

Corporate Social Responsibility Information Disclosure, Environmental Dynamics and Corporate Value

Juanjie Tang *

Department of Economics and Management, Nanjing University of Science and Technology,
Nanjing, China

* Corresponding Author Email: 18362991118@sina.cn

Abstract. With the rapid economic development, social responsibility issues such as environmental protection, food safety, and employee health have become increasingly severe, and have received widespread attention from the general public. The relationship between corporate social responsibility information disclosure and corporate value has also become a hot issue in academia and practice. There are countless relevant studies, but they have not reached a consistent conclusion. With the introduction of relevant policies, although the number of companies that disclose social responsibility information in my country has increased, it is still only a quarter of the number of listed companies. Moreover, due to the lack of soundness of our country's corporate social responsibility information disclosure system, the content and form of disclosure are different, and the quality is uneven. Therefore, this article takes our country's Shenzhen and Shanghai non-financial A-share listed companies from 2011 to 2020 as a sample to explore the relationship between corporate social responsibility information disclosure and corporate value, and finds that: (1) Disclosure of social responsibility information can enhance corporate value; (2) The higher the quality of corporate social responsibility information disclosure, the more significant the increase in corporate value; (3) When a company faces a low degree of environmental dynamics, the social responsibility information disclosure has a more significant effect on the company's value enhancement. This article enriches the research perspective of social responsibility information disclosure, and promotes the formulation and improvement of the social responsibility information disclosure system.

Keywords: Social Responsibility Information Disclosure; Corporate Value; Environmental Dynamics.

1. Introduction

With the development of society and economy, the basic financial information disclosure of enterprises can no longer meet the needs of external investors, and non-financial information such as social responsibility has begun to receive extensive attention from the public, which has aroused heated discussions in the academic and practical circles. According to the traditional theory of shareholders' wealth maximization, all the behaviors of enterprise managers will serve to improve enterprise profits, i.e. to maximize shareholders' interests. This will undoubtedly bring short-lived economic benefits to the enterprise, but at the same time, it will also lead to a series of social problems, such as environmental pollution, food safety, and employee health problems. In order to address the adverse impacts on society brought about by corporate managers' neglect of CSR, governments have introduced a series of laws and regulations to standardize CSR behaviors. Internationally, Sweden and Norway put legal constraints on CSR behavior in the Accounting Act at the end of last century. Subsequently, other countries have proposed regulations such as the Guidelines for Sustainability Reporting (GRI) and ISO quality standards.

Compared with foreign countries, China's research on social responsibility information disclosure started later. Since the beginning of this century, after China's stock exchanges successively published guiding documents on social responsibility and environmental information, social responsibility behaviors in the practical world have only been considered to be formally on the right track, which in turn led to heated discussions in the academic world. At present, China only mandates the disclosure of relevant social responsibility information for some corporate governance boards and enterprises in the financial and other industries, and does not require all enterprises to do so, which is

in the voluntary-cum-mandatory disclosure stage. In 2018, the Securities and Futures Commission (SFC) formally incorporated the relevant requirements for the disclosure of social responsibility information into the governance guidelines for listed companies. This newly revised document clearly requires enterprises to disclose social responsibility information on poverty alleviation and other aspects, in addition to the originally required corporate governance information. With the introduction of relevant policies, the number of listed companies disclosing social responsibility information in China has been increasing, from less than 30 in 2006 to 950 in 2020. However, according to the statistics of the Institute for Public Policy Research of Zhejiang University, although the number of listed companies disclosing in 2020 has increased, it still only accounts for a quarter of listed companies, and there is still a big difference in the truthfulness, accuracy and reliability of the published reports. Against this background, in-depth research on CSR disclosure to further develop relevant systems to promote the fulfillment of CSR and standardize its disclosure content, form and third-party assessment institutions has become an urgent issue.

In addition, enterprises often need to invest a large amount of capital and manpower when assuming social responsibility, which will undoubtedly increase the operating costs in the current period. However, at the same time, by actively fulfilling their social responsibility and sending relevant signals to relevant responsibility targets, enterprises will bring good reputation benefits, realize economic benefits and guarantee sustainable development. Therefore, it has become a research hotspot that how to balance CSR disclosure and corporate performance, as well as the influence and direction of the two when corporate managers pursue profit maximization, and there are countless theoretical analyses and empirical studies on this issue. However, through a review of previous literature, we find that no scholars have explored the moderating effect of environmental dynamics on the relationship between CSR disclosure and corporate value. The survival of enterprises depends on the market and natural environment, and this environment is constantly changing dynamically. Therefore, exploring the impact of environmental dynamics on the relationship between the two as the external environment changes is necessary to further clarify the relationship between CSR disclosure and corporate value, and is of great significance for enterprises to formulate CSR strategies in the light of the actual situation, and for the government to formulate relevant policies.

