CORPORATE SOCIAL RESPONSIBILITY AND STOCK VALUE ENHANCEMENT: AN INVESTIGATION OF STAKEHOLDER EVALUATIONS

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ABSTRACT

While previous research has analyzed the causal relationship between CSR and subsequent financial performance from a strategic perspective, this paper emphasizes from a stakeholder perspective that CSR and financial performance (i.e., stock value enhancement) jointly influence stakeholder evaluations. Using a sample of Chinese listed companies from 2011 and 2022, we find a negative joint effect of CSR and stock value enhancement on stakeholder evaluations, proxied by analyst recommendations and online stock forum sentiments, indicating that CSR is a substitute for stock value enhancement in stakeholder evaluations. Further, by distinguishing between internal versus external CSR, we find external CSR contributes more to the substitution effect for analysts, and internal CSR contributes more to the substitution effect for private investors. These findings advance our understanding of the criteria by which stakeholders evaluate multifaceted corporate performance and offer implications for stakeholder management in an increasingly complex and dynamic world.

Keywords: Corporate social responsibility, stock value enhancement, stakeholder evaluation, analyst recommendation, online stock forum sentiment

1. Introduction

Over the past several decades, corporate activities have been increasingly identified as a major cause of social and environmental problems (Gillan, Koch, & Starks, 2021). Corporations are thus under intense scrutiny and constant evaluation by a variety of stakeholder groups based on corporate financial performance and, increasingly, corporate social performance (Barnett, Henriques, & Husted, 2020; Wang, Reger, & Pfarrer, 2021). Since high-quality stakeholder-company relationships help accumulate tangible and intangible strategic resources (Barnett, 2007; Cheng, Ioannou, & Serafeim, 2014), the evaluations of stakeholders who control critical resources are becoming more and more important to corporate survival and development (Flammer, 2015; Flammer & Luo, 2017).

As for how stakeholders evaluate a firm's performance, extant studies tend to examine stakeholder responses to a certain aspect of corporate performance, neglecting that different performance dimensions may interact with each other in affecting stakeholder assessment and evaluation. For example, research often premises that stakeholders in capital markets pay more attention to the stock value, while other stakeholders are more concerned about corporate social activities related to their own interests (Hendry, 2006). Yet, as business organizations penetrate deeper into various aspects and domains of social life, it becomes increasingly difficult to separate the economic and social roles of corporations (Hilliard, 2019). As such, stakeholders often act toward a firm, either appreciation or resistance, based upon an overall impression of the firm (Mahon & Wartick, 2012). It is thus pressing to investigate how stakeholders perceive the interconnections between corporate performance in different domains.

Regarding the joint influence of corporate social performance and corporate financial performance on stakeholder evaluations, previous studies have rarely conducted direct empirical tests, but we can get some inspirations from the research on the causal relationship between CSR and subsequent financial outcomes. Agency theory suggests that firms face a trade-off between social performance and shareholder interests. Those holding this view propose that the companies incur agency costs from corporate social activities that put them at an economic disadvantage compared to others that engage in less CSR activities (Aupperle, Carroll, & Hatfield, 1985). Firms under great pressure from stakeholders put social performance over financial performance in a quest for legitimacy (Sethi, 1979). In this case, CSR is a substitute for corporate financial performance. The other contrasting view is based on strategic perspective, arguing that firms can eventually benefit financially from engaging in corporate social activities through satisfying

stakeholders' interests and gain their subsequent supports (Harrison, Bosse, & Phillips, 2010). That is, CSR plays as a supplement to shareholder interests.

The above two distinct views provide different guiding principles for CSR investments, but existing research has rarely discussed them in stakeholder evaluations. This paper addresses the gap by investigating how CSR and stock value jointly influence stakeholder evaluations. Stock value is an important indicator for stakeholders to evaluate corporate profitability, especially for shareholders. Since the criteria for a "good" firm may be different for different stakeholders, we select security analysts and private investors' evaluations for our analysis. They are in distinct fields but are both pivotal evaluators of corporate performance. Financial analysts convey their judgments on a firm's prospects to potential investors in capital markets (Hinze & Sump, 2019), and private investors communicate with each other in online stock forums (Jiang, Liu, & Yang, 2019). Moreover, different stakeholder groups may assess the same CSR quite differently, perceiving the degree, direction and relevance of the outcome dissimilarly (Bhattacharya, Korschun, & Sen, 2009; Hetze, 2016; Mahon & Wartick, 2012). We thus further distinguish between external CSR and internal CSR and examine whether analysts and private investors differentially perceive these two aspects of CSR performance.

The study analyzes a sample of Chinese publicly listed firms from 2011 to 2022. As the largest emerging economy in the world, China has encountered a lot of environmental and societal challenges associated with its rapid economic growth during the last several decades; the Chinese government has also emphasized corporate social responsibility as a critical factor in realizing high-quality development (Chen, Hung, & Wang, 2018). In this context, Chinese firms are under dual pressures to meet both economic and social expectations, which allows us to examine how stakeholders perceive and evaluate firms against their CSR and stock value. Our results demonstrate a strong relationship between stock value and stakeholder evaluations. More importantly, CSR and stock value have a negative joint effect on stakeholder evaluations. In other words, the coexistence of high performance of CSR and stock value may be counterproductive. Furthermore, for analysts, external CSR contributes to this weakening effect more, whereas for private investors, internal CSR contributes more.

The paper contributes to the literature in three ways. First, by revealing the impact of the interaction of CSR and stock value enhancement on stakeholder evaluations, this paper first contributes to the line of research on the relationship between CSR and corporate financial outcomes. Rather than analyzing the relationship between CSR and subsequent financial performance from a strategic perspective in previous research (Jia & Zhang, 2014), we emphasize

in a stakeholder view that different dimensions of corporate performance jointly influence the stakeholder perceptions. Our results show that CSR is a substitute for stock value in stakeholder evaluations. Second, while prior studies on stakeholder responses to CSR tend to take a holistic view and often adopt a composite performance index, we delve into the different facets of CSR (Hawn & Ioannou, 2016) and highlight their differential implications to different stakeholders. By distinguishing between internal and external CSR, we contribute a more nuanced understanding of the value of different forms of CSR. Third, from a stakeholder management view, by discerning and revealing the evaluation criteria and focus of attention of stakeholders, our study has clear managerial implications for firms to strategically allocate resources and efforts in managing their evaluations from multiple stakeholders.

The paper proceeds as follows. Section 2 presents the literature review and Section 3 describes the research design. Section 4 present our main findings, including robustness checks and additional analysis. Furthermore, Section 5 discusses the main conclusions and implications.

2. Literature review

Our paper contributes to three main research streams: the first one considers stakeholder evaluations of multifaced corporate performance, the second one is related to the relationship between CSR and stock value, and the third one is stakeholder perceptions of CSR components.

2.1. Corporate performance and stakeholder evaluations

For stakeholders, outstanding stock value signals an appropriate strategy, good management, and effective resource allocations in current business operations (Roberts & Dowling, 2002; Sabate & Puente, 2003), and so triggers more favorable assessments. However, stakeholders are increasingly refer to nonfinancial information in firm reports and pay considerable attention to these supplementary information when making investment decisions (Breton & Taffler, 2001). The Accounting Standards Executive Committee states that financial information alone is insufficient to meet the information needs of evaluators in capital markets since they require more information to validate a firm's long-term prospects through the disclosure of nonfinancial measures.

