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競業禁止條款與企業社會責任之關聯性：高階經理人任期之調節效果

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摘要：本研究主要探討美國各州競業禁止條款（non-compete agreements, NCAs）執行程度不一與該州公司企業社會責任（corporate social responsibility, CSR）參與之關聯性。與過去文獻一致，本研究的實證結果顯示州政府 NCAs 執行程度較嚴時會導致企業投入較少的 CSR，此結果支持公司挽留員工的動機會影響其參與 CSR 的論點。但更重要的是，我們發現高階經理人（CEO）的任期會影響 NCAs 執行強度與 CSR 參與間的負向關係，亦即，任期較長的 CEO 會減弱上述的負向關係。也就是說，在執行較嚴格的 NCAs 之下，相對於任期較短的 CEO，任期較長的 CEO 較不會減少投入 CSR。本研究指出，雖然執行嚴格的 NCAs 會減少公司對於員工留任的擔憂，但同時也會降低公司投入 CSR 的動機，然而公司若有任期較長的 CEO，則會減弱其降低投入 CSR 的動機。

關鍵詞：競業禁止條款、投入企業社會責任、高階經理人任期、員工留任

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Non-Compete Agreements and Corporate Social Responsibility: The Moderating Effect of CEO Tenure

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Abstract: In this study, we examine the relationship between the enforceability of non-compete agreements (NCAs) across U.S. states and firms' corporate social responsibility (CSR) engagement. Consistent with the prior literature, we document that stricter state-level enforcement of NCAs leads to lower CSR engagement, supporting the argument that firms' incentive to retain employees affects their CSR engagement. More importantly, we find that the negative relation between NCA enforceability and CSR engagement varies with CEO tenure. Specifically, longer CEO tenure weakens the negative association. That is, under stricter NCA enforcement, firms with longer-tenured CEOs are less likely to reduce their CSR activities compared to firms with shorter-tenured CEOs. Overall, our finding supports the conjecture that although stricter NCAs reduce firms' incentive to engage in CSR activities by decreasing concerns about employee retention, the stronger incentive to retain their longer-tenured CEOs mitigates firms' incentives to reduce their CSR activities.

Keywords: non-compete agreements, CSR engagement, CEO tenure, employee retention

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I. Introduction

Because of the increasing number of companies using non-compete agreements (NCAs) enforceability to prohibit employees from joining a competing firm, prior research examines the relationship between NCAs and firms' corporate social responsibility (CSR) activities.[1] Flammer and Kacperczyk (2019) show that CSR helps reduce employees' propensity to join a rival firm and disclose its proprietary knowledge even if they do join a rival firm. Similarly, Hrazdil, Kim, and Li (2021) find that an increase in the enforcement of NCAs deteriorates CSR engagement from the perspective of firms. While prior studies attribute the negative relation between NCAs and CSR to firms' incentive to retain employees, in this study, we examine the role of CEO tenure in the relation between NCAs and corporate CSR. Therefore, the primary purpose of this study is to examine whether and how the relationship between NCAs' enforceability and firms' CSR investment varies with CEOs' tenure.

NCAs are covenants signed by employees to not compete with their employer for a specified period after termination of employment, which is similar to CEOs' horizon problem based on the limitation of future job opportunities. In states with stricter NCAs, talents face restrictions on job mobility. They also reduce CEOs' mobility and job opportunities (Bishara, Martin, and Thomas, 2015; Kini, Williams, and Yin, 2021) and possibly change CEOs' investment decisions about CSR.

We posit two competing views on how CEOs strategically engage in CSR to respond to the enforceability of NCAs from the perspective of CEOs instead of firms. CEOs likely have more incentives to invest in CSR under stricter NCAs. Supposedly, even though CEOs would face restrictions on job mobility under stricter NCAs, they may choose to stay at the current firm for a longer period to enjoy the long-term benefits of CSR investments. Meanwhile, engagement in CSR activities is good publicity and gains media exposure, so CEOs could strategically choose to pursue CSR activities to

[1] CSR is a broader concept that emphasizes the responsibility of businesses to address environmental, social, and governance aspects in their operations and to give back to society by enhancing social welfare. Environmental, social, and governance (ESG), on the other hand, serves as a concrete approach to implementing CSR, providing a systematic framework that helps businesses evaluate and optimize their performance across these three dimensions. ESG translates the core principles of CSR into actionable guidelines, elevating CSR beyond mere ethical advocacy by using quantifiable indicators to demonstrate a company's actual performance in sustainable development (United Nations Global Compact, 2004). Although ESG encompasses a broader scope than CSR, they are often viewed as complementary in practice. CSR offers conceptual guidance on corporate sustainability responsibilities, while ESG further implements these principles and presents the results in a data-driven format. Therefore, in academic research and practical application, CSR and ESG are often used interchangeably as the theoretical foundation for discussing corporate sustainability responsibilities (Frost, Li, Tsang, and Yu, 2022). Based on this, the present study regards the two as equivalent and uses them interchangeably.

contribute to their personal interests and enhance their reputation (Barnea and Rubin, 2010; Borghesi, Houston, and Naranjo, 2014; Petrenko, Aime, Ridge, and Hill, 2016). Moreover, if CEOs have better performance in CSR currently, it will be easier for them to find new jobs after leaving (Dai, Gao, Lisic, and Zhang, 2023). As there are fewer job opportunities under stricter NCAs, the CEOs would like to keep energy, cultivate strength, and build a reputation by investing more in CSR to help them find next better jobs. Therefore, investing in CSR is a selective way for CEOs to compensate for their personal loss due to fewer outside job opportunities under stricter NCAs.

