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When Net-Zero Goals Meet Zero-Sum Realities: New Insights on the CSR-Firm Value Effect and the Role of New Product Development Versus Marketing

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ABSTRACT

Academic Summary: Corporate social responsibility (CSR) is a key strategy to achieving (e.g., environmental) sustainability. While many studies report a positive effect of CSR on firm value, growing evidence suggests practice often fails to unlock such effect. This equivocality may arise from conflicting theoretical perspectives, insufficient consideration of granular CSR activities, and/or neglecting the role of new product development (NPD). We address this equivocality through a theoretically unprejudiced exploration of the effects of a comprehensive set of CSR activities on firm value and by investigating the underexplored moderating role of NPD alongside that of marketing moderators. Econometric analysis of 3,107 firms across industries unveils that the largely overlooked CSR activities addressing social concern avoidance (e.g., by protecting stakeholders from environmental hazards) account for the greatest number of significant effects on firm value. Second, all significant effects of CSR activities on firm value are negative. Third, while all significant interaction effects of CSR activities and NPD on firm value are positive, most interactions with marketing instruments are negative. Overall, the findings highlight the critical role of NPD in potentially unlocking a positive effect of CSR on firm value. Even more so, they suggest treating CSR and firm value as separate strategic goals—akin to sustainability's people, planet, and profit objectives.

Managerial Summary: While many firms invest in corporate social responsibility (CSR) initiatives not only to advance sustainability but also to drive firm value, this research shows that only a subset of CSR activities has a significant effect on firm value and that these effects are predominantly negative. Many of the CSR activities with significant effects relate to avoiding social or environmental harm, but their impact varies markedly across stakeholders, rendering aggregate CSR strategies misleading for managerial decision-making. Further, whether CSR activities undermine or support firm value depends critically on how they are implemented. For innovation and R&D managers, the findings suggest that CSR activities are most effective when embedded in new product development. For marketing managers, the findings urge caution, as heavy reliance on branding and other marketing tools to advance the firm's CSR objectives can amplify negative effects on firm value. For senior executives, the results suggest a need to treat CSR and firm value as distinct strategic goals and carefully balancing specific CSR activities rather

than assuming uniform financial payoffs. For policy makers and regulators, the findings indicate that markets may penalize sustainability efforts, at least in the short term, underscoring the need for targeted regulatory support and incentives.

1 | Introduction

Sustainability is commonly framed by the triple bottom line, which integrates the firm's social, environmental, and economic objectives (Elkington 1997). While firms advance social and environmental objectives through corporate social responsibility (CSR; ISO 2016)—activities that reflect their commitment to long-term societal and environmental objectives—they pursue economic goals by creating firm value (Kim et al. 2024). A compelling case has been made that these objectives are related, with prior research widely reporting a positive effect of CSR on firm value (Luo and Bhattacharya 2006, 2009). Correspondingly, Fortune 500 companies have spent $20 billion annually on CSR activities (Forbes 2022), with a global industry offering socially responsible investments that has grown to $35 trillion annually (Bloomberg 2024a). However, both business practice (Bloomberg 2024b; Forbes 2008) and academic scholarship (Climent and Soriano 2011; Revelli and Viviani 2015) increasingly suggest that firms struggle to derive financial value from specific CSR activities, leading them to question their ongoing commitment to CSR.

Three observations may explain this equivocality. First, prior research has relied on two dominant theories that predict opposing effects. While agency theory predicts a negative effect of CSR on firm value (Barnea and Rubin 2010), instrumental stakeholder theory envisages a positive effect (Barnett 2007). In line with these predictions, Hirsch et al.'s (2023) meta-analysis identifies a publication bias favoring the reporting of either statistically significant positive or negative effects of CSR on firm performance. Therefore, a gap exists that calls for empirical research on the effect of CSR on firm value without the a priori adoption of any theoretical perspective (Golder et al. 2023).

Second, most CSR research lacks practical applicability due to insufficient consideration of granular CSR activities (Salinas and Somasundaram 2024). As shown in Table 1, prior research has focused on aggregate CSR measures (Luo and Bhattacharya 2006). However, managers need to understand the firm value effects of *dis*aggregate CSR activities to inform their CSR decision-making (Lenz et al. 2017). Prior research has only selectively accounted for them (Groening et al. 2016; Mishra and Modi 2016), generating a second gap.

Third, while prior research has explored the moderating role of selected marketing instruments in the effect of CSR activities on firm value, it has focused less on innovation, including new product development (NPD; see Table 1). However, CSR activities are largely intangible and difficult to grasp and may thus be perceived as insincere (Mishra and Modi 2016). Marketing may exacerbate these perceptions as its consumption focus may conflict with the CSR goal of sustainable value creation (Kumar et al. 2025). Though NPD may help tackle these challenges (e.g., owing to its greater tangible goods focus and its ability to signal the sincere commitment of the firm to creating superior stakeholder value; Klein et al. 2021), the role of NPD (vs. marketing) in influencing the effect of specific CSR activities on firm value remains underexplored, yielding a third gap.

Bridging these gaps, we address the following research questions: (1) *Which CSR activities impact firm value*? (2) *Which CSR activities best align with NPD or marketing instruments*? And (3) *What is the impact of NPD* (vs. *marketing instruments) on the effect of CSR activities on firm value?*

As theory-driven expectations may be at least partially responsible for the observed equivocality (Hirsch et al. 2023), we adopt an empirics-first approach to explore the effects of granular CSR activities on firm value and assess the moderating role of NPD (vs. marketing instruments) in a theoretically unprejudiced manner (Golder et al. 2023; Graebner et al. 2023). We study CSR activities in a comprehensive set of stakeholder domains (Godfrey et al. 2009). In each domain, we explore the firm value impact of CSR activities designed to promote social strengths (e.g., enhancing wellbeing by funding local communities) and those to avoid social concerns (e.g., protecting stakeholders from environmental hazards through net-zero policies). For these granular CSR activities, we explore the moderating effects of NPD intensity and marketing instruments. Overall, we account for the firm value effects of 12 distinct CSR activities and their interactions with NPD and 4 established marketing instruments, yielding a total of 60 interaction effects. The sample tracks 3107 firms across multiple industries over 19 years (Kang et al. 2016). As Hirsch et al. (2023) imply, we account rigorously for potential sources of unobserved heterogeneity (i.e., firm, time, and firm-time specific sources).

This study makes the following contributions to the CSR, NPD, and innovation management literatures. First, we advance empirical insight into the effect of CSR on firm value by exploring CSR activities at the most disaggregate level while accounting for the most comprehensive set of activities studied to-date. We show that only 5 of the 12 examined CSR activities exert a significant main effect on firm value, each of which is negative. While prior research has almost exclusively focused on CSR activities that promote social strengths (e.g., Mishra and Modi 2016), we find that the majority of these significant effects is associated with CSR activities focusing on protecting stakeholders' interests. These findings indicate that concern avoidance activities (e.g., preventing environmental harm) are considered costs by investors and safeguarding the environmental and social objectives of sustainability can clash with its economic objective, challenging the notion that the triple bottom line of sustainability is a non-zero sum game in which advancing one objective automatically progresses another (Clark et al. 2015).

Second, the results add novel empirical insight into the interplay of CSR activities and NPD. While prior literature has focused on the role of marketing instruments (e.g., advertising), our results indicate the superiority of NPD (vs. marketing instruments) for improving the financial performance of CSR activities. Specifically, the results reveal that each of the significant interaction effects between CSR activities and NPD are positive,

TABLE 1 | Prior research addressing the interplay of CSR, NPD or marketing, and firm value.

Study	Disaggregated CSR activities				Role of NPD	Role of marketing				Key insights
	Social strengths	Social concerns	Technical domains	Institutional domains		Advertising	Distribution	Pricing	Brand-ding	
Luo and Bhattacharya (2006)					✓					• NPD leverages the positive effect of CSR on firm value.
Servaes and Tamayo (2013)						✓				• Advertising leverages the effect of CSR on firm value; for low advertising intensity the firm value effect of CSR is negative.
Mishra and Modi (2016)	✓		✓	✓		✓	✓			• Social strength should be disentangled into stakeholder domains. • Marketing instruments leverage the effects of some CSR activities on firm value.
Groening et al. (2016)	✓	✓	✓						✓	• Stakeholder needs differ across domains. • Brands' product line breadth moderates the effects of employee-related CSR activities on firm value.
This study	✓	✓	✓	✓	✓	✓	✓	✓	✓	• Social strength and social concern avoidance differ across stakeholder domains in terms of their effects on firm value. • The most relevant CSR activities (those related to social concern avoidance) have received the least attention in prior research. • CSR activities have no or a significant negative effect on firm value. • NPD is more successful in unlocking positive effects of CSR activities on firm value than marketing activities. • The tension between social and financial goals could be solved by viewing them as separate goals.

while many of their significant interactions with marketing instruments are negative, in line with greenwashing accusations (Habel et al. 2016; Ioannu et al. 2023). Overall, these findings indicate the capacity of NPD to align the firm's environmental sustainability and other CSR objectives with firm value.

Third, the results substantiate that the observed theoretical equivocality may be reconciled by questioning whether CSR should be viewed as a means to grow firm value. Instead, it should be viewed as a firm goal in its own right that is incompatible with a profit objective, in line with the emerging paradox perspective (Berti and Cunha 2023). Indeed, the predominantly negative observed effects of CSR activities on firm value suggest that CSR may fail unless it is treated as a distinct managerial goal. In other words, for CSR to achieve desired environmental and social sustainability outcomes, it needs to be treated as being of equal strategic importance as firm value (vs. being seen as merely instrumental to it). Only then can firms balance the triple bottom line.