2. Literature review and theoretical analysis

2.1. Literature review

Guo Hongcai pointed out that although the research on the interrelationship between corporate value and social responsibility disclosure has always been a hot and difficult issue in academia, and there have been countless studies on the subject, no universally recognized conclusions have been reached [1].

Liu Think and Liu Yinguo examine the relationship between board size, proportion of state-owned shares, and proportion of executive shareholding and social responsibility, respectively, and point out that all three are effective in improving the level of disclosure, and find that active disclosure of social responsibility information by firms is conducive to the establishment of standardized institutional arrangements by firms, which in turn enhances the long-term value of firms [2]. Dong Xin and Zhang Yuqi showed that corporate disclosure of environmental and other social responsibility information can effectively improve the efficiency of resource utilization and further increase corporate value [3]. Karaosmanoglu et al. argued that corporate investment in social responsibility related projects leads to an increase in costs in the short term and affects profit inflows, and Ding et al. came to a similar conclusion, confirming that corporate social responsibility negatively affects corporate financial performance [4, 5]. Jia Yibo, on the other hand, confirms that the quality of social responsibility disclosure does not bring a significant effect on corporate value [6]. In addition, Li Zheng's study pointed out that the degree of corporate social responsibility fulfillment is significantly and negatively related to short-term corporate performance, but will bring a positive effect on long-term corporate value [7].

Nekhili et al. argue that there may be a complex role of similar moderating and mediating factors between social responsibility disclosure and firm value, and thus a part of the literature focuses on the impact of CSR on financial performance in the presence of relevant factors [8]. Chen Xiaoyi et al. show that since corporate social responsibility is often hampered by complicated organizational processes and in more sensitive industries, active disclosure of relevant information by firms may cause investors to overinterpret firms' motives, which in turn negatively moderates the positive impact of social responsibility disclosure on firm value [9]. He Yin et al. proved through empirical analysis that enterprises can effectively publicize their CSR commitment by placing a large number of advertisements, enhance customers' awareness of purchasing, and then increase the value of the enterprise [10]. Huang Jun and He Guoliang, on the other hand, divided the sample into two groups of state-owned enterprises and non-state-owned enterprises, and confirmed the weakening and completely intermediate effects of technological innovation on the relationship between the two, respectively[11].

Based on the combing and summarizing of the literature, we can find that many scholars have studied CSR and corporate value, and not a few scholars have explored the correlation between environmental dynamics and corporate value or corporate performance. However, the impact of environmental dynamics on both has not been explored, and scholars have mostly focused their attention on social responsibility, but less on CSR disclosure. Enterprises are not in a vacuum environment, but exist in society. The dynamic market environment will generate a large amount of information, further aggravating the information asymmetry between stakeholders and enterprises, which in turn makes it difficult to measure the direct impact of CSR disclosure on the value of the enterprise itself. Therefore, when exploring the relationship between CSR disclosure and enterprise value, we should not ignore the situational variable of environmental dynamics. Exploring the role of environmental dynamics on the relationship between CSR disclosure and enterprise value with the change of external environment is not only important but also of practical significance to further clarify the relationship between the two, but there is still a gap in this field in China. On the basis of previous studies, this paper divides CSR disclosure into two perspectives: "whether to disclose" and "disclosure quality", and introduces the situational variable of environmental dynamics, focusing on its moderating effect on the two, and analyzing the relationship between CSR disclosure and corporate value in depth. We also introduce the situational variable of environmental dynamics, focusing on its moderating effect on the two, and deeply analyze the relationship between CSR disclosure and corporate value.