In contrast, when a company's performance is poor, its board tends to believe that the CEO does not enhance the firm's value and invests resources in suboptimal projects, for example, CSR investments (Hubbard, Christensen, and Graffin, 2017). When the NCAs are more enforceable, CEOs are more likely to become unemployed for poor performance because the departing CEOs are prohibited from working for competitors, at least for the NCAs' enforcement period (Kini et al., 2021). CEOs may worry that CSR investments will lead to bad short-term performance and increase their unemployment risk, so they will likely have fewer incentives to invest in CSR.

According to upper echelons theory, the CEO is the main decision-maker in the company (Hambrick and Mason, 1984), and their characteristics significantly affect the firm's performance. Prior studies have indicated that CEO tenure plays an important role in explaining the diversity in firm strategies or performance (Hambrick and Mason, 1984; Hambrick and Fukutomi, 1991; Henderson, Miller, and Hambrick, 2006; Simsek, 2007). Thus, we further consider how CEO tenure affects the relationship between the changing enforceability of NCAs and CSR investments. Although CEOs worry that CSR investments may lead to bad short-term performance and increase their risk of unemployment, managerial power theory (Shleifer and Vishny, 1989; Hermalin and Weisbach, 1998) suggests that CEOs with longer tenure in their current positions can influence the boards' decision-making because they have more experience and information about the board and firm. In addition, according to the matching theory, CEOs have a lower risk of dismissal when they are in the later stages of their current position. Dikolli, Mayew, and Nanda (2014) also suggest that the likelihood of a CEO's performance-related dismissal decreases as their tenure increases. As a result, compared with shorter-tenured CEOs, longer-tenured CEOs should feel free to optimize their CSR investments to compensate for their job loss under NCAs. Therefore, CEO tenure will affect the impact of stricter NCAs on CSR.

Among various CEO characteristics, we focus on CEO tenure, as it reflects both the degree of managerial entrenchment and the CEO's perceived job security—factors that directly influence a CEO's incentives and ability to respond to external constraints such as

stricter NCAs. Compared to other traits such as age or gender, tenure better captures the evolving interplay between a CEO's experience and their strategic influence. Specifically, longer-tenured CEOs are more likely to have built internal support networks and accumulated reputational capital, thereby reducing the likelihood of dismissal and enabling greater discretion to pursue long-term initiatives such as CSR, even in the face of short-term performance pressures. Moreover, recent studies (e.g., Chen, Liao, Tsang, and Yu, 2023) highlight that early-tenure CEOs are typically more sensitive to career concerns, prompting adjustments in disclosure and investment behavior. Building on this insight, our study investigates whether CEO tenure, as a proxy for internal power and career stability, moderates the impact of external labor constraints (i.e., NCAs) on firms' CSR decisions.

Using a sample of US firms for the 2000–2014 period, we test the predictions of two competing hypotheses relating to NCAs and CSR. The results indicate that CEOs decrease CSR investments as they face job risks given stricter NCAs. In addition, we further find that CEO tenure mitigates the negative effect of strict enforcement of NCAs on CEOs' engagement in CSR.

This study makes several important contributions. First, it contributes to a better understanding of the career horizon in influencing CEOs' discretionary CSR investments. CEOs would adjust CSR investments given stricter NCAs, and they may either display a greater incentive to compensate for their job cost by increasing CSR investments or to reduce dismissal risk by reducing CSR investments. Our study supports the assertion that CSR investments are driven by CEOs' dismissal risk; for example, CSR investments decline as CEOs' job opportunities are limited by stricter NCAs. We demonstrate a specifically exogenous event, the change of legal enforcement, which influences CEOs' career horizons and how they determine CSR investments.

Second, previous literature indicate that CEOs will lower discretionary expenditures in response to stricter NCAs (Chen, Zhang, and Zhou, 2018). In support of this view, our result shows a negative relationship between NCAs' enforceability and CSR engagement. By examining the relationship between NCAs and discretionary expenditure, our finding echoes Chen et al. (2018) and suggests that CEO characteristics affect the relationship between NCAs and discretionary expenditure.

Third, to the best of our knowledge, no studies have examined whether and what CEO characteristics affect the relationship between NCAs and CSR. This is the first study empirically showing how major executive characteristics such as CEO tenure can explain differences in CEOs' reactions to NCAs through engagement in CSR activities. We extend the study from Hrazdil et al. (2021) and further suggest that, although CEOs are less likely to engage in CSR to avoid dismissal risk when NCAs are stricter, longer-tenured CEOs will

invest more in CSR to compensate for their job cost given stricter NCAs. While Hrazdil et al. (2021) primarily examines this relationship from the perspective of external labor market dynamics, focusing on how firms adjust their CSR activities to manage employee retention risks under varying NCA enforceability, our study deepens this analysis by considering how the individual characteristics of top executives influence these decisions. This addition enhances our understanding of the heterogeneity in corporate responses to external constraints by highlighting the importance of managerial characteristics in shaping strategic decisions, thus offering a more nuanced perspective on how firms navigate the challenges posed by stringent NCA enforceability. Thus, our study adds to previous studies examining the economic consequences of CEO characteristics by presenting evidence that CEO tenure can mitigate the negative effect of NCAs on CSR.

The remainder of this paper proceeds as follows. Section 2 reviews the literature and develops a hypothesis, while Section 3 describes the methodology and discusses the variables. Section 4 reports the empirical results, and Section 5 offers conclusions.