2 | Research Approach

We employ an empirics-first approach. Golder et al. (2023) highlight multiple conditions that call for an empirics-first approach and emphasize that this approach is appropriate "when *any* of the conditions are met" (p. 325). Several recent studies highlight equivocality about an effect as the key reason to choose an empirics-first approach (e.g., Habel et al. 2023; Wu et al. 2024), as also adopted in this research.

2.1 | Equivocality of Prior Evidence About the Firm Value Effects of CSR Activities

There is *stark equivocality* of prior evidence regarding the effect of CSR on firm value in two respects. First, we observe a *research-practice equivocality*. While prior literature, particularly in marketing, widely supports the notion that engaging in CSR is a strategic win-win where companies are rewarded for their CSR investments through enhanced firm value (Servaes and Tamayo 2013), managerial wisdom increasingly draws a less optimistic picture. For example, Hein Schumacher, CEO of Unilever, recently refocused the company's CSR approach to "realistic sustainability" by discontinuing initiatives that detract from its economic bottom line (Salinas and Somasundaram 2024). Second, there is an *equivocality across prior empirical findings*. In particular, empirical CSR findings in other fields (e.g., Climent and Soriano 2011; Revelli and Viviani 2015) conflict with the prevailing "CSR pays off" mantra in marketing research (Luo and Bhattacharya 2006). We next discuss potential sources of this equivocality.

2.2 | Sources of the Observed Equivocality

2.2.1 | Conflict Between Dominant Theoretical Perspectives

The first potential source of the observed equivocality is the reliance of prior literature on either of two theoretical perspectives that conflict in their predictions about the effect of CSR on firm value.

Agency theory (e.g., Jensen and Meckling 1976) posits that CSR represents an agency problem between managers (the agents) and shareholders (the principals). Managers may devote resources to stakeholders (e.g., charities) for personal gain (e.g., to improve their own standing in the community), implying a cost to the firm (Friedman 1970). Resolving the conflict between managers' (vs. shareholders') goals requires strict control, further inflating costs. Agency theorists thus argue CSR has a negative effect on firm value.

In contrast, *instrumental stakeholder theory* (Freeman 1984) maintains that CSR strengthens stakeholder relationships, which benefits the firm because each stakeholder controls unique resources that can be leveraged to boost firm performance (Barnett 2007). Firms that address stakeholder expectations through CSR gain privileged access to these resources and are poised to outperform competitors (Homburg et al. 2013). Thus, instrumental stakeholder theorists foretell a positive effect of CSR on firm value.

A key take-away from the two theories is that they imply conflicting directions of the effect of CSR on firm value. As the adopted theoretical perspective may influence variable selection and operationalization (Golder et al. 2023) and may highlight specific positive or negative effects (Lehmann 2020), the adoption of a particular theory may have contributed to a bi-directional publication bias in CSR-firm value research (Hirsch et al. 2023). Consequently, a theory-agnostic study design is imperative for our study (Graebner et al. 2023).

2.2.2 | Insufficient Consideration of Different CSR Activities

A second potential source of the observed equivocality is the lack of empirical evidence about the firm value consequences of specific CSR activities. CSR is broadly defined as the firm's commitment to long-term societal and environmental objectives (Kim et al. 2024), offering an important pathway to its (e.g., environmental) sustainability (Zhang and Hao 2024). It thus reflects those firm activities that relate to its obligations to its stakeholders, including customers, employees, local communities, not-for-profit organizations, and public interest groups (Brown and Dacin 1997) as well as to the environment (Kumar et al. 2025). This definition implies that CSR activities differ in terms of the stakeholders they target (Flammer 2015) and in terms of how they serve the interests of these stakeholders (by promoting stakeholder interests or by protecting them from negative externalities; Acuti et al. 2024; Nickerson et al. 2022).

While CSR measures differ substantially across both aspects, prior empirical research has not sufficiently accounted for the role of different CSR activities. Despite the diverse nature of CSR activities required to address the needs of different stakeholders, prior studies have tended to aggregate CSR activities into an overall "net" CSR measure (e.g., Godfrey et al. 2009). Prior studies have also widely conmingled selected CSR activities that serve the firm's obligations to different stakeholders. For instance, while Luo and Bhattacharya (2006) combine activities that promote different stakeholders' interests, Servaes

and Tamayo (2013) aggregate activities that refer to both the promotion and the protection of stakeholders' interests. While a few other studies account for CSR at a more granular level, their analyses tend to be limited to exploring isolated CSR activities, including the promotion of customers' (Özturan and Grinstein 2022) or employees' interests (Bode and Singh 2018).

Overall, to address the insufficient consideration of the diversity of CSR activities, it is necessary to disentangle CSR activities designed to benefit different stakeholders and the distinct approaches to serve their respective needs.

2.2.3 | Insufficient Consideration of the Interactions of CSR Activities With NPD Intensity

While literature addressing the CSR-firm interface has focused on marketing instruments, it has widely overlooked the role of NPD.[1] However, it is unlikely that findings about the moderating effects of marketing instruments on the effect of CSR on firm value are transferable to NPD. The innovation literature suggests that marketing and NPD are characterized by fundamentally different capabilities. Marketing reflects the firm's capabilities to commercially exploit value, including by promoting and selling existing products (Krasnikov and Jayachandran 2008; Mizik and Jacobson 2003). Value exploitation refers to optimizing and efficiently using the firm's resources to ensure its current viability and short-term performance. However, stakeholders may be skeptical of firms that accompany their CSR activities by intense marketing efforts (e.g., branding or advertising), potentially yielding perceived deceptive conduct (e.g., greenwashing, window dressing; Habel et al. 2016; Ioannu et al. 2023).

By contrast, NPD reflects value exploration in terms of a firm's pursuit of new product opportunities and experimentation to secure its future viability (O'Reilly and Tushman 2013). It embodies transforming ideas into new offerings and generating tangible outcomes that make the otherwise abstract exploration process visible to customers and other stakeholders (Katila and Ahuja 2002). As the ethical values underlying CSR activities are often intangible and less perceptible, linking CSR to concrete NPD outcomes (products) can help enhance their visibility. For instance, product innovations that integrate environmental considerations offer stakeholders observable evidence of the firm's commitment to CSR, strengthening the positive impact of CSR on firm value.

A further challenge of CSR activities is that they are often perceived as hypocritical and merely symbolic as they sometimes clash with the firm's bad deeds in other areas, indicating contradictory values (Lenz et al. 2017). NPD may also help overcome this challenge. Specifically, NPD requires substantial irreversible R&D investments (Levitas and Ann McFadyen 2009). Coupling intense NPD with CSR activities increases the perceived credibility of CSR efforts, as the firm can demonstrate that it lives up to its responsibility claims by developing innovative products that help reduce its adverse environmental impact (González-Ramos et al. 2023). Tying CSR to NPD thus signals that the firm cares about its stakeholders, reinforcing the firm value impact of its CSR efforts.

We conclude that to legitimize CSR activities through NPD, it is necessary to (a) better understand the role of the firm's NPD efforts in leveraging the effects of its CSR activities on firm value, and (b) compare it with the role of marketing instruments in shaping the effect of CSR on firm value.

2.3 | Empirics-First Approach Helps Overcome the Observed Equivocality

The literature synthesis uncovers equivocality in prior evidence on the effects of CSR activities on firm value, alongside lacking insight into the role of NPD in shaping these effects. The adopted empirics-first approach lends itself particularly well to tackling these challenges (Golder et al. 2023; Graebner et al. 2023). First, this approach addresses the issue of conflicting theoretical evidence because it is agnostic to prior theory (Golder et al. 2023). While traditional theory-first approaches may have infused a level of bias into published CSR research by enforcing strict adherence to pre-existing theoretical beliefs (Hirsch et al. 2023), adoption of an empirics-first approach removes the capacity of theory to influence the results, thus offering a more objective examination (Lehmann 2020). This does not imply a disregard for existing theory but instead offers a data-driven approach to advancing theory by grounding new theory in empirical results. Second, this approach offers the flexibility to systematically explore a large range of effects, which would be impractical under the umbrella of any prespecified theory. We assess the firm value effects of 12 distinct CSR activities and their interactions with NPD and 4 core marketing instruments ($12 \times 5 = 60$ interactions).

3 | Study Framework

We explore the effects of disaggregate CSR activities on firm value and study the moderating role of NPD (vs. marketing instruments) in this effect. In this section, we view firm value and CSR as well as NPD and marketing instruments from a sustainability viewpoint.

3.1 | A Sustainability Perspective on Firm Value and CSR

The sustainability paradigm rests on the argument that firms should achieve more than just economic performance to successfully compete long-term. Described as the "triple bottom line," sustainability subsumes the firm's economic, environmental, and social outcomes (Kim et al. 2024). While firm value comprises its economic outcomes, CSR is concerned with achieving its environmental and social outcomes.

3.1.1 | Firm Value

Within the sustainability paradigm, firm value represents the economic dimension of the triple bottom line. Achieving economic sustainability requires firms to generate enduring value that ensures long-term viability and competitiveness. Defined as a firm's capacity to sustain cash flows into the future, *firm*

value extends beyond short-term profitability (Jayachandran et al. 2013; Lee and Grewal 2004). Consequently, enhanced firm value embodies the economic outcome that arises when financial performance aligns with responsible and forward-looking behavior.

3.1.2 | Corporate Social Responsibility

Within the sustainability paradigm, CSR is concerned with the environmental and social dimensions of the triple bottom line of sustainability and accounts for the concrete actions that can be taken to achieve environmental and social goals (Zhang and Hao 2024).

