Journal of Business Research 190 (2025) 115218

Contents lists available at ScienceDirect

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres

Corporate social responsibility and financial performance in a cross-country context: A meta-analysis

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ARTICLE INFO

Keywords:
Corporate social responsibility
Financial performance
Cross-country
Meta-analysis
Heterogeneity

ABSTRACT

Corporate social responsibility (CSR) may be beneficial for enhancing firms' value according to the instrumental stakeholder theory. Nevertheless, the empirical evidence is inconclusive. We conduct a *meta*-analysis to synthesize and clarify the heterogeneity of findings from the literature, using data manually gathered from 223 studies in the USA, China, Europe and other regions from 1984 to 2023. We find that the relationship between CSR and corporate financial performance (CFP) is generally positive, which suggests that CSR does improve CFP but differs across the measurements of social and financial performance, which is the strongest when both are measured with surveys. These positive signaling impacts are more likely in China, Africa, and other developing economies. They are more prominent in countries with weaker financial markets, worse environmental performance, feminine culture, and voluntary CSR disclosure. Our inferences emphasize that signaling theory and the institutional-based perspective can jointly contribute to CSR premium research.

1. Introduction

Instrumental stakeholder theory and cost perspective suggest that corporate social responsibility (CSR) has both bright and dark sides (Friedman, 1970; Jones, 1995). Being socially responsible can create a sustained competitive advantage (Branco and Rodrigues 2006) for companies, leading to enhanced corporate financial performance (CFP), which is esteemed by the capital market and beneficial for stockholders—the bright side. However, in the meantime, it benefits other stakeholders at the cost of stockholders, which may result in decreased company earnings and stock prices (Brammer et al., 2006; Lioui & Sharma, 2012)—the dark side. Therefore, whether CSR would enhance CFP is strategically important to management and investors (Simpson & Kohers, 2002). Since the initial papers of Bragdon and Marlin (1972) and Moskowitz (1972) were published, over 100 empirical articles have examined the relation between CSR and CFP.[1] Nevertheless, the findings concerning the connection between CSR and CFP remain ambiguous (Margolis & Walsh, 2003). Some research indicates a positive association (Lev et al., 2010; Surroca et al., 2010), while other research indicates a negative or nonlinear association (Aupperle et al., 1985; Barnett & Salomon, 2006; Sun et al., 2019). Opposite findings can be traced to the measurements of CSR and CFP (Peloza, 2006), estimation methods (Garcia-Castro et al., 2010; Servaes & Tamayo, 2013), firm characteristics (Gompers et al., 2003; McWilliams & Siegel, 2000), region and sector factors (Hou et al., 2016; Jo & Na, 2012), as well as macro-economic factors[2] (Huang et al., 2020).

In fact, many disagreements in current research can be ascribed to the complicated impacts of country-level factors. Hofstede (1984) reveals four main dimensions on which country cultures differ, which show some significant and meaningful correlations with geographic,

Abbreviations: CSR, corporate social responsibility; CFP, corporate financial performance; RATING INDEX, CSR rating index measured by independent rating agencies; CONTENT ANALYSIS, CSR measured by content analysis technique; REPUTATION, CSR measured by reputation indicators; SURVEY, perceptual CSR obtained from questionnaire participants; PROXY VARIABLE, CSR measured by unidimensional proxies; ACCOUNTING, accounting-based financial performance measures; MARKET, market-based financial performance measures; PERCEPTUAL, private evaluations of corporate financial performance obtained from questionnaire participants; OTHER, financial performance measures other than accounting-based, market-based and perceptual measures.

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[1] As the continuously growing number of studies in Appendix A, studies examining the CSR-CFP link show no sign of abating.

[2] Economic fluctuation (interchangeable economic cycle) denotes the downward and upward movements of GDP relative to its long-term growth trends (Huang et al., 2020; Madhani, 2010).

https://doi.org/10.1016/j.jbusres.2025.115218
Received 12 May 2024; Received in revised form 22 January 2025; Accepted 22 January 2025
Available online 30 January 2025

economic, demographic, and political indicators. The differences demonstrated by Hofstede (1984) have profound consequences for the validity of the transfer of theories across countries. Cai et al. (2016) and Liang and Renneboog (2017) demonstrate that national features seem to explain firms' CSR practices well, indicating that variations in CSR practices are more closely linked to national features than to firm-specific traits; this highlights the impacts of economic development, laws and cultures on these variations. However, owing to the scarcity of cross-country data, comparative studies among various contexts remain infrequent. To address this gap, we conduct this *meta*-analysis, trying to determine the country-level factors that impact the CSR–CFP linkage in a comprehensive way.

Meta-analytic procedures allow researchers to aggregate results across studies to determine the relationship between two variables studied (Lipsey & Wilson, 2001). Previous *meta*-analyses examining the associations between CSR and CFP are relatively dated (Margolis et al., 2009; Orlitzky et al., 2003) or just focus on a specific region (Hou et al., 2016), which did not deeply examining the country-level heterogeneities of the CSR–CFP link.[3] This paper includes the most recent studies from all over the world and discusses the role of country-level factors in a systematic manner. Specifically, the dataset for this paper consists of 223 studies from 1984 to 2023, with 80 % of samples drawn from the last decade. Regarding country-level factors, we focus on the economic, institutional, social, and environmental aspects and incorporate eight segmentation factors to analyze the contingencies in the CSR–CFP association, including development status, financial market, legal institution, corruption, culture, environmental performance, CSR disclosure manner, and education.

We collect studies that report multivariate regression results on the CSR–CFP linkage and finally extract 5,388 effects from 17.7 million firm-year observations in 29 countries. We first summarize the total influences of CSR on financial performance, decompose them into a matrix of social and financial performance operationalization, and examine the variations among them. The results provide significantly positive correlations between CSR and CFP, and they hold up in a series of sensitivity analyses. Next, we run *meta*-analytic regressions, which include national features, to clarify the disagreement from the findings. Empirical analyses show that these positive signaling effects of CSR are reinforced in developing economies and countries with weak financial markets, heavy-polluting environmental performance, feminine cultures, and voluntary CSR disclosure. In the robustness tests, these findings still hold up when replacing explained variables or models, adding control variables, or excluding the COVID-19 pandemic disturbance. We further find the positive CSR–CFP link stronger in the later sample period and high-polluting industries.

Our study makes three main contributions. First, we provide the most comprehensive investigation of the relationships between CSR and CFP through a *meta*-analysis. This method allows us to summarize the impacts of social responsibilities, expand the number of observations, and account for heterogeneity—including data sources, time periods, and primary regression models—in the empirical studies used. Thus, this study adds new evidence to the literature regarding the CSR–CFP link, and the results can provide helpful guidance for the capital market. Second, in contrast to previous *meta*-analytic papers on the associations between CSR and CFP (Huang et al., 2020; Margolis et al., 2009; Orlitzky et al., 2003; Wang et al., 2016), we construct a conceptual framework in which key measurements of social and financial performance are considered, while these impacts are divided into a matrix of CSR and financial performance measurements that helps us visualize the CSR–CFP link more intuitively. Third, to our best knowledge, previous *meta*-analyses do not deeply examine the country-level heterogeneities of the CSR–CFP link (Huang et al., 2020; Wang et al., 2016)[4] or only focus on a specific region (Hou et al., 2016). This article is the first to present word evidence and incorporate new macro-level factors to identify the sources of difference in study-to-study outcomes. We complement the signaling theory (Su et al., 2016; Spence, 1973) to show that in markets devoid of robust institutions, CSR practices per se, as a signal of quality, can fill institutional voids and generate premiums for companies, irrespective of their contribution to intangible assets such as innovations or organizational cultures (King et al., 2005; Surroca et al., 2010). Additionally, our research differs from previous research suggesting that the institution constitutes various models of firm social behaviors in various nations (Cai et al., 2016; Maignan & Ralston, 2002). Invoking the institution-based perspective (Brammer et al., 2012), we further examine the extent to which CSR benefit varies owing to the outside environment.

The rest of our paper is organized as follows. In Section 2, we illustrate the theoretical background and develop a conceptual framework that explains the measuring methods of social and financial performance. Section 3 deals with developing hypotheses on the association between CSR and CFP, as well as the role of country factors in this association. Section 4 discusses this study's search strategies and data, while Section 5 describes our methods, reports the main results, and discusses the macro heterogeneities in the *meta*-results. Finally, Section 6 summarizes, concludes, and suggests directions for further research.

2. Theoretical background and conceptual framework

2.1. Signaling theory and institutional theory

The CSR–CFP link has been explained using various theories such as stakeholder (Freeman, 1984), signaling (King et al., 2005), reputation (Godfrey et al., 2009) and agency theories (Jensen & Meckling, 1976). Our paper emphasizes that signaling and institutional theories may collaboratively contribute to CSR premium and related contingent influences.

Signaling theory can address the information asymmetry between two sides (Connelly et al., 2011), wherein one side gains a premium by credibly communicating its own unobservable attributes to the other, hence mitigating the moral hazard resulting from the behaviors of exchange sides (Spence, 1973; Su et al., 2016). Spence (1973) posits that applicants might utilize observable properties (e.g., college degree) to show their unobservable features (e.g., job competence). Driven by the above views, researchers adopt signaling theory to interpret the underlying values of CSR activities (Montiel et al., 2012; Ramchander et al., 2012). For example, King et al. (2005) illustrate that when companies acquire the ISO 14001 standard certification, a signal conveying their unobservable information is sent to suppliers, thereby reducing information asymmetries and potential opportunism from suppliers. Our paper posits that, like management certifications, CSR behaviors can also serve as a signal conveying supplementary information to associated stakeholders, particularly in emerging economies. Although CSR activities may incur explicit and invisible costs, they are ultimately rewarded when firms have "stakeholder influencing capability" (Barnett, 2007).

Institutional theory emphasizes exterior systemic contexts including social, political, and economic systems, which envelop organizations and provide legitimacy (North, 1990). Some scholars use institutional theory to interpret CSR issues in two ways: CSR heterogeneities and

[3] Huang et al. (2020) and Wang et al. (2016) discuss the confounding influences of the development status of economies and economic fluctuation on the CSR–CFP link.

[4] Wang et al. (2016) find stronger relations between CSR and CFP for companies in developed economies than those in developing economies. However, when we follow Kysucky and Norden (2016) and develop variables for potential sources of observed system heterogeneities and add them to all models, we find a different result, namely, the CSR–CFP relation is stronger in developing countries and still holds in a series of robustness tests (see next for details).

dynamics (Berrone & Gomez-Mejia, 2009; Campbell, 2007; Campbell, 2011). On the issue of heterogeneities, several studies test cross-country variations in CSR, finding that the value of CSR practices depends on different institutional environments (Cai et al., 2016; Gjolberg, 2009). The institutional environment here includes both formal institutions (e.g., law and rule) and informal ones (e.g., religion and culture). On another issue of dynamics, researchers try to investigate the changing concept, value, and mechanism of social responsibility (Brammer et al., 2012). For example, the fundamental elements of CSR have evolved through the adjustment and imitation of organizations beyond the Western institutional framework. Institutional theory is crucial in illustrating CSR dynamics.

2.2. Literature review

Although many papers analyze the influence of CSR on CFP, this association is still debated among researchers. Some scholars claim that CSR behavior deviates from the aim of corporate value maximizing (Jensen, 2002). For instance, the short-term expenses associated with CSR engagement generally surpass its instant financial rewards (Barnett & Salomon, 2006; Ullmann, 1985), and executives may privately divert company resources in response to CSR initiatives (Friedman, 1970). However, stakeholder theory posits that firms can do well by doing good (Bénabou & Tirole, 2010; Freeman 1984), and the concept of CSR aims to impact stakeholder-driven outcomes, which might align to maximize shareholder wealth (Kitzmueller & Shimshack, 2012). Some studies identify several avenues by which CSR enhances financial performance, such as improved access to financing (Cheng et al., 2014; Dhaliwal et al., 2011), reduced capital costs (Ng & Rezaee, 2015; Tan et al., 2020), greater innovation (Bocquet et al., 2017), and increased customer satisfaction (Luo & Bhattacharya, 2006) in companies exhibiting favorable CSR rating. However, some empirical evidence finds no real link between CSR and financial performance (McWilliams & Siegel, 2000; O'Neill et al., 1989).

Several studies use the *meta*-analytic method to examine the CSR–CFP link (Gupta & Das, 2022; Margolis et al., 2009; Orlitzky et al., 2003). Orlitzky et al. (2003) use a *meta*-analysis of 52 studies from 1970 to 2002 to find that CSR and financial performance are generally positively associated. They also posit that measuring methods and environmental settings could help clarify the variety of the CSR–CFP relationship. Using East Asian firms as samples for *meta*-analysis, Hou et al. (2016) present a similar positive CSR–CFP relationship. Some scholars show that the disagreement in the literature on how CSR affects CFP can be attributed to the confounding influence of the development status of economies and economic cycles (Huang et al., 2020; Wang et al., 2016). Margolis et al. (2009) review 251 studies and find that only 28 % report positive relationships, while the remaining 72 % report insignificant or negative ones. Meanwhile, the overall effect between CSR and CFP is positive but small. In this paper, we use three kinds of effect sizes and introduce more comprehensive country-level factors to test their moderating impacts on the CSR–CFP relationship.

2.3. Conceptual framework: Measurements of social and financial performance

Some studies argue that since both CSR and CFP are such wide *meta*-structures, the key measurement dimensions of CSR include the social rating index, content analysis, reputation index, survey, and proxy variable. The key CFP indicators are accounting-based, market-based, perceptual (survey), and other measures. Thus, the measurement problem of each structure in an individual study is a fundamental cause of uncertainty about the CSR–CFP relationship (Chen & Delmas, 2011; Waddock & Graves, 1997). To mitigate the influence of measurement dimension issues of included individual studies on our *meta*-analytic findings, we construct a conceptual framework combining CSR measurement dimensions with CFP dimensions, which is used to calculate their corresponding effect sizes. Next, we describe our conceptual framework.