II. Institutional Background and Prior Literature

2.1 Institutional Background

Employees are important human capital for every company (Garmaise, 2011). Therefore, in order to keep talent and avoid knowledge spillovers, employers may require employees to sign an NCA, predominantly at the beginning of the employment relationship. Generally, NCAs prohibit employees from competing with their former employer and are valid for one or two years. NCAs were first proposed in the fifteenth century, but most countries did not strictly enforce them at that time in order to promote the economy and guarantee employees' job mobility. In the seventeenth century, some governments began to enforce the law related to NCAs, and their enforcement was often limited to specific regions (Marx and Fleming, 2012). Today, in the United States, the enforcement of NCAs falls under state-level employment laws, and the state-level enforceability of NCAs varies across states (Chen et al., 2018; Hrazdil et al., 2021). For example, we observe that California and Oklahoma both have active labor markets, and they are resistant to the enforcement of NCAs to avoid a severe adverse impact on their local labor market mobility (Marx and Fleming, 2012). That is, once mobility is limited, lost outside opportunities are potentially greater for employees. As a result, the employees will have incentives to take some actions to reduce these personal losses. Furthermore, if a CEO is also restricted under NCAs, their response could greatly influence their company due to the importance of their position.

2.2 Prior Literature and Hypotheses Development

2.2.1 NCAs and Investments in CSRs

Currently, CSR has become a mainstream business consideration for most firms. As the main decision-maker of the company, the CEO controls the overall direction of operations (Hambrick and Mason, 1984; Chatterjee and Hambrick, 2007; Hambrick, 2007). Therefore, the CEO should view CSR investment as an important company strategy. However, CSR is a long-term strategy (Mahapatra, 1984), and meanwhile, there is no consistent conclusion on the impact of CSR on company performance (McWilliams and Siegel, 2000; Wang, Choi, and Li, 2008; Chang, Oh, and Messersmith, 2013; Saeidi, Sofian, Saeidi, Saeidi, and Saaeidi, 2015; Petrenko et al., 2016). Therefore, CEOs will consider if they should engage in CSR. CEOs with stricter NCAs have fewer job opportunities in the future. As a result, they will most probably invest in CSR projects strategically to gain public support to reduce the probability of being dismissed (Cespa and Cestone, 2007). However, uncertain corporate social performance still increases CEOs' turnover risk (Kini et al., 2021). In sum, the decision to invest in CSR projects depends on CEOs' consideration of their job opportunities. Therefore, this study proposes two opposing viewpoints on the relationship between stricter NCAs and CSR investments.

According to agency theory, CEOs' personal incentives would affect their CSR commitments (Jensen and Meckling, 1976). In particular, engagement in CSR activities provides good publicity and gains media exposure, so CEOs could strategically choose to pursue CSR activities to contribute to their personal interests and reputation building (Barnea and Rubin, 2010; Borghesi et al., 2014; Petrenko et al., 2016). Further, past literature has shown that CSR investments can help enhance a firm's reputation, brand value, and trust, and its value ultimately would be increased (Jones, 1995; Porter and Kramer, 2006; Jo and Harjoto, 2011). As a result, CEOs could use this to signal good management. In addition, CEOs who have better performance in CSR are less likely to be unemployed. These CEOs are more likely to find a new and higher executive position with richer compensation even after departing their current position (Dai et al., 2023). CEOs have fewer outside job opportunities under more enforceable NCAs, so they have incentives to invest in CSR that can potentially compensate for their personal loss. For example, CEOs could benefit all of the stakeholders via investing in CSR to act as window-dressing their performance (Anagnostopoulou, Tsekrekos, and Voulgaris, 2021) and try to prevent reporting worse performance entailed by accounting conservatism and incurring extra job costs. To sum up, CEOs subject to stricter NCAs are more likely to extend their tenure at the current firm due to fewer outside job opportunities, and CEOs would receive

more remuneration with better CSR engagement. Thus, we propose that CEOs will invest more in CSR projects under more enforceable NCAs.

On the other hand, stakeholder theory suggests that CSR efforts are taken to benefit stakeholders, who can substantially affect the welfare of the company, with the ultimate goal of benefiting the firm's performance (e.g., Jones, 1995). Yet, when the NCAs are more enforceable, CEOs are more likely to be dismissed for poor performance because the departing CEOs are prevented from working for competitors, at least for the NCA's enforcement period. Previous literature also shows that turnover–performance sensitivity is stronger when CEOs' mobility is limited by NCAs (Kini et al., 2021). Under NCAs, CEOs worry that CSR investments might lead to bad short-term performance and increase their unemployment risk. For example, the UK retailer Marks & Spencer started an ambitious CSR program in 2007, and eventually this program was very profitable five years later (Brokaw, 2012). Likewise, one review article also indicates that the overall correlation between CSR and corporate financial performance is positive but small (e.g., Margolis, Elfenbein, and Walsh, 2007). Therefore, the benefits from CSR investments might not be realized in the short term, so these investments would not immediately increase the shareholders' interests. Furthermore, if CEOs invest too many resources in CSR activities, this would increase the likelihood of CEO dismissal, as corporate performance would then be poor (Hubbard et al., 2017). This poor financial performance following CSR investments will make the board members believe that the CEOs failed to maximize shareholders' interests due to investing resources in other less profitable activities such as CSR. Accordingly, mixed empirical results of the relation between CSR and financial performance support the claim that CSR investments are highly outcome uncertain (Griffin and Mahon, 1997; Waddock and Graves, 1997; McWilliams and Siegel, 2000; Wang et al., 2008; Chang et al., 2013; Brooks and Oikonomou, 2018; Cho and Lee, 2019). Thus, CEOs would worry about their job risk when NCAs become enforceable, and they do their best to maintain good short-term operating performance, avoiding investments in risky projects such as CSR.

