How does dividend payout affect corporate social responsibility? A channel analysis☆

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ABSTRACT

We find that dividend paying firms demonstrate superior corporate social responsibility (CSR) performance in the subsequent year than non-paying firms. This effect can be explained by stakeholder relationship management through CSR, as dividend payout reflects the inherent conflict between shareholders and stakeholders. Specifically, for dividend payers, we find an increase in CSR performance after states adopt constituency statutes which encourage board's attention on stakeholders, supporting a causal inference of the stakeholder relationship management's effect on CSR. The increase in dividend payers' CSR around the constituency statute adoption is more pronounced when management is friendlier to CSR, which lends further support for the stakeholder relationship management channel. We find no support for the short-termism view of dividends or the notion that CSR is solely an outcome of agency problems within firms. In conclusion, our findings suggest that dividend payout serves as a mechanism for balancing shareholder and stakeholder interests, leading to improved CSR performance among dividend-paying firms.

1. Introduction

Prior studies provide contradictory findings regarding the association between dividend payout and corporate social responsibility (CSR). Some studies have indicated a positive relation between CSR and dividends, with Ferrell et al. (2016) suggesting that CSR serves as evidence of effective corporate governance. On the contrary, Masulis and Reza (2015) imply a negative association between CSR and dividends, albeit without directly examining the CSR-dividend relation. There are also studies that use dividend payout as a control variable to predict CSR and find a positive correlation, such as Di Giuli and Kostovetsky (2014) and Husted et al. (2015). However, these studies do not explicitly explain the

underlying mechanism or just implicitly treat dividends as an indicator of financial strength. Although various theories on dividend payout have been proposed in the literature, empirical evidence on the CSR-dividend relationship remains inconclusive. Therefore, it is still necessary to provide a clear and comprehensive discussion of the relevant theories in prior research.

In July 2020, the European Commission released a report titled "Study on director's duties and sustainable corporate governance", conducted by Ernst & Young. In this report, which is referred to as the European Commission Report, it is emphasized that "directors should properly balance the following interests, alongside the interest of shareholders: long-term interests of the company (beyond 5–10 years);

interests of employees; interest of customers; interest of local and global environment; interest of society at large."[1] The European Commission Report criticizes the rise of short-termism among publicly traded companies, where the interests of shareholders are prioritized over those of non-shareholder stakeholders, ultimately undermining corporate sustainability. The Report regards an increase in gross payout (dividends and share repurchases) to shareholders as one of the indicators of short-termism. The European Commission Report raises the importance of understanding the impact of dividend payout on non-shareholder stakeholders and CSR. Therefore, we aim to empirically analyze the influence of dividends on CSR based on various dividend policy theories.

Specifically, we examine the possible channels which may help to explain the CSR-dividend relation based on the following theories: stakeholder theory (e.g., Holder et al., 1998; DeAngelo and DeAngelo, 1990, 1991), signaling (of financial capability) theory (e.g., Bhattacharya, 1979), short-termism (the European Commission Report), and free cash flow theory (e.g., Jensen, 1986). We discuss them in detail as follows.

First, in stakeholder theory, dividend payout reflects the tension between shareholders and stakeholders (DeAngelo and DeAngelo, 1990, 1991; Holder et al., 1998; Chu, 2018). A firm is a nexus of contracts between shareholder and stakeholders. Stakeholders provide resources in exchange for both explicit claims (e.g., wage contracts, product warranties) and implicit claims (e.g., job securities and continuing services to customers). By paying excess cash that could be otherwise used to fulfil stakeholders' explicit and implicit claims, dividend payout transfers wealth from stakeholders to shareholders (Kalay, 1982). Firms should strike a balance between interest of shareholders and stakeholders, which indicates that a stakeholder-oriented firm should not only focus on value creation for shareholders, but also keep its implicit commitment to stakeholders. One way to manage stakeholder relationship is to reduce dividend payout (DeAngelo and DeAngelo, 1990, 1991).[2] However, survey suggests that managers are reluctant to cut dividends (Brav et al., 2005).[3] Rather, managers may increase CSR to improve stakeholder relationship.[4] We term this reason as the *stakeholder relationship management channel* and predict that dividend paying will have a positive relation to CSR.

Second, signaling theory suggests that dividend payout conveys positive information about a firm's future cash flows (Bhattacharya, 1979; Handjinicolaou and Kalay, 1984). Investment in CSR activities requires corporate resources, and only well-performing firms can afford to invest in CSR (Hong et al., 2012). In that case, both dividend payout and CSR investment can be explained by an omitted variable reflecting a firm's financial capability, which leads to a positive CSR-dividend relation. We refer to this as a *financial capability channel.*

Third, the European Commission Report criticizes firms for promoting short-termism that prioritizes shareholders' interest at the expense of long-term sustainable value creation. The report perceives dividend payout as an indicator of short-termism which benefits merely the shareholders and sacrifices long-term interests of stakeholders. Therefore, the *short-termism channel* should predict a negative CSR-dividend relation, as dividend paying firms are less likely to engage in CSR activities for the long-term interest of stakeholders.

Fourth, free cash flow theory suggests that dividend payout is to reduce the agency cost of free cash flow and to prevent managers from overinvestment (Jensen, 1986). Free cash flow refers to the excess amount of cash after funding all the projects with positive net present value. Since managers have incentives to overinvest free cash flow for private benefits at the expense of shareholders (Jensen and Meckling, 1976), free cash flow results in agency cost between managers and shareholders. As suggested by Jensen (1986), dividend payout reduces the free cash flow under managers' control and constrains managers from overinvesting for self-serving purposes. One stream of research regards managers' decision in CSR investment as a result of agency problem (Masulis and Reza, 2015; Cheng et al., 2020), as managers conduct CSR investment at the expense of shareholders to earn a good personal reputation among stakeholders. The *free cash flow channel* should predict a negative CSR-dividend relation, as managers in dividend paying firms have limited free cash flow under control to overinvest in CSR.

We examine the above four channels that could explain the association between dividend payout and CSR. Our findings indicate that firms that pay dividends are more likely to exhibit higher CSR performance in the subsequent year compared with non-dividend paying firms. This positive effect of dividend on CSR provides possible support for the financial capability channel and stakeholder relationship management channel but does not support the short-termism channel and the free cash flow channel. Given that the first two channels may not be mutually exclusive, our objective is not to favor one channel over the others, but rather to explore the contributions of each channel in explaining the positive association between CSR and dividend payout. To achieve this aim, we employ three distinct approaches.

First, we identify the predicted and residual components in dividend payout following Baker and Wurgler (2004). The predicted component of dividend paying is explained by firm fundamentals, while the residual component is orthogonal to firm fundamentals. The association between the predicted component of dividend paying and CSR performance reflects how firm fundamentals (measuring financial capability) affect CSR through dividend payout. We find a positive association, supporting the financial capability channel. However, we also find a positive association between the residual component of dividend paying and CSR performance, implying that CSR engagement is also affected by factors other than financial capability, which lends support to the stakeholder relationship management channel.

Second, we construct a matched sample, based on firm fundamentals, of non-payers for each dividend payer using a propensity score matching (PSM) method and an entropy balancing matched (EBM) method, respectively. In both matched samples, dividend paying firms and matched non-paying firms are not significantly different in firm fundamentals, implying that the financial capability between the two groups does not exhibit significant difference. We find that relative to matched dividend non-payers, dividend payers perform better in CSR. This finding provides further evidence that the positive CSR-dividend relation is unlikely to be fully driven by financial capability.

Third, we examine the stakeholder relationship management channel. We analyze a state-level regulation, a constituency statute (CS) – also called as a stakeholder statute – which encourages board of directors to consider the interests of non-shareholder stakeholders (e.g., creditors, customers, and employees). CS adoption provides an opportunity to directly examine whether the positive CSR-dividend relation

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[1] See p. viii, Ernst & Young, Study on directors' duties and sustainable corporate governance: final report (2020), https://op.europa.eu/en/publication-detail/-/publication/e47928a2-d20b-11ea-adf7–01aa75ed71a1/languageen?mc_cid= 664fe83cf0&mc_eid= 657d91711d.

[2] This is because some stakeholders tend to hold adverse attitude towards dividend payout. For example, workers regard dividends as the wages of shareholders (DeAngelo et al., 2009) and are concerned that dividend payout would render the firm to an empty shell. In the negotiation process with labor unions, shareholders use dividend cuts as a compromise to bargain for unions' concessions (DeAngelo and DeAngelo, 1990, 1991). To avoid the wealth transfer, creditors require constraints on dividend payment (Kalay, 1982; Brockman and Unlu, 2009).

[3] In the survey by Brav et al. (2005), 94% managers in dividend paying firms are trying to avoid reducing dividends.

[4] Several studies find that managers actively pursue CSR when they have an awareness of the interest of stakeholders. For instance, Servaes and Tamayo (2013) document that role of firms' public awareness in the association between stakeholder-oriented CSR activities and shareholder value. Abeysekera and Fernando (2020) suggest that the decision of CSR investment for family firms depends on the extent of interest alignment between shareholders and stakeholders.

varies with the incentive or needs to manage stakeholders' interests. While CS adoption induces firms to place a greater emphasis on the interests of non-shareholder stakeholders, prior research shows that this regulatory event does not affect dividend payout (Ni et al., 2020). Therefore, managers may have to seek other ways, rather than reducing dividends to deal with stakeholder's concern as suggested by previous studies (e.g., DeAngelo and DeAngelo, 1990, 1991). This is the stakeholder relationship management channel that we will examine: dividend paying firms will have a greater incentive to invest in CSR than non-dividend paying firms. To investigate this channel, we contrast CSR performance between prior and post periods surrounding the adoption of CS by various states.

The stakeholder relationship management channel will predict that CSR performance will increase after CS adoption, more for dividend paying firms than for non-dividend paying firms. This is because dividend paying firms will seek other ways (such as CSR investment) to solve the conflicts between shareholders and stakeholders when boards pay more attention to stakeholders. In contrast, the financial capability channel shall not be affected by CS adoption.[5] We find that the positive CSR-dividend relation increases significantly after CS adoption, supporting the stakeholder relationship management channel. The results also support a causal inference of the stakeholder relationship management's effect on CSR.

Since CS encourages firms to consider the interest of non-shareholder stakeholders, the stakeholder relationship management channel implies that CSR-friendly managers are likely to react more to CS adoption than others. We use the presence of capable CEO and female board members to proxy for a manager's and a board's friendliness to CSR following prior literature.[6] We find that the increase in CSR-dividend relation after CS adoption is more pronounced for firms with CEOs of higher managerial ability and for firms with a higher fraction of female directors on boards. This finding lends further support to the stakeholder relationship management channel.

In additional analyses, we separately examine the impact of dividend payout and the moderating effect of CS on each dimension of CSR performance (i.e., community, diversity, employee relations, environment, human rights, and product quality and safety). We find that dividend paying firms are more likely to compensate stakeholders by improving CSR performance in community and diversity, and increase their investment in employee relations, and product quality and safety after CS adoption. In robustness analyses, we use alternative measures of corporate payout, including the number of consecutive years a firm has paid dividends (duration of dividend payment), ranking of dividend payout ratio, and an indicator for corporate payout. We find that all three variables positively predict future CSR performance and lends support to stakeholder relationship management channel. Finally, our main findings are robust after controlling for firm fixed effects, CEO characteristics, or corporate governance, and robust to alternative CSR performance measures.

Our research contributes in the following ways. First, this paper answers a question of important policy implication when regulators evaluate firms' short-termism and CSR engagement. Opposite to the concern in the European Commission Report that firms' payout (a sign of short-termism) may harm long-term interests of employees, customers, local or global environment, and the society, we find that dividend payers deliver a significantly better CSR performance than non-payers. The effect is driven by dividend payers' superior CSR performance in community and diversity. Our paper provides support for Roe et al. (2020) who also criticize the short-termism argument in the European Commission Report.

Second, this paper extends the stream of literature that studies the determinants of CSR engagement. We find that dividend payout has a positive and causal effect on CSR performance. To the extent that higher dividend represents a larger damage to stakeholder interest, our study suggests that the incentive to maintain a good stakeholder relationship is one important factor that drives the positive CSR-dividend relation, and investment in CSR can be a way to compensate non-shareholder stakeholders' loss in the wealth redistribution process of dividend payout. Our paper is broadly consistent with Anantharaman et al. (2022) who find that CSR performance is higher when firms' need to restore or manage reputation, especially in the face of corporate actions that can hurt stakeholders.[7] In addition, we find that governments can help firms to better align the interests of shareholders and other stakeholders. In particular, we show that, after a state-level regulation that positively affects stakeholder orientation, dividend payers significantly increase their CSR performance to a larger extent than non-payers. Our paper also contributes to the ESG investing literature (e.g., Eccles et al., 2023; Kacperczyk et al., 2023) since the results suggest that investors overweighting green firms may receive more dividend income.

Third, this paper provides a thorough discussion of the mechanisms that may explain the relation between CSR and dividends from theories on dividend policy. Our paper discusses and tests multiple possible channels that predict either a negative or positive CSR-dividend relation. We provide support for the financial capability channel and stakeholder relationship management channel, but not for free cash flow or the short-termism channel.