Among nonfinancial measures, stakeholders increasingly value CSR information and issue more optimistic evaluations for firms with good CSR performance in more recent years (Ioannou & Serafeim, 2015). On the one hand, stakeholders tend to be risk-averse (Brammer & Pavelin, 2006). CSR as a signal of management integrity and ethics (Hsu, Koh, Liu, & Tong, 2019), can

provide insurance-like protection for the relationship-based intangible assets of a firm (Godfrey, 2005). In other words, if two firms exhibit similar levels of financial outcomes, the firm with more CSR information receives more favorable evaluations because of its lower risk (Fombrun & Shanley, 1990). On the other hand, more CSR information may enhance the reliability of financial information. This is because CSR inherently has a longer time horizon compared to the more short-term financial performance (Banker, Potter, & Srinivasan, 2000), and firms tend to disclose better information about more immediate or short time horizon outcomes than long time horizon outcomes (Ghosh & Wu, 2012). As emphasized by an analyst in an interview, "the reality is that we are interested in corporate financial performance at the end of the day. But there is enough evidence to suggest that corporate governance, good sustainability and environmentally friendly behavior add value over the longer term—although it is hard to immediately measure that in financial terms" (Luo, Wang, Raithel, & Zheng, 2015, p.125).

In the past, when firms were mainly active in the economic sector, stakeholders relied more on their financial data to assess their overall value (Roberts & Dowling, 2002). But, as some large corporations have been involved in major social and environmental disasters during the last several decades (Palazzo & Scherer, 2006), "citizens are increasingly demanding that the corporations justify and legitimate not only their economic actions but also their social and environmental performance in the general public sphere" (Colleoni, 2013, p. 229). As a consequence, an increasing number of firms have begun to voluntarily disclose and publicize their CSR information to obtain intangible resources such as legitimacy (Marquis & Qian, 2014). Stakeholders thus has access to information on CSR, have accumulated more knowledge and experience to judge how firms can improve the public's lives, and can directly evaluate the social value created by firms.

2.2. CSR and stock value

Since the 1980s, whether shareholders may profit financially from social activities or do well by doing good has been a major question in the field of CSR research (Vishwanathan, van Oosterhout, Heugens, Duran, & van Essen, 2020; Wang, Tong, Takeuchi, & George, 2016). Regarding this question, the existing literature has mainly evolved into two streams of argument. On the one hand, numerous articles assume that managers are fungible agents of shareholders who are likely to take corporate policies to enhance their own interests at the price of shareholder value (Zajac & Westphal, 2004). If CSR practices are interpreted through the lens of this agency logic, CSR performance is viewed as agency costs damaging stock value. Only when firms under great

pressure from stakeholders, they will put social performance over shareholder interests in a quest for legitimacy (Sethi, 1979). In this case, CSR is a substitute for stock value enhancement.

On the other hand, the strategic or instrumental approach of CSR demonstrates a clear interest in shareholder profitability and market performance. The strategic perspective posits that firms invest in these social aspects of the context to strengthen their competitiveness (Porter & Kramer, 2006) or sustainable competitive advantage (McWilliams & Siegel, 2011). Indeed, research has revealed a variety of rewards for CSR activities, including but not limited to price premia, reduced labor costs, lower capital costs, insurance against adverse events, co-operation from stakeholders, and better reputation (Dorobantu et al., 2017). By meta-analyzing the available empirical evidence, Vishwanathan et al. (2020) define CSR as "those firm activities that appear to further some social good, while at the same time benefitting the firm financially by either enhancing its reputation, increasing stakeholder reciprocation, mitigating firm-specific risk, and/or improving innovation". In this case, CSR is a supplement to stock value enhancement.

In sum, regarding whether CSR is a substitute for or a supplement to stock value, the results of existing studies are still mixed.

2.3. CSR Components

Stakeholder theory suggests that firms can benefit from CSR activities by fulfilling the needs and expectations of their stakeholders, including employees, customers, governments, shareholders, etc. (Eccles, Ioannou, & Serafeim, 2014). However, stakeholder groups exert different pressures on CSR in broad social themes (Wang, Gibson, & Zander, 2020). Different types of CSR initiatives "may differ in their implementation costs, societal impacts, and the longevity of those impacts" (Buell & Kalkanci, 2021, p.947). Hence, how firms with limited resources balance and prioritize CSR activities targeting different stakeholders is increasingly critical and challenging (Jin, Jiang, & Hu, 2021; Wang et al., 2016).

In investigating and classifying different types of CSR activities, extant studies have demarcated between internal and external CSR in line with the distinction between the target stakeholders inside and outside the firm (Al-Shammari, Rasheed, & Al-Shammari, 2019). Specifically, internal CSR encompasses a firm's outcomes of operations and policies that reflect commitments to stakeholders internal to a firm (e.g., employees), and external CSR involves practices intended to benefit external stakeholders (e.g., customers) (Hawn & Ioannou, 2016; Jin et al., 2021). Firms will weigh these stakeholders when decide to engage in internal versus external CSR activities, and they may strategically choose to devote more resources to one and

less in the other (Ge & Zhao, 2017). Indeed, studies have found that some firms' internal CSR exceeds their external CSR, whereas in other firms the opposite is true (Gosselt, van Rompay, & Haske, 2019).

Internal and external CSR demonstrate firms' social initiatives to stakeholders in different ways. Internal CSR performance mainly shows a firm's commitment to the responsibility for the harms imposed by its operations and the enaction of practices to reduce them (Sine, David, & Mitsuhashi, 2007). These internal social practices (e.g., employee relations, diversity policies, and CSR governance) frequently necessitate more substantial adjustments to core practices, norms, structures, and routines or even long-term investments to adapt corporate policies and organizational culture (Eccles et al., 2014). That is, a better internal CSR score indicates a higher degree of integration of CSR activities into day-to-day operations (Ge & Zhao, 2017). In contrast, external CSR practices (e.g., philanthropy, environmental protection, and product safety) do not need a long-term commitment or structural support (Tang, Hull, & Rothenberg, 2012), and therefore are easier to implement (Jin et al., 2021). Via engaging in a variety of prosocial practices where external audiences are beneficiaries, firms show their efforts in balancing the economic goals and a set of social goals (Buell & Kalkanci, 2021).

When interpreting these information, internal CSR requires a higher level of professional knowledge of evaluators, and it is difficult for ordinary shareholders to establish a connection between internal CSR and firm value. On the contrary, the public shares a great deal of common knowledge about firms' information on external CSR (Clemente & Roulet, 2015). This is because firms often advertise their external CSR that is in line with the interests of most external audiences in order to seek external support (Lim & Greenwood, 2017). For example, many firms have specialized departments to provide a steady stream of information to the public (Shoemaker & Reese, 1996), which in turn helps people become more familiar with external CSR activities and can more accurately judge the implications of external CSR information.

Firms engaging in CSR practices expect that their performance can be positively perceived and rewarded by key evaluators. Therefore, it is of interest to clarify the perceptions of the two types of CSR by evaluators to help firms accurately cater to their target evaluators.