Taken together, when NCAs become enforceable, CEOs will face job risks, including limited mobility. The CEOs will pursue CSR activities to contribute to their interests and reputation building. On the other hand, the benefits from CSR investments are highly uncertain and less likely to be realized in the short term, so CEOs will decrease their engagement in CSR activities to avoid dismissal risk. Following the competing views on the effect of NCAs on CSR, we state our first hypothesis as follows:

H1a: There is a positive association between the enforceability of NCAs and CEOs' engagement in CSR investments.

H1b: There is a negative association between the enforceability of NCAs and CEOs' engagement in CSR investments.

2.2.2 The Impact of CEO Tenure on NCAs and CSR Investments

In upper echelons theory, the CEO is the main decision-maker in the company, and the company's strategy and operating performance are deeply influenced by the CEO's characteristics (Hambrick and Mason, 1984). In the past, many studies have explored the impacts of the CEO's tenure on the company's operating strategies (Henderson et al., 2006; McClelland, Barker III, and Oh, 2012; Oh, Chang, and Jung, 2018; Chen, Zhou, and Zhu, 2019) and have found that the CEO's behaviors vary across different phases of their tenure in the current firm (Hambrick and Fukutomi, 1991). For example, newly hired CEOs tend to actively acquire new knowledge to manage the company. However, as they become more familiar with operations over time, their motivation to continue learning may decline, potentially limiting the firm's adaptability. Also, they are reluctant to pursue reform strategies to avoid dismissal risk. In addition, some studies have shown that newly hired CEOs' ability is uncertain in the current market. Therefore, CEOs adopt myopic strategies that are more profitable in the short term to prove their ability in the marketplace (Huang, Rose-Green, and Lee, 2012; Ali and Zhang, 2015). Therefore, this study considers an important CEO characteristic, CEO tenure, and explores its impact on the association between NCAs' enforceability and CSR investments.

Initial CSR investment is expensive and can result in poor financial performance in the short term, leading to increases in the possibility of unemployment for incumbent CEOs (Coughlan and Schmidt, 1985; Warner, Watts, and Wruck, 1988). In the case of more enforceable NCAs, CEOs have fewer job opportunities after leaving their current firm, so they should be more concerned about the poor performance caused by any discretionary investments, such as CSR. In general, firms often replace the incumbent CEOs if the shareholders are not satisfied with current corporate performance (Weisbach, 1988; Hermalin and Weisbach, 1998). However, the likelihood of a CEO's performance-related dismissal decreases as the CEO's tenure increases (Dikolli et al., 2014). This is because, as CEOs' tenure increases, their initially uncertain managerial ability becomes evident through the firm's performance. In the long run, the need for a firm to monitor its CEO decreases over a CEO's tenure, and that results in weak governance related to the CEOs' performance review; thus, a CEO's turnover rate declines as well.

According to managerial power theory, CEOs' bargaining power relative to other board members increases with tenure (Arthur, 2001), which in turn enhances their ability to influence the board's decisions (Bebchuk and Fried, 2006; Abernethy, Kuang, and Qin,

2015; van Essen, Otten, and Carberry, 2015). In the long run, board independence declines over the length of a CEO's tenure (Hermalin and Weisbach, 1998), and the likelihood of a CEO's performance-related dismissal decreases. Furthermore, matching theory suggests that newly hired CEOs face greater dismissal risk, as poor fit with the firm reduces their likelihood of improving performance and increases the chance of early turnover. In contrast, a CEO who is a good match with their firm, ideally, should be more productive than others. So, the well-matched CEOs tend to remain with their firms longer, and the likelihood of dismissal decreases as their tenure increases (Allgood and Farrell, 2003).

To sum up, this research indicates that CEO tenure would moderate the relationship between more enforceable NCAs and CSR investments. For CEOs with shorter tenure, their ability may not yet be fully observable through firm performance, and they will face a higher risk of dismissal. At the same time, they also have limited bargaining power, which reduces their influence over board decisions. Therefore, when NCAs become more enforceable, leading to fewer future job opportunities, CEOs should be more worried about the current bad performance brought about by CSR activities and reduce CSR investments accordingly. In contrast, as tenure increases, a CEO's ability becomes more apparent through firm performance, which enhances the board's trust in their leadership. At that point, the CEO will have enough managerial power to influence the board's decision-making, thus ensuring an extension of their tenure with the firm. Therefore, CEOs with longer tenure tend to exert greater influence over the board and face a lower risk of dismissal. When NCAs are more enforceable, such CEOs are more inclined to invest in CSR, viewing it as a strategic long-term initiative. Their enhanced job security enables them to tolerate short-term costs associated with CSR, thereby reinforcing the positive association between NCA enforceability and CSR investment. Building on this logic, we hypothesize that CEOs' tenure will strengthen the relationship between NCA enforceability and CSR investments. Accordingly, we propose the following hypothesis:

H2a: If H1a holds, CEO tenure strengthens the positive relationship between the enforceability of NCAs and CEOs' engagement in CSR investments.

Consistent with H1b, stricter enforcement of NCAs is associated with lower levels of CSR investment. However, this negative relationship is mitigated as CEO tenure increases. CEOs with longer tenure, who face lower job insecurity and wield greater influence over the board, are more likely to sustain or even enhance CSR engagement despite the restrictive nature of NCAs. Based on this reasoning, we propose the following hypothesis:

H2b: If H1b holds, CEO tenure mitigates the negative relationship between the enforceability of NCAs and CEOs' engagement in CSR investments.

