An Empirical Analysis of the Relationship between Charitable Donation and Enterprise Performance - Based on the data of Listed companies in China

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ABSTRACT: *As the wave of the economy continues to surge, social responsibility has become a hot topic in recent years. And, as people's educational level increases, the voice of reason becomes clearer. In the past, the goal of maximizing profit for shareholders was targeted by the enterprises. However, with the normalization of the commodity economy, social conflicts such as environmental pollution, employment problems and the gap between the rich and poor are increasingly exposed. Enterprises are urged to pay attention to themselves while making high profits Social responsibility And charitable donations, it is an important part of corporate social responsibility to demonstrate their own. It is precisely for this reason that from the original maximization of shareholders' interests as the main objective, the development of enterprises has now taken into account the interests of stakeholders, and the enterprise has evolved from a single interest instrument to an important member of the society to move on continuously. Through charity Donations and other means to promote their own sustainable development and improve their own image, to achieve win-win results.*

Starting with charitable donations, this article analyzes the domestic and foreign literature and the present status of charitable donations in our country. Then, taking the listed companies charitable donations from 2016 to 2019 as samples, this paper empirically analyzes the impact of charitable donations on business performance. Through regression analysis, it is found that ①charitable donations have a positive impact on the performance of enterprises. ②the impact of end-product companies than non-end-product companies. ③The extent to which state-owned enterprises charitable donations affect the performance of enterprises is not significantly different from that of private-owned enterprises. Therefore, it proposes to our country's listed companies that enterprises should incorporate the concept of charity donation into the development of enterprises and actively establish an effective donation system. No matter it is a state-owned enterprise or a privately-owned enterprise, it should assume social responsibility and make the enterprise become a member of society, Truly contribute to the balanced development of society.

KEYWORDS-Social responsibility,Charitable donations,Corporate performance

Introduction

In recent years, as economic waves continue to surge, social responsibility has become a hot topic. And, as people's education levels continue to rise up, the voice of reason becomes clearer. In the past, companies aimed at maximizing shareholder profits. However, with the normalization of the commodity economy, social conflicts such as environmental pollution, employment difficulties, and widening gaps between the rich and the poor have gradually exposed. Companies are called upon to make high profits while at the same time. Should pay attention to their own social responsibilities.Well, charitable donations are an important link for most companies to demonstrate their social responsibilities. Because of this, companies have gradually evolved from the original maximization of shareholders as their main pursuit, and now they are in the same boat as the interests of stakeholders, and have evolved from a single

benefit tool to a major member that promotes the continuous advancement of society through charity. Donationspromote their own sustainable development, improve their own image, and achieve win-win results.The investigation found that charitable donations have had a certain impact on the performance of the company. The author would like to further analyze the data released by listed companies, supplemented by the nature of the company, from all types of enterprises, terminal manufacturing enterprises, non-terminal manufacturing enterprises, state-owned enterprisesand private enterprises. Through such three aspects ,the relationship between charitable donations and corporate performance is summarized respectively.

I. Literature review

1.1 Review of foreign literature

The development history of charitable donation in the western world started earlier, and there are various discussions on charity. The foreign empirical view is that charitable donations are positively correlated with corporate performance. The initial point of view comes from Mahon (1997)[1] that charitable donations are a kind of market tool for enterprises, which can bring positive financial benefits to enterprises. This is put forward from the perspective of management.Fomburn (1996)[2] believes that charitable donations can help companies occupy the product and service market. Godfrey (2005)[3] and Jones(2008)[4]believe that the participation of companies in charitable donation activities promotes cooperation with corporate stakeholders to obtain their support, thereby providing protection for their related assets, which is conducive to the company's acquisition of important needs from stakeholders.

On the other hand, in the summary of CSP-CFP related classic empirical studies from 1972 to 2002, there are 109 empirical studies on the impact of social responsibility performance (including charitable donations) on corporate financial performance, with 54 positive correlations, 7 negative correlations, and 28 unrelated items. Therefore, it can be seen that foreign research theories tend to be perfect in terms of angle or quantity. Based on the above analysis of foreign literature, the mainstream thinking believes that charitable donations can improve the performance of enterprises, and even if they reduce the cash flow of enterprises in a short period of time, it is still one of the strategic guidelines for the sustainable development of enterprises.