Overall, considering the complexity in stakeholder evaluations of corporate multifaced performance, we formulate a pair of competing hypotheses:

Hypothesis 1b (H1a). *CSR (external CSR and internal CSR) is a substitute for stock value enhancement in stakeholder evaluations, such that CSR and stock value enhancement have a negative joint effect on stakeholder evaluations.*

Hypothesis 1a (H1b). *CSR (external CSR and internal CSR) is a supplement to stock value enhancement in stakeholder evaluations, such that CSR and stock value enhancement have a positive joint effect on stakeholder evaluations.*

3. Research design

3.1. Data and sample

Our sample includes the public firms that published CSR reports in Shanghai and Shenzhen Stock exchanges during 2011 and 2022. The dataset was mainly constructed based on two data sources, including the China Stock Market and Accounting Research (CSMAR) and the Chinese Research Data Services Platform (CNRDS). CSMAR serves as the primary source of information on firm financial statements. Following prior research, we exclude firms in the financial industry because of different disclosure requirements among industries (Rehman, Riaz, Cullinan, Zhang, & Wang, 2020). Information regarding stakeholder evaluations (analyst recommendations and online stock forum sentiments) and CSR is recorded in the CNRDS database. After removing observations with heavy missing values in key variables, the final two groups of unbalanced samples consist 1185 firms (6,885 observations) for predicting analyst recommendations, and 1306 firms (8,696 observations) for predicting online stock forum sentiments.

3.2. Stakeholder evaluations

We measure stakeholder evaluations based on two stakeholder groups, security analysts and private investors in online stock forums. Compared with other stakeholders, they are special in that they act as information intermediaries and therefore influence some other investors' decision making (Ioannou & Serafeim, 2015; Wu, Zheng, & Olson, 2014). That is, they exert their influence on firms not only through direct interactions, but more importantly, through influencing their audiences with information to directly encourage or restrict certain firm behaviors.

Specifically, we proxy analyst evaluations of a firm using analyst recommendations (AR) that is extracted from security analysis reports and encoded on a five-point scale, with five indicating a "strong buy" recommendation and one indicating a "sell" recommendation. Many firms are

subject to more than once evaluations by the same analyst team within a year, and here we use the earliest recommendation results of each analyst team after the release of the company's annual report to capture their timely responses to corporate performance in the previous year. Drawing on prior research (Zhang, Wang, & Zhou, 2020), we take the average of all the investment recommendations from different analyst teams.

We collect information regarding private investor evaluations in online stock forums from the Stock Comments (GUBA) sub-database of the CNRDS database. GUBA uses machine learning methods to judge the positive, negative, and neutral sentiments of each post and counts the total number of posts of each type related to the focal firm. Following prior literature (Deephouse, 2000), we measure online stock forum sentiments by solving Eq. (1):

$$OSFS_t = \begin{cases} \left(f_t^2 - f_t u_t\right)/n_t^2, \; if \; f_t > u_t; \\ 0, \qquad\qquad if \; f_t = u_t; \\ \left(f_t u_t - u_t^2\right)/u_t^2, \; if \; f_t < u_t; \end{cases} \tag{1}$$

where $OSFS_t$ represents the online stock forum sentiment of a firm in year t; f_t is the number of favorable posts about the focal firm; u_t is the number of unfavorable posts about the focal firm; and n_t is the total number of posts about the focal firm. As a result, the range of this variable is (-1, 1), where 1 indicates all the posts about the focal firm are positive, and -1 indicates all negative.

Table 1 shows that the annual average of analyst recommendations and online stock forum sentiments during the period under investigation is generally positive. However, the changing trends of their evaluations are not completely consistent, suggesting that analysts and investors in online forums may use different standards to evaluate corporate performance.

[Insert Table 1 about here]

3.3. CSR scores

The firm's CSR information is collected from the Environmental, Social, and Governance Database of Listed Company (CESG) sub-database of the CNRDS database, which aggregates time-series data on multidimensional CSR in binary terms. The CESG database records CSR in six categories that gauge a firm's commitment to corporate governance related to social activities, charity activity, product advantages, employee relations, environmental protection, and diversity. Under each category, CESG annually rates each firm for the presence of several specific "strengths" and "concerns", recording a total of 49 strengths and 9 concerns. Following prior studies (Peng, Colak, & Shen, 2023), we calculate the CSR score for each category by subtracting the number of concerns from the number of strengths. Then the firm's overall CSR score is calculated as the

average score of CSR among these six categories to capture the firm's overall CSP in a year (Chin, Hambrick, & Treviño, 2013).

According to the stakeholders targeted by corporate social activities (Jin et al., 2021), the external CSR score is calculated as the average score among three CSR categories, including corporate governance, employee relations, and diversity; the internal CSR score is calculated as the average score among the other three CSR categories, including charity activity, product advantages, and environmental protection.

3.4. Model specification

To examine the impact of the interaction between CSR and stock value enhancement on stakeholder evaluations, we develop the following model:

$$SE_{i,t} = \beta_0 + \beta_1 CSR_{i,t-1} * EPS_{i,t-1} + \beta_2 CSR_{i,t-1} + \beta_3 EPS_{i,t-1} + \beta_4 SA_{i,t} + \Sigma\beta_k Controls_{i,t-1} + FirmFE + YearFE + \varepsilon_{i,t} \quad (2)$$

where *i* indexes firm and *t* indexes year. The dependent variable is stakeholder evaluation (*SE*), which is proxied by *AR* and *OSFS* as described in section 3.2. The primary explanatory term is the interaction between *CSR* and *EPS*. We measure *CSR* using overall CSR score (*OCSR*), external CSR score (*ECSR*), and internal CSR score (*ICSR*) to analyze whether different aspects of CSR performance exert different influence on stakeholder evaluations. *EPS* gives the earnings per share and is one of the core indicators for stakeholders to predict stock prices and make evaluations of corporate performance (Akono, Karim, & Nwaeze, 2019).

We control for stakeholder attention (*SA*), because firms are supervised and evaluated by a varying number of analysts and investors (Da, Engelberg, & Gao, 2011), and this is highly correlated with the average level of stakeholder evaluations. Specifically, when predicting analyst recommendations, we proxy stakeholder attention using the analyst coverage (*AC*) that is calculated as the share of analyst teams covering an industry segment that cover the focal firm in year *t* (White, 2010; Zhang et al., 2020); when predicting online stock forum sentiments, we proxy stakeholder attention using investor attention (*IA*) that is calculated as the log of one plus the number of online posts related to the focal firm in year *t*.

We further include several control variables that are shown to affect stakeholder evaluations. Previous research suggests that stakeholders will apply higher standards to assess corporate performance of large firms, we thus controlled *SIZE* and *AGE*, as larger firms are generally believed to have more resources and better capability (Ge & Micelotta, 2019). Moreover, the stakeholder evaluations of a firm's potential growth are affected by other financial indicators of

the firm, so we also control for variables related to firm slack resource and profitability (He, Feng, & Hao, 2023; Mishra & Modi, 2013). *Leverage* is calculated as a firm's long-term debt over total assets, reflects the firm's resource constraints. *Liquidity* is proxied using a firm's cash ratio, which is a commonly recommended approach to measuring a firm's slack resources. *ROE* is the return on equity that captures a firm's profitability. Advertising intensity (*AD*) is calculated as the ratio of selling and administrative expenses to firm revenue. State-owned enterprises are given higher expectations in corporate performance because they receive financial support and institutional protection from the government agencies (Wang & Qian, 2011). We consider *SOE* that takes 1 if the firm is owned by the Chinese government or its agencies and 0 otherwise. We also include several corporate governance features that may enhance stakeholder evaluations (He, Ding, Yue, & Liu, 2023). *Duality* equals to 1 if the CEO also serves the chair of the board of directors. *TMT equity* is the ratio of the number of shares held by TMT members to the total number of shares. *CSE* captures ownership concentration that is calculated as the controlling shareholders' equity. These control variables, except for stakeholder attention, are lagged by one year to address the issue of reverse causality.