III. Method

3.1 Sample

The sample consists of US publicly held companies with CSR ratings in the Kinder, Lydenberg, and Domini (KLD) database from 2000 to 2014.[2] This database has been widely used in previous related studies to measure a company's CSR engagement (e.g., Jo and Harjoto, 2011; Davidson, Dey, and Smith, 2019). KLD indicates positive performance (Strength) and negative performance (Concern) with respect to various subcategories. It is noted in the literature that these five existing categories of the KLD measures, including employee relations, diversity issues, product issues, community relations, and environmental issues, are more relevant to the company's stakeholders (Waddock and Graves, 1997; Hillman and Keim, 2001; Davidson et al., 2019). This research measures CSR investments based on these five aspects. Other financial variables used in this study are taken from the Compustat database; the CEO tenure information is taken from the ExecuComp database.

In addition, to capture the state-level variation in the enforceability of NCAs in the US, we follow prior research (Chen et al., 2018; Ertimur, Rawson, Rogers, and Zechman, 2018) and use the index developed by Garmaise (2011).[3] The index captures the enforceability of NCAs, with higher values indicating stricter NCAs, and this index for some states goes up and then down (or opposite) during our sample period.

Table 1 summarizes the sample selection procedure. As reported in Table 1, after excluding firms with missing data in Compustat, KLD, or ExecuComp, we obtained our final sample comprising 1,944 firms with 16,936 firm-year observations from 2000 to 2014. Table 2 provides additional details on the sample distribution. Panel A reports the number of firm-year observations across varying levels of NCA enforceability, based on the state-level legal environments as developed by Garmaise (2011). This panel highlights institutional variation in NCA enforcement across states and aligns with the construction of our primary explanatory variable. Panel B presents the sample distribution across 49 U.S. states, while Panel C reports the distribution by sample year. Together, these panels offer a comprehensive overview of the cross-sectional and variation in NCA enforceability, thereby reinforcing the consistency between the data structure and our empirical design.

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[2] We can only update the study period until 2014 due to the state-level enforceability index data was last updated in that year and does not include more recent time periods, due to data availability.

[3] Garmaise (2011) constructed this state-level enforceability index during the period 1992–2004 using 12 questions, proposed by Malsberger (2004), concerning the details of non-compete laws in the US. Chen et al. (2018) and Ertimur et al. (2018) followed and used Garmaise's method and extended the sample period to 2014.

TABLE 1 The Sample Construction

Compustat data in fiscal years 2000–2014		169,006
Discard observations for which state identifiers are not available in Compustat	(43,184)	
Merge with KLD data for CSR investments	(96,679)	
Merge with ExecuComp data	(9,939)	
Discard observations with other missing value	(2,268)	(152,070)
Final sample		16,936

TABLE 2 The Sample Distribution

Panel A: The enforceability of NCAs by firm-year observations

The enforceability of NCAs	Number of Obs.	%
0	2,613	15.43
1	153	0.9
2	333	1.97
3	4,325	25.54
4	1,523	8.99
5	3,904	23.05
6	2,580	15.23
7	800	4.72
9	705	4.16

Panel B: The sample distribution by state

	State	Number of Obs.	%
1	Alabama	120	0.71
2	Arkansas	105	0.62
3	Arizona	279	1.65
4	California	2,584	15.26
5	Colorado	363	2.14
6	Connecticut	407	2.4
7	District of Columbia	67	0.4
8	Delaware	32	0.19
9	Florida	705	4.16
10	Georgia	534	3.15
11	Hawaii	13	0.08
12	Iowa	84	0.5

TABLE 2 The Sample Distribution (Continue)

	State	Number of Obs.	%
13	Idaho	60	0.35
14	Illinois	924	5.46
15	Indiana	213	1.26
16	Kansas	69	0.41
17	Kentucky	143	0.84
18	Louisiana	121	0.71
19	Massachusetts	845	4.99
20	Maryland	283	1.67
21	Maine	16	0.09
22	Michigan	336	1.98
23	Minnesota	520	3.07
24	Missouri	339	2
25	Mississippi	35	0.21
26	Montana	4	0.02
27	North Carolina	382	2.26
28	North Dakota	21	0.12
29	Nebraska	83	0.49
30	New Hampshire	49	0.29
31	New Jersey	532	3.14
32	New Mexico	14	0.08
33	Nevada	137	0.81
34	New York	1,293	7.63
35	Ohio	707	4.17
36	Oklahoma	153	0.9
37	Oregon	160	0.94
38	Pennsylvania	725	4.28
39	Rhode Island	69	0.41
40	South Carolina	100	0.59
41	South Dakota	40	0.24
42	Tennessee	317	1.87
43	Texas	1,737	10.26
44	Utah	107	0.63
45	Virginia	493	2.91
46	Vermont	8	0.05
47	Washington	291	1.72
48	Wisconsin	309	1.82
49	West Virginia	8	0.05

TABLE 2 The Sample Distribution (Continue)

Panel C: The sample distribution by year

Year	Number of Obs.	%
2000	323	1.91
2001	525	3.1
2002	552	3.26
2003	1,003	5.92
2004	1,036	6.12
2005	1,050	6.2
2006	1,157	6.83
2007	1,398	8.25
2008	1,401	8.27
2009	1,409	8.32
2010	1,443	8.52
2011	1,416	8.36
2012	1,436	8.48
2013	1,386	8.18
2014	1,401	8.27

