

# LINKING CSR TO FIRM-SPECIFIC EARNINGS AND CASH FLOWS: INSIGHTS ON FINANCIAL IMPACT

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## ABSTRACT

Despite trillions of dollars directed toward socially responsible investment, firms and investors continue to question whether CSR creates tangible financial value. These doubts are reinforced by prior research, which provides mixed evidence on the link between CSR and firm performance. To address this gap, we focus on firm-specific performance indicators - earnings and cash flows - that directly capture a firm's financial health and competitive position. Drawing on the resource-based view of the firm, we argue that CSR performance represents a unique resource of the firm and allows the firm to develop competitive advantages. We predict and find that CSR is positively associated with the level of both firm-specific earnings and cash flows. Our findings contribute to the debate on CSR and firm performance and provide managers and investors with clearer evidence of the financial benefits of effective CSR engagement.

**Keywords:** CSR performance, firm-specific cash flows, firm-specific earnings

**Data Availability:** Data is available from the public sources identified in the text.

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## 1. INTRODUCTION

Global sustainable investment has reached a staggering \$30.3 trillion (GSIA, 2022). Despite this massive capital allocation towards corporate social responsibility (CSR), the world is not on track to meet sustainable development goals (United Nations, 2025). At the firm level, managers and investors continue to express doubts about CSR's credibility (Segal, 2024a, 2024b). These tensions are amplified as much of the prior CSR literature relies on broad, market-based measures of performance (e.g., Bifulco et al., 2023; Lins et al., 2017; Lu et al., 2021), which often capture market expectations rather than the direct financial value that CSR contributes to individual firms.

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If CSR were shown to reliably enhance firm-specific earnings and cash flows - the direct indicators of financial health - investors would have stronger incentives to allocate capital toward socially responsible firms, managers would be more motivated to engage in CSR, and firms could better integrate CSR into their competitive strategies. This, in turn, would not only enhance firm and investor value but also create more credible pathways for global progress toward sustainable development. For this reason, our study shifts the focus toward firm-specific financial measures and examines whether and how CSR translates into unique earnings and cash flow advantages.

The value and importance of such an inquiry become even clearer in light of the mixed findings in the CSR literature. Some studies suggest CSR enhances performance and valuation (e.g., Lins et al., 2017; Lu et al., 2021; Jia & Li 2022), while others find CSR imposes costs and undermines shareholder value (e.g., Di Giuli & Kostovetsky, 2014; Fahad & Busru, 2021; Bifulco et al., 2023). We argue that these conflicting results stem in part from aggregate or market-level financial measures, which may fail to capture whether CSR actually generates competitive advantages at the firm-specific level.

The resource-based view (RBV) provides the theoretical foundation for our inquiry. RBV posits that firms achieve competitive advantage by cultivating unique resources and capabilities that rivals cannot easily replicate (Barney, 1991; Amit & Schoemaker, 1993). Competitive advantage is ultimately reflected in firm-specific earnings and cash flows - outcomes that isolate the value created by a firm's distinct capabilities rather than industry-wide factors. CSR can be one such capability: it enhances reputation (Du et al., 2011; Lattanzio & Litov, 2020), motivates differentiation, and strengthens a firm's position in ways that cannot be easily replicated by competitors.<sup>1</sup>

We measure CSR performance using MSCI KLD ratings (Servaes & Tamayo, 2013; Burke et al., 2020) and construct three CSR measures, including a broader CSR definition and an industry-adjusted measure to address variation in CSR concentration across industries. Following Hui et al. (2016), we measure firm-specific earnings and cash flows as the difference between a firm's reported outcomes and industry-wide benchmarks. Our results show that higher CSR performance is positively associated with both firm-specific earnings and firm-specific cash flows, consistent with RBV predictions. Because these measures isolate performance attributable to the firm rather than the industry, our findings indicate that CSR contributes positively to overall firm performance.

Additional analyses reveal that these results are driven by CSR strengths rather than concerns. We further find that CSR performance related to environmental initiatives, product quality and safety, and lower involvement in controversial industries is positively associated with firm-specific earnings. These are consistent with environment and product (controversial industry involvement) related CSR activities being value-enhancing (value-destructive).

Our study contributes to the CSR literature by demonstrating that CSR performance and competition are associated with firm-specific earnings and cash flows, thereby enhancing firms'

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<sup>1</sup> Stakeholder theory (Freeman, 1984; Donaldson & Preston, 1995) and legitimacy theory (Suchman, 1995; Deegan, 2002) provide complementary perspectives by explaining how CSR addresses stakeholder expectations and maintains organizational legitimacy. While these theories illuminate CSR's social and relational roles, the RBV is more appropriate for analyzing its financial consequences because it directly links firm-specific capabilities to competitive advantage and performance.

economic differentiation. The positive relationship between superior CSR performance and firm-specific financial outcomes supports the view of CSR as a differentiation strategy that generates sustainable competitive advantages. In doing so, we respond to Huang and Watson's (2015) call for research on the CSR–earnings relationship and help reconcile mixed findings in prior work by showing that firm-specific performance measures better capture the economic value of CSR.

Our findings have practical implications for investors and managers. Investors can use CSR performance - particularly in environmental and product-related domains - to identify firms with stronger firm-specific earnings and cash flows. Managers can use these insights to strategically allocate resources toward value-enhancing CSR activities and integrate CSR more effectively into competitive strategy.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### ***2.1. Related Literature***

CSR is defined as a firm's voluntary efforts and commitments that surpass compliance with law and regulations to further social good (McWilliams et al., 2006). The growing number of CSR-related investments implies that CSR is believed to be associated with firm financial performance, stimulating increasing amounts of sustainable investments. However, despite extensive research, evidence on the CSR–performance relationship remains mixed (Christiansen et al., 2021; Huang et al., 2020).

#### *Positive Effects of CSR*

A large body of literature supports the view that CSR improves financial outcomes. Velte (2022) performs a meta-analysis and finds an overall positive association between CSR and firm performance. Firm-level studies also show that CSR performance is positively associated with operating return on assets and gross margins (Lins et al., 2017) and that strong sustainability performance predicts higher future earnings (Jia & Li, 2022). These gains arise through several mechanisms. CSR enhances organizational reputation, brand loyalty, and employee commitment (Yahya & Ha, 2013; Wong & Reevany, 2019; Kader et al., 2021), which in turn support long-term value creation. Other studies highlight improved market performance (Dowell et al., 2000) and greater adoption of environmental strategies that strengthen returns on assets and cash flows (Clarkson et al., 2011).

CSR has also been shown to reduce financing frictions. Firms with stronger CSR benefit from lower costs of capital (El Ghouli et al., 2011; Hmidien et al., 2022), reduced capital constraints (Cheng et al., 2014; Attig, 2024), and mitigation of information asymmetry and agency problems (Albuquerque et al., 2019; Palmon et al., 2024). In some cases, CSR even shields firms from penalties in litigation (Hong et al., 2012; Wang et al., 2025). Collectively, these findings suggest that CSR can function as a strategic resource that generates competitive advantages and tangible financial benefits.

