

# *Corporate Social Responsibility and Corporate Performance: A Meta-Analysis*

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**Keywords:** Corporate social responsibility; Corporate economic performance; Corporate financial performance; Meta-analysis

**Abstract:** Corporate social responsibility is an important force to increase the total social welfare and promote the sustainable development of corporates. However, there have been serious differences in the academic research on the impact of corporate social responsibility on corporate performance. Based on the previous research on corporate social responsibility and corporate performance, this study further refines the variable dimension and deeply analyzes the relationship and mechanism between them. Providing a methodologically and systematically rigorous review than prior efforts, this study conducts a Meta-analysis of 42 studies yielding a total sample size of 92863 observations. The results suggest that corporate social responsibility has a significant positive effect on corporate economic & financial performance, especially on accounting-based performance. The findings also indicate that year of publication, sample country and sample industry have moderating effect on the mean effect. These findings enrich the study of CSR and organization sustainability.

## **1. Introduction**

Corporate Social Responsibility (CSR) has always been a hot topic of concern in all walks of life. Especially in recent years, many companies have exposed their social responsibility behaviors, such as the health hazards caused by inferior products to consumers, and the human rights brought by sweatshops, and the smog caused by the emission of polluting waste gas, all of which makes corporate social responsibility become the balance point of enterprise development and social welfare. Can corporate social responsibility bring financial value to it? Will companies with better financial positions be more active in fulfilling their social responsibilities? These questions need to be answered urgently. However, when it comes to the relationship between corporate social responsibility and corporate economic and financial performance, despite decades of development, there are still huge differences in the conclusions of existing research. There are three types of conclusions: positive correlation, negative correlation and irrelevance. Not only can it not provide useful guidance and reference for corporates to better undertake social responsibilities, but even shake their confidence in fulfilling social responsibilities.

At this time, using the research method of Meta-analysis to merge, organize and analyze the existing empirical research results on the relationship between corporate social responsibility and corporate economic and financial performance can not only overcome the shortcomings of

traditional review methods, but also It is possible to reduce various deviations and obtain more scientific, objective, true and universal conclusions. Therefore, this paper will use Meta analysis to summarize and comment on 42 domestic and foreign empirical literatures from the perspective of quantitative review, in order to reveal the relationship between corporate social responsibility and corporate economic and financial performance, so as to better fulfill responsibilities and obtain profits for corporates, to provide guidance and reference.

The structure of this paper is as follows: the next part will systematically describe the relevant theoretical background and existing research; then, based on existing theories, hypotheses and research models are proposed; then, the basic methodology of meta-analysis and the operation process of this paper are described; then, based on Finally, the limitations of this paper and future research directions are pointed out.

## 2. Literature review

### 2.1 Corporate social responsibility and corporate performance

Whether corporate decision-makers should consider factors other than profit when making corporate decisions is a major issue in academic research. Many scholars have tried to define the standard of corporate social responsibility through various studies, such as the Carroll model proposed by Carroll. In this model, Carroll defines corporate social responsibility as a concept that includes four aspects of responsibility: "economic, legal, moral and philanthropic". Among them, the economic responsibility means that the enterprise should produce profitable and in-demand products, which is the basic responsibility of the enterprise. For developing countries, this responsibility is reflected in creating employment opportunities and bringing income to the people; legal responsibility means that corporates should perform their economic responsibilities within the scope permitted by the legal system of the country, such as corporates should ensure the safety of employees, do not harm the environment and pay taxes in accordance with the law; moral and ethical responsibility is to require corporates to be fair and just, follow the requirements of the law and strive to do better; public welfare and charitable responsibility refers to the responsibility to promote social development and improve people's quality of life. This model has been widely accepted and recognized, but with the continuous changes in the world economic environment, the definition of corporate social responsibility is constantly incorporating new connotations. For example, the World Business Council for Sustainable Development expresses corporate social responsibility as a corporate commitment, promising that it will promote economic development, and that it will maximize the lives of its employees, their families, and communities. quality. The economic and financial performance of an enterprise refers to the performance of an enterprise in the market and finance, which mainly includes two aspects: market performance and financial performance.

Different studies and literatures have also given different answers to the classification and measurement methods of the two. This paper organizes a large number of literatures and gives a more systematic classification. Please refer to Table 1 for details.