3.2 Measures

3.2.1 Model Specification for Hypothesis 1

The first hypothesis predicts that there is an association between the enforceability of NCAs and CEOs' engagement in CSR investments. We test the first hypothesis by developing a regression model that regresses the sample firms' CSR engagement scores (*CSRI*) on the variables representing the enforcement of non-compete provisions (*NI*) and a set of control variables (Chen et al., 2019; Davidson et al., 2019):

$$CSRI_{it} = \alpha_0 + \alpha_1 NI_{it} + \alpha_2 AD_{it} + \alpha_3 SIZE_{it} + \alpha_4 LOSS_{it} + \alpha_5 MB_{it} + \alpha_6 LEV_{it} + \alpha_7 CASH_{it} + \alpha_8 ZSCORE_{it} + \alpha_9 CEO\_DELTA_{it} + \sum Year + \sum Industry + \varepsilon_{it} \quad (1)$$

where *CSRI* refers to the CSR engagement score for firm *i* in year *t*. As there is a positive correlation between CSR engagement and CSR investments (Hillman and Keim, 2001; Choi and Wang, 2009; Kang, 2013), we adopt CSR engagement as a proxy for CSR investments. Following previous literature (Chen et al., 2019; Guo, Huang, and Zhang, 2020), we construct *CSRI* by taking the difference between the total number of CSR strengths and concerns across the five key KLD dimensions—Environment, Employee,

Product, Community, and Diversity—and dividing the result by five. To mitigate potential measurement errors (Duanmu, Huang, Li, and McBrayer, 2021), the resulting value is standardized within each year by subtracting the cross-sectional mean and dividing by the cross-sectional standard deviation. *NI* refers to the degree of enforceability of non-compete agreements, capturing variation in how strictly such agreements are enforced across states and over time. The original state-level non-compete enforcement index, covering the period from 1992 to 2004, was developed by Garmaise (2011) and subsequently updated through 2014 by Ertimur et al. (2018).

We include a set of control variables in Equation (1), following prior studies. Firms operating in more competitive markets tend to conduct higher CSR activities as product differentiation strategies (McWilliams and Siegel, 2001), and we control for firms' outsider competition, measured as advertising expense over net sales (*AD*). Accordingly, prior studies suggest that firm size (*SIZE*) has a positive effect on CSR performance (Ho, Wang, Ho-Dac, and Vitell, 2019). Larger firms, in particular, are more likely to engage in CSR activities because they possess greater visibility and slack resources. For this study, *SIZE* was controlled and measured as the natural logarithm of sales (e.g., Petrenko et al., 2016). Furthermore, prior literature suggests that firms' engagement in CSR is guided by the slack resources theory—that is, such engagement reflects strategic decisions regarding the allocation of excess resources. Consistent with this view, CSR activities have been found to be positively associated with a firm's financial capacity (Waddock and Graves, 1997). Accordingly, we control for this capacity by including an indicator variable for negative net income (*LOSS*) (e.g., Shaukat, Qiu, and Trojanowski, 2016), as firms reporting losses are expected to exhibit lower levels of CSR engagement. In addition, we also include the following control variables as indicators of organizational slack: firms' market-to-book ratio (*MB*), measured as firms' market value of equity divided by book value of equity (Davidson et al., 2019); firms' leverage (*LEV*), measured as long-term debt divided by total assets (e.g., Yuan, Tian, Lu, and Yu, 2019); and firms' holding cash (*CASH*), measured as firm's holding cash balances over assets (e.g., Di Giuli and Kostovetsky, 2014). We also control for firm-level financial distress using the *ZSCORE* (Altman, 1968), as prior studies suggest that financially distressed firms may pursue distinct CSR strategies (e.g., Lins, Servaes, and Tamayo, 2017). Additionally, we incorporate a proxy for CEO risk-taking incentives, *CEO_DELTA*, defined as the sensitivity of the CEO's stock holdings to a 1% change in the firm's stock price. This variable captures the extent to which a CEO's personal wealth is affected by fluctuations in the firm's stock performance, aligning with the concept of delta commonly used in the executive compensation literature (e.g., Coles, Daniel, and Naveen, 2006). Including *CEO_DELTA* allows us to account for the influence

of risk-related incentives on CSR engagement, as CEOs with higher equity sensitivity may exhibit distinct preferences toward risk-taking and long-term investments such as CSR (Dunbar, Li, and Shi, 2020). Lastly, our models control for year effect and industry fixed effects based on the two-digit standard industrial classification (SIC) codes. All variables are detailed in Appendix I.

Hypothesis 1a (1b) predicts that the enforceability of NCAs positively (negatively) affects CEOs' engagement in CSR investments. Therefore, as expressed by Equation (1), a significantly positive (negative) coefficient (α_1) on *NI* indicates that Hypothesis 1a (1b) is supported.

3.2.2 Model Specification for Hypothesis 2

The second hypothesis predicts that CEOs' tenure affects the relation between the enforceability of NCAs and CSR investments. To test the hypothesis, we regress *CSRI* on the variables representing *NI*, CEO tenure (*TENURE*), and a set of control variables. *TENURE* is measured as the number of years a CEO has been employed in the incumbent position.[4] The equation is as follows:

$$\begin{aligned} CSRI_{it} = {} & \beta_0 + \beta_1 NI_{it} + \beta_2 TENURE_{it} + \beta_3 NI_{it} \times TENURE_{it} + \beta_4 AD_{it} + \beta_5 SIZE_{it} \\ & + \beta_6 LOSS_{it} + \beta_7 MB_{it} + \beta_8 LEV_{it} + \beta_9 CASH_{it} + \alpha_{10} ZSCORE_{it} \\ & + \alpha_{11} CEO\_DELTA_{it} + \sum Year + \sum Industry + \varepsilon_{it} \end{aligned} \quad (2)$$

