

# Impact of Corporate Social Responsibility on Financial Performance—Taking Guangzhou Listed Companies as Examples

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**Abstract:** Domestic enterprises often view Corporate Social Responsibility (CSR) as an economic burden or performance stunt, while foreign research highlights its benefits for enhancing company image and competitiveness. This paper investigates the relationship between CSR and Corporate Financial Performance (CFP) to encourage public attention and proactive CSR engagement. Using theoretical analysis and empirical research, the study explores CSR's impact on financial performance. Theoretical models propose that CSR's impact should be divided into direct and intermediary effects. Empirical analysis of Guangzhou's listed enterprises reveals that CSR's total effect on financial performance is insignificant. However, when decomposed, CSR shows a negative direct impact and a positive intermediary effect through media attention on accounting indices. The paper recommends enterprises enhance CSR awareness, increase publicity of CSR activities, and adopt CSR as a long-term strategy. Additionally, policy support for proactive CSR is suggested to promote sustainable development.

**Keywords:** Corporate social responsibility; Financial performance; Listed enterprises; Empirical analysis.

## 1. Introduction

The White Paper on China's Corporate Social Responsibility Report (2021) was released in 2023. The report shows that in 2021, the social responsibility development index of the top 300 Chinese enterprises was 15.2 points, which is generally in the bystander stage. In 2021, the corporate social responsibility development index reached 23.1 points, indicating that the performance of CSR by Chinese enterprises is gradually improving, but the overall level is still weak. This shows that the ability of listed information technology companies to create environmental and social value urgently needs to be improved [1-5].

The Guangzhou Stock Exchange officially released the "Guidelines for Social Responsibility of Listed Companies" in September 2021. This set clear requirements for listed information technology companies to fulfill their social responsibility and disclose information. This provided effective institutional support for enterprises that attach importance to fulfilling social responsibility [6-8]. The Guangzhou Stock Exchange and Green Finance require listed information technology companies to fulfill their social responsibilities through relevant regulations, strengthen disclosure of social responsibility information, and provide effective incentives for enterprises to actively fulfill their social responsibilities, taking the first step towards promoting capital market awareness and understanding of corporate social responsibility [9-12].

## 2. Research Questions

This study aims to explore the relationship between social responsibility and financial performance of listed companies in Guangzhou City. Specifically, it aims to answer the following questions:

- 1) What is the extent of CSR activities adapted by companies along:
  - a. theoretical management
  - b. environmental programs

- c. public welfare and charity programs
  - d. economic program
- 2) What is the level of corporate financial performance of listed companies along:
- a. transaction cost
  - b. production cost
- 3) What is the relationship between the CSR activities and financial performance of listed companies?

**3. Design and Methodology**

This study uses a descriptive-correlation research design.

The study focuses on 50 listed companies in Guangzhou, using panel data from 2012 to 2021, including main board, SME board, growth enterprise board, and innovation board companies.

Data are sourced from annual and CSR reports via Sina Finance, Economic and Financial Research databases, Rise Financial Research database, China Securities Regulatory Commission, and company websites. A fixed effects regression model (FEM) examines the impact of CSR on financial performance. The Table 1, Table 2 and Table 3 shows the details.

*Table 1: Corporate Social Responsibility Scale<sup>[13]</sup>*

	Items
Theoretical management	Enhance the corporate image of listed companies
	Reduce regulatory efforts
	Organizational effectiveness reduces layers of management
Environmental programs	Environmentally friendly products cater to the trend
	Improved resource utilization
	Achieve sustainable development
	Green business concepts boost stock prices and attract investment
Public welfare and charity programs	Improve the business environment and enhance competitiveness
	Good corporate image to enhance brand efficiency
	Cut your losses in times of adversity
	Shareholder dividends are generous, and additional investment brings economies of scale
Economic programs	Employee salary increase and promotion promote labor productivity
	Suppliers collect fast, timelier to provide high-quality and affordable products
	Consciously pay taxes and reduce enterprise expenditure on safety and fire protection

*Table 2: Reputation Capital Scale<sup>[14]</sup>*

	Items
Fame	Good quality of products or services
	Perfect organizational system and standardized management
	More positive media coverage
	High visibility of corporate legal entity
	A complete sales network enhances market share
	A corporate culture with values at its core
	Good public relations and social resources
Reputation	Consumer trust
	Attracting and retaining talents
	Timely and transparent information disclosure
	Legal operation