Accordingly, *Corporate Social Responsibility* (CSR) comprises each of the firm's activities that reflect its commitment to environmental and societal objectives (Kim et al. 2024). CSR activities can be distinguished based on two main criteria (Brown and Dacin 1997). First, CSR activities cater to different stakeholders and their respective needs, including customers (e.g., product), employees (e.g., employee relations), local communities (e.g., community relations), diversity-related stakeholders (e.g., women, LGBTQ+ or disabled individuals), environmental interest groups, and NGOs (e.g., those focused on human rights; Flammer 2015).[2] Second, CSR activities may promote or protect specific stakeholders' interests (Acuti et al. 2024). While CSR activities that promote social strengths are designed to benefit particular stakeholders' interests or wellbeing (e.g., by funding community initiatives), those that protect specific stakeholders by avoiding social concerns aim to ensure that particular stakeholders are not harmed by negative externalities (e.g., pollution).[3]

We account for the differences between the six stakeholders (customers, employees, local communities, women/minority stakeholders, environmental groups, and human rights-oriented NGOs) and the two approaches to address their respective needs (promoting social strengths, avoiding social concerns), disaggregating CSR into (6×2) 12 activities: Product strength, employee strength, community strength, diversity strength, environment strength, human rights strength, product concern avoidance, employee concern avoidance, community concern avoidance, diversity concern avoidance, environment concern avoidance, and human rights concern avoidance. We compare the effects of these CSR activities on firm value.

3.2 | New Product Development Intensity

While a firm's CSR initiatives are often difficult for stakeholders to observe and verify, its NPD efforts are more directly observable. NPD visibly demonstrates the firm's technological capabilities and its potential to create tangible value for its stakeholders (Mizik and Jacobson 2003). Through its commitment to innovation and value creation, NPD can also enhance stakeholders' perceptions of the firm's perceived CSR sincerity and credibility, as firms that consistently develop meaningful innovations appear more capable and motivated to create lasting value (González-Ramos et al. 2023). In this vein, we define *NPD intensity* as the firm's investment in designing and engineering new offerings (Tse et al. 2017).

3.3 | Marketing Instruments

Marketing centers on the firm's activities to commercially exploit value (e.g., promoting and selling existing products; Mizik and Jacobson 2003). Some prior literature suggests that marketing knowhow in profitably managing customer relationships should be leveraged to also meet other stakeholders' needs and should therefore be a potent lever for CSR performance (Hult et al. 2011; Kumar et al. 2025). In contrast, other studies argue that marketing, when intertwined with other management roles like CSR, may inhibit the effectiveness of the latter in shaping firm performance because it adds coordination complexity without adding tangible value (Grimpe et al. 2017). Despite this ongoing debate, no prior study is known to have comprehensively examined the role of marketing in influencing the effects of the company's CSR activities on firm value. To compare NPD (vs. marketing) in leveraging the firm's CSR activities, we account for the classical marketing mix instruments (4Ps), which capture the firm's efforts to commercialize its existing products.

Based on prior literature (Edeling and Fischer 2016; Hultink et al. 1997; Steenkamp and Gielens 2003), we capture the 4Ps through advertising intensity (promotion), distribution intensity (place), premium pricing (price), and brand strength (product). *Advertising intensity* refers to the firm's advertising investment (above the line) and sales promotions (below the line; Ptok et al. 2018). *Distribution intensity* is the firm's investment in sales activities like prospecting, contract negotiation, or sales implementation across distribution channels (Bucklin et al. 2008). *Premium pricing* reflects the extent to which the firm focuses on high-quality positioning rather than cost efficiency (Berman et al. 1999). *Brand strength* captures the extent to which a brand commands consumers' beneficial cognitive and emotional assessment (e.g., high awareness, positive associations; Keller 1993).

4 | Model Specification

4.1 | Model Requirements

The modeling approach to estimate the effect of CSR on firm value and its interactions with NPD and marketing variables should address several challenges that may lead to the under- or overestimation of the studied effects. First, time-specific factors may systematically affect the sampled firms. For example, economic crises could affect CSR investments and firm value, yielding correlated standard errors (Lins et al. 2017). We account for this issue by estimating time-fixed effects (by including year-based dummies in the model). Second, systematic cross-sectional, time-invariant differences across firms may also pose a problem (e.g., based on industry or firm idiosyncrasies; Steenkamp and Fang 2011). As firm-fixed effects deal with this type of endogeneity, we also consider them in the model. Third, though firm- and time-fixed effects capture a broad array

of potential sources of endogeneity, they fail to account for firm-year-specific factors that correlate with CSR activities and firm value but are difficult to directly control for. For example, a change in the executive board could affect a company's social and firm value (Flammer 2015). As explained below, we use an instrument-free approach to address this issue. Finally, firm-based CSR activities, NPD, and marketing actions may follow a long-term strategy, in which case they would not vary substantially over time, potentially underestimating the standard errors owing to correlated error terms. We thus estimate robust clustered error terms (Cleeren et al. 2013), as detailed below.

4.2 | Baseline Model

We begin with the following model:

$$\begin{aligned} FirmValue_{it} = \alpha_i + \sum_{k=1}^{K} \beta_k CSR_{kit} + \beta_{K+1} Moderator_{it} \\ + \sum_{l=1}^{L} \beta_{K+1+l} CSR_{lit} \times Moderator_{it} \\ + \sum_{r=1}^{R} \beta_{K+1+L+r} Control_{rit} + \varepsilon_{it}, \end{aligned} \tag{1}$$

where i indicates the firm, t the year, and α is the intercept. *FirmValue* is as stated. *CSR* is a placeholder for different ways of capturing CSR at increasing granularity levels. For example, using a net CSR measure, the most aggregate measure results in $K = 1$. K increases in line with measurement granularity. For instance, for CSR we distinguish social strengths from social concerns and further differentiate CSR activities across stakeholders. The most granular approach to capture CSR means accounts for all $K = 12$ CSR activities. We consider one moderator (i.e., NPD intensity, marketing moderators) in the model at a time, denoted by the placeholder *Moderator*.[4] A moderator's interactions with CSR variables are accounted for in the placeholder *CSR* × *Moderator* (i.e., 12 interaction effects in total per moderator). *Control* is a vector of control variables, and ε is the robust clustered error term. Given our annual-level data (the adopted CSR data is released annually), a reasonable assumption is that of contemporaneous effects of the independent variables on firm value (Kang et al. 2016). In fact, the forward-looking nature of firm valuations implies that the stock market immediately accommodates new information, calling for the consideration of concurrent effects of CSR efforts to ensure that the reported effects are based on current CSR activities (vs. efforts *post* the observation period). We also account for the contemporaneous effects of the other variables, based on the rationale that CSR decisions are guided by the company's current situation.

4.3 | Addressing Unobserved Heterogeneity

4.3.1 | Time-Specific Effects

Endogeneity due to unobserved longitudinal heterogeneity may pose a problem if year-specific factors systematically affect all sampled firms. For example, economic crises could affect both social and firm value. To cancel out year-related effects, we include time dummies in the model (Groening et al. 2016), denoted as *Year*:

$$\begin{aligned} FirmValue_{it} = \alpha_i + \sum_{k=1}^{K} \beta_k CSR_{kit} + \beta_{K+1} Moderator_{it} \\ + \sum_{l=1}^{L} \beta_{K+1+l} CSR_{lit} \times Moderator_{it} \\ + \sum_{r=1}^{R} \beta_{K+1+L+r} Control_{rit} \\ + \sum_{t} \delta_t Year_t + \varepsilon_{it}. \end{aligned} \tag{2}$$

4.3.2 | Firm-Specific Effects

Endogeneity due to unobserved cross-sectional heterogeneity could arise from time-invariant differences or idiosyncrasies across firms, including those inherent in the industry, offering(s), or specific leadership styles. These differences may affect a firm's social and financial performance, yielding correlated standard errors. We therefore use the fixed-effects estimator to estimate the model (each firm observation is adjusted by its firm-specific mean).

4.3.3 | Time-Firm-Specific Effects

Endogeneity of CSR activities may arise from unobserved factors that are unique to a specific firm in a particular year. For instance, larger firms can afford to invest more in CSR than smaller firms while at the same time reporting higher firm value. It is preferable to directly account for such sources of endogeneity (Papies et al. 2017), which we undertake by accounting for a range of control variables in the vector *Control*. However, there may still be factors that are difficult to observe. For example, investor expectations about the positive effects of CSR activities on firm value could lead some firms to invest more in CSR at certain times, while also driving up firm value.

One means to address this issue is the instrumental variable approach, where researchers often concentrate on one or two endogenous variables at a time, as fulfilling the requirements in terms of instrument strength, validity, and number becomes increasingly prohibitive with a greater number of endogenous regressors to account for. As we examine a total of 12 CSR activities, the instrumental variable approach is infeasible (Papies et al. 2017). Instead, we use a contemporary instrument-free approach, namely Gaussian copulas (Park and Gupta 2012), which has gained popularity in recent years (e.g., Burmester et al. 2015), including in CSR research (Lenz et al. 2017). A key benefit of this approach is that it does not depend on the choice of strong instruments and flexibly adapts to a larger number of endogenous regressors (Rossi 2014). Gaussian copulas model the joint normal distribution of the endogenous variable and the error term to capture the dependence between the two, which is what causes the endogeneity (Park and Gupta 2012). Equation (3) uses the same net CSR measure as an example that we consider in Equations (1) and (2):

$$C_{CSR_{it}} = \Phi^{-1}\left(H_{CSR}\left(CSR_{it}\right)\right), \tag{3}$$

where Φ^{-1} is the inverse of the normal cumulative distribution function and H(·) is the empirical distribution of the CSR variables. We confirm the validity of the copulas in the results section. We add the copula term as a control variable to Equation (2), yielding Equation (4):

$$\begin{aligned} FirmValue_{it} = \alpha_i &+ \sum_{k=1}^{K} \beta_k CSR_{kit} + \beta_{K+1} Moderator_{it} \\ &+ \sum_{l=1}^{L} \beta_{K+1+l} CSR_{lit} \times Moderator_{it} \\ &+ \sum_{r=1}^{R} \beta_{K+1+L+r} Control_{rit} \\ &+ \sum_{s=1}^{S} \beta_{K+1+L+R+s} C_{CSR_{sit}} \\ &+ \sum_{t} \delta_t Year_t + \epsilon_{it}. \end{aligned} \tag{4}$$