As expressed in Equation (2), the coefficient of the interaction term (β_3) captures the moderating effect of CEO tenure. Specifically, (1) H2a: If H1a holds (i.e., stricter NCA enforcement is associated with greater CSR engagement), we expect $\beta_3>0$, indicating that longer CEO tenure strengthens the positive relation between NCA enforceability and CSR investments. (2) H2b: If H1b holds (i.e., stricter NCA enforcement is associated with lower CSR engagement), we also expect $\beta_3>0$, because longer CEO tenure mitigates the negative relation between NCA enforceability and CSR investments. Thus, regardless of whether H1a or H1b is supported, we consistently predict a positive coefficient for the interaction term (β_3), reflecting the reinforcing role of CEO tenure in shaping CSR engagement under more enforceable NCAs.

IV. Main Empirical Results

4.1 Descriptive Statistics

[4] To avoid too many missing values of CEO tenure, we replace these missing values with the CEO median tenure of the same industry.

Table 3 presents the summary statistics for the primary sample. The mean *CSRI* score is 0.061, while the median is -0.161, suggesting that the majority of firms exhibit more CSR concerns than strengths. This distributional pattern is consistent with descriptive statistics reported in prior studies (Guo et al., 2020). The enforceability index of non-compete agreements (*NI*) has a mean of 3.946 and ranges from 0 to 9, consistent with the state-level variation documented in Garmaise (2011). The mean (median) of tenure (*TENURE*) is 8.241 (6) years, similar to descriptive statistics reported in prior studies (Chen et al., 2019). In addition, the distributions of our control variables are comparable to prior literature. The results also show that the mean of advertising expenses accounts for 1.1% of net sales (*AD* mean = 0.011). For a typical firm, the sample mean of *SIZE* is 7.454. On average, 13.6% of the sample firms reported operating losses (*LOSS* mean = 0.136). The average firms' market-to-book ratio (*MB*) is 3.203. The average leverage ratio for our sample firms is 21.8% (*LEV* mean = 0.218). The mean of a firm's holding cash balances accounts for 15.7% of total assets (*CASH* mean = 0.157). The average *ZSCORE* in our sample is 4.558, which is well above the conventional cut-off value of 2.99 and thus indicates that most firms face relatively low bankruptcy risk (Altman, 1968). In addition, the mean *CEO_DELTA* is 8.910, suggesting that CEOs' personal wealth in our sample is highly sensitive to fluctuations in firm value. This finding implies that the compensation structure is designed to align CEOs' financial interests with firm performance. Overall, the descriptive statistics suggest meaningful variation across key variables, supporting the empirical identification strategy used in subsequent regression analyses.

TABLE 3 Descriptive Statistics of Main Variables

	Mean	Std. Dev.	Min	Q1	Median	Q3	Max
CSRI	0.061	1.130	-4.828	-0.589	-0.161	0.638	8.123
NI	3.946	2.277	0.000	3.000	4.000	5.000	9.000
TENURE	8.241	6.742	1.000	3.750	6.000	11.000	34.000
AD	0.011	0.027	0.000	0.000	0.000	0.007	0.157
SIZE	7.454	1.572	4.088	6.331	7.351	8.511	11.482
LOSS	0.136	0.343	0.000	0.000	0.000	0.000	1.000
MB	3.203	3.033	0.526	1.522	2.297	3.684	20.438
LEV	0.218	0.179	0.000	0.050	0.204	0.339	0.689
CASH	0.157	0.168	0.001	0.030	0.093	0.228	0.736
ZSCORE	4.558	4.549	-0.470	1.869	3.355	5.459	28.263
CEO_DELTA	8.910	2.256	0.000	7.917	9.033	10.159	14.017

Notes: This table presents the summary statistics for key variables in our sample, and our sample of observations is 16,936. The detailed definition of variables is provided in Appendix I, and all of the continuous variables are winsorized at the 1% and 99% levels.

TABLE 4 Correlation Matrix of Main Variables

	1.	*2.*	*3.*	*4.*	*5.*	*6.*	*7.*	*8.*	*9.*	*10.*	*11.*
1. CSRI	1.00										
2. NI	-0.08***	1.00									
	(0.00)										
3. TENURE	-0.05***	-0.02***	1.00								
	(0.00)	(0.00)									
4. AD	0.10***	-0.00	-0.01	1.00							
	(0.00)	(0.55)	(0.18)								
5. SIZE	0.25***	0.09***	-0.10***	0.04***	1.00						
	(0.00)	(0.00)	(0.00)	(0.00)							
6. LOSS	-0.06***	-0.05***	-0.04***	-0.02***	-0.17***	1.00					
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)						
7. MB	0.10***	-0.01	-0.01	0.16***	0.01*	-0.09***	1.00				
	(0.00)	(0.19)	(0.39)	(0.00)	(0.08)	(0.00)					
8. LEV	-0.04***	0.10***	-0.06***	-0.10***	0.18***	0.08***	0.06***	1.00			
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)				
9. CASH	0.07***	-0.20***	0.07***	0.07***	-0.35***	0.11***	0.19***	-0.44***	1.00		
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			
10. ZSCORE	0.02***	-0.08***	0.13***	0.12***	-0.24***	-0.16***	0.30***	-0.53***	0.46***	1.00	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)		
11. CEO_DELTA	0.06***	0.03***	0.37***	0.01	0.25***	-0.18***	0.13***	0.02***	-0.05***	0.08***	1.00
	(0.00)	(0.00)	(0.00)	(0.49)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	