Our paper differs from Cheung et al. (2018) and Benlemlih (2019) in the following important ways. First, our paper shows that dividend paying firms have a higher CSR performance because they attempt to improve stakeholder relationship with high CSR spending, while Cheung et al. (2018) and Benlemlih (2019) focus on the role of dividends as a proxy for the financial capability (or constraints). We implement comprehensive tests to differentiate the stakeholder relation hypothesis and the financial capability hypothesis. To better identify the potential mechanisms, we also discuss and reject two other hypotheses (short-termism view of dividends and the view that CSR is an outcome of agency problem). Second, we adopt multiple approaches (e.g., matching sample, shock to stakeholder orientation) to establish a causal effect of dividends on future CSR performance. In contrast, Cheung et al. (2018) and Benlemlih (2019) present a positive concurrent relation between CSR and dividends (using dividends as the dependent variable) and their results are subject to a potential causality issue. Our paper is different from Jha et al. (2022) which focus on the impact of CSR on share repurchases. Jha et al. (2022) show that CSR amplifies the positive associated between shareholder repurchases and free cash flow. They explain CSR as an indicator of corporate culture that protects shareholders' interests from managers' self-serving behavior.

The rest of the paper is organized as follows. Section 2 introduces related literature and develops the hypotheses. Section 3 describes our empirical methodology. Empirical results and additional analyses are provided in Sections 4 and 5, and we conclude in Section 6.

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[5] We confirm in our data that CS adoption does not affect firm performance and firm valuation. We show that there is no significant difference in firm performance (return on equity) and valuation (Tobin's Q) between dividend payers and non-payers around CS adoption, implying that our results around CS adoption is unlikely to be driven by the financial capability channel.

[6] Prior studies document significant effect of CEO characteristics and board characteristics on CSR performance. For instance, studies show that firms with higher CEO ability conduct more socially responsible activities and less socially irresponsible activities (Yuan et al., 2019). In addition, the gender diversity of board has a positive influence on CSR performance (McCarthy et al., 2017).

[7] In addition, this finding also contributes to research on the relation between corporate decisions and shareholder-stakeholder conflict (e.g., Jiang et al., 2010; Becker and Strömberg, 2012; Chen et al., 2012; Allen et al., 2015; Chu, 2018).

2. Literature review and hypothesis development

2.1. Mixed evidence on the association between dividends and CSR

The extant literature has shown that CSR investment is driven by both firm-level factors− such as financial capability (Hong et al., 2012; Lys et al., 2015), reputation concerns (Chakravarthy et al., 2014), shareholder engagement (Chen et al., 2020; Azar et al., 2021), agency problems (Masulis and Reza, 2015; Ferrell et al., 2016) − and external factors, including location (Husted et al., 2015), product market competition (Cao et al., 2019), legal origin (Liang and Renneboog, 2017), and firms' strategy (Banker et al., 2022). For example, Banker et al. (2022) show that innovation differentiation strategy is positively associated with CSR performance, while cost leadership (marketing differentiation) is negatively associated with CSR performance.

Prior studies provide mixed evidence on the association between dividend payout and CSR. Some papers use dividend payout as a control variable to predict CSR and show a positive association, but they do not provide an explicit explanation of the mechanism or implicitly treat dividends as a proxy for financial strength (e.g., Di Giuli and Kostovetsky, 2014; Husted et al., 2015). Other studies try to explain CSR from the framework of agency issue and imply opposite conclusions on the relation between CSR and dividends. Masulis and Reza (2015), focusing on the effect of the 2003 Tax Reform Act on CSR activities, imply a negative association between dividends and CSR performance, although they do not directly test the relation between CSR and dividends. They show that corporate giving or CSR performance is reduced after the 2003 Dividend Tax Cut which increases dividend payout. The increase in dividend payout and the reduction in CSR performance around the 2003 Tax Cut imply a negative association. On the contrary, to explore explanations for CSR, Ferrell et al. (2016) use dividend payout as one of the agency indicators and show a positive relation between CSR and dividends. They interpret CSR as evidence of good governance rather than agency issues. Although Ferrell et al. (2016) is related to our paper by showing a positive associated between dividends and CSR, they aim at exploring explanations for CSR and do not provide specific discussions on the mechanism behind the CSR-dividend relation.

Given the mixed empirical evidence and also the lack of a clear discussion of related theories in prior literature, we focus on explaining the relation between dividend payout and CSR through the theories of dividend payout. Our paper adds to this field by showing that dividend payout is one driving factor of CSR investment. We discuss four different channels through which dividends may affect CSR and provide empirical analyses of these channels.

2.2. Related theories on dividend payout

There exists a long stream of literature on the puzzle for dividend payout. Although Miller and Modigliani (1961)'s dividend irrelevance theorem predicts that dividend payout in a perfect capital market should not affect other corporate decisions, the irrelevance theorem cannot explain the practices of dividend payout in imperfect markets. Existing studies provide several explanations for dividend payout, including stakeholder theory (e.g., DeAngelo and DeAngelo, 1990, 1991; Holder et al., 1998), signaling theory (e.g., Bhattacharya, 1979), free cash flow theory (e.g., Jensen, 1986), and taxes (e.g., Blouin et al., 2011).

Stakeholder theory on dividends suggests that dividend payout is a reflection of the relative power between shareholders and stakeholders (DeAngelo and DeAngelo, 1990, 1991; Holder et al., 1998). Stakeholders have fixed claims on firms' cash flows, while shareholders enjoy the residual cash flows (Fama, 1990). Stakeholders' claims include both explicit contractual claims and implicit claims. Explicit claims are legal contracts (e.g., wage contracts, product warranties), and implicit claims are state-contingent and ambiguous to reduce to written form (e.g., job securities, continuing services to customers). Compared with the value of explicit claims that is more sensitive to financial distress (e.g.,

bankruptcy), the value of implicit claims is more sensitive to the change in general financial condition of the firms, as firms may choose to default on implicit claims without going into bankruptcy (Holder et al., 1998). The interest of stakeholders is associated with dividend payout decisions through both explicit and implicit claims (Jensen, 1983), since dividend payout transfers wealth that could be otherwise used for interest payment for creditors or fulfil implicit claims for other stakeholders. In light of the potential wealth transfer, non-shareholder stakeholders (both creditors and other non-creditor stakeholders) tend to hold a negative attitude towards dividend payment (DeAngelo and DeAngelo, 1990, 1991; DeAngelo et al., 2009). High dividend payout reflects the conflict of interest between shareholders and stakeholder, whereas low dividend payout indicates firms' willingness to consider the interest of stakeholders by making payoffs on implicit claims (Holder et al., 1998).

Signaling theory of dividends shows that dividend serves as an indicator for a firm's future prospect (Bhattacharya, 1979). This explanation of dividend payout is also supported by the information content hypothesis on dividends.[8] Dividend payout indicate high profitability of a firm and is associated with adequate cash flows (John and Williams, 1985; Charitou and Vafeas, 1998; Mougoué and Rao, 2003). The signalling theory implies that dividend payout indicates a firm's financial capability of undertaking projects that can only be afforded by well-performing firms. Engagement in CSR activities is one of these projects.

Free cash flow theory addresses how to solve the agency cost from free cash flow by dividend payout. Free cash flow is the cash flow in excess of the amount that is required for investment in all the positive NPV projects. Agency costs between managers and shareholders arise when a firm generates substantial free cash flow. This is because managers with free cash flow have incentives to overinvest beyond an optimal level. Jensen (1986) suggests that dividend payout can help to reduce free cash flow under managers' control and prevent managers from making inefficient investment for their private benefits. Extended on Jensen (1986)'s work, Lang and Litzenberger (1989) show that dividend payout increases firm value by reducing overinvestment. The free cash flow theory implies that dividend payout can be viewed as managers' ongoing commitment to make diligent use of corporate resources and should prevent managers' self-serving decisions that would possibly harm shareholders' wealth.[9]

While dividend tax rates have been identified as an important determinant of dividend policies in both U.S. (Blouin et al., 2011) and other countries (e.g., Li et al., 2017), we do not review this literature in our paper. We also skip discussions of behavior explanations of dividends, such as dividend clientele (e.g., Chemmanur et al., 2023; Hameed et al., 2023) for brevity.

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[8] Several studies focus on the implication of dividends by examining the market reaction to dividend changes. For example, Handjinicolaou and Kalay (1984) analyze bond returns around dividend announcements. Both studies provide evidence in support of information content hypothesis of dividends. Another related stream of literature implies that dividend changes, together with firms' strategic release of private information, convey information about firms' future prospect (Chemmanur and Tian, 2012, 2014). In addition, Akhigbe and Madura (1996) show that dividend initiation is associated with favorable long-term stock performance. Homburg et al. (2018) find that investors revise their earnings expectations after dividend announcements. The dividend signaling model is also generalized to explain stock repurchases in prior literature (see Chemmanur et al., 2022).

[9] For brevity of presentation, we do not provide detailed review of empirical papers testing different theories of dividend. We refer interested readers to Wang et al. (2023) for empirical tests of multiple dividend theories in a unified framework.

2.3. Hypothesis development

2.3.1. Dividend payout and CSR performance

Given the mixed evidence on the association between dividend payout and CSR, existing literature does not reach a consensus on how dividend payout influences CSR. Based on theories on dividend payout, we consider four possible channels through which dividend payout affects CSR performance.

First, firms with CSR engagement tend to have a reputation of keeping implicit commitment to stakeholders, as CSR engagement can help to align the interest of shareholders and stakeholders (Deng et al., 2013). Dividend payout reflects the conflict of interest between shareholders and stakeholders, as it transfers wealth that could be used for serving stakeholders' claims (Holder et al., 1998; Chu, 2018). To mitigate the shareholder-stakeholder conflict, firms may reduce dividends to express their desire to consider the interest of stakeholders (DeAngelo and DeAngelo, 1990, 1991). However, dividend reduction is not the first choice for most firms (Brav et al., 2005). CSR is favored by stakeholders. For instance, firms with better CSR performance receive better valuation (Servaes and Tamayo, 2013; Flammer, 2015; Byun and Oh, 2018; etc.) and enjoy lower credit spreads, longer debt maturities, and easier access to debt (Goss and Roberts, 2011; Chava, 2014; Amiraslani et al., 2022). In that case, CSR may act as a suitable solution to strike a balance between shareholders and stakeholders for dividend paying firms. In other words, in need of mitigating the tension between shareholder and stakeholder, dividend paying firms are more likely to engage in CSR activities. We term this as *stakeholder relationship management channel*.

Second, the famous "doing good by doing well" argument indicates that CSR engagement reflects a firm's good financial performance. For example, Hong et al. (2012) provide evidence that less financially constrained firms perform better in CSR. Lys et al. (2015) suggest that firms engage in CSR in anticipation of strong financial performance. Given the information of a firm's good future prospect conveyed by dividend payout, both dividend payout and CSR investment can be explained by an omitted variable reflecting a firm's financial capability, which leads to a positive CSR-dividend relation. We refer to this as *financial capability channel*.

Third, the European Commission Report perceives dividend payout as evidence of short-termism, which sacrifices the long-term interests of stakeholders. The Report states that prioritization of shareholder value maximization may harm firms' sustainable value creation. This indicates that firms paying dividends are more likely to focus on the benefit of shareholders at the expense of long-term value of stakeholders and thus are less likely to engage in CSR activities. Therefore, the European Commission Report's short-termism perspective predicts a negative CSR-dividend relation. We refer to this as *short-termism channel*.

Fourth, prior studies find that CSR activities reflect the agency problem inside the firm (Masulis and Reza, 2015) and that managers spend on CSR at the expense of shareholders to enhance their personal reputations among stakeholders (Tirole, 2001). Krüger (2015) shows that shareholders respond negatively to positive CSR news, and explains it as evidence that CSR investment is a result of the agency problem between managers and shareholders. As suggested by Jensen (1986), one way to mitigate the agency conflict between managers and shareholders is dividend payment, which can reduce the free cash flow under managers' control and limit their opportunities to engage in self-serving investment that would possibly harm shareholders' wealth. From this perspective, dividend payout may constrain managers from overinvesting in CSR activities, and this predicts a negative association between dividend payout and CSR performance (*the free cash flow channel*).

Fig. 1 illustrates the logic of the four channels, respectively. Our first hypothesis is stated as follows:

H1a. *From the stakeholder relationship management channel, firms that have paid dividend payout are more likely to engage in CSR activities in the future.*

H1b. *From the financial capability channel, firms that have paid dividend payout are more likely to engage in CSR activities in the future.*

H1c. *From the short-termism channel, firms that have paid dividend payout are less likely to engage in CSR activities in the future.*

H1d. *From the free cash flow channel, firms that have paid dividend payout are less likely to engage in CSR activities in the future.*

2.3.2. Differentiating the stakeholder management channel and the financial capability channel

To differentiate the stakeholder management channel and the financial capability channel, both of which predict a positive CSR-dividend relation, we analyze the moderating effect of a positive shock to firms' stakeholder orientation. Constituency statutes, also called stakeholder statutes, are aimed at requiring directors to consider stakeholders' welfare in making decisions. In the U.S., states began to pass constituency statutes in the 1980 s, during a wave of hostile takeovers (Karpoff and Wittry, 2018). The constituency statutes can be applied to takeovers as well as to general business decisions (Bainbridge, 1992) and these statutes allow directors to take into account "the social, legal and economic effects upon employees, suppliers, customers, and others with similar relationships with the corporation, and the communities in which the corporation conducts its business".[10] In addition, the statutes' permissive nature gives firms discretion in deciding how to protect stakeholder interests (Bainbridge, 1992).