### *Negative or Neutral Effects of CSR*

Classical economic theories predict that CSR is irrelevant or even harmful to firm value. Modigliani & Miller (1958) suggest CSR performance should not matter for firm valuation, while Friedman (1970) argues that corporations exist to maximize shareholder wealth, not social welfare. Therefore, CSR investments and activities are a deviation from core responsibilities. Empirical work also supports this view. For example, Chen et al. (2018) examine Chinese companies and find that mandatory CSR disclosures are negatively associated with various measures of firm performance, including return on assets and return on equity. Further, Di Giuli & Kostovetsky (2014) show that CSR is linked to lower future stock returns as it imposes direct costs on shareholders. Similar results appear across other contexts: CSR decreases market value across ten global industrial sectors (Daszyńska-Żygadło et al., 2016), in European firms even when CSR committees are present (Bifulco et al., 2023), and in emerging markets such as India (Fahad & Busru, 2021).

Agency-based explanations further suggest that managers may use CSR to pursue personal or reputational benefits, exacerbating information asymmetry and agency problems (Barnea & Rubin, 2010; Hamrouni et al., 2022). Analyst monitoring constrains such behavior, as greater coverage leads to reduced CSR spending (Adhikari, 2016). CSR may also reduce resource allocation efficiency, as funds devoted to CSR could earn higher returns in core operations (Bhandari & Javakhadze, 2017).

At the same time, some evidence suggests that CSR's impact is contingent rather than uniformly negative. Investors respond positively to CSR-related good news but penalize CSR-related bad news (Krüger, 2015), and CSR's average effect may be neutral depending on investor interpretation (Lu et al., 2021).

### *Rationale for Firm-Specific Financial Measures*

The mixed findings highlight a central challenge in the literature: disentangling CSR's costs and benefits (Huang & Watson, 2015). Much prior research relies on market-based measures, such as stock returns or firm value, which reflect investor perceptions as well as firm fundamentals. As Huang and Watson (2015, p. 8) note, "studying earnings is a promising avenue...because it avoids using market perceptions as performance measures."

To address this limitation, we focus on firm-specific earnings and cash flows - outcomes that isolate value generated by a firm's unique strategies and resources rather than industry-wide or market-driven effects (Brown & Kimbrough, 2011). Examining CSR through firm-specific performance provides clearer evidence on whether CSR creates real economic value. This approach offers more informative insights for investors allocating capital, managers designing CSR strategies, and firms seeking competitive differentiation, while also strengthening the credibility of CSR as a mechanism for sustainable development.

## 2.2. *Hypotheses Development*

RBV theory suggests that firms maintain and develop core resources and capabilities to achieve and sustain competitive advantages (Lippman & Rumelt, 1982; Hall, 1993). Specifically, RBV theory articulates that a firm's core resources and capabilities are drivers of firm differentiation strategies that help the firm gain competitive edges. We extend RBV by linking environmental strategies to competitive advantages, proposing that pollution prevention, product stewardship, and sustainable development can sustain firm competitiveness (Hart, 1995). This extension provides a direct bridge between RBV and CSR.

CSR can thus be understood as a resource and capability that supports differentiation. For example, Harley-Davidson's launch of the all-electric motorcycle *LiveWire* exemplifies CSR-based differentiation: customers willing to pay a premium for environmentally friendly products see CSR as a marker of honesty and responsibility (Harley-Davidson, 2019; Siegel & Vitaliano, 2007). More broadly, internal capabilities such as brand image, R&D, and innovation (Palep et al., 2007) are strengthened by CSR, which enhances reputation, attracts stakeholders, and fosters competitive positioning (Chakravarthy et al., 2013; Lattanzio & Litov, 2020).

From a management perspective, CSR is strategically deployed to improve eco-efficiency (Kemper et al., 2013), build eco-control systems that enhance environmental and financial performance (Henri & Journeault, 2010), and drive both product and process innovation (Bocquet et al., 2017). These outcomes reinforce CSR's role as a differentiating capability that aligns with RBV logic.

In sum, CSR is a competitive tool that is part of firm differentiation strategies, representing a firm's internal resources or unique capabilities that significantly influence firm reputation differentiation, innovation, and control systems. A firm with superior CSR performance can therefore differentiate itself. RBV theory posits that competition in the CSR space should result in greater firm-specific earnings, the portion of earnings that are not explained by industry factors.<sup>2</sup> We state the following hypothesis:

**H1a:** Controlling for other factors, CSR performance is positively associated with firm-specific earnings.

A potential concern, however, is whether the CSR–earnings link reflects genuine economic benefits or simply accrual-based earnings. To reinforce the notion that CSR contributes to real earnings power, we extend H1a by considering firm-specific cash flows. Cash flows are not subject to accrual adjustment and capture the stability of operations more directly.

If CSR-driven differentiation translates into higher customer loyalty, repeat purchases, and reduced volatility, these benefits should also be evident in firm-specific cash flows. Prior work supports this view, showing that CSR-based differentiation increases customer satisfaction, repeat business, and long-term loyalty (Siegel & Vitaliano, 2007; Chakravarthy et al., 2013; Lattanzio & Litov, 2020; Dodds et al., 1991). Higher loyalty and repeat transactions, in turn, generate more stable and predictable cash inflows. Therefore, CSR is more likely to be positively associated with firm-

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<sup>2</sup> Signaling theory provides an alternative argument that is also consistent with a positive association.

specific cash flows.<sup>3</sup> This leads to the following hypothesis:

**H1b:** Controlling for other factors, CSR performance is positively associated with firm-specific cash flows.

### 3. RESEARCH DESIGN

#### 3.1. Measurement of CSR Performance

We use the MSCI KLD dataset for our CSR data.<sup>4</sup> Widely adopted for its longitudinal history and multidimensional coverage (Khan et al., 2016), it remains suitable despite potential U.S.-centric bias or "grade inflation" (Larcker et al., 2022) because it provides a consistent, accepted framework for capturing both positive and negative attributes. Sourced from surveys, media, and disclosures, MSCI KLD evaluates eight categories: community, diversity, employees, environment, human rights, product quality and safety, corporate governance, and controversial business involvement. The first seven track both strengths and concerns, controversial involvement - comprising alcohol, gaming, firearms, military, nuclear, and tobacco - tracks concerns only.

We follow Servaes and Tamayo (2013) and Burke et al. (2020) and use three measures to capture CSR performance. CSR\_RATIO aggregates the net difference between scaled strengths and concerns across six social categories, ranging from -6 to +6.<sup>5</sup> CSR\_RATIO2, extends CSR\_RATIO by subtracting the controversial involvement concern ratio, ranging from -7 to +6. CSR\_IDX rescales CSR\_RATIO via a min-max adjustment within each industry-year to ensure cross-sector comparability. Table 1 provides further rationale and range clarifications.