1.2Review of domestic literature

The domestic academia is still in the developing stage of charitable donations, and there are not many empirical documents at present. Chinese scholar Li Zheng (2006)[5] used the 521 companies in 2003 on Shanghai Stock Exchange as an example. He used content analysis to measure social responsibility and Tobin'Q to measure corporate value. The results show that from the current period, the more social responsibilities are assumed, the lower the corporate value. ; But in the long run, according to the theory of interest-relatedness and the theory of social capital, the value of enterprises that undertake social responsibilities will not decrease.

Zhu Yingchun (2010) [6]believes that non-state-owned enterprises are more willing to increase corporate value through charitable donations than state-owned enterprises. Du Xingqiang and Du Yingjie (2010)[7] manually collected data on public welfare donations of Chinese listed companies after the Wenchuan earthquake. The results showed that charitable donations will significantly improve financial performance and market performance in the event of sudden natural disasters.However, the data selection here is contrary to this article. This article will exclude years with major natural disasters and quote the amount of charitable donations in ordinary years as research data.

Wang Fenggui (2011)[8] believes that corporate donations can improve corporate performance, but there is a certain lag. Therefore, in contrast, there are few domestic researches, and there is still no clear argument on the relationship between charitable donations and corporate performance.

1.3 Comments on the literature

In summary, foreign literature studies are relatively comprehensive, expounding the different effects of charitable donations on corporate performance from all angles in an all-round way. Domestic research started late, and the current research on corporate philanthropy and performance remains to be demonstrated. And many domestic

articles use the event research method, for example, through the time cut-off points of major natural disasters such as Wenchuan and Yushu and so on. Due to the sudden nature of natural disasters, the conclusion cannot be effectively supported. On the other hand, due to the differences in the nature of enterprises and my special national conditions, there is a lack of research on regulatory variables in China.

1.4 Definition of related concepts

Companies can generally make donations to these types of external sources: ①Public welfare donations, that is, donations from enterprises to culture, education, social public equipment,environmental protection, etc. ②Relief donation, that is, to provide relief and subsidies in daily life to remote areas, natural disaster-affected areas, or vulnerable groups and individuals.This article gives several criteria for judging corporate donations: ①Free, no substantial benefit exchange. ②Voluntary, no mandatory regulations. ③The donation object is used for charity.

II. Research hypothesis

Today, corporate charitable donations have gradually moved towards sustainability and strategic development. Charitable donations are no longer simply accidental phenomena when natural disasters occur. Long-term corporate CEOs have incorporated charitable donations into their strategic development tools. By making charitable donations, the company gains social recognition, improves its reputation and, markets its brandto a certain extent. On the other hand, it has improved employees' recognition of the company, cultivated potential high-quality employee groups, and improved the enthusiasm and efficiency of employees, laying a solid foundation for the long-term development of the company.

The core indicator of enterprise development is financial performance. This article uses ROA (Return on Total Assets Ratio) to represent financial performance. Although the outflow of funds caused by charitable donations will make ROA lower, and the company will reduce the pressure on working capital or stop making charitable donations. The impact of charitable donations from different types of enterprises on performance is also quite different. Therefore, in order to verify the relationship between charitable donations and financial performance indicators, this article proposes the following three hypotheses.

H1: Charitable donations have a positive correlation with corporate performance.

H2:The impact of charitable donations by state-owned enterprises on performance is greater than that of private enterprises.

H3:The impact of charitable donations by end-product companies on performance is higher than that by non-end-product companies.

III. Design of variables

3.1 Design of independent variables

This article selects the data disclosed in the annual report of the Shanghai Stock Exchange A-share listed company, and designates the companies that make charitable donations as 1, and the companies that do not make charitable donations as 0. The data is taken from the ChinaStockMarketAccountingResearchDatabase (CSMAR). When selecting companies, we use industry classification and stratified sampling based on the proportions of each industry. Priority is given to companies that have made charitable donations in the four years of 2016-2019, and then decreases in order.

3.2 Design of adjustment variables

In view of our special national conditions, there are some state-owned enterprises in our country's listed companies. After reading the current domestic literature, this group found that most scholars have concluded that the behavior of charitable donations by state-owned enterprises has a greater impact on corporate performance than private enterprises. Therefore, this article will study whether state-owned enterprises are regarded as a moderating variable to test its significance, which is 1 for Chinese enterprises and 0 for private enterprises.