The underlying reasons for passing these statutes can be traced back to the debate on whose interest corporate management should attend (Dodd, 1932). In the 1970 s, the traditional view of corporate governance was oriented toward shareholders with the goal of shareholder wealth maximization. In contrast, over the past two decades, the stakeholder orientation perspective has gained popularity. This perspective emphasizes corporations' duty to protect non-shareholder wealth. Stakeholder orientation proponents argue that all parties that can affect or be affected by corporate policies have an important role in a firm's success (Freeman, 2010) and that a company's optimal value depends on its wealth maximization for all parties. In this case, it is necessary for corporate managers to balance stakeholders' interests.

The adoption of CS provides an opportunity to directly examine whether the CSR-dividend relation varies with the incentive to emphasize stakeholders' interest. Several extant studies suggest that firms take stakeholder interests into account more after CS adoptions (Flammer and Kacperczyk, 2016; Gao et al., 2021; Ni, 2020). CS adoptions provide firms with greater incentives to mitigate the existing conflict between shareholders and stakeholders (Gao et al., 2021). Since dividend payout does not significantly decrease with CS adoption (Ni et al., 2020), firms may seek for other ways to take care of stakeholders' interest. CSR activities are favourable to various types of stakeholders. For example, firms with better CSR performance are rewarded by creditors with lower credit spreads, longer debt maturities, and greater access to debt (Goss and Roberts, 2011; Chava, 2014; Amiraslani et al., 2022). Therefore, dividend paying firms may have greater incentives to invest in CSR, as it is in alignment with the stakeholder orientation perspective of CS. The stakeholder relationship management channel will predict that CS adoption will enhance the positive association between dividend payout and CSR performance.

The financial capability channel suggests that CSR engagement is simply a result of a firm's good financial performance. In that case, it is not clear whether firms with better financial capability will increase CSR performance after CS adoption due to its permissive nature. Therefore, under the financial capability channel, we would find no clear impact of

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[10] Proxy Statement and Text of Amendment for Nortek, Inc. (May 26, 1982), reprinted in *Shark Repellents and Golden Parachutes: A Handbook for the Practitioner* (Robert L. Winter, Robert D. Rosenbaum, Mark H. Stumpf, and L. Stevenson Parker, eds., 1983 and Supp. 1989).
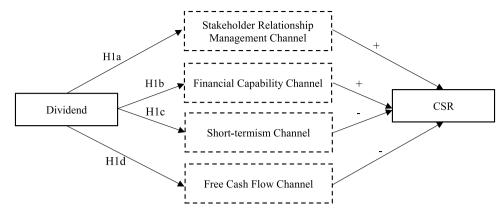
Fig. 1. Hypothesized channels through which dividends affect CSR, This figure presents the four hypothesized channels through which dividend payout affects CSR performance.

CS adoption on the CSR-dividend relation.

H2a. *From the stakeholder relationship management channel, the CS adoption has a positive impact on the association between dividend payout and CSR performance.*

H2b. *From the financial capability channel, the CS adoption has no impact on the association between dividend payout and CSR performance.*

3. Sample and variable measurement

3.1. Sample and data

Our sample period dates from 1991 to 2016 because of the availability of CSR data. We obtain CSR performance data from MSCI ESG STATS (formerly known as KLD). We start with all firms within MSCI ESG STATS from 1991 to 2016. We obtain financial information from Compustat and exclude observations with missing information to calculate dividend payout measures. Observations with missing values for calculation of key control variables are excluded as well. In addition, we exclude firms incorporated outside the United States. All continuous variables are winsorized at the top and bottom 1 and 99 percentiles to alleviate the effect of extreme observations. Our final sample consists of 42,246 firm-year observations. Table 1 describes the sample selection procedure.

We use the state-level staggered adoption of CS to capture the increases in stakeholder importance emphasis across firms. Appendix A presents the year and state information of CS adoption in the U.S. We obtain information on CS adoption from Barzuza (2009). We hand-collect historical incorporation state information from 10-K filings.

Table 1
Sample selection procedure.

	Num. of Obs.
Unique observations with valid data on MSCI KLD Stats database over years from 1991 to 2016	46,818
Exclude:	
Firm-year observations with missing dividend payout measures	-181
Firm-year observations with missing control variables (*SIZE, ROA, MTB, LEVERAGE, AGE, CASH, TANGIBILITY, SG, CAPEX, AD, RD*)	-2701
Non-US firm-year observations	-1690
	42,246

This table presents the steps we take in constructing our main sample. The number of firm-year observations in the sample is 42,246 and the sample period is from 1991 to 2016.

3.2. Measurement of corporate social responsibility

As with prior research, we use the CSR scores from MSCI ESG STATS (formerly known as KLD) as our measure of CSR performance (Deng et al., 2013; Krüger, 2015). In 1991, KLD rates for approximately 600 U. S. firms that were first included either in the S&P 500 broad market index or the Domini 400 Social Index (DSI). In 2003, KLD expanded its rating coverage to approximately 2,800 U.S. firms included in the Russell indexes. By using 34 binary scores across various subcategories, MSCI analysts assess firms based on a variety of CSR performance dimensions, including corporate governance, community, diversity, employee relations, environment, human rights, and product quality and safety. MSCI assigns a binary rating that equals one (zero) to indicate the presence (absence) of concerns and strength within each dimension. The score for each dimension equals the number of strengths minus the number of concerns, and the total CSR score is calculated as the sum of the scores for each dimension. We follow prior research in constructing an adjusted CSR strength (concern) score by scaling the raw strength (concern) scores by the total number of strength (concern) indicators in each dimension (e.g., Deng et al., 2013). The adjusted CSR score is calculated as the difference between the total adjusted strength score and the total adjusted concern score. In addition, when constructing the adjusted CSR score, we exclude the corporate governance dimension in order to disentangle CSR from corporate governance. A higher value of the adjusted CSR score indicates greater engagement in CSR activities.

4. Empirical results

4.1. Summary statistics

Panel A of Table 2 reports the descriptive statistics for main variables in our sample. Detailed variable definitions are provided in Appendix D. The adjusted net CSR scores (*ADJ_NETCSR*) in our sample have a mean value of − 0.098 and a median of − 0.042, indicating that the adjusted number of concerns is slightly higher than the adjusted number of strengths, consistent with Deng et al. (2013). On average, firms in our sample have a logarithm of total assets (*SIZE*) of 7.446 (around 8590 million U.S. dollars), a leverage ratio (*LEV*) of 0.225 and a market-to-book ratio (*MTB*) of 3.085, similar to those documented in prior literature. As for financial performance, our sample firms have an average return on assets (*ROA*) of 0.023 and a ratio of cash to the book value of total asset (*CASH*) of 0.165. The average firm age (*AGE*) in our sample is 23 years and average sale growth (*SG*) is about 14.2% in our sample. Firms in our sample have capital expenditures of 4.7% relative to total assets (*CAPEX*), 24.6% of tangible assets (*TANGIBILITY*), 1.1% of advertising expenses to sales (*AD*) and 3.3% of research and development expense to total assets (*RD*).

Table 2
Descriptive statistics.

Panel A: Summary statistics of key variables

Variables	N	Mean	Q1	Median	Q3	Std Dev
ADJ_NETCSR	42,246	-0.098	-0.333	-0.042	0.125	0.453
DIV_PAYER	42,246	0.573	0.000	1.000	1.000	0.495
AT (in millions)	42,246	8590.990	479.833	1575.431	5319.821	24914.099
SIZE	42,246	7.446	6.173	7.362	8.579	1.748
ROA	42,246	0.023	0.008	0.037	0.077	0.125
MTB	42,246	3.085	1.395	2.153	3.605	4.479
LEV	42,246	0.225	0.049	0.194	0.340	0.202
AGE	42,246	23.877	10.000	19.000	36.000	16.495
LOGAGE	42,246	2.895	2.303	2.944	3.584	0.795
CASH	42,246	0.165	0.027	0.082	0.229	0.197
TANGIBILITY	42,246	0.246	0.047	0.164	0.381	0.241
SG	42,246	0.142	-0.006	0.078	0.196	0.367
CAPEX	42,246	0.047	0.012	0.031	0.063	0.055
AD	42,246	0.011	0.000	0.000	0.011	0.026
RD	42,246	0.033	0.000	0.000	0.031	0.072

Panel B: Frequency of dividend paying and non-paying firms by year

Year	# of Obs.	DIV_PAYER= 0		DIV_PAYER= 1		ADJ_NETCSR
		# of Obs.	% of Obs.	# of Obs.	% of Obs.	Mean
1991	598	67	11.20	531	88.80	0.00
1992	601	74	12.31	527	87.69	0.00
1993	605	70	11.57	535	88.43	-0.04
1994	596	62	10.40	534	89.60	-0.03
1995	612	73	11.93	539	88.07	0.03
1996	612	83	13.56	529	86.44	0.05
1997	612	94	15.36	518	84.64	0.07
1998	611	97	15.88	514	84.12	0.08
1999	617	110	17.83	507	82.17	0.06
2000	614	134	21.82	480	78.18	0.06
2001	996	370	37.15	626	62.85	-0.01
2002	1002	361	36.03	641	63.97	-0.04
2003	2702	1385	51.26	1317	48.74	-0.12
2004	2641	1356	51.34	1285	48.66	-0.18
2005	2611	1226	46.96	1385	53.04	-0.19
2006	2590	1233	47.61	1357	52.39	-0.20
2007	2467	1193	48.36	1274	51.64	-0.20
2008	2581	1271	49.24	1310	50.76	-0.19
2009	2630	1376	52.32	1254	47.68	-0.19
2010	2611	1397	53.50	1214	46.50	-0.36
2011	2522	1287	51.03	1235	48.97	-0.29
2012	2436	1166	47.87	1270	52.13	0.10
2013	2105	922	43.80	1183	56.20	-0.04
2014	2173	947	43.58	1226	56.42	0.06
2015	2074	872	42.04	1202	57.96	0.06
2016	2027	809	39.91	1218	60.09	0.14
Total	42,246	18,035	42.69	24,211	57.31	-0.10

This table reports summary statistics of the main variables and the distribution of observations by year for dividend paying and non-paying firms. Panel A presents summary statistics of the main variables. Panel B presents the number and percentage of dividend payers and non-payers, together with mean value of CSR performance for these firms in each year. Variable definitions are provided in Appendix D.

Table 2, Panel B reports number and percentage of dividend paying and non-paying firms and mean value of CSR performance by year. On average, 57.3% of firms in our sample are dividend paying firms. Over 80% of firms are dividend payers in 1990 s and the proportion of dividend payers becomes lower in 2010 s. The low proportion of dividend payers during 2008–2011 is probably due to the influence of financial crisis in 2008.

Panel A of Table 3 presents comparative statistics of key variables for dividend paying and non-paying firms. We find statistically significant difference in CSR performance and firm fundamentals between dividend payers and non-payers. Dividend paying firms exhibit significantly better CSR performance as proxied by adjusted net CSR scores (*ADJ_NETCSR*). As for firm fundamentals, dividend paying firms are larger in firm size (*SIZE*), higher in profitability (*ROA*), lower in cash holdings relative to total assets (*CASH*), higher in proportion of tangible assets relative to total assets (*TANGIBILITY*), higher in leverage ratio (*LEV*), and more mature in firm age (*AGE*). In addition, the market-to-book ratio (*MTB*) of dividend paying firms is lower than that of non-

paying firms, together with lower sales growth (*SG*), lower spending on capital expenditure (*CAPEX*), advertising (*AD*), and R&D expense (*RD*).

We report Pearson correlation among our main variables in Table 3, Panel B. We find a positive correlation between dividend paying (*DIV_PAYER*) and CSR performance (*ADJ_NETCSR*). This is consistent with the univariate test results in Panel A of Table 3.

4.2. Dividend payout and corporate social responsibility – Baseline results

To test H1, we estimate the following lead-lag OLS model:

$$ADJ\_NETCSR_{it}=\beta_0+\beta_1 DIV\_PAYER_{it-1}+\beta_2 SIZE_{it-1}+\beta_3 ROA_{it-1}+\beta_4 MTB_{it-1}+\beta_5 LEV_{it-1}+\beta_6 LOGAGE_{it-1}+\beta_7 CASH_{it-1}+\beta_8 TANGIBILITY_{it-1}+\beta_9 SG_{it-1}+\beta_{10}CAPEX_{it-1}+\beta_{11}AD_{it-1}+\beta_{12}RD_{it-1}+Year, Ind\ F\cdot E\cdot+\varepsilon_{it}. \quad (1)$$

The dependent variable is *ADJ_NETCSR$_{it}$*, the adjusted CSR score for firm *i* in year *t* based on six dimensions of CSR, including community activities, diversity, employee relations, environmental records, records

Table 3

Univariate tests.