Table 1: Variable Definitions

**Panel A: Summary of CSR measures**

Variable	Definition	Range
CSR_RATIO	$= \sum_{k=1}^k \left( \frac{\text{number of firm – year strengths within category } k}{\text{maximum number of strengths in category } k} - \frac{\text{number of firm – year concerns within category } k}{\text{maximum number of concerns in category } k} \right)$ <p>where k represents community, diversity, employee relations, environment, human rights, and product quality and safety categories</p> <p>Rationale: This measure sums net CSR engagement across six social categories (community, diversity, employee relations, environment, human rights, product quality/safety). Each category</p>	-6 to +6

<sup>3</sup> CSR firms exhibit higher reporting quality by avoiding opportunistic earnings manipulation (Kim et al., 2012). This transparency builds a reputation that lowers debt costs (Cooper & Uzun, 2015) and secures favorable supplier credit (Xu, et al., 2020). Consequently, CSR firms optimize liquidity through accelerated cash inflows and extended payment terms.

<sup>4</sup> The database evolved from S&P 500/Domini 400 to Russell 1000/3000 coverage, adding human rights in 2002y. It started to include the human rights category in 2002. We follow prior literature to ensure measurement consistency across these coverage shifts (Servaes & Tamayo, 2013; Burke et al. 2020).

<sup>5</sup> Corporate governance is excluded as it evaluates agency monitoring mechanisms for shareholders rather than the broader social objectives captured by the other categories.

score can range between -1 (all concerns, no strengths) and +1 (all strengths, no concerns), so the combined score falls between -6 (worst possible CSR performance) and +6 (best possible CSR performance).

CSR\_RATIO2 = CSR\_RATIO less the ratio of the number of firm-year controversial business involvement concerns to the maximum number of controversial business involvement concerns -7 to +6

Rationale: This measure extends CSR\_RATIO by incorporating “controversial business involvement” as an additional source of concerns. Since this category only allows negative contribution, the lower bound decreases to -7, while the maximum score remains +6. This broader range reflects the potential reputational penalty of controversial business ties in addition to the six social categories.

CSR\_IDX = 
$$\frac{\text{NET\_CSR} - \text{minimum NET\_CSR}}{\text{maximum NET\_CSR} - \text{minimum NET\_CSR}}$$
 0 to 1 (rescaled)

where NET\_CSR is a CSR performance score at the firm-year level (total strength – total concerns summed over the six rating categories); minimum NET\_CSR is the minimum CSR performance score for the firm’s industry in that year; and maximum NET\_CSR is the maximum CSR performance score for the firm’s industry in that year

Rationale: CSR\_IDX rescales CSR\_RATIO within each industry-year using a min-max adjustment. This ensures comparability across industries by expressing each firm’s CSR performance as a relative position between the industry minimum (0) and maximum (1). The rationale is that CSR activity levels vary substantially across industries, and without adjustment, firms in CSR-intensive industries would systematically score higher regardless of relative standing.

CSR\_STRENGT HS = 
$$\sum_1^k \left( \frac{\text{number of firm – year strengths within category } k}{\text{maximum possible number of strengths in category } k} \right)$$
 0 to +6

where k = represents community, diversity, employee relations, environment, human rights, and product quality and safety KLD categories

Rationale: CSR\_STRENGTHS aggregates a firm’s relative CSR strengths across six MSCI KLD categories (community, diversity, employee relations, environment, human rights, and product quality/safety). Each category’s ratio ranges from 0 (no strengths) to 1 (all possible strengths), so the sum across six categories falls between 0 and +6. This measure captures the breadth and intensity of positive CSR engagement.

CSR\_CONCERN S = 
$$\sum_1^k \left( \frac{\text{number of firm – year concerns within category } k}{\text{maximum number of concerns in category } k} \right)$$
 0 to +6

where k = represents community, diversity, employee relations, environment, human rights, and product quality and safety KLD categories

Rationale: CSR\_CONCERNS aggregates a firm's relative CSR concerns across the same six KLD categories. Each category's ratio ranges from 0 (no concerns) to 1 (all possible concerns), so the sum across six categories falls between 0 and +6. This measure reflects the degree to which a firm is flagged for socially irresponsible practices or risk exposures.

**Panel B: Model variables**

Variable	Definition
CSR_METRIC	= Takes the value of one of the CSR measures detailed in Panel A
FirmE	= Difference between a firm's operating income after depreciation divided by average assets and the industry average of operating income after depreciation divided by average assets
FirmCF	= Difference between a firms' operational cash flow divided by average assets and the industry average of operating cash flows divided by average assets
SIZE	= Natural log of the market value of common equity
MktShare	= Firm sales divided by the total sales of the two-digit SIC code in which the firm operates
StdROA	= Standard deviation of return on assets over five years. Return on asset equals income before extraordinary and special items divided by the beginning of year total assets
MB	= Ratio of market value of common equity to book value of common equity
DIVERSE	= Revenue-based Herfindahl Index for firm diversification using the reported business segments of the firm
HERF	= Revenue-based Herfindahl Index for industry-level concentration
LEVERAGE	= Ratio of long-term debt to the sum of long-term debt and book value of equity
NIND	= Number of firms in the industry
KLD	= An indicator equal to 1 for firms with MSCI KLD ratings during the sample period, and 0 for control firms that never received a MSCI KLD rating
POST	= An indicator variable equal to 1 for the post-MSCI KLD coverage period and 0 for the pre-coverage years

Note: All continuous variables are winsorized at the 1st and 99th percentiles.

**3.2. Measurement of Firm-specific Earnings and Cash Flows**

Following Hui & Yeung (2013) and Hui et al. (2016), we partition earnings into industry-wide and firm-specific components. We use Equation (1) to compute firm-specific earnings.

$$FirmE_{i,t} = EARN_{i,t} - \sum_{j=1}^J \left( EARN_{j,t} \cdot \frac{1}{N_{j,t}} \right) \quad (1)$$

where FirmE is firm-specific earnings for firm i in year t; EARN denotes firm earnings measured as operating income after depreciation divided by average assets for firm i in year t; j refers to industry using two-digit SIC codes, and N refers to the number of firms in industry j.

In the same way, we partition operating cash flows into its industry-wide and firm-specific components, using Equation (2).

$$FirmCF_{i,t} = OCF_{i,t} - \sum_{j=1}^J \left( OCF_{j,t} \cdot \frac{1}{N_{j,t}} \right) \quad (2)$$

where  $FirmCF_{i,t}$  is firm-specific cash flow for firm  $i$  in year  $t$ ;  $OCF_{i,t}$  denotes firm cash flow from operations divided by average assets for firm  $i$  in year  $t$ ;  $j$  refers to industry using two-digit SIC codes, and  $N$  refers to the number of firms in industry  $j$ .