5 | Data

We begin by collecting CSR data from the MSCI *E*nvironment, *S*ocial, and *G*overnance (ESG) Stats database, which is the *de facto* standard in empirical CSR research (Mattingly 2017). The employed ratings refer to clearly defined criteria, rendering them unbiased, objective, and comparable across firms and industries over time (Groening et al. 2016). We use the ESG Stats ratings from the initial database year 1991 through to 2009, as MSCI made significant methodological changes in 2010, yielding one of the longest observation periods used in CSR research to date. Eccles et al. (2019) indicate that findings using more recent ESG stats data mirror the findings using samples from before the methodological changes were made (such as ours). An additional advantage of the chosen sample is that it preempts an ESG/CSR stock market bubble that inflated *post*-2009 (Bloomberg 2024b), offering a more conservative estimation of the effect of CSR on firm value. We next match Compustat data to the dataset to account for firm value, some of the moderators, and control variables. We obtain an unbalanced sample with 18,411 observations from 3107 firms across 371 industries (4-digit SIC codes).[5]

6 | Variables

6.1 | Firm Value

CSR is expected to affect firm value in different ways. We account for these characteristics by using Tobin's *q* as the dependent variable. As Tobin's *q* reflects stock market expectations about a firm's future cash flows and growth (e.g., Lee and Grewal 2004), it accounts for the multiple ways in which CSR affects firm value. It is forward-looking, thus capturing the long-term impact of CSR, and it is not biased by accounting conventions, thus ensuring comparability across firms and industries (Anderson et al. 2004).

However, simplified versions of Tobin's *q* that were previously widely used (e.g., Luo and Bhattacharya 2006) have recently been criticized for overestimating the impact of investments into intangibles such as marketing or CSR, because the intangibles are not accounted for in book value (part of the denominator) and thus increase the simplified Tobin's *q* even if they are not effective at increasing firm performance (Bendle and Butt 2018). We use a state-of-the-art adaptation of Tobin's *q* proposed by Peters and Taylor (2017), Total *q*, to eliminate these concerns. We calculate Total *q* as the ratio of the firm's market value to the replacement costs of physical and intangible firm capital[6] (see Table 2).

6.2 | Corporate Social Responsibility

In line with established measurement protocols, we capture CSR variables through index construction from the MSCI ESG Stats data (e.g., Servaes and Tamayo 2013). MSCI ESG Stats provide social strength and concern ratings in the areas of product (customers), employee relations (employees), community (local communities), diversity (women, minorities), environment (public interest groups), and human rights (NGOs) (Flammer 2015). From these ratings, we construct the below CSR measures that vary in granularity. The measurement approaches, which reflect the established standard, have been applied to different levels of CSR granularity (e.g., Mishra and Modi 2016).[7] We use the less granular measures for model validation and comparison purposes only, given our focus on the most granular approach.

6.2.1 | Focal Measurement Approach

The most granular measurement approach makes full use of the MSCI ESG Stats information and differentiates not only social strengths vs. social concerns, but also stakeholder domains. We capture the CSR activities of firms through the average strength and concern scores per domain. To facilitate the interpretation that a higher score is preferable from a social viewpoint (as is the case for social strengths), we reverse the concern measures to reflect social concern avoidance.[8]

6.2.2 | Alternative Measurement Approaches Used for Comparison Purposes

To assess the role of measurement granularity, we compute a net CSR variable, which is the least granular measure (e.g., Servaes and Tamayo 2013). To attain this measure, we subtract the average social concern scores from the average social strength scores for each stakeholder domain, sum these differences, and divide the total by the number of domains.

One way to achieve moderate granularity is to categorize CSR activities to distinguish *stakeholder groups*, thus accounting for their different needs, interests, and resources (Hult et al. 2011). The common criterion is whether stakeholder entitlements are contractually formalized and can thus be directly enforced (Shapiro 1987), yielding the dual categorization of technical CSR (product and employee domains) and institutional CSR (community, diversity, environment, and human rights domains; Godfrey et al. 2009).[9] To capture technical CSR, we subtract the average social concern scores from the average social strength

TABLE 2 | Variable measurement, data sources, and literature-based support.

Variable	Operationalization	Data source	Literature-based support
Firm value			
Tobin's *q*	Captured as Total *q*. That is, ratio of the firm's market value to the replacement costs of physical and intangible firm capital. The firm's market value is the market value of outstanding equity plus the book value of debt minus the firm's current assets. Firm replacement costs of physical capital are measured as the book value of property, plant, and equipment. Intangible capital is estimated as the sum of the firm's knowledge capital (the capitalized value of firm R&D expenditures) and organizational capital (the capitalized value of firm SGA expenditures).	Compustat	Peters and Taylor (2017)
CSR			
Net CSR	Subtraction of average scores of social concerns from the average scores of social strengths per domain; summed; divided by the number of domains	MSCI ESG Stats	Servaes and Tamayo (2013)
Technical CSR and institutional CSR	Technical CSR: Subtraction of average scores of social concerns from the average scores of social strengths for each technical domain separately (product and employee); summed; divided by the number of technical domains Institutional CSR: Subtraction of average scores of social concerns from the average scores of social strengths for each institutional domain separately (community, diversity, environment, and human rights); summed; divided by the number of institutional domains	MSCI ESG Stats	Servaes and Tamayo (2013)
Social strength and social concern avoidance	Social strength: average scores of social strengths per domain; summed; divided by the number of domains Social concern avoidance: average scores of social concerns per domain; summed; divided by the number of domains; to facilitate interpretation we reversed the concern measure to reflect concern avoidance	MSCI ESG Stats	Kang et al. (2016)
CSR activities (focal measures)	Average scores of social strengths per domain and average scores of social concerns per domain; to facilitate interpretation, we reversed the concern measures to reflect concern avoidance	MSCI ESG Stats	Mishra and Modi (2016)
NPD moderator			
NPD intensity	Research and development (R&D) expenditure divided by book value of total assets	Compustat	McAlister et al. (2016)
Marketing moderators			
Advertising intensity	Advertising expenditure divided by book value of total assets	Compustat	Luo and Bhattacharya (2009)
Distribution intensity	Sales, general, and administrative (SG&A) expenditure minus advertising and R&D expenditures; divided by book value of total assets	Compustat	Bucklin et al. (2008)
Premium pricing	Cost of goods sold divided by total assets	Compustat	McAlister et al. (2016)
Brand strength	Sum of goodwill and other intangible assets divided by book value of total assets	Compustat	Ptok et al. (2018)
Control variables			
Industry concentration	Herfindahl index	Compustat	Lee and Grewal (2004)
Firm size	Log of book value of total assets	Compustat	Servaes and Tamayo (2013)

TABLE 3 | Descriptive statistics.

Variable	*N*	Mean	SD	Min.	Max.
Tobin's *q*	18,411	1.244	1.951	0.034	14.437
CSR variables					
Net CSR	18,411	−0.022	0.072	−0.389	0.345
Technical CSR	18,411	−0.035	0.122	−0.800	0.583
Institutional CSR	18,411	−0.015	0.080	−0.521	0.403
Social strength	18,411	0.037	0.054	0.000	0.547
Social concern avoidance	18,411	0.942	0.062	0.467	1.000
Product strength	18,411	0.023	0.077	0.000	0.750
Employee strength	18,411	0.059	0.115	0.000	0.833
Community strength	18,411	0.029	0.087	0.000	0.750
Diversity strength	18,411	0.075	0.127	0.000	0.875
Environment strength	18,411	0.033	0.087	0.000	0.667
Human rights strength	18,411	0.003	0.043	0.000	1.000
Product concern avoidance	18,411	0.059	0.143	0.000	1.000
Employee concern avoidance	18,411	0.093	0.133	0.000	0.800
Community concern avoidance	18,411	0.019	0.073	0.000	0.750
Diversity concern avoidance	18,411	0.111	0.162	0.000	0.667
Environment concern avoidance	18,411	0.046	0.113	0.000	1.000
Human rights concern avoidance	18,411	0.022	0.088	0.000	1.000
NPD moderator					
NPD intensity	18,411	0.038	0.078	0.000	1.837
Marketing moderators					
Advertising intensity	18,411	0.014	0.044	0.000	2.185
Distribution intensity	18,411	0.189	0.187	0.000	2.484
Premium pricing	18,389	3.778	244.670	0.000	29,326.700
Brand strength	14,618	0.275	0.275	0.000	1.000
Additional control variables					
Industry concentration	18,411	0.224	0.185	0.012	1.000
Firm size	18,411	7.256	1.614	2.317	12.527

scores for each technical domain. We then sum the differences and divide them by the number of technical domains to ensure comparability with the other CSR measures. We follow the same approach to calculate institutional CSR from the institutional domain data.

The next measurement approach also offers a moderate level of granularity, this time by distinguishing *social strengths* and *social concerns* (Kang et al. 2016) to address the balancing act between promoting stakeholders' interests and protecting them (Acuti et al. 2024). To calculate the social strength (concern) measure, we sum the average strength (concern) scores from all domains. As before, we reverse the concern measure to facilitate interpretation and reflect concern avoidance. Finally, we divide both measures by the number of domains considered in each. The full list of CSR indicators used to construct the measures is shown in Web Appendix A.

6.3 | NPD Intensity and Marketing Moderators

We use established measures to capture NPD intensity and the four marketing moderators. To capture NPD intensity, we use research and development expenses scaled by total assets (McAlister et al. 2016). With respect to the marketing moderators, we measure advertising intensity through advertising expenditures scaled by the total assets (Luo and Bhattacharya 2009). We operationalize distribution intensity by subtracting advertising

and R&D expenditures from selling, general, and administrative expenditure and dividing the result by the total assets (Bucklin et al. 2008). Premium pricing is operationalized as the cost of goods sold scaled by total assets, where larger numbers indicate a lower focus on cost efficiency, which aligns with a premium image (McAlister et al. 2016). Brand strength is measured as the sum of goodwill and other intangible assets divided by the book value of total assets (Ptok et al. 2018).

6.4 | Control Variables

It is important to control for firm size, as it affects growth opportunities and thus stock market performance, while requiring further CSR-related choices to be made. We operationalize firm size as the log of its total assets. We also include industry concentration because it determines entry barriers and customer choice and may thus not only call for reduced CSR activities but may also influence firm value directly (Groening et al. 2016). Industry concentration is operationalized using the Herfindahl index, which deploys the sales revenue of all firms in the same industry (four-digit SIC code; Lee and Grewal 2004).

Table 2 summarizes all variables, their operationalization, data sources, and literature-based support, while Table 3 presents descriptive statistics. We also provide the correlations between Tobin's q, CSR activities, and the control variables in Table 4.

7 | Results

7.1 | Model Specification Testing

We assess the appropriateness of the model specification. First, the highest correlation between the independent variables used in the same model is 0.459, remaining well below the recommended 0.800 threshold, indicating that multicollinearity is not an issue (Hair et al. 2010). Next, the Hausman test, which compares fixed- and random-effects models, favors the fixed (vs. the random) effects estimator at each level of CSR measurement granularity ($p < 0.01$), supporting the modeling approach. Finally, we examine the usefulness of Gaussian copulas, which is contingent on the non-normality of the endogenous regressors (Park and Gupta 2012). Shapiro–Wilk tests confirm that non-normality applies to all of them ($p < 0.01$).

7.2 | Analytical Procedures

We perform three analytical steps. As shown in Table 5, we first challenge our modeling approach by testing whether it replicates prior findings. Establishing the soundness of the modeling approach is an important first step to ensure that the findings attained in the subsequent steps can be compared to prior results. Next, Table 1 suggests that CSR measurement granularity may explain the different results across studies, as explored in the second step. The third step uncovers those CSR activities that have the largest effect on firm value, those that are most susceptible to being supported by NPD intensity and marketing moderators, and the relative suitability of NPD intensity (vs. marketing instruments) to provide this support.

7.3 | Analytical Step 1: The Modeling Approach Corroborates Established Findings

We first verify whether the modeling approach is suitable to uncover CSR interactions with NPD (our focal moderator) and advertising (the most widely studied marketing moderator) and their respective effect on firm value. Models 1 and 2 in Table 6 reveal no significant main effect of net CSR on firm value ($p > 0.10$), in line with prior findings (e.g., Mishra and Modi 2016; Servaes and Tamayo 2013). We also find that NPD intensity (Model 1; Luo and Bhattacharya 2006) and advertising intensity (Model 2; Servaes and Tamayo 2013) have significant, positive interaction effects with net CSR on firm value ($p < 0.05$). We conclude that the modeling approach is valid to further explore the effect of CSR on firm value.

7.4 | Analytical Step 2: Measurement Granularity Matters

We next assess whether more (vs. less) granular CSR measures offer additional insight, as confirmed by the findings in Table 7. Comparing Models 1–4 shows that accounting for different stakeholders and their unique needs reveals a picture different from that drawn by less granular CSR approaches. All else being equal, there is no significant effect of net CSR ($\beta = -0.862$, $p > 0.10$; Model 1), technical CSR ($\beta = -0.847$, $p > 0.10$), or institutional CSR ($\beta = 0.576$, $p > 0.10$; Model 2). When we distinguish between social strength and social concern avoidance, an interesting observation emerges. While social strength exerts no significant effect on firm value ($\beta = 1.311$, $p > 0.10$), social concern avoidance has a significant negative effect ($\beta = -3.757$, $p < 0.01$; Model 3). This finding is interesting because most prior studies have neglected social concern avoidance when examining either aggregate or disaggregate CSR measures (Lin-Hi and Müller 2013). Model 4, which employs the most granular measures, has the highest R^2. Employee strength ($\beta = -1.714$, $p < 0.05$), employee concern avoidance ($\beta = -2.489$, $p < 0.01$), community concern avoidance ($\beta = -1.663$, $p < 0.05$), diversity concern avoidance ($\beta = -4.707$, $p < 0.01$) and environment concern avoidance ($\beta = -1.285$, $p < 0.01$) exert significant negative effects on firm value.

Three novel insights emerge from Model 4. First, while different CSR activities exert unique effects on firm value, only some are significant, suggesting that broad statements about the CSR-firm value interface should be taken with a grain of salt. Second, all the significant effects are negative, challenging the broadly advocated positive effect of CSR and suggesting that CSR activities may not generally increase firm value. Third, unlike the literature-based focus on social strengths to date, we find that the majority of significant (and negative) effects occur among CSR activities focused on social concern avoidance, which have been largely overlooked in prior research. This finding empirically underscores calls for a more balanced consideration of social strength and social concern avoidance (Lin-Hi and Müller 2013). Overall, the results suggest that CSR decision-making should

TABLE 4 | Correlations between Tobin's *q*, CSR measures, and control variables.

	Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
1.	Tobin's *q*	1.000																			
2.	Net CSR	0.055	1.000																		
3.	Technical CSR	0.070	0.691	1.000																	
4.	Institutional CSR	0.021	0.832	0.174	1.000																
5.	Social strength	−0.044	0.557	0.269	0.553	1.000															
6.	Social concern avoidance	0.102	0.686	0.576	0.492	−0.222	1.000														
7.	Product strength	0.009	0.351	0.392	0.178	0.516	−0.040	1.000													
8.	Employee strength	−0.013	0.386	0.452	0.178	0.681	−0.144	0.278	1.000												
9.	Community strength	−0.044	0.331	0.037	0.423	0.623	−0.157	0.169	0.241	1.000											
10.	Diversity strength	−0.014	0.390	−0.039	0.560	0.713	−0.167	0.190	0.285	0.370	1.000										
11.	Environment strength	−0.085	0.290	0.069	0.342	0.596	−0.182	0.222	0.282	0.258	0.253	1.000									
12.	Human rights strength	−0.012	0.132	0.010	0.171	0.217	−0.036	0.004	0.058	0.115	0.053	0.042	1.000								
13.	Product concern avoidance	−0.050	−0.302	−0.577	0.032	0.278	−0.598	0.073	0.136	0.207	0.281	0.166	0.012	1.000							
14.	Employee concern avoidance	−0.081	−0.408	−0.599	−0.096	0.095	−0.563	0.020	0.049	0.014	0.124	0.066	0.020	0.143	1.000						
15.	Community concern avoidance	−0.056	−0.281	−0.157	−0.262	0.209	−0.513	0.023	0.166	0.118	0.163	0.180	0.005	0.270	0.155	1.000					
16.	Diversity concern avoidance	0.006	−0.496	−0.081	−0.613	−0.177	−0.426	−0.058	−0.092	−0.114	−0.183	−0.100	−0.015	−0.047	0.086	0.007	1.000				
17.	Environment concern avoidance	−0.111	−0.318	−0.159	−0.310	0.244	−0.587	0.042	0.210	0.174	0.102	0.263	0.017	0.292	0.185	0.381	−0.061	1.000			
18.	Human rights concern avoidance	−0.049	−0.221	−0.091	−0.232	0.177	−0.415	0.052	0.073	0.191	0.127	0.091	0.102	0.154	0.094	0.149	−0.029	0.223	1.000		
19.	Industry concentration	−0.057	0.020	0.011	0.018	0.021	0.005	0.045	0.022	0.020	−0.015	0.001	0.021	−0.012	0.038	−0.028	0.005	−0.060	0.033	1.000	
20.	Firm size	−0.172	−0.014	−0.157	0.101	0.459	−0.419	0.161	0.301	0.323	0.362	0.293	0.048	0.437	0.171	0.324	−0.153	0.443	0.235	−0.032	1.000

Note: $N = 18{,}411$. Correlations greater than or equal to |0.011| are statistically significant ($p < 0.10$, two-tailed).

TABLE 5 | Overview of analytical procedures.

Analytical step	Purpose	Rationale
Step 1	Validation of the modeling approach	• Compare the effect of net CSR and the effects of the interactions between net CSR and NPD intensity or advertising on firm value with recent findings. • The modeling approach is considered sound if recent results can be recovered.
Step 2	Exploration of the role of variations in measurement granularity	• Compare the results across different levels of CSR measurement granularity.
Step 3	Exploration of the CSR activities that are most relevant for firm value, the CSR activities that are most susceptible to product innovation management or marketing support, and the corresponding moderators (Research Questions 1–3)	• Estimate a range of models—each of which contains another moderator—one at a time. • The CSR activities that are most relevant for firm value are those that yield stable significant results across different model specifications and subsamples (Research Question 1). • CSR activities most susceptible to be supported by product innovation management or marketing are those that interact significantly with the respective moderators (Research Question 2). • Moderators (NPD intensity, marketing instruments) most relevant for guiding CSR are those that interact significantly with many CSR activities (Research Question 3).

TABLE 6 | Replication of established findings suggests the modeling approach is valid.

	Dependent variable: firm value			
	Model 1[a]		Model 2[b]	
Independent variables	**β**	**(SE)**	**β**	**(SE)**
Constant	1.098	(0.079)**	1.102	(0.090)**
CSR				
Net CSR	−0.312	(1.015)	−0.948	(1.073)
CSR–marketing interactions				
Net CSR × NPD intensity	21.017	(6.718)**		
Net CSR × advertising intensity			18.683	(7.510)*
Controls				
NPD intensity	−5.459	(0.923)**		
Advertising intensity			−4.941	(1.376)**
Industry concentration	−0.209	(0.363)	−0.230	(0.314)
Firm size	−0.555	(0.070)**	−0.463	(0.080)**
Firm fixed effects	Yes		Yes	
Time fixed effects	Yes		Yes	
Copula terms	Yes		Yes	
R^2	0.124		0.115	

Note: All models are based on the full sample ($N = 18{,}411$). Coefficients are unstandardized. We report bootstrapped standard errors. R^2 is based on within-firm variance. *$p < 0.05$; **$p < 0.01$ (two-tailed test).
[a]We include a dummy variable that equals 1(0) if R&D spending information is (not) disclosed.
[b]We include a dummy variable that equals 1(0) if advertising spending information is (not) disclosed.