In this study, we use five kinds of CSR measurement strategies: (a) The social rating index dataset is a database generated by independent rating agencies, each of which scores the indicators of stakeholder groups to obtain an overall ethical rating, in which KLD is the mostly utilized (Chen & Delmas, 2011). The dataset's greatest advantage is that it is comparable and minimizes collection efforts (Chi & Hang, 2023), and the disadvantage is that they are not necessarily compiled using the rigorous scientific research methods required (Godfrey et al., 2009). (b) Content analysis is a technique for collecting data by counting words, phrases, clauses, or sentences in company publications (e.g., annual reports or CSR disclosures) related to environmental topics and quantifying them. Its advantage is that once a particular variable has been selected, the process is fairly objective, and larger sample sizes can be achieved (Cochran & Wood, 1984; De Leaniz & Del Bosque, 2013). However, this method has some disadvantages. For example, the choice of measurement variables is subjective and it only captures what a company has already done (Galant & Cadez, 2017). (c) The reputation index is calculated by experts or professional journals who assess goodwill scores related to corporate reputation and use them as a CSR measure. The most used survey is Fortune magazine's Corporate Reputation Index (CRI). Reputation ratings assume that CSR reputation is a good reflection of underlying CSR values and behavior (Orlitzky et al., 2003). Unfortunately, these indices can be subject to the "halo" effect, and their effectiveness relies heavily on the evaluators' skills and qualifications (Abbott & Monsen, 1979; Buckingham, 2012). (d) Surveys, one of the mainstream research methods for social sciences, are often used to measure CSR. Researchers assess the level of social responsibility by distributing questionnaires to participants or talking with them, and the responses obtained are analyzed to assess CSR (Danso et al., 2020). Its main advantage is in providing researchers with considerable flexibility in identifying and collecting CSR data of interest (Galant & Cadez, 2017). However, the main problem is that developing well-structured questionnaires is a challenge (Lange & Washburn, 2012). (e) Unidimensional proxies are commonly employed measures as well (Lev et al., 2010). Pollution control investments and charitable donations are often used as proxy variables for social behavior. They are particularly suitable for empirical studies (Buckingham, 2012), but unidimensional indicators focus on only one aspect of social practices, which makes it impossible to offer a thorough depiction of the level of CSR (Gbadamosi, 2016).

In addition to different CSR measures, financial performance measures fall into four broad categories in this paper: (a) Accounting-based indicators of CFP, such as a company's return on assets (ROA), return on equity (ROE), or earnings per share (EPS), reflect the company's internal efficiency to some extent. They are available for all companies and are easily comparable. Regarding the restriction, they are considered historical (Al-Tuwaijri et al., 2004; Barauskaite & Streimikiene, 2021). (b) Market-based indicators, such as price per share or Tobin's Q, demonstrate the notion that stockholders are the main participants. The main advantage of market-based measures lies in their contemporaneity, allowing them to more rapidly capture changes in CSR compared to accounting-based measures. However, their primary constraint is their exclusivity to publicly listed enterprises (Galbreath, 2010). (c) Perceptual measurements of CFP require questionnaire participants to provide private evaluations of a firm's financial state. Surveys can be used when a firm's objective financial data are unavailable, but the likely drawback of this method is the respondents' honesty and whether their responses reflect the true situation (Ketokivi & Schroeder, 2004). (d) Measures other than the above, such as credit rating and green product innovation. These measures can be employed to estimate other performance indicators of interest. However, these metrics usually include one dimension but ignore others.

3. Hypotheses

3.1. Corporate social responsibility and corporate financial performance

Although the literature indicates that enterprises and investors are increasingly acknowledging the value of CSR, researchers are still engaged in an argument concerning the association between CSR and firm performance (Awaysheh et al., 2020). The notion that companies can receive rewards from CSR is present in theoretical and practical domains. A company's value relies on the explicit demand costs of not just its stockholders but also other stakeholders (Cornell & Shapiro, 1987, Freeman, 1984). For one thing, instrumental stakeholder theory argues that stakeholders possess resources that can support or improve the execution of firm decisions. Meanwhile, firms need to view them as a part of the whole environment and manage them to ensure financial advantage and benefit stockholders (Berman et al., 1999; Jones, 1995). For another thing, CSR might serve as an organizational resource offering both internal and external advantages. Internally, by establishing solid bonds with key stakeholders, companies can cultivate some intangible assets, including innovation, human capital and organizational culture, which helps them gain strategic superiority over their competitors (Branco & Rodrigues, 2006; Khan et al., 2019; Surroca et al., 2010). Externally, signaling theory suggests that investing in CSR can signal to stakeholders the unobservable traits (King et al., 2005), which can reduce risk and develop reputation capital (Godfrey et al., 2009), work as an insurance mechanism (Godfrey, 2005; Shiu & Yang, 2017), or return to firms through the "halo effect" when they are facing penalties (Gong et al., 2021).

However, the academics advocating for a negative association between social and financial performance claim that socially responsible corporates will face competitive disadvantages relative to their irresponsible counterparts (Aupperle et al., 1985) as they incur direct costs on the corporates (Barnett & Salomon, 2006; Ullmann, 1985). Friedman (1970), a famous CSR critic, argues that, based on the agency theory (Jensen & Meckling, 1976), a conflict of interests and goals always arises between agents (the top management team) and principals (shareholders), and corporate executives, making responses to the call for socially responsible activities, use funds and resources that would otherwise belong to shareholders to enhance their personal interests.

Additionally, some empirical studies find no real link (Alexander & Buchholz, 1978; McWilliams & Siegel, 2000) or a nonlinear relationship (Brammer & Millington, 2008; Sun et al., 2019) between CSR and financial performance. The above contradictory opinions arise partly from disagreements in the data source, sample period, methodology, or measurements of CSR and CFP (Garcia-Castro et al., 2010; Huang et al., 2020; Peloza, 2006; Servaes & Tamayo, 2013; Wang et al., 2016). In the first step, we synthesize the literature and test whether it aligns with the argument that the bright side of CSR dominates its dark side.

Hypothesis 1 Corporate social responsibility is positively associated with financial performance.

3.2. The role of country-level factors

In the next step, we incorporate the following eight macro-level segmentation factors from the economic, institutional, social, and environmental aspects to compare the roles of CSR in a cross-country: development status, financial environment, legal institution, corruption, culture, environmental performance, CSR disclosure manner, and education. The reasons for choosing them are several. First, the institutional environment significantly influences the decision of CSR initiatives (Arya & Zhang, 2009); thus, we consider the contingent effects of development status to set conditions on the value of CSR activities, and the existing literature remains controversial (Hou et al., 2016; Wang et al., 2016). Second, Cai et al. (2016) and Liang and Renneboog (2017) posit that a nation's economic development, laws, and cultures play important roles in explaining companies' CSR activities, which may influence CSR profitability. Third, we consider macro-level environmental performance and education as they shape the extent to which nationals value social behavior and thus the ability to benefit from CSR. Fourth, the CSR disclosure manner, as a key feature of CSR, may also influence the CSR–CFP relationship. Then, we discuss how the above country-level factors influence CSR benefits and develop testable hypotheses.

3.2.1. Development status

Developed and developing economies have various economic development stages and institutional settings, as well as various coercive or cognitive pressures to participate in CSR (Baughn et al., 2007; Maignan & Ralston, 2002). On one hand, with various information channels and efficient market supervision, developed countries enable stakeholders to make more accurate reactions to information about companies' social practices, and these reactions to CSR would convert into positive economic returns (Wang & Qian, 2011). Additionally, local governments may provide favorable terms to help firms decrease the costs of CSR, thereby increasing CFP (Albareda et al., 2007).

On the other hand, developing regions have frail legal systems, inadequate law enforcement, widespread corruption, and other institutional deficiencies (La Porta et al., 1998). CSR can serve as an informal mechanism for companies to offset these institutional voids and improve the relationship with stakeholders (Kramer & Porter, 2006; Miller et al., 2009), which can therefore command a higher premium in developing economies. Additionally, based on signaling theory, CSR practices are regarded by key stakeholders as a signal of good reputation (King et al., 2005; Montiel et al., 2012), which can help them enhance financial success (Doh et al., 2010; Ramchander et al., 2012). We argue that the signaling function of CSR, a tool for addressing information asymmetries, diminishes in developed economies characterized by an abundance of information. Furthermore, in developing countries, the institutional environment usually shifts significantly when local governments implement different new laws and rules (Chung & Beamish, 2005; Dieleman & Sachs, 2008). By cultivating robust relationships with government stakeholders, companies in changeable environments can utilize CSR to mitigate their drawbacks. Therefore, we predict that CSR may have greater significance for emerging countries where CSR is not dominant. This leads to our hypothesis on development status:

Hypothesis 2(a) The positive CSR–CFP relationship is greater in developing economies.

3.2.2. Financial environment

Financial market development plays a crucial role in assessing the degree to which companies may benefit from social behavior (Campbell, 2007; Doh & Guay, 2006). In weak financial markets, transparency is low, and stakeholders have limited access to reliable financial information (Andrade & Chhaochharia, 2010). Therefore, companies with good CSR behaviors can convey positive signals to stakeholders, improve financing, and enhance financial performance (Dhaliwal et al., 2011; Tan et al., 2020). This effect is likely to be more pronounced in situations where financial markets are weak and information asymmetry is high. Additionally, the economic environment of countries with weak financial markets is usually more volatile, leading to higher risks for firms. As an insurance mechanism, CSR can act as a buffer in times of financial instability (Godfrey, 2005; Shiu & Yang, 2017), and the added value of its CSR on financial performance can be more substantial than that in strong financial markets. This leads to our hypothesis on financial environment:

Hypothesis 2(b) The positive CSR–CFP relationship is greater in countries with weak financial markets.

3.2.3. Institutional environment

In nations with fragile legal frameworks, regulations, enforcement and governance are usually deficient (La Porta et al., 1998). Through implementing CSR initiatives, companies can remedy institutional

weaknesses, enhance their reputation, and gain trust from stakeholders, thus improving economic success (Bénabou & Tirole, 2010; Levy & Kaplan, 2008). Additionally, weak legal systems mean that firms may face greater uncertainties and business risks and that CSR engagement can help in risk management efforts while enhancing firm value (Godfrey et al., 2009; Shiu & Yang, 2017). Therefore, we argue that the impact of CSR on financial performance will be strengthened in nations with weak legal systems.

In countries where corruption is prevalent, companies often face a crisis of trust from the public and other stakeholders (Morris & Klesner, 2010). Companies that invest in CSR can build legitimacy and trust with stakeholders and gain their support (Bachmann & Ingenhoff, 2016; Kim, 2019). In turn, increased trust can lead to greater customer and employee loyalty as well as enhanced investor information, all of which contribute to improved financial performance (Luo & Bhattacharya, 2006; Servaes & Tamayo, 2013). The significance of CSR in building trust is more pronounced in contexts characterized by elevated corruption levels, thus strengthening the association between social and financial performance. This leads to our hypotheses on institutional environment:

Hypothesis 2(c) The positive CSR–CFP relationship is greater in countries with weak legal institutions.

Hypothesis 2(d) The positive CSR–CFP relationship is greater in countries with high levels of corruption.

3.2.4. Culture

Culture is a complex abstract concept, among which the masculine vs. feminine cultural variable looks at the extent to which a society stresses achievement or nurture and has been widely applied by scholars in the field of corporate social responsibility (Ringov & Zollo, 2007). In feminine cultures, we expect people to focus more on harmony with their communities and the societies in which they are embedded. In contrast, in cultures with high masculinity scores, the pursuit of economic expansion and wealth maximization is prioritized over living quality (Hofstede, 2011), inhibiting helping behavior and making a firm might not benefit substantially from social engagement even though it has substantial investments in CSR. Earlier research (Gallego-Álvarez & Ortas, 2017; Ho et al., 2012) shows the consistent finding of a negative association between masculinity and CSR. This leads to our hypothesis on culture:

Hypothesis 2(e) The positive CSR–CFP relationship is greater in countries with feminine cultures.

3.2.5. Environmental performance

Alonso-Martinez et al. (2020) find that elevated pollution levels enhance awareness of sustainable development within a nation and Jiménez-Parra et al. (2018) contend that apprehensions regarding air pollution result in increased environmental requirements from stakeholders. One study of a single country finds that CSR has greater impacts on financial performance in high-polluting industries than in low-polluting ones (Lucas & Noordewier, 2016). Similarly, we hypothesize that in high-polluting countries, firms can gain stakeholder support and increase firm value by improving reputation and signaling active management of environmental risks, where CSR's reputational benefits and risk-mitigation effects are more pronounced. This leads to our hypothesis on environmental performance:

Hypothesis 2(f) The positive CSR–CFP relationship is greater in countries with heavy-polluting environmental performance.

3.2.6. CSR disclosure manner

In economies with voluntary CSR disclosure, firms that disclose CSR can mitigate information asymmetries between management and outside investors while creating their competitive advantages (Clarkson et al., 2008; Mahmoudian et al., 2021), especially in markets where CSR is not yet the norm. Even though the legitimacy theory suggests that the management strategically employs sustainable disclosures to cover negative news (Cho et al., 2012; Patten, 2002), it can still be viewed as a positive signal by investors and other stakeholders that the company not only adheres to ethical standards but is also willing to go beyond the minimum requirements, thus attracting socially conscious investors and improving financial performance. In contrast, in countries where CSR disclosure is mandatory, the competitive advantages of engaging in CSR may be weakened because all companies are required to disclose. This leads to our hypothesis on CSR disclosure manner:

Hypothesis 2(g) The positive CSR–CFP relationship is greater in countries with voluntary CSR disclosure.

3.2.7. Education

Hambrick and Mason (1984) highlight the roles of formal education in influencing organizational results. The greater the levels of education are, the more environmentally conscious people will be, and they may prefer to work for companies that align with their ethical and social values. Meyer (2015) empirically finds that CEOs with a higher education level are more inclined to act environmentally and socially responsibly or disclose companies' environmental performance. Thus, in countries with higher levels of education, firms can increase customer and employee satisfaction by implementing CSR to enhance financial performance (Luo & Bhattacharya, 2006; Servaes & Tamayo, 2013), and the alignment between people's values and CSR can amplify the financial benefits of socially responsible practices. This leads to our hypothesis on education:

Hypothesis 2(h) The positive CSR–CFP relationship is greater in countries with better education.

4. Data

We conduct a preliminary literature search using two methods. First, when searching in the six databases (Web of Science, Google Scholar, ScienceDirect, SSRN, ABI/INFORM, and Emerald), we use the following keywords and their variations: corporate social responsibility (CSR), social performance, environmental performance, sustainability, corporate financial performance, profitability, and economic success. Second, as common in *meta*-analyses, we examine the cited references from every located article and previous literature surveys (Huang et al., 2020; Margolis et al., 2009; Orlitzky et al., 2003; Wang et al., 2016) to find any article that we might have missed, ending our collection period in July 2023. All unpublished articles are searched in the mentioned databases for the latest or published versions, which are replaced when necessary.