Finally, to control for firm-invariant and year-invariant unobserved heterogeneities, we include firm dummies (*FirmFE*) and year dummies (*YearFE*) in our model with robust standard errors clustered by firm. All financial independent variables are winsorized at the 1.0 percentile in each tail (Fiordelisi, Ricci, & Santilli, 2023).

4. **Main findings**

4.1. Descriptive statistics

As we can see from Table 2, Panel A includes the variables used to predict analyst recommendations (*AR*), and Panel B includes the variables used to predict online stock forum sentiments (*OSFS*). The average value of *AR* is 4.338, indicating that analysts are generally optimistic about the potential growth of listed companies' stock values in China's capital market. While the average value of *OSFS* is 0.025, which is very close to 0, suggesting that the online forum discussions among investors are mixed with various sentiments rather than a dominant evaluation orientation. Comparing the average of the overall CSR score (*OCSR*), external CSR score (*ECSR*), and internal CSR score (*ICSR*), we can find that *ECSR* contributes more to the *OCSR* than *ICSR*, which is in line with our expectation that external CSR practices are easier to implement.

[Insert Table 2 about here]

Table 3 reports pairwise correlation coefficients. We can see that analyst recommendations (*AR*) are positively correlated with *EPS* and CSR scores (i.e., *OCSR*, *ECSR*, and *ICSR*), while online stock forum sentiments (*OSFS*) are positively correlated with EPS but negatively correlated with CSR scores. This confirms our expectation that CSR performance can be evaluated differently among various stakeholder groups. We checked the potential multicollinearity concern by computing variance inflation factors (VIFs). The maximum VIF obtained in any of our models is 2.54 (*SIZE*), and the mean VIF is about 1.64, substantially below the rule of thumb cutoff for regressions (Greene, 2011). Therefore, multicollinearity was not an important issue in our results.

[Insert Table 3 about here]

4.2. Main results

Table 4 shows the results of regressions on stakeholder evaluations. Models 1 and 3 are the base line models, containing control variables, the main effects of *EPS*, and the overall CSR score (*OCSR*). The effects of *EPS* on analyst recommendations (*AR*) and online stock forum sentiments (OSFS) are both positive and significant ($p < 0.01$), indicating that analysts and investors give more optimistic evaluations to those firms with greater stock value enhancement. The main effects of *OCSR* on stakeholder evaluations are negative but insignificant, which suggests that, compared to CSR, analysts rely more on financial information to evaluate corporate performance. Models 2 and 4 incorporate the interaction term between *EPS* and the overall CSR score (*OCSR*), and the coefficients are negative and significant ($p < 0.01$). That is, stock value enhancement and CSR are substitutes in stakeholder evaluations, lending support to Hypothesis 1a.

[Insert Table 4 about here]

We then unpack the overall CSR score and replace it with the internal CSR score (*ICSR*) and the external CSR score (*ECSR*), and then examine their interactive effects with *EPS* on stakeholder evaluations in Table 5. Models 2 and 6 show a significantly negative relationship at the 1% level for the interaction term between *ECSR* and *EPS*. Models 3 and 7 also show a significantly negative relationship for the interaction term between *ICSR* and *EPS* at the 5% level and at the 1% level, respectively. Considering *ECSR* and *ICSR* are highly correlated, we include all the controls, independent variables, and interaction terms. Model 4 shows that only the coefficient of *ECSR* × *EPS* remains significant ($p < 0.10$), while Model 5 shows that only the coefficient of *ICSR* × *EPS* remains significant ($p < 0.01$). The results indicate that, compared with the internal CSR score, the company's favorable external CSR performance will weaken the positive relationship between

stock value enhancement and analyst recommendations. From agency perspective, analysts may consider external CSR investments will increase the cost of firms when the corporate profitability is already relatively good (Aupperle et al., 1985). Moreover, internal CSR requires firms to incorporate social policies and plans into governance structures, which analysts may not view as undermining shareholder equity based on its potential to improve the integration of CSR with the company's overall strategy (Lock & Seele, 2016). On the contrary, for investors who communicate in the online stock forums, higher internal CSR scores will weaken the positive relationship between stock value enhancement and online stock forum sentiments. This is because internal CSR information is more difficult to understand for private investors who lack sufficient corporate governance knowledge, and is therefore more likely to be regarded as a deprivation of shareholder interests under conditions of strong profitability (McWilliams & Siegel, 2011).

[Insert Table 5 about here]

4.3. Robustness checks and additional analysis

We conduct several additional tests to further validate our main findings on the joint effect of CSR and stock value enhancement on stakeholder evaluations. First, scholars have traditionally studied CSR initiatives by investigating CSR reports (Zerbini, 2017). And the CSR report shows a firm's attitudes toward social outcomes of their economic actions. We therefore create another measure of CSR scores, *CSR initiative*, calculated as the log of the number of pages of CSR reports. As shown in Table 6, *CSR initiative* and *EPS* have a significant and negative joint effect on stakeholder evaluations, so our main findings still hold with this new measure.

[Insert Table 6 about here]

Second, we use dividends per share (*DPS*) as an alternative measure for stock value enhancement. Companies that pay greater dividends than peer companies would undoubtedly be more appealing to stakeholders, especially investors in capital markets (Sunaryo, 2020). In Table 7, we observe no significant relationship between *DPS* and *AR* but a significant and positive relationship between *DPS* and *OSFS*. We believe that the results are related to the differences in the demands of the two stakeholder groups, i.e., analysts and investors. Analysts are more concerned about the potential value of the stock, whereas investors care more about whether the company has paid stable dividends. The coefficient of the interaction term between *OCSR* and *DPS* remains negative and significant, partially supporting Hypothesis 1a.

[Insert Table 7 about here]

Third, the variation of stakeholder evaluations at industry level can occur. We thus use industry-adjusted analyst recommendations (*IndAR*) and industry-adjusted online stock forum sentiments (*IndOSFS*) to capture stakeholder evaluations. As shown in Table 8, the results of our main findings still remain, lending further support to our argument.

[Insert Table 8 about here]

Although our findings show that analysts do not necessarily appreciate companies with high CSR scores, CSR as nonfinancial performance assists in linking management actions to firm financial results and future earnings estimates (Rajgopal, Shevlin, & Venkatachalam, 2003), and is positively associated with analysts' forecast accuracy (Orens & Lybaert, 2007). We thus expect that CSR will negatively affect analyst forecast errors. Following Dhaliwal et al. (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012), we measure analyst forecast errors as the average of the absolute errors of all forecasts make in the year for target earnings, scaled by the stock price. The results in Table 8 indicate that overall CSR scores (*OCSR*) have a negative and significant impact on forecast errors, which is aligned with our expectations. We can also find that overall CSR scores and EPS have a significant and negative joint effect on analyst forecast errors. That is, when the firm's EPS and CSR score are both high, analyst recommendations tend to be similar.

[Insert Table 9 about here]

5. Discussion and conclusions

This study examines the interconnections between CSR and stock value enhancement in stakeholder evaluations. Using a sample of Chinese listed companies from 2011 and 2022, we find a negative joint effect of CSR and stock value enhancement on stakeholder evaluations that are proxied by analyst recommendations and online stock forum sentiments, suggesting that CSR is a substitute for stock value enhancement. Further, by distinguishing between internal versus external CSR, we find external CSR contributes to the substitution effect more for analysts, whereas internal CSR contributes more to the substitution effect more for private investors.