Notes: This table presents the results of Pearson correlations for key variables. The detailed definition of variables is provided in Appendix I. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4 presents the correlation matrix. We observe a negative association between CSR investments (*CSRI*) and *NI*. This result is consistent with our argument that the CEOs of companies headquartered in states with stricter enforcement of NCAs are more cautious about CSR investments and, therefore, make fewer CSR investments. Meanwhile, we also observe a negative association between *CSRI* and CEOs' tenure (*TENURE*), and this result is consistent with Chen et al. (2019). Moreover, CSR investments are significantly positively correlated with advertisement expense (*AD*), firm size (*SIZE*), and market-to-book ratio (*MB*). In addition, CSR investment is significantly negatively correlated with operating losses (*LOSS*) and firm leverage (*LEV*), suggesting that financially constrained firms are less likely to engage in CSR activities. The correlation between *ZSCORE*, a proxy for financial health, and *CSRI* is significant, indicating a positive association between overall financial stability and CSR engagement. Last, *CEO_DELTA*, which captures CEO risk-taking incentives, is positively and significantly correlated with CSR engagement. This suggests that CEOs with greater equity sensitivity may be more inclined to pursue long-term strategic initiatives such as CSR. However, the true direction and statistical significance of this relationship are more appropriately evaluated within the context of the full regression model. Overall, none of the correlation coefficients exceed 0.4, suggesting that multicollinearity is unlikely to bias our regression estimates.

4.2 Main Results

Columns (1) and (2) of Table 5 respectively report the multivariate regression results for Hypotheses 1 and 2. The coefficient of *NI* on *CSRI* in Column (1) is significantly negative (-0.033, t = -9.50, $p < 0.01$), consistent with our Hypothesis 1b, which indicates that when NCAs are more enforceable, this leads to less CSR investment. The second hypothesis predicts that CEO tenure will affect the association between NCAs and CSR, and Column (2) reports the regression results. The results of *TENURE* in Column (2) (-0.015, t = -6.87, $p < 0.01$) indicate that CEO tenure is negatively associated with CSR investment. The coefficient of *NI*×*TENURE* in Column (2) is 0.002 (t = 5.49, $p < 0.01$). Consistent with Hypothesis 2b, the results indicate that CEO tenure mitigates the negative impact of NCAs on CSR. It suggests that longer-tenured CEOs are more empowered to decide firms' engagement in CSR, and they can reap the benefits of those investments against dismissal risk caused by stricter NCAs.

The coefficients of the remaining control variables are consistent with our expectations. First, the coefficient of *AD* is significantly positive, consistent with the argument that firms operating in more competitive markets will engage in more CSR activities (McWilliams and Siegel, 2001). The coefficient of *SIZE* is also significantly positive, consistent with the

argument that large firms are likely to engage in CSR activities (Ho et al., 2019). Further, CSR engagement is found to be positively associated with firms' economic affordability (Waddock and Graves, 1997), and we also find that the coefficients are significantly positive for firms' market-to-book ratio (*MB*) and firms' holding cash (*CASH*). In addition, we find that the coefficient is significantly negative for firms' leverage (*LEV*). Finally, the coefficient on *CEO_DELTA* is negative and significant in Column (1), though insignificant in Column (2), implying that CEOs whose wealth is more sensitive to short-term stock performance may be less inclined to invest in long-term initiatives such as CSR.

TABLE 5 OLS Estimates of the Effects of Non-Compete Enforceability and CEO Tenure on CSR Engagement

	H1	*H2*
	CSRI	*CSRI*
	(1)	(2)
Intercept	-2.949***	-2.856***
	(-14.68)	(-14.30)
NI	-0.033***	-0.055***
	(-9.50)	(-9.76)
TENURE		-0.015***
		(-6.87)
NI×TENURE		0.002***
		(5.49)
AD	2.960***	2.995***
	(8.26)	(8.34)
SIZE	0.277***	0.272***
	(33.31)	(32.75)
LOSS	-0.044*	-0.046*
	(-1.88)	(-1.96)
MB	0.025***	0.023***
	(7.11)	(6.74)
LEV	-0.391***	-0.378***
	(-6.27)	(-6.06)
CASH	0.536***	0.541***
	(9.12)	(9.19)
ZSCORE	-0.002	-0.002
	(-1.21)	(-0.76)
CEO_DELTA	-0.009***	-0.001
	(-2.59)	(-0.37)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	16,936	16,936
adj. R^2	0.180	0.182
F	29.743	29.149

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. A detailed definition of variables is provided in Appendix I.

4.3 Robustness Tests

We perform several sensitivity tests to check the robustness of our findings. First, we re-estimate the main models using an alternative measure of CSR engagement: CSR strengths **(***CSRI_STR***)**, which captures the number of CSR strengths across the five KLD dimensions and has been widely adopted in prior literature (e.g., Flammer, 2015). Columns (1) and (2) of Table 6 report the results corresponding to Hypotheses 1 and 2, respectively.

In Column (1), the coefficient on *NI* is significantly negative (-0.029, t = -9.61, p < 0.01), consistent with Hypothesis 1b. This result supports the argument that firms located in states with stricter enforcement of non-compete agreements tend to engage less in CSR activities. In Column (2), CEO tenure (*TENURE*) is negatively associated with *CSRI_STR* (-0.012, t = -6.51, p < 0.01), and the interaction term *NI*×*TENURE* is significantly positive (0.001, t = 3.60, p < 0.01), consistent with Hypothesis 2b. These findings suggest that longer-tenