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The impact of CEO power and institutional discretion on CSR investment

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Abstract

Based on a large international sample, we show how the decision-making power of CEOs in conjunction with prevailing institutional discretion relates to corporate resources allocated toward CSR strategy. First, especially with greater institutional discretion, powerful CEOs pursue exaggerated CSR strategies aiming at reputational gains for their private benefit, while not necessarily bearing the costs of their decisions. Second, such CEO-induced CSR enhancements turn out to be defective CSR overinvestment, ultimately entailing a decrease in firm value. By complementing organizational factors with institutional characteristics, we refute previous contradicting empirical evidence regarding a significant CEO effect and show a conditional relation between CEO power and CSR choice. Our results are robust to alternative sample compositions, different variable definitions, and various methodological specifications.

KEYWORDS

CEO, corporate governance, corporate social responsibility, managerial discretion, national institutions

JEL CLASSIFICATION

D03; G11; G18; G34; M14

1 | INTRODUCTION

When analyzing Corporate Social Responsibility (CSR), extant literature has already identified a broad range of both consequences of as well as determinants for CSR initiatives. Prior research documents various relations between CSR and financial parameters, such as firm value (Fatemi et al., 2015), stock returns (Brammer et al., 2006), systematic risk (Albuquerque et al., 2018), financial distress (Goss, 2009), cost of equity (El Ghouli et al., 2011), access to finance (Cheng et al., 2014), and merger performance (Deng et al., 2013). As for the determinants of CSR investments, current research mainly focuses on reasons on the firm-level, such as managerial discretion (Arora & Dharwadkar, 2011), narcissistic behavior (Petrenko et al., 2016), commitment to ethical behavior (Muller & Kolk, 2010), hubris (Tang et al., 2015), and political orientation (Chin et al., 2013) of the CEO, whereas Campbell (2007) also finds evidence for the impact of the legal environment on the level of CSR activities in firms. Additionally, the CSR performance can differentiate across industries (McWilliams & Siegel, 2001) and countries (Ioannou & Serafeim, 2012).

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More specifically, focusing on the CEO's role in determining a firm's CSR activities, two issues arise. First of all, what are the CEO's motives when deciding on CSR measures? Secondly, what is the CEO's capability in implementing such measures? The first question gains importance if we examine somewhat closer CEOs' opportunities to pursue personal goals. As is well known, there is a general tendency for egoistic managers to overinvest leading to so-called "empire building" in order to increase one's reputation. If on the one side, this (mis-) incentive affects all kinds of investments in a similar way, one would also expect CEOs to strive for (value-destroying) CSR overinvestment. If, on the other side, certain kinds of investments are suited to support empire building in a particular way and are therefore preferred by CEOs, these egoistic managers will forego (value-enhancing) CSR investments. In order to gain insights into the motives of CEO's CSR activities, it is thus necessary to investigate them simultaneously together with their consequences for financial performance.

The second issue tackles the problem of whether a CEO's latitude of action is sufficient for accomplishing personal goals. Two dimensions seem to be of major importance in this regard: first, on a corporate level, the CEO's power as part of the board of directors, and second, on the country level, the institutional environment opening up avenues for egoistic managerial behavior.

Against this background and based on a large international sample with 32,995 observations across 40 countries between 2002 and 2017, we contribute to the analysis of possible determinants and consequences of corporate CSR investments and shed light on the role CEOs play in this regard. To be more precise, while there are studies that show separately that a CEO's power (Arora & Dharwadkar, 2011) and his or her narcissism (Petrenko et al., 2016) may determine the level of CSR investments, we are the first to investigate these issues and their interaction simultaneously in a unified empirical framework, allowing us to obtain deeper insights about the motivation of powerful CEOs. Second, by additionally integrating the national background in this analysis, we reveal that pronounced institutional discretion available to powerful CEOs accelerates this inclination to CSR investment. Third, we demonstrate that these CEO-induced CSR initiatives indeed emerge as defective overinvestment, ultimately destroying firm value.

Several additional analyses support our main findings drawing a consistent overall picture. In particular, as revealed by textual analyses of conference calls leading to 4,682 observations from 16 countries, the above findings are particularly strong for CEOs that are characterized by narcissistic personality traits. For a CEO to indulge in narcissism, it is necessary to speak about these CSR activities and society must be prone to CSR measures. Therefore, CSR reporting and an increasing awareness of a society regarding CSR issues coincide with more intense CSR (over) investment. Furthermore, more short-term oriented CSR investments in the social domain seem to be preferable to more long-term oriented CSR measures tackling environmental issues. Apparently, CSR overinvestments may be particularly attractive for narcissistic CEOs, and therefore, we do not observe any crowding-out of CSR activities by other kinds of overinvestment aiming, e.g., especially at empire building.

The remainder of the paper proceeds as follows. The next section reviews related literature and derives our hypotheses. The third section introduces our dataset along with explanations on sample construction and variable measurement. The fourth section presents our main results including additional analyses, while the fifth section is devoted to several robustness tests. The last section concludes.

2 | LITERATURE AND HYPOTHESES

2.1 | CEO power and CSR choice

According to agency theory (Jensen & Meckling, 1976), CEOs often pursue other objectives than shareholders due to differences of specific intrinsic drivers and prevailing informational asymmetry (Arrow, 1968). While shareholders are largely non-affiliated investors trying to maximize the value of their well-diversified portfolios, CEOs may also urge to strengthen their individual reputation by enforcing various measures. Whenever possible, CEOs that are more concerned about their personal targets rather than the well-being of the firm immediately increase investment to derive such perquisites (Jensen, 1986).

At this point, the power of individuals to exert their will becomes relevant (Finkelstein, 1992). Pfeffer (1981) defines power as "the capability of one social actor to overcome resistance in achieving a desired objective or result." The traditional view of an organization's hierarchical structure proposes higher formal power to the board than to the CEO, for instance, reflected by the legitimate right to hire and fire CEOs or the reward capability to set the compensation of CEOs (e.g., Fama & Jensen, 1983). However, broader approaches also consider the informational power to control the exchange of knowledge (Raven, 1965), allowing CEOs to evade influence by the board. Therefore, upper echelons theory from Hambrick and Mason (1984) states that strategic choices and organizational outcomes are the result of certain leadership team characteristics. In a nutshell, CEO power arises from the status of CEOs relative to the restricting board. This, in turn, determines the ability to actively influence decisions and thereby shape firm-level outcomes in one's very own interest (Park et al., 2018).

Considering a company where the CEO makes all decisions alone and a company where all decisions emerge from a consensus among the executive team, it is obvious that CEOs can better strive for personal goals in the former case. Accordingly, the architecture of the decision-making authority is of particular importance for the significance of CEOs in the decision-making process (Sah & Stiglitz, 1986) and the feasibility of CEOs to enforce exaggerated engagement for the sake of increasing their own personal reputation in more centralized decision-making authorities (Sah & Stiglitz, 1991).

In order to enhance their reputation, CEOs who hold such power have several different strategies at their disposal. In particular, if CEOs see a high relevance for sustainable issues in society, they may increase the respective CSR investment even beyond a value-maximizing extent, aiming at reputational gains for their private benefit from being associated with an environmentally and socially committed company (Barnea & Rubin, 2010). In this vein, CSR choice has emerged as an important agency problem in the recent past. If the willingness to exaggerate CSR engagement on the part of the CEOs exists, the practical feasibility turns out to be the critical aspect in the end.

This consideration leads to the following hypothesis regarding the relationship between CEO power and CSR investments:

Hypothesis 1 *CEO power relative to the board of directors is positively related to the extent of CSR activities.*

2.2 | The moderating role of institutional discretion

Taking for granted that national institutions constitute the constraints that structure political, social, and economic interaction within each country (North, 1991), extensive interrelationships with governance systems for incentive shaping and consequential resource allocation on the firm-level are evident (Williamson, 2000). Previous studies document different organizational governance characteristics in international comparisons (e.g., Aguilera & Jackson, 2003), suggesting country-specific changes in managerial discretion as well. House et al., (2004) realize that the amount of influence, prestige, and privilege given to CEOs varies widely across countries. Some countries exhibit severe constraints on what CEOs can do, while in other countries CEOs enjoy substantial power, status, and special perquisites.

Therefore, the possibility to influence corporate decisions depends not only on the previously discussed organizational factors, but also on various external determinants (Hambrick & Finkelstein, 1987). On this basis, Crossland and Hambrick (2007) were the first to provide a theoretical link between both formal and informal institutions and managerial discretion. Within the resulting concept of institutional discretion, social norms and formal rules are major determinants that permit or constrain latitude of action available to CEOs. Constraints, in this context, occur whenever an action is objectionable from an institutional perspective. To what extent this is the case depends on both the degree to which institutions consider the action objectionable and the disciplining power of these institutions. While social norms, such as cultural values, strongly relate to prevailing virtues and habits that determine the point from which on an action is regarded as reprehensible, formal rules, such as current laws, refer to available powers and authorities that prevent these objectionable actions (Crossland & Hambrick, 2011). Thus, adapting the conceptualization of Hambrick and Finkelstein (1987), institutional discretion can be defined as the joint product of cultural open-mindedness toward CEOs' actions and legal inability to prevent objectionable behavior of CEOs.

In the end, CEOs try to achieve leeway by evading controlling and disciplining forces (Walsh & Seward, 1990). Along with institutions forming the foundations of these forces and thereby the degree of discretion they confer to CEOs, an impact on the power nexus between CEOs and the board appears likely. If CEOs experience sufficient institutional discretion, they will exploit their power to pursue their own interests at the shareholders' expense. Everything taken into consideration, CEO power is the enabler and institutional discretion serves as the accelerator for CEO-induced variations of CSR activities.

Hypothesis 2 *According to the prevailing national framework, the positive relation between CEO power and CSR choice according to H1 intensifies with pronounced institutional discretion.*

2.3 | Valuation effects of CEO-induced CSR investment changes

The neoclassical investment theory assumes that CEOs seek to maximize the present value of the firm (Tobin & Brainard, 1977). This means CEOs realize solely projects with a positive net present value (Hayashi, 1982). After implementing all profitable investment opportunities, excess cash can simply be distributed to the shareholders as dividends. However, CEOs may deviate from this optimal investment strategy and realize detrimental overinvestment due to insufficiently aligned interests with shareholders. First, problems of moral hazard struggle with abundant access to cash available to CEOs that thereupon implement

overinvestment subsequent to financing (Jensen, 1986). Second, problems of adverse selection let CEOs take advantage of their information lead by selling overpriced equity to the disadvantage of new shareholders in order to finance overinvestment (Baker & Wurgler, 2002). If CSR enhancements beyond prospective opportunities are only beneficial from a CEO's perspective, such exploitations turn out to be adverse overinvestment and earn a punishment by the capital market.

In a nutshell, defective overinvestment along with CEO-induced CSR enhancements in line with Hypothesis 1 should entail a reduction in firm value, which is particularly severe when CEOs are facing both the enabling power surplus relative to the board and the accelerating institutional discretion to exert their will.