By focusing on the multifaceted corporate performance, this study first deepens and enriches our understanding of the relationship between different dimensions of corporate performance in stakeholder evaluations. While firms are increasingly being judged and evaluated for their activities and performance in different domains simultaneously, research often presupposes that stakeholders in a certain field are only concerned about and concentrate on just one single side of corporate performance, thus independently examining the stakeholder responses to a specific dimension of corporate performance (Hendry, 2006). We advance this line of research by

proposing and showing that different dimensions of corporate performance interact with each other in affecting stakeholder evaluations. While we focus on CSP and CFP as the two most widely used performance dimensions in this study, we also recognize that other dimensions are also central in stakeholder evaluation, such as the political performance in the eyes of Chinese government. Research can further discern between the dimensions of corporate performance and examine how they interact to influence stakeholder evaluations.

Second, by distinguishing between internal and external CSR, this study identifies the differences in focus of attention between analysts and private investors when they evaluate CSR from an information perspective. Stakeholders vary in information acquisition, interpretation, and evaluation, thus various types and contents of CSR information convey different implications and values to different evaluators. While some previous studies have recognized that corporate social activities involve a wide range of practice areas and serve diverse stakeholders (Al-Shammari et al., 2019; Hawn & Ioannou, 2016), most of these studies regard stakeholders as beneficiaries who only care more about the firm activities relevant to their direct interests, and seldom consider them as beholders who scrutinize and evaluate the overall corporate performance. Whether the overall CSR engagement can obtain the evaluation results as expected depends on who their evaluators are and how they perceive different aspects of corporate performance (Tang et al., 2012). While we distinguish between external and internal CSR according to information content, scholars may further examine how other information attributes, such as information proximity and visibility, affect different stakeholders' perceptions of CSR activities.

Third, by investigating the interconnection between CSR and stock value enhancement in the eyes of analysts and private investors, our study first advances the research on the heterogeneity among evaluations of multiple stakeholders (Fini, Jourdan, & Perkmann, 2018). Due to differentiated professional traits and value orientations, stakeholders can have very different expectations and demands for firms (Neville, Bell, & Mengüç, 2005), and may evaluate the same information quite differently (Bhattacharya et al., 2009; Hetze, 2016). Previous studies have mostly focused on the evaluation from a single stakeholder group, which downplays the complexity of stakeholder interests in firm behaviors and restricts our understanding of the potential heterogeneity in stakeholders' evaluations. In this study, we focus on corporate performance evaluations and find the divergence between analysts and private investors; future research can further investigate and compare between other stakeholder groups and also explore other firm behaviors under evaluation. In addition, heterogeneity can also exit within a single

stakeholder group, and additional research delving into such internal differentiation within each stakeholder group can be imperative.

Our findings also have managerial implications. First, firms need to carefully discern the corresponding evaluation criteria of stakeholders to maximize the preferable outcomes. As implied by this study, a firm eager to gain investors' appraisal through engaging in CSR activities may find that the effectiveness of this investment could not be that satisfied when the stock value is already better than their competitors. Second, we reveal that different stakeholders vary in their perceptions of CSR components, which implies that managers should improve their ability to identify the focus of attention of different stakeholders, and strategically allocate their resources to the domains that are appealing to their target stakeholders. Third, from the corporate communication view, as some stakeholders can hardly interpret the intention of certain CSR practices given their limited specialized knowledge, firms should actively deliver what they have done for society's interests to the target audiences, especially when their practices seem irrelevant to some stakeholders' interests.

We also acknowledge several limitations that future research could address. First, while our findings suggest that stakeholders take CSR as a substitute for stock value enhancement, the process of how they evaluate the corporate performance remains unclear. Future research can take advantage of qualitative methods to further unpack this black box and investigate the processes, mechanisms, and contingencies of stakeholder evaluations. Second, while we largely treat the evaluations from the two stakeholder groups (i.e., analysts and private investors) as independent from each, they do interact, such as the negative forum sentiments may increase a firm's financial risk and then downgrade analyst recommendations (Kölbel, Busch, & Jancso, 2017). Future research can address this limitation by more comprehensively taking these complexities into consideration when assessing evaluations from different stakeholders. Finally, the generalizability of our empirical findings from China's emerging market could be further examined in those mature markets where analysts and private investors have developed more refined metrics to evaluate corporations.

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Table 1

Sample composition across years.

Year	N. firms' observations	AR average	N. firms' observations	OSFS average
2011	413	4.072	445	0.017
2012	461	4.028	507	0.021
2013	483	4.066	568	0.043
2014	527	4.164	605	0.030
2015	557	4.325	629	0.013
2016	589	4.352	655	0.037
2017	597	4.409	704	0.035
2018	544	4.452	747	0.024
2019	604	4.449	823	0.027
2020	618	4.427	872	0.018
2021	678	4.456	969	0.012
2022	814	4.542	1172	0.025
Total	**6885**	**4.338**	**8696**	**0.025**

Note: The table reports the description of our sample, considering the number of observations by year, the average of analyst recommendations by year, and the average of online stock forum sentiments by year.

Table 2

Summary statistics.

Panel A					Panel B				
Variables	Mean	SD	Min	Max	Variables	Mean	SD	Min	Max
AR_t	4.338	0.436	1.000	5.000	$OSFS_t$	0.025	0.031	-0.097	0.373
EPS_{t-1}	0.590	0.674	-1.700	3.150	EPS_{t-1}	0.487	0.670	-1.700	3.150
$OCSR_{t-1}$	3.256	1.144	0.333	7.000	$OCSR_{t-1}$	3.229	1.129	0.333	7.000
$ECSR_{t-1}$	3.367	1.423	0.000	7.667	$ECSR_{t-1}$	3.309	1.414	-0.333	7.667
$ICSR_{t-1}$	3.145	1.082	0.000	6.333	$ICSR_{t-1}$	3.148	1.063	0.000	6.333
$SIZE_{t-1}$	23.380	1.423	19.030	26.760	$SIZE_{t-1}$	23.190	1.429	19.030	26.760
AGE_{t-1}	18.940	5.974	1.000	63.000	AGE_{t-1}	19.430	5.997	1.000	63.000
$Leverage_{t-1}$	0.486	0.194	0.051	1.089	$Leverage_{t-1}$	0.485	0.199	0.051	1.089
$Liquidity_{t-1}$	0.885	1.385	0.020	12.900	$Liquidity_{t-1}$	0.876	1.355	0.020	12.900
ROE_{t-1}	0.102	0.114	-1.098	0.565	ROE_{t-1}	0.081	0.144	-1.098	0.565
AD_{t-1}	0.151	0.124	0.009	1.238	AD_{t-1}	0.155	0.130	0.009	1.238
$Duality_{t-1}$	0.172	0.378	0.000	1.000	$Duality_{t-1}$	0.169	0.375	0.000	1.000
SOE_{t-1}	0.546	0.498	0.000	1.000	SOE_{t-1}	0.551	0.497	0.000	1.000
CSE_{t-1}	0.376	0.161	0.034	0.900	CSE_{t-1}	0.368	0.160	0.030	0.900
$TMT\ equity_{t-1}$	0.058	0.134	0.000	0.677	$TMT\ equity_{t-1}$	0.054	0.130	0.000	0.677
AC_t	0.108	0.138	0.001	1.750	IA_t	9.507	1.147	5.136	14.350

Note: Panel A presents the summary statistics for variables predicting analyst recommendations. The sample comprises 6885 observations representing 1185 unique firms during 2011-2022; Panel B presents the summary statistics for variables predicting evaluations in online stock forums. The sample comprises 8696 observations representing 1306 unique firms during 2011-2022.