Table 1: Classification and measurement of corporate social responsibility and corporate performance

Member	Representative Measurement	Representative Literature
Corporate Social Responsibility (CSR), Community & Society-related, Environment-related, Human Rights-related	Databases such as KLD, EIRIS, etc., give scores based on the performance of companies in key areas and controversial business indicators such as: community, corporate governance, diversity, employee relations, environment, human rights and products.	Richard A. Johnson & Daniel W. Greening,1999;Vassiliki Grougiou, Emmanouil Dedoulis & Stergios Leventis,2016
	Fortune's annual survey of corporate reputation.	Jean B. McGuire, Alison Sundgren & Thomas Schneeweis,1988;
	Score given by the Corporate Social Responsibility Report.	Yu, Huang, & Cao, 2015

Member	Representative Measurement	Representative Literature
	Social Responsibility Comprehensive Evaluation Index.	Zhang, Zhao, & Yang, 2014
Positive Social Responsibility (Positive CSR)	The KLD database aggregates companies' scores in key areas of social responsibility as well as controversial business indicators such as community, corporate governance, diversity, employee relations, environment, human rights and products to provide a positive ranking.	Philipp Schreck, 2011
Negative Social Responsibility (Negative CSR)	The KLD database assigns negative rankings based on how companies score in key areas and on controversial business metrics such as community, corporate governance, diversity, employee relations, environment, human rights and products.	Kyung Ho Kang, Seoki Lee & Chang Huh, 2010
Market Performance (Market-based)	P/E ratio, P/B ratio, Tobin's Q, etc.	Parthiban David, Matt Bloom & Amy J. Hillman, 2007
Financial Performance (Finance-based)	Return on assets, return on equity, profit on sales, sales growth rate, etc.	Supriti Mishra & Damodar, 2010

## 2.2 The relationship between corporate social responsibility and corporate economic and financial performance

The literature on the relationship between corporate social responsibility and corporate economic and financial performance is very rich, and the theories on which it is based also show diverse characteristics.

Table 2: Main theories that study the relationship between corporate social responsibility and corporate economic and financial performance

Analysis Conclusion	Research theory	Specific Explanation	Representative Literature
Positive Correlation	Stakeholder Theory	Corporate social responsibility is a "contradiction coordination mechanism" for coordinating corporate managers and corporate stakeholders. The effective implementation of this mechanism can create and improve corporate economic and financial performance.	Freeman, 1984
	Risk Management Theory	Corporate social responsibility is conducive to the accumulation of goodwill or moral capital. Although goodwill or moral capital has a weak role in creating a company's economic and financial performance, it can ensure that when a negative social responsibility event occurs, the company can obtain the "Lighter penalties", thus bringing an "insurance-like effect" to the economic and financial performance of corporates.	Godfrey, 2009
	New Institutional Economics Theory	Corporate social responsibility is an institutional choice for stakeholders to informally restrain the profit-seeking behavior of corporates under the conditions of a market economy.	Su & He, 2011
Irrelevant	Capital Structure Independent Theory	Corporate social responsibility does not have price characteristics and is not a major risk factor affecting corporate value. Therefore, whether an enterprise fulfills its social responsibility will not bring about significant changes in corporate value. That is, there is no correlation between the two.	Ullman, 1985
Negative Correlation	Maximize Shareholder Benefits Theory	This theory holds that, on the premise of not violating laws and market rules, creating maximum profits for shareholders is the only social responsibility of an enterprise. However, corporate social responsibility will increase the cost of the enterprise, weaken its advantage in market competition, and have a negative impact on the economic and financial performance of the enterprise and the interests of shareholders.	Aupperle et al., 1985
	Agency Theory	In order to improve personal reputation, management tends to devote corporate resources to corporate social responsibility excessively, thus causing damage to corporate value and shareholder interests.	Barnea & Rubin, 2010

Among these theories, Stakeholder Theory has been recognized by many scholars. In empirical research, some scholars have adopted multiple perspectives such as Consumer Reasoning Theory, Signaling Theory, Social Identity Theory, and Quality Management Theory. Stakeholder theory is explained. The modern enterprise stakeholder theory (Cornell & Shapiro, 1987) believes that the value of an enterprise depends not only on the costs caused by explicit claims, but also on the costs caused by implicit claims. From this perspective, claimants of corporate resources, in addition to shareholders and bondholders, also have explicit claims contracts with the enterprise (eg, wage contracts between the enterprise and its employees) or implicit contracts with the enterprise (e.g., Corporates need to provide high-quality services and fulfill social responsibilities) to other

stakeholders. If an enterprise fails to fulfill its social responsibilities, stakeholders who have implicit contracts with the enterprise will turn these implicit contracts into explicit claims, which will bring greater losses to the enterprise. For example, if a company fails to fulfill its commitments to the government (destroying the environment, producing counterfeit and shoddy products, etc.), government agencies will see it as necessary to impose stricter regulations, i.e., clear claims, to enforce corporate social responsibility. This lack of social responsibility also makes other stakeholders doubt whether the company can meet their demands. Therefore, compared with other companies, a company that has established a good image of undertaking social responsibility has lower costs due to hidden claims, and thus can obtain higher economic and financial value.