2.2. Theoretical analysis

2.2.1. Corporate Social Responsibility Disclosure and Corporate Value

Scholars also have different views on the economic consequences of corporate disclosure of socially responsible information. Although there is a negative view that corporate disclosure of socially responsible information brings costs in social responsibility fulfillment, information collection, and report evaluation, thus adversely affecting corporate performance [5]. However, more scholars hold a positive view that corporate disclosure of social responsibility information can promote continuous, open, and honest information communication between enterprises and other stakeholders, and release quality signals to shareholders [12]. On the other hand, disclosure of information about corporate social responsibility fulfillment can also alleviate financing constraints, reduce the difficulty of equity refinancing, and raise more capital, to which the securities market will also respond positively [13]. In the long run, social responsibility information disclosure follows the international trend and is an important way to improve corporate reputation. By shaping a good corporate image, it can enhance public confidence in the enterprise and help the enterprise realize greater benefits and sustainable development. Therefore, we propose the following hypotheses:

Hypothesis H1a: Compared with enterprises that do not disclose social responsibility information, the value enhancement of enterprises that disclose is more significant.

In the case that not all enterprises in China have a mandatory obligation to disclose social responsibility information, publicizing it as non-financial information is actually an autonomous behavior of enterprises. As a result, enterprise managers may disclose it selectively, disclosing only favorable information while concealing unfavorable information, which leads to a decrease in the reliability of the social responsibility report, weakening investor trust in the enterprise, and then bringing impacts on the market [14]. Therefore, for other stakeholders, they are concerned not only with whether enterprises disclose social responsibility information, but also judge the reliability of the information. The more quantity and quality of information disclosed by enterprises, the more they can gain investors' trust and improve stock returns [15]. Bhattacharya and Daouk conducted a study on international samples and found that information transparency is significantly negatively correlated with the cost of equity capital [16]. Our scholars Xu Guanghua and Wan Sijia's study on heavy pollution industry similarly found that the quality of environmental information disclosure is positively related to firm value [17]. Therefore, we propose the following hypothesis:

Hypothesis H1b: Among the enterprises disclosing social responsibility information, the higher the quality of disclosure, the more significant the increase in enterprise value.

2.2.2. The moderating role of environmental dynamism

Adopting Dess' definition, this paper argues that the higher the environmental dynamism, the faster the rate of environmental change and the more unpredictable the future situation faced by the organization. In this scenario, enterprises face great business risks and survival pressure, and corporate managers may develop short-sighted behaviors, neglect social responsibility fulfillment, and reduce CSR information disclosure [18]. And when high environmental dynamics, the environment changes dramatically, a large amount of information influx, and the characteristics of low stability and high risk of new information bring great challenges to its screening, filtering, noise reduction and cleaning process. This may make the public skeptical and unreliable about CSR information, weakening the reputational effect of CSR disclosure, and thus its positive impact on corporate value. Wilden and Gudergan point out that not all resource changes are beneficial in a dynamic environment, and that companies must behave in a way that is real and effective in enhancing their competitiveness. Firm performance can only be improved by satisfying customer needs [19]. Dramatic changes in the environment will make the original resources of the enterprise lose or reduce the value, other stakeholders are more concerned about the core competitiveness of the enterprise and enterprise performance at this time. Enterprises must reduce operating costs, technological innovation, enhance competitiveness to improve corporate performance, at this time the positive effect of social responsibility information disclosure will be weakened. When the environment is more stable, consumer demand is more fixed, and enterprises do not need to increase technological investment too much to gain competitive advantage. The disclosure of social responsibility information at this time will make the firm differentiate itself from other competitors, enhance consumer confidence, and play a more positive role in the value of the firm. Therefore, we propose the following hypothesis:

Hypothesis H2: When the degree of environmental dynamics faced by the enterprise is low, the disclosure of social responsibility information has a more significant effect on the enhancement of enterprise value.

3. Research Design

3.1. Sample Selection and Data Sources

This paper takes China's A-share listed companies from 2011 to 2020 as the research sample, and screens the data as follows: (1) Excluding financial and insurance listed companies. (2) Excluding companies with special treatment such as ST and *ST. Such companies may have additional factors affecting the regression results, and the reliability of the disclosed information is low, so the analysis value is not high. (3) Excluding companies with extreme values and missing data. After the above treatment, this paper finally obtains 18,418 observations and shrinks the tail at the 1% and 99% levels,

replacing the values below 1% with the values of 1% of the variables. Similarly, the values above its 99% level are replaced with the values of 99% to avoid the influence of extreme values on the empirical results. The measures of social responsibility disclosure in this paper come from the Runling Global Social Responsibility Rating database, other financial data come from the CSMAR database, and the environmental dynamics are borrowed from the measures of Hui-Hui Shen [20].

3.2. Selection of indicators and definition of variables

This paper draws on the practice of scholars and uses TobinQ value to measure enterprise value for the study, the higher the value, the higher the value-added ability and enterprise value of the enterprise. CSR disclosure is measured using a dummy variable, i.e., if a company discloses a social responsibility report, the value is 1, otherwise it is 0. In addition, this paper also evaluates the disclosure quality of the disclosing companies by using the index method, specifically using the aforementioned Running Spirit Global Social Responsibility Report Evaluation Index. The index not only comprehensively evaluates the disclosure quality, but also includes detailed scores for four specific dimensions: technology, industry, overall, and content. The value of this rating index ranges from 0 to 100 points, and the higher the score, the higher the level of social responsibility report disclosed by the enterprise. Since the other variables involved in this paper are mostly decimals, the index is divided by 100 as a proxy variable for the level of social responsibility disclosure.

Environmental dynamics, on the other hand, mainly draws on the measurement method proposed by Shen Huihui, and combines the specific calculations of Wang Fenmian and Zhang Hong [20,21]. First of all, the enterprise's sales revenue in the year and four years ahead of the year using ordinary least squares regression, the specific regression equation is as follows:

$$\text{Sale} = \alpha + \beta \cdot \text{Year} + \varepsilon. \quad (1)$$

In this case, we use the logarithmic form of sales revenue to represent sale, so that the regression equation can better fit the sample data. year is the year variable, which takes the value of 1 if the observation is in the fourth year in the past, 2 if it is in the third year in the past, and so on, and 5 if it is an observation in the current year. standard deviation of the regression coefficient β is obtained and divided by the mean of the natural logarithm of sales revenue for the five years. The standard deviation of the regression coefficient β is obtained and divided by the mean of the natural logarithm of sales revenue for the five years to represent the dynamics of the environment faced by the firm.

In order to control the possible influence of other factors on the empirical results, this paper selects ten control variables: firm size, number of board of directors, proportion of independent directors, equity concentration, financial leverage, development capacity, return on net assets, nature of equity, industry, and year, and the specific variables are defined as shown in Table 1:

Table 1. Major Variables Definition Table.

Type of variable	Study variable	Variable symbol	Calculation method
Explained Variables	Corporate Value	TobinQ	Market value of the company/replacement cost of assets
Explanatory Variables	Whether to disclose social responsibility information	CSR1	1 if the company has disclosed a social responsibility report, 0 otherwise
	Quality of Social Responsibility Disclosure	CSR2	Runling Global Social Responsibility Report Rating Index/100
Moderating variable	Environmental dynamics	EU	Specific calculation method is described in the text
	Board Size	Board	Natural logarithm of the number of board of directors
	Proportion of Independent Directors	Indep	Number of independent directors/number of board of directors
	Shareholding Concentration	Top10	Sum of shareholding ratio of top 10 shareholders
Control Variables	Enterprise Size	Size	Natural logarithm of total assets of the company
	Financial Leverage	Lev	Total liabilities/total assets
	Development Capacity	Growth	Growth rate of operating income
	Return on Net Assets	ROE	Net profit/average total net assets
	Nature of Ownership	Ownership	The value is 1 if it is a state-owned enterprise, and 0 otherwise.
	Industry Dummy Variables	Industry	According to the 2012 SEC industry classification, the second level of classification for the manufacturing industry, and the first level of classification for the rest of the industry
	Yearly Dummy Variables	Year	A total of 9 annual dummy variables for 2011-2020

3.3. Model building

In order to test the above hypotheses, the following four regression models are constructed in this paper:

$$\text{TobinQ} = \alpha_0 + \alpha_1 \cdot \text{CSR1} + \alpha \cdot \text{Control} + \sum \text{Industry} + \sum \text{Year} + \varepsilon_1. \quad (2)$$

$$\text{TobinQ} = \beta_0 + \beta_1 \cdot \text{CSR2} + \beta \cdot \text{Control} + \sum \text{Industry} + \sum \text{Year} + \varepsilon_2. \quad (3)$$

$$\text{TobinQ} = \delta_0 + \delta_1 \cdot \text{CSR1} + \delta_2 \cdot \text{EU} + \delta_3 \cdot \text{CSR1} \cdot \text{EU} + \delta \cdot \text{Control} + \sum \text{Industry} + \sum \text{Year} + \varepsilon_3. \quad (4)$$

$$\text{TobinQ} = \gamma_0 + \gamma_1 \cdot \text{CSR2} + \gamma_2 \cdot \text{EU} + \gamma_3 \cdot \text{CSR2} \cdot \text{EU} + \gamma \cdot \text{Control} + \sum \text{Industry} + \sum \text{Year} + \varepsilon_4. \quad (5)$$

Model (2) is used to test the impact of whether enterprises disclose social responsibility information on corporate value, i.e., hypothesis H1a; model (3) is used to test the impact of the quality of social responsibility information disclosure on corporate value; in order to test the moderating effect of environmental dynamics on the quality of social responsibility information disclosure and corporate value, this paper constructs model (4) and model (5).