Table 3

Panel A: Pairwise correlation coefficients.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) *AR*	1.000															
(2) *EPS*	0.260	1.000														
	(0.000)															
(3) *OCSR*	0.234	0.214	1.000													
	(0.000)	(0.000)														
(4) *ECSR*	0.194	0.213	0.935	1.000												
	(0.000)	(0.000)	(0.000)													
(5) *ICSR*	0.240	0.174	0.885	0.663	1.000											
	(0.000)	(0.000)	(0.000)	(0.000)												
(6) *SIZE*	0.079	0.165	0.368	0.364	0.300	1.000										
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)											
(7) *AGE*	0.179	0.060	0.251	0.206	0.260	0.120	1.000									
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)										
(8) *Leverage*	-0.019	-0.122	0.066	0.093	0.018	0.546	0.052	1.000								
	(0.114)	(0.000)	(0.000)	(0.000)	(0.138)	(0.000)	(0.000)									
(9) *Liquidity*	-0.020	0.095	-0.055	-0.059	-0.039	-0.316	-0.084	-0.566	1.000							
	(0.104)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)								
(10) *ROE*	0.205	0.702	0.076	0.078	0.058	0.036	-0.019	-0.143	0.059	1.000						
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.121)	(0.000)	(0.000)							
(11) *AD*	0.072	0.005	0.011	0.013	0.006	-0.385	-0.001	-0.424	0.302	-0.032	1.000					
	(0.000)	(0.678)	(0.378)	(0.298)	(0.619)	(0.000)	(0.957)	(0.000)	(0.000)	(0.008)						
(12) *Duality*	0.104	0.048	0.069	0.047	0.084	-0.134	0.008	-0.125	0.097	0.036	0.133	1.000				
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.520)	(0.000)	(0.000)	(0.003)	(0.000)					
(13) *SOE*	-0.189	-0.068	-0.037	-0.012	-0.062	0.337	-0.028	0.248	-0.123	-0.110	-0.299	-0.282	1.000			
	(0.000)	(0.000)	(0.002)	(0.307)	(0.000)	(0.000)	(0.019)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)				
(14) *CSE*	-0.117	0.040	-0.001	0.017	-0.025	0.241	-0.198	0.101	-0.052	0.028	-0.192	-0.104	0.358	1.000		
	(0.000)	(0.001)	(0.905)	(0.171)	(0.040)	(0.000)	(0.000)	(0.000)	(0.000)	(0.019)	(0.000)	(0.000)	(0.000)			
(15) *TMT equity*	0.098	0.035	-0.003	-0.004	-0.001	-0.317	-0.106	-0.239	0.164	0.065	0.200	0.185	-0.445	-0.199	1.000	
	(0.000)	(0.004)	(0.794)	(0.724)	(0.931)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
(16) *AC*	0.067	0.151	0.045	0.061	0.016	0.272	-0.124	0.004	-0.041	0.141	-0.108	-0.049	0.083	0.160	-0.070	1.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.183)	(0.000)	(0.000)	(0.746)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	

Note: This table reports pairwise correlation coefficients of variables used in the regression analyses of analyst recommendations, with significance level in brackets. *AR* and *AC* are measured for year *t*; the other independent variables are measured for year *t-1*.

Panel B: Pairwise correlation coefficients.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) *OSFS*	1.000															
(2) *EPS*	0.119	1.000														
	(0.000)															
(3) *OCSR*	-0.044	0.202	1.000													
	(0.000)	(0.000)														
(4) *ECSR*	-0.033	0.207	0.934	1.000												
	(0.002)	(0.000)	(0.000)													
(5) *ICSR*	-0.050	0.153	0.881	0.655	1.000											
	(0.000)	(0.000)	(0.000)	(0.000)												
(6) *SIZE*	0.022	0.206	0.352	0.356	0.274	1.000										
	(0.038)	(0.000)	(0.000)	(0.000)	(0.000)											
(7) *AGE*	-0.076	0.008	0.248	0.196	0.266	0.096	1.000									
	(0.000)	(0.440)	(0.000)	(0.000)	(0.000)	(0.000)										
(8) *Leverage*	-0.050	-0.145	0.056	0.084	0.008	0.516	0.062	1.000								
	(0.000)	(0.000)	(0.000)	(0.000)	(0.472)	(0.000)	(0.000)									
(9) *Liquidity*	0.045	0.105	-0.053	-0.059	-0.034	-0.293	-0.070	-0.565	1.000							
	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)								
(10) *ROE*	0.095	0.680	0.075	0.083	0.050	0.087	-0.052	-0.185	0.079	1.000						
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)							
(11) *AD*	-0.063	-0.041	0.010	0.003	0.017	-0.365	0.009	-0.379	0.291	-0.097	1.000					
	(0.000)	(0.000)	(0.364)	(0.779)	(0.121)	(0.000)	(0.406)	(0.000)	(0.000)	(0.000)						
(12) *Duality*	-0.014	0.041	0.063	0.042	0.079	-0.119	0.009	-0.114	0.092	0.025	0.133	1.000				
	(0.193)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.419)	(0.000)	(0.000)	(0.020)	(0.000)					
(13) *SOE*	0.004	-0.057	-0.034	-0.012	-0.056	0.291	-0.026	0.226	-0.110	-0.067	-0.292	-0.263	1.000			
	(0.673)	(0.000)	(0.002)	(0.276)	(0.000)	(0.000)	(0.015)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)				
(14) *CSE*	0.074	0.082	0.003	0.022	-0.022	0.243	-0.204	0.090	-0.043	0.077	-0.198	-0.096	0.351	1.000		
	(0.000)	(0.000)	(0.774)	(0.042)	(0.037)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)			
(15) *TMT equity*	0.061	0.054	0.020	0.019	0.017	-0.275	-0.119	-0.225	0.152	0.063	0.179	0.175	-0.432	-0.184	1.000	
	(0.000)	(0.000)	(0.068)	(0.081)	(0.119)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
(16) *IA*	-0.312	0.006	0.026	0.080	-0.050	0.292	-0.059	0.167	-0.066	-0.009	-0.052	-0.047	0.048	-0.100	-0.141	1.000
	(0.000)	(0.555)	(0.015)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.420)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	

Note: This table reports pairwise correlation coefficients of variables used in the regression analyses of evaluations in online stock forums, with significance level in brackets. EOSF and MA are measured for year *t*; the other independent variables are measured for year *t-1*.

Table 4

CSR, stock value enhancement, and stakeholder evaluations.

	(1)	(2)	(3)	(4)
Variables	*AR*	*AR*	*OSFS*	*OSFS*
EPS	0.045***	0.114***	0.003***	0.009***
	(0.017)	(0.031)	(0.001)	(0.002)
OCSR	-0.006	0.005	-0.001	0.000
	(0.009)	(0.011)	(0.000)	(0.000)
*OCSR * EPS*		-0.017***		-0.002***
		(0.006)		(0.000)
SIZE	-0.102***	-0.099***	-0.002*	-0.001
	(0.022)	(0.022)	(0.001)	(0.001)
AGE	0.050***	0.050***	0.000	0.000
	(0.004)	(0.004)	(0.000)	(0.000)
Leverage	0.337***	0.336***	0.007**	0.007**
	(0.079)	(0.079)	(0.003)	(0.003)
Liquidity	0.001	0.001	0.000	0.000
	(0.007)	(0.007)	(0.000)	(0.000)
ROE	0.354***	0.311***	0.001	-0.001
	(0.095)	(0.096)	(0.002)	(0.002)
AD	-0.435***	-0.429***	0.004	0.004
	(0.158)	(0.157)	(0.005)	(0.005)
Duality	0.012	0.013	0.000	0.000
	(0.022)	(0.022)	(0.001)	(0.001)
SOE	-0.031	-0.034	-0.001	-0.001
	(0.048)	(0.048)	(0.003)	(0.002)
CSE	-0.009	-0.007	0.003	0.003
	(0.110)	(0.110)	(0.006)	(0.006)
TMT equity	-0.132*	-0.129*	-0.005	-0.004
	(0.072)	(0.072)	(0.004)	(0.004)
AC	1.194***	1.190***		
	(0.111)	(0.111)		
IA			-0.011***	-0.011***
			(0.000)	(0.000)
Constant	5.500***	5.412***	0.161***	0.150***
	(0.474)	(0.471)	(0.021)	(0.021)
Observations	6885	6885	8696	8696
F	29.767	29.257	117.326	115.386
Adjusted R^2	0.190	0.190	0.305	0.308
FIRM_FE	Yes	Yes	Yes	Yes
YEAR_FE	Yes	Yes	Yes	Yes

Note: This table reports the joint effect of CSR and stock value enhancement on stakeholder evaluations. OCSR indicates the overall CSR score. Stock value enhancement is proxied by EPS. Stakeholder evaluation is proxied by AR (Models 1 and 2) and OSFS (Models 3 and 4), respectively. Robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5

CSR (OCSR replaced by ECSR and ICSR), stock value enhancement, and stakeholder evaluations.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	*AR*	*AR*	*AR*	*AR*	*OSFS*	*OSFS*	*OSFS*	*OSFS*
EPS	0.045***	0.105***	0.095***	0.109***	0.003***	0.008***	0.009***	0.010***
	(0.017)	(0.028)	(0.031)	(0.031)	(0.001)	(0.001)	(0.002)	(0.002)
ECSR	-0.003	0.005	-0.003	0.005	-0.000	0.000	-0.000	0.000
	(0.006)	(0.008)	(0.006)	(0.009)	(0.000)	(0.000)	(0.000)	(0.000)
ICSR	-0.002	-0.002	0.006	-0.000	-0.001	-0.000	0.000	0.000
	(0.009)	(0.009)	(0.011)	(0.012)	(0.000)	(0.000)	(0.000)	(0.000)
*ECSR * EPS*		-0.014***		-0.013*		-0.001***		-0.001
		(0.005)		(0.007)		(0.000)		(0.000)
*ICSR * EPS*			-0.013**	-0.002			-0.002***	-0.001***
			(0.007)	(0.009)			(0.000)	(0.000)
SIZE	-0.102***	-0.100***	-0.099***	-0.100***	-0.002*	-0.001	-0.001	-0.001
	(0.022)	(0.022)	(0.022)	(0.022)	(0.001)	(0.001)	(0.001)	(0.001)
AGE	0.050***	0.050***	0.050***	0.050***	0.000	0.000	0.000	0.000
	(0.004)	(0.004)	(0.004)	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	0.337***	0.338***	0.336***	0.337***	0.007**	0.007**	0.006**	0.006**
	(0.079)	(0.079)	(0.079)	(0.079)	(0.003)	(0.003)	(0.003)	(0.003)
Liquidity	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
	(0.007)	(0.007)	(0.007)	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)
ROE	0.354***	0.314***	0.325***	0.312***	0.001	-0.001	-0.001	-0.001
	(0.095)	(0.096)	(0.096)	(0.096)	(0.002)	(0.002)	(0.002)	(0.002)
AD	-0.435***	-0.431***	-0.428***	-0.430***	0.004	0.004	0.005	0.004
	(0.157)	(0.157)	(0.157)	(0.156)	(0.005)	(0.005)	(0.005)	(0.005)
Duality	0.012	0.013	0.012	0.013	0.000	0.000	0.000	0.000
	(0.022)	(0.022)	(0.022)	(0.022)	(0.001)	(0.001)	(0.001)	(0.001)
SOE	-0.031	-0.035	-0.032	-0.035	-0.001	-0.001	-0.001	-0.001
	(0.048)	(0.048)	(0.048)	(0.048)	(0.003)	(0.002)	(0.002)	(0.002)
CSE	-0.009	-0.010	-0.005	-0.009	0.003	0.003	0.004	0.003
	(0.110)	(0.110)	(0.110)	(0.110)	(0.006)	(0.006)	(0.006)	(0.006)
TMT equity	-0.131*	-0.130*	-0.128*	-0.130*	-0.005	-0.005	-0.004	-0.004
	(0.072)	(0.072)	(0.072)	(0.072)	(0.004)	(0.004)	(0.004)	(0.004)
AC	1.194***	1.191***	1.191***	1.191***				
	(0.111)	(0.111)	(0.111)	(0.111)				
IA					-0.011***	-0.011***	-0.011***	-0.011***
					(0.000)	(0.000)	(0.000)	(0.000)
Constant	5.499***	5.440***	5.418***	5.430***	0.161***	0.154***	0.148***	0.148***
	(0.474)	(0.472)	(0.472)	(0.472)	(0.021)	(0.021)	(0.021)	(0.021)
Observations	6885	6885	6885	6885	8696	8696	8696	8696
F	28.573	27.767	28.408	27.346	112.441	110.547	110.322	106.823
Adjusted R^2	0.189	0.190	0.190	0.190	0.305	0.307	0.308	0.308
FIRM_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
YEAR_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: This table reports the joint effect of CSR and stock value enhancement on stakeholder evaluations. ECSR indicates the external CSR score. ICSR indicates the internal CSR score. Stock value enhancement is proxied by EPS. Stakeholder evaluation is proxied by AR (Models 1-4) and OSFS (Models 5-8), respectively. Robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 6

Alternative measure of CSR, stock value enhancement, and stakeholder evaluations.

	(1)	(2)	(3)	(4)
Variables	*AR*	*AR*	*OSFS*	*OSFS*
EPS	0.046***	0.067***	0.003***	0.004***
	(0.017)	(0.021)	(0.001)	(0.001)
CSR initiative	-0.001	-0.000	-0.000	
	(0.000)	(0.001)	(0.000)	
*CSR initiative * EPS*		-0.001*		-0.000**
		(0.000)		(0.000)
SIZE	-0.101***	-0.101***	-0.002*	-0.002*
	(0.022)	(0.022)	(0.001)	(0.001)
AGE	0.050***	0.050***	0.000	0.000
	(0.004)	(0.004)	(0.000)	(0.000)
Leverage	0.337***	0.338***	0.007**	0.007**
	(0.079)	(0.079)	(0.003)	(0.003)
Liquidity	0.001	0.001	0.000	0.000
	(0.007)	(0.007)	(0.000)	(0.000)
ROE	0.355***	0.334***	0.001	0.000
	(0.095)	(0.095)	(0.002)	(0.002)
AD	-0.434***	-0.429***	0.004	0.004
	(0.158)	(0.157)	(0.005)	(0.005)
Duality	0.013	0.014	0.000	0.000
	(0.022)	(0.022)	(0.001)	(0.001)
SOE	-0.030	-0.029	-0.001	-0.001
	(0.048)	(0.049)	(0.003)	(0.002)
CSE	-0.007	-0.006	0.003	0.003
	(0.110)	(0.110)	(0.006)	(0.006)
TMT equity	-0.129*	-0.131*	-0.005	-0.005
	(0.071)	(0.072)	(0.004)	(0.004)
AC	1.198***	1.197***		
	(0.112)	(0.111)		
IA			-0.011***	-0.011***
			(0.000)	(0.000)
Constant	5.481***	5.473***	0.162***	0.161***
	(0.476)	(0.473)	(0.021)	(0.021)
Observations	6885	6885	8696	8696
F	29.709	28.391	116.860	118.917
Adjusted R-squared	0.190	0.190	0.305	0.306
FIRM_FE	Yes	Yes	Yes	Yes
YEAR_FE	Yes	Yes	Yes	Yes

Note: This table reports the joint effect of CSR and stock value enhancement on stakeholder evaluations. CSR initiative indicates the log of the number of pages of CSR reports. Stakeholder evaluation is proxied by AR (Models 1 and 2) and OSFS (Models 3 and 4), respectively. Robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 7

CSR, alternative measure of stock value enhancement, and stakeholder evaluations.

	(1)	(2)	(3)	(4)
Variables	*AR*	*AR*	*OSFS*	*OSFS*
DPS	0.027	0.117	0.010***	0.018***
	(0.044)	(0.089)	(0.003)	(0.006)
OCSR	-0.005	0.002	-0.001	
	(0.010)	(0.012)	(0.001)	
*OCSR * DPS*		-0.025		-0.002**
		(0.020)		(0.001)
SIZE	-0.062**	-0.062**	-0.001	-0.001
	(0.026)	(0.026)	(0.002)	(0.002)
AGE	0.048***	0.048***	0.000	0.000
	(0.005)	(0.005)	(0.000)	(0.000)
Leverage	0.259***	0.260***	0.003	0.003
	(0.095)	(0.095)	(0.005)	(0.005)
Liquidity	0.001	0.001	-0.000	-0.000
	(0.007)	(0.007)	(0.000)	(0.000)
ROE	0.853***	0.843***	0.014**	0.013*
	(0.113)	(0.114)	(0.007)	(0.007)
AD	-0.110	-0.106	0.018*	0.018*
	(0.196)	(0.196)	(0.009)	(0.009)
Duality	0.012	0.013	0.001	0.001
	(0.026)	(0.026)	(0.001)	(0.001)
SOE	-0.040	-0.041	-0.004	-0.004
	(0.046)	(0.046)	(0.003)	(0.003)
CSE	-0.008	-0.006	0.009	0.009
	(0.127)	(0.127)	(0.008)	(0.008)
TMT equity	-0.192**	-0.187**	0.003	0.004
	(0.086)	(0.086)	(0.005)	(0.005)
AC	1.199***	1.199***		
	(0.121)	(0.121)		
IA			-0.012***	-0.012***
			(0.001)	(0.001)
Constant	4.599***	4.571***	0.153***	0.151***
	(0.538)	(0.535)	(0.037)	(0.037)
Observations	4608	4608	5282	5282
F	23.706	22.881	81.456	82.353
Adjusted R-squared	0.191	0.191	0.320	0.321
FIRM_FE	Yes	Yes	Yes	Yes
YEAR_FE	Yes	Yes	Yes	Yes

Note: This table reports the joint effect of CSR and stock value enhancement on stakeholder evaluations. DPS indicates the dividends per share. Stakeholder evaluation is proxied by AR (Models 1 and 2) and OSFS (Models 3 and 4), respectively. Robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 8

CSR, stock value enhancement, and industry-adjusted stakeholder evaluations.

	(1)	(2)	(3)	(4)
Variables	*IndAR*	*IndAR*	*IndOSFS*	*IndOSFS*
EPS	0.090**	0.224***	0.084***	0.344***
	(0.042)	(0.077)	(0.025)	(0.051)
OCSR	-0.018	0.004	-0.027*	0.011
	(0.020)	(0.025)	(0.014)	(0.015)
*OCSR * EPS*		-0.034**		-0.069***
		(0.015)		(0.011)
SIZE	-0.204***	-0.199***	-0.059*	-0.042
	(0.052)	(0.052)	(0.031)	(0.030)
AGE	-0.003	-0.004	-0.003	-0.005
	(0.009)	(0.009)	(0.005)	(0.005)
Leverage	0.673***	0.672***	0.201*	0.192*
	(0.184)	(0.184)	(0.104)	(0.102)
Liquidity	-0.006	-0.006	-0.003	-0.004
	(0.016)	(0.016)	(0.011)	(0.011)
ROE	0.766***	0.682***	0.059	-0.032
	(0.248)	(0.253)	(0.075)	(0.073)
AD	-0.771**	-0.759**	0.163	0.180
	(0.370)	(0.369)	(0.158)	(0.155)
Duality	0.031	0.033	-0.003	-0.002
	(0.053)	(0.053)	(0.029)	(0.029)
SOE	-0.049	-0.056	-0.011	-0.024
	(0.107)	(0.107)	(0.080)	(0.079)
CSE	0.037	0.041	0.162	0.166
	(0.270)	(0.270)	(0.183)	(0.181)
TMT equity	-0.298*	-0.294*	-0.223*	-0.211
	(0.172)	(0.172)	(0.132)	(0.132)
AC	2.958***	2.951***		
	(0.256)	(0.255)		
IA			-0.339***	-0.339***
			(0.014)	(0.014)
Constant	4.319***	4.147***	4.475***	3.995***
	(1.104)	(1.099)	(0.668)	(0.659)
Observations	6885	6885	8696	8696
F	16.436	16.357	37.239	36.906
Adjusted R-squared	0.108	0.108	0.181	0.186
FIRM_FE	Yes	Yes	Yes	Yes
YEAR_FE	Yes	Yes	Yes	Yes

Note: This table reports the joint effect of CSR and stock value enhancement on stakeholder evaluations. In Models 1 and 2, the dependent variable is the industry-adjusted analyst recommendations (IndAR). In Models 1 and 2, the dependent variable is the industry-adjusted online stock forum sentiments. Robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 9

CSR, stock value, and analyst forecast errors.

Variables	(1)	(2)
EPS	0.003	0.010***
	(0.002)	(0.004)
OCSR	-0.002**	-0.001
	(0.001)	(0.001)
*OCSR * EPS*		-0.002**
		(0.001)
SIZE	0.004**	0.005***
	(0.002)	(0.002)
AGE	0.001***	0.001***
	(0.000)	(0.000)
Leverage	0.001	0.002
	(0.008)	(0.008)
Liquidity	0.000	0.000
	(0.000)	(0.000)
ROE	-0.040**	-0.044***
	(0.017)	(0.017)
AD	-0.011	-0.010
	(0.015)	(0.015)
Duality	-0.000	-0.000
	(0.002)	(0.002)
SOE	0.000	0.000
	(0.006)	(0.006)
CSE	0.024**	0.024**
	(0.009)	(0.009)
TMT equity	0.005	0.005
	(0.006)	(0.006)
AC	-0.021***	-0.022***
	(0.007)	(0.007)
Constant	-0.106***	-0.114***
	(0.038)	(0.038)
Observations	6308	6308
F	8.467	8.186
Adjusted R-squared	0.048	0.049
FIRM_FE	Yes	Yes
YEAR_FE	Yes	Yes

Note: This table reports the joint effect of CSR and stock value enhancement on the analyst forecast error. The dependent variable is defined as the average of the absolute errors of all forecasts make in the year for target earning, scaled by the stock price at the beginning of the year. Robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.