Panel A: Mean value of key variables for dividend paying firms and non-paying firms

Variables	DIV_PAYER= 1	DIV_PAYER= 0	(DIV_PAYER=1) – (DIV_PAYER=0)	
			Diff. in Mean	t-value
ADJ_NETCSR	-0.055	-0.156	0.101	22.810 * **
SIZE	8.087	6.586	1.501	96.389 * **
ROA	0.043	-0.003	0.045	37.444 * **
MTB	2.850	3.401	-0.551	-12.541 * **
LEV	0.243	0.201	0.042	21.304 * **
LOGAGE	3.163	2.536	0.628	87.182 * **
CASH	0.101	0.250	-0.149	-83.077 * **
TANGIBILITY	0.270	0.215	0.055	23.332 * **
SG	0.097	0.203	-0.106	-29.628 * **
CAPEX	0.045	0.051	-0.006	-10.803 * **
AD	0.011	0.012	-0.002	-6.450 * **
RD	0.013	0.059	-0.046	-68.941 * **

Panel B: Correlation matrix

	ADJ_NETCSR	DIV_PAYER	SIZE	ROA	MTB	LEV
DIV_PAYER	0.110 * **					
SIZE	0.195 * **	0.425 * **				
ROA	0.073 * **	0.179 * **	0.168 * **			
MTB	0.065 * **	-0.061 * **	-0.093 * **	0.056 * **		
LEV	-0.019 * **	0.103 * **	0.282 * **	-0.099 * **	-0.062 * **	
LOGAGE	0.104 * **	0.390 * **	0.394 * **	0.158 * **	-0.066 * **	0.085 * **
CASH	-0.013 * **	-0.375 * **	-0.436 * **	-0.250 * **	0.193 * **	-0.336 * **
TANGIBILITY	-0.050 * **	0.113 * **	0.089 * **	0.062 * **	-0.053 * **	0.268 * **
SG	-0.033 * **	-0.143 * **	-0.128 * **	-0.022 * **	0.124 * **	-0.033 * **
CAPEX	-0.018 * **	-0.052 * **	-0.067 * **	0.068 * **	0.028 * **	0.078 * **
AD	0.075 * **	-0.031 * **	-0.033 * **	0.032 * **	0.078 * **	-0.023 * **
RD	0.009 *	-0.318 * **	-0.356 * **	-0.492 * **	0.156 * **	-0.183 * **
	LOGAGE	CASH	TANGIBILITY	SG	CAPEX	AD
CASH	-0.290 * **					
TANGIBILITY	0.222 * **	-0.334 * **				
SG	-0.239 * **	0.170 * **	-0.054 * **			
CAPEX	0.023 * **	-0.149 * **	0.692 * **	0.068 * **		
AD	-0.052 * **	0.070 * **	-0.078 * **	0.012 * *	-0.016 * **	
RD	-0.173 * **	0.606 * **	-0.215 * **	0.129 * **	-0.089 * **	-0.013 * **

This table reports the univariate test and correlation matrix for our main variables. Panel A reports mean values of main variables for dividend paying and non-paying firms. Panel B provides Pearson correlation table for our main variables.

on human rights, and product quality and safety. In addition, we decompose the CSR performance measure into measures of CSR strength, ADJ_SUMSTR_{it}, and measures of CSR concerns, ADJ_SUMCON_{it}, and use CSR strength and CSR concern as the dependent variable separately. ADJ_SUMSTR_{it} is the adjusted CSR strength score for firm i in year t based on the six dimensions, and ADJ_SUMCON_{it} is the adjusted CSR concern score for firm i in year t based on the six dimensions. To mitigate the concern of reverse causality, we conduct a lead-lag regression analysis with independent variable and control variables lagged by one year. The variable of interest, DIV_PAYER_{it-1}, is an indicator variable that equals one if firm i pays cash dividends in year t-1, and zero otherwise. When using the adjusted CSR score as dependent variable, we should observe a positive β_1 from the financial capability channel and the stakeholder relationship management channel, while a negative β_1 under the short-termism channel and free cash flow channel.

We control for an array of firm characteristics documented to have an impact on CSR performance (Surroca and Tribo, 2008; Di Giuli and Kostovetsky, 2014; Husted et al., 2015). We control for firm size (SIZE), profitability (ROA), market-to-book ratio (MTB), leverage (LEV), firm age (LOGAGE), cash holdings (CASH), tangible assets ratio (TANGIBILITY), sale growth (SG), capital expenditure (CAPEX), advertising expense (AD), and research and development expense (RD). It is important to note that we control for four other components of KZ index (i.e., profitability, market-to-book ratio, leverage, and cash holdings). We predict that less constrained firms (i.e., firms with higher profitability, higher market-to-book ratio, lower leverage, and more cash) will have a higher CSR score. In addition, we predict that larger firms, those that are more profitable, and firms with less debt are associated with a

higher level of CSR performance (Di Giuli and Kostovetsky, 2014). Firm age (LOGAGE) is positively associated with CSR performance (Surroca and Tribo, 2008). Firms with a higher capital expenditure (CAPEX) are associated with a higher level of CSR engagement. The control variables are lagged by one year.

Panel A of Table 4 tabulates the regression results of Eq. (1). The coefficient on DIV_PAYER is 0.037 (t-value = 3.53) in column (1), suggesting that on average, the net adjusted CSR score of firms paying dividends is about 0.037 higher than for firms not paying dividends. The coefficient on DIV_PAYER in column (2) is 0.037 (t-value = 5.15), indicating that CSR strength score of dividend-paying firms is 0.037 higher relative to firms paying no dividends. In column (3), we find no significant difference in CSR concern scores between dividend payers and non-payers, suggesting that good CSR performance for dividend paying firms mainly arises from improvement in CSR strength. The positive association between dividend payout and CSR performance provides support for the stakeholder relationship management channel (H1a) and the financial capability channel (H1b) but does not support the short-termism channel (H1c) and free cash flow channel (H1d).

As for control variables, the coefficient estimates of control variables are generally consistent with prior research (Di Giuli and Kostovetsky, 2014; Cronqvist and Yu, 2017). We find a significant and positive association between CSR performance and firm size, return on assets, market-to-book ratio, cash holdings, capital expenditures, advertising expense, and R&D expense, respectively. Besides, we find that firms with higher leverage and sale growth engage less in CSR activities. The signs of coefficients on return on assets, cash holdings, and leverage are consistent with the prediction from the financial constraint view, while

Table 4
Dividend payout and corporate social responsibility – Baseline results.

Panel A: The impact of dividend paying on CSR performance			
Dependent=	(1)	(2)	(3)
	ADJ_NETCSR (t)	*ADJ_SUMSTR (t)*	*ADJ_SUMCON (t)*
DIV_PAYER(t-1)	0.037 * **	0.037 * **	0.001
	(3.53)	(5.15)	(0.17)
SIZE	0.054 * **	0.123 * **	0.069 * **
	(10.96)	(29.77)	(16.58)
ROA	0.187 * **	0.088 * **	-0.102 * **
	(5.94)	(3.80)	(−4.44)
MTB	0.004 * **	0.004 * **	-0.000
	(5.30)	(6.55)	(−0.46)
LEV	-0.060 * *	-0.127 * **	-0.068 * **
	(−2.34)	(−6.62)	(−3.33)
LOGAGE	0.010	0.024 * **	0.014 * **
	(1.45)	(4.97)	(2.67)
CASH	0.095 * **	0.155 * **	0.055 * **
	(3.52)	(7.75)	(2.78)
TANGIBILITY	-0.018	0.039	0.055 *
	(−0.47)	(1.41)	(1.77)
SG	-0.027 * **	-0.023 * **	0.004
	(−4.64)	(−5.73)	(0.78)
CAPEX	0.460 * **	0.335 * **	-0.142
	(3.89)	(4.23)	(−1.54)
AD	0.905 * **	0.874 * **	-0.038
	(4.72)	(5.82)	(−0.29)
RD	0.548 * **	0.552 * **	-0.014
	(6.27)	(8.91)	(−0.22)
CONSTANT	-0.803 * **	-0.739 * **	0.051
	(−5.10)	(−7.16)	(0.25)
IND, YEAR FE	YES	YES	YES
N	42,246	42,246	42,246
ADJ. R-SQ	0.173	0.326	0.276

Panel B: The effect of residual and predicted component of dividend paying on CSR performance			
Dependent=	(1)	(2)	(3)
	ADJ_NETCSR(t)	*ADJ_SUMSTR(t)*	*ADJ_SUMCON(t)*
RDIV_PAYER(t-1)	0.037 * **	0.037 * **	0.001
	(3.37)	(4.36)	(0.16)
EDIV_PAYER(t-1)	0.249 * **	0.622 * **	0.372 * **
	(7.79)	(19.35)	(13.05)
CONTROLS	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes
N	42,246	42,246	42,246
ADJ. R-SQ	0.144	0.174	0.234

This table reports the effect of dividend payout on CSR performance. The dependent variable is CSR performance, which is the adjusted CSR score (ADJ_NETCSR) in column (1), adjusted CSR strength (ADJ_SUMSTR) in column (2), and adjusted CSR concern (ADJ_SUMCON) in column (3), respectively. The independent variable in Panel A, DIV_PAYER, is an indicator variable that equals one if a firm pays dividends in year t-1 and zero otherwise. In Panel B, the independent variables are RDIV_PAYER and EDIV_PAYER. RDIV_PAYER (EDIV_PAYER) is the residual (predicted) component of DIV_PAYER. We obtain the residual (predicted) component of DIV_PAYER by regressing the indicator variable, DIV_PAYER, on concurrent firm fundamentals. Control variables are lagged by one year. We control for industry and year fixed effects in all specifications. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level using two-tailed tests and standard errors are clustered at the firm-level.

the positive coefficient of market-to-book ratio is not.

To further investigate the channel through which dividend payout affects CSR performance, we identify the components of dividend paying that is explained or unexplained by firm fundamentals. Following Baker and Wurgler (2004), we first estimate the propensity of a firm to pay dividends as a function of firm fundamentals, and obtain the predicted component and the residual component of the decision to pay dividends for each firm by estimating the following regression in the first stage.

$$DIV\_PAYER_{it-1} = \beta_0 + \beta_1 SIZE_{it-1} + \beta_2 ROA_{it-1} + \beta_3 MTB_{it-1} + \beta_4 LEV_{it-1} + \beta_5 LOGAGE_{it-1} + \beta_6 CASH_{it-1} + \beta_7 TANGIBILITY_{it-1} + \beta_8 SG_{it-1} + \beta_9 CAPEX_{it-1} + \beta_{10} AD_{it-1} + \beta_{11} RD_{it-1} + Year, Ind\ F \cdot E \cdot + \varepsilon_{it}. \quad (2)$$

We calculate the predicted component from the above regression ($EDIV\_PAYER_{it-1}$), which captures the likelihood to pay dividends driven by financial capability. The error term ε is the residual component of the decision to pay dividends for a given firm-year ($RDIV\_PAYER_{it-1}$), which is orthogonal to firm fundamentals related to financial capability.[11]

In the second stage, we use $RDIV\_PAYER_{it-1}$ and $EDIV\_PAYER_{it-1}$ as our independent variables to test our first hypothesis.

$$ADJ\_NETCSR_{it} = \beta_0 + \beta_1 RDIV\_PAYER_{it-1} + \beta_2 EDIV\_PAYER_{it-1} + Year, Ind\ F \cdot E \cdot + \varepsilon_{it}. \quad (3)$$

If investment in CSR is not only driven by financial capability, but also driven by incentives to maintain a good stakeholder relationship, we would observe positive and significant coefficients of both β_1 and β_2. Otherwise, if CSR investment is merely driven by firms' financial capability as captured by the predicted component of dividend payout, we would find an unclear sign of β_1 and a positive sign of β_2.

Panel B of Table 4 tabulates the regression results of Eq. (3). In Panel B of Table 4, when using the residual and predicted component of dividend paying decision (RDIV_PAYER, EDIV_PAYER) as the independent variables, we find results consistent with that in Panel A, i.e., dividend paying firms tend to perform better in CSR activities.[12] We find positive coefficients on the predicted component of the decision to pay dividends (EDIV_PAYER) in columns (1)-(2), showing that financial capability can affect both decisions of dividend payment and CSR. This evidence is in support of the financial capability channel. Besides, the positive and significant coefficients on RDIV_PAYER in columns (1)-(2) suggest that the better CSR performance of dividend paying firms is affected by factors unrelated to financial capability. This implies that the financial capability channel and stakeholder relationship management channel may not be mutually exclusive and that dividend paying firms may invest in CSR to compensate stakeholders' loss from wealth redistribution in dividend payout. Overall, the above results suggest that in addition to the financial capability, incentives to maintain a balance between shareholders and stakeholders may also affect dividend paying firms' decision in CSR engagement.

4.3. Dividend payout and corporate social responsibility – Propensity score matched sample

To further identify the role of the two channels in explaining the positive CSR-dividend relation and mitigate the potential endogeneity concern that the results are driven by differences in firm fundamentals, we construct a matched sample of non-payers for each dividend payer using a propensity score matching (PSM) method. We estimate the propensity score as the predicted probability of paying dividends for a firm in a certain year using coefficients obtained from a probit model. Following prior research (Baker and Wurgler, 2004; Hoberg and Prabhala, 2009; Hameed and Xie, 2019), we regress an indicator variable of dividend payer on a set of firm characteristics, including total assets (*SIZE*), return on assets (*ROA*), market-to-book ratio (*MTB*), leverage (*LEV*), capital expenditure scaled by total assets (*CAPEX*) and idiosyncratic volatility (*IRISK*). We define stock's idiosyncratic volatility as the standard deviation of residuals estimated from a market model using daily returns in the past year (Hoberg and Prabhala, 2009). We use nearest-neighbor matching which allows each treated firm to be matched with one control firm-year observation, running the procedure

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[11] The estimation result for the first stage is provided in Appendix B.
[12] Our conclusion is similar if we estimate the predicted component and residual component with a Logit regression rather than an OLS regression specification.

with replacement. By construction, the treated dividend paying firms and the matched non-paying firms should exhibit no significant difference in firm fundamentals, including financial capability. Therefore, the difference in CSR performance between these two groups may indicate the presence of other explanation channels in addition to the financial capability channel.