4. Empirical Analysis

4.1. Descriptive statistics

In this paper, Stata software was used to provide descriptive statistics for each variable, and the results are shown in Table 2.

Table 2. Descriptive statistics.

variable	N	mean	sd	min	median	max
TobinQ	18418	2.093	1.417	0.881	1.619	9.052
CSR1	18418	0.303	0.460	0	0	1
CSR2	5548	0.399	0.122	0.195	0.373	0.765
EU	18418	0.003	0.003	0.0002	0.002	0.020
Board	18418	2.148	0.202	1.609	2.197	2.708
Indep	18418	0.374	0.054	0.333	0.333	0.571
Top10	18418	0.338	0.148	0.086	0.315	0.738
Size	18418	22.405	1.281	19.781	22.254	26.156
Lev	18418	0.466	0.203	0.069	0.466	0.894
ROE	18418	0.045	0.161	-0.946	0.062	0.310
Growth	18418	0.178	0.473	-0.575	0.097	3.146
Ownership	18418	0.461	0.498	0	0	1

From the results of descriptive statistics, the average value of Tobin's Q, which measures the value of enterprises, is 2.09, and the difference between the maximum and minimum values is significant, which is 9.05 and 0.88, respectively, indicating that the level of enterprise value varies among different listed companies. And the most concentrated equity concentration among different listed companies is 74%, which is nine times of the minimum value, indicating that the degree of influence of major shareholders on the company's business decisions varies among different companies. For other indicators describing firm characteristics, such as firm size, board size, and the proportion of independent directors, there are no extreme differences. Among other control variables, the maximum value of return on net assets is 0.31 and the minimum value is -0.95; the maximum values of operating income growth rate are 3.15 and -0.58 respectively, indicating that the profitability and development potential of different companies are at different levels. Gearing ratio of the two maximum level of the existence of a relatively wide gap, which may be due to different lines of different business qualities. The median value of the nature of equity is 0 and the mean value is lower than 0.5, indicating that there are more non-state-owned enterprises than state-owned enterprises in the sample.

In addition, we can see from the table that the mean value of CSR1 is only 0.3, indicating that only nearly 30% of the enterprises in China have yet to disclose social responsibility information. The mean value of the disclosure quality measure is only 0.4, and the maximum values are 0.765 and 0.195 respectively, i.e. the maximum values of the Runling Global Social Responsibility Rating scores are 76.5 and 19.5 respectively, which indicates that the overall disclosure level in our country is relatively low, and the quality of disclosure among listed companies is uneven, which may be related to the lack of relevant regulations and systems in our country to a certain extent. The difference between the maximum and minimum values of environmental dynamics is two levels, indicating that the speed of environmental change and the degree of unpredictability faced by enterprises in different industries and with different property rights may vary greatly.

4.2. Regression analysis

4.2.1. Corporate Social Responsibility Disclosure and Corporate Value

Table 3 shows the regression results of the impact of CSR disclosure on corporate value, which controls for the indicators of Board size (Board), proportion of independent directors (Indep), enterprise size (Size), and development capacity (Growth). From the first column of the table we can see that the coefficient of CSR1 is 0.287, which is significant at the one percent level; the regression coefficient of CSR2 in the second column of the regression results is 0.416, which is also significant at the one percent level. Therefore, we can get the conclusion that the value of disclosing enterprises will be enhanced more significantly compared to enterprises that do not publish social responsibility information, and the level of disclosure is significantly and positively related to enterprise value, i.e., hypotheses H1a and H1b are verified. Among other variables, the regression coefficients of Growth, Indep and ROE are all significantly positive, indicating that companies with a large proportion of

independent directors and strong growth and profitability have relatively high enterprise value. The regression coefficients of firm size and gearing ratio are negative, which may be due to the fact that large firms with too much debt can lead to the deterioration of their market reputation, which in turn affects firm value. In addition, we can find that the R² of both regression models are close to 40%, which indicates a good fit in the model.