### 3.3. Empirical Specification

Our empirical specification is based on Brown & Kimbrough (2011) with the addition of our variable of interest capturing CSR performance. Our model to examine the association between concurrent firm-specific earnings (firm-specific cash flows) and CSR performance is as follows:

$$FirmE_{i,t} (FirmCF_{i,t}) = \beta_0 + \beta_1 CSR\_METRIC_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MB_{i,t} + \beta_4 MktShare_{i,t} + \beta_5 StdROA_{i,t} + \beta_6 DIVERSE_{i,t} + \beta_7 HERF_{j,t} + \beta_8 LEVERAGE_{i,t} + \beta_9 NIND_{j,t} + Year\ FE + Firm\ FE + \varepsilon_{i,t} \quad (3)$$

where variables are defined in the Appendix. The subscripts  $i, j, t$  denote firm  $i$ , industry  $j$ , and year  $t$ , respectively. We include year and firm fixed effects to control for time variant and firm fixed effects.<sup>6</sup> We cluster standard errors by both firm and year level.<sup>7</sup>

To test H1a and H1b, we use firm-specific earnings (FirmE) and firm-specific cash flows (FirmCF) as dependent variables, respectively, where  $CSR\_METRIC$  represents  $CSR\_RATIO$ ,  $CSR\_RATIO2$ , or  $CSR\_IDX$ . H1a and H1b are supported if the estimated coefficient on the CSR variable is positive and significant ( $\beta_1 > 0$ ). Such results would suggest that CSR performance enhances firm-specific performance, consistent with the Resource-Based View (RBV).

We include control variables that prior research indicates are potentially associated with firm-specific earnings and/or cash flows.<sup>8</sup> Firm size (SIZE) is expected to be positive due to scale advantages, while market share (MktShare) is unsigned as both dominant and niche firms may perform well (Durnev et al., 2004; Piotroski & Roulstone, 2004). Market-to-book (MB) is predicted to be positive, reflecting growth potential. Earnings volatility (StdROA) is expected to be positive, as firms likely mitigate risks associated with volatility and smoothing (Graham et al., 2005; Khurana et al., 2018). Diversification (DIVERSE) is predicted to be positive by reducing shock sensitivity, whereas industry concentration (HERF) should be negative due to increased earnings correlation (Morck et al., 2000). Leverage (LEVERAGE) remains unsigned, as its impact on volatility may be offset by reduced profitability (Long & Malitz, 1985; Hall, 2002). Finally, the number of firms in an industry (NIND) is expected to be positive, as competition fosters performance-enhancing differentiation.

<sup>6</sup> We employ firm rather than industry fixed effects, as firm-level earnings are industry-adjusted.

<sup>7</sup> To account for potential serial correlation within firms and cross-sectional dependence, we cluster standard errors at the firm and year levels.

<sup>8</sup> Consistent with prior research, our expectations for the control variables when the dependent variable is firm-specific cash flows are the same as firm-specific earnings as discussed in the remainder of this section.

## 4. RESULTS AND DISCUSSION

### 4.1. Sample Selection

Our sample begins with 55,551 MSCI KLD firm-year observations from 1991 to 2018.<sup>9</sup> After merging with North American Compustat and excluding 28,481 observations missing CSR ratings or required financial data, our final sample comprises 27,070 firm-year observations for 3,352 unique firms. We report sample selection process in Panel A of Table 2.

We also create a sample for a difference-in-difference test that consists of the 28,481 treatment firms from our main sample and a control group of non-treatment firms (non-KLD firms). Starting with 277,999 Compustat observations (1991–2018), we exclude those: 1) missing financial data (145,834); 2) appearing in KLD in any year (47,813); or 3) not industry- and size-matched to a treatment firm in its initial year of KLD coverage (44,664). This yields a final control group of 39,688 observations, resulting in a total DID sample of 66,758 observations across 5,885 unique firms (see Panel B of Table 2).

**Table 2: Sample Selection**

**Panel A: Sample selection for main hypotheses test**

All US firm-year level observations in MSCI KLD 1991-2018	55,551
Less observations:	
Missing firm earnings data and fundamental financial data from Compustat North American database to calculate control variables in Equation (3)	(28,481)
<b>Firm-year observation for main hypotheses test (Equation 3)</b>	<b>27,070</b>
<b>Unique Firms</b>	<b>3,352</b>

**Panel B: Sample selection for difference-in-difference test**

Treatment group (KLD firms)	27,070
Control group (non-KLD firms)	
All US firm-year observations in Compustat North American database 1991-2018	277,999
Less observations:	
Missing firm earnings data and fundamental financial data from Compustat North American database to calculate control variables in Equation (4)	(145,834)
With CSR ratings in MSCI KLD database in any year of sample period	(47,813)
Not matched with a treatment firm (each KLD rated firm is matched with non-KLD rated firms in the same coded industry category by the nearest firm size in the year of initial KLD coverage without replacement)	(44,664)
<b>Firm-year observation for control group (non-KLD firms) i</b>	<b>39,688</b>
<b>Firm-year observation for DID test (Equation 4)</b>	<b>66,758</b>
<b>Unique Firms in matched sample</b>	<b>5,885</b>

<sup>9</sup> Our sample ends in 2018 to avoid confounding effects from the Pandemic.

Table 3 reports the annual sample distribution. Rising firm counts over time reflect MSCI KLD's coverage expansion: from the S&P 500 and Domini 400 in the 1990s to the Russell 1000 in 2001 and the Russell 3000 by 2003.

**Table 3: Sample Distribution by Year**

<b>Year</b>	<b>Frequency</b>	<b>Percent</b>
1991	323	1.19
1992	336	1.24
1993	353	1.30
1994	367	1.36
1995	380	1.40
1996	383	1.41
1997	388	1.43
1998	383	1.41
1999	382	1.41
2000	385	1.42
2001	575	2.12
2002	572	2.11
2003	1,288	4.76
2004	1,611	5.95
2005	1,539	5.69
2006	1,489	5.50
2007	1,435	5.30
2008	1,482	5.47
2009	1,544	5.70
2010	1,599	5.91
2011	1,509	5.57
2012	1,400	5.17
2013	1,384	5.11
2014	1,279	4.72
2015	1,142	4.22
2016	1,154	4.26
2017	1,130	4.17
2018	1,258	4.65
<b>Total</b>	<b>27,070</b>	<b>100.00</b>

#### 4.2. Descriptive Statistics

Table 4 presents descriptive statistics for the primary model variables. All continuous variables are winsorized at the 1st and 99th percentiles to mitigate outlier influence. Mean (median) values for **FirmE** and **FirmCF** are 0.694 (0.385) and 0.287 (0.216), respectively, aligning with prior studies (e.g., Hui et al., 2016).<sup>10</sup>

Means for **CSR\_RATIO** and **CSR\_RATIO2** are 0.022 and 0.004, respectively, with medians near zero. The industry-adjusted **CSR\_IDX** has a mean of 0.412 and a median of 0.382; because this proxy measures performance relative to the industry's lowest-ranked firm, its values are

<sup>10</sup> Pre-merge descriptive statistics are consistent with prior work; however, our final sample skews toward larger firms due to MSCI KLD's coverage focus.

predominantly positive, resulting in a distribution distinct from the other two metrics.<sup>11</sup> These CSR and control variable measures are consistent with prior literature (Burke et al., 2020; Brown & Kimbrough, 2011).