Both terminal product manufacturers and non-terminal product companies have always been the focus of attention. Due

to the particularity of the industry, the performance impact is very different. In this paper, we design terminal product companies as 1, and non-terminal product companies as 0.

3.3 Control variable design

There are many factors that affect corporate performance. Therefore, the author tries to reduce the impact of other elements on corporate performance by adding control variables. This paper designs the four factors as the control variables: the largest shareholder and the top five shareholders, which represent the company's governance capabilities; the account receivable turnover rate and the asset intensity, which represent the company's operating capabilities. These variables are imported into the regression model, so that the model can more accurately reflect the impact of corporate charitable donations on performance.The summary of each variable is shown in Table 2-1.

Table1 The summary of each variable

Variable category	Variable code	Variable name	Variable definition
Independent variable	X_1	Donate or not	Donate=1, not donate=0
Moderating variable	X_2	Whether state-owned enterprises	State-owned enterprises = 1, private enterprises = 0
	X_3	Whether terminal	terminal=1, non-terminal=0
Controlling Variables	Y_1	The largest shareholder's shareholding ratio	Shareholding Proportion of Company's Largest Shareholder
	Y_2	Shareholding ratio of the top five shareholders	The total shareholding ratio of the company's top five shareholders
	Y_3	Capital intensity	Total assets/operating income
	Y_4	Accounts receivable turnover rate	Sales revenue/Average balance of accounts receivable
Dependent variable	ROA	Return on assets	Net profit before interest/total assets×100%

3.4 Model construction

Based on the above three hypotheses, this paper analyzes and establishes three models according to the construction method of the panel data model to test the hypotheses H1, H2 and H3 respectively.

Model 1: $ROA=\alpha_0+\alpha_1*X_1+\alpha_2*Y_1+\alpha_3*Y_3+\alpha_4*Y_4+\varepsilon_1$

Model 2: $ROA=\beta_0+\beta_1*X_2+\beta_2*Y_1+\beta_3*Y_3+\beta_4*Y_4+\varepsilon_2$

Model 3: $ROA=\gamma_0+\gamma_1*X_3+\gamma_2*Y_2+\gamma_3*Y_3+\gamma_4*Y_4+\varepsilon_3$

Among model 1, α_0 is the intercept of the regression equation, α_i(i=1,2,3,4) is the regression coefficient, and ε_1 is the error term.Similar to this, the same is true for Model 2 and Model 3.

3.5 Selection of samples and data sources

This article selects the data of the listed companies that published the current charitable donation information on the A-share main board of the Shanghai Stock Exchange from 2016 to 2019. Finally, 120 companies were sampled by stratified sampling based on the industry share. The reason for choosing SSE A shares is that the annual report data of listed companies is relatively objective and easy to obtain after auditing. In addition, this article processes the selected samples and data to ensure the accuracy of the results. The specific processing method is as follows:

(1) The 120 samples consisted of 60 companies that made donations and 60 companies that did not donate, all of which

were obtained by stratified sampling. When sampling, priority is given to companies that have donated for 3 years. Because such companies regard charitable donations as a company's strategic concept, excluding occasional donation companies, when the number of donating companies for three consecutive years is insufficient, the companies that have donated for two consecutive years are selected.

(2) This article removes cross-listed companies, and only retains companies listed on the Shanghai Stock Exchange A-shares. The reason is that different markets have different accounting standards, and the caliber of financial indicators will vary accordingly.

(3) The financial and insurance companies are excluded because the accounting standards and accounting systems that these companies refer to are different from those of other industries.

(4) This article excludes ST and ST* companies because the performance of this type of company is too poor, and this type of company often modifies financial statements or even conducts financial fraud, which is not conducive to the conduct of empirical studies.

(5) This paper eliminates companies with missing financial data in the database.The data sources used in this article are all taken from the CSMAR database and China Statistical Yearbook. The software for data processing uses EXCEL 2013 and SPSS 23.0.

IV. Empirical analysis

Due to space limitations, the detailed statistical results of the four-year data are mainly analyzed using 2016 as an example.The empirical process mainly carried out descriptive statistics, Pearson correlation analysis, goodness of fit and significance test, and regression result analysis

4.1 Descriptive Statistics

Table 2   2016-2018 Descriptive Statistics

	N	Min	Max	Mean	Std.16	Std.17	Std.18
ROA	120	-0.02	0.16	0.03	0.074	0.072	0.05
Y_1	120	0.01	0.86	0.19	0.35	0.346	0.34
Y_2	120	0.04	0.98	0.23	0.49	0.5	0.48
Y_3	120	1.99	6014.74	860.41	193.45	89.31	108.5
Y_4	120	0.42	6.69	1.42	1.83	2.05	2.41
Valid N	120						

Through Table2, we can see the shareholder's shareholding ratio is basically stable, and the accounts receivable turnover rate capital intensity are greatly affected by individual companies, but suddenly fluctuate greatly in 2018. While ROA continues to decline for several years.