Hypothesis 3 *CEO power is positively related to CSR overinvestment particularly for higher institutional discretion. Moreover, for high CEO power and high institutional discretion, CSR overinvestments are negatively related to firm value.*

3 | DATA

3.1 | Sample

The sample of our baseline regressions for testing Hypotheses H1 to H3 combines several different data sources. We obtain data on the extent of environmental, social, and governance (ESG) initiatives from Thomson Reuters ASSET4, providing us with structured and standardized information on more than 5,000 global companies in the form of over 500 different metrics. The Worldscope database offers us fundamental data on companies' financial accounts. The assessment of institutional discretion originates from Djankov et al., (2008). Finally, World Bank Open Data gives us access to macroeconomic and development data around the world. For the main analysis, we restrict our sample to observations with only full data coverage. Therefore, we include all companies covered by the ASSET4 Full Universe List and match them with data from Worldscope and Djankov et al., (2008). Table 1 provides an overview of the variables used in our analyses together with references to their sources.

The resulting sample comprises overall 32,995 observations across 40 countries between 2002 and 2017. While the United States is the most strongly represented country with 8,910 observations, Sri Lanka, however, accounts for only 2 observations. Besides, the number of observations per year is largely increasing over time. Table 2 shows the breakdown of our sample according to country, sector, and year attribution.

3.2 | Variables

3.2.1 | CEO power

Despite numerous studies interested in consequences resulting from the CEOs' latitude of action, its adequate quantification is an unsettled issue and remains subject to academic debate (e.g., Kim, 2013). For instance, Adams et al., (2005) observe overall low correlations among different measures of CEO power, suggesting a multilayered construct. Therefore, Pathan (2009), among others, requires two criteria of CEO power to be jointly fulfilled before it can be assumed that CEOs are able to influence corporate decisions. In this sense, we rely on the sum of CEO duality and CEO importance, to quantify CEO power (*POWER*). The data used at this point originate from the governance pillar as a part of Thomson Reuters ASSET4. First, CEO duality (*DUAL*) is a dummy variable that indicates whether the CEO simultaneously presides the board. Considering that a chairperson is usually responsible for the procedure of board meetings and the decisions regarding recruitment, dismissal, and assessment of the CEO, researchers are concerned about selective information transfer, restricting the boards' independent monitoring function, and simultaneously increasing CEO power (e.g., Fama & Jensen, 1983). Second, following Pathan (2009) and Adams et al., (2005), we define CEO importance (*ONLYINSIDER*) as a dummy variable that indicates whether the CEO is the only executive sitting on the board. This exploits the idea that other executives besides the CEO also participate in corporate decision-making and therefore act as possible obstacles, limiting the CEO's power (Adams et al., 2005).

We note that the corporate board is subject to strict requirements and largely predetermined by a country's federal law. For instance, board structure can be attached to certain corporate characteristics, such as size or revenue. In extreme cases, membership of executives on the board is even prohibited by law, although transitional arrangements may allow temporary exceptions (as is, e.g., the case in Germany). Nevertheless, we still observe a considerable heterogeneity of CEO power within individual countries (see Table A.1 in the Appendix S1, which is accessible online as Appendix S1). However, we will return to this issue in Section 4.2.2.

3.2.2 | Institutional discretion

When analyzing external latitude of action available to CEOs, many studies focus on industry-level factors (e.g., Hambrick & Abrahamson, 1995). Recent work demonstrates that when the magnitude of CEO effects already depends on industry-level factors, the national context is at least of equal importance (Crossland & Hambrick, 2007, 2011). Djankov et al., (2008) develop a so-called revised antidirector rights index to capture the legal protection of shareholders against expropriation by CEOs. The revised antidirector rights index counteracts various concerns against the original version of this index suggested by La Porta et al., (1998) and is based on six variables indicating laws that regulate the consideration of shareholders as part of the company's decision-making process. Higher values imply less leeway available to the CEO and accordingly more rights to shareholders. As we are interested in the latitude of action available to CEOs within a country, we utilize the reverse (revised) antidirector rights index to capture institutional discretion (*IDISC*). Resulting from this, we find that Argentina, Greece, and Italy confer CEOs the most pronounced institutional discretion, while at the other end Brazil, Hong Kong, India, Ireland, Malaysia, Singapore, South Africa, Spain, and the United Kingdom all grant the least discretion possible (see Table A.1 in the Appendix S1).

3.2.3 | Corporate social responsibility

We follow previous international studies (Cheng et al., 2014; Ioannou & Serafeim, 2012) and employ international data from Thomson Reuters ASSET4, giving us access to detailed information on around 5,000 global publicly listed companies, including MSCI World, STOXX 600, Bovespa, FTSE 250, ASX 300, and MSCI Emerging Market Index. The data are broken down into 750 data points on the base level and, in turn, structured into normalized, weighted, and benchmarked pillar scores for environmental, social, and governance dimensions of CSR between 0 (worst performance) and 100 (best performance).

As already mentioned, we use data from the governance component of the overall score to construct our measure for CEO power. Therefore, we base our main analysis only on the weighted combination of all available indicators for environmental and social initiatives and call this for simplicity reasons *CSR*. However, the results of all our analyses remain completely unchanged if we make use of the complete CSR score including the governance dimension. Moreover, in Section 4.2.3, we also make separate use of either the social component or the environmental component.

In what follows, we use a firm's CSR performance as a proxy for the amount of its CSR investments, since data regarding the latter are only available for a small sample of firms. However, this kind of approximation of CSR investments is an established method in the literature (e.g., Borghesi et al., 2014). In addition, the only reason for but a weak relationship between CSR scores and CSR investments would be that there were firms that are more or less successful in transforming (CSR) investments into (CSR) performance. As we want to examine the “dark side” of CSR investments, if anything, our conclusions are too conservative at least with respect to potential overinvestment issues, because we abstract from any (additional) frictions when translating CSR investments into CSR performance. Nevertheless, later on, we will return to this issue.

3.2.4 | CSR investment and valuation

To examine the link between CEO-induced CSR overinvestments, we rely on a series of appropriate measures. First, we make use of an estimation procedure to identify deviations from the optimal CSR choice within a relevant peer group. As expenditures for CSR engagement can become manifest either in increases in CSR score or in generally high levels of CSR scores due to ongoing regular costs, we aim to include both aspects into our definition of CSR investment. Since there is no established measure for identifying CSR overinvestment in the literature so far, we rely on an alternative approaches for our empirical study. Inspired by Biddle et al., (2009), we define the optimal CSR choice as a function of the sales growth ratio (*SGRO*) with which we proxy a firm's latitude for CSR expenditures. We, therefore, regress the total CSR score of a firm on the corresponding sales growth ratio grouped by country, industry, and year to account for possible exogenous influences on the CSR levels. It should be noted that we are not concerned with the sign of the regression coefficient belonging to *SGRO* (in fact, fast-growing companies spend on average less for CSR activities), because we base our classifications on the obtained estimated residuals of this regression, which hereby measure deviations from the expected level of CSR performance, and then group observed CSR choices into quartiles. While the lower three quartiles represent appropriate CSR choices or even CSR underinvestment, a classification within the top quartile indicates CSR overinvestment (*CSROI*). Second, along with related studies in the field of corporate governance, we proxy a firm's market value relative to its size with Tobin's *Q* (*TQ*) (e.g., La Porta et al., 2002) and investigate the impact of *CSROI* on *TQ*.

TABLE 1 Variable definitions and data sources

Variable	Description	Source
<i>CSR</i>	Composite score based on standardized indicators for environmental and social performance	Authors' calculation; ASSET4 ESG DATA
<i>EN</i>	Standardized indicator for environmental performance	ASSET4 ESG DATA
<i>SO</i>	Standardized indicator for social performance	ASSET4 ESG DATA
<i>POWER</i>	The sum of <i>DUAL</i> and <i>ONLYINSIDER</i>	Authors' calculation; ASSET4 ESG DATA
<i>DUAL</i>	An indicator of whether the CEO is also the chairperson of the board	ASSET4 ESG DATA.
<i>ONLYINSIDER</i>	An indicator of whether the CEO is the only executive on the board	Authors' calculation; ASSET4 ESG DATA.
<i>CEO Pay</i>	CEO power measured by CEOs' total compensation relative to the second highest-earning executive	Authors' calculation; ASSET4 ESG DATA.
<i>CSR REPORT</i>	An indicator of whether the company publishes voluntarily a CSR report	ASSET4 ESG DATA.
<i>CSROI</i>	An indicator of whether the firms' CSR score is classified as CSR overinvestment	Authors' calculation; Worldscope
<i>A_CSROI</i>	An indicator of whether the firms' CSR score is classified as CSR underinvestment measured by the deviation of CSR score between t and $t-1$	Authors' calculation; Worldscope
<i>TQ</i>	The ratio of market value of equity plus the book value of debt, divided by total assets	Authors' calculation; Worldscope
<i>SIZE</i>	The natural logarithm of total assets in \$US	Authors' calculation; Worldscope
<i>BTM</i>	The ratio of book value to the market value of equity	Authors' calculation; Worldscope
<i>LEV</i>	The ratio of long-term debt to total assets	Authors' calculation; Worldscope
<i>SGRO</i>	The annual growth rate in sales	Authors' calculation; Worldscope
<i>CAPEX</i>	The ratio of capital expenditures to total assets	Authors' calculation; Worldscope
<i>CASH</i>	The ratio of cash to total assets	Authors' calculation; Worldscope.
<i>PROFIT</i>	The ratio of operating income to assets	Authors' calculation; Worldscope
<i>IOWN</i>	Percentage of closely held shares	Authors' calculation; Worldscope
<i>COMMON</i>	An indicator of whether a country is classified as belonging to the common or the civil law tradition	La Porta et al., (1998)
<i>CSRLAW</i>	An indicator of the national laws regarding CSR disclosure	Dhaliwal et al., (2012)
<i>STAKE</i>	Average rank score of the number of nongovernmental organizations (NGOs) per million people and the number of CSR reports issued by both commercial and noncommercial organizations per million people	Dhaliwal et al., (2012)
<i>NARC</i>	The abnormal positivity in tone CEOs use in conference calls based on the word list by Loughran and McDonald (2011)	Loughran and McDonald (2011)
<i>IDISC</i>	Institutional discretion measured by the reverse antidirector rights index	Authors' calculation; Djankov et al., (2008).
<i>A_IDISC</i>	Institutional discretion measured by the reverse anti-self-dealing index	Authors' calculation; Djankov et al., (2008).
<i>A_IDISC2</i>	Institutional discretion measured by standardized corporate governance scores on country level	Authors' calculation; ASSET4 ESG Data
<i>BFSIZE</i>	The total size of the board of directors	ASSET4 ESG DATA.

Note: This table presents definitions and sources of the variables from the analyses.