### 3. Research Model and Hypotheses

Based on the above review of previous literature and research, it can be found that there are major differences in the research on corporate social responsibility and corporate economic and financial performance. The reasons may be as follows: First, about corporate social responsibility and corporate economics. The classification and measurement of financial performance is not uniform. Taking the economic and financial performance of corporates as an example, many studies only involve one aspect of market performance or financial performance. In addition, the variables used to measure market performance and financial performance are also different. The classification and measurement of diverse variables has caused great difficulties for the unification of research results; secondly, the selection of research samples has diversity and difference. Due to different research purposes or due to the limitation of sample data, many studies are limited to a certain industry, certain regions or countries, lacking universal value, and thus different research conclusions have been drawn; again, the research is based on There are differences in theories and perspectives, and research methods are also different. For example, some studies use regression analysis methods, while others use case study methods. Since regression analysis will be affected by endogeneity, and case studies are limited by reliability and validity, even if the sample is the same, the use of different methods, the conclusions obtained are likely to be different.

One of the advantages of meta-analysis is that it can explore the potential moderating effect of the characteristics of the original literature (such as: publication year, sample country, sample source, etc.) on the relationship of the main inquiry (Hunter & Schmidt, 1990). Therefore, based on this advantage of meta-analysis and the analysis of the reasons for the differences in the conclusions of previous studies and literature, this paper established a research model (Figure 1 research model), and each hypothesis will be discussed in detail below.

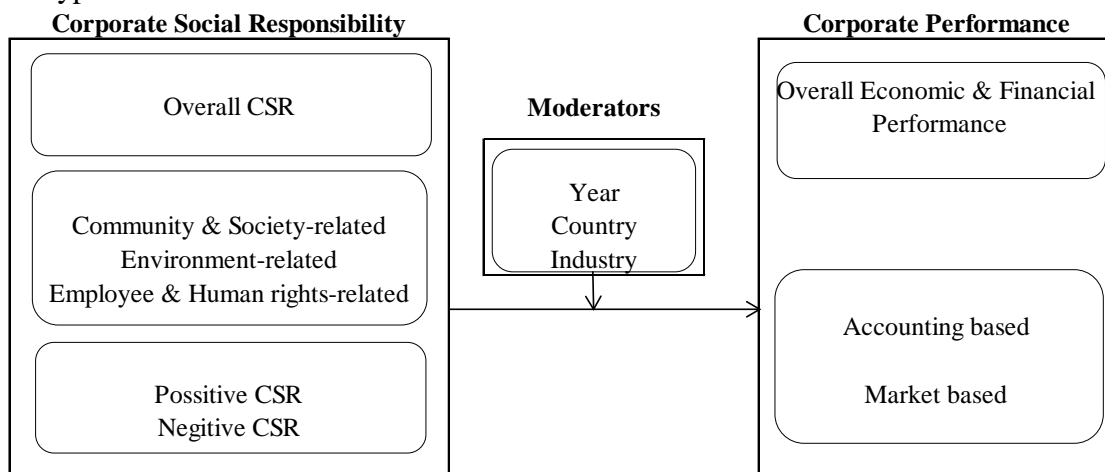


Figure 1: Research Model

### **3.1 The relationship between corporate social responsibility and corporate economic and financial performance**

Although different theories and studies have given different answers to the relationship between corporate social responsibility and corporate economic and financial performance, there is no unified result. But in general, most of the existing studies believe that when a company fulfills its social responsibility, it will gain a better reputation, which will help it win the trust and support of multiple stakeholders such as the government and consumers, and thus be beneficial to the economy and finance. Achievement of performance. At the same time, as far as the reality is concerned, stakeholders such as the government and consumers are very concerned about the company's fulfillment of social responsibilities, and companies that do not undertake social responsibilities (such as Sanlu) are often punished severely or even fatally. Therefore, this paper proposes the hypothesis H1.

H1: Corporate social responsibility is positively related to the economic and financial performance of corporates.

As a concept with no unified definition, corporate social responsibility involves many dimensions. Many literatures have analyzed one or some dimensions. Because the connotations of different dimensions may be different, for example, social responsibility related to the corporate environment is more focused on reducing Production damages the environment and strengthens investment in environmental protection, while the social responsibility related to employees is mainly reflected in the company's respect for employees, creating a good working environment for them, and providing benefits. Differences in connotation directly lead to different stakeholders and different inputs, which may very likely affect the relationship between corporate social responsibility and corporate economic and financial performance in different dimensions. Therefore, this paper proposes the hypothesis H2.