In Table 5, Panel A, we provide comparison of firm characteristics between dividend payers and matched dividend non-payers. Dividend paying group and matched non-paying group exhibit no statistical difference in financial capability. In Panel B, we re-estimate Eq. (1) using the propensity score matched sample. We find that dividend paying firms perform better in CSR. This finding based on PSM indicates that the better CSR performance of dividend paying firms is not completely driven by their superior financial capability. This evidence supports our further exploration of the stakeholder relationship management channel.

4.4. Dividend payout and corporate social responsibility – Entropy balancing matched sample

The limitation of PSM is that it eliminates a part of the sample and could be sensitive to design choices such as caliper width (Shipman et al., 2017). To overcome those limitations, we perform analyses based on entropy balancing matched (EBM) method which achieves covariate balance by weighting control group units and adjusting for random and systematic inequalities in the variable distributions between the treatment and control groups (Hainmueller, 2012).

To implement EBM, we match our control variables (i.e., *SIZE*, *ROA*, *MTB*, *LEV*, *LOGAGE*, *CASH*, *TANGIBILITY*, *SG*, *CAPEX*, *AD*, *RD*) across the dividend payer and non-payer samples on the first (mean), second (variance), and third (skewness) moments. Table 6, Panel A tabulates the sample mean, variance and skewness of the treatment and control groups after the balancing process. We show that the three moments of the covariate distributions are balanced between the treatment and control firms after reweighting. The weights generated and assigned to each control group observation are incorporated in the regression

Table 5
Dividend payout and corporate social responsibility – Propensity score matched sample.

Panel A: Firm characteristics of dividend payers and matched non-payers after matching							
Variables	N	$DIV\_PAYER = 1$		$DIV\_PAYER = 0$		$(DIV\_PAYER=1) - (DIV\_PAYER=0)$	
		Mean	Median	Mean	Median	Diff.in Mean	t-value
SIZE	3128	6.954	6.909	6.919	6.876	0.035	0.88
ROA	3128	0.021	0.032	0.017	0.032	0.004	1.14
MTB	3128	2.984	1.989	2.781	2.010	0.203	1.67
LEV	3128	0.219	0.174	0.224	0.180	-0.005	-0.87
CAPEX	3128	0.046	0.030	0.045	0.025	0.001	0.80
IRISK	3128	-3.764	-3.800	-3.748	-3.802	-0.016	-1.28

Panel B: Main regression based on a propensity score matched sample			
Dependent=	(1)	(2)	(3)
	ADJ_NETCSR(t)	*ADJ_SUMSTR(t)*	*ADJ_SUMCON(t)*
DIV_PAYER(t-1)	0.025 *	0.024 * *	-0.000
	(1.74)	(2.42)	(−0.01)
SIZE	0.045 * **	0.086 * **	0.042 * **
	(6.46)	(13.32)	(7.22)
ROA	0.109 *	0.022	-0.096 * *
	(1.82)	(0.56)	(−2.27)
MTB	0.003 *	0.001	-0.001
	(1.91)	(1.00)	(−1.19)
LEV	-0.082 * *	-0.068 * *	0.007
	(−2.13)	(−2.47)	(0.22)
LOGAGE	0.016	0.022 * **	0.006
	(1.62)	(3.04)	(0.69)
CASH	0.001	0.134 * **	0.127 * **
	(0.03)	(3.80)	(3.41)
TANGIBILITY	-0.051	-0.007	0.042
	(−0.91)	(−0.19)	(0.92)
SG	-0.035 * *	-0.018 *	0.017
	(−2.17)	(−1.82)	(1.40)
CAPEX	0.319 *	0.237 * *	-0.084
	(1.92)	(2.27)	(−0.63)
AD	0.769 * **	0.580 * **	-0.184
	(3.01)	(2.78)	(−0.93)
RD	0.513 * **	0.414 * **	-0.115
	(3.58)	(4.63)	(−1.12)
CONSTANT	-0.359	-0.456 * **	-0.089
	(−1.58)	(−4.09)	(−0.51)
IND, YEAR FE	YES	YES	YES
N	6256	6256	6256
ADJ. R-SQ	0.169	0.216	0.233

This table reports the effect of dividend payout on CSR performance based on a propensity score matched sample. The matched sample is constructed using a nearest-neighbor score matching method. The propensity score is estimated from a probit model in which the dependent variable is an indicator variable that equals one if a firm pays dividend in a given year. The propensity to pay dividends is estimated using the following firm characteristics: SIZE, ROA, LEV, MTB, CAPEX and IRISK. Panel A reports the univariate statistics for firm characteristics between dividend payers and matched non-payers. Panel B provides results based on the PSM matched sample. The independent variable is DIV_PAYER, an indicator variable that equals one if a firm pays dividend in year t-1 and zero otherwise. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

Table 6
Dividend payout and corporate social responsibility – Entropy balancing matched sample.

Panel A: Firm characteristics of dividend payers and non-payers after entropy balancing

Variables	DIV_PAYER= 1			DIV_PAYER= 0		
	Mean	Variance	Skewness	Mean	Variance	Skewness
SIZE	8.087	2.822	0.157	8.087	2.822	0.157
ROA	0.043	0.007	-3.314	0.043	0.007	-3.322
MTB	2.850	15.620	3.193	2.850	15.620	3.192
LEV	0.243	0.035	1.015	0.243	0.035	1.015
LOGAGE	3.163	0.561	-0.812	3.163	0.561	-0.812
CASH	0.101	0.017	2.504	0.101	0.017	2.505
TANGIBILITY	0.270	0.064	0.800	0.270	0.064	0.800
SG	0.097	0.077	4.405	0.097	0.077	4.405
CAPEX	0.045	0.003	2.267	0.045	0.003	2.267
AD	0.011	0.001	3.694	0.011	0.001	3.694
RD	0.013	0.001	5.452	0.013	0.001	5.472

Panel B: Main regression based on an entropy balancing matched sample

	(1)	(2)	(3)
Dependent=	ADJ_NETCSR(t)	ADJ_SUMSTR(t)	ADJ_SUMCON(t)
DIV_PAYER(t-1)	0.090 * **	0.074 * **	-0.018
	(5.50)	(6.20)	(−1.29)
SIZE	0.048 * **	0.130 * **	0.080 * **
	(6.71)	(23.34)	(12.71)
ROA	0.383 * **	0.237 * **	-0.153 * **
	(5.46)	(4.92)	(−2.59)
MTB	0.001	0.003 *	0.002
	(0.85)	(1.94)	(1.04)
LEV	-0.025	-0.075 * *	-0.059
	(−0.47)	(−2.21)	(−1.38)
LOGAGE	-0.024 * *	0.013 * *	0.037 * **
	(−2.23)	(2.04)	(4.21)
CASH	0.107 *	0.232 * **	0.112 * *
	(1.86)	(4.98)	(2.51)
TANGIBILITY	-0.037	0.046	0.075
	(−0.62)	(1.32)	(1.54)
SG	-0.048 * **	-0.038 * **	0.009
	(−3.63)	(−3.89)	(0.68)
CAPEX	0.684 * **	0.425 * **	-0.262 *
	(3.23)	(3.30)	(−1.69)
AD	0.762 * *	1.037 * **	0.226
	(2.31)	(4.59)	(0.84)
RD	1.536 * **	1.269 * **	-0.309 *
	(6.91)	(8.81)	(−1.82)
CONSTANT	-0.698 * **	-0.822 * **	-0.116
	(−5.56)	(−9.39)	(−0.93)
IND, YEAR FE	YES	YES	YES
N	42,246	42,246	42,246
ADJ. R-SQ	0.185	0.342	0.342

This table reports the effect of dividend payout on CSR performance based on an entropy balancing matched (EBM) sample. Panel A reports the univariate statistics for firm characteristics between dividend payers and non-payers for the EBM sample. Panel B provides results using the EBM sample. The independent variable is DIV_PAYER, an indicator variable that equals one if a firm pays dividend in year t-1 and zero otherwise. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

analysis. Panel B reports the regression results. We find results consistent with our main findings using entropy balancing matched sample.

4.5. Dividend payout, constituency statutes, and CSR performances

To test our second hypothesis and examine the stakeholder relationship management channel, we use CS adoption as a proxy for the increase in firms' incentives to emphasize stakeholders' interest. The adoption of CS introduces an exogenous shock for firms to emphasize more on stakeholders' interest. However, the passage of CS is not particularly intended to alter the firm's dividend policies and Ni et al. (2020) show that CS adoption does not affect dividend payout. Besides, the adoption of CS does not affect firms' financial capability (in Appendix C). This suggests that CS adoption is a good moderator to examine the stakeholder relationship management channel as it does not correlate with the independent variable. Specifically, we estimate the

following regression model.

$ADJ\_NETCSR_{it} = \beta_0 + \beta_1 DIV\_PAYER_{it-1} \times CS_{ist} + \beta_2 DIV\_PAYER_{it-1} + \beta_3 CS_{st} + \beta_4 SIZE_{it-1} + \beta_5 ROA_{it-1} + \beta_6 MTB_{it-1} + \beta_7 LEV_{it-1} + \beta_8 LOGAGE_{it-1} + \beta_9 CASH_{it-1} + \beta_{10} TANGIBILITY_{it-1} + \beta_{11} SG_{it-1} + \beta_{12} CAPEX_{it-1} + \beta_{13} AD_{it-1} + \beta_{14} RD_{it-1} + Year, Ind\ F \cdot E \cdot + \varepsilon_{it}.$ (4)

CS_{ist} is an indicator variable that equals one if firm i is incorporated in a state that adopts a constituency statute in year t, and zero otherwise. After the adoption of CS, a firm will experience an increase in the incentive to emphasize stakeholders' interest. The stakeholder relationship management channel will predict a greater improvement in CSR performance for dividend paying firms than for dividend non-paying firms after the CS adoption. Therefore, we expect β_1 to be positive.

Panel A of Table 7 provides the results. We find that the coefficient on the interaction term $DIV\_PAYER_{it-1} \times CS_{ist}$ is significantly positive

Table 7
Dividend payout, stakeholder importance, and CSR performance.

Panel A: The moderating effect of constituency statute adoption

Dependent=	(1)	(2)	(3)
	ADJ_NETCSR (t)	ADJ_SUMSTR (t)	ADJ_SUMCON (t)
DIV_PAYER(t-1)×CS	0.062 * **	0.019	-0.041 * **
	(3.21)	(1.33)	(−2.75)
DIV_PAYER(t-1)	0.018	0.032 * **	0.014
	(1.47)	(3.70)	(1.56)
CS	-0.015	-0.008	0.008
	(−1.07)	(−0.90)	(0.68)
SIZE	0.055 * **	0.123 * **	0.068 * **
	(11.28)	(29.69)	(16.43)
ROA	0.188 * **	0.089 * **	-0.103 * **
	(5.97)	(3.82)	(−4.46)
MTB	0.004 * **	0.004 * **	-0.000
	(5.36)	(6.57)	(−0.52)
LEV	-0.056 * *	-0.126 * **	-0.070 * **
	(−2.20)	(−6.58)	(−3.45)
LOGAGE	0.007	0.024 * **	0.016 * **
	(1.00)	(4.78)	(3.00)
CASH	0.099 * **	0.156 * **	0.052 * **
	(3.66)	(7.79)	(2.62)
TANGIBILITY	-0.017	0.040	0.054 *
	(−0.44)	(1.42)	(1.75)
SG	-0.028 * **	-0.024 * **	0.004
	(−4.76)	(−5.77)	(0.88)
CAPEX	0.463 * **	0.336 * **	-0.144
	(3.91)	(4.24)	(−1.57)
AD	0.920 * **	0.877 * **	-0.049
	(4.81)	(5.83)	(−0.38)
RD	0.545 * **	0.550 * **	-0.012
	(6.22)	(8.86)	(−0.20)
CONSTANT	-0.805 * **	-0.738 * **	0.052
	(−5.24)	(−7.07)	(0.27)
IND, YEAR FE	YES	YES	YES
N	42,246	42,246	42,246
ADJ. R-SQ	0.174	0.326	0.277

Panel B: Cross-sectional analysis of CS moderating effects

Dependent=	ADJ_NETCSR(t)			
	Managerial Ability		Female Director Ratio	
Sub-sample=	High	Low	High	Low
	(1)	(2)	(3)	(4)
DIV_PAYER(t-1)×CS	0.116 * **	0.038	0.091 * **	0.026
	(3.46)	(1.45)	(3.41)	(1.22)
DIV_PAYER(t-1)	0.007	0.012	0.012	0.000
	(0.39)	(0.82)	(0.76)	(−0.00)
CS	-0.024	-0.013	-0.055 * **	0.015
	(−1.18)	(−0.81)	(−2.66)	(1.04)
CONTROLS	Yes	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes	Yes
N	16,018	16,018	16,993	17,026
ADJ. R-SQ	0.171	0.174	0.187	0.189
Test for Diff. (p-value)	0.0281		0.0405	

This table reports the effect of CS adoptions on the association between dividend payout and CSR performance. CS is an indicator variable that equals one if a firm is incorporated in a state that adopted a constituency statute in year t and zero otherwise. In Panel A, we report the effect of CS adoption for the full sample and in Panel B, we conduct cross-sectional analyses for subsamples partitioned by CEO and board characteristics, including managerial ability and board female ratio. We partition our sample into high and low managerial ability firms based on MA-score obtained from Peter Demerjian's Web Page. High ability firms are those above the median value of MA-score among all firms. Firms with high female director ratio are those with percentage of female directors on a given board above the median value among all firms. Control variables are lagged by one year. We control for industry and year fixed effects in all specifications. Variable definitions are provided in Appendix D. * ** , * * , and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

when using *ADJ_NETCSR* as the dependent variable, and significantly negative when using *ADJ_SUMCON* as the dependent variable. This indicates that compared with non-payers, dividend payers increase CSR performance by reducing CSR concerns after CS adoptions, which is consistent with H2a in support of the stakeholder relationship management channel.[13] The results also support a causal inference of the stakeholder relationship management's effect on CSR.[14]

In Panel B, we conduct cross-sectional analyses for the impact of stakeholder interest emphasis. Specifically, we conduct subsample analyses to examine whether CEO and board characteristics play a part in the impact of CS adoption on CSR-dividend relation. The CEO and board characteristics we investigate include managerial ability and director gender on the board.