Table 3. Corporate Social Responsibility Disclosure and Corporate Value.

	TobinQ	TobinQ
CSR1	0.287*** (14.85)	
CSR2		0.416*** (4.21)
Board	0.079 (1.56)	-0.076 (-1.27)
Indep	1.296*** (7.19)	0.984*** (4.73)
Top10	0.203*** (3.51)	0.001 (1.37)
Size	-0.585*** (-43.64)	-0.277*** (-22.91)
Lev	-0.298*** (-4.23)	-1.118*** (-13.02)
ROE	0.528*** (6.68)	1.592*** (10.95)
Growth	0.038* (1.66)	0.096** (2.38)
Ownership	-0.090*** (-4.84)	-0.062** (-2.25)
Industry	YES	YES
Year	YES	YES
_cons	14.676*** (51.60)	8.926*** (29.81)
N	18418	5548
R ²	0.389	0.434
Adj R ²	0.388	0.430

t statistics in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

4.2.2. Moderating effect of environmental dynamics

In order to investigate the moderating effect of environmental dynamics in the relationship between CSR disclosure and corporate value, this paper conducted multiple linear regressions on models (4) and (5), and the regression results are shown in Table 4. Among them, the moderating effect of environmental dynamics can be obtained by observing the regression results of the interaction terms.

The regression results of model (4) show the moderating effect of environmental dynamics on the relationship between whether companies disclose social responsibility information and corporate value. According to the regression results, it can be found that the coefficient of the cross-multiplier term of CSR1 and EU is significant at the one percent level with a value of -53.74, which proves that environmental dynamics negatively moderates the relationship between whether companies disclose social responsibility information and corporate value. In the regression results of model (5), the regression coefficient of the CSR2 and EU interaction term is -128.87 with a t-value of -2.76, which is significant at the one percent level of significance, which indicates that, relative to high environmental dynamics, when firms face a lower degree of environmental dynamics, i.e., when the environment changes at a slower pace and faces less future unpredictability, the positive impact of

social responsibility information disclosure on firm value is more significant. At this point, hypothesis H2 is proved, and the R² of both regression models is also close to 40%, with a high degree of model fit.

Table 4. Moderating effect of environmental dynamics.

	TobinQ	TobinQ
CSR1	0.274*** (14.15)	
CSR2		0.367*** (3.72)
EU	31.814*** (7.09)	-18.126*** (-3.15)
CSR1·EU	-53.740*** (-7.58)	
CSR2·EU		-128.866*** (-2.76)
Board	0.086* (1.71)	-0.081 (-1.35)
Indep	1.305*** (7.26)	0.960*** (4.63)
Top10	0.184*** (3.16)	0.001 (1.53)
Size	-0.580*** (-44.78)	-0.278*** (-23.01)
Lev	-0.310*** (-4.47)	-1.107*** (-12.91)
ROE	0.594*** (7.66)	1.555*** (10.71)
Growth	-0.018 (-0.77)	0.116*** (2.82)
Ownership	-0.082*** (-4.40)	-0.065** (-2.37)
Industry	YES	YES
Year	YES	YES
_cons	14.472*** (52.60)	9.022*** (29.98)
N	18418	5548
R ²	0.393	0.436
Adj R ²	0.392	0.432

t statistics in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

4.3. Robustness testing

To further demonstrate the robustness of the above results, we re-run the regression with the independent and dependent variables replaced. Among them, this paper uses the market-focused indicator, earnings per share (EPS), as a proxy variable for TobinQ to measure corporate value [22]; for the measure of CSR disclosure quality, we replace it with the score of the social responsibility reports published by Hexun.com [23], further empirical regressions are conducted and the results are shown in Table 5.

Table 5. Robustness testing.