3.2.5 | Control variables

To ensure proper statistical inference, we follow related studies and control for a range of previously identified determinants affecting the process of CEO decision-making (Adams et al., 2005) and CSR strategy (Ioannou & Serafeim, 2012). Larger (*SIZE*), investment-intensive (*CAPEX*), and more profitable (*ROA*) firms with abundant access to cash (*CASH*) seem to be more likely to spend resources on CSR. By contrast, indebted (*LEV*) value firms (*BTM*) with higher sales growth rates (*SGRO*)

practice less CSR. In addition, we include the share of inside ownership (*IOWN*), as CEOs with large ownership stakes in their own company exhibit poor diversification, making them bear significant costs of value-reducing actions ultimately affecting their decision-making behavior (Jensen & Meckling, 1976). We account for all the above-mentioned circumstances by adding appropriate control variables.

Furthermore, since we cannot conduct firm-fixed effects due to the likely invariant nature of our CEO power variable, we include year dummies to capture occurring time-series variations and industry dummies to allow for industry-specific differences in asset structure, accounting practices, regulation, and competitiveness. Despite this limitation, this invariance over time of the measure for CEO power reduces the potential risk of endogeneity. Country dummies to absorb remaining institutional characteristics are only included in regressions without country-level variables in the set of independent variables to prevent problems of multicollinearity. Otherwise, we include an additional dummy indicator to consider the legal tradition (*COMMON*). Finally, we follow Dhaliwal et al., (2012) and introduce the variable CSR disclosure (*CSRLAW*) as a three-point scale (1 for mandatory CSR disclosure requirements for pension funds only, 2 for industrial companies and pension funds, and 0 for no laws concerning CSR disclosure) to control for legal publication obligations with respect to a firm's CSR engagement. We make use of this variable in our tests for CSR overinvestment, as here such legal requirements for disclosure may be of particular importance, because they may influence companies to invest excessively into stakeholder-oriented measures. However, we will return to this issue also in our section with additional tests. The first two columns of Table 3 provide descriptive statistics for all variables of our main analysis (for more information on descriptive statistics see Table A.2 in the Appendix S1).

4 | RESULTS

4.1 | CEO power, levels of institutional discretion, and CSR choice

We examine the impact of CEO power in interaction with the prevailing level of institutional discretion on CSR choice as well as resulting consequences based on several multivariate regression models in a panel data framework. To ensure comparability of the empirical results across all independent variables, we rely on standardized regression coefficients, which means that all dependent and independent variables exhibit a mean of zero and a variance of one during the estimation. As we have several observations per firm over time, it is likely that our residuals correlate within each firm across years. Consequently, we cluster standard errors by firm to take adequate account of this error source. Relatively low values of the variance inflation factor for the control variables across all of our regression models (including those of the Appendix S1) indicate that multicollinearity is not a serious problem. Moreover, Table 3 endorses this conclusion, as the correlations between our control variables are generally rather low. At first glance, the relatively high correlation of 0.386 between *POWER* and *IDISC* might seem concerning as we try to examine interaction terms between both variables. However, when splitting *POWER* into its components *DUALITY* and *ONLYINSIDER*, we see that individual correlations between *IDISC* and both variables are significantly lower. Moreover, low correlations between *POWER* and alternative measures of *IDISC* (see Section 4.2.2. for details) in combination with all VIF values being below critical thresholds underline the conjecture that multicollinearity is not a major issue within our analysis. To adjust for outliers, we winsorize all our variables at 1 percent.

As a first step, we investigate whether CEO power influences CSR choice, initially neglecting the moderating role of institutional discretion, in order to assess the importance of CEOs for CSR initiatives. For this purpose, we rely on an OLS regression model of the following form:

$$CSR = \beta_0 + \beta_1 \cdot POWER + \beta \cdot C + \varepsilon. \quad (1)$$

Our proxy for *CSR* is an aggregated score of environmental and social engagement. However, as already mentioned, all our empirical results are essentially identical, if we also include the governance component of the *CSR* score (see Table A.3 in the Appendix S1). *POWER* indicates the status of the CEO relative to the board. The vector *C* comprises all control variables as elaborated before. The corresponding results are available in Model 1 of Table 4 and show a statistically significant positive sign of the coefficient for *POWER*. Therefore, CEOs that are more powerful enhance on average all types of *CSR* engagement. The findings are strongly in line with the prediction of H1, stating that a higher status of the CEO relative to the board improves the feasibility to influence corporate decision-making and thus increases *CSR* choice. Furthermore, the coefficients of our control variables are mostly in line with our expectations based on the common literature.

In Models 2 to 4 of Table 4, we take the moderating role of institutional discretion into consideration. Our OLS regression model thus changes to the following one:

TABLE 2 Sample breakdown

Country	N	%	Sector	N	%
Argentina	21	0.07	1 Consumer Nondurables	2,204	6.68
Australia	2,500	7.58	2 Consumer Durables	1,150	3.49
Austria	146	0.44	3 Manufacturing	4,001	12.13
Belgium	228	0.69	4 Energy	1,938	5.87
Brazil	461	1.40	5 Chemicals	1,394	4.22
Canada	1,718	5.21	6 Business Equipment	3,680	11.15
Chile	159	0.48	7 Telecommunication	1,383	4.19
Colombia	53	0.16	8 Utilities	1,658	5.03
Denmark	230	0.70	9 Shops	3,353	10.16
Egypt	40	0.12	10 Healthcare	1,803	5.46
Finland	301	0.91	11 Finance	3,451	10.46
France	1,008	3.06	12 Other	6,980	21.16
Germany	766	2.32	Total	32,995	100.00
Greece	123	0.37			
Hong Kong	1,363	4.13	Year	N	%
India	624	1.89	2002	406	1.23
Indonesia	184	0.56	2003	415	1.26
Ireland	118	0.36	2004	937	2.84
Israel	83	0.25	2005	1,203	3.65
Italy	343	1.04	2006	1,230	3.73
Japan	4,409	13.36	2007	1,357	4.11
South Korea	661	2.00	2008	1,628	4.93
Malaysia	278	0.84	2009	1,994	6.04
Mexico	135	0.41	2010	2,423	7.34
Netherlands	296	0.90	2011	2,630	7.97
New Zealand	232	0.70	2012	2,837	8.60
Norway	231	0.70	2013	2,546	7.72
Philippines	132	0.40	2014	3,099	9.39
Portugal	83	0.25	2015	3,858	11.69
Singapore	448	1.36	2016	4,548	13.79
South Africa	703	2.13	2017	1,884	5.71
Spain	431	1.31	Total	32,995	100.00
Sri Lanka	2	0.01			
Sweden	588	1.78			
Switzerland	590	1.79			
Taiwan	786	2.38			
Thailand	132	0.40			
Turkey	133	0.40			
United Kingdom	3,346	10.14			
United States	8,910	27.00			
Total	32,995	100.00			

Note: This table presents the number of observations per country, sector, and year as well as the respective proportions of the full sample.

TABLE 3 Summary statistics and Pearson's correlation coefficients

	<i>N</i>	<i>MN</i>	<i>CSR</i>	<i>EN</i>	<i>SO</i>	<i>POWER</i>	<i>DUAL</i>	<i>ONLYINSIDER</i>	<i>CEO Pay</i>	<i>CSR REPORT</i>
<i>CSR</i>	32,995	49.399	1.000*							
<i>EN</i>	32,995	52.265	0.952*	1.000*						
<i>SO</i>	32,995	51.999	0.949*	0.807*	1.000*					
<i>POWER</i>	32,995	0.640	-0.083*	-0.081*	-0.076*	1.000*				
<i>DUAL</i>	32,995	0.392	-0.054*	-0.044*	-0.059*	0.803*	1.000*			
<i>ONLYINSIDER</i>	32,995	0.248	-0.077*	-0.085*	-0.060*	0.761*	0.225*	1.000*		
<i>CEO Pay</i>	22,044	95.071	-0.004*	-0.004*	-0.003*	0.341*	0.302*	0.180	1.000*	
<i>CSR REPORT</i>	32,995	0.211	0.707*	0.685*	0.658*	-0.136*	-0.112*	-0.101*	0.010*	1.000*
<i>CSROI</i>	22,005	0.271	0.767*	0.723*	0.727*	-0.048*	-0.031*	-0.044*	0.015*	0.575*
<i>A_CSROI</i>	20,072	0.250	0.099*	0.096*	0.091*	0.010*	-0.018*	0.035*	0.020*	0.051*
<i>TQ</i>	32,981	0.262	0.027*	0.045*	0.006	0.049*	0.035*	-0.000	0.004*	0.011*
<i>SIZE</i>	32,995	16.534	0.315*	0.331*	0.267*	-0.095*	0.016*	0.011*	0.032*	0.296*
<i>BTM</i>	32,995	0.639	-0.014*	-0.002	-0.025*	-0.048*	-0.042*	-0.008	-0.001	0.019*
<i>LEV</i>	32,995	0.201	-0.000	0.011*	-0.013*	0.095*	0.057*	0.007	0.004*	-0.011*
<i>SGRO</i>	32,995	0.114	-0.016*	-0.014*	-0.017*	0.009	0.005	0.007	-0.000	-0.012*
<i>CAPEX</i>	32,995	0.519	0.044*	0.042*	0.041*	-0.031*	-0.009	-0.028*	0.014*	0.050*
<i>CASH</i>	32,995	0.091	0.036*	0.040*	0.028*	-0.029*	-0.002	-0.031*	0.005*	0.035*
<i>PROFIT</i>	32,995	0.078	0.009	0.006	0.011*	0.007	0.006	0.009*	0.000	0.004
<i>IOWN</i>	32,995	24.538	-0.073*	-0.065*	-0.075*	-0.225*	-0.146*	-0.205*	0.020*	0.003
<i>COMMON</i>	32,995	0.778	-0.221*	-0.206*	-0.214*	0.235*	0.186*	0.093*	-0.024*	-0.193*
<i>CSRLAW</i>	31,575	0.611	0.198*	0.171*	0.205*	-0.325*	-0.353*	-0.054*	-0.010*	0.169*
<i>STAKE</i>	32,995	13.37	0.152*	0.147*	0.143*	-0.385*	-0.409*	-0.069*	-0.001	0.153*
<i>NARC</i>	8,846	0.000	0.116*	0.123*	0.093*	-0.159*	-0.108*	-0.115*	-0.018*	0.072*
<i>IDISC</i>	32,995	-3.886	-0.136*	-0.134*	-0.125*	0.386*	0.286*	0.174*	-0.005*	-0.203*
<i>A_IDISC</i>	32,995	-0.628	0.135*	0.147*	0.106*	-0.005	0.032	-0.007	0.003*	0.079*
<i>A_IDISC2</i>	32,995	47.04	0.257*	0.229*	0.259*	-0.271*	-0.206*	-0.086*	-0.007*	0.242*
<i>BSIZE</i>	32,995	10.04	0.288*	0.273*	0.274*	-0.025*	0.067*	-0.114*	-0.004*	0.195*

(Continues)

TABLE 3 (Continued)