Yuan et al. (2019) find that firms with higher CEO ability conduct more socially responsible activities and less socially irresponsible activities. Therefore, we predict after the adoption of CS, firms with higher managerial ability are more likely to increase their CSR performance. We first partition our sample into firms with high and low managerial ability based on MA-score.[15] We identify high managerial ability firms as those with MA-score above median among all firms. By comparing the coefficients on $DIV\_PAYER_{it-1} \times CS_{ist}$ for high and low group, we find that firms with higher managerial ability are more likely to increase CSR performance after CS adoption.

Next, we examine the effect of female directors on the board by partitioning our sample into high and low female director groups. High female director group refers to firms with the percentage of female board members above median among all firms. Results suggest that the improvement in CSR performance is mainly driven by dividend paying firms with more female board members. Overall, the above findings indicate that management team who are friendlier to CSR investment may have greater incentives to maintain a good stakeholder relationship and respond positively to the state-level shock to stakeholder orientation. One policy implication is that government's advocation for a greater focus on long-term benefits of employees, environment and society (without a penalty for firms that do not follow) is only effective for firms that have already done well in CSR performance.

5. Additional analyses and robustness checks

5.1. Dividend payout and sub-categories of CSR performance

We separately examine the impact of dividend payout and the moderating effect of CS adoption on each dimension of CSR performance. We calculate the net adjusted score in each dimension, including community (*COM*), diversity (*DIV*), employee relations (*EMP*), environment (*ENV*), human rights (*HUM*), and product quality and safety (*PRO*).

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[13] In Appendix C, we provide evidence that the increase in CSR-dividend relation after CS adoption is not driven by outperformance of dividend payers in the post-CS-adoption period. If dividend payout is just an indicator for good future performance, dividend paying firms' improvement in CSR performance after CS adoption will be accompanied with increases in financial performance. In Appendix C, we use return on equity (*ROE*) to proxy for accounting performance from shareholders' perspective and Tobin's Q (*TQ*) to proxy for firm performance. We find that dividend paying firms in states adopting CS do not exhibit any increase in ROE and Tobin's Q relative to firms in states not adopting CS. In addition, dividend paying firms incorporated in CS adopted states experience an insignificant decrease in ROE and firm value. The insignificant effect on ROE and Tobin's Q suggests that the positive effect of dividends on CSR around CS adoption is not due to change in firm performance or valuation.

[14] In unreported analyses, we conduct a robustness check by including incorporation state fixed effects and the results hold.

[15] We thank Peter Demerjian for sharing the data: http://faculty.washington.edu/pdemerj/data.html.

In Panel A of Table 8, we report the results using the net adjusted score in each dimension as dependent variables. In odd number columns, we find that relative to dividend non-paying firms, dividend paying firms are more likely to improve CSR performance in community (*COM*) and diversity (*DIV*). We do not find significant differences in employee relations (*EMP*), environment (*ENV*), human rights (*HUM*), and product quality and safety (*PRO*) dimensions between dividend payers and non-payers. This evidence suggests that dividend paying firms may compensate stakeholders by investing in community (such as corporate donations, providing education and housing supports for the community, and etc.) and diversity (such as improving employee work/life benefits, promotions of women and minorities, and etc.). However, improvement in human rights, employee relations, environment, and product quality and safety dimensions may not be the first choice for dividend paying firms. For example, product quality and safety dimension are related to corporate innovation, which is possibly too costly to afford for dividend paying firms.

In the even number columns in Panel A of Table 8, we find a positive moderating effect of CS on all sub-categories of net CSR scores with variations in the significance levels, except environment dimension (column (8)). The moderating effect of CS is significant and positive on sub-categories of employee relations (column (6)), and product quality and safety (column (12)). For the other three sub-categories, the moderating effect is positive but insignificant.

In Panels B (C) of Table 8, we present the results using CSR concern (strength) scores as the dependent variables. We find that although dividend payout has a positive impact on both concern and strength in community (*COM*), the positive effect on strength dominates that on concern (in column (1) of Panels B and C). Similarly, while dividend payout has a positive impact on both concern and strength in environment (*ENV*), the effect on strength dominates that on concern (in column (7) of Panels B and C). In contrast, we find that dividend increases the strength and reduces the concern in diversity (*DIV*) (in column (3) of Panels B and C).

In Panel B of Table 8, we find that the moderating effect of CS on concern score is negative and significant in three sub-categories (employee relations, human rights, and product quality and safety), and is negative but insignificant for community and diversity

Table 8
Additional analyses – Sub-categories of CSR performance.

Panel A: Using the net CSR score in each sub-category as the dependent variables

Dependent=	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	COMCSR (t)		DIVCSR (t)		EMPCSR (t)		ENVCSR (t)		HUMCSR (t)		PROCSR (t)	
DIV_PAYER(t-1)	0.006 **	0.003	0.024 ***	0.018 ***	0.000	-0.004	0.003	0.003	0.000	-0.001	0.004	0.000
	(1.97)	(0.77)	(4.38)	(3.01)	(0.11)	(−1.01)	(1.30)	(1.15)	(0.08)	(−0.53)	(1.47)	(0.02)
DIV_PAYER(t-1)×CS		0.009		0.017		0.013 **		-0.000		0.005		0.015 **
		(1.59)		(1.62)		(2.12)		(−0.03)		(1.49)		(2.38)
CS		0.002		-0.001		-0.003		-0.003		-0.003		-0.005
		(0.74)		(−0.08)		(−0.63)		(−1.00)		(−1.55)		(−1.21)
CONTROLS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246
ADJ. R-SQ	0.064	0.065	0.317	0.317	0.150	0.150	0.125	0.125	0.083	0.083	0.163	0.164

Panel B: Using CSR concern score in each sub-category as the dependent variables

Dependent=	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	COMCON(t)		DIVCON(t)		EMPCON(t)		ENVCON(t)		HUMCON(t)		PROCON(t)	
DIV_PAYER(t-1)	0.004 *	0.005 *	-0.016 ***	-0.013 ***	0.006 **	0.008 ***	0.007 ***	0.007 ***	0.000	0.003 *	-0.000	0.003
	(1.73)	(1.91)	(−4.00)	(−2.82)	(2.36)	(3.11)	(4.12)	(3.15)	(0.35)	(1.87)	(−0.13)	(0.92)
DIV_PAYER(t-1)×CS		-0.004		-0.010		-0.008 *		0.000		-0.007 ***		-0.011 *
		(−0.90)		(−1.25)		(−1.79)		(0.13)		(−2.77)		(−1.91)
CS		-0.000		-0.004		0.002		0.001		0.003		0.004
		(−0.04)		(−0.57)		(0.51)		(0.39)		(1.64)		(1.01)
CONTROLS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246
ADJ. R-SQ	0.119	0.119	0.317	0.318	0.208	0.208	0.339	0.339	0.137	0.138	0.258	0.259

Panel C: Using CSR strength score in each sub-category as the dependent variables

Dependent=	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	COMSTR(t)		DIVSTR(t)		EMPSTR(t)		ENVSTR(t)		HUMSTR(t)		PROSTR(t)	
DIV_PAYER(t-1)	0.009 ***	0.007 ***	0.007 **	0.005	0.006 **	0.004	0.009 ***	0.010 ***	0.001	0.001	0.004 **	0.003
	(4.51)	(2.97)	(2.34)	(1.48)	(2.49)	(1.52)	(5.41)	(4.49)	(0.49)	(0.89)	(2.56)	(1.44)
DIV_PAYER(t-1)×CS		0.006		0.007		0.006		0.000		-0.002		0.004
		(1.29)		(1.19)		(1.21)		(0.09)		(−1.14)		(1.49)
CS		0.002		-0.005		-0.001		-0.002		-0.000		-0.002
		(0.86)		(−1.11)		(−0.40)		(−0.90)		(−0.31)		(−0.78)
CONTROLS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246
ADJ. R-SQ	0.173	0.174	0.229	0.229	0.199	0.199	0.237	0.237	0.075	0.075	0.096	0.096

This table reports the results of additional analyses. Panel A reports the effect of dividend payout on sub-categories of CSR performance. Six dimensions of CSR are examined separately, including community (COM), diversity (DIV), employee relations (EMP), environment (ENV), human rights (HUM), and product quality and safety (PRO). The dependent variable in each column is the adjusted net performance score in a certain dimension in year t. In Panels B and C, we use the concern and strength scores in each sub-category in year t as the dependent variables, respectively. We control for industry and year fixed effects in all specifications. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * **, * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

dimensions). In Panel C of Table 8, the moderating effect of CS on strength score is positive in five sub-categories (except for human rights). Overall, the above findings suggest that dividend paying firms make efforts to reduce their CSR concerns and increase their CSR strengths in related categories after CS adoption.

5.2. Alternative measures of corporate payout

In this section, we repeat our analyses using alternative measures of corporate payout. In Table 9, we use three alternative corporate payout measures.

First, we use the number of consecutive years that a firm pays dividends (PAYER_DUR) as our proxy for dividend payout. A long duration of dividend payment may result in great intensity of the tension between shareholders and stakeholders, as wealth is transferred year-by-year from stakeholders to shareholders. Therefore, there will be a greater need to compensate stakeholders through CSR in order to strike a balance between shareholders and stakeholders.

Second, we use ranking of dividend payout ratio as the proxy for dividend payout. The ranking of dividend payout ratio (DIV_AT_RANK) is the ranking score of cash dividend payout ratio, where cash dividend payout ratio (DIV_AT) is cash dividends scaled by total assets. We obtain the ranking score by sorting sample firms into 10 groups by DIV_AT. For non-payers, we set the value of DIV_AT_RANK as zero. We attach a score from 1 to 9 for dividend paying firms from the lowest to the highest group. By deflating the ranking score by 10, DIV_AT_RANK ranges from zero to one. Higher ranking score of dividend payout ratio captures a greater amount of dividend payout.

Third, we replace the measure of dividend payout with a proxy for corporate payout. Repurchase (PAYOUT_PAYER) is an indicator variable that equals to one if a firm pays dividends or repurchases shares in a given year. While stock repurchase does not stand for a long-term commitment to shareholders, it also facilitates the transfer of corporate wealth to shareholders.

In Table 9, we find that firms' CSR performance is higher for firms that have maintained a longer duration of cash dividend payouts, that rank higher in dividend payout ratio, and that have any positive payout (i.e., dividend payout or share repurchases). This finding lends further

support for both the stakeholder relationship management channel (H1a) and financial capability channel (H1b). In addition, we also find a positive moderating effect of CS on net CSR score when interacting CS with these alternative payout measures, which further supports the stakeholder relationship management channel (H2a).

5.3. Robustness checks

To alleviate the concern that possible omitted firm characteristics or changes in local economic conditions may bias our results, we conduct several robustness tests for H1a and H2a. First, we include firm fixed effects in our main analysis. In Panel A of Table 10, we find our results robust after controlling for firm fixed effects. Second, we control for CEO characteristics in our analyses. We include CEO gender and CEO age as additional control variables. In Panel B, we find results consistent with our main findings. In addition, we find that young CEOs and female CEOs are more likely to invest in CSR. Moreover, we use an alternative measure of CSR performance, calculated as the number of strengths scaled by the maximum possible number of strengths and concerns minus the number of concerns scaled by the maximum possible number of strengths and concerns across the six dimensions of CSR categories (Albuquerque et al., 2019). Results in Panel C remain consistent and robust. In Panel D of Table 10, we re-estimate the impact of CS adoption on the positive CSR-dividend relation after eliminating firms that were established after CS adoption. The results remain robust. Finally, in Panel E of Table 10, we control for firms' corporate governance score (obtained from KLD), CG, and the results remain robust and significant.

6. Conclusions

In this paper, we study the CSR-dividend relation and the channels through which dividend payout affects CSR performance. We find a positive CSR-dividend relation, which provides support for the financial capability and stakeholder relationship management channel. To further explore the explanations for this positive CSR-dividend relation, we adopt three approaches. We find that the positive CSR-dividend relation increases after CS adoption which increases stakeholder importance. In addition, we find that the enhancing effect of CS adoption on the

Table 9
Additional analyses – Alternative measures of corporate payout.

Dependent=	(1)	(2)	(3)	(4)	(5)	(6)
	ADJ_NETCSR (t)					
PAYER_DUR(t-1)×CS		0.002 * *				
		(2.39)				
PAYER_DUR(t-1)	0.002 * **	0.001 * *				
	(4.82)	(2.39)				
DIV_AT_RANK (t-1)×CS				0.082 * **		
				(2.76)		
DIV_AT_RANK (t-1)			0.079 * **	0.048 * **		
			(5.21)	(2.66)		
PAYOUT_PAYER(t-1)×CS						0.045 * *
						(2.34)
PAYOUT_PAYER(t-1)					0.023 * **	0.012
					(2.76)	(1.30)
CS		-0.008		-0.006		-0.007
		(−0.64)		(−0.44)		(−0.46)
CONTROLS	Yes	Yes	Yes	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes	Yes	Yes	Yes
N	42,246	42,246	42,246	42,246	42,246	42,246
ADJ. R-SQ	0.176	0.177	0.175	0.176	0.172	0.173

This table reports the results using alternative payout variables. We use three alternative proxies for dividend payout. PAYER_DUR is the number of consecutive years of dividend payment. DIV_AT_RANK is calculated as the ranking score of dividend payout ratio deflated by 10, where dividend payout ratio is the amount of cash dividends scaled by total assets. We rank dividend payers into nine groups based on dividend payout ratio, and obtain the ranking score for each group. For non-payers, we set the value of DIV_AT_RANK as zero. We attach a score from 1 to 9 for dividend payers from the lowest to the highest group. After deflated by 10, DIV_AT_RANK ranges from 0 to 1. PAYOUT_PAYER is an indicator variable that equals one if a firm pays dividend or repurchases shares in a given year. We control for industry and year fixed effects in all specifications. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

Table 10

Robustness checks.

Panel A: Controlling for firm fixed effect

Dependent=	(1)	(2)
	ADJ_NETCSR (t)	
DIV_PAYER(t-1)	0.025 * *	0.015
	(2.23)	(1.14)
DIV_PAYER(t-1)×CS		0.040
		(1.64)
CS		-0.084 * *
		(−2.02)
CONTROLS	Yes	Yes
FIRM, YEAR FE	Yes	Yes
N	42,246	42,246
ADJ. R-SQ	0.142	0.142

Panel B: Controlling for CEO characteristics

Dependent=	(1)	(2)
	ADJ_NETCSR(t)	
DIV_PAYER(t-1)	0.049 * **	0.024
	(3.61)	(1.52)
DIV_PAYER(t-1)×CS		0.082 * **
		(3.27)
CS		-0.011
		(−0.57)
LOGCEOAGE	-0.113 * **	-0.112 * **
	(−2.76)	(−2.75)
MALE	-0.258 * **	-0.254 * **
	(−6.66)	(−6.72)
CONTROLS	Yes	Yes
IND, YEAR FE	Yes	Yes
N	27,779	27,779
ADJ. R-SQ	0.177	0.180

Panel C: Using an alternative measure of CSR performance

Dependent=	(1)	(2)
	ADJ_NETCSR1(t)	
DIV_PAYER(t-1)	0.020 * **	0.010
	(3.76)	(1.64)
DIV_PAYER(t-1)×CS		0.033 * **
		(3.26)
CS		-0.009
		(−1.33)
CONTROLS	Yes	Yes
YEAR, YEAR FE	Yes	Yes
N	42,246	42,246
ADJ. R-SQ	0.148	0.150

Panel D: Eliminating firms established after CS adoptions

Dependent=	(1)	(2)	(3)
	ADJ_NETCSR(t)	ADJ_SUMSTR(t)	ADJ_SUMCON(t)
DIV_PAYER(t-1)×CS	0.106 * **	0.055 * **	-0.049 * *
	(3.81)	(2.86)	(−2.26)
DIV_PAYER(t-1)	0.021 *	0.029 * **	0.008
	(1.72)	(3.35)	(0.91)
CS	-0.030	-0.036 * *	-0.003
	(−1.28)	(−2.45)	(−0.16)
CONTROLS	Yes	Yes	Yes
IND, YEAR FE	Yes	Yes	Yes
N	37,123	37,123	37,123
adj. R-sq	0.175	0.331	0.280

Panel E: Controlling for corporate governance score

Dependent=	(1)	(2)
	ADJ_NETCSR(t)	
DIV_PAYER(t-1)	0.030 * **	0.012
	(2.89)	(1.00)
DIV_PAYER(t-1)×CS		0.059 * **
		(3.05)
CS		-0.016
		(−1.13)
CG	0.082 * **	0.081 * **

Table 10 (*continued*)

Panel E: Controlling for corporate governance score		
Dependent=	(1)	(2)
	ADJ_NETCSR(t)	
	(11.42)	(11.36)
CONTROLS	Yes	Yes
FIRM, YEAR FE	Yes	Yes
N	42,246	42,246
ADJ. R-SQ	0.184	0.185

This table provides results of robustness checks. In Panel A, we control for firm-fixed effects. In Panel B, we control for CEO characteristics including CEO age and CEO gender. In Panel C, we provide results based on an alternative measure of CSR performance. In Panel D, we provide results after eliminating firms that are established after CS adoptions. In Panel E, we add the corporate governance score as an additional control variable. Corporate governance score is the difference between the number of strengths in corporate governance category and the number of concerns in corporate governance category. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

positive CSR-dividend relation is more pronounced for firms with more capable CEOs and firms with more female directors on the boards.

Our results indicate that while financial capability has a significant role in explaining the positive CSR-dividend relation, it is not the only driving factor. In addition to financial capability, firms' incentives to balance the interest of shareholders and stakeholders and improve stakeholder relationship can help to explain the positive CSR-dividend

relation. In other words, the financial capability channel and the stakeholder relationship management channel jointly cause the positive CSR-dividend relation.

Overall, our paper provides evidence that the incentive to balance the interest of shareholders and stakeholders is one important driving factor of CSR engagement.

Appendix A. Year of constituency statute adoptions and incorporation states

State of incorporation	State abbreviation	Adoption Year
Nevada	NV	1991
North Carolina	NC	1993
North Dakota	ND	1993
Connecticut	CT	1997
Vermont	VT	1998
Maryland	MD	1999
Texas	TX	2006
Nebraska	NE	2007

Appendix B. First stage model to decompose *DIV _PAYER*(*t*-1) into a residual component and a predicted component

Dependent=	(1)
	DIV _PAYER (*t*-1)
SIZE	0.039 * **
	(10.07)
ROA	0.142 * **
	(3.82)
MTB	0.003 * **
	(3.74)
LEV	-0.105 * **
	(−3.57)
LOGAGE	0.145 * **
	(18.78)
CASH	-0.270 * **
	(−8.34)
TANGIBILITY	0.156 * **
	(3.64)
SG	-0.031 * **
	(−4.35)
CAPEX	-0.669 * **
	(−5.65)
AD	-0.171
	(−0.88)
RD	-0.577 * **
	(−6.50)
CONSTANT	0.125
	(0.64)
IND FE	Yes
YEAR FE	Yes

(*continued on next page*)

(*continued*)

Dependent=	(1)
	DIV_PAYER (*t*-1)
N	42,246
ADJ. R-SQ	0.373

This table presents the estimation results of the first stage to obtain the residual and predicted component of the decision to pay dividends. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors are clustered at the firm-level.

Appendix C. Dividend payout, constituency statutes, and shareholder wealth

Dependent=	(1)	(2)
	ROE (*t*)	*TQ* (*t*)
DIV_PAYER(*t*-1)×*CS*	-0.015	-0.072
	(−1.23)	(−1.24)
DIV_PAYER(*t*-1)	0.050 * **	0.214 * **
	(6.20)	(5.50)
CS	0.019 *	0.048
	(1.77)	(0.94)
SIZE	0.016 * **	-0.089 * **
	(6.15)	(−7.10)
LEV	-0.143 * **	-0.203 * *
	(−4.58)	(−2.21)
LOGAGE	0.016 * **	-0.046 * *
	(3.23)	(−2.25)
CASH	-0.035	2.072 * **
	(−1.34)	(18.49)
TANGIBILITY	-0.078 * **	-0.616 * **
	(−2.97)	(−6.39)
SG	0.025 * *	0.452 * **
	(2.29)	(12.60)
CAPEX	0.371 * **	4.528 * **
	(4.15)	(13.00)
AD	0.067	3.712 * **
	(0.45)	(4.51)
RD	-1.311 * **	2.902 * **
	(−10.06)	(8.93)
CONSTANT	-0.058	2.273 * **
	(−1.10)	(6.94)
IND FE	Yes	Yes
YEAR FE	Yes	Yes
N	42246	38115
ADJ. R-SQ	0.080	0.376

This table examines the shareholder wealth for dividend paying firms incorporated in CS adoption states. The dependent variable is return on equity (*ROE*) in column (1) and Tobin's Q (*TQ*) in column (2). We control for industry and year fixed effects in all specifications. Control variables are lagged by one year. Variable definitions are provided in Appendix D. * ** , * *, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests and standard errors clustered at the firm-level.

Appendix D. Variable definitions

Variable	Definition	Source
Dependent variables		
ADJ_NETCSR	The sum of strength scores across the six CSR categories scaled by total number of strength indicators minus the sum of concern scores across the six CSR categories scaled by the total number of concern indicators in year *t*.	KLD database
ADJ_SUMSTR	The sum of strength scores across the six CSR categories scaled by total number of strength indicators in year *t*.	KLD database
ADJ_SUMCON	The sum of concern scores across the six CSR categories scaled by total number of concern indicators in year *t*.	KLD database
Independent variable		
DIV_PAYER	An indicator variable that equals one if a firm pays dividends and zero otherwise.	Compustat
Control variables		

(*continued*)

Variable	Definition	Source
SIZE	Natural logarithm of book value of total assets in millions.	Compustat
ROA	Net income before extraordinary items scaled by book value of total assets.	Compustat
MTB	Market-to-book ratio.	Compustat
LEV	Total long-term debt scaled by book value of total assets.	Compustat
LOGAGE	Natural logarithm of firm age, calculated as the number of years between the current year *t* and the first year the company appeared in CRSP database.	Compustat
CASH	Cash balance scaled by total assets.	Compustat
TANGIBILITY	Tangible assets scaled by total assets.	Compustat
SG	Change of sales scaled by lagged sales.	Compustat
CAPEX	Capital expenditure scaled by book value of total assets.	Compustat
AD	Advertising expense scaled by sales.	Compustat
RD	Research and development expense scaled by sales.	Compustat
Other variables		
IRISK	Standard deviation of residual estimated from a market model using daily returns in the prior year.	CRSP
EDIV_PAYER	The predicted component of *DIV_PAYER* by regressing *DIV_PAYER* on concurrent firm fundamentals.	Compustat
RDIV_PAYER	The residual component of *DIV_PAYER* by regressing *DIV_PAYER* on concurrent firm fundamentals.	Compustat
CS	An indicator variable that equals one if a firm's incorporation state has adopted constituency statutes in year *t*, and zero otherwise.	Compustat
COMCSR	The sum of strength scores in the community category scaled by total number of strength indicators minus the sum of concern scores in the community category scaled by the total number of concern indicators in year *t*.	KLD database
DIVCSR	The sum of strength scores in the diversity category scaled by total number of strength indicators minus the sum of concern scores in the diversity category scaled by the total number of concern indicators in year *t*.	KLD database
EMPCSR	The sum of strength scores in the employee category scaled by total number of strength indicators minus the sum of concern scores in the employee category scaled by the total number of concern indicators in year *t*.	KLD database
ENVCSR	The sum of strength scores in the environment category scaled by total number of strength indicators minus the sum of concern scores in the environment category scaled by the total number of concern indicators in year *t*.	KLD database
HUMCSR	The sum of strength scores in the human right category scaled by total number of strength indicators minus the sum of concern scores in the human right category scaled by the total number of concern indicators in year *t*.	KLD database
PROCSR	The sum of strength scores in the product quality category scaled by total number of strength indicators minus the sum of concern scores in the product quality category scaled by the total number of concern indicators in year *t*.	KLD database
COMSTR	The sum of strength scores in the community category scaled by total number of strength indicators in year *t*.	KLD database
DIVSTR	The sum of strength scores in the diversity category scaled by total number of strength indicators in year *t*.	KLD database
EMPSTR	The sum of strength scores in the employee category scaled by total number of strength indicators in year *t*.	KLD database
ENVSTR	The sum of strength scores in the environment category scaled by total number of strength indicators in year *t*.	KLD database
HUMSTR	The sum of strength scores in the human right category scaled by total number of strength indicators in year *t*.	KLD database
PROSTR	The sum of strength scores in the product quality category scaled by total number of strength indicators in year *t*.	KLD database
COMCON	The sum of concern scores in the community category scaled by total number of concern indicators in year *t*.	KLD database
DIVCON	The sum of concern scores in the diversity category scaled by total number of concern indicators in year *t*.	KLD database
EMPCON	The sum of concern scores in the employee category scaled by total number of concern indicators in year *t*.	KLD database
ENVCON	The sum of concern scores in the environment category scaled by total number of concern indicators in year *t*.	KLD database
HUMCON	The sum of concern scores in the human right category scaled by total number of concern indicators in year *t*.	KLD database
PROCON	The sum of concern scores in the product quality category scaled by total number of concern indicators in year *t*.	KLD database
PAYER_DUR	Number of consecutive years of dividend payment.	Compustat
DIV_AT_RANK	Dividend payout ratio, measured as the ratio of cash dividends to total assets	Compustat
PAYOUT_PAYER	An indicator variable that equals one if a firm pays dividends or repurchases shares in year *t* and zero otherwise.	Compustat
MALE	An indicator variable that equals one if a firm's CEO is male and zero otherwise.	Execu-Comp
LOGCEOAGE	The natural logarithm of CEO age.	Execu-Comp
CG	The difference between the number of strengths in corporate governance category and the number of concerns in corporate governance category in a given year.	KLD database
ADJ_NETCSR1	The sum of strength scores across the six CSR categories minus the sum of concern scores across the six CSR categories, scaled by the total number of strength and concern indicators across the six CSR categories.	KLD database
ROE	The ratio of income before extraordinary items over book value of equity in year t.	Compustat
TQ	Book value of total assets minus the book value of equity minus the balance-sheet deferred taxes plus the market value of equity divided by the book value of assets in year t.	Compustat

References

Abeysekera, A., Fernando, C.S., 2020. Corporate social responsibility versus corporate shareholder responsibility: a family firm perspective. J. Corp. Financ. 61, 101370.