	(1)EPS	(2)EPS	(3)EPS	(4)EPS
CSR1	0.023*** (3.31)		0.019** (2.53)	
CSR2		0.002*** (5.29)		0.002*** (5.15)
EU			2.541* (1.90)	2.198 (0.57)
CSR1·EU			-11.810*** (-3.67)	
CSR2·EU				-0.409*** (-2.85)
Board	-0.033* (-1.76)	-0.088*** (-2.85)	-0.033* (-1.76)	-0.085*** (-2.75)
Indep	-0.140** (-2.25)	-0.273** (-2.50)	-0.137** (-2.20)	-0.260** (-2.39)
Top10	0.083*** (3.84)	-0.001 (-1.37)	0.083*** (3.85)	-0.001 (-1.28)
Size	0.116*** (30.33)	0.133*** (19.96)	0.116*** (30.50)	0.132*** (19.90)
Lev	-0.242*** (-13.00)	-0.325*** (-8.23)	-0.243*** (-13.04)	-0.319*** (-8.04)
ROE	2.223*** (57.90)	4.123*** (41.85)	2.225*** (57.90)	4.143*** (41.23)
Growth	0.072*** (9.37)	0.049** (2.36)	0.069*** (8.71)	0.045** (2.17)
Ownership	0.009 (1.31)	0.074*** (5.48)	0.008 (1.27)	0.075*** (5.61)
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
_cons	-2.163*** (-25.39)	-2.511*** (-18.15)	-2.168*** (-25.44)	-2.521*** (-18.16)
N	18418	5548	18418	5548
R ²	0.557	0.628	0.558	0.629
Adj R ²	0.556	0.625	0.557	0.626

t statistics in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

The results of robustness test show that the regression coefficients of "whether to disclose" and "quality of disclosure" dimensions in model (1) and model (2) are both significantly positive at 1% level, which is consistent with the conclusion of the previous study, i.e., the disclosure of social responsibility information by enterprises can increase the value of enterprises, and the higher the quality of disclosed social responsibility information is, the more obvious the increase of enterprise value. This is consistent with the findings of the previous study, that is, corporate disclosure of social responsibility information can increase enterprise value, and the higher the quality of disclosed social responsibility information, the more obvious the increase in enterprise value. The regression coefficients of the interaction term between CSR disclosure and environmental dynamics in model (3) and model (4) are -11.81 and -0.409 respectively, and the t-values are -3.67 and -2.85 respectively, and all of them are significant at the 1% significance level, which indicates that environmental dynamics still negatively moderates the relationship between the two, which confirms the original hypothesis H2 once again, and increases the robustness of regression results. In addition, the R² of the four regression models for the robustness test exceeded 0.5, with a high degree of fit.

5. Summary

In this paper, we study the impact of CSR information on corporate value from the dimensions of "whether to disclose" and "disclosure quality", and then we introduce the situational variable of environmental dynamics to construct an interaction term with CSR information disclosure, and then regressively test the moderating effect of environmental dynamics on the relationship between the two. Then we introduce the situational variable of environmental dynamics to construct the interaction term with CSR disclosure, and regressively test the moderating effect of environmental dynamics on the relationship between the two. Through empirical research, we find that: (1) disclosure of CSR information can have a significant positive impact on corporate value, and the quality of disclosure is positively related to corporate value. (2) Compared with high environmental dynamics, CSR disclosure has a more significant effect on corporate value when the degree of environmental dynamics faced by enterprises is low.

Based on the conclusion of the study, this paper puts forward three inspirations: firstly, in the process of pursuing profit maximization and enterprise value, enterprises should fully consider the needs of other stakeholders, proactively incorporate social responsibility into the strategic system and proactively disclose relevant information. Second, government departments should standardize and improve the social responsibility disclosure system as soon as possible, so that listed companies have a system to follow in this regard. In addition, the government needs to make more efforts to encourage the development of relevant rating agencies, vigorously develop non-financial report auditing, accelerate the development of China's corporate social responsibility report evaluation system, and enhance the credibility of the report. Thirdly, enterprises must always pay attention to the changes in the external environment, adjust their own strategies at the right time, and correctly look at the social responsibility strategy in the dynamic environment from the perspective of development, so as to maximize its utility and enhance the value of the enterprise.

This project not only analyzes the impact of CSR disclosure on corporate value, but also further explores the moderating effect of environmental dynamics, expanding the scope of research on CSR disclosure in China. Subsequently, it puts forward suggestions and measures to improve the existing problems in China. However, due to the limitations of the author's existing academic ability and research methodology, there are still some limitations in the research perspective of this paper. This paper only explores the moderating effect of environmental dynamics on the relationship between CSR disclosure and corporate value. However, returning to the previous literature, we can find that there may be a mediating factor between CSR disclosure and corporate value, but no scholars have explored the mediating effect of environmental dynamics on the two. Therefore, in the subsequent research, we can explore this perspective in depth.

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