Next, we determine the eligibility of studies for our *meta*-analytic procedures based on three criteria: (a) studies authored in languages other than English are excluded; (b) studies have to contain one or more multivariate regression models with CSR as an explanatory variable and CFP as an explained variable; (c) studies have to report information regarding the effect size, including sample size, regression coefficients showing the relationship between explanatory and explained variables, as well as relevant statistical significance. This search and selection process yields a final sample of 223 studies, containing 190 published articles and 33 unpublished ones. Specifically, these unpublished articles are obtained by searching the above databases for working papers, dissertations, and conference papers. Appendix B lists the studies included in our analysis.

For every selected article, we obtain hand-gathered data on the association between CSR and CFP from all the tables in each article, which includes the appendices. The gathering process results in a sample of 5388 estimated outcomes (hereafter referred to as "effects"). These given studies are based on 17.7 million firm-year observations. We gather key features of each given study and relevant country indicators from public databases such as Journal Citation Reports, Web of Science, World Bank, and others. Appendix C describes our main variables and Table 1 shows summary statistics.

The studies in our sample rely on information mainly from the USA (68 studies), China (43 studies), Europe (7 studies), and world evidence

Table 1
Summary Statistics of Studies in the Sample.

Panel A. Sample composition (number of studies)

Publication status		Region		Development status		CSR Data source	
Unpublished studies of which	33	United States	68	Developed	96	Rating index dataset	134
Working paper	14	China	43	Emerging	82	Firm survey	13
Dissertation	12	World	32	Both	45	Other	76
Conference paper	7	Europe	7				
Published journal	190	Other	73				
Total	223		223		223		223

Panel B. Sample characteristics

	Mean	Median	Min	Max	Std. dev.
Publication year	2016.7	2018	1984	2023	5.76
Sample period midyear	2008.9	2011	1974	2020	7.37
Journal impact factor	7.93	8.1	1.2	17.3	4.06
No. of citations	171.14	49	0	3491	387.20
No. of effects	24.16	13	1	640	47.72
Firm count	546	183	7	5235	919
Observation count	3029	576	22	31,060	5784

Notes. This table describes the characteristics of the chosen papers. One paper is considered published when it is included in a peer-reviewed journal. The region is associated with the geography of the sample in a given study. The sample period midyear refers to the median year of the sampling window. The development status of regions is classified by the World Bank country classification system and determined in the median sampling year. The data source provides the main source of CSR data in each study. The journal's impact factor is from the Journal Citation Report for the publication year, and the number of citations is from Web of Science, and both indicators are reported only for published papers. The firm count is the total number of unique firms within each study. The observation count is the number of unique firm-year observations approximated as the maximum number of observations in all regression models in a study. The number of effects is the number of effect sizes of each original study.

(32 studies), which cover the time window from 1970 to 2022. CSR data are mostly derived from the rating index dataset and firm survey. The maximum and minimum numbers of effect sizes in each study are 1 and 640, respectively. The number of unique companies in the original articles ranges from 7 to 5,235.

We construct country-level indicators for each study, and our country-level data's primary sources are public databases such as the World Bank. When a time overlap occurs between the sampling window of original studies and available country-level data, we compute the mean of these available country indicators during the overlapping periods. However, if study observations fall into periods during which country-level series are available but lack time overlap, we utilize the nearest available country-year observation. Since most of these indicators are continuous, conducting an empirical analysis without filling in the data does not affect our inferences. In particular, as macro indicators for studies with mixed-country data are more difficult to handle, we delete these studies to ensure the accuracy of the results.

5. Empirical analysis

5.1. Method

We use a *meta*-analysis to integrate the results of individual studies and measure disagreements among those studies. Meta-analysis is important because it can combine the results of various independent investigations into a single estimate while correcting for statistical artifacts (Hunter & Schmidt, 2004). Additionally, it can help scholars recognize potential moderating variables for disagreements, therefore having a strong insight and explanatory power. Our *meta*-analysis is conducted following four specific steps: (1) searching the literature and collecting data; (2) calculating the comparable effect size; (3) estimating the strength and direction of the real relation; and (4) analyzing the systematic heterogeneity (if it exists). Meta-analytic practices improve the precision of the whole inference of the true relationship by weighing the contribution of each effect based on the sample size. This study uses the most advanced *meta*-analytic procedures (Borenstein et al., 2009; Kysucky & Norden, 2016; Lipsey & Wilson, 2001).

The term "effect" in this paper stands for the measures of significance, direction, and strength of regression coefficients, which captures the association between CSR proxies and CFP proxies. As a procedure that uses a full set of measurements is preferable to one that only uses one value to represent each study, we collect effects from all tables, including the appendix in our sample studies (Duran et al., 2016). We calculate effect sizes using three measurements: one discrete and two continuous indicators. The first is one discrete indicator categorizing captured effects as positive, negative, and nonsignificant at a significance level of 10 %. The second is one-tail p-value, which continuously explains the direction and significance of effects. Its value ranges from 0 to 1, indicating significant beneficial effects for the responsible firms when it is closer to 1 and significant adverse effects when it is closer to 0. The third is one continuous Fisher's z-score, which captures the degree of the CSR–CFP relationship after controlling for the other explanatory variables in the original regression models. Fisher's z-score refers to one skewness-corrected partial correlation, and we get partial correlations from regression models following Dzhambov et al. (2014) and Peterson and Brown (2005). We verify that these two continuous indicators are closely associated (Pearman's correlation = 0.717, p-value < 0.001). We can use the above three measurements to acquire the data about the true relationship. As they are common metrics, we can conduct heterogeneity tests for the *meta*-analysis in a comparable way.

To test Hypothesis 1, we employ three kinds of effect sizes to calculate the combined effect. First, we present discrete relative frequencies of significantly positive, significantly negative, and insignificant effect sizes. Then, we estimate the whole one-tail p-value (Edgington, 1972) and the combined *meta*-analytic mean correlation (Borenstein et al., 2009; Lipsey & Wilson, 2001). To be thorough, we use both random-effects and fixed-effects models for this *meta*-analysis. Although both methods yield consistent findings, our focus is on the random-effects method because it relies on the conception that the study samples are drawn from all theoretically possible studies over a period. We test Hypothesis 2 through a *meta*-regression, which helps us analyze the role that country-level factors play in the reported results of the original studies. In the regression model, we use country-level variables constructed for each sample study as explanatory variables and use the effect size of CSR and CFP obtained in the corresponding study as explained variables. To mitigate the influence of outliers, we winsorize all continuous variables at the upper and lower 1 % quartiles. Additionally, to address possible biases caused by publication-level heterogeneities, we construct indicators for potential sources of systematic variations, including data, model design, estimation methods, and publication characteristics using the procedure proposed by Kysucky and Norden (2016). We also add these control variables to all regression models.

5.2. Direction and significance of the effects

To estimate the direction and significance of the CSR-CFP link, we first calculate the combined effect by considering all individual effect sizes. Fig. 1 displays the distribution of these continuous one-tail p-values. The effect cluster approaches 0 (unfavorable to responsible firms) and 1 (favorable to responsible firms), but the frequency is significantly higher when approaching 1, which suggests that the financial advantages of responsible firms are predominant. This finding tentatively supports Hypothesis 1.

Next, we investigate the effect of CSR on CFP in Table 2. Panel A in

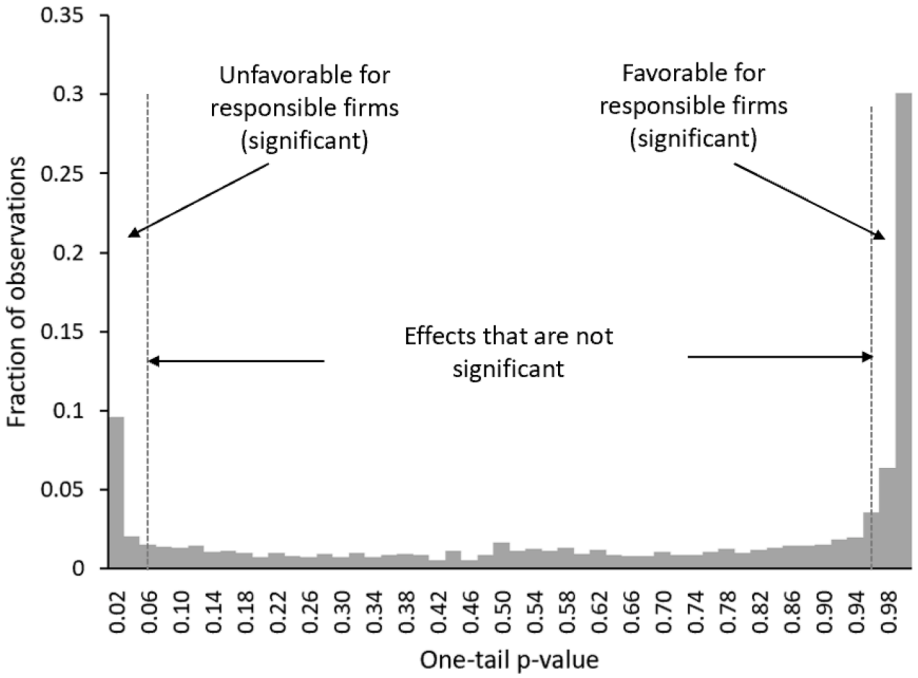


Fig. 1. Distribution of the One-tail P-values. This figure displays the frequency distribution of one-tail p-values from all studies included in our *meta*-analysis. The values near 1 indicate significant beneficial effects for the responsible firms at the 10% significance level, and those near 0 indicate significant adverse effects. Values at 0.05–0.95 represent the nonsignificant CSR–CFP relationships at the 10% significance level. The distribution is based on 5,388 observations.

Table 2 displays the relative frequencies of these effects. The sign (+) indicates significantly positive regression coefficients; (−) indicates significantly negative coefficients; and "B" is used to mark cells that represent significant responsible firm benefits. Among the significant effects (namely excluding those insignificant ones temporarily), 76 % are advantageous for responsible companies, while 24 % are disadvantageous for responsible companies. This difference is significant at the 1 % level. We also show that the pooled one-tail p-value equals 1 and is significant at the 1 % level, which is aligned with the first hypothesis that CSR positively affects CFP.

Panel B in Table 2 presents our *meta*-analytic findings. We report both fixed-effects and random-effects models to enhance the validity of our findings. As shown in Column 4, for a sample size of 17.7 million from 5388 effect sizes, the correlation coefficient ρ calculated using the random-effects model is 0.073 (95 % C.I. = 0.067/0.079), which is significant at the 0.1 % (z-value = 24.00) level. This suggests a positive association between CSR and CFP. That is, companies can benefit from their responsible behavior; thus, instrumental stakeholder theory in Hypothesis 1 is verified. The correlation coefficient ρ calculated using the fixed-effects model is 0.027 (95 % C.I. = 0.027/0.028), which is one-third of the size of the random-effects model and is also significant at the 0.1 % level (z-value = 115.63), further validating our conclusion.

Additionally, Table 2 reports the significant Q statistic and I^2 = 99.36, where I^2 is defined as a fraction of overall variations attributable to heterogeneities among studies (Higgins & Thompson, 2002). Empirically, an I^2 of 25 %, 50 %, and 75 % reflects a low, medium, and high heterogeneity, respectively, implying one high level of heterogeneity in conclusions about the association between CSR and CFP. We will discuss moderating tests of this association at length in the following parts. Further, the availability bias is commonly criticized in *meta*-analyses. To address the issue of publication bias, we adopt Rothstein et al.'s (2005) fail-safe n. A critical value of 5 K + 10 is used to make the judgment, and as shown in the last two columns, fail-safe N is greater than the critical value. Thus, we can guarantee that all substantial inferences of our *meta*-analysis will not be affected by publication bias.

We decompose the impacts into CSR and CFP proxies in Panels C and D of Table 2, which is thus the most informative (we only report *meta*-analytic coefficients estimated using the random-effects model for saving space, and the same applies to Table 3). We find the most scholarly interest in the association between CSR measured using social rating and accounting and market-based CFP, followed by the relationship between CSR measured using content analysis and CFP as described above, both of which show significant positive correlations. The one-tailed p-value between CSR and perceived CFP measured using surveys is 1, and the mean effect size ρ is 0.195, both of which are significant at the 1 % level; this suggests that the CSR–CFP relationship obtained using this measure is the most highly correlated among all the measured dimensions. One reason is that this approach offers the advantage of validating constructs. However, we cannot deny the typical technique bias that leads to overestimating the link. We further find no significant association between CSR measured by reputation or questionnaires and market-based financial performance, and we hypothesize that this may be due to the relatively few studies preventing us from determining the substantive relationship between them. In summary, our results indicate that the findings of the discrete investigation generally agree with the effects on a continuous scale. As shown in Hypothesis 1, CSR has more generalized economic benefits as they exist in multiple combinations of CSR and CFP proxies. Meanwhile, the measurement approach influences previous findings. That is, significant differences exist in the relationships established using different measurement approaches.

5.3. Sensitivity analysis of the effects

We probe the robustness of our inferences with various sensitivity checks reported in Table 3. The earlier literature argues that reverse causation and omitted variables between CSR and financial performance create potential endogeneity problems (Zahid et al., 2020); thus, we conduct a series of analyses in Panel A. First, we include only endogeneity-treated studies and obtain a mean effect size of 0.088 between CSR and CFP, consistent with the main findings. We further list the two endogeneity treatments most used by scholars, namely the IV approach and GMM, and obtain an average effect value of 0.234 and 0.029, respectively. In particular, the magnitude of the coefficients of

Table 2
Results for Main Effects of CSR on Financial Performance.

Panel A. Pooled effect sizes

	Coeff. sign			Binomial sign test		One-tail p-value		
Relationship	+	−	ns					
CSR → CFP	2081	667	2640	***	B	1	***	B

Panel B. Meta-analytic result

								Heterogeneity		Publication Bias	
Relationship	N	K	n	ρ	95 %C.I.		Z-value	Q	I^2	Fail-safe N	5 K + 10
CSR → CFP (Random)	223	5388	17,729,944	0.073	0.067	0.079	24.00***	839910.66***	99.36	35,976,274	26,950
CSR → CFP (Fixed)	223	5388	17,729,944	0.027	0.027	0.028	115.63***				

Panel C. Discrete effects

		Financial performance outcomes											
Measurement of CSR	Coeff. Sign	ACCOUNTING			MARKET			OTHER			PERCEPTUAL		
RATING INDEX	+	776		B	506		B	118		B			
	−	226	***		179	***		32	***		—		
	ns	863			794			46					
CONTENT ANALYSIS	+	263		B	46		B	46		B			
	−	95	***		22	***		21	***		—		
	ns	487			161			62					
REPUTATION	+	19		B	9			8					
	−	6	**		10	—		0	—		—		
	ns	18			4			3					
SURVEY	+	28		B	1			9			28		B
	−	5	***		1	—		0	—		0	***	
	ns	42			2			3			13		
PROXY VARIABLE	+	168		B	55		B	1					
	−	40	***		30	***		0	—		—		
	ns	81			58			3					

Panel D. Continuous effects

		Financial performance outcomes											
Measurement of CSR		ACCOUNTING			MARKET			OTHER			PERCEPTUAL		
RATING INDEX	One-tail p-value	1.00	***	B	1.00	***	B	1.00	***	B			
	ρ	0.096	***		0.021	***		0.033	***			—	
	No. of studies	101			82			15					
CONTENT ANALYSIS	One-tail p-value	1.00	***	B	0.9974	***	B	1.00	***	B			
	ρ	0.124	***		0.11			0.039	**			—	
	No. of studies	33			11			6					
REPUTATION	One-tail p-value	0.9998	***	B	0.7170		B	1.00	***	B			
	ρ	0.025	***		0.014	*		0.091	***			—	
	No. of studies	4			4			2					
SURVEY	One-tail p-value	1.00	***	B	0.2757			1.00	***	B	1.00	***	B
	ρ	0.067	***		0.006			0.096	***		0.195	***	
	No. of studies	7			1			2			6		
PROXY VARIABLE	One-tail p-value	1.00	***	B	0.9996	***	B	0.9595	**	B			
	ρ	0.038	**		0.009			0.104					
	No. of studies	29			20			2				—	

Notes. Panel A reports the estimates of the overall discrete and continuous effect sizes. "+" represents significantly positive regression coefficients; "-" represents significantly negative coefficients, and "ns" represents nonsignificant coefficients from the sample studies at the 10 % level. The *, **, and *** indicate the significance of a two-tail binomial sign test at the 10 %, 5 %, and 1 % levels, respectively. The pooled estimate of the overall one-tail p-value is estimated using Edgington's normal curve method (Edgington, 1972), and the star next to it is added for visual purposes. The *, **, and *** indicate the significance of the one-tail p-value at the 10 %, 5 %, and 1 % levels, respectively. We report indicator "B" if the pooled positive CSR–CFP relationship tested using the two methods mentioned above is significant at the 10 % level. Panel B shows the *meta*-analytic results of the mean correlations estimated using sample size as weight (Borenstein et al. 2009). The ρ estimate relies on partial correlations, which are derived from the reported regression coefficients following Dzhambov et al. (2014) and Peterson and Brown (2005). N = number of studies; K = number of total effect sizes; n = total sample size; 95 % C.I. = lower and upper bounds of confidence interval around ρ; Z-value = the null test that the true pooled effect ρ is 0; Q = chi-square test for homogeneity; I^2 = scale free index of heterogeneity. Fail-safe n refers to the number of unpublished studies reporting null results needed to reduce the cumulative effect across studies to the point that the 95 % confidence interval includes zero. The *, **, and *** indicate significance at the 5 %, 1 %, and 0.1 % levels, respectively. Panel C shows the discrete measure of the overall effects per combination of CSR and CFP measures (we fill the significance cell with "—" if the number of observations is less than 20). The *, **, and *** indicate the significance of a two-tail binomial sign test at the 10 %, 5 %, and 1 % levels, respectively. Indicator "B" denotes significant pooled effects that are beneficial to CFP at the 10 % level. Panel D shows the two kinds of continuous measures of the overall effects per combination of CSR and CFP measures. The *, **, and *** next to the one-tail p-value indicate significance at the 10 %, 5 %, and 1 % levels, respectively. The *, **, and *** next to ρ indicate significance at the 5 %, 1 %, and 0.1 % levels, respectively. We report indicator "B" if either the overall pooled one-tail p-value or pooled ρ are significant at the 10 % level. Please refer to Appendix C for the detailed variable descriptions.

the *meta*-analysis using the IV estimator is the largest, which suggests that the positive association between CSR and CFP is reinforced after considering endogeneity, with a magnitude of about three times that of the main results. Next, we examine the sample that uses a lagged independent variable to mitigate the endogeneity problem and find that the mean effect sizes of current CSR and CFP for periods 1 and j ($j \geq 2$) ahead are 0.031 and 0.048, respectively, which still shows a significant positive relationship. Additionally, McWilliams and Siegel (2000) illustrate that investment in R&D and advertising expenditure are important variables with a direct influence on company performance,

Table 3
Sensitivity Analysis for Meta-Analysis.

Panel A Considering Endogeneity							
Relationship	N	K	n	ρ		95 %C.I.	Z-value
(a) Endogeneity test							
CSR → CFP (all)	58	770	3,983,840	0.088	0.069	0.107	9.079***
CSR → CFP (IV)	29	245	1,579,108	0.234	0.188	0.279	9.710***
CSR → CFP (GMM)	21	192	590,696	0.029	0.018	0.040	5.002***
(b) Lagged dependent variable							
$CSR_t \rightarrow CFP_t$	160	4173	11,867,584	0.083	0.075	0.091	19.914***
$CSR_t \rightarrow CFP_{t+1}$	86	1059	5,378,319	0.031	0.027	0.036	14.838***
$CSR_t \rightarrow CFP_{t+j}$ ($j \geq 2$)	16	156	484,041	0.048	0.039	0.056	10.987***
(c) Controlling important variables							
CSR → CFP (R&D)	58	1263	6,696,692	0.071	0.059	0.082	11.911***
CSR → CFP (advertising)	26	344	2,923,560	0.018	0.013	0.022	7.632***
CSR → CFP (both R&D and advertising)	23	300	2,849,349	0.013	0.008	0.017	5.530***
Panel B Reverse Causality							
Relationship	N	K	n	ρ		95 %C.I.	Z-value
$CFP_t \rightarrow CSR_t$	24	428	3,912,478	0.030	0.025	0.034	12.414***
$CFP_t \rightarrow CSR_{t+1}$	22	159	1,296,459	0.021	0.016	0.027	7.696***
$CFP_t \rightarrow CSR_{t+j}$ ($j \geq 2$)	7	39	71,671	0.124	0.094	0.154	8.090***
Panel C Using an Average Effect Size per Study							
Relationship	N	K	n	ρ		95 %C.I.	Z-value
CSR → CFP (using average)	223	223	617,904	0.082	0.066	0.099	9.684***
Panel D Controlling Publication Status							
Relationship	N	K	n	ρ		95 %C.I.	Z-value
CSR → CFP (published)	190	4042	15,890,181	0.086	0.079	0.093	23.356***
CSR → CFP (unpublished)	33	1346	1,839,763	0.031	0.026	0.035	13.004***
Panel E Excluding Some Countries							
Relationship	N	K	n	ρ		95 %C.I.	Z-value
CSR → CFP (excluding USA)	156	4078	13,403,244	0.085	0.077	0.092	21.316***
CSR → CFP (excluding China)	184	4314	11,709,785	0.078	0.071	0.086	20.663***
Panel F Excluding the Most Effect Sizes							
Relationship	N	K	n	ρ		95 %C.I.	Z-value
CSR → CFP (excluding Jitaree (2015))	222	4748	17,521,576	0.08	0.074	0.087	24.646***
CSR → CFP (excluding Pan et al. (2014))	222	5208	17,679,610	0.073	0.067	0.08	23.667***

Notes. This table shows the sensitivity analysis of the main *meta*-analytic results. N = number of studies; K = number of total effect sizes; n = total sample size; 95 % C.I. = lower and upper bounds of confidence interval around ρ; Z-value = the null test that the true pooled effect ρ is 0. The *, **, and *** indicate significance at the 5 %, 1 %, and 0.1 % levels, respectively. Please refer to Appendix C for the detailed variable descriptions.

and we find that the mean effect values after controlling for the above variables in the original study still support the contention that responsible firms make gains.

Slack resources theory posits that the previously high levels of company financial performance can offer slack resources necessary to participate in social activities (McGuire et al., 1988; Waddock & Graves, 1997). In Panel B, we examine the correlation coefficients between current CFP and CSR for periods 1 and j ($j \geq 2$) ahead, which are 0.021 and 0.124, respectively, both significant at the 0.1 % level. Combined with the relationship between CSR and future CFP found in Panel A, it suggests that both instrumental stakeholder theory and slack resource description are correct. Namely, a bi-directional causal association exists between firms' social and financial performance, with a virtuous circle between them.

Many papers present over one effect size, and an issue is that these multiple effects might not be independent; thus, our main results may generate bias (Nelson & Kennedy, 2009). In Panel C, we use each study's average effect size and sample size to re-estimate the CSR–CFP relationship, which has a *meta*-analytic correlation coefficient of 0.082, and the conclusion remains robust. In Panel D, to obtain high-quality evidence, we limit the sample to research published in journals and find that the mean effect size of CSR–CFP for published papers is 0.086, which is not particularly different from that of all papers but much higher than that of unpublished papers. Finally, in Panels E and F, we exclude the most densely researched countries in the sample and the studies that contain the most effect sizes, both of which are not significantly different from the main results. In summary, all these sensitivity analyses confirm our main findings.

5.4. Multivariate analysis of corporate social responsibility benefits

Now we examine Hypothesis 2, which predicts how country-level factors influence the probability of financial benefits for responsible firms. Countries and regions show substantial differences in the CSR environment. So far, the global economy has undergone tremendous changes, and emerging economies, represented by China and India, have been swiftly incorporated into the global economic framework. However, a large gap occurs between emerging and advanced countries concerning market development and institutional structure. We posit that variations in the structural economic variables can partially explain the variations in responsible firms' financial performance across countries. Fig. 2 shows the relationship between the financial market index and average CSR benefits of each country, which shows a significantly negative linear link between these two variables, and this bivariate ordinary least squares (OLS) regression model reveals one slope of −0.21 (p-value = 0.017) and R^2 of 19 %. The benefits of responsible firms are greater in most developing countries—especially those with weak financial markets such as Kenya, Sri Lanka, and Ghana. The smaller CSR benefits are concentrated in advanced economies such as the USA and UK.

We proceed with multivariate regressions in Table 4. Depending on the needs of the study, the sample size of the later models may somewhat become smaller. Model (1) presents findings with simple region influence. This test aims to identify the aggregated unobserved heterogeneity among the regions, suggesting that the positive association between CSR and CFP is less pronounced in the USA compared to that in China, Europe, and Africa. The contrast is the largest in Africa and the smallest in Europe. This finding does not assume that CSR behavior is more prevalent in these regions but that responsible firms in these regions

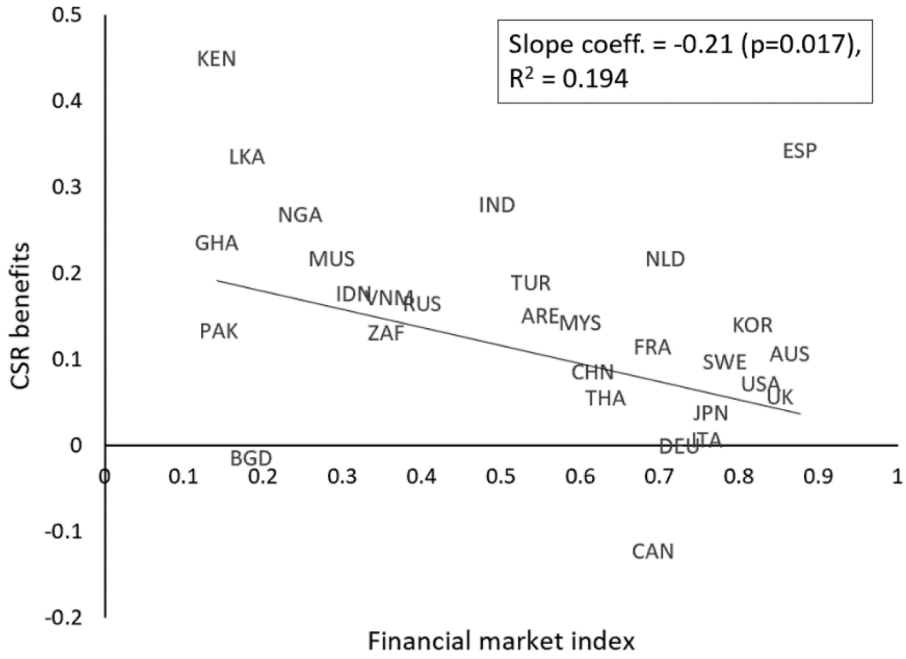


Fig. 2. CSR Benefits and Financial Market Index. This figure displays the linear relationship between the means financial market index (0 = weak financial market; 1 = developed financial market) and CSR benefits estimated by Fisher's Z-scores (values range from −1 to 1, with higher values corresponding to more CSR benefits). The means are computed as the average of observations per country during the sampling window in a given study using equal weights, which excludes the observations from multi-country studies. Countries: ARE, United Arab Emirates; AUS, Australia; BGD, Bangladesh; CAN, Canada; CHN, China; DEU, Germany; ESP, Spain; FRA, France; GHA, Ghana; IDN, Indonesia; IND, India; ITA, Italy; JPN, Japan; KEN, Kenya; KOR, Korea; LKA, Sri Lanka; MYS, Malaysia; MUS, Mauritius; NGA, Nigeria; NLD, Netherlands; PAK, Pakistan; RUS, Russia; SWE, Sweden; THA, Thailand; TUR, Turkey; UK, United Kingdom; USA, United States; VNM, Vietnam; ZAF, South Africa.

receive higher returns than those in other regions.

From the regression, we find that the coefficient of development status is −0.045, which is statistically significant at the 10 % level, suggesting that responsible firms in developing countries are more likely to gain financial benefits (consistent with H2(a)). This result is consistent with the test for regional effects using model (1) and supports the previous literature (Hou et al., 2016; Su et al., 2016). We provide evidence that institutional environments moderate the signaling effects of CSR on corporate economic success. In developing countries, companies that engage in CSR can easily stand out owing to CSR's superior ability to fill institutional gaps caused by law enforcement and corruption. Moreover, owing to the lesser prevalence of CSR in emerging economies compared to Western nations, these signaling effects of CSR on economic success are more pronounced than those in developed capital markets. Further, we report that the coefficient of financial market index is −0.137, which is statistically significant at the 1 % level, showing one strong negative association between the financial market index and the CSR–CFP relationship (consistent with H2(b)). As shown in Fig. 2, this may result from the greater availability of information in developed capital markets (e.g., USA and UK), allowing investors to assess the competencies of enterprises through other credible sources outside the CSR signaling impact. In more advanced capital markets, these positive signaling impacts of CSR on corporate financial success are weaker than in less developed capital markets, which supports the findings of Su et al. (2016). Although legal systems play important roles in impacting the differences across economies, we do not provide evidence that the CSR–CFP link differs significantly in economies with less mature legal systems or higher levels of corruption (not consistent with H2(c) and H2 (d)), which shows that the variations in CSR signaling effects between developed and developing economies are mainly caused by financial market mechanisms among countries rather than legal systems or corruption.

We also find that the coefficient of masculinity is -0.001, which is statistically significant at the 5 % level, showing that the CSR–CFP relationship is weaker in masculine cultures (consistent with H2(e)); this aligns with previous findings of diminished environmental performance in more masculine nations (Gallego-Álvarez & Ortas, 2017). Masculinity refers to "the distribution of values between the genders," and highly masculinized societies value strength over caring for others and cooperation, thus placing less emphasis on social responsibilities; this results in lower CFP. Additionally, we find that the coefficient of mandatory CSR disclosure is −0.034, which is statistically significant at the 1 % level, suggesting that responsible corporates are less likely to benefit from environments where CSR disclosure is mandatory (consistent with H2 (g)). This indicates that in economies that voluntarily disclose CSR, whether disclosing CSR activities alleviates information asymmetry with external investors or covers up negative news, it can send positive signals to investors and differentiate its capabilities from those of many competitors. In particular, this signal effect will be amplified in economies that adopt voluntary CSR disclosure. The two remaining characteristics of the CSR environment are discussed next. For environmental performance, we find that the coefficient of environmental performance is 0.005, which is statistically significant at the 1 % level, suggesting that the CSR–CFP link is stronger in countries with heavier environmental pollution (consistent with H2(f)). Stakeholders are a key mechanism for firms to receive positive returns from CSR activities. If firms located in environments with severe pollution problems present greater levels of socially responsible behavior, they are more likely to receive a positive response from their stakeholders, which translates into positive economic returns and supports the previous literature (Lucas & Noordewier, 2016). However, we do not find evidence that high levels of education are associated with a strong CSR–CFP link (not consistent with H2(h)), which suggests that better national education does not amplify the financial benefits of social practices compared to other macro-level variables. All the above models control for publication-level heterogeneities and use robust standard errors.

Table 4
The CSR-CFP link and Country Characteristics.

	(1) OLS			(2) OLS		
Dependent variable:	Continuous Fisher's z-score			Continuous Fisher's z-score		
	Coeff.	t	Sig.	Coeff.	t	Sig.
Regions (USA is the reference)						
China	0.020	3.00	***			
Europe	0.012	1.73	*			
Asia excluding China	0.041	4.59	***			
Africa	0.281	8.41	***			
Other	−0.009	−0.62				
CSR environment						
Developed status				−0.045	−1.68	*
Financial market index				−0.137	−4.20	***
Legal system and property index				−0.013	−0.79	
Corruption index				0.021	0.97	
Masculinity				−0.001	−2.51	**
Environmental performance				0.005	3.70	***
Mandatory CSR disclosure				−0.034	−5.98	***
Education				0.001	0.95	
Publication controls						
Ln no. of observations	−0.008	−4.36	***	−0.005	−3.04	***
Method strength	−0.005	−0.91		−0.012	−1.98	**
Primary	0.021	4.45	***	0.017	3.34	***
Subsample	−0.018	−3.08	***	−0.021	−3.27	***
Publication year	0.002	3.50	***	0.002	2.57	**
Published	0.001	0.06		−0.015	−1.10	
Rating agency	0.013	2.23	**	0.035	5.04	***
No. of citations	0.006	2.60	***	0.006	2.54	**
Data type	0.006	0.99		0.007	1.02	
Constant	−4.892	−3.48	***	−4.731	−2.40	**
No. of studies			187			165
No. of observations			4292			3787
R^2			0.083			0.053

Notes. This table shows the *meta*-analytic regressions to clarify the relationship between CSR and financial performance by region effects and country-level factors. The dependent variable is Fisher's z-score, and reported t-statistics are based on robust standard errors. The omitted reference for regions is "USA." Please refer to Appendix C for the detailed variable descriptions. All variables are winsorized at the 1% and 99% levels to mitigate the potential influence of outliers. The *, **, and *** indicate 10%, 5%, and 1% significant levels, respectively.

5.5. Robustness check and further empirical analysis

In Table 5, we perform a few additional tests to validate our inferences and provide further analyses. In model (1), we run a regression using one-tail p-value as an alternative explained variable. Considering that the one-tail p-value ranges from 0 to 1, we repeat the above test using the Tobit model (model (2)), and the results confirm our previous findings. Additionally, the findings still hold after we regress using the Bootstrapped estimator (model (3)) and add the control variable Midyear to the model, which equals the median sampling year (model (4)). In model (5), we delete the observations that include the year of 2019 from the original studies to test sensitivity to the COVID-19 pandemic, and the result is also aligned with baseline results.

In another test on the model (6), we include Later period as a moderating variable, which equals 1 when the sampling year median of a given study is greater than the median of sampling year medians of all studies (= 2011), and 0 otherwise. It reports that a significantly positive correlation exists between Later period and the CSR–CFP relationship, which suggests that with more attention from the capital market to CSR activities, more recent CSR activities may bear better financial fruit than earlier ones. In model (2) of Table 4, we examine the impact of country-level environmental performance on the CSR–CFP link, and in model (7) of Table 5, we further analyze whether the industry-level pollution degree has the same moderating effect using an indicator equaling 1 if the sample dataset originates from a heavy-polluting industry. The coefficient of heavy-polluting industry suggests that CSR behavior in high-polluting industries will be more valued by people, which thus receives more positive feedback. This analysis laterally confirms H2 (f).

The following analysis differentiates financial performance (except for perceptual measures owing to the relatively few observations). Table 6 shows our results. As seen in models (1)–(3), responsible firms in the US generally receive lower financial rewards compared to those in other regions. However, we find that responsible firms in China receive lower economic gains than those in the United States when financial performance is a market-based or a other indicator. Models (4)–(6) show that responsible firms achieve better accounting and market-based financial performance in countries with less developed market mechanisms and mandatory CSR disclosure. We do not find evidence that responsible corporates can achieve more other financial performance in the above environments. Conversely, firms investing in CSR activities gain higher other financial performance in countries with poorer environmental performance and better national education.

6. Conclusion

In this study, we use the *meta*-analysis method to synthesize and clarify variations in the findings of previous research on the CSR–CFP link in a cross-country context. It suggests that CSR generally enhances CFP, which, however, differs across the operationalizations of CSR. The empirical evidence implies that scholars studying the CSR–CFP relationship most commonly use CSR measured by social rating agencies and accounting and market-based financial performance. When both CSR and CFP are estimated using surveys, this positive relationship generates the strongest effect in all measurement dimensions.

The *meta*-regression shows that the relationship between CSR and CFP is significantly related to country-level features. The financial benefit for responsible firms is less likely in the USA than in other regions, and the contrast is the largest in developing economies. Similarly, we find that the positive relationship between CSR and CFP is stronger in developing countries than in developed countries; this underscores the institutional environment as an important precondition for CSR to play a role. In developing countries, CSR serves as a vital mechanism to fill institutional gaps, and given its novelty in these regions, its signaling impact is magnified. Furthermore, our study reveals that as financial markets become more sophisticated, they temper the positive association between CSR and CFP. The finding shows that as financial systems evolve and market information becomes more abundant, the signaling value of CSR in denoting a firm's superior capabilities diminishes. However, we find no evidence of the moderating roles of legal institutions or corruption, which indicates that the divergent signaling effects of CSR are predominantly a function of financial market mechanisms among countries rather than legal systems or corruption levels. Additionally, our research confirms that firms practicing responsibilities enjoy enhanced benefits in cultures that value femininity, confirming our hypothesis that societies that prioritize care and cooperation reward responsible entities more generously. Moreover, our results suggest that in countries grappling with severe pollution, a high focus on CSR can amplify its positive signaling effect, leading to greater rewards. In economies where CSR disclosure is voluntary, firms can gain competitive advantages by disclosing CSR activities to alleviate asymmetries or cover up negative news, which results in a stronger link between CSR and CFP. Finally, we find no evidence to support the moderating roles of education in the CSR–CFP relationship; this indicates that better national educational standards do not amplify the economic benefits of social practices relative to other macro factors.

Our findings advance the theoretical development in several ways. First, based on this *meta*-analysis integrating 223 studies, we provide sufficient evidence to support a generally positive correlation between CSR and financial performance as our baseline hypothesis, confirming

Table 5
Robustness Checks and Further Analysis.

	(1) OLS			(2) Tobit			(3) Bootstrap			(4) OLS			(5) OLS			(6) OLS			(7) OLS		
Dependent variable:	Continuous one-tail p-value			Continuous one-tail p-value			Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score		
	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.
CSR environment																					
Developed status	−0.142	−2.35	**	−0.142	−2.17	**	−0.045	−1.80	*	−0.050	−1.79	*	−0.066	−2.02	**						
Financial market index	−0.151	−1.98	**	−0.151	−1.99	**	−0.137	−4.63	***	−0.159	−3.88	***	−0.209	−5.90	***						
Legal system and property rights	−0.002	−0.07		−0.002	−0.08		−0.013	−0.81		−0.008	−0.44		0.003	0.15							
Corruption index	0.050	1.20		0.050	1.25		0.021	0.99		0.018	0.80		0.004	0.18							
Masculinity	−0.002	−3.25	***	−0.002	−3.23	***	−0.001	−2.51	**	−0.001	−2.27	**	−0.001	−3.57	***						
Mandatory CSR disclosure	−0.087	−5.05	***	−0.087	−4.99	***	−0.034	−5.18	***	−0.034	−5.09	***	−0.036	−4.50	***						
Environmental performance	0.017	5.13	***	0.017	5.08	***	0.005	4.02	***	0.005	3.63	***	0.006	4.75	***						
Education	0.003	1.05		0.003	1.09		0.001	0.92		0.001	1.06		0.002	1.50							
Later period																0.018	2.91	***			
Heavy pollution industry																			0.066	5.83	***
Publication controls																					
Ln no. of observations	0.008	1.81	*	0.008	1.92	*	−0.005	−2.98	***	−0.005	−2.52	**	−0.005	−2.41	**	−0.008	−4.83	***	−0.012	−2.77	***
Method strength	0.089	4.46	***	0.089	4.32	***	−0.012	−2.10	**	−0.012	−1.94	*	0.006	0.96		−0.005	−0.88		0.015	0.85	
Primary	0.068	4.11	***	0.068	4.28	***	0.017	3.20	***	0.017	3.29	***	0.013	2.22	**	0.023	4.35	***	0.042	3.00	***
Subsample	0.002	0.11		0.002	0.11		−0.021	−3.19	***	−0.021	−3.18	***	−0.02	−2.79	***	−0.022	−3.80	***	−0.033	−2.69	***
Publication year	0.006	2.78	***	0.006	2.80	***	0.002	2.83	***	0.002	1.42		0.005	4.48	***	0.002	2.38	**	0.012	5.01	***
Published	−0.009	−0.25		−0.009	−0.28		−0.015	−1.02		−0.014	−1.04		−0.023	−1.45		−0.002	−0.18		−0.083	−2.9	***
Rating agency	0.080	4.32	***	0.080	4.53	***	0.035	5.11	***	0.034	4.94	***	0.042	5.64	***	−0.001	−0.10		−0.027	−1.85	*
No. of citations	0.022	3.42	***	0.022	3.74	***	0.006	2.35	**	0.006	2.63	***	0.011	4.20	***	0.004	1.70	*	0.031	4.55	***
Data type	−0.002	−0.14		−0.002	−0.14		0.007	1.04		0.007	1.04		0.001	0.09		0.007	0.96		0.005	0.31	
Midyear										0.001	1.16										
Constant	−11.87	−2.59	***	−11.87	−2.61	***	−4.731	−2.66	***	−5.308	−2.48	**	−9.24	−4.32	***	−3.16	−2.34	**	−23.265	−5.00	***
No. of studies			165			165			165			165			124			165			57
No. of observations			3787			3787			3787			3787			3120			3896			1338
R^2/Pseudo R^2			0.051			0.058			0.053			0.065			0.075			0.025			0.062

Notes. This table shows the robustness check and further analysis. Models (1) and (2) use one-tail p-value as alternative dependent variables. Model (3) reports the Bootstrap estimation with 200 resampling. Models (4) and model (5) report the *meta*-analytic regressions by adding a new control variable and excluding samples containing COVID-19 period, respectively. Models (6) and (7) report the moderating effects of CSR behavior period and industry-level pollution on the CSR–CFP link. Please refer to Appendix C for the detailed variable descriptions. All variables are winsorized at the 1% and 99% levels to mitigate the potential influence of outliers. The *, **, and *** indicate the significance level at 10%, 5%, and 1%, respectively.

Table 6
Decomposition of Financial Performance.

	(1) OLS			(2) OLS			(3) OLS			(4) OLS			(5) OLS			(6) OLS		
Dependent variable:	Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score			Continuous Fisher's z-score		
	ACCOUNTING			MARKET			OTHER			ACCOUNTING			MARKET			OTHER		
	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.	Coeff.	t	Sig.
Regions (USA is the reference)																		
China	0.068	6.28	***	−0.025	−3.60	***	−0.041	−1.94	*									
Europe	0.025	2.71	***	−0.004	−0.38		0.083	2.63	***									
Asia excluding China	0.067	5.50	***	0.010	0.85		0.140	2.63	***									
Africa	0.422	12.34	***	0.013	0.16		—											
Other	−0.044	−1.92	*	−0.273	−9.49	***	0.062	1.73	*									
CSR environment																		
Developed status										−0.012	−0.36		0.036	0.75		−0.290	−1.59	
Financial market index										−0.151	−3.80	***	−0.228	−3.41	***	0.100	0.27	
Legal system and property rights										−0.021	−1.04		−0.046	−1.58		−0.095	−1.28	
Corruption index										0.034	1.27		0.049	1.27		0.099	1.14	
Masculinity										−0.002	−3.81	***	−0.000	−0.37		0.001	0.39	
Mandatory CSR disclosure										−0.030	−3.03	***	−0.028	−2.32	**	0.001	0.02	
Environmental performance										0.003	1.47		0.002	0.60		0.018	2.96	***
Education										−0.002	−1.03		0.003	1.00		0.017	2.79	***
Publication controls																		
Ln no. of observations	−0.002	−0.79		−0.014	−4.55	***	0.018	2.13	**	0.002	0.61		−0.011	−3.48	***	−0.001	−0.08	
Method strength	−0.013	−1.51		0.016	2.01	**	0.026	1.61		−0.019	−1.99	**	0.009	1.34		0.006	0.35	
Primary	0.036	4.98	***	0.004	0.68		0.024	1.20		0.024	3.12	***	0.007	0.97		0.024	1.23	
Subsample	−0.021	−2.63	***	−0.004	−0.60		0.012	0.46		−0.022	−2.47	**	0.007	0.94		−0.002	−0.07	
Publication year	0.004	5.00	***	−0.000	−0.01		−0.003	−1.07		0.005	3.86	***	0.000	0.28		−0.006	−0.69	
Published	−0.042	−2.75	***	0.047	2.18	**	0.136	4.31	***	−0.063	−3.52	***	−0.001	−0.03		0.135	4.45	***
Rating agency	0.027	3.35	***	0.011	1.09		0.003	0.10		0.047	4.72	***	0.025	2.39	**	0.087	1.23	
No. of citations	0.015	4.67	***	−0.002	−0.53		−0.022	−2.97	***	0.017	4.62	***	0.000	−0.03		−0.017	−1.96	*
Data type	0.002	0.20		0.023	2.03	**	−0.021	−0.65		0.003	0.37		0.021	1.80	*	−0.033	−0.76	
Constant	−8.803	−5.02	***	0.101	0.04		5.181	1.04		−9.550	−3.68	***	−0.393	−0.13		13.066	0.71	
No. of studies			139			88			23			117			77			21
No. of observations			2523			1425			313			2268			1204			308
R^2			0.146			0.066			0.167			0.086			0.076			0.176

Notes. This table categorizes financial performance into accounting-based (model (1) and (4)), market-based (model (2) and (5)) and other (model (3) and (6)) indicators. The table shows the *meta*-analytic regressions to clarify the relationship between CSR and CFP by region effects and country-level factors. The dependent variable is Fisher's z-score, and reported t-statistics are based on robust standard errors. The omitted reference for regions is "USA." Please refer to Appendix C for the detailed variable descriptions. All variables are winsorized at the 1% and 99% levels to mitigate the potential influence of outliers. The *, **, and *** indicate 10%, 5%, and 1% significance levels, respectively.

that firms can do well by doing good (Freeman, 1984; Kitzmueller & Shimshack, 2012). Second, our paper contributes to the social responsibility literature by introducing signaling theory. We argue that signaling theory is another theoretical view that explains how CSR promotes financial performance. We find that in emerging economies, CSR behaviors themselves can convey unobserved positive signals to stakeholders, thereby filling institutional voids to earn premiums (Su et al., 2016). Firms exhibiting good CSR behaviors can gain competitive advantages by building connections with stakeholders or gaining intangible assets such as organizational culture, reputation, and human capital (Freeman, 1984; Surroca et al., 2010). Our signaling perspective complements this line of research by emphasizing that CSR practices themselves can be viewed as valuable resources that create premiums for companies, irrespective of their contribution to intangible resources (Spence, 1973). Third, we draw on the institutional perspective to examine the institutional conditions under which CSR is more valuable (Ahuja & Yayavaram, 2011; Brammer et al., 2012). In developing countries, firms that engage in CSR activities can function as a mechanism to fill institutional voids, and this positive signaling effect depends on the financial institutional environment. Additionally, we find that national culture, environmental performance, and CSR disclosure manner also moderate CSR premium. In short, the institutional environment is important, and CSR is one key dimension of how the institution works. Institutions constitute various models of social behavior in various nations (Cai et al., 2016; Campbell, 2007), and our study further explores the extent to which CSR value varies depending on the moderation of the external environment.

We notice that the *meta*-analytic conclusions rely on the input from the original papers, where systematic heterogeneities in those original papers may lead to biases in the whole *meta*-analysis and *meta*-regressions. We use several ways to address this issue. First, we minimize the imprecision of the pooled effect estimates by choosing the sample size as weights for individual effects. Next, we perform a series of sensitivity tests to enhance the validity of our inferences. Moreover, we control for potential sources of observed systematic heterogeneities in all models, which are associated with data, methodology, model design, and publication features.

Our *meta*-analysis is the first trial to systematically and quantitatively assess the research on the CSR–CFP link in a cross-country context. Our results also provide some interesting paths for further investigations. For instance, we have not yet deeply explored the mechanics through which CSR influences financial performance. Is it the instrumental stakeholder theory, signaling theory, or something else? Hence, to estimate the real CSR–CFP relationship, opening the black box and understanding the specific mechanisms as well as the magnitude of their respective contributions is necessary. Moreover, we can take a stakeholder perspective to investigate the impact of firms' CSR behavior on financial performance in the dimensions of shareholders, customers, employees, suppliers, communities, among others, together with how they differ across countries.

CRediT authorship contribution statement

Wanli Li: Funding acquisition, Conceptualization, Project administration, Writing – review & editing. **Tiantian Yan:** Writing – original draft, Methodology, Data curation, Formal analysis. **Yue Li:** Writing – review & editing, Methodology, Validation.

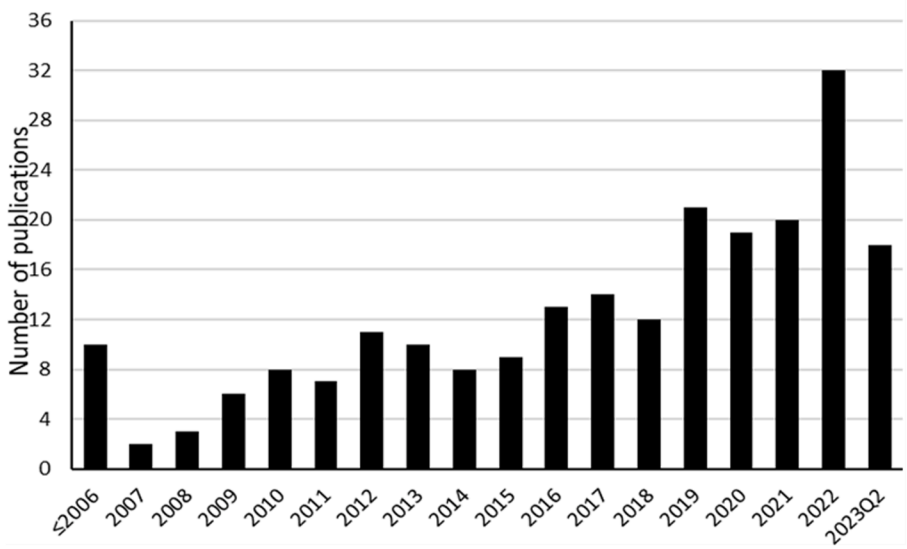
Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We thank Nikolaos Panagopoulos (Senior Editor), Weichun Zhu (Associate Editor), and two anonymous reviewers for their constructive comments. We also thank Professor Qiang Wu of Hong Kong Polytechnic University for his helpful guidance. This work was supported by the National Social Science Fund of China [grant number 21AGL009]; Humanities and Social Science Foundation of the Ministry of Education in China [grant number 23YJC630263]; and General Project of Scientific Research Plan of Beijing Municipal Education Commission [grant number SM202410038010].

Appendix A. Number of Papers on the CSR–CFP Link Included in the Meta-Analysis per Year



Appendix B. Studies Included in the Meta-Analysis

ID	Author(s)	Title	Year	Publication	No. of effects	No. of obs.
1	Abdi & Li	Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: The moderating role of size and age	2022	*Environment Development and Sustainability*	48	4279
2	Akben-Selcuk	Corporate social responsibility and financial performance: The moderating role of ownership concentration in Turkey	2019	*Sustainability*	1	329
3	Akisik & Gal	The impact of corporate social responsibility and internal controls on stakeholders' view of the firm and financial performance	2017	*Sustainability Accounting Management and Policy Journal*	12	735
4	Al Amosh & Khatib	Websites visits and financial performance for GCC banks: The moderating role of environmental, social and governance performance	2022	*Global Business Review*	6	448
5	Al Amosh et al.	Environmental, social and governance impact on financial performance: Evidence from the Levant countries	2023	*Corporate Governance-The International Journal of Business in Society*	36	883
6	Al Mahmuda & Muktadir-Al-Mukit	Corporate social responsibility disclosures and profitability of Islamic banks: An empirical study	2022	*Social Responsibility Journal*	4	60
7	Al-Hadi et al.	Corporate social responsibility performance, financial distress and firm life cycle: Evidence from Australia	2019	*Accounting and Finance*	57	651
8	Alkaraan et al.	Corporate transformation toward Industry 4.0 and financial performance: The influence of environmental, social, and governance (ESG)	2022	*Technological Forecasting and Social Change*	16	1043
9	Alsaifi et al.	Carbon disclosure and financial performance: UK environmental policy	2020	*Business Strategy and the Environment*	19	747
10	Al-Shammari et al.	Corporate social responsibility and firm performance: A theory of dual responsibility	2022	*Management Decision*	9	791
11	Amadi & Zhao	Corporate social responsibility and financial performance: The stakeholder theory perspective	2020	*Working Paper*	8	577
12	Amadi & Zhu	The effect of mandatory corporate social responsibility (CSR) disclosure on corporate financial performance in China: A DID analysis	2020	*Working Paper*	20	21,967
13	Anderson et al.	Corporate social responsibility, earnings management, and firm performance: Evidence from panel VAR estimation	2014	*Working Paper*	4	8702
14	Angelia & Suryaningsih	The Effect of environmental performance and corporate social responsibility disclosure towards financial performance (case study to manufacture, infrastructure, and service companies that listed at Indonesia stock exchange)	2015	*Conference Paper*	2	34
15	Arn & Bin Tariq	Corporate social responsibility disclosure quality and firm financial performance: Evidence from an emerging economy	2022	*Global Business Review*	60	2328
16	Arya & Zhang	Institutional reforms and investor reactions to CSR announcements: Evidence from an emerging economy	2009	*Journal of Management Studies*	14	71
17	Awaysheh et al.	On the relation between corporate social responsibility and financial performance	2020	*Strategic Management Journal*	10	23,369
18	Ba	Corporate social responsibility and financial performance: The role of corporate governance: Evidence from the Netherlands	2017	Dissertation	30	142
19	Babajee et al.	Corporate social responsibility and hotel financial performance	2022	*Journal of Hospitality Marketing & Management*	2	516
20	Barnett & Salomon	Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance	2006	*Strategic Management Journal*	13	4821
21	Barnett & Salomon	Does it pay to be really good? Addressing the shape of the relationship between social and financial performance	2012	*Strategic Management Journal*	10	4730
22	Ben Saad & Belkacem	How does corporate social responsibility influence firm financial performance?	2022	*Corporate Governance-The International Journal of Business in Society*	17	1044
23	Berrone et al.	Corporate ethical identity as a determinant of firm performance: A test of the mediating role of stakeholder satisfaction	2007	*Journal of Business Ethics*	13	398
24	Bhatter & Chhatoi	Financial inclusion and financial performance: Evaluating the moderating effect of mandatory corporate social responsibility	2023	*Journal of Financial Economic Policy*	5	96
25	Bodhanwala & Bodhanwala	Does corporate sustainability impact firm profitability? Evidence from India	2018	*Management Decision*	8	290
26	Buallay et al.	Sustainability reporting and bank performance after financial crisis: Evidence from developed and developing countries	2021	*Competitiveness Review*	13	1947
27	Buckingham	The effect of corporate social responsibility on the financial performance of listed companies in the UK	2012	*Dissertation*	68	2955
28	Callan & Thomas	Corporate financial performance and corporate social performance: An update and reinvestigation	2009	*Corporate Social Responsibility and Environmental Management*	16	441
29	Callan & Thomas	Executive compensation, corporate social responsibility, and corporate financial performance: A multi-equation framework	2011	*Corporate Social Responsibility and Environmental Management*	1	864
30	Cavaco & Crifo	CSR and financial performance: Complementarity between environmental, social and business behaviours	2014	*Applied Economics*	40	1094
31	Chang et al.	Employee satisfaction, corporate social responsibility and financial performance	2021	*Sustainability*	6	5196
32	Chen	An empirical study of corporate environmental liability performance, industry characteristics and financial performance	2019	*Conference Paper*	6	936
33	Chen & Xie	ESG disclosure and financial performance: Moderating role of ESG investors	2022	*International Review of Financial Analysis*	49	7614
34	Chen et al.	How business strategy in non-financial firms moderates the curvilinear effects of corporate social responsibility and irresponsibility on corporate financial performance	2018	*Journal of Business Research*	14	6715

(*continued on next page*)

(*continued*)

ID	Author(s)	Title	Year	Publication	No. of effects	No. of obs.
35	Chi & Hang	Corporate social responsibility expenditure and financial performance: A comparison of Vietnamese listed and unlisted banks	2023	*Cogent Economics & Finance*	14	191
36	Cho et al.	Study on the relationship between CSR and financial performance	2019	*Sustainability*	27	191
37	Choi & Wang	Stakeholder relations and the persistence of corporate financial performance	2009	*Strategic Management Journal*	26	1510
38	Choi et al.	Corporate social responsibility and corporate financial performance: Evidence from Korea	2010	*Australian Journal of Management*	30	1222
39	Cochran & Wood	Corporate social responsibility and financial performance	1984	*Academy of Management Journal*	30	402
40	Cornett et al.	Greed or good deeds: An examination of the relation between corporate social responsibility and the financial performance of US commercial banks around the financial crisis	2016	*Journal of Banking & Finance*	48	687
41	Danso et al.	Environmental sustainability orientation, competitive strategy and financial performance	2019	*Business Strategy and the Environment*	7	269
42	Danso et al.	Stakeholder integration, environmental sustainability orientation and financial performance	2020	*Journal of Business Research*	3	233
43	Das Gupta & Deb	Interlinkage between corporate social, environmental performance and financial performance: Firm-mediators in a multi-country context	2023	*Finance Research Letters*	35	18,062
44	Das Gupta & Roy	Firm environmental, social, governance and financial performance relationship contradictions: Insights from institutional environment mediation	2023	*Technological Forecasting and Social Change*	36	412
45	De Burgos-Jimenez et al.	Environmental protection and financial performance: An empirical analysis in Wales	2013	*International Journal of Operations & Production Management*	42	186
46	Dharmaratne	The impact of corporate social responsibility on the financial performance with reference to the banking sector in Sri Lanka	2020	*Working Paper*	2	49
47	Doh et al.	Does the market respond to an endorsement of social responsibility? The role of institutions, information, and legitimacy	2010	*Journal of Management*	2	86
48	Ducassy	Does corporate social responsibility pay off in times of crisis? An alternate perspective on the relationship between financial and corporate social performance	2013	*Corporate Social Responsibility and Environmental Management*	6	132
49	Duque-Grisales & Aguilera-Caracuel	Environmental, social and governance (ESG) scores and financial performance of multilatinas: Moderating effects of geographic international diversification and financial slack	2021	*Journal of Business Ethics*	12	520
50	Dursun-De Neef et al.	How did banks' ESG conduct affect financial performance and lending during COVID-19?	2023	*Working Paper*	24	504

Note. This table reports some of the studies included in our *meta*-analysis, and the remaining studies are provided as supplementary material if required.

Appendix C. Variable Definitions

Meta-analytic effect sizes

Measure of significance: This indicator classifies captured effect sizes from the selected studies into significantly positive, significantly negative, and nonsignificant at the 10 % significance level. Significance is obtained from the original regression data. Source: sample studies

One-tail p-value: One continuous indicator that reveals the direction and significance of the effect sizes. The value ranges from 0 to 1, with it closer to 1 indicating significant beneficial effects for the responsible firms, and closer to 0 indicating significant adverse effects. If the effect is in the direction of the hypothesis that CSR benefits financial performance, then the one-tail p-value equals p1 = 1 – (p2/2) and p1 = (p2/2) otherwise, where p1 is the one-tail p-value and p2 is the two-tail p-value reported in the original studies. If a given study only provides the star indication of significance level, we collect the most conservatism measure (e.g., for p-value < 0.1 we document p-value = 0.1). Source: sample studies

Fisher's Z-score: Skewness-corrected partial correlation. Partial correlations are derived from the reported regression statistics of each study following Dzhambov et al. (2014): $r_{xy} = \sqrt{t_x^2/(t_x^2 + df)}$, where r_{xy} is the partial correlation between the independent variable x and dependent variable y; t is the t-statistic of the x coefficient, and df is the degrees of freedom. Additionally, if the standardized regression coefficient β is reported: $r_{xy} = 0.98 \times \beta + 0.05 \times \gamma$ (Peterson and Brown, 2005), where λ is an indicator equals 1 when $\beta \geq 0$ and 0 when $\beta < 0$. Then, we correct for skewness according to Borenstein et al. (2009). Positive Fisher's z-scores represent a positive CSR–CFP relationship, and negative Fisher's z-scores represent a negative relationship. Source: sample studies

Country-level CSR environment

We construct country-level indicators for each study. When a temporal overlap occurs between the sample period of the original study and country-level data, we calculate the average of these available country-year observations. In case of no overlap, we use the closest available country-year observation.

Developed status: = 1 if the sample study is from a high-income region classified by the World Bank in the median sampling year, 0 otherwise. Source: World Bank

Financial market index

One aggregate of financial markets depth, access, and efficiency indexes. Its value ranges from 0 to 1, with higher values corresponding to more developed financial markets. Source: International Monetary Fund

Legal system and property rights: An index of protection of persons and their rightfully acquired property, which consists of nine components including judicial independence, impartial courts, protection of property rights, and others. Its value ranges from 0 to 1, with higher values corresponding to stronger legal systems.

Corruption index: Control of corruption index captures perceptions of the extent to which public power is exercised for private gain. Its value ranges from − 2.5 to 2.5, with higher values corresponding to lower corruption. Source: World Bank

Masculinity: Masculinity is the extent to which the use of force is endorsed socially. Source: Hofstede.

Environmental performance: GHG net emissions/removals by LUCF refers to changes in atmospheric levels of all greenhouse gases attributable to forest and land-use change activities. Source: World Bank

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Mandatory CSR disclosure: =1 when implementing a full CSR mandatory disclosure, 0 when a partial CSR mandatory disclosure, and −1 when a voluntary CSR disclosure. Source: Google Research
Education: The percentage of the population ages 25 and over that attained or completed a bachelor's or equivalent. Source: World Bank
Publication variables
Ln no. of observations: The logarithm of the number of observations for the reported regression model. Source: own data set
Method strength: = 1 if the original estimation method uses endogenous treatment, and 0 otherwise. Source: own data set
Primary: = 1 if corporate social responsibility is the main focus in the original regressions, and 0 otherwise. Source: own data set
Subsample: = 1 if the effect size is not obtained from the main analysis in the sample study. Source: own data set
Publication year: The year of the original paper publication. Source: own data set
Published: = 1 if the study is published in a peer-reviewed journal, and 0 otherwise. Source: own data set
Rating agency: = 1 if the paper's CSR information is from the rating agency, and 0 otherwise. Source: own data set
No. of citations: The number of citations is derived from Web of Science for each published article. Source: Web of Science
Data type: = 1 if the sample data type is panel data, and 0 otherwise. Source: own data set

Data availability

Data will be made available on request.

References

Abbott, W. F., & Monsen, R. J. (1979). On the measurement of corporate social responsibility: self-reported disclosures as a method of measuring corporate social involvement. *Academy of Management Journal, 22*(3), 501–515. https://doi.org/10.5465/255740

Ahuja, G., & Yayavaram, S. (2011). Explaining influence rents: the case for an institutions-based view of strategy. *Organization Science, 22*(6), 1631–1652. https://doi.org/10.1287/orsc.1100.0623

Al-Tuwaijri, S. A., Christensen, T. E., & Hughes, K. E. (2004). The relations among environmental disclosures environmental performance, and economic performance: a simultaneous equations approach. *Accounting Organizations and Society, 29*(5–6), 447–471. https://doi.org/10.1016/s0361-3682(03)00032-1

Albareda, L., Lozano, J. M., & Ysa, T. (2007). Public policies on corporate social responsibility: the role of governments in Europe. *Journal of Business Ethics, 74*(4), 391–407. https://doi.org/10.1007/s10551-007-9514-1

Alexander, G. J., & Buchholz, R. A. (1978). Corporate social-responsibility and stock-market performance. *Academy of Management Journal, 21*(3), 479–486. https://doi.org/10.5465/255728

Alonso-Martinez, D., De Marchi, V., & Di Maria, E. (2020). Which country characteristics support corporate social performance? *Sustainable Development, 28*(4), 670–684. https://doi.org/10.1002/sd.2018

Andrade, S. C., & Chhaochharia, V. (2010). Information immobility and foreign portfolio investment. *Review of Financial Studies, 23*(6), 2429–2463. https://doi.org/10.1093/rfs/hhp116

Arya, B., & Zhang, G. (2009). Institutional reforms and investor reactions to CSR announcements: evidence from an emerging economy. *Journal of Management Studies, 46*(7), 1089–1112. https://doi.org/10.1111/j.1467-6486.2009.00836.x

Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical-examination of the relationship between corporate social-responsibility and profitability. *Academy of Management Journal, 28*(2), 446–463. https://doi.org/10.5465/256210

Awaysheh, A., Heron, R. A., Perry, T., & Wilson, J. I. (2020). On the relation between corporate social responsibility and financial performance. *Strategic Management Journal, 41*(6), 965–987. https://doi.org/10.1002/smj.3122

Bachmann, P., & Ingenhoff, D. (2016). Legitimacy through CSR disclosures? The advantage outweighs the disadvantages. *Public Relations Review, 42*(3), 386–394. https://doi.org/10.1016/j.pubrev.2016.02.008

Barauskaite, G., & Streimikiene, D. (2021). Corporate social responsibility and financial performance of companies: the puzzle of concepts, definitions and assessment methods. *Corporate Social Responsibility and Environmental Management, 28*(1), 278–287. https://doi.org/10.1002/csr.2048

Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review, 32*(3), 794–816. https://doi.org/10.5465/amr.2007.25275520

Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: the curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal, 27*(11), 1101–1122. https://doi.org/10.1002/smj.557

Baughn, C. C., Bodie, N. L., & McIntosh, J. C. (2007). Corporate social and environmental responsibility in Asian countries and other geographical regions. *Corporate Social Responsibility and Environmental Management, 14*(4), 38–54. https://doi.org/10.1002/csr.160

Bénabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica, 77*(305), 1–19. https://doi.org/10.1111/j.1468-0335.2009.00843.x

Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal, 42*(5), 488–506. https://doi.org/10.5465/256972

Berrone, P., & Gomez-Mejia, L. R. (2009). Environmental performance and executive compensation: an integrated agency-institutional perspective. *Academy of Management Journal, 52*(1), 103–126. https://doi.org/10.5465/amj.2009.36461950

Bocquet, R., Le Bas, C., Mothe, C., & Poussing, N. (2017). CSR, innovation, and firm performance in sluggish growth contexts: a firm-level empirical analysis. *Journal of Business Ethics, 146*(1), 241–254. https://doi.org/10.1007/s10551-015-2959-8

Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. John Wiley & Sons Ltd.

Bragdon, J. H., & Marlin, J. (1972). Is pollution profitable. *Risk Management, 19*(4), 9–18.

Brammer, S., Brooks, C., & Pavelin, S. (2006). Corporate social performance and stock returns: UK evidence from disaggregate measures. *Financial Management, 35*(3), 97–116. https://doi.org/10.1111/j.1755-053X.2006.tb00149.x

Brammer, S., Jackson, G., & Matten, D. (2012). Corporate social responsibility and institutional theory: new perspectives on private governance. *Socio-Economic Review, 10*(1), 3–28. https://doi.org/10.1093/ser/mwr030

Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic Management Journal, 29*(12), 1325–1343. https://doi.org/10.1002/smj.714

Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics, 69*(2), 111–132. https://doi.org/10.1007/s10551-006-9071-z

Buckingham, G. P. (2012). *The effects of corporate social responsibility on the financial performance of listed companies in the UK*. United Kingdom: University of Exeter.

Cai, Y., Pan, C. H., & Statman, M. (2016). Why do countries matter so much in corporate social performance? *Journal of Corporate Finance, 41*, 591–609. https://doi.org/10.1016/j.jcorpfin.2016.09.004

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review, 32*(3), 946–967. https://doi.org/10.5465/amr.2007.25275684

Campbell, J. L. (2011). The US financial crisis: lessons for theories of institutional complementarity. *Socio-Economic Review, 9*(2), 211–234. https://doi.org/10.1093/ser/mwq034

Chen, C. M., & Delmas, M. (2011). Measuring corporate social performance: an efficiency perspective. *Production and Operations Management, 20*(6), 789–804. https://doi.org/10.1111/J.1937-5956.2010.01202.x

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal, 35*(1), 1–23. https://doi.org/10.1002/smj.2131

Chi, L. H. D., & Hang, B. T. T. (2023). Corporate social responsibility expenditure and financial performance: a comparison of Vietnamese listed and unlisted banks. *Cogent Economics & Finance, 11*(1). https://doi.org/10.1080/23322039.2023.2203987

Cho, C. H., Freedman, M., & Patten, D. M. (2012). Corporate disclosure of environmental capital expenditures: a test of alternative theories. *Accounting Auditing & Accountability Journal, 25*(3), 486–507. https://doi.org/10.1108/09513571211209617

Chung, C. C., & Beamish, P. W. (2005). The impact of institutional reforms on characteristics and survival of foreign subsidiaries in emerging economies. *Journal of Management Studies, 42*(1), 35–62. https://doi.org/10.1111/j.1467-6486.2005.00488.x

Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. *Accounting Organizations and Society, 33*(4–5), 303–327. https://doi.org/10.1016/j.aos.2007.05.003

Cochran, P. L., & Wood, R. A. (1984). Corporate social responsibility and financial performance. *Academy of Management Journal, 27*(1), 42–56. https://doi.org/10.5465/255956

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: a review and assessment. *Journal of Management, 37*(1), 39–67. https://doi.org/10.1177/0149206310388419

Cornell, B., & Shapiro, A. C. (1987). Corporate stakeholders and corporate finance. *Financial Management, 16*(1), 5–14. https://doi.org/10.2307/3665543

Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J., & Owusu-Yirenkyi, D. (2020). Stakeholder integration, environmental sustainability orientation and financial

performance. *Journal of Business Research, 119*, 652–662. https://doi.org/10.1016/j.jbusres.2019.02.038
De Leaniz, P. M. G., & Del Bosque, I. R. (2013). Intellectual capital and relational capital: the role of sustainability in developing corporate reputation. *Intangible Capital, 9*(1), 262–280. https://doi.org/10.3926/ic.378
Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *Accounting Review, 86*(1), 59–100. https://doi.org/10.2308/accr.00000005
Dieleman, M., & Sachs, W. M. (2008). Coevolution of institutions and corporations in emerging economies: how the Salim group morphed into an institution of Suharto's crony regime. *Journal of Management Studies, 45*(7), 1274–1300. https://doi.org/10.1111/j.1467-6486.2008.00793.x
Doh, J. P., & Guay, T. R. (2006). Corporate social responsibility, public policy, and NGO activism in Europe and the United States: an institutional-stakeholder perspective. *Journal of Management Studies, 43*(1), 47–73. https://doi.org/10.1111/j.1467-6486.2006.00582.x
Doh, J. P., Howton, S. D., Howton, S. W., & Siegel, D. S. (2010). Does the market respond to an endorsement of social responsibility? The role of institutions, information, and legitimacy. *Journal of Management, 36*(6), 1461–1485. https://doi.org/10.1177/0149206309337896
Duran, P., Kammerlander, N., van Essen, M., & Zellweger, T. (2016). Doing more with less: Innovation input and output in family firms. *Academy of Management Journal, 59*(4), 1224–1264. https://doi.org/10.5465/amj.2014.0424
Dzhambov, A. M., Dimitrova, D. D., & Dimitrakova, E. D. (2014). Association between residential greenness and birth weight: Systematic review and meta-analysis. *Urban Forestry Urban Greening, 13*(4), 621–629. https://doi.org/10.1016/j.ufug.2014.09.004
Edgington, E. S. (1972). A normal curve method for combining probability values from independent experiments. *The Journal of Psychology, 82*(1), 85–89. https://doi.org/10.1080/00223980.1972.9916971
Freeman, R. E. (1984). *Strategic management: a stockholder approach*. *Pitman*.
Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, 122–126. September 13.
Galant, A., & Cadez, S. (2017). Corporate social responsibility and financial performance relationship: a review of measurement approaches. *Economic Research-Ekonomska Istrazivanja, 30*(1), 676–693. https://doi.org/10.1080/1331677x.2017.1313122
Galbreath, J. (2010). How does corporate social responsibility benefit firms? Evidence from Australia. *European Business Review, 22*(4), 411–431. https://doi.org/10.1108/09555341011056186
Gallego-Álvarez, I., & Ortas, E. (2017). Corporate environmental sustainability reporting in the context of national cultures: a quantile regression approach. *International Business Review, 26*(2), 337–353. https://doi.org/10.1016/j.ibusrev.2016.09.003
Garcia-Castro, R., Ariño, M. A., & Canela, M. A. (2010). Does social performance really lead to financial performance? Accounting for endogeneity. *Journal of Business Ethics, 92*(1), 107–126. https://doi.org/10.1007/s10551-009-0143-8
Gbadamosi, W. A. (2016). *Corporate social responsibility and financial performance of banks in the United States*. Walden University.
Gjolberg, M. (2009). The origin of corporate social responsibility: global forces or national legacies? *Socio-Economic Review, 7*(4), 605–637. https://doi.org/10.1093/ser/mwp017
Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. *Academy of Management Review, 30*(4), 777–798. https://doi.org/10.5465/amr.2005.18378878
Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic Management Journal, 30*(4), 425–445. https://doi.org/10.1002/smj.750
Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics, 118*(1), 107–155. https://doi.org/10.1162/00335530360535162
Gong, G. M., Huang, X., Wu, S. R., Tian, H. W., & Li, W. J. (2021). Punishment by securities regulators, corporate social responsibility and the cost of debt. *Journal of Business Ethics, 171*(2), 337–356. https://doi.org/10.1007/s10551-020-04438-z
Gupta, J., & Das, N. (2022). Multidimensional corporate social responsibility disclosure and financial performance: a meta-analytical review. *Corporate Social Responsibility and Environmental Management, 29*(4), 731–748. https://doi.org/10.1002/csr.2237
Hambrick, D. C., & Mason, P. A. (1984). Upper echelons-The organization as a reflection of its top managers. *Academy of Management Review, 9*(2), 193–206. https://doi.org/10.2307/258434
Higgins, J. P. T., & Thompson, S. G. (2002). Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine, 21*(11), 1539–1558. https://doi.org/10.1002/sim.1186
Ho, F. N., Wang, H. M. D., & Vitell, S. J. (2012). A global analysis of corporate social performance: the effects of cultural and geographic environments. *Journal of Business Ethics, 107*(4), 423–433. https://doi.org/10.1007/s10551-011-1047-y
Hofstede, G. (1984). *Culture's consequences: International differences in work-related values*. SAGE Publications Inc.
Hofstede, G. (2011). Dimensionalizing cultures: the Hofstede model in context. *Online readings in psychology culture, 2*(1). https://doi.org/10.9707/2307-0919.1014
Hou, M., Liu, H., Fan, P., & Wei, Z. (2016). Does CSR practice pay off in East Asian firms? A meta-analytic investigation. *Asia Pacific Journal of Management, 33*(1), 195–228. https://doi.org/10.1007/s10490-015-9431-2
Huang, K. X., Sim, N., & Zhao, H. (2020). Corporate social responsibility, corporate financial performance and the confounding effects of economic fluctuations: A meta-analysis. *International Review of Financial Analysis, 70*, Article 101504. https://doi.org/10.1016/j.irfa.2020.101504
Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: correcting error and bias in research findings*. CA: Thousand Oaks.
Jensen, M. C. (2002). Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly, 12*(2), 235–256. https://doi.org/10.2307/3857812
Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.
Jiménez-Parra, B., Alonso-Martinez, D., & Godos-Diez, J.-L. (2018). The influence of corporate social responsibility on air pollution: analysis of environmental regulation and eco-innovation effects. *Corporate Social Responsibility and Environmental Management, 25*(6), 1363–1375. https://doi.org/10.1002/csr.1645
Jo, H. J., & Na, H. (2012). Does CSR reduce firm risk? Evidence from controversial industry sectors. *Journal of Business Ethics, 110*(4), 441–456. https://doi.org/10.1007/s10551-012-1492-2
Jones, T. M. (1995). Instrumental stakeholder theory-A synthesis of ethics and economics. *Academy of Management Review, 20*(2), 404–437. https://doi.org/10.2307/258852
Ketokivi, M. A., & Schroeder, R. G. (2004). Perceptual measures of performance: fact or fiction? *Journal of Operations Management, 22*(3), 247–264. https://doi.org/10.1016/j.jom.2002.07.001
Khan, S. Z., Yang, Q., & Waheed, A. (2019). Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance. *Corporate Social Responsibility and Environmental Management, 26*(2), 285–295. https://doi.org/10.1002/csr.1678
Kim, S. (2019). The process model of corporate social responsibility (CSR) communication: CSR communication and its relationship with consumers' CSR knowledge, trust, and corporate reputation perception. *Journal of Business Ethics, 154*(4), 1143–1159. https://doi.org/10.1007/s10551-017-3433-6
King, A. A., Lenox, M. J., & Terlaak, A. (2005). The strategic use of decentralized institutions: exploring certification with the ISO 14001 management standard. *Academy of Management Journal, 48*(6), 1091–1106. https://doi.org/10.5465/amj.2005.19573111
Kitzmueller, M., & Shimshack, J. (2012). Economic perspectives on corporate social responsibility. *Journal of Economic Literature, 50*(1), 51–84. https://doi.org/10.1257/jel.50.1.51
Kramer, M. R., & Porter, M. E. (2006). Strategy and society: the link between competitive advantage and corporate social responsibility. *Harvard Business Review, 84*(12), 78–92.
Kysucky, V., & Norden, L. (2016). The benefits of relationship lending in a cross-country context: a meta-analysis. *Management Science, 62*(1), 90–110. https://doi.org/10.1287/mnsc.2014.2088
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy, 106*(6), 1113–1155. https://doi.org/10.1086/250042
Lange, D., & Washburn, N. T. (2012). Understanding attributions of corporate social irresponsibility. *Academy of Management Review, 37*(2), 300–326. https://doi.org/10.5465/amr.2010.0522
Lev, B., Petrovits, C., & Radhakrishnan, S. (2010). Is doing good good for you? How corporate charitable contributions enhance revenue growth. *Strategic Management Journal, 31*(2), 182–200. https://doi.org/10.1002/smj.810
Levy, D. L., & Kaplan, R. (2008). Corporate social responsibility and theories of global governance: Strategic contestation in global issue arenas. Doi: 10.1093/oxfordhb/9780199211593.003.0019.
Liang, H., & Renneboog, L. (2017). On the foundations of corporate social responsibility. *Journal of Finance, 72*(2), 853–910. https://doi.org/10.1111/jofi.12487
Lioui, A., & Sharma, Z. (2012). Environmental corporate social responsibility and financial performance: Disentangling direct and indirect effects. *Ecological Economics, 78*, 100–111. https://doi.org/10.1016/j.ecolecon.2012.04.004
Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. SAGE Publications, Inc.
Lucas, M. T., & Noordewier, T. G. (2016). Environmental management practices and firm financial performance: the moderating effect of industry pollution-related factors. *International Journal of Production Economics, 175*, 24–34. https://doi.org/10.1016/j.ijpe.2016.02.003
Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing, 70*(4), 1–18. https://doi.org/10.1509/jmkg.70.4.001
Madhani, P. M. (2010). Rebalancing fixed and variable pay in a sales organization: a business cycle perspective. *Compensation & Benefits Review, 42*(3), 179–189. https://doi.org/10.1177/0886368709359668
Mahmoudian, F., Lu, J., Yu, D. N., Nazari, J. A., & Herremans, I. M. (2021). Inter-and intra-organizational stakeholder arrangements in carbon management accounting. *British Accounting Review, 53*(1), Article 100933. https://doi.org/10.1016/j.bar.2020.100933
Maignan, I., & Ralston, D. A. (2002). Corporate social responsibility in Europe and the US: Insights from businesses' self-presentations. *Journal of International Business Studies, 33*(3), 497–514. https://doi.org/10.1057/palgrave.jibs.8491028
Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2009). Does it pay to be good... and does it matter? A meta-analysis of the relationship between corporate social and financial performance. *Working Paper*.
Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly, 48*(2), 268–305. https://doi.org/10.2307/3556659
McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social-responsibility and firm financial performance. *Academy of Management Journal, 31*(4), 854–872. https://doi.org/10.5465/256342

McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic Management Journal, 21*(5), 603–609. https://doi.org/10.1002/(sici)1097-0266(200005)21:5<603::Aid-smj101>3.0.Co;2-3

Meyer, A. (2015). Does education increase pro-environmental behavior? Evidence from Europe. *Ecological Economics, 116*, 108–121. https://doi.org/10.1016/j.ecolecon.2015.04.018

Miller, D., Lee, J., Chang, S., & Le Breton-Miller, I. (2009). Filling the institutional void: the social behavior and performance of family vs non-family technology firms in emerging markets. *Journal of International Business Studies, 40*(5), 802–817. https://doi.org/10.1057/jibs.2009.11

Montiel, I., Husted, B. W., & Christmann, P. (2012). Using private management standard certification to reduce information asymmetries in corrupt environments. *Strategic Management Journal, 33*(9), 1103–1113. https://doi.org/10.1002/smj.1957

Morris, S. D., & Klesner, J. L. (2010). Corruption and trust: theoretical considerations and evidence from Mexico. *Comparative Political Studies, 43*(10), 1258–1285. https://doi.org/10.1177/0010414010369072

Moskowitz, M. (1972). Choosing socially responsible stocks. *Business Society Review, 1*(1), 71–75.

Nelson, J., & Kennedy, P. (2009). The use (and abuse) of meta-analysis in environmental and natural resource economics: an assessment. *Environmental & Resource Economics, 42*(3), 345–377. https://doi.org/10.1007/s10640-008-9253-5

Ng, A. C., & Rezaee, Z. (2015). Business sustainability performance and cost of equity capital. *Journal of Corporate Finance, 34*, 128–149. https://doi.org/10.1016/j.jcorpfin.2015.08.003

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

O'Neill, H. M., Saunders, C. B., & McCarthy, A. D. (1989). Board members, corporate social responsiveness and profitability-are tradeoffs necessary. *Journal of Business Ethics, 8*(5), 353–357. https://doi.org/10.1007/bf00381726

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: a meta-analysis. *Organization Studies, 24*(3), 403–441. https://doi.org/10.1177/0170840603024003910

Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: a research note. *Accounting Organizations and Society, 27*(8), 763–773. https://doi.org/10.1016/s0361-3682(02)00028-4

Peloza, J. (2006). Using corporate social responsibility as insurance for financial performance. *California Management Review, 48*(2), 52–72. https://doi.org/10.2307/41166338

Peterson, R. A., & Brown, S. P. (2005). On the use of beta coefficients in meta-analysis. *Journal of Applied Psychology, 90*(1), 175–181.

Ramchander, S., Schwebach, R. G., & Staking, K. (2012). The informational relevance of corporate social responsibility: evidence from DS400 index reconstitutions. *Strategic Management Journal, 33*(3), 303–314. https://doi.org/10.1002/smj.952

Ringov, D., & Zollo, M. (2007). Corporate responsibility from a socio-institutional perspective: the impact of national culture on corporate social performance. *International Journal of Corporate Governance, 7*(4), 476–485. https://doi.org/10.1108/14720700710820551

Rothstein, H., Sutton, A., & Borenstein, M. (2005). Publication bias in meta-analysis prevention. *assessment and adjustments preface*. John Wiley & Sons Ltd.

Servaes, H., & Tamayo, A. (2013). The impact of corporate social responsibility on firm value: the role of customer awareness. *Management Science, 59*(5), 1045–1061. https://doi.org/10.1287/mnsc.1120.1630

Shiu, Y. M., & Yang, S. L. (2017). Does engagement in corporate social responsibility provide strategic insurance-like effects? *Strategic Management Journal, 38*(2), 455–470. https://doi.org/10.1002/smj.2494

Simpson, W. G., & Kohers, T. (2002). The link between corporate social and financial performance: evidence from the banking industry. *Journal of Business Ethics, 35*(2), 97–109. https://doi.org/10.1023/a:1013082525900

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics, 87*(3), 355–374. https://doi.org/10.2307/1882010

Su, W., Peng, M. W., Tan, W. Q., & Cheung, Y. L. (2016). The signaling effect of corporate social responsibility in emerging economies. *Journal of Business Ethics, 134*(3), 479–491. https://doi.org/10.1007/s10551-014-2404-4

Sun, W. B., Yao, S. J., & Govind, R. (2019). Reexamining corporate social responsibility and shareholder value: the inverted-u-shaped relationship and the moderation of marketing capability. *Journal of Business Ethics, 160*(4), 1001–1017. https://doi.org/10.1007/s10551-018-3854-x

Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal, 31*(5), 463–490. https://doi.org/10.1002/smj.820

Tan, W., Tsang, A., Wang, W., & Zhang, W. (2020). Corporate social responsibility (CSR) disclosure and the choice between bank debt and public debt. *Accounting Horizons, 34*(1), 151–173. https://doi.org/10.2308/acch-52631

Ullmann, A. A. (1985). Data in search of a theory: a critical-examination of the relationships among social performance, social disclosure, and economic-performance of US firms. *Academy of Management Review, 10*(3), 540–557. https://doi.org/10.2307/258135

Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal, 18*(4), 303–319. https://doi.org/10.1002/(sici)1097-0266(199704)18:4<303::Aid-smj869>3.3.Co;2-7

Wang, H. L., & Qian, C. L. (2011). Corporate philanthropy and corporate financial performance: the roles of stakeholder response and political access. *Academy of Management Journal, 54*(6), 1159–1181. https://doi.org/10.5465/amj.2009.0548

Wang, Q., Dou, J. S., & Jia, S. H. (2016). A meta-analytic rreview of corporate social responsibility and corporate financial performance: the moderating effect of contextual factors. *Business & Society, 55*(8), 1083–1121. https://doi.org/10.1177/0007650315584317

Zahid, M., Rahman, H. U., Khan, M., Ali, W., & Shad, F. (2020). Addressing endogeneity by proposing novel instrumental variables in the nexus of sustainability reporting and firm financial performance: a step-by-step procedure for non-experts. *Business Strategy and the Environment, 29*(8), 3086–3103. https://doi.org/10.1002/bse.2559

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