	CSROI	A_CSROI	TQ	SIZE	BTM	LEV	SGRO	CAPEX	CASH	PROFIT
CSROI	1.000*									
A_CSROI	0.052*	1.000*								
TQ	0.003	-0.005*	1.000*							
SIZE	0.300*	-0.014*	-0.031*	1.000*						
BTM	0.016*	-0.011*	-0.006	0.000	1.000*					
LEV	-0.011	0.008	0.807*	-0.012*	-0.005	1.000*				
SGRO	-0.019*	-0.003*	0.000	-0.008	0.001	0.001	1.000*			
CAPEX	0.070*	-0.000	0.000	0.205*	0.002	-0.000	-0.001	1.000*		
CASH	0.022*	0.002	-0.000	0.223*	0.003	-0.002	-0.001	0.498*	1.000*	
PROFIT	0.004	0.004	-0.392*	0.039*	0.003	-0.150*	-0.001	0.002	0.001	1.000*
IOWN	-0.110*	-0.012*	0.012*	0.099*	0.027*	0.002	0.016*	0.056*	0.045*	-0.007
COMMON	-0.114*	0.008*	0.003	-0.226*	-0.010*	0.007	0.000	-0.040*	-0.009*	-0.005
CSRLAW	0.133*	0.008*	0.002	-0.195*	0.013*	0.002	0.002	-0.039*	-0.048*	-0.005
STAKE	0.103*	-0.003*	0.002	-0.122*	0.022*	-0.001	0.001	-0.026*	-0.028*	-0.008
NARC	0.084*	0.019*	-0.037*	0.050*	0.007	-0.056*	-0.004	0.036*	0.213*	-0.005
IDISC	-0.137*	0.010*	0.001*	-0.205*	-0.016*	0.006	0.006	-0.049*	-0.055*	-0.0056
A_IDISC	-0.041*	-0.022*	-0.002*	0.268*	0.004	-0.004	-0.000	0.032*	0.042*	-0.001
A_IDISC2	0.188*	-0.005*	-0.002*	0.150*	0.001	-0.003*	-0.003*	0.048*	0.038*	0.004*
BSIZE	0.239*	-0.010*	0.047*	0.356*	0.019*	0.012*	-0.002*	-0.007*	-0.122*	0.002
IOWN	1.000*	COMMON	CSRLAW	STAKE	NARC	IDISC	A_IDISC	A_IDISC2	BSIZE	
COMMON	-0.289*	1.000*								
CSRLAW	0.005	-0.206*	1.000*							
STAKE	0.061*	-0.032*	0.779*	1.000*						
NARC	0.076*	-0.098*	0.165*	0.201*	1.000*					
IDISC	-0.209*	-0.146*	-0.398*	-0.378*	-0.253*	1.000*				
A_IDISC	0.109*	-0.670*	-0.216*	-0.075*	0.016	0.412*	1.000*			
A_IDISC2	0.079*	-0.245*	0.484*	0.361*	0.008	-0.455*	0.103*	1.000*		
BSIZE	0.076*	-0.174*	-0.136*	-0.173*	-0.201*	0.045*	0.146*	0.066*	1.000*	

Note: This table presents the number of observations *N*, mean values *MN*, and the Pearson correlation coefficients between the unstandardized variables from the analyses. See Table 1 for the definitions of all variables.

* $p < 0.01$.

$$CSR = \beta_0 + \beta_1 \cdot POWER + \beta_2 \cdot IDISC + \beta_3 \cdot POWER \cdot IDISC + \beta \cdot C + \varepsilon \quad (2)$$

In addition to the aforementioned components, *IDISC* joins as a proxy for country-level institutional discretion depending on the prevailing legal framework. Eventually, we observe statistically significant and positive signs of the coefficients for our measures of CEO power in Models 2 to 4 of Table 4. Again, CEOs that are more powerful enhance their CSR engagement, supporting the prediction of H1. When looking at the interaction terms *POWER · IDISC*, we uniformly notice statistically significant and positive signs of the coefficients. This means that the positive impact of CEO power on CSR choice intensifies with increasing institutional discretion. These findings corroborate the prediction of H2, stating that pronounced institutional discretion available to CEOs serves as an accelerator for CEO-induced CSR enhancements. Another interesting finding is the negative and statistically significant coefficient of *IDISC* in Models 2 to 4 in Table 4, which indicates that with low *POWER* institutional discretion reduces the level of CSR engagement. Coupled with the negative effect of *IDISC* on Tobin's *Q* in Model 6 of Table 4, it can be derived that the total management team appears to be rather conservative toward potential CSR investments and therefore exhibits even inefficiently low levels of CSR. We note that our conclusions likewise remain unchanged when we replace our aggregated measure of CEO power by the underlying individual components *DUAL* in Model 3 and *ONLYINSIDER* in Model 4.

Furthermore, our results are also significant in economic terms. Due to standardization, *IDISC* in Table 4 can assume positive as well as negative values. As a consequence, CEO power leads to an increase in the CSR level among companies in countries with high institutional discretion, while the CSR level decreases with higher CEO power among companies in countries with low institutional discretion. Using a specific example, this means that in a country with maximum institutional discretion, a CEO that is the chairperson as well as the only executive on the board (*POWER* = 2) implements a CSR strategy receiving on average a performance score of 50 on a scale from 0 (lowest) to 100 (highest), while a CEO without the aforementioned position relative to the board (*POWER* = 0) only implements a CSR strategy with a mean performance score of just under 35.

4.2 | CSR investment and valuation

4.2.1 | Baseline regressions

In the light of our empirical results so far, in Models 5 and 6 of Table 4, we investigate whether CEO-induced CSR enhancements prove to be defective overinvestment, ultimately destroying firm value. We argue that powerful CEOs are prone to destroy firm value through exaggerated CSR strategies aiming at reputational gains for their private benefit. In order to address this issue, we make use of an indicator variable which points out whether a firm overinvests in CSR or not. In contrast to previous approaches, we employ the following generalized structural equation model with a maximum-likelihood estimation to assess whether CEO-induced CSR enhancements actually prove to be CSR overinvestment and the further impact of these overinvestments on firm value. With this kind of analysis, we can link these two relationships simultaneously in one cumulated model rather than independently running different regressions for each stage. The following two equations display the respective stages of our structural equation model, where *CSROI_{EST}* describes the estimated value of CSR overinvestment (*CSROI*) derived from Equation (3):

$$\text{Logit}(CSROI) = \beta_{cs,0} + \beta_{cs,1} \cdot POWER + \beta_{cs,2} \cdot IDISC + \beta_{cs,3} \cdot POWER \cdot IDISC + \beta_{cs} \cdot C_{cs} + \varepsilon_{cs}, \quad (3)$$

$$\begin{aligned} TQ = & \beta_{TQ,0} + \beta_{TQ,1} \cdot CSROI_{EST} + \beta_{TQ,2} \cdot POWER + \beta_{TQ,3} \cdot IDISC \\ & + \beta_{TQ,4} \cdot POWER \cdot IDISC + \beta_{TQ} \cdot C_{TQ} + \varepsilon_{TQ}. \end{aligned} \quad (4)$$

To proxy for CSR overinvestment, we rely on an estimation procedure to predict deviations from the optimal CSR choice within a relevant peer group as described above. Looking at the first stage of the structural equation model presented in Model 5 of Table 4, we observe a statistically significant and positive sign of the coefficient for *POWER*. This tells us that for ceteris paribus greater CEO power, the chance for a firm of being assigned to the CSR overinvestment group increases. Powerful CEOs thus seem to be more prone to overinvest in CSR. This effect is particularly pronounced for countries with high values of institutional discretion, as is indicated by the statistically significant and positive sign of the interaction term *POWER · IDISC*. In summary, it can be ascertained that CEO power increases the chance of exaggerated CSR strategies, which is further intensified when combined with institutional discretion. We can, therefore, find strong evidence for the first part of H3, predicting a higher rate of CSR overinvestments in cases of high *POWER* and *IDISC*. Speaking in economic terms, as a specific illustration,

TABLE 4 CEO power, levels of institutional discretion, and CSR choice

	(1) CSR	(2) CSR	(3) CSR	(4) CSR	(5) CSROI	(6) TQ
	POWER	POWER	DUAL	ONLYINSIDER	First Stage	Second Stage
POWER	0.035*** (3.84)	0.360*** (7.07)	0.285*** (5.51)	0.216*** (4.40)	0.725*** (8.51)	-0.004*** (-2.45)
IDISC		-0.248*** (-13.77)	-0.225*** (-12.76)	-0.207*** (-13.13)	0.004 (0.11)	-0.001*** (-3.32)
POWER IDISC		0.313*** (6.60)	0.281*** (5.68)	0.162*** (3.39)	0.621*** (8.04)	-0.004** (-2.51)
CSROI						-0.002*** (-6.21)
SIZE	0.972*** (47.22)	0.284*** (20.36)	0.286*** (20.13)	0.284*** (20.23)	0.710*** (21.62)	0.007*** (11.25)
BTM	-0.078*** (-8.12)	-0.055*** (-5.16)	-0.056*** (-5.29)	-0.056*** (-5.27)	-0.077*** (-4.20)	-0.002*** (-3.57)
LEV	-0.047*** (-4.57)	0.019 (1.60)	0.022* (1.83)	0.019 (1.58)	-0.004 (-0.18)	0.066*** (83.59)
SGRO	-0.075*** (-13.50)	-0.081*** (-15.46)	-0.082*** (-15.58)	-0.082*** (-15.68)	-0.002*** (-5.84)	0.001** (2.35)
CAPEX	0.012 (1.54)	-0.029*** (-3.35)	-0.030*** (-3.50)	-0.029*** (-3.40)	-0.003 (-1.28)	-0.001*** (-2.73)
CASH	0.007 (0.75)	-0.080*** (-7.48)	-0.080*** (-7.45)	-0.080*** (-7.49)	-0.079*** (-3.68)	-0.001* (-1.67)
PROFIT	0.037*** (4.71)	0.061*** (6.58)	0.062*** (6.66)	0.065*** (7.01)	0.116*** (5.3)	-0.002** (-2.53)
IOWN	-0.081*** (-6.85)	-0.189*** (-14.98)	-0.193*** (-15.28)	-0.193*** (-15.27)	-0.151*** (-6.81)	0.000 (0.79)
COMMON		-0.301*** (-20.83)	-0.290*** (-20.05)	-0.292*** (-20.65)	-0.067*** (-3.26)	-0.005*** (-5.80)
CSRLAW					0.491*** (13.96)	-
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Sector dummies	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	No	No	No	No	No
Robust	Yes	Yes	Yes	Yes	Yes	Yes
N	32,995	32,995	32,995	32,995	20,072	20,072
adj. R ²	0.467	0.273	0.271	0.271		

Note: Models 1 to 4 present standardized coefficients from OLS regression models explaining determinants of CSR choice. Model 1 initially neglects possible cross-country variations, while Models 2 to 4 consider the moderating role of prevailing institutional discretion (*IDISC*), using the interaction methodology. The general *POWER* variable is replaced by its respective individual components *DUAL* and *ONLYINSIDER* in Models 3 and 4. Models 5 and 6 present standardized coefficients from a generalized structural equation model using maximum-likelihood estimations to explain determinants of CSR overinvestment (*CSROI*) on the first stage and the effects on Tobin's *Q* (*TQ*) on the second stage. Robust *t*-statistics calculated by applying clustered standard errors on the firm-level in parentheses. See Table 1 for the definitions of all variables.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

switching from $POWER = 0$ to $POWER = 2$ in countries with maximum institutional discretion raises the probability of an average firm being characterized by CSR overinvestment from below 10 percent to over 30 percent.