**Table 4: Descriptive Statistics**

<b>Variable (N = 27,070)</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>25<sup>th</sup> Percentile</b>	<b>Median</b>	<b>75<sup>th</sup> Percentile</b>
FirmE	0.694	0.914	0.122	0.385	0.901
FirmCF	0.287	0.287	0.080	0.216	0.423
CSR_RATIO	0.022	0.640	-0.333	0.000	0.242
CSR_RATIO2	0.004	0.642	-0.333	0.000	0.206
CSR_IDX	0.412	0.257	0.220	0.382	0.576
SIZE	7.225	1.526	6.114	7.160	8.270
MB	3.323	3.319	1.579	2.441	3.935
MktShare	0.016	0.033	0.001	0.003	0.015
StdROA	0.074	0.116	0.019	0.038	0.080
DIVERSE	0.734	0.274	0.490	0.804	1.000
HERF	0.063	0.056	0.033	0.041	0.069
LEVERAGE	0.205	0.182	0.033	0.188	0.316
NIND	5.336	1.175	4.419	5.670	6.394

Table 4 reports the descriptive statistics for all variables included in our primary research models. All variables are defined in the Appendix.

Table 5 reports Pearson pairwise correlations for Equation (3). As expected, firm-specific performance measures and CSR metrics exhibit strong mutual correlations; however, since these variables enter the model separately, this does not bias our estimations. Consistent with our hypotheses, CSR\_RATIO and CSR\_RATIO2 positively correlate with the firm-specific variables. However, CSR\_IDX shows negative correlations, likely due to its unique distribution and the fact that CSR\_IDX is industry-adjusted while firm-specific performance measures exclude industry effects.

Several control variable correlations exceed 0.50. Specifically, the correlation between SIZE and MktShare is expected, as larger firms typically command higher market shares. Higher correlations among MktShare, NIND, and HERF are also expected, as these are all industry-based metrics. However, multicollinearity tests yield variance inflation factors (VIFs) well below 5 for all independent variables, indicating that multicollinearity does not pose a concern for our analysis.

<sup>11</sup> CSR\_RATIO2 is less than that of CSR\_RATIO because CSR\_RATIO2 is reduced for controversial business involvement.

**Table 5:** Pearson Correlation Matrix**Panel A: Variables 1 through 6**

		(1)	(2)	(3)	(4)	(5)	(6)
(1)	FirmE	<b>1.00</b>					
(2)	FirmCF	<b>0.73</b>	<b>1.00</b>				
(3)	CSR_RATIO	<b>0.10</b>	<b>0.16</b>	<b>1.00</b>			
(4)	CSR_RATIO2	<b>0.11</b>	<b>0.16</b>	<b>1.00</b>	<b>1.00</b>		
(5)	CSR_IDX	<b>-0.08</b>	<b>-0.12</b>	<b>0.53</b>	<b>0.53</b>	<b>1.00</b>	
(6)	SIZE	<b>-0.04</b>	<b>-0.02</b>	<b>0.27</b>	<b>0.25</b>	<b>0.15</b>	<b>1.00</b>
(7)	MB	<b>0.11</b>	<b>0.18</b>	<b>0.12</b>	<b>0.12</b>	<b>0.03</b>	<b>-0.02</b>
(8)	MktShare	<b>-0.19</b>	<b>-0.24</b>	<b>0.07</b>	<b>0.06</b>	<b>0.14</b>	<b>0.43</b>
(9)	StdROA	<b>0.11</b>	<b>0.07</b>	<b>-0.07</b>	<b>-0.06</b>	<b>-0.05</b>	<b>-0.31</b>
(10)	DIVERSE	<b>0.02</b>	<b>0.01</b>	<b>-0.05</b>	<b>-0.03</b>	<b>-0.01</b>	<b>-0.33</b>
(11)	HERF	<b>-0.26</b>	<b>-0.33</b>	<b>-0.04</b>	<b>-0.05</b>	<b>0.07</b>	<b>0.04</b>
(12)	LEVERAGE	<b>-0.03</b>	<b>-0.09</b>	<b>0.05</b>	<b>0.04</b>	<b>0.03</b>	<b>0.35</b>
(13)	NIND	<b>0.41</b>	<b>0.51</b>	<b>0.05</b>	<b>0.06</b>	<b>-0.11</b>	<b>-0.11</b>

**Panel B: Variables 7 through 13**

		(7)	(8)	(9)	(10)	(11)	(12)	(13)
(7)	MB	<b>1.00</b>						
(8)	MktShare	-0.01	<b>1.00</b>					
(9)	StdROA	<b>0.10</b>	<b>-0.15</b>	<b>1.00</b>				
(10)	DIVERSE	<b>0.09</b>	<b>-0.14</b>	<b>0.19</b>	<b>1.00</b>			
(11)	HERF	<b>-0.09</b>	<b>0.32</b>	<b>-0.12</b>	<b>-0.03</b>	<b>1.00</b>		
(12)	LEVERAGE	<b>-0.01</b>	<b>0.13</b>	<b>-0.10</b>	<b>-0.16</b>	<b>0.03</b>	<b>1.00</b>	
(13)	NIND	<b>0.14</b>	<b>-0.45</b>	<b>0.22</b>	<b>0.09</b>	<b>-0.68</b>	<b>-0.14</b>	<b>1.00</b>

Table 5 reports the Pearson correlation coefficient matrix for all variables included in our primary research models. Variables are defined in the Appendix. N = 27,070. Bold represent significance at the 0.05 level.

### 4.3. Multivariate Regression Results

Table 6 reports the results of estimating Equation (3) where the dependent variable is firm-specific earnings and the definition of CSR is varied across the three columns.<sup>12</sup> The adjusted R<sup>2</sup> for each estimation is approximately 35%. The estimated coefficients for control variables are in general, as predicted. The estimated coefficients for the CSR metrics in each model are positive and significant (0.043, p-value < 0.01; 0.044, p-value < 0.01; and 0.154, p-value < 0.10, respectively). Whether we measure CSR over the six categories, include the influence of controversial businesses, or industry adjust the CSR performance measure, we find a positive association consistent with competitive advantages captured in CSR performance being associated with greater firm-specific earnings. Our results are also economically significant. A one-standard deviation change in CSR\_RATIO is associated with a 3.97% change in firm-specific earnings.<sup>13</sup> Similar relative effect sizes are obtained for CSR\_RATIO2 and CSR\_IDX. Our first hypothesis (H1a) is supported.