Table3   Pearson correlation analysis in 2016

	X_1	Y_1	Y_2	Y_3	Y_4	ROA
X_1	1	0.163	.326*	0.185	-0.166	.515**
Y_1	0.163	1	.851**	-0.038	-0.063	0.005
Y_2	.326*	.851**	1	0.023	-0.066	0.099
Y_3	0.185	-0.038	0.023	1	0.23	0.07
Y_4	-0.166	-0.063	-0.066	0.23	1	0.165
ROA	.515**	0.005	0.099	-0.07	0.165	1

*Significantly correlated at the 0.05 level (two-sided).

**Significantly correlated at the 0.01 level (two-sided).

Table4   Fitness and analysis of variance

Model 1	TSS	df	F	Sig.	R^2	Adjusted R^2	ESS
Regression	0.033	4	9.088	0	0.398	0.354	0.023
Residual	0.049	115					
Total	0.082	119					

This paper conducts a linear regression analysis on the sample companies from 2016 to 2019, and the results show that charitable donations are significantly positively correlated, with sig values of 0.000, 0.004, and 0.005 respectively, which all passed the 1% significance test. The R-square value is close to 0.4, and the goodness of fit is relatively good. It shows that charitable donations of listed companies will improve financial performance. When an enterprise makes charitable donations, it satisfies the secondary distribution of social resources to a certain extent, and satisfies the psychological expectations of stakeholders; on the other hand, it also improves its reputation and the performance of the company, which is a social responsibility and A win-win behavior for corporate finance. Therefore, assume that H1 is verified by the data.

Table5   Regression result M1

Model 1	B	σ	Beta	t	Sig.
constant	0.035	0.01		3.581	0.001
X1	0.047	0.008	0.633	5.722	0.000
Y_1	-0.017	0.021	-0.088	-0.823	0.014
Y_3	0.000	0.000	-0.265	-2.397	0.020
Y_4	0.004	0.001	0.325	2.953	0.005

For model 2, the significance test was not passed, and the goodness of fit was poor. The results are no longer listed, so hypothesis 2 is rejected.

Table6 Fitness and analysis of variance

Model 3	TSS	df	F	Sig.	R^2	Adjusted R^2	ESS
Regression	.0.34	4	9.02	.000	0.396	0.352	0.031
Residual	0.052	55					
Total	0.087	59					

Table7   Regression result M2

Model 1	B	σ	Beta	t	Sig.
constant	0.046	0.012		3.706	0
X3	0.036	0.008	0.471	4.371	0
Y_1	1.41E-05	0	0.292	2.692	0.009
Y_3	-0.005	0.003	-0.172	-1.635	0.108
Y_4	-0.011	0.017	-0.07	-0.647	0.52

Based on Table6 and the three-year linear regression analysis data (not listed in the text), the fit degree for

three consecutive years has been increasing, respectively 0.396, 0.415, and 0.499, indicating that the regression model has an ideal effect and a high degree of credibility.

From Table7, we can know thatthe variable whether it belongs to a terminal manufacturing company has a positive impact on corporate performance(sig. value is less than 1% for three consecutive years), which also shows that the results of this model are highly accurate . Therefore, it can be concluded that charitable donations made by end-product manufacturers have a greater impact on the performance of the company. Therefore, the data supports Hypothesis H3.

V. conclusion

This article confirms Hypothesis H1 and Hypothesis H3, but rejects Hypothesis H2. That is (1) charitable donations will have a positive impact on corporate performance. (2) End product manufacturers have a greater impact on corporate performance than non-end product manufacturers about charitable donations. (3) When making charitable donations, the degree of influence of state-owned enterprises on corporate performance is not significantly higher than that of private enterprises.Enterprises (especially the terminal manufacturing industry) should actively participate in charitable donation activities to achieve a win-win situation between performance and social expectations. State-owned enterprises should take the lead to create a good and harmonious environment.

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