Second, we can observe the resulting impact on firm value in Model 6 of Table 4. Given that our suggested reasoning is true, CEO-induced CSR enhancements decrease firm value. A glance at the *CSROI* variable on the second stage of the structural

equation model reveals a statistically significant and negative coefficient regarding TQ . This means that exaggerated CSR enhancements are value-destroying from a company's perspective, especially in countries where CEOs additionally have sufficient power as well as institutional discretion. This finding may also serve as a further justification for relying on CSR performance as a proxy for CSR investments, because according to the results of our structural equation model, excessively high CSR performance is value-decreasing. Such a result only seems to be understandable when higher CSR scores are connected with higher CSR investments. Even though at first glance the absolute value of the coefficient seems to be rather small, the marginal effects confirm an economically significant impact of CSR overinvestments on firm value. Firms characterized by CSR overinvestment *ceteris paribus* exhibit a value for Tobin's Q that is on average about 5 percent smaller than for firms without CSR overinvestment going from around 0.255 without $CSROI$ to nearly 0.242 if firms overinvest into CSR.

Moreover, we can also find a direct negative effect of CEO power on Tobin's Q (becoming larger for higher institutional discretion), which indeed is quite plausible, since powerful CEOs are able to extract private benefits in more ways than just through CSR overinvestment. In fact, this ability to separate the adverse impact of CEO power via CSR overinvestment from the impact of CEO power via other kinds of perquisites consumption is the main reason for performing a structural equation approach. Taken together with our previous empirical results, this implies lower valuation due to unreasonable levels of CSR enhancements, resulting from inefficient CEO-induced overinvestments which are in line with the second part of Hypothesis H3.

It should be noted that our results are almost identical, if we replace the logistic regression according to (3) with a linear equation. In this case, we are also able to assess the general quality of the structural equation model by some special measures. In fact, for the Root Mean Square Error of Approximation ($RMSEA$), we get a value of 0.033, and for the Standardized Root Mean Square Residual ($SRMR$), a value of 0.001 which both suggest rather a high model quality (see Table A.4 in the Appendix S1 for further details). Similarly, standard errors for double (firm- and year-level) clustering instead of just using firm-level clusters does not change our main results as can be seen in Table A.5 in the Appendix S1.

4.2.2 | Alternative variables

To further verify the appropriateness of our key variables, we also run our core regressions using alternative measures for CEO power and institutional discretion.

First, one may criticize our measure of CEO power, because there are countries with rather strict legal rules that make it difficult to implement firm-specific solutions with respect to $DUAL$ and $ONLYINSIDER$. However, as already pointed out as well, even in such countries like Germany, there is at least some firm-level variation of these variables possible in connection with exploiting opportunities for temporary exceptions. Moreover, even if one assumed that both variables were completely fixed in some countries (which is actually not the case as revealed by our descriptive statistics in Table A.1 of the Appendix S1), CEO power in firms of these countries would indeed be higher or lower (depending on the specific rules to be obeyed) than in firms of countries with more corporate freedom regarding the choice of board structure. Moreover, in such cases with strictly given legal requirements, there would be the additional advantage of endogeneity problems not being even a theoretical concern at all, as there would be no other choice for firms than to accept the legally defined power distribution between the CEO and the board. In this extreme interpretation, our analyses regarding the impact of CEO power on CSR activities would still hold with a focus on the country level.

Nevertheless, to further strengthen our empirical evidence, we introduce two alternative measures for CEO power: the size of the board ($BSIZE$) and a CEO's total compensation relative to the second highest-earning executive ($CEO\ Pay$). The literature shows that larger boards tend to be less efficient at controlling CEOs due to weaker communication and coordination in larger groups (Eisenberg et al., 1998; Jensen, 1993). Certainly, there are also legal requirements regarding board size. However, they do not seem to be as strict as the legal rules for the general board structure: e.g., a minimum of board members is defined depending on firm size (which is controlled for in our analyses). When replicating our main analyses of Table 4 with $BSIZE$ as our alternative measure for CEO power, our findings are largely unaffected (see Models 1 to 3 of Table 5).

It is to be expected that the higher a CEO's relative compensation, the more power the respective CEO has (e.g., Albrecht & Jhin, 1978; Daily & Johnson, 1997; Zagonov & Salganik-Shoshan, 2018). The corresponding results can be seen in Models 4 to 6 of Table 5 and are consistent with our previous findings.

Another criticism of our analysis might be that our results are only valid for a specific measure of institutional discretion. To document that this is not an issue, we apply two alternative measures. First of all, we replace our measure of institutional discretion with the reverse anti-self-dealing index from Djankov et al., (2008) in Model 7 of Table 5 as an alternative description of legal protection granted to minority shareholders against the expropriation by CEOs in the corporate decision-making process. Higher rates of the underlying anti-self-dealing index indicate more effective corporate governance. Therefore, we rely on the

TABLE 5 Alternative measures of CEO power, IDISC, and CSROI

	(1) <i>CSR</i> <i>B</i> SIZE	(2) <i>CSROI</i> First Stage	(3) <i>TQ</i> Second Stage	(4) <i>CEO</i> Pay	(5) <i>CSROI</i> First Stage	(6) <i>TQ</i> Second Stage	(7) <i>Alt. Inst.</i> <i>discretion</i>	(8) <i>Alt. Inst.</i> <i>discretion2</i>	(9) <i>Alt. CSROI</i> First Stage	(10) <i>Alt. CSROI</i> <i>TQ</i> Second Stage
<i>POWER</i>	0.641 ^{***} (9.76)	0.842 ^{***} (4.89)	-0.005 (-1.59)	3.377 [*] (1.78)	1.098 ^{**} (2.19)	0.042 (0.69)	0.252 ^{***} (6.29)	1.734 ^{***} (3.90)	0.080 ^{**} (2.21)	-0.062 ^{**} (-2.07)
<i>IDISC</i>	-0.465 ^{***} (-11.76)	-0.315 ^{***} (-3.01)	-0.001 (-0.45)	-0.078 ^{***} (-4.75)	-0.190 ^{***} (-9.44)	-0.028 ^{***} (-4.17)	-0.166 ^{***} (-7.73)	-0.200 ^{***} (-12.01)	-0.014 (-1.43)	-0.030 ^{**} (-2.43)
<i>POWER IDISC</i>	0.537 ^{***} (7.24)	0.773 ^{***} (4.14)	-0.003 (-1.03)	3.400 [*] (1.79)	1.742 ^{***} (2.63)	0.041 (0.69)	0.272 ^{***} (6.73)	1.663 ^{***} (3.76)	0.066 [*] (1.92)	-0.066 ^{**} (-2.18)
<i>CSROI</i>			-0.002 ^{***} (-5.71)			-0.015 ^{***} (-3.05)				-0.011 ^{***} (-3.12)
<i>SIZE</i>	0.229 ^{***} (16.28)	0.589 ^{***} (18.14)	0.008 (11.64)	0.393 ^{***} (24.56)	0.427 ^{***} (18.25)	0.041 (4.39)	0.335 ^{***} (20.23)	0.258 ^{***} (18.15)	-0.019 ^{**} (-2.22)	0.056 ^{***} (5.27)
<i>BTM</i>	-0.054 ^{***} (-5.20)	-0.067 ^{***} (-3.74)	-0.002 ^{***} (-3.87)	-0.056 ^{***} (-4.31)	-0.054 ^{***} (-3.19)	-0.011 [*] (-1.85)	-0.043 ^{***} (-4.08)	-0.061 ^{***} (-5.57)	-0.018 ^{**} (-2.16)	-0.039 ^{**} (-2.33)
<i>LEV</i>	0.017 (1.48)	0.005 (0.243)	0.065 ^{***} (83.74)	-0.019 (-1.49)	-0.009 (-0.55)	0.915 (76.32)	0.009 (0.74)	0.021 [*] (1.72)	0.016 ^{**} (2.08)	0.814 ^{***} (43.41)
<i>SGRO</i>	-0.077 ^{***} (-14.74)	-0.087 ^{***} (-5.67)	0.001 (2.25)	-0.064 ^{***} (-9.74)	-0.108 ^{***} (-5.58)	0.008 (1.46)	-0.085 ^{***} (-15.73)	-0.055 ^{***} (-10.27)	0.030 ^{***} (4.17)	0.027 (1.14)
<i>CAPEX</i>	-0.014 [*] (-1.70)	-0.010 (-0.602)	-0.001 (-2.84)	-0.033 ^{***} (-3.21)	-0.009 (-0.57)	-0.006 (-1.04)	-0.029 ^{***} (-3.34)	-0.034 ^{***} (-3.79)	-0.000 (-0.037)	-0.026 ^{**} (-2.29)
<i>CASH</i>	-0.071 ^{***} (-6.84)	-0.075 ^{***} (-3.54)	-0.001 (-2.03)	-0.050 ^{***} (-4.36)	-0.044 ^{**} (-2.43)	0.008 (1.04)	-0.085 ^{***} (-8.05)	-0.079 ^{***} (-7.32)	-0.016 ^{**} (-2.03)	-0.021 ^{***} (-3.16)
<i>PROFIT</i>	0.063 ^{***} (6.99)	0.111 ^{***} (5.26)	-0.002 (-2.46)	0.062 ^{***} (5.70)	0.101 ^{***} (5.12)	-0.005 (-0.53)	0.064 ^{***} (6.89)	0.068 ^{***} (7.13)	0.032 ^{***} (3.98)	-0.069 ^{***} (-2.90)
<i>IOWN</i>	-0.199 ^{***} (-16.29)	-0.157 ^{***} (-7.31)	0.001 (1.10)	-0.284 ^{***} (-19.03)	-0.188 ^{***} (-9.23)	0.012 ^{**} (1.99)	-0.188 ^{***} (-14.87)	-0.219 ^{***} (-17.13)	-0.003 (-0.36)	0.022 (3.88)
<i>COMMON</i>	-0.257 ^{***} (-18.75)	-0.036 (-1.52)	-0.005 (-6.13)	-0.198 ^{***} (-11.59)	-0.111 ^{***} (-6.78)	-0.022 (-3.50)	-0.259 ^{***} (-12.49)	-0.098 ^{***} (-6.48)	-0.003 (-0.37)	-0.050 ^{***} (-4.75)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	No	No	No	No	No	No	No	No	No	No
Clustered SE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	32,995	20,072	20,072	22,044	13,450	13,450	32,995	32,995	20,072	20,072
adj. <i>R</i> ²	0.308			0.254		0.243		0.163		

This table presents standardized coefficients from regression models explaining determinants of CSR choice (*CSR*) depending on prevailing institutional discretion using alternative variable definitions. Models 1 and 4 display standardized coefficients of linear OLS regressions in which CEO power is exchanged by the variable indicated. Models 2–3 and 5–6 show the standardized coefficients from a generalized structural equation model each using the alternative CEO power variable described in the respective preceding column. In Models 9 and 10, *CSROI* is replaced by an alternative measure based on the changes in CSR score between t and $t-1$. Robust standard errors are clustered on the firm-level and corresponding t -statistics are displayed in parentheses. See Table 1 for the definitions of all variables.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

reverse of this variable as a measure for institutional discretion (A_IDISC). Secondly, in Model 8 of Table 5, we exchange our measure for institutional discretion by governance scores on country level (A_IDISC2). To this end, we calculate a country's average corporate governance score according to standardized governance pillar scores mentioned in Section 3.2.3.