<sup>12</sup> Robust t-statistics for all estimations are based on correction for heteroskedasticity with clustering at the firm and year level.

<sup>13</sup> The relative effect size is computed as the estimated coefficient on CSR\_RATIO times the ratio of standard deviation of CSR\_RATIO to the mean of firm-specific earnings.

**Table 6:** Association of CSR with Firm-specific Earnings

	Pred.	(1)	(2)	(3)
CSR_RATIO	H1a: +	0.043*** (3.049)		
CSR_RATIO2	H1a: +		0.044*** (3.018)	
CSR_IDX	H1a: +			0.154* (1.993)
SIZE	+	0.067** (2.290)	0.067** (2.290)	0.067** (2.273)
MB	+	0.008* (1.999)	0.008* (2.002)	0.008* (1.935)
MktShare	?	0.409 (0.708)	0.416 (0.720)	0.408 (0.696)
StdROA	+	0.226 (1.259)	0.227 (1.261)	0.230 (1.274)
DIVERSE	+	0.047 (1.081)	0.047 (1.071)	0.044 (1.004)
HERF	-	-0.006 (-0.009)	-0.004 (-0.006)	-0.006 (-0.009)
LEVERAGE	-	-0.115 (-1.601)	-0.115 (-1.604)	-0.113 (-1.558)
NIND	+	0.445*** (4.592)	0.445*** (4.592)	0.452*** (4.603)
Constant		-2.232*** (-3.525)	-2.230*** (-3.525)	-2.327*** (-3.571)
Adjusted R <sup>2</sup>		0.351	0.351	0.352
Year fixed effects		Yes	Yes	Yes
Firm fixed effects		Yes	Yes	Yes
Observations		27,070	27,070	27,070

Table 6 reports estimations of Equation (3) where the dependent variable is FirmE and the CSR\_METRIC is varied as indicated in the table.

All variables are defined in the Appendix. \*\*\*, \*\*, \* indicate significance at 1%, 5%, and 10%, respectively, using t-statistics based on heteroscedasticity robust standard errors adjusting for clustering at the firm and year levels. t-statistics are reported under the coefficient estimates.

In Table 7, we consider the association of CSR with firm-specific cash flows using Equation (3). The explanatory power of the three models are approximately 56%. The significant control variables are also consistent with our expectations. The estimated coefficients on the CSR metrics are again positive and significant in all three specifications (0.013 in model (1), p-value < 0.01; 0.014 in model (2), p-value < 0.01; and 0.033 in model (3), p-value < 0.10). These results show that firms with higher CSR performance have a higher level of firm-specific cash flows and are consistent with the argument that firms gain a competitive advantage through their unique CSR resources and report increased cash flow when the CSR performance is higher. Our results are also economically significant the relative effect size ranges from 2.90% to 3.12% of firm-specific cash flows. This evidence supports RBV theory that firms with unique resources are more likely to have a competitive advantage in terms of cash inflows among their rival firms, supporting H1b.

**Table 7:** Association of CSR with Firm-specific Cash Flow

	Pred.	(1)	(2)	(3)
CSR_RATIO	H1b: +	0.013*** (3.689)		
CSR_RATIO2	H1b: +		0.014*** (3.794)	
CSR_IDX	H1b: +			0.033* (1.806)
SIZE	+	0.033*** (4.620)	0.033*** (4.621)	0.033*** (4.646)
MB	+	0.004*** (4.011)	0.004*** (4.016)	0.004*** (3.941)
MktShare	?	-0.036 (-0.182)	-0.034 (-0.172)	-0.034 (-0.168)
StdROA	+	0.071* (1.919)	0.071* (1.924)	0.071* (1.913)
DIVERSE	+	0.017 (1.361)	0.017 (1.348)	0.016 (1.311)
HERF	-	-0.072 (-0.598)	-0.072 (-0.594)	-0.072 (-0.593)
LEVERAGE	-	-0.136*** (-7.516)	-0.136*** (-7.522)	-0.135*** (-7.450)
NIND	+	0.134*** (10.888)	0.134*** (10.879)	0.136*** (11.039)
Constant		-0.659*** (-8.428)	-0.658*** (-8.419)	-0.683*** (-8.577)
Adjusted R <sup>2</sup>		0.564	0.564	0.564
Year fixed effects		Yes	Yes	Yes
Firm fixed effects		Yes	Yes	Yes
Observations		27,070	27,070	27,070

Table 7 reports estimations of Equation (3) where the dependent variable is FirmCF and the CSR\_METRIC is varied as indicated in the table.

All variables are defined in the Appendix. \*\*\*, \*\*, \* indicate significance at 1%, 5%, and 10%, respectively, based on t-statistics using heteroscedasticity-robust standard errors clustered by firm and year. t-statistics are reported under the coefficient estimates.

Combined, the positive CSR and firm-specific earnings relationship appear driven by firm-specific cash flow. The consistent findings on the effect of CSR performance suggest that CSR benefits exceed its costs in terms of increasing firm-specific performance.<sup>14</sup> Further, we re-estimate our models using earnings and cash flows as the dependent variable. The CSR-firm performance relationship is only present for cash flows and is weaker than the CSR association with firm-specific cash flow reported in Table 7 (untabulated), consistent with the mixed results in prior research.<sup>15</sup> Our results therefore provide evidence improving our understanding of the CSR – firm performance relationship.

<sup>14</sup> We also use the difference between the number of total strength and the number of total concerns for all the rated six CSR categories as an alternative CSR performance measure and we re-estimate Equation (3) in each case. The estimation results (not tabulated) are consistent with those using the three main CSR measures.

<sup>15</sup> Our argument is that CSR, as a competitive advantage, is associated with firm-specific firm performance as is shown. We would therefore not expect an association when using industry firm performance. In untabulated analysis, we find marginal or insignificant results when explaining industry performance consistent with your argument.

#### 4.4. *Difference-In-Differences Test*

A major contention is whether CSR or other firm characteristics determine financial performance. For example, profitable or large, successful firms may have a higher propensity to engage in CSR, suggesting that profitability drives CSR rather than the reverse (Hong et al., 2012; Clarkson et al., 2011). This debate questions whether CSR creates success or if CSR is simply what successful firms do (Huang & Watson, 2015). Consequently, unobservable factors affecting both firm-specific earnings and CSR performance may introduce omitted variable bias or reverse causality. To address these endogeneity concerns, we implement a difference-in-difference (DID) design using a firm's initial MSCI KLD coverage as an exogenous shock (Cheng et al., 2014).