TABLE 7 | Results for disaggregate CSR activities.

	Dependent variable: firm value							
	Model 1		Model 2		Model 3		Model 4	
Independent variables	***β***	**(SE)**	***β***	**(SE)**	***β***	**(SE)**	***β***	**(SE)**
Constant	1.160	(0.084)**	1.159	(0.069)**	1.160	(0.082)**	1.177	(0.079)**
CSR								
Net CSR	−0.862	(1.226)						
Technical CSR			−0.847	(0.754)				
Institutional CSR			0.576	(1.012)				
Social strength					1.311	(1.552)		
Social concern avoidance					−3.757	(1.446)**		
Product strength							1.048	(1.234)
Employee strength							−1.714	(0.737)*
Community strength							0.254	(0.817)
Diversity strength							0.170	(0.602)
Environment strength							0.511	(0.678)
Human rights strength							−0.739	(0.480)
Product concern avoidance							−0.362	(0.509)
Employee concern avoidance							−2.489	(0.548)**
Community concern avoidance							−1.663	(0.688)*
Diversity concern avoidance							−4.707	(1.377)**
Environment concern avoidance							−1.285	(0.450)**
Human rights concern avoidance							0.296	(0.390)
Control variables								
Industry concentration	−0.255	(0.402)	−0.239	(0.300)	−0.261	(0.314)	−0.253	(0.291)
Firm size	−0.453	(0.084)**	−0.453	(0.075)**	−0.456	(0.074)**	−0.451	(0.086)**
Firm fixed effects	Yes		Yes		Yes		Yes	
Time fixed effects	Yes		Yes		Yes		Yes	
Copula terms	Yes		Yes		Yes		Yes	
R^2	0.110		0.110		0.111		0.118	

Note: All models are based on the full sample ($N = 18{,}411$). Coefficients are unstandardized. We estimate bootstrapped standard errors for the models with copula terms. R^2 is based on within-firm variance. $^{\dagger}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$ (two-tailed test).

consider unique stakeholder domains with tailored relational approaches for serving specific stakeholders (building social strengths or avoiding social concerns).

7.5 | Analytical Step 3: The Interplay Between CSR Activities and NPD or Marketing Instruments Is Critical for the Effect on Firm Value

In step 3, we address the research questions (RQs). We uncover the most relevant CSR activities for driving firm value, those that are most susceptible to NPD or marketing support, and whether NPD or marketing instruments are most influential in moderating these effects.

7.5.1 | Most Relevant CSR Activities for Firm Value (RQ1)

We estimate Equation (4) once with each moderating variable (i.e., 5 times). A side benefit of this repeated estimation of the interaction model using different NPD and marketing moderators is that we test the robustness of the main effects of CSR activities on firm value. Here, NPD and each marketing variable act as another control and their addition not only offers an alternative model specification but also yields the model's estimation across subsamples.[10] We report all interaction models and their respective sample sizes in Web Appendix B.

Table 8, which summarizes the results shown in Web Appendix B, affirms the results reported in the main-effects-only

TABLE 8 | Summary of results across interaction models.

CSR activities	Significance (direction) in main-effects-only model[a]	% of significant effects of the CSR activity across all interaction models estimated[b]			
		Main effects		Interaction effects	
		$p < 0.10$[c]	$p \geq 0.10$	$p < 0.10$[d]	$p \geq 0.10$
Product strength	—	0.0%	100.0%	0.0%	100.0%
Employee strength	$p < 0.05$ (–)	**100.0%**	0.0%	20.0%	80.0%
Community strength	—	0.0%	100.0%	40.0%	60.0%
Diversity strength	—	0.0%	100.0%	0.0%	100.0%
Environment strength	—	0.0%	100.0%	20.0%	80.0%
Human rights strength	—	0.0%	100.0%	0.0%	100.0%
Product concern avoidance	—	0.0%	100.0%	40.0%	60.0%
Employee concern avoidance	$p < 0.01$ (–)	**100.0%**	0.0%	40.0%	60.0%
Community concern avoidance	$p < 0.05$ (–)	**80.0%**	20.0%	0.0%	100.0%
Diversity concern avoidance	$p < 0.01$ (–)	**100.0%**	0.0%	**60.0%**	40.0%
Environment concern avoidance	$p < 0.01$ (–)	**100.0%**	0.0%	**80.0%**	20.0%
Human rights concern avoidance	—	0.0%	100.0%	0.0%	100.0%

Note: "—" indicates not significant ($p > 0.10$). Bold numbers highlight effects that are significant in at least half of the estimated models.
[a]See Table 7 (Model 4).
[b]We count both positive and negative interaction effects. See Web Appendix S1 (Tables B.1–B.5).
[c]Percentages indicate the number of significant ($p < 0.10$) or insignificant ($p \geq 0.10$) main effects of the CSR variable across all interaction models divided by the number of the estimated interaction models. For example, we found a significant main effect of environment concern avoidance in five of the five models (i.e., 100%).
[d]Recall that each NPD or marketing interaction model includes one moderator. Percentages indicate the number of significant interaction effects ($p < 0.10$) of the CSR variable across all interaction models divided by the number of all NPD and marketing interaction models estimated. For instance, we found a significant interaction effect of environment concern avoidance with NPD or a marketing variable in four of the five models (i.e., 80%).

model (Table 7). Again, there are notable differences across the effects of different CSR activities on firm value, both in terms of significance and direction (Web Appendix B). As before, the significant firm value effects are negative. We again find that most of the significant effects relate to CSR activities centered on social concern avoidance, which have been largely overlooked in prior research.

Regarding RQ1, comparing the number of CSR activities with main effects that remain significant across the multiple estimations offers information about their relevance for firm value (in terms of the robustness of significant effects across different models). Table 8 shows that only 5 of the 12 CSR activities exert a significant main effect on firm value and do so in at least 80% of the estimated interaction models. The results demonstrate that employee strength, employee concern avoidance, community concern avoidance, diversity concern avoidance, and environment concern avoidance are those CSR activities that are most relevant in driving firm value. We note that all the significant main effects are negative.

7.5.2 | CSR Activities Most Susceptible to NPD or Marketing Support (RQ2)

Table 8 also identifies those CSR activities that best lend themselves to being aligned with NPD or marketing instruments, answering our second research question. The one CSR activity that interacts with most (80%) of the moderating variables is environmental concern avoidance. Another interesting insight is that all other CSR activities (except for diversity concern avoidance) interact significantly with only relatively few moderators (40.0% or less of those considered). Again, those CSR activities related to concern avoidance are most relevant (in terms of the number of significant interactions with NPD or marketing variables). This is important, as prior studies have tended to focus on social strengths.

7.5.3 | Most Influential Moderators for Leveraging CSR'S Effect on Firm Value (RQ3)

RQ3 addresses the relevance of NPD versus marketing instruments for leveraging CSR activities. Table 9 shows the percentage of significant positive or negative ($p < 0.10$) and nonsignificant interactions ($p \geq 0.10$) for each of them, as reported in Web Appendix B. Table 9 reveals that NPD intensity has the largest number of significant positive interactions with CSR activities (25.0%).

In contrast, the firm value consequences of CSR activities vary substantially depending on the marketing moderators. The positive significant interactions with marketing moderators range from 8.3% for advertising and brand strength to 16.7% for distribution intensity and premium pricing, while their significant negative interactions range from 0% for

TABLE 9 | Summary of results for interaction effects with NPD compared to marketing.

Focal moderator	Underlying model estimation results	% of interaction effects across CSR activities		
		Significant positive ($p < 0.10$)	Significant negative ($p < 0.10$)	Not significant ($p \geq 0.10$)
NPD intensity	Table B.1	**25.0%**	0.0%	75.0%
Advertising intensity	Table B.2	8.3%	0.0%	91.7%
Distribution intensity	Table B.3	16.7%	8.3%	75.0%
Premium pricing	Table B.4	16.7%	16.7%	66.7%
Brand strength	Table B.5	8.3%	**25.0%**	66.7%

Note: The table summarizes the percentage of significant positive or negative and non-significant interaction effects between the focal NPD or marketing moderator and the 12 CSR activities on firm value. The calculations are based on the models reported in Web Appendix B. For instance, Table B.5 shows that of the 12 unique CSR activities accounted for in the model, brand strength has a significant positive interaction effect ($p < 0.10$) with one CSR activity (i.e., 1/12 = 8.3%), significant negative interaction effects ($p < 0.10$) with three other CSR activities (i.e., 3/12 = 25%), and no significant interaction ($p \geq 0.10$) with the remaining 8 CSR activities (i.e., 8/12 = 66.7%). Bold numbers identify the moderator that exerts the most significant positive or negative interaction effects.

advertising to 25.0% for brand strength. Our results indicate that of the studied marketing instruments, only advertising exclusively interacts positively with CSR activities but does so only in a few cases. However, we also find that while all other marketing instruments have the capacity to strengthen the effect of one CSR activity on firm value, they may weaken the effect of another. The findings partially align with prior studies that identify positive interactions, to some extent backing the CSR-marketing synergy argument (Mishra and Modi 2016). However, the findings also bolster the caveat that marketing activities may impair CSR effectiveness (Banerjee and Wathieu 2017).

7.6 | Additional Analysis: What Explains the Dominance of Negative Effects?

Our findings differ from much of the earlier work addressing the effect of CSR on firm value that reports predominantly positive effects—though some studies also report non-significant (e.g., Mishra and Modi 2016) or negative effects (e.g., Makni et al. 2009). While others have discussed a possible publication bias (Hirsch et al. 2023), as a significant positive effect of CSR on firm value may be favored in the review process (Havlinova and Kukacka 2023), we identify three main reasons for our results.

The first reason is that prior studies had to rely on an outdated measurement of firm value (traditional Tobin's q) that has recently been criticized for systematically producing positive effects of investments into intangibles (e.g., marketing or CSR) on firm value, even if these activities have been ineffective (Bendle and Butt 2018), thus potentially overestimating the effectiveness of such investments for increasing firm value. In contrast, we use a state-of-the-art version of Tobin's q that addresses this criticism (i.e., Total q; Peters and Taylor 2017). In additional analyses, we assess to what extent this measure affects the results of a model that includes the most disaggregate CSR activities. Additional analyses show that the ratio of significant positive CSR effects on firm value to all significant CSR effects drops from 62.5% in a model using the traditional Tobin's q measure (e.g., Groening et al. 2016; Lee and Grewal 2004) to 42.9% in a model with Total q as a state-of-the-art version of Tobin's q.[11]

As a second reason, our examination comprehensively accounts for unobserved heterogeneity. We are not aware of any other study that addresses the relationship between CSR and firm value, which accounts for firm-specific, time-specific, and firm-time-specific unobserved heterogeneity. Additional analyses show that the more rigorous the modeling procedure, the fewer significant positive results are recovered. The ratio of significant positive CSR effects on firm value to all significant CSR effects drops from 42.9% in the least rigorous model in our consideration set (does *not* include firm-fixed effects, time-fixed effects, or Gaussian copulas) to 0% in the (focal) most rigorous model (includes firm-fixed effects, time-fixed effects, and Gaussian copulas), in line with recent studies that find no significant positive main effects of CSR activities on firm value (e.g., Mishra and Modi 2016).

The third reason is that we comprehensively account for the spectrum of CSR activities at the most disaggregate level. In contrast, prior research has only accounted for aggregate (e.g., Luo and Bhattacharya 2006) or selected disaggregate CSR activities (Groening et al. 2016), often focusing on social strengths rather than social concern avoidance (Mishra and Modi 2016). As shown in Table 7, we find that most of the negative effects relate to social concern avoidance activities (Models 3 and 4).

7.7 | Summary of Key Findings

This research offers several important new findings. The first is that the effect of CSR, a key pathway to environmental and social sustainability, on firm value arises from a subset of 5 (of the 12) examined CSR activities, including employee strength, employee concern avoidance, community concern avoidance, diversity concern avoidance, and environment concern avoidance. Of these, the latter yields the most significant effects across models. The second important finding is that these CSR activities tend to produce significant negative main effects, reducing rather than increasing firm value. Third, the findings reveal that environment concern avoidance as well as other CSR activities benefit the most from being aligned with NPD rather than marketing

instruments (in terms of their impact on firm value), suggesting the capacity of NPD in supporting the firm's environmental sustainability. Finally, NPD is the sole moderator for which we only find significant positive interactions with CSR activities.

8 | Theoretical Implications

The study's empirical insights contribute to overcoming the observed equivocality by informing theory development on the interactions between CSR, NPD, and marketing in shaping firm value. We next detail novel insights, followed by the proposed implications.

8.1 | New Insights

8.1.1 | CSR Activities Differ in Terms of Their Firm Value Consequences

Fulfilling different stakeholders' needs requires manifold CSR activities, including pathways to shape the firm's environmental sustainability (Zhang and Hao 2024). However, prior research has tended to examine selected CSR activities, often aggregated into an overall CSR measure. Based on the results, we strongly advise against this approach, as we found CSR activities to differ markedly in terms of their respective effect on firm value, ranging from significant positive, to non-significant, and significant negative effects. The findings suggest that researchers should account for different environmental and social objectives and the promotion (i.e., through social strengths) *and* protection (i.e., through avoidance of social concerns) of their interests.

8.1.2 | Key CSR Activities Have Been Overlooked in Prior Research With Environment Concern Avoidance Standing Out

Four of the five CSR activities for which we find significant effects are associated with avoiding social concerns (i.e., employee concern avoidance, community concern avoidance, diversity concern avoidance, and environment concern avoidance). It is surprising that these remain largely overlooked in prior empirical research, which has instead focused on enhancing social strengths (e.g., Mishra and Modi 2016). We therefore suggest that future research examining the effect of CSR on firm value should explicitly account for social concerns. Environment concern avoidance warrants particular attention given its necessity in achieving environmental sustainability while also yielding the greatest number of significant effects among the studied CSR activities.

8.1.3 | The Effects of CSR Activities on Firm Value May Be Less Positive Than Previously Expected

Prior research has predominantly reported significant positive or non-significant main effects of CSR on firm value (Wang et al. 2016). While we find that most of the studied CSR activities do not exert a significant main effect on firm value, those that do tend to produce significant negative effects. As others have warned (Havlinova and Kukacka 2023; Hirsch et al. 2023), these findings suggest that the financial benefits of CSR may have been overstated, highlighting a need for further investigation. All else being equal, stock markets may view activities such as environmental concern avoidance primarily as cost factors. Yet, we also find that activities related to environmental CSR yield the most positive significant interactions. In particular, we find that environmental strength is the only CSR variable that has a positive interaction effect with brand strength while environmental concern avoidance has positive interactions with NPD intensity as well as distribution intensity.

8.1.4 | NPD Outperforms Marketing in Unlocking CSR Pay-Offs

In light of the finding that all significant main effects are negative, an important question is when these negative effects diminish. Our findings reveal the strategic superiority of NPD (vs. marketing instruments) in bolstering the effect of CSR on firm value. Prior research has highlighted the moderating effect of advertising on the CSR-firm value interface (e.g., Servaes and Tamayo 2013). However, as soon as we account for CSR activities at a more granular, managerially relevant level, we find that advertising does not hold its promise as a silver bullet for leveraging CSR's effect on firm value. Other marketing tools like branding and premium pricing even harm CSR effectiveness in some cases. Overall, the findings caution against the assumption that combining CSR with marketing always pays off. Instead, they align with the notion that marketing can undermine CSR credibility and trigger greenwashing concerns as reflected in the significant negative interaction we find between environmental concern avoidance and brand strength (Habel et al. 2016). Conversely, while the role of NPD in shaping the effect of CSR on firm value has received only scant attention, it stands out for its significant positive interactions with many CSR activities, particularly environment concern avoidance. An important implication is that more focus should be devoted to the interplay between CSR activities and NPD intensity.

8.2 | Implications for Advancing CSR Theory

Most prior studies have adopted a single theoretical perspective to hypothesize the effects of CSR activities on firm value. Positive effects are typically justified through instrumental stakeholder theory, while negative effects draw on agency theory. Hirsch et al.'s (2023) recent meta-analysis reports that CSR research is more likely to be published if it finds either significant positive or negative effects (in line with the respective theory applied), suggesting that claims about the effect of CSR on firm value may have been exaggerated. Indeed, in line with prior sustainability research (El-Bassiouny et al. 2022; King and Pucker 2021), our results indicate that the conventionally proposed win-win scenario of superior CSR performance (representing the *environmental* and *social* dimensions of sustainability) and superior firm value (the *economic* dimension) may be largely illusory and that the interplay of CSR activities, NPD, marketing, and firm value is much more complex and ambiguous than previously assumed. Therefore, based on our results, we formulate three tenets to guide research in reconciling opposing theoretical perspectives and to advance an overarching theory on the interplay between CSR, NPD, marketing, and firm value.

8.2.1 | Tenet 1: Acknowledging the CSR-Firm Value Paradox

The results indicate that in most cases, CSR and financial performance are incompatible. This creates a CSR–firm value paradox, where strong CSR efforts may hinder rather than facilitate value creation.

We propose that acknowledging this paradox is key to advancing theoretical understanding of the CSR-firm value interface. Therefore, the paradox lens may serve as a fundamental cornerstone of a new overarching CSR theory (Miron-Spektor et al. 2018). Accordingly, CSR and firm value can be viewed as opposing yet interrelated elements (i.e., a paradox), implying that they should be treated as *parallel* goals. Then, any effect of CSR activities on firm value can be viewed as a trade-off of CSR costs (as suggested by agency theorists) versus their potential financial benefits (as suggested by instrumental stakeholder theorists). This trade-off means that the main effects of different CSR activities on firm value can be negative (i.e., if costs prevail), non-significant (if costs and benefits are balanced), or positive (i.e., if benefits prevail). A paradox exists when the effect is negative (Berendes et al. 2025). Acknowledging the paradox uncovers new research avenues because treating CSR as a goal in its own right makes it a compelling dependent variable. For instance, researchers could clarify whether NPD or marketing more strongly drives a firm's social performance.

8.2.2 | Tenet 2: Detecting Paradoxical CSR Activities

To address the paradox, it is necessary to identify those CSR activities for which it exists. Our results show that the paradox holds for employee strength, employee concern avoidance, community concern avoidance, diversity concern avoidance, and environment concern avoidance because these CSR activities have significant negative effects on firm value, all else being equal. Once paradoxical activities are identified, the next step is to explore how the paradox can be mitigated.

8.2.3 | Tenet 3: Mitigating the Paradox

An obvious way to resolve the paradox would be to disengage from paradoxical CSR activities. However, doing so would be ethically infeasible because most of them address firm externalities (e.g., environmental concern avoidance). Rather than delving into an ethical debate (Pava and Krausz 1996), we pragmatically suggest that such concern avoidance activities offer prime regulation targets for policymakers, as discussed further in the next section. A paradox then remains for those CSR activities that are considered imperative to address externalities (e.g., through regulation) but which decrease firm value. Paradox theorists have suggested that specific management contingencies may exist under which the paradox can be mitigated such that CSR and financial performance goals are more balanced (Berti and Cunha 2023). Our findings identify NPD intensity as one key means to mitigate the paradox. For instance, NPD intensity appears as the most important contextual factor for tackling the paradox for environmental concern avoidance (see Web Appendix B).

9 | Practical Implications

9.1 | Implications for CSR Managers

The results suggest that five CSR activities stand out in terms of their potential implications for firm value: employee strength, employee concern avoidance, community concern avoidance, diversity concern avoidance, and environmental concern avoidance. Since the main effects of these CSR activities are negative, it becomes paramount for CSR managers to carefully align them with the firm's stance on the triple bottom line to avoid unanticipated financial consequences and thereby endanger its ongoing commitment to sustainability. Among the mentioned CSR activities, the linkage to firm value is most consistent for environmental concern avoidance. Interestingly, CSR managers can ensure that environmental concern avoidance yields a positive effect on firm value when premium pricing and brand strength are low and NPD and distribution intensity are high.

9.2 | Implications for Marketing Managers

The multitude of CSR activities and marketing instruments implies that their alignment runs the risk of excessive resource demands. Even worse, our findings reveal that more "premium-marketing-oriented" instruments like branding or premium pricing that seek to create high-quality product positioning often exhibit negative interactions with CSR. Such instruments raise stakeholder skepticism and intensify greenwashing concerns (Habel et al. 2016). We thus suggest that marketing managers strategically decouple CSR and firm value by establishing each as a firm goal in its own right. This requires relinquishing the expectation that a firm's non-economic function needs to create value in its economic function (Roth et al. 2020). Instead, the non-economic function should be considered a cost of ethically doing business. Adopting this perspective should benefit marketing managers by generating cost savings, as the complex coordination of CSR and marketing activities and the effort to justify the financial impact of marketing instruments on CSR become obsolete. Instead, CSR can be enacted to address the most pressing externalities.

9.3 | Implications for Innovation Managers

The resources that are freed by reducing the coordination requirements between marketing and CSR could be shifted to NPD. This implication strongly resonates with the observation that many firms invest significantly more in NPD relative to advertising and branding (Govindarajan et al. 2019). For example, many firms that are strongly engaged in CSR, such as Apple, Alphabet, Microsoft, and Johnson & Johnson, have reversed their spending patterns towards higher R&D compared to advertising.

More specifically, the results point to opportunities to align specific CSR activities with NPD, providing actionable guidance for innovation managers. Our findings suggest that CSR initiatives aimed at avoiding negative externalities are most effective when integrated with NPD. CSR activities that stand out in this regard address concerns in the areas of employee treatment, diversity, and particularly environmental impact, offering key insight into

the role of innovation in fostering environmental sustainability. As such, CSR activities are often strategic and less concrete; they particularly profit from coupling with tangible NPD outputs so that stakeholders can directly observe and verify their benefits, thereby also enhancing the perceived sincerity of the firm's CSR efforts.

If the firm spends extensively on NPD, innovation managers should prioritize environment concern avoidance, employee concern avoidance, and diversity concern avoidance in their NPD programs, allowing them to innovate in an environmentally and socially sustainable manner. They can do so by accounting for CSR factors in designing core (e.g., technological) capabilities and/or peripheral product characteristics (e.g., packaging). As an example of a CSR-based core product innovation, Procter & Gamble launched the cold-water detergent "Tide Professional Coldwater," which achieves the same cleaning effect as conventional hot-water detergents with less energy and water consumption, reducing environmental externalities (Business Wire 2015).

9.4 | Implications for Investors

Investors will need to walk their talk and accept that moral responsibility comes at a cost. They should take off the rose-colored glasses and no longer view CSR as being instrumental to profitability and instead accept that, as our empirical results indicate, CSR's conventionally proposed firm-value enhancing effect may be an illusion, at least in the short term. Instead, the results call for a paradigm shift to a normative understanding of CSR, whereby social responsibility and profit are considered as parallel goals. Initial steps in this direction are already being taken. For example, the Business Roundtable (2019) has committed to social responsibility as a core organizational goal, irrespective of whether it creates firm value.

9.5 | Implications for Policymakers

One important implication for policymakers is that the elevated performance of investment schemes focused on firms that fulfill specific CSR (or ESG) criteria appears to be an overpromise. Thus, the results substantiate policy decisions such as the U.S. Department of Labor's restriction of the investment of retirement funds based on socially responsible criteria (Holger 2020).

Another key implication arises from the finding that the most significant effects on firm value are from CSR activities that aim to avoid firm externalities such as environmental concern avoidance (but also employee concern avoidance, community concern avoidance, and diversity concern avoidance). Since they exert a negative effect on firm value, the market is unlikely to address these externalities and leaves ethically sound decision-making to managers, who face competitors that may not uphold the same ethical standards. Policymakers should thus level the playing field and require firms to play by the same rules. The challenge is not to enforce unreasonable demands on firms to engage in CSR activities without purpose—as our study shows, CSR often comes with negative firm value repercussions. Rather, the idea is to add a line of defense that guides ethical decision-making by making unethical practices more costly (e.g., by pricing greenhouse gas emissions). In sustainability terms, firms would be required to limit their environmental and social externalities in the pursuit of profits. However, regulating all potential externalities would be impractical. Thus, another promising avenue is to build on Nobel Prize-winning Elinor Ostrom's (2010) suggestion to implement polycentric governance structures that require firms to collaborate with the communities that are affected by their externalities.

Finally, our analyses indicate that highly innovative firms have a business incentive to invest in CSR, as for them such investments may even enhance firm value. Policymakers can therefore accelerate corporate sustainability most efficiently by fostering a pro-innovation environment (e.g., through R&D incentives, supportive knowledge infrastructure and regulation) that embeds these market-based incentives in the broader economy.

10 | Limitations and Further Research

Despite its contribution, this research also has limitations. First, while drawing on the MSCI ESG Stats database enables us to study CSR activities, the list of stakeholders impacted by these activities is not exhaustive. Future studies may thus incorporate other or additional stakeholders. Second, the studied NPD and marketing mix instruments were carefully selected to cover different aspects of product innovation and marketing decision-making. However, these fail to capture all possible factors, raising additional research avenues. For example, innovation management instruments such as process innovation, organizational innovation, open innovation, lead user involvement, and innovation-related incentives may interact in meaningful ways with CSR activities and firm value. Future research on these interdependencies could yield valuable insights for advancing a more sustainable future that integrates environmental, social, and economic goals. Third, as recommended by others (e.g., Hirschey et al. 2012; Kogan et al. 2017), we use R&D as an input-oriented proxy for NPD (i.e., costs). Future studies could instead use output-oriented measures such as patent counts (Artz et al. 2010) to further substantiate our findings. Finally, our data period ends in 2010 to exclude the subsequent CSR-boom, which has been associated with a stock market bubble. Meanwhile, this CSR-boom seems to have reversed and the bubble has burst (Shifflett 2023). While this is in line with our findings that CSR is not a silver bullet to increase firm value, it may be worthwhile replicating our analysis using post-2010 data.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from Compustat and MSCI ESG Stats. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from the authors with the permission of Compustat and MSCI ESG Stats.

Endnotes

[1] We found only one study that has explored the interaction effects of net CSR with knowledge capabilities and future NPD potential on firm value (Luo and Bhattacharya 2006), but it did not consider NPD intensity.

[2] While this list is not exhaustive, it is widely established in empirical research because it captures what are arguably the most important stakeholder domains and because secondary databases offer reliable access to the relevant data (Mishra and Modi 2016; Strike et al. 2006). We exclude corporate governance from our examination, as it reflects shareholders' interests (vs. stakeholder/social interests; Servaes and Tamayo 2013).

[3] Since both capture distinct aspects, they are evaluated in parallel. A firm could be high on both promoting social strength and social concern avoidance, low on both, or high on either one of them and low on the other.

[4] We consider the moderators separately (vs. in unison) for two reasons: First, given that we account for 12 CSR activities and their interactions with 5 moderators, considering multiple moderators in the same model may result in high multicollinearity due to the excessive number of interactions included (adding a second moderator would require us to estimate 24 interaction effects, a third would result in 36 interaction effects, etc.). Second, the construction of some moderator variables imposes restrictions on the sample size owing to data requirements. If we were to consider all moderators in one model, overlaps in missing information for specific moderator variables would further reduce the sample size.

[5] Some of these databases do not provide information for all firm-year observations, yielding different sample sizes across some of the estimated interaction models. We report the sample size for each estimated model.

[6] In line with prior literature (Servaes and Tamayo 2013), we winsorize Tobin's q at the 1st and 99th percentiles to avoid that outliers bias the results.

[7] Note that the few studies that have employed the highest level of granularity have focused on small subsets of the firm's manifold CSR activities that we consider (Jayachandran et al. 2013; Mishra and Modi 2016).

[8] Apart from facilitating the interpretation of results, a conceptual rationale also exists for capturing social concern avoidance. Investing more in avoiding undesirable social outcomes lowers concern ratings as it helps protecting stakeholders from harm (Kang et al. 2016). This is reflected in the social concern avoidance measure: A higher score indicates that firm actions to avoid concerns are more effective.

[9] The assignment of stakeholders to technical or institutional domains is largely congruent with other stakeholder-pooling schemes (Clarkson 1995; Freeman 1984; Godfrey et al. 2009).

[10] Owing to data requirements for constructing the NPD and marketing variables, the size of the respective samples used for model testing varies for some moderators, effectively creating subsamples.

[11] We use a model that does not yet account for unobserved heterogeneity through firm-fixed, time-fixed effects and Gaussian copulas as we discuss the consequences of model rigor (through rigorously accounting for potentially unobserved heterogeneity) subsequently.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Appendix S1:** Supporting Information.