Finally, to verify the accuracy of our $CSROI$ variable, instead of focusing on expected CSR investment based on firms' respective sales growth ratio, in Models 9 and 10 of Table 5, we rather focus on the yearly changes of the individual CSR scores, since it is to be expected that an increase in firms' CSR score is mainly achieved by respective CSR investments. Hence, we calculate the differences in CSR scores between t and $t-1$, where observations in the top quantile are defined as overinvestment (A_CSROI). Again, all results using alternative measures for our core variables confirm our key findings of previous analyses.

4.2.3 | Managerial reputation management and CSR dimensions

Summarizing so far, there is overall strong evidence that powerful CEOs in the "right" institutional environment indulge in excessive CSR activities. Moreover, we can underline our previous results by also shedding light on the different effects of each underlying CSR dimension (i.e., environmental and social engagement) regarding their individual contribution to the managerial reputation management.

In this vein, Porter and Kramer (2006) establish a framework to differentiate between valuable strategic and wasteful responsive CSR policies. Strategic CSR policies tackle the causes of specific CSR-related issues but pay off only in the long run. By contrast, responsive CSR policies only conceal the adverse symptoms of acute CSR issues, aiming at a prompt positive recognition. Irrespective of the intrinsic value of the CSR measure itself, CEOs managing their private reputation through exaggerated CSR engagement will prefer prompt gains from, for example, charitable contributions that occur immediately and are associated with the decision-maker. This is at the expense of longer-term benefits from, for example, upgrades to environmentally friendly technologies for a period where the CEO may not belong to the company anymore. Existing evidence supports this idea, as studies on aggregated CSR scores lack consensus regarding the impact on financial performance due to contrary effects resulting from the aggregation across different dimensions (Galema et al., 2008). From a company perspective, the environmental component may embody mainly favorable effects and the social component may comprise primarily the adverse effects of CSR.

In summary, we expect CEOs managing their private reputation to favor short-term oriented social over long-term oriented environmental engagement, which means that CEO-induced CSR enhancements are supposed to be more pronounced for social than for environmental initiatives. The positive relation between CEO power and CSR choice according to H1 and the corresponding impact of institutional discretion according to H2 should, therefore, be stronger for social initiatives than for environmental ones.

To test for these effects, we replace the aggregated score for CSR engagement with the individual scores for environmental (EN) and social (SO), respectively, in Models 1 and 2 in Table 6. As $POWER$ and $POWER \cdot IDISC$ are both significant on the one percent level in both Models 1 and 2, CEOs that are more powerful in fact enhance both types of CSR engagement rather than just those measures with short-term effects and this behavior becomes more relevant for higher institutional discretion. However, when taking a closer look at the coefficients from these separate analyses of the individual CSR components, we observe a coefficient for the impact of $POWER$ on SO ($\beta = 0.396, p = 0.000$) that is almost 37 percent higher than the corresponding coefficient for $POWER$ with respect to EN ($\beta = 0.290, p = 0.000$). The corresponding increase regarding the coefficients for $POWER \cdot IDISC$ is even larger with a value of more than 59 percent ($\beta = 0.251, p = 0.000$ for Model 1 and $\beta = 0.346, p = 0.000$ for Model 2). That observation substantiates when testing the difference in both coefficients for $POWER$ and $POWER \cdot IDISC$, respectively, between Models 1 and 2, as the comparison rejects the null hypothesis that they are equal in both models on the 1 percent level as indicated by a chi-square test with χ^2 of 11.34. These findings support the prediction that CEOs managing their private reputation favor immediately occurring short-term gains from social initiatives over longer-term strategic benefits from environmental initiatives. Contrary to our expectations, powerful CEOs do not exclude environmental measures completely from their portfolio. This could mean that environmental engagements, besides their long-term orientation, may also lead to some immediate reputational gains in the public.

4.2.4 | Visibility of CSR

Another essential prerequisite for managerial reputation building is the observability of a management's actions and/or their corresponding outcomes. In this regard, Fombrun and van Riel (2004) refer to the degree of visibility as a major determinant of reputation building. This image-building based on excessive and inefficient investments is only possible in the case of defective information processing on the part of the stakeholders, because otherwise they would recognize that a CEO's behavior

TABLE 6 Reputation management and visibility

	(1) <i>EN</i>	(2) <i>SO</i>	(3) <i>CSR</i>	(4) <i>CSR</i>	(5) <i>CSR</i>	(6) <i>CSR</i>	(7) <i>CSROI</i>	(8) <i>TQ</i>
	<i>POWER</i>	<i>POWER</i>	<i>CSR REPORT: Yes</i>	<i>CSR REPORT: No</i>	<i>CSR REPORT: Forced</i>	Avg. <i>POWER</i>	First Stage	Second Stage
<i>POWER</i>	0.290*** (5.78)	0.396*** (0.000)	0.329*** (4.50)	0.235*** (3.58)	0.652*** (4.53)	0.259*** (7.14)	0.254*** (4.07)	-0.002* (1.87)
<i>IDISC</i>	-0.217*** (-12.25)	-0.255*** (0.000)	0.062** (2.47)	-0.022 (-1.00)	-0.277*** (-5.33)	-0.830*** (-13.81)	-0.464*** (-4.47)	0.002 (0.77)
<i>POWER · IDISC</i>	0.251*** (5.37)	0.346*** (0.000)	0.252*** (3.66)	0.181*** (2.97)	0.582*** (4.23)	0.751*** (10.45)	0.719*** (5.95)	-0.005* (-1.80)
<i>CSROI</i>								-0.002*** (-6.21)
<i>SIZE</i>	0.318*** (23.34)	0.222*** (0.000)	0.211*** (11.40)	0.035** (2.06)	0.502*** (16.57)	0.276*** (19.69)	0.680*** (20.73)	0.007*** (11.35)
<i>BTM</i>	-0.034*** (-3.24)	-0.070*** (0.000)	-0.052*** (-3.45)	-0.067*** (-5.34)	-0.061** (-2.29)	-0.060*** (-5.69)	-0.088*** (-4.62)	-0.002*** (-3.35)
<i>LEV</i>	-0.019 (-1.62)	-0.017 (0.156)	-0.021 (1.25)	-0.032** (2.31)	0.010 (-0.35)	0.260** (2.19)	0.010 (0.51)	0.065*** (82.64)
<i>SGRO</i>	-0.076*** (-14.49)	-0.078*** (0.000)	-0.030*** (-3.66)	-0.028*** (-3.85)	-0.101*** (-6.95)	-0.083*** (-15.96)	-0.097*** (-6.32)	0.001** (2.38)
<i>CAPEX</i>	-0.014* (-1.66)	-0.04*** (0.000)	-0.031** (-2.20)	-0.032*** (-3.22)	-0.033 (-1.36)	-0.029*** (-3.41)	-0.026* (-1.57)	-0.001*** (-2.67)
<i>CASH</i>	-0.068*** (-6.68)	-0.083*** (0.000)	-0.059*** (-3.85)	-0.051*** (-4.13)	-0.039* (-1.83)	-0.080*** (-7.41)	-0.086*** (-3.97)	-0.001 (-1.54)
<i>PROFIT</i>	0.030*** (3.29)	0.087*** (0.000)	0.068** (4.10)	0.049*** (4.26)	0.008 (0.31)	0.064*** (6.86)	0.123*** (5.68)	-0.002*** (-2.68)
<i>IOWN</i>	-0.184*** (-15.07)	-0.177*** (0.000)	-0.209*** (-11.40)	-0.173*** (-11.63)	-0.079*** (-3.35)	-0.199*** (-15.76)	-0.173*** (-7.71)	0.000 (0.97)
<i>COMMON</i>	-0.269*** (-18.73)	-0.305*** (0.000)	-0.090*** (-4.15)	-0.016 (-0.84)	-0.180*** (-3.42)	-0.274*** (-19.29)	-0.057*** (-2.77)	-0.005*** (-6.04)
χ^2	11.34		14.18		9.81			
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	No	No	No	No	No	Yes	No	No
Robust	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	32,995	32,995	16,163	16,832	4,347	32,995	20,072	20,072
adj. <i>R</i> ²	0.284	0.226	0.136	0.175	0.386	0.273		

Note: This table presents standardized coefficients from OLS regressions in Models 1 to 5 explaining determinants of CSR choice, with *EN* and *SO* replacing *CSR* as the dependent variable in Models 1 and 2. Models 3 and 4 show the impact of disclosure of CSR reports on the effect of *POWER* and *IDISC* on *CSR*. The respective impact of forced CSR reports is displayed in Model 5. Model 6 presents standardized coefficients from an OLS regression model explaining the effect of the average CEO Power during the last five years available for each firm on CSR choice. Models 7 and 8 present standardized coefficients from a generalized structural equation model using maximum-likelihood estimations to explain determinants of CSR overinvestment on the first stage and the effects on Tobin's *Q* (*TQ*) on the second stage. Robust *t*-statistics calculated by applying clustered standard errors on the firm-level in parentheses. See Table 1 for the definitions of all variables.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

is driven by egoistic motives just rendering these measures ineffective for a CEO's reputation management. In fact, there is a growing literature hinting at the possibility that investors' information processing has some shortcomings so that certain kinds of signals for managerial misbehavior are not properly interpreted (for a brief overview see Breuer et al., 2020). In particular,

regarding CSR investments, it is difficult for outsiders to distinguish between value-destroying overinvestment and efficient investment levels even with respect to shareholder value maximization. This especially holds true as CEOs may communicate CSR overinvestments in a way that emphasizes their positive aspects thus distracting from their value-destroying features. We therefore expect adverse CEO-induced CSR enhancements to be more pronounced for visible firms, although a higher visibility is also most likely accompanied by a stronger monitoring of the decision-making process. Nevertheless, against the background of our analysis so far, we conjecture that this intensified monitoring cannot offset the higher managerial incentive for CSR overinvestment as a means of (unjustified) reputation building. In line with this, Borghesi et al., (2014) find that visibility via media attention increases the magnitude of CSR investments in firms. The positive relation between CEO power and CSR choice according to H1 and the corresponding impact of institutional discretion according to H2 might thus be more pronounced for more visible firms. Therefore, in Models 3 and 4 of Table 6, we split our sample depending on whether a company publishes a CSR report on a voluntary basis or obliged by law on the one side and not on the other side. Assuming that CSR reporting facilitates the exchange of information on corporate CSR initiatives between the firm and the public, private reputation building of CEOs via CSR enhancements proves to be more promising in this case.

Although the coefficients of *POWER* from both subsamples are statistically significant, the availability of CSR reports leads to a considerable increase of the corresponding coefficient by about 40 percent ($\beta = 0.329$ for Model 3 and $\beta = 0.235$ for Model 4) which is statistically different from zero on the 10 percent level. The same applies if we look at the interaction term *POWER* · *IDISC*. Thus, the tendency of CEOs to enhance all types of CSR engagement is more pronounced for the subsample with high visibility of CSR initiatives. These empirical results of statistically significant differences of regression coefficients for *POWER* and *POWER* · *IDISC* hold true even if we redefine our subsamples so that we distinguish between firms with forced CSR reports on the one hand and companies with no CSR report at all on the other (see again Table 6, Model 4 versus Model 5; countries with forced CSR reports are characterized by *CSRLAW* = 2). Firms with forced CSR reports are better suited than those with voluntary CSR reports to examine the consequences of visibility in isolation, because the former also comprise firms that would not have published certain CSR information at all if they were not obliged to do so.

To go one step further and check the validity of the CSR performance as a proxy for CSR investments, we replace *POWER* with the average CEO power during the last five years available for each firm. This is based on the consideration that the actual CSR performance should be a representation of past and current CSR investments, so that former CEO-induced CSR investments might be of relevance as well. As depicted in Models 6 to 8 of Table 6, all core results stay basically the same when using the average CEO power, hinting at a strong relation between former CSR investment and observable current CSR performance. Additionally, we can observe a high invariance of *POWER* over time, which further indicates that the past CEO-induced CSR investments can be approximated as a function of current CEO power.

4.2.5 | Stakeholder sentiment

Another important aspect for the exploitation of CSR measures for the sake of reputation management is the acceptance of such measures among all stakeholders. For example, companies should always strive for legitimacy in order to maintain stakeholder support and avoid possible sanctions. This legitimacy, in turn, depends on the individual requirements of the stakeholders (Suchman, 1995). According to Aguilera et al., (2007), companies face varying CSR performance needs depending on the respective country and culture. Consequently, greater acceptance of CSR measures can be expected in cultures with a high demand for altruism and stakeholder orientation (Dhaliwal et al., 2012) leading also to a higher (positive) impact on managerial reputation of such activities.

To test for this stakeholder sentiment, we split our sample depending on whether the society of a country shows a high awareness of such CSR issues. To be more precise, we follow Dhaliwal et al., (2012) and introduce *STAKE* as a variable that depends in a positive way on the number of non-governmental organizations and the number of published CSR reports in a country per million people. As can be seen in Models 1 to 4 of Table 7, the effect of *POWER* and *POWER* · *IDISC* on the overall CSR level only shows slight differences between both subsamples. Therefore, at first glance, CEO behavior does not seem to be distinct for both subsamples. However, when examining CSR overinvestments determined according to Equation (3) (with *SGRO* as explanatory variable), we can see that the positive impact of *POWER* and *POWER* · *IDISC* on *CSROI* is only statistically significant if *STAKE* is high, which confirms the presumption that CEOs tend to exploit CSR more excessively if they expect a high acceptance within society and therefore among its stakeholders.

4.2.6 | CEO narcissism

A further critical aspect for the extent of CSR activities is the personality traits of CEOs. While a CEO's latitude of action is an inevitable necessity for achieving personal goals, not every powerful CEO overinvests into CSR measures for the sake of selfish reputation building, so that the managerial discretion available does not fully explain why some CEOs exploit this power. Further sufficient conditions, which influence powerful CEOs to act as described, need to be considered. We therefore build on existing research and investigate the impact of a CEO's narcissism on CSR activities. In this context, Petrenko et al., (2016) provide a link between agency theory and CEO's narcissistic traits. The concept of narcissism primarily describes the striving of an individual both toward attention and the constant feeling of superiority (Bogart et al., 2004). While narcissism often coincides with exaggerated levels of self-esteem and self-admiring, narcissists especially pursue the appreciation from outsiders (Chatterjee & Hambrick, 2007). As the ultimate driver of this psychological construct is the selfish reputation building of individuals, we can match these findings with our previous hypotheses: following existing literature (e.g., Chatterjee & Hambrick, 2007, 2011; Kernberg, 1975), we expect more narcissistic CEOs to take advantage of the informational asymmetry pictured by agency theory more often. That means, the higher the individual level of narcissism, the more likely a CEO's goal deviates from the general approach of maximizing firm value, since more narcissistic CEOs tend to care more about their own self-image (Kernberg, 1975). Following Petrenko et al., (2016), we expect more narcissistic CEOs to not only exhibit higher levels of CSR, but also to show a higher probability of overinvesting into CSR. As stated above, however, this relationship should only hold if a CEO has sufficient leeway.

Since the application of other methods is practically impossible due to the size and internationality of our sample, we rely on textual analysis in order to test for the level of narcissism. According to Buchholz et al., (2018), the level of a CEO's narcissism can be approximated via the abnormal positivity in tone in CEO speech. In order to test for this relationship, we utilize transcriptions of regularly held conference calls, in which CEOs lead the talk. The utilization of conference calls allows us to obtain a high number of observations, as they are available for a large proportion of listed firms from various countries, which helps applying the construct of institutional discretion. We estimate the prevailing tone in the CEOs' speeches by making use of the well-established word list by Loughran and McDonald (2011). This list identifies (English) words with either positive or negative attributes in a financial context. We follow the method suggested by Loughran and McDonald (2011) and divide the difference between the number of positive and negative words by the total amount of both positive and negative words so that we get a measure that approximates the prevalent tone in CEO speech. In order to obtain this abnormal positivity *NARC* as a proxy for narcissism according to Buchholz et al., (2018), we regress the positive tone in conference calls on *SGRO* and *PROFIT*, so that we can identify deviations from the level of positivity that we would expect based on the financial performance of the respective firm.

As a consequence of relying on such a word list, we can only consider conference calls held in English. Our sample, therefore, mostly consists of large international companies except for firms of native English-speaking countries. Therefore, the fraction of some English-speaking countries like Australia, the United Kingdom, and especially the United States is larger than in our baseline sample, and in particular, countries with only a small share in the original sample like Colombia or Israel may drop out completely (for details see Table A.9 in the Appendix S1). However, we control for firm size in our regressions and, if any, we expect more pronounced effects for large firms than for small ones because of better opportunities for broadly "visible" CSR activities. Overall, we are examining 4,682 observations from 16 different countries with the mean values and standard deviations of *NARC* across all these countries being rather similar (see Table A.10 in the Appendix S1). This also underpins our opinion that there is no relevant general bias in our subsample.

We first split the sample into two subsamples with either high ($>$ median) or low (\leq median) *NARC* and then test for the impact of *POWER* and the respective interaction with *IDISC* for both subsamples.

According to Models 5 to 8 of Table 7, we indeed find a statistically significant positive relationship between *POWER* and the respective CSR level as well as the likelihood of CSR overinvestment only if *NARC* is high. Moreover, the interaction between *POWER* and *IDISC* even increases these effects in line with our theoretical considerations. Summarizing, these results offer additional evidence for selfish CEOs exploiting their power for excessively investing in CSR measures.

5 | FURTHER ROBUSTNESS TESTS

To address typical criticism regarding our sample composition and variable measurement, we run several robustness checks in Models 1 to 8 of Table 8. First of all, the heterogeneity due to the varying number of observations from countries represented in our sample might influence our results. Therefore, in Model 1, we exclude all firms from the United States and Japan, representing the two largest countries in our sample with jointly about 50% of all observations. Moreover, when relying on a constant

TABLE 7 Stakeholder sentiment, CEO narcissism, and CSR choice

	(1) CSR		(2) CSR		(3) CSROI		(4) CSROI		(5) CSR		(6) CSR		(7) CSROI		(8) CSROI		
	High STAKE	Low STAKE	High STAKE	Low STAKE	High STAKE	Low STAKE	High STAKE	Low STAKE	High NARC	Low NARC	High NARC	Low NARC	High NARC	Low NARC	High NARC	Low NARC	
POWER	0.306 ^{***} (4.10)	0.282 ^{***} (3.33)	0.479 ^{***} (3.18)	0.280 (0.86)	0.612 ^{***} (3.11)	0.212 (0.94)	0.511 ^{**} (2.12)	0.446 (0.174)									
IDISC	-0.268 ^{***} (-9.95)	0.047 (1.27)	-0.360 ^{***} (-8.10)	0.145 ^{***} (3.24)	-0.178 ^{***} (-3.51)	-0.197 ^{***} (-4.01)	-0.062 (-0.64)	-0.448 ^{***} (-3.19)									
POWER IDISC	0.296 ^{***} (4.05)	0.236 ^{***} (2.88)	0.497 ^{***} (3.12)	0.245 (0.76)	0.496 ^{***} (2.73)	0.132 (0.63)	0.400 [*] (1.77)	0.490 (1.56)									
SIZE	0.234 ^{***} (13.76)	0.645 ^{***} (26.06)	0.399 ^{***} (13.08)	0.697 ^{***} (17.24)	0.418 ^{***} (9.37)	0.488 ^{***} (9.66)	0.645 ^{***} (8.16)	0.619 ^{***} (9.02)									
BTM	-0.051 ^{***} (-3.89)	-0.081 ^{***} (-5.48)	-0.069 ^{***} (-2.94)	-0.082 ^{***} (-2.94)	-0.115 ^{***} (-3.33)	-0.060 [*] (-1.73)	-0.123 ^{**} (-2.41)	-0.014 (-0.27)									
LEV	0.049 ^{***} (3.09)	-0.037 ^{***} (-2.24)	0.033 (1.38)	-0.022 (-0.80)	-0.009 (-0.25)	-0.051 (-1.30)	0.035 (0.77)	0.002 (0.04)									
SGRO	-0.083 ^{***} (-13.28)	-0.075 ^{***} (-7.59)	-0.072 ^{***} (-4.05)	0.151 ^{***} (-5.27)	-0.091 ^{***} (-3.83)	-0.062 ^{**} (-2.14)	-0.167 ^{***} (-3.64)	-0.140 ^{**} (-2.39)									
CAPEX	-0.022 ^{**} (-2.02)	-0.021 (-1.55)	0.002 (0.08)	0.017 (0.57)	0.033 (1.00)	-0.008 (-0.19)	-0.037 (-0.78)	-0.088 (-1.60)									
CASH	-0.094 ^{***} (-7.15)	0.051 ^{***} (3.42)	-0.181 ^{***} (-6.69)	0.064 ^{**} (2.20)	-0.074 [*] (-1.86)	0.232 (0.52)	-0.035 (-0.69)	0.028 (0.55)									
PROFIT	0.028 ^{**} (2.36)	0.081 ^{***} (6.01)	0.054 ^{**} (2.04)	0.155 ^{***} (4.00)	0.061 [*] (1.72)	0.027 (0.63)	0.130 ^{**} (2.52)	0.118 [*] (1.84)									
IOWN	-0.184 ^{***} (-12.32)	-0.171 ^{***} (-8.20)	-0.199 ^{***} (-7.46)	-0.070 ^{**} (-2.23)	-0.134 ^{***} (-3.70)	-0.079 [*] (-1.76)	-0.103 ^{**} (-2.11)	-0.049 (-0.90)									
COMMON	-0.381 ^{***} (-15.60)	-0.141 ^{***} (-4.96)	-0.330 ^{***} (-9.54)	-0.175 ^{***} (-4.81)	-0.151 ^{***} (-3.36)	-0.086 ^{***} (-2.61)	-0.019 (-0.73)	-0.035 ^{***} (-2.03)									
χ^2			5.21		11.38		7.95										
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Robust	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	22,601	10,394	12,915	9,077	2,387	2,295	2,145	2,171									
adj. R^2			0.181	0.315	0.330	0.297	0.278	0.269									

Note: This table presents standardized coefficients from OLS regressions in Models 1 to 2 and 5 to 6 and Logit regressions in Models 3 to 4 and 7 to 8 explaining determinants of CSR choice. Models 1 to 4 present the effects of POWER and IDISC both on CSR and CSROI if STAKE is either high (> median) or low (\leq median). Models 5 to 8 describe the effect of POWER and the interaction with IDISC on CSR and CSROI in subsamples with high (> median) and low (\leq median) NARC. Robust t -statistics calculated by applying clustered standard errors on the firm-level in parentheses. See Table 1 for the definitions of all variables.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

country-level measure of institutional discretion, we implicitly assume that the institutional framework within each country remains stable as the ongoing research on cultural and governance systems argues. However, it appears necessary to examine to what extent radical economic changes, such as the latest financial crisis starting in 2007, affect our conclusions. We repeat our analysis for periods before (Model 2) and since (Model 3) the financial crisis in 2007.

Finally, to address methodological issues, we present a range of additional tests in Models 4 to 8. One objection may arise due to our limited dependent variable and thereby the problem of corner solutions. As *CSR* in our sample only assumes values between 0 and 100, coefficients of an OLS model may be inconsistent. To address such concerns, Model 4 relies on maximum-likelihood estimates from a Tobit model, which is quite suited for such ends. To overcome problems of serial correlation and heteroscedasticity in the error terms, Model 5 employs a Newey–West estimator. In Model 6, we alternatively use heteroscedasticity-consistent standard errors based on the asymptotically corrected covariance matrix of Huber–White to calculate underlying *t*-statistics. As related literature with comparable cross-country panel datasets is divided on whether to cluster by firm or by country (e.g., Pinkowitz et al., 2006), we alternatively cluster standard errors by country in Model 7 to take this error source adequately into account deviating from our procedure in the main analyses. By implementing a dynamic model with lagged *POWER* in Model 8, we pursue the intuitive idea that *CSR* choice of powerful CEOs managing their reputation in period $t-1$, becomes perceptible at the earliest in period t . Moreover, in order to assure that the effect of *POWER* on *CSR* does not incur from the opposite direction, i.e., from past *CSR* to past *POWER*, and that our findings are not a result of persistent *CSR* activities, we use the lagged *CSR* score (i.e., CSR_{t-1}) as another control variable besides $POWER_{t-1}$ in this model to control for these potential problems of reverse causality in our main analyses (results without additional controlling for CSR_{t-1} in Model 8 would confirm our findings as well).

The results of Table 8 completely support our Hypotheses H1 and H2. With the exception of utilizing Newey–West Estimators in OLS regressions (which cannot be applied in our structural equation approach), we are also able to generalize our main findings regarding Hypothesis H3 to all settings underlying Table 8 (see Tables A.7 and A.8 in the Appendix S1 for *CSROI* and *SGRO* used in Equation (3); results for other model specifications according to Section 4 are similar): In all these cases, the first stage of our generalized structural equation model reveals a significantly positive influence of *POWER* and *POWER IDISC* on *CSROI*, i.e., potential *CSR* overinvestment, and on the second stage, we identify a significantly negative impact of *CSROI* on Tobin's *Q* (*TQ*).

In additional tests, we use the standardized free cash flow per business unit instead of *SGRO* for the calculations of *CSROI*. As another measure, we simply identify all observations in the highest quartile of all *CSR* scores as overinvestment. As can be seen in Table A.6 in the Appendix S1, our results are unaltered in both cases.

Summarizing across all the changes discussed above, the results derived from our main analysis remain qualitatively and quantitatively unaffected, underlining the robustness of our findings.

6 | CONCLUSION

Our study complements existing research in finance, economics, and organizational theory on CEO significance within corporate decision-making, in particular with regard to *CSR* choice. To assess the role of CEOs in setting up *CSR* policies, we rely on a dataset that combines both organizational and external factors of managerial discretion across a large international sample. Thus, we can examine possible interactions between these different levels in order to reveal causes and circumstances for the development of a distinct *CSR* choice. We find that CEOs motivated by self-interest implement *CSR* enhancements to increase their private reputation from being associated with an environmentally and (in particular) socially committed firm, if necessary, at their shareholders' expense. After all, such CEO-induced *CSR* enhancements lead to defective overinvestment, notably in the case of wasteful social activities, entailing a significant decrease in firm value in the end. In this context, CEO power, determined by a CEO's status relative to the board, seems to be the enabler, while institutional discretion, determined by law, appears to be the accelerator for CEO-induced *CSR* enhancements.

As our findings hint at the possibility of reputation management of CEOs being a motivation for defective *CSR* enhancements and sufficient power of CEOs being a prerequisite under which leadership is related to *CSR* choice, our results have a high practical relevance for improvements in corporate development and corporate governance. In contrast to many other managerial incentive problems, defective *CSR* overinvestment needs some kind of publicity to cater to, e.g., managers' narcissism. This opens up opportunities to fight this issue by more effective scrutiny of such matters. Moreover, when documenting the accelerating effect of institutional discretion for CEO-induced *CSR* overinvestment, we suggest a possible starting point for a legal reform by the government.

TABLE 8 Robustness checks

	(1) No top 2	(2) Before crisis	(3) Since crisis	(4) Tobit	(5) Newey–West	(6) Huber–White	(7) Clustered by country	(8) Lagged CEO power/CSR
<i>POWER</i>	0.354*** (4.74)	0.212** (2.00)	0.377*** (7.11)	0.034*** (2.86)	0.033*** (6.13)	0.360*** (14.81)	0.360*** (3.12)	0.147*** (4.64)
<i>IDISC</i>	−0.232*** (−9.05)	−0.207*** (−6.03)	−0.255*** (−13.88)	−0.162*** (−9.90)	−0.174*** (−29.72)	−0.248*** (−34.21)	−0.248** (−2.72)	−0.069*** (−6.74)
<i>POWER IDISC</i>	0.359*** (4.93)	0.218** (2.16)	0.324*** (6.56)	0.081*** (6.63)	0.076*** (13.71)	0.313*** (13.71)	0.313*** (2.73)	0.120*** (4.14)
<i>Lagged CSR</i>								0.672*** (73.18)
<i>SIZE</i>	0.251*** (13.91)	0.262*** (10.38)	0.286*** (20.15)	0.353*** (23.69)	0.312*** (53.49)	0.284*** (53.49)	0.284*** (3.78)	0.102*** (13.54)
<i>BTM</i>	−0.058*** (−4.24)	−0.052** (−2.06)	−0.057*** (−5.22)	−0.062*** (−4.75)	−0.059*** (−10.49)	−0.055*** (−10.49)	−0.055*** (−3.56)	−0.031*** (−4.65)
<i>LEV</i>	0.054*** (3.43)	−0.028 (−1.12)	0.024** (2.03)	0.022 (1.54)	0.021*** (3.71)	0.019*** (3.71)	0.019 (0.76)	0.022*** (3.06)
<i>SGRO</i>	−0.096*** (−14.29)	−0.078*** (−4.99)	−0.081*** (−14.86)	−0.170*** (−11.88)	−0.109*** (−19.41)	−0.081*** (−19.41)	−0.081*** (−6.42)	−0.031*** (−6.80)
<i>CAPEX</i>	−0.040*** (−3.53)	0.024 (1.18)	−0.037*** (−4.24)	−0.047*** (−3.17)	−0.037*** (−6.49)	−0.029*** (−6.49)	−0.029* (−1.76)	−0.017*** (−2.88)
<i>CASH</i>	−0.053*** (−4.29)	−0.111*** (−4.70)	−0.077*** (−7.02)	−0.117*** (−7.04)	−0.097*** (−16.20)	−0.080*** (−16.20)	−0.080** (−2.68)	−0.030*** (−4.52)
<i>PROFIT</i>	0.051*** (3.96)	0.071*** (3.03)	0.056*** (5.94)	0.089*** (5.63)	0.074*** (13.64)	0.061*** (13.64)	0.061*** (3.40)	0.026*** (4.10)
<i>IOWN</i>	−0.191*** (−12.44)	−0.178*** (−8.02)	−0.189*** (−14.65)	−0.207*** (−14.21)	−0.201*** (−35.90)	−0.189*** (−35.90)	−0.189*** (−5.44)	−0.083*** (−11.51)
<i>COMMON</i>	−0.317*** (−13.42)	−0.187*** (−12.77)	−0.291*** (−19.75)	−0.299*** (−22.09)	−0.293*** (−53.10)	−0.301*** (−53.10)	−0.301*** (−5.71)	−0.116*** (−13.70)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	No	No	No	No	No	No	No	No
Clustered SE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	19,676	4,191	28,804	32,995	32,995	32,995	32,995	19,970
adj. R^2	0.261	0.250	0.280	0.273	0.273	0.273	0.273	0.615

Note: This table presents standardized coefficients from regression models explaining determinants of CSR choice (*CSR*) depending on prevailing institutional discretion using alternative variable definitions, different sample compositions, and various methodological specifications. Robust standard errors are clustered on the firm-level (except for Model 7) and corresponding *t*-statistics are displayed in parentheses. For Model 4, we display the respective Nagelkerke Pseudo R^2 instead of the adjusted R^2 . In Model 8, $POWER_{t-1}$ instead of $POWER_t$ is employed. See Table 1 for the definitions of all variables.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Although we contribute to a better understanding of the nexus between CEOs, leadership, and CSR choice, further aspects are worth being covered in future research. In particular, textual analyses may offer the potential for additional investigations, e.g., with respect to the role of trust or CEOs' charisma as determinants of a firms' CSR activities.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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SUPPORTING INFORMATION

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