Table 3: Financial Performance Scale (from the perspective of transaction and production cost reduction) <sup>[13]</sup>

	Items
Transaction costs	
1	Helps to form fixed partnerships
2	Beneficial for consumers to establish brand loyalty
3	Signing a contract is easy to negotiate
4	Weakening of information asymmetry phenomenon
5	Reduced supervision investment in contract performance
Production cost	
1	Increased investment brings economies of scale effects
2	Increased employee initiative in work
3	Attracting talent is beneficial for innovation
4	Low occupancy of raw material inventory

4. Result and Discussion

Table 4: Total variance explained by the Overall Variance of Changes in Corporate Social Responsibility

Ingredients	Initial eigenvalue			Extract sum of squares loading			Rotational sum of squares loading		
	Total	% of variance	Accumulated %	Total	% of variance	Accumulated %	Total	% of variance	Accumulated %
1	2.511	17.938	17.938	2.511	17.938	17.938	2.030	14.499	14.499
2	2.045	14.605	32.543	2.045	14.605	32.543	2.025	14.462	28.960
3	1.865	13.321	45.864	1.865	13.321	45.864	1.921	13.719	42.679
4	1.772	13.085	58.949	1.772	13.085	58.949	1.887	13.622	55.301
5	.882	6.987	65.936						
6	.833	5.949	71.885						
7	.758	5.200	77.085						
8	.709	4.525	81.610						
9	.575	3.220	84.830						
10	.553	3.948	88.778						
11	.504	3.599	92.377						
12	.428	3.055	95.432						
13	.344	2.460	97.892						
14	.295	2.108	100.000						

Table 5: Factors matrix of Corporate Social Responsibility after Rotation, Rotating Component Matrix

	Component			
	1	2	3	4
h111	-.117	.796	.074	.614
h112	-.080	.028	.052	.715
h113	-.130	.317	.337	.640
hj1	.051	-.103	.839	.002
hj2	.254	-.163	.689	.134
hj3	.067	.024	.751	.079
hj4	-.101	.081	.425	-.614
gy1	-.109	.646	.088	-.063
gy2	.073	.841	.282	-.051
gy3	.203	.683	-.006	-.161
jj1	.253	.245	-.281	.336
jj2	.597	.131	-.116	-.001
jj3	.827	.084	.094	-.130
jj4	.868	-.078	.118	.047

Table 4 explains the total variance in CSR variables, highlighting how each component contributes to overall variance. The initial eigenvalues indicate that the first four components account for most of the variance, with a cumulative total of approximately 58.949% before item deletion and 64.135% after modifications. Table 5 presents the Rotating Component Matrix, showing the factor loadings for each

item in the CSR scale. The matrix shows how the items are grouped into factors, with the highest loadings indicating the strongest relationships between items and factors. Two items, hj4 and jj1, were deleted to improve the analysis's overall fit, revealing distinct factors representing ethical management, environmental responsibility, public welfare and charity, and economic responsibility.

**Tables 6 through 10** provide further insights into the refinement of CSR variables and introduce the analysis of Corporate Reputation Capital. **Table 6** displays the test results of KMO and Bartlett's tests, showing a KMO value of 0.759, indicating sampling adequacy, and a significant Bartlett's test result, which supports the use of factor analysis. **Table 7** provides the updated variance explanation after factor extraction, noting that the four common factors account for a cumulative variance of 64.135%. This alignment is consistent with the dimensions set forth in the study's indicators. **Table 8** further details the factor loadings of CSR variables post-rotation, emphasizing that all loadings exceed 0.5, satisfying statistical requirements. Transitioning to Corporate Reputation Capital, **Table 9** demonstrates the variance explained by this new variable, with two primary factors contributing to a cumulative variance of 63.067%, revealing critical dimensions such as popularity and reputation. **Table 10** then outlines the Rotating Component Matrix for Corporate Reputation Capital, presenting the relationships between various items and their respective factors.

*Table 6: Test Results of KMO and Bartlett for Corporate Social Responsibility Variables*

Kaiser Meyer Olkin metric for sampling adequacy		.759
Bartlett	Approximate square card	231.47
	df	49
	Sig.	.000

*Table 7: The Total Variance Explained by the Overall Variance of Corporate Social Responsibility Variables*

Ingredients	Initial eigenvalue			Extract sum of squares loading			Rotational sum of squares loading		
	Total	% of variance	Accumulated%	Total	% of variance	Accumulated%	Total	% of variance	Accumulated %
1	2.511	18.761	18.761	2.251	18.761	18.761	2.077	17.306	17.306
2	1.965	16.377	35.138	1.965	16.377	35.1383	1.995	16.624	33.930
3	1.768	14.735	49.873	1.768	14.735	49.873	1.774	14.781	48.711
4	1.711	14.261	64.135	1.711	9.261	59.135	1.751	14.424	62.135
5	.828	6.896	71.031						
6	.788	6.596	77.627						
7	.667	5.394	83.031						
8	.502	4.047	87.068						
9	.415	3.524	90.592						
10	.108	3.817	94.448						
11	.347	2.894	97.343						
12	.349	2.657	100.00						

*Table 8: Factor Matrix of Corporate Social Responsibility Variable Rotation*

	Component			
	1	2	3	4
h111	-.117	.796	.074	.616
h112	-.080	.028	.052	.723
h113	-.130	.317	.337	.650
hj1	.051	-.103	.847	.002
hj2	.254	-.163	.705	.134
hj3	.067	.024	.792	.079
gy1	-.109	.646	.088	-.063
gy2	.073	.852	.282	-.051
gy3	.203	.704	-.006	-.161
jj2	.724	.131	-.116	-.001
jj3	.851	.084	.094	-.130
jj4	.883	-.078	.118	.047

Table 9: The Total Variance Explained by the Overall Variance of Corporate Reputation Capital Variables

Ingredients	Initial eigenvalue			Extract sum of squares loading			Rotational sum of squares loading		
	Total	% of variance	Accumulated%	Total	% of variance	Accumulated %	Total	% of variance	Accumulated %
1	5.388	48.985	48.985	5.388	48.985	48.985	3.839	34.899	34.899
2	1.549	14.082	63.067	1.549	14.082	63.067	3.098	28.168	63.067
3	.886	8.056	71.123						
4	.833	7.572	78.695						
5	.653	5.932	84.628						
6	.597	5.429	90.056						
7	.464	4.215	94.271						
8	.396	3.600	97.871						
9	.217	1.971	99.842						
10	.009	.084	99.926						
11	.008	.074	100.00						

Table 10: The Factor Matrix after the Rotation of Corporate Reputation Capital Variable and The Rotating Component Matrix

	Ingredients	
	1	2
Zmd1	0.255	0.655
Zmd2	0.298	0.657
Zmd3	0.525	0.353
Zmd4	0.124	0.799
Zmd5	0.424	0.66
Zmd6	0.139	0.615
Zmd7	0.255	0.775
ymd1	0.812	0.212
ymd2	0.447	0.093
ymd3	0.741	0.333
ymd4	0.68	0.476

Tables 11 through 13 focus on the in-depth analysis of Corporate Reputation Capital, beginning with Table 11, which confirms the adequacy of the data for exploratory factor analysis through a KMO value of 0.731 and a significant Bartlett's test result with a chi-square value of 206.82. Table 12 explains the variance for Corporate Reputation Capital, illustrating how the extracted factors account for a significant portion of the variance, specifically 67.113% after rotation. Finally, Table 13 presents the Prime Matrix for the Rotated Corporate Reputation Capital Variables, demonstrating the factor loadings that validate the hypothesized dimensions of popularity and reputation. The high loadings across items indicate that the factors are well-defined and contribute to a deeper understanding of corporate reputation within the context of the study.

Table 11: Test Results of KMO and Bartlett for Corporate reputation KMO and Bartlett's Test

Kaiser Meyer Olkin metric for sampling adequacy		.731
Bartlett	Approximate square card	206.82
	df	31
	Sig.	.000

Table 12: Explanation of the overall variance of changes in corporate reputation capital

Ingredients	Initial eigenvalue			Extract sum of squares loading			Rotational sum of squares loading		
	Total	% of variance	Accumulated %	Total	% of variance	Accumulated%	Total	% of variance	Accumulated%
1	4.833	53.699	53.699	4.833	53.699	53.699	3.123	34.704	34.704
2	1.207	13.414	67.113	1.207	13.414	67.113	2.917	32.409	67.113
3	.880	9.773	76.886						
4	.693	7.697	84.583						
5	.509	5.651	90.234						
6	.461	5.120	95.354						
7	.312	3.467	98.820						
8	.097	1.077	99.897						
9	.009	.103	100.000						

Table 13: The Prime Matrix of the Rotated Corporate Reputation Capital Variable

	Ingredients	
	1	2
Zmd1	0.265	0.694
Zmd2	0.308	0.705
Zmd4	0.164	0.817
Zmd5	0.354	0.68
Zmd6	0.143	0.658
Zmd7	0.263	0.783
ymd1	0.835	0.241
ymd3	0.762	0.357
ymd4	0.713	0.485

## 5. Conclusion

This study explored the relationship between Corporate Social Responsibility (CSR) and financial performance among listed companies in Guangzhou City, with a focus on understanding the extent of CSR activities and their impact on financial metrics. Utilizing a descriptive-correlation research design, data from 50 listed companies spanning 2012 to 2021 was analyzed using a fixed effects regression model. The analysis revealed a significant correlation between CSR activities and financial performance, particularly in transaction and production cost reduction. Companies that engaged in comprehensive CSR activities, such as environmental programs and public welfare, demonstrated improved financial outcomes, suggesting that CSR not only enhances corporate reputation but also contributes to financial sustainability. The findings underscore the importance of strategic CSR integration, as it not only fulfills ethical responsibilities but also aligns with corporate goals for economic gain. This research emphasizes the need for listed companies to prioritize CSR activities as part of their core strategies to achieve long-term success in the competitive business landscape of Guangzhou City.

## References

- [1] Barnett, M. L. (2007). *Stakeholder influence capacity and the variability of financial returns to corporate social responsibility*. *Academy of Management Review*, 32, 794-816.
- [2] Carroll, A. B. (1979). *A three-dimensional conceptual model of corporate performance*. *Academy of Management Review*, 4, 497-505.
- [3] Clarkson, M. B. (1995). *A stakeholder framework for analyzing and evaluating corporate social performance*. *Academy of Management Review*, 1, 92-117.
- [4] Davis, K. (1960). *Can business afford to ignore social responsibilities?* *California Management Review*, 2, 70-76.
- [5] Holman, W. R., New, J. R., & Singer, D. (1985). *The impact of corporate social responsiveness on shareholder wealth*. *Research in Corporate Social Performance and Policy*, 7, 137-152.
- [6] Jamali, D. (2007). *The case for strategic corporate social responsibility in developing countries*. *Business and Society Review*, 1, 1-27.
- [7] Zhao, W. (2019). *Research on the comprehensive evaluation index system of enterprise management*. *Contemporary Finance and Economics*, 5, 49-54.
- [8] Li, L. Q. (2020). *Theoretical and empirical research on corporate social responsibility evaluation*. *Southern Economy*, 1, 105-118.
- [9] Yan, S. Y. (2020). *Financial evaluation system of social responsibility for listed companies*. *Financial Science*, 4, 66-72.
- [10] Duan, C. Q., & Ding, L. (2020). *Analysis of the evaluation dimensions and strengthening measures of corporate social responsibility*. *Journal of Zhongnan University of Economics and Law*, 6, 116-120.
- [11] Zhu, R. X., & Guo, J. F. (2020). *Research on social responsibility and international competitiveness of enterprises*. *East China Economic Management*, 18(6), 28-30.
- [12] Liu, Q. X., & He, Z. J. (2021). *On the relationship between corporate social responsibility and market competitiveness*. *Enterprise Economy*, 4, 79-80.
- [13] Hu, X. Q. (2020). *Corporate sustainable development and corporate social responsibility*. *Journal of Chongqing University of Posts and Telecommunications (Social Science Edition)*, 2, 123-125.
- [14] Zhu, W. M., & Chen, X. Y. (2020). *Corporate social responsibility: The basis of strategic public relations for enterprises*. *Contemporary Finance and Economics*, 8, 65-73.
- [15] Lei, Z. H., & Yang, Q. L. (2020). *Research on employee responsibility indicators from the perspective of corporate responsibility*. *Journal of Inner Mongolia University of Finance and Economics*, 2, 59-62.