Firms could not influence MSCI KLD's coverage expansion from the Fortune 500 to the Russell 1000 and 3000, making the initiation of coverage an exogenous shock. Post-initiation, firms are incentivized to improve CSR performance to maintain their reputation (Cheng et al., 2014).<sup>16</sup> This initial coverage creates a quasi-experimental setting, allowing us to compare firm-specific earnings between treated firms (those subsequently rated) and control firms (never covered) across pre- and post-initiation periods.<sup>17</sup> We modify Equation (3) into a difference-in-difference model as follows:

$$\begin{aligned}
 & FirmE_{i,t} \text{ (} FirmCF_{i,t} \text{)} \\
 & = \beta_0 + \beta_1 KLD_{i,t} + \beta_2 POST_{i,t} + \beta_3 (KLD_{i,t} \times POST_{i,t}) + \beta_4 SIZE_{i,t} + \beta_5 MB_{i,t} \\
 & + \beta_6 MktShare_{i,t} + \beta_7 StdROA_{i,t} + \beta_8 DIVERSE_{i,t} + \beta_9 HERF_{j,t} \\
 & + \beta_{10} LEVERAGE_{i,t} + \beta_{11} NIND_{j,t} + \text{Year FE} + \text{Firm FE} + \varepsilon_{i,t}
 \end{aligned}
 \tag{4}$$

where variables are defined in the Appendix.<sup>18</sup> The subscripts i, j, t denote firm i, industry j, and year t, respectively. The variable of interest is the interaction term  $KLD \times POST$ . A positive coefficient indicates CSR performance is associated with increases in firm-specific earnings providing additional evidence to support our hypothesis. We also vary the dependent variable to estimate firm-specific cash flows.

As discussed above, we use a sample for our DID test where we match each MSCI KLD rated firm in our sample (without replacement) with a non-MSCI KLD rated firm in the same industry (two-digit SIC codes) by the nearest firm size in the year of initial MSCI KLD coverage.<sup>19</sup> We estimate Equation (4) for both dependent variables and report our results in Table 8. The estimated coefficient of the interaction term is consistent with our earlier results of the positive association between CSR performance and firm-specific earnings (0.061 in model (1), p-value < 0.05) and firm-specific cash flows (0.030 in model (2), p-value < 0.01). Therefore, results reported in Table 6 further support our hypotheses. Further, the difference-in-difference analysis suggests that CSR

<sup>16</sup> This outcome is consistent with that found when rating agencies began covering specific firms (Cheng, et al. 2014).

<sup>17</sup> We are not stating that non-covered firms have lower CSR performance, only that we would not expect a change in CSR performance because of the shock to the treated firms.

<sup>18</sup> We include year fixed effects and firm fixed effects to control for time variant and firm fixed effects and cluster standard errors by both firm and year level.

<sup>19</sup> The sample size increases from 27,070 in Table 6 to 66,758 in Table 8 because the DID test incorporates a control group of non-KLD-rated firms. Furthermore, because the DID model focuses on the coverage shock rather than specific CSR scores, we retain observations that were previously excluded due to missing CSR component data. Finally, matching by size mitigates potential biases related to MSCI KLD's phased expansion.

performance leads to improved firm performance.

**Table 8:** Difference-in-Differences Analysis

	(1) FirmE	(2) FirmCF
KLD	-0.016 (-0.766)	-0.005 (-0.890)
POST	0.282*** (4.583)	0.054*** (3.198)
KLD X POST	0.061** (2.284)	0.030*** (4.154)
SIZE	0.039*** (4.691)	0.028*** (10.189)
MB	0.002 (0.621)	0.003** (2.610)
MktShare	-1.922*** (-5.163)	-1.113*** (-9.288)
StdROA	0.141 (1.395)	-0.145*** (-6.409)
DIVERSE	-0.053* (-1.913)	-0.010 (-1.276)
HERF	-0.149 (-0.264)	-0.247** (-2.316)
LEVERAGE	-0.109*** (-3.026)	-0.099*** (-8.279)
NIND	0.216 (1.620)	0.012 (0.449)
Constant	-0.965 (-1.293)	0.008 (0.053)
Adjusted $R^2$	0.246	0.355
Year fixed effects	Yes	Yes
Firm fixed effects	Yes	Yes
Observations	66,758	66,758

Table 8 reports estimations of Equation (4) where the dependent variable is varied as indicated in the table. All variables are defined in the Appendix. \*\*\*, \*\*, \* indicate significance at 1%, 5%, and 10%, respectively, based on t-statistics using heteroscedasticity-robust standard errors clustered by firm and year. t-statistics are reported under the coefficient estimates.

The difference-in-difference test assumes that treatment and control firms follow similar trends in firm-specific earnings and cash flow before the initiation of KLD coverage (parallel trends assumption). To validate this assumption, we interact a series of pre- and post-event indicator variables with the KLD treatment variable. We find no significant coefficients for the pre-event periods, and F-tests confirm the sum of these coefficients is statistically insignificant from zero (p-values = 0.233 and 0.801, for firm-specific earnings and firm-specific cash flow, respectively). This lack of pre-existing trends rules out the potential reverse causality. Conversely, post-event coefficients are positive and significant, confirming that firm-specific performance increased following KLD coverage relative to the control group.

As a secondary check against omitted variable bias, we estimate dynamic models including lagged dependent variables, a method similar to the Granger causality approach used by Bose & Yu (2023). These results (untabulated) remain qualitatively similar to our primary findings, further supporting that the direction of association flows from CSR performance to firm performance and is not spurious.

#### **4.5. Sensitivity Tests**

We perform several sensitivity tests to address the robustness of our results. First, while we use a comprehensive CSR performance metric in our primary analysis, this approach presents an interpretability issue; different dimensions of CSR performance may have varying or even opposing effects on firm-specific earnings, or a single category may be the primary driver. Therefore, we use the individual net CSR scores for each category (Benlemlih & Bitar, 2018): the environment (ENV\_NET), community (COM\_NET), diversity (DIV\_NET), employee relations (EMP\_NET), human rights (HUM\_NET), product characteristics (PRO\_NET), and industry concerns (IND\_CONCERN).<sup>20</sup>

We re-estimate Equation (3) as modified and report our results in Table 9. In model (1), we find that the firm-specific earnings are significantly and positively associated with CSR performance on environmental issues. That is, firm-specific earnings are greater when the strengths of environmental issues are increased. Similar results are found for firm-specific cash flows in model (2). In addition, firm-specific cash flows are significantly increasing in net strengths of product issues, and as the number of industry concerns declines. Our analysis of individual CSR categories provides further information about the association between different dimensions of CSR performance and firm-specific earnings and cash flows.

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<sup>20</sup> IND\_CONCERN is an inverse measure of the number of controversial business involvement concerns in the industries to allow for interpretation that is directionally consistent with the other dimensions.