Akhigbe, A., Madura, J., 1996. Dividend policy and corporate performance. J. Bus. Financ. Account. 23 (9), 1267–1287.

Albuquerque, R., Koskinen, Y., Zhang, C., 2019. Corporate social responsibility and firm risk: theory and empirical evidence. Manag. Sci. 65 (10), 4451–4949.

Allen, F., Carletti, E., Marquez, R., 2015. Stakeholder governance, competition, and firm value. Rev. Financ. 19, 1315–1346.

Amiraslani, H., Lins, K.V., Servaes, H., Tamayo, A., 2022. Trust, social capital, and the bond market benefits of ESG performance. Rev. Account. Stud. 1–42.

Anantharaman, D., Gao, F., Manchiraju, H., 2022. Does social responsibility begin at home? The relation between firms' pension policies and corporate social responsibility (CSR) activities. Rev. Account. Stud. 27, 76–121.

Azar, J., Duro, M., Kadach, I., Ormazabal, G., 2021. The big three and corporate carbon emissions around the world. J. Financ. Econ. 142, 674–696.

Bainbridge, S.M., 1992. Interpreting non-shareholder constituency statutes. Pepper Law Rev. 19, 991–1025.

Baker, M., Wurgler, J., 2004. A catering theory of dividends. J. Financ. 59 (3), 1125–1165.

Banker, R.D., Ma, X., Pomare, C., Zhang, Y., 2022. When doing good for society is good for shareholders: importance of alignment between strategy and CSR performance. Rev. Account. Stud. 27, 76–121.

Barzuza, M., 2009. The state of state antitakeover law. Va Law Rev. 95, 1973–2052.

Becker, B., Strömberg, P., 2012. Fiduciary duties and equity-debtholder conflicts. Rev. Financ. Stud. 25 (6), 1931–1969.

Benlemlih, M., 2019. Corporate social responsibility and dividend policy. Res. Int. Bus. Financ. 47, 114–138.

Bhattacharya, S., 1979. An exploration of non-dissipative dividend-signaling structures. J. Financ. Quant. Anal. 14 (4), 667–668.

Blouin, J., Raedy, J., Shackelford, D., 2011. Dividends, share repurchases, and tax clienteles: evidence from the 2003 reductions in shareholder taxes. Account. Rev. 86 (3), 887–914.

Brav, A., Graham, J.R., Harvey, C.R., Michaely, R., 2005. Payout policy in the 21st century. J. Financ. Econ. 77, 483–528.

Brockman, P., Unlu, E., 2009. Dividend policy, creditor rights, and the agency costs of debt. J. Financ. Econ. 92 (2), 276–299.

Byun, S.K., Oh, J.M., 2018. Local corporate social responsibility, media coverage, and shareholder value. J. Bank. Financ. 87, 68–86.

Cao, J., Liang, H., Zhan, X., 2019. Peer effects of corporate social responsibility. Manag. Sci. 65 (12), 5449–5956.

Chakravarthy, J., DeHaan, E., Rajgopal, S., 2014. Reputation repair after a serious restatement. Account. Rev. 89 (4), 1329–1363.

Charitou, A., Vafeas, N., 1998. The association between operating cash flows and dividend changes: an empirical investigation. J. Bus. Financ. Account. 25 (1), 225–249.

Chava, S., 2014. Environmental externalities and cost of capital. Manag. Sci. 60 (9), 2223–2247.

Chemmanur, T., Tian, X., 2012. Preparing the equity market for adverse corporate events: a theoretical Analysis of firms cutting dividends. J. Financ. Quant. Anal. 47 (5), 972–993.

Chemmanur, T., Tian, X., 2014. Communicating private information to the equity market before a dividend cut: an empirical analysis. J. Financ. Quant. Anal. 49 (5–6), 1167–1199.

Chemmanur, T., Li, Y., Xie, J., & Zhu, Y.Y. (2022). Noisy signaling through open market share repurchase programs and information production by institutions. *Working Paper.*

Chemmanur, T., Sun, Z.Y., & Xie, J. (2023). Keeping up with the Joneses: Corporate dividends and common institutional blockholders. *Working Paper.*

Chen, H., Kacperczyk, M., Ortiz-Molina, H., 2012. Do nonfinancial stakeholders affect the pricing of risky debt? Evidence from unionized workers. Rev. Financ. 16, 347–383.

Chen, T., Dong, H., Lin, C., 2020. Institutional shareholders and corporate social responsibility. J. Financ. Econ. 135, 483–504.

Cheng, I.H., Hong, H., & Shue, K. (2020). Do managers do good with other peoples' money? Working paper.

Cheung, A., Hu, M., Schwiebert, J., 2018. Corporate social responsibility and dividend policy. Account. Financ. 58, 787–816.

Chu, Y., 2018. Shareholder-creditor conflict and payout policy: Evidence from mergers between lenders and shareholders. Rev. Financ. Stud. 31 (8), 3098–3121.

Cronqvist, H., Yu, F., 2017. Shaped by their daughters: executives, female socialization, and corporate social responsibility. J. Financ. Econ. 126 (3), 543–562.

DeAngelo, H., DeAngelo, L., 1990. Dividend policy and financial distress: an empirical investigation of troubled NYSE firms. J. Financ. 45, 1415–1431.

DeAngelo, H., DeAngelo, L., 1991. Union negotiations and corporate policy: a study of labor concessions in the domestic steel industry during the 1980s. J. Financ. Econ. 30, 3–43.

DeAngelo, H., DeAngelo, L., Skinner, D.J., 2009. Corporate payout policy. Found. Trends Financ. 3, 95–287.

Deng, X., Kang, J.K., Low, B.S., 2013. Corporate social responsibility and stakeholder value maximization: evidence from mergers. J. Financ. Econ. 110 (1), 87–109.

Di Giuli, A., Kostovetsky, L., 2014. Are red or blue companies more likely to go green? Politics and corporate social responsibility. J. Financ. Econ. 111 (1), 158–180.

Dodd, E.M., 1932. For whom are corporate managers trustees? Harv. Law Rev. 45 (7), 1145–1163.

Eccles, R., Rajgopal, S., & Xie, J. (2023). Does ESG negative screening work? *Working Paper.*

Fama, E.F., 1990. Contract costs and financing decisions. J. Bus. 63, S71–S91.

Ferrell, A., Liang, H., Renneboog, L., 2016. Socially responsible firms. J. Financ. Econ. 122 (3), 585–606.

Flammer, C., 2015. Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. Manag. Sci. 61 (11), 2549–2568.

Flammer, C., Kacperczyk, A., 2016. The impact of stakeholder orientation on innovation: evidence from a natural experiment. Manag. Sci. 62 (7), 1982–2001.

Freeman, R.E., 2010. Strategic Management: A Stakeholder Approach. Cambridge University Press, Cambridge.

Gao, H., Li, K., Ma, Y., 2021. Stakeholder orientation and the cost of debt: Evidence from a natural experiment. J. Financ. Quant. Anal. 56 (6), 1908–1944.

Goss, A., Roberts, G.S., 2011. The impact of corporate social responsibility on the cost of bank loans. J. Bank. Financ. 35 (7), 1794–1810.

Hainmueller, J., 2012. Entropy balancing for causal effects: a multivariate reweighting method to produce balanced samples in observational studies. Political Anal. 20 (1), 25–46.

Hameed, A., Xie, J., 2019. Preference for dividends and return comovement. J. Financ. Econ. 132 (1), 103–125.

Hameed, A., Xie, J., & Zhong, Y.X. (2023). Preference for dividends and stock returns around the world. *Working Paper.*

Handjinicolaou, G., Kalay, A., 1984. Wealth redistributions or changes in firm value: an analysis of returns to bondholders and stockholders around dividend announcements. J. Financ. Econ. 13 (1), 35–63.

Hoberg, G., Prabhala, N.R., 2009. Dividend policy, risk, and catering. Rev. Financ. Stud. 22 (1), 79–116.

Holder, M.E., Langrehr, F.W., Hexter, J.L., 1998. Dividend policy determinants: an investigation of the influences of stakeholder theory. Financ. Manag. 73–82.

Homburg, C., Müller, C., Nasev, J., 2018. How important are dividend signals in assessing earnings persistence? Contemp. Account. Res. 35 (4), 2082–2105.

Hong, H., Kubik, J.D., Scheinkman, J.A., 2012. Financial constraints on corporate goodness. Natl. Bur. Econ. Res. *Working Paper No. 18476.*

Husted, B.W., Jamali, D., Saffar, W., 2015. Near and dear? The role of location in CSR engagement. Strateg. Manag. J. 37 (10), 2050–2070.

Jensen, M.C., 1983. Organization theory and methodology. Account. Rev. 58 (2), 319–339.

Jensen, M.C., 1986. Agency cost of free cash flow, corporate finance, and takeovers. Am. Econ. Rev. 76 (2), 323–329.

Jensen, M.C., Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. J. Financ. Econ. 3 (4), 305–360.

Jha, A., Kulchania, M., Kwon, M.J., 2022. Stock repurchasing and corporate social responsibility. J. Financ. Stab. 62, 101071.

Jiang, W., Li, K., Shao, P., 2010. When shareholders are creditors: effects of the simultaneous holding of equity and debt by non-commercial banking institutions. Rev. Financ. Stud. 23 (10), 3595–3637.

John, K., Williams, J., 1985. Dividends, dilution, and taxes: a signalling equilibrium. J. Financ. 40 (4), 1053–1070.

Kacperczyk, M., Lin, P., & Xie, J. (2023). ESG investing and stock return comovements. *Working Paper.*

Kalay, A., 1982. Stockholder-bondholder conflict and dividend constraints. J. Financ. Econ. 10 (2), 211–233.

Karpoff, J.M., Wittry, M.D., 2018. Institutional and legal context in natural experiments: the case of state antitakeover laws. J. Financ. 73 (2), 657–714.

Krüger, P., 2015. Corporate goodness and shareholder wealth. J. Financ. Econ. 115 (2), 304–329.

Lang, L., Litzenberger, R.H., 1989. Dividend announcements: cash flow signalling vs. free cash flow hypothesis? J. Financ. Econ. 24 (1), 181–191.

Li, Z., Liu, H., Ni, C., Ye, K., 2017. Individual investors' dividend taxes and corporate payout policies. J. Financ. Quant. Anal. 52 (3), 963–990.

Liang, H., Renneboog, L., 2017. On the foundations of corporate social responsibility. J. Financ. 72 (2), 853–908.

Lys, T., Naughton, J.P., Wang, C., 2015. Signaling through corporate accountability reporting. J. Account. Econ. 60, 56–72.

Masulis, R., Reza, S.W., 2015. Agency problems of corporate philanthropy. Rev. Financ. Stud. 28 (2), 592–636.

McCarthy, S., Oliver, B., Song, S., 2017. Corporate social responsibility and CEO confidence. J. Bank. Financ. 75, 280–291.

Miller, M.H., Modigliani, F., 1961. Dividend policy, growth, and the valuation of shares. J. Bus. 34 (4), 411–433.

Mougoué, M., Rao, R., 2003. The information signaling hypothesis of dividends: evidence from cointegration and causality tests. J. Bus. Financ. Account. 30 (3–4), 441–478.

Ni, X., 2020. Does stakeholder orientation matter for earnings management: evidence from non-shareholder constituency statutes. J. Corp. Financ. 62, 101606.

Ni, X., Song, W., Yao, J., 2020. Stakeholder orientation and corporate payout policy: Insights from state legal shocks. J. Bank. Financ. 121, 105970.

Roe, M.J., Spamann, H., Fried, J.M., Wang, C.C., 2020. The European Commission's sustainable corporate governance report: a critique. Eur. Corp. Gov. Inst. -Law. Working Paper, 553.20-30.

Servaes, H., Tamayo, A., 2013. The impact of corporate social responsibility on firm value: the role of customer awareness. Manag. Sci. 59 (5), 1045–1061.

Shipman, J.E., Swanquist, Q.T., Whited, R.L., 2017. Propensity score matching in accounting research. Account. Rev. 92 (1), 213–244.

Surroca, J., Tribo, J.A., 2008. Managerial entrenchment and corporate social performance. J. Bus. Financ. Account. 35 (5–6), 748–789.

Tirole, J., 2001. Corporate governance. Econometrica 69 (1), 1–35.

Wang, X.Q., Xie, J., Zhang, B.H., & Zhao X.F. (2023). Unraveling the dividend puzzle: A field experiment. *Working Paper.*

Yuan, Y., Tian, G., Lu, L.Y., Yu, Y., 2019. CEO ability and corporate social responsibility. J. Bus. Ethics 157 (2), 391–411.