H2: Different dimensions of corporate social responsibility have different correlations with corporate economic and financial performance.

Compared with corporate financial performance, there are more factors affecting corporate market performance and higher uncertainty. The effect of corporate social responsibility on market performance is likely to be affected by other factors, and the significance of the relationship between the two may be reduced accordingly. Therefore, this paper proposes the hypothesis H3:

H3: The positive impact of corporate social responsibility on corporate financial performance is stronger than the positive impact on market performance.

### **3.2 Moderating effects of publication time, sample country and industry**

With the development of time, viewpoints such as modern enterprise theory and high-quality management theory have been continuously formed and updated. Corporate social responsibility has received attention from the government, consumers, and even the enterprise itself, and its strategic position in the enterprise has become more and more important. It is becoming more and more important, and its impact on the economic and financial performance of corporates is also increasing. Therefore, this paper proposes the hypothesis H4.

H4: In recent published literature, corporate social responsibility is more strongly correlated with corporate economic and financial performance.

In countries with different levels of economic development, there are great differences in the performance of corporate social responsibilities. Corporates in developed countries generally undertake more social responsibilities, and their enthusiasm for fulfilling social responsibilities is also higher. Under such circumstances, the public has higher expectations and stricter requirements for companies to fulfill their social responsibilities. In developing countries, because the overall



level of corporate social responsibility performance is relatively low, a company's social responsibility efforts can easily make it stand out from its competitors, gain public recognition and support, and be reflected in its economy. financial performance. Therefore, this paper proposes the hypothesis H5:

H5: In emerging countries, corporate social responsibility and corporate economic and financial performance will show a stronger positive correlation.

Different industries have different cost structures and factors that affect profits. Compared with the manufacturing industry, the resource allocation of the service industry is more flexible, and the cost of undertaking social responsibility has less negative impact on its production and operation; at the same time, because the enterprise value of the service industry is more affected by consumer satisfaction and consumer loyalty, undertaking social responsibilities will bring more lucrative returns to service corporates. Overall, there is a more significant relationship between the social responsibility of service corporates and their economic and financial performance. Therefore, this paper proposes the hypothesis H6.

H6: Compared with the manufacturing industry, the H6 service industry has a stronger positive correlation between its corporate social responsibility and its economic and financial performance.

## 4. Research Methods

### 4.1 Literature search and sample characteristics

This paper employs a variety of search techniques to retrieve appropriate empirical research: First, in five electronic databases (Tongfang Knowledge Network, ABI/Inform, JSTOR, Elsevier Science Direct & Springer Link) that contain a large number of business journals in both Chinese and Western languages, Search using keywords such as "Corporate social responsibility (CSR)", "corporate performance", "Corporate financial performance (CFP)"; next, on Google Scholar, Search relevant literature. Then, in order to ensure that nothing was left out, major management and business academic journals such as: Academy of Management Journal (AMJ), Strategic Management Journal (SMJ), Journal of Business Ethics (JBE), Journal of Business Research (JBR), Journal of Marketing (JM), Administrative Science Quarterly (ASQ), etc., conducted manual special searches. Using the above methods, a total of 151 related research papers were finally retrieved, including 128 in English and 23 in Chinese.

Since this paper aims to study the relationship between corporate social responsibility and corporate economic and financial performance, the 151 documents collected initially need to be screened. The screening criteria are mainly as follows: first, it must contain at least one variable about the economic and financial performance of the company; second, corporate social responsibility must be one of the main variables of its research; third, the sample must be reported in the literature Quantities and effect size values that can be calculated (e.g. correlation coefficients, path coefficients for structural equations, etc.). After a multi-faceted review, 42 empirical research papers were finally screened. These 42 articles are from 22 journals, and the publication time is distributed from 1988 to 2016. Among them, 3 from AMJ, 6 from SMJ, 4 from JBR, 1 from JM, 7 from JBE, and the rest from other literatures. Table 3 gives a list of the full literature.

Table 3: List of 42 literatures used for meta-analysis

<i>The Academy of Management Journal</i> (n=3)
Jean B. McGuire, Alison Sundgren and Thomas Schneeweis,(1988)
Daniel B. Turban and Daniel W. Greening,(1997)
Richard A. Johnson and Daniel W. Greening,(1999)
<i>Journal of Marketing</i> (n=1)
Xueming Luo and C. B. Bhattacharya,(2006)
<i>Strategic Management Journal</i> (n=6)

Jordi Surroca, Josep A. Tribo and Sandra Waddock,(2010)  
 Paul C. Godfrey, Craig B. Merrill and Jared M. Hansen,(2009)  
 Sandra A. Waddock and Samuel B. Graves,(1997)  
 Scott D. Julian and Joseph C. Ofori-Dankwa,(2013)  
 Parthiban David, Matt Bloom and Amy J. Hillman,(2007)  
 Abigail McWilliams and Donald Siegel,(2000)  
**Journal of Business Research(n=4)**  
 Fanny Vong, IpKin Anthony Wong,(2013)  
 Jan Kemper, Oliver Schilke, Martin Reimann, Xuyi Wang and Malte Brettel,(2013)  
 David Han-Min Wang, Pei-Hua Chen, Tiffany Hui-Kuang Yu and Chih-Yi Hsiao,(2015)  
 Vassiliki Grougiou, Emmanouil Dedoulis and Stergios Leventis,(2016)  
**The International Journal of Accounting(n=1)**  
 Sacero Bozzolan, Michele Fabrizi, Christine A. Mallin and Giovanna Michelon,(2015)  
**International Journal of Production Economics (n=1)**  
 Lujie Chen, Andreas Feldmann, and Ou Tang,(2015)  
**Financial Management(n=1)**  
 Stephen Brammer, Chris Brooks and Stephen Pavelin,(2006)  
**Journal of Business Ethics(n=7)**  
 Anis Ben Brik, Belaid Rettab and Kamel Mellahi,(2011)  
 Roberts C. Padgett and Jose I. Galan,(2010)  
 Philipp Schreck,(2011)  
 Roman Lanis, Grant Richardson,(2015)  
 Yan Leung Cheung, Weiqiang Tan, Hee-Joon Ahn and Zheng Zhang,(2010)  
 Supriti Mishra and Damodar,(2010)  
 Wenjing Li and Ran Zhang,(2010)  
**International Review of Financial Analysis(n=1)**  
 Hisham Farag, Qingwei Meng and Chris Mallin,(2015)  
**Journal of Banking & Finance(n=2)**  
 Anand Jha and James Cox,(2015)  
 Steven F. Cahan, Chen Chen, Li Chen and Nhut H. Nguyen,(2015)  
**Journal of Corporate Finance (n=2)**  
 Karen Jingrong Lin, Jinsong Tan, Liming Xzhao and Khondkar Karim,(2015)  
 Lei Gao and Joseph H. Zhang,(2015)  
**Journal of Production Economics (n=1)**  
 Lucia Barcos, Alicia Barroso, Jordi Surroca and Josep A Tribo,(2013)  
**Research in International Business and Finance (n=1)**  
 Isabelle Ducassy, Sophie Montandrou, (2015)  
**Accounting Forum (n=1)**  
 Vassiliki Grougiou, Emmanouil Dedoulis, Stergios Leventis & Stephen Owusu-Ansah, (2014)  
**BRQ Business Research Quaterly (n=1)**  
 Mercedes, Rodriguez-Fernandez,(2015)  
**Journal of Family Business Strategy (n=1)**  
 Joern Block and Marcus Wagner,(2014)

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**International Journal of Hospitality Management (n=3)**  
 Hyewon Youn, Nan Hua and Seoki Lee,(2015)  
 Seoki Lee, Manisha Singal and Kyung Ho Kang, (2013)  
 Kyung Ho Kang, Seoki Lee & Chang Huh, (2010)  
**Journal of Multinational Financial Management (n=1)**  
 Ming Jian and Kin-Wai Lee, (2015)  
**Journal of Huaibei Normal University (n=1)**  
 Li & Zhuo, (2015)  
**Business Review (n=1)**  
 Yu, Huang, & Cao (2015)  
**Statistics & Information Forum (n=1)**  
 Zhang, Zhao, & Yang (2014)  
**Accounting and Finance (n=1)**  
 Zhang, (2015)

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## 4.2 Coding and measurement

Since the correlation coefficient  $r$  is not affected by scale (Hunter & Schmidt, 1990), this paper adopts  $r$  as the effect size. This paper also uses Excel software to establish a database, which codes the research description items such as author, publication year, publication journal, country of study sample, and industry of study sample in detail. In addition to the recording of effect sizes and literature characteristics, the coding process also includes two aspects of classification: first, classify corporate social responsibility variables and label them according to the classification; second, classify corporate economic and financial performance variables according to market and

Accounting is divided into two measurement methods. In order to eliminate the errors caused by manual coding, the coding process was repeated twice, and sampling inspection was carried out, no errors were found, and the recorded data can be considered to be accurate and reliable.

The resulting data, with a total sample size of 92,863, included 157 correlation coefficients obtained from 42 independent research papers. Some literatures provide multiple correlation coefficients because: first, the literature contains multiple independent research samples (eg, Kyung Ho Kang, Seoki Lee, Chang Huh, 2010); second, the literature contains different dimensions of corporate social responsibility and give independent effect sizes (eg, Daniel B. Turban and Daniel W. Greening, 1997); third, the literature includes different corporate economic and financial performance and gives independent effects amount (eg, Wenjing Li and Ran Zhang, 2010). Therefore, the total number of effect sizes exceeds the total number of literatures, but each effect size in this paper is independent.

### 4.3 Average effect size estimation and heterogeneity test

Considering the existence of sample error and measurement error, and referring to previous studies on meta-analysis of effect size in the field of management, this paper uses sample weighting and average correlation coefficient after reliability correction to estimate the overall effect size. Specifically, it mainly includes the following steps: first, use Fisher's Z to transform each effect size  $r$ ; next, weight the effect size according to the sample size of each study; finally calculate the effect size mean and standard error.

In addition, this paper also tested the heterogeneity of the selected studies, that is, the Q-test. The Q-test is a chi-square test that obeys a chi-square distribution with  $k-1$  degrees of freedom ( $k$  is the number of effect sizes). If the results are statistically significant, it means that these effect sizes are a heterogeneous distribution, that is, the relationship under study is significantly different between different valid samples, and the study is meaningful.

### 4.4 Moderating effect analysis

On the basis of mean effect size estimation and heterogeneity test, moderator effect analysis can further explore which potential moderator variables lead to differences in conclusions in existing studies. According to the previous assumptions, this paper establishes a sub-sample based on potential moderator variables, which include: different dimensions of corporate social responsibility, two different aspects of corporate economic and financial performance, publication time, sample source country, and sample industry. By analyzing the sub-samples, we discuss their impact on the relationship between corporate social responsibility and corporate economic and financial performance.

## 5. Research Results

Using the above-mentioned Meta analysis technology, this paper comprehensively obtained the relationship between corporate social responsibility and corporate economic and financial performance, and the number of effect sizes ( $K$ ), the sample-weighted correlation coefficient ( $r$ ), the sample-weighted and calculated results. The reliability-adjusted correlation coefficient ( $r_c$ ) and its standard error (SE), the 95% confidence interval (CI), and the Q value of the heterogeneity test are reported, see Tables 4 and 5 for details.

This paper firstly estimates the value of the average effect size between corporate social responsibility and corporate economic and financial performance under comprehensive conditions, and obtains a positive and significant result ( $r_c=0.133$ ,  $K=157$ , confidence level is 95% confidence



interval CI =0.128-0.137), and the results of the heterogeneity test (Q value=8304.384) also indicated the existence of moderator variables. This result supports H1.

The moderating effect analysis of the sub-samples also achieved significant results. First, corporate social responsibility of different dimensions has a strong positive correlation with corporate economic and financial performance, but the strength of the correlation is not the same. For example, under the dimension of CSR related to community and society, the correlation between the two ( $r_c = 0.288$ ) is much higher than that under the dimension of human-related CSR ( $r_c = 0.120$ ). This result provides strong support for H2. Secondly, the results of the two different dimensions of corporate economic and financial performance also show strong differences. The correlation between corporate social responsibility and corporate market performance ( $r_c = 0.098$ ) is weaker than the correlation between corporate social responsibility and corporate financial performance ( $r_c = 0.173$ ). H3 is validated. Thirdly, the difference in national economic development also brings about the difference in the correlation between corporate social responsibility and corporate economic and financial performance. The results for emerging countries ( $r_c = 0.266$ ) are more significant than those for developed countries ( $r_c = 0.140$ ). It can be considered that H5 is established. In addition, under different industry conditions, the correlation between corporate social responsibility and corporate economic and financial performance not only reflects the consistency of direction, but also reflects the difference in strength. The value of the manufacturing industry ( $r_c = 0.132$ ) is significantly lower than that of the service industry ( $r_c = 0.402$ ), supporting H6. However, the subsamples divided according to the year of publication did not show significant differences. Results for articles published after 2000 ( $r_c = 0.133$ ) were only slightly stronger than results for articles published before 2000 ( $r_c = 0.131$ ). In this case, H4 cannot be accepted.

In conclusion, the results of average effect size calculation, heterogeneity test and moderation effect test basically support the original hypothesis and model. The reasons for these results will be systematically explained in the next section.

## 6. Discussion

This paper proves the positive correlation between corporate social responsibility and corporate economic and financial performance through meta-analysis, which strongly supports the discussion of the relationship between the two in stakeholder theory.

At the same time, this paper analyzes several dimensions of corporate social responsibility, and also obtains some interesting findings. For example, in the first classification of corporate social responsibility, the correlation between comprehensive corporate social responsibility and corporate economic and financial performance ( $r_c = 0.133$ ) is much weaker than that of community and society-related social responsibility, environment-related social responsibility. The correlation between responsibility and corporate economic and financial performance (the values of  $r_c$  are 0.296 and 0.235, respectively), is only slightly stronger than the correlation between the human-related corporate social responsibility dimension and corporate economic and financial performance ( $r_c = 0.121$ ). This paper argues that the emergence of this situation is related to several other dimensions of corporate social responsibility that are not studied in this paper. The classification of corporate social responsibility dimensions is not uniform. It is more common or often used by researchers to classify the KLD database. Comprehensive corporate social responsibility consists of more dimensions. However, due to the limitation of variables and data in the sample literature, in the sub-dimension research, this paper only selects three dimensions with a relatively large frequency for analysis, and draws the above conclusions. Therefore, this paper believes that this result reflects the possibility of weak or even negative correlation between corporate social responsibility and corporate economic and financial performance in other

dimensions. This also provides a possible reason for the conclusion that corporate social responsibility is not related or negatively related to corporate economic and financial performance in some previous studies - the focus of the literature is precisely on those that are related to corporate economic and financial performance. Small or negatively related dimensions of corporate social responsibility.

There are many possible explanations for the difference in the correlation between corporate social responsibility, corporate financial performance and market performance. For example, the capital market is still influenced by theories such as the maximization of shareholders' equity. For the view that corporate social responsibility will positively affect corporate performance Doubts remain.

Table 4: Meta-analysis result table

Relationship	K	$\bar{r}$	$\bar{r}_c$	SE	95% CI		Q <sub>H</sub>
					Lower	Upper	
Overall CSR→Overall financial performance	157	0.133	0.133	0.002	0.128	0.137	8304.384*
1.Year (before 2000)	22	0.131	0.130	0.014	0.103	0.157	49.623*
2.Year (after 2000)	135	0.133	0.133	0.002	0.128	0.137	49.623*
3.Country (developed)	31	0.141	0.140	0.004	0.133	0.148	878.323*
4.Country (developing)	39	0.272	0.266	0.005	0.256	0.275	2572.103*
5.Industry (manufacturing)	17	0.133	0.132	0.010	0.113	0.151	428.080*
5.Industry (service)	53	0.426	0.402	0.008	0.387	0.417	1756.439*
Different dimensions of CSR							
1.Community related CSR→Overall financial performance	19	0.296	0.288	0.010	0.267	0.308	803.087*
2.Environment related CSR→Overall financial performance	16	0.235	0.231	0.011	0.210	0.251	863.090*
3.HR related CSR→Overall financial performance	16	0.121	0.120	0.018	0.086	0.154	71.730*
4.Positive related CSR→Overall financial performance	19	0.191	0.189	0.008	0.173	0.205	270.626*
5.Negative related CSR→Overall financial performance	17	0.026	0.026	0.026	-0.024	0.076	110.991*
Different dimensions of financial performance							
1.Overall CSR→Overall market performance	46	0.098	0.098	0.004	0.091	0.105	1408.270*
2.Overall CSR→Overall accounting performance	105	0.173	0.171	0.003	0.165	0.177	4420.826*

Table 5: Correlation coefficients

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Year (before 2000)	1													
2 Year (after 2000)	-1.000**	1												
3 Country (developed)	-.200*	.200*	1											
4 Country (developing)	-.232**	.232**	-.285**	1										
5 Industry (manufacturing)	-0.141	0.141	.291**	-0.105	1									
6 Industry (service)	-.288**	.288**	-0.117	0.026	-.249**	1								
7 Community related CSR	0.075	-0.075	0.061	0.013	.248**	-0.1	1							
8 Environment related CSR	0.107	-0.107	0.097	0.05	0.086	-0.062	-0.125	1						
9 HR related CSR	.228**	-.228**	-0.061	-0.047	0.086	-.240**	-0.125	-0.113	1					
10 Positive related CSR	-0.15	0.15	-0.135	-0.123	-0.129	.437**	-0.138	-0.125	-0.125	1				
11 Negative related CSR	-0.141	0.141	-0.121	-.200*	-0.121	.488**	-0.129	-0.117	-0.117	-0.129	1			
12 Overall market performance	-.260**	.260**	-.173*	-.241**	-0.089	0.073	-0.067	-0.032	-0.078	0.104	0.136	1		
13 Overall accounting performance	.284**	-.284**	-.161*	.217**	0.115	-0.07	0.095	0.058	0.103	-0.071	-0.103	-.915**	1	
14 R	-0.012	0.012	0.016	.282**	-0.048	.184*	0.102	0.068	-0.068	0.107	-.219**	-0.145	.166*	1
Mean	0.140	0.860	0.198	0.248	0.108	0.338	0.121	0.102	0.102	0.121	0.108	0.293	0.669	0.1425
SD	0.348	0.348	0.399	0.433	0.312	0.474	0.327	0.304	0.304	0.327	0.312	0.457	0.472	0.248

In all analyses, corporate social responsibility and corporate economic and financial performance showed the most significant positive correlation in the service industry sub-sample, with a correlation coefficient as high as 0.426. This paper believes that the emergence of this phenomenon is consistent with many conclusions about the relationship between the two from the perspective of consumers. These studies found that consumers' perception of corporate social responsibility can affect the economic effects of corporate social responsibility. In the service industry, where the relationship between corporates and consumers is closer and the communication is smoother and more convenient, CSR is more likely to promote the economic and financial performance of corporates.

The moderating effect analysis based on the time of publication of the sample literature did not obtain the expected results, and could not support the hypothesis of H4 that "Corporate social responsibility is more strongly correlated with corporate economic and financial performance in the recently published literature". However, this paper believes that the occurrence of this situation has

a great relationship with the imbalance of the amount of data between the two sub-samples (the amount of data before 2000 was 22, and the amount of data after 2000 was 135). The results just do not support H4, and it does not mean that the factor of time has no effect on the relationship between the two.

## **7. Theoretical and Management Significance**

### **7.1 Theoretical contribution**

Through a systematic and integrated analysis of the relationship between corporate social responsibility and corporate economic and financial performance in recent decades, this paper draws a universal conclusion that corporate social responsibility and corporate economic and financial performance are positively correlated. A useful supplement to the research on the relationship between the two. At the same time, through the analysis of the moderating effect, this paper further discusses the influence of time, country and industry on the relationship between the two, and proves that the moderating effect of the state and industry factors on the relationship between the two plays a role in "seeking from the same" different" expected effect. This expands the academic community's understanding of the relationship between the two, and helps later generations to better carry out research in related fields.

### **7.2 Management significance**

The conclusions of this paper have guiding significance for corporates to take social responsibility more proactively. First of all, corporates should improve their enthusiasm and initiative in fulfilling their social responsibilities, and look at corporate social responsibility from a more comprehensive and long-term perspective. The expenditure on corporate social responsibility is not a waste of resources, but another form of investment; Secondly, corporates can take corporate social responsibility with emphasis according to their own economic conditions and strategic arrangements, and according to the strength of the relationship between different dimensions of corporate social responsibility and corporate economic and financial performance. For example, in the case of limited resources, companies can prioritize increasing community building and investment in order to obtain higher performance returns; again, it is recommended that companies educate their consumers and use better communication methods to increase consumption. Finally, corporates in emerging countries and those engaged in the service industry should pay more attention to corporate social responsibility and place social responsibility in a more important strategic position to gain competitive advantage, and better realize enterprise value.

## **8. Limitations and Future Research Directions**

This paper uses the Meta analysis method to make a useful exploration of the relationship between corporate social responsibility and corporate economic and financial performance, and draws some conclusions with reference value. A total of 42 empirical literatures are covered, which cannot fully cover the existing empirical research, and there are still some limitations. First, the lack of literature has led to significant differences in the amount of data among some sub-samples, which has brought some interference to the analysis of moderating effects. For example, the two sub-samples analyzed with time as a moderator variable have a data volume of 22 and 135 respectively, which reduces the explanatory power of the empirical results to a certain extent. Secondly, the limited number of literature also directly affects the adoption of research methods in this paper. This paper only adopts basic Meta-analysis methods such as calculating the average

effect size, heterogeneity test, and moderating effect analysis, and does not carry out more advanced analysis such as Meta-regression, which requires a high number of documents, which limits the depth of the research to a certain extent.

On the basis of this research, future research will further expand the sample size, improve its representativeness, and focus on discovering more component moderator variables, establishing a more complete model, and using more advanced methods such as Meta regression. methods to improve the accuracy of research and lead to more meaningful conclusions.

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