**Table 9:** CSR Components and Firm-Specific Earnings and Cash Flows

	(1)	(2)
	FirmE	FirmCF
ENV_NET	0.199*** (3.209)	0.031* (1.734)
COM_NET	0.047 (0.700)	-0.003 (-0.217)
DIV_NET	0.010 (0.244)	0.010 (1.033)
EMP_NET	-0.033 (-0.877)	0.006 (0.503)
HUM_NET	0.100 (0.762)	0.019 (0.992)
PRO_NET	0.011 (0.184)	0.024* (1.754)
IND_CONCERN	0.149 (0.777)	0.128** (2.115)
SIZE	0.067** (2.338)	0.033*** (4.713)
MB	0.008** (2.234)	0.004*** (4.102)
MktShare	0.787 (1.353)	0.053 (0.278)
StdROA	0.220 (1.205)	0.071* (1.939)
DIVERSE	0.048 (0.956)	0.016 (1.241)
HERF	0.415 (0.567)	-0.060 (-0.512)
LEVERAGE	-0.115 (-1.501)	-0.135*** (-7.462)
NIND	0.454*** (4.609)	0.133*** (11.011)
Constant	-2.288*** (-3.497)	-0.652*** (-8.361)
Adjusted R <sup>2</sup>	0.346	0.564
Year fixed effects	Yes	Yes
Firm fixed effects	Yes	Yes
Observations	27,070	27,070

Table 9 reports estimations of a modification of Equation (3) where the dependent variable is varied as indicated in the table and the CSR\_METRIC is the array of CSR performance scores for the six MSCI KLD categories (ENV\_NET, COM\_NET, DIV\_NET, EMP\_NET, HUM\_NET, PRO\_NET, IND\_CONCERN).

All variables are defined in the Appendix. \*\*\*, \*\*, \* indicate significance at 1%, 5%, and 10%, respectively, based on t-statistics using heteroscedasticity-robust standard errors clustered by firm and year. t-statistics are reported under the coefficient estimates.

Next, we separate our net CSR measure into strengths and concerns, as prior research suggests strengths and concerns are distinct and could have different effects (Burke et al., 2020), and re-estimate our models (Table 10). CSR strengths are positively associated with firm-specific earnings and cash flows, consistent with our main results, whereas CSR concerns show no significant associations. These findings indicate that CSR strengths drive the positive relationship between CSR performance and firm-specific earnings and cash flows.

**Table 10:** Analysis of the Effects of CSR Strengths and Concerns

	(1) FirmE	(2) FirmCF
CSR_N_STRENGTHS	0.060*** (3.515)	0.015*** (2.881)
CSR_N_CONCERNS	0.009 (0.328)	0.005 (0.562)
SIZE	0.063** (2.147)	0.036*** (5.011)
MB	0.008* (2.029)	0.004*** (3.719)
MktShare	0.597 (1.023)	-0.074 (-0.365)
StdROA	0.222 (1.238)	0.022 (0.757)
DIVERSE	0.047 (1.094)	0.020 (1.684)
HERF	0.004 (0.006)	-0.171 (-1.334)
LEVERAGE	-0.112 (-1.565)	-0.128*** (-6.906)
NIND	0.442*** (4.605)	0.122*** (7.883)
Constant	-2.202*** (-3.528)	-0.617*** (-7.031)
Adjusted $R^2$	0.351	0.568
Year fixed effects	Yes	Yes
Firm fixed effects	Yes	Yes
Observations	27,070	27,070

Table 10 reports estimations of Equation (3) where the dependent variable is varied as indicated in the table and the CSR\_METRIC are CSR\_N\_STRENGTHS and CSR\_N\_CONCERNS.

All variables are defined in the Appendix. \*\*\*, \*\*, \* indicate significance at 1%, 5%, and 10%, respectively, based on t-statistics using heteroscedasticity-robust standard errors clustered by firm and year. t-statistics are reported under the coefficient estimates.

CSR effects may persist over time, so we examine whether CSR performance is associated with future firm-specific earnings. Using one-, two-, and three-year lags of CSR performance (untabulated), we find no evidence of CSR stickiness.

The difference between firm-specific earnings and cash flows reflects firm-specific accruals, which we further decompose into normal and discretionary components. Firm-specific normal accruals are predicted using the performance-adjusted discretionary accrual model, while firm-specific discretionary (abnormal) accruals are measured as residuals from this model (Kothari et al., 2005). Re-estimating Equation (3) with accrual measures as dependent variables (untabulated), we find that higher CSR performance is associated with higher firm-specific accruals. Specifically, CSR coefficients are positive and significant for normal accruals but negative and significant for discretionary accruals, consistent with normal accruals' close alignment with earnings and cash flows and with CSR being associated with higher earnings quality.

Finally, we examine whether these associations differ between profitable and loss firms. Our subsamples include 21,085 profitable firms and 5,985 loss firms, indicating that most CSR firms are profitable. The results (untabulated) show that the positive association between CSR performance and firm-specific earnings is concentrated among profitable firms, consistent with prior literature arguing that profitability enables firms to pursue CSR activities.

#### **4.6. Implications**

Our study directly responds to Huang & Watson's (2015) call to move beyond market-based metrics, which generate noise and contribute to the mixed findings in CSR research. By demonstrating a robust positive association between CSR and firm-specific financial performance, our evidence helps reconcile contradictions in prior studies (e.g., Christiansen et al., 2021; Huang et al., 2020) and shows that CSR's effect is best captured by measures that isolate competitive advantage at the firm level. The results further clarify the debate between the positive view of CSR (e.g., El Ghoul et al., 2011; Cheng et al., 2014) and the agency-cost perspective (Barnea & Rubin, 2010) by showing that value creation stems from CSR strengths, not concerns - implying that strategic, not wasteful, CSR generates financial returns. Supporting the RBV framework, our study offers both theoretical and practical significance: it validates CSR as a profit-driven resource that strengthens competitive advantage, addresses real-world skepticism about CSR's credibility, and provides evidence to align capital allocation with global sustainability goals.

## **5. CONCLUSION**

Prior research on the CSR–firm performance relationship has yielded mixed findings, largely due to endogeneity concerns over whether financially successful firms simply have greater capacity to engage in CSR. We address this challenge by focusing on firm-specific earnings and employing a difference-in-differences design to isolate the effect of CSR. Consistent with the resource-based view, our results show that CSR operates as a firm-specific resource that generates competitive advantage. Through channels such as sustainable product integration, operational efficiency, and enhanced reputation, CSR contributes directly to higher firm-specific earnings and cash flows. These findings demonstrate that CSR is not merely a byproduct of firm success but an economically meaningful driver of it.

Importantly, our evidence provides a credible economic rationale for private-sector engagement in sustainable development. The positive association between responsible production practices and firm-specific earnings supports progress toward responsible consumption and production (SDG 12). The strong link between environmental CSR strengths and cash flows shows that corporate climate action can enhance, rather than undermine, financial performance and advance climate goals (SDG 13). Moreover, by establishing that CSR strengthens firm performance, our results validate investments in safe workplaces, product quality, and employee well-being as pathways to sustained economic growth (SDG 8).

Our study is subject to limitations. Reliance on MSCI KLD data raises concerns regarding coverage and the distinction between CSR performance and disclosure. While these limitations are unlikely to materially affect our conclusions, future research should assess whether similar firm-specific financial benefits arise using alternative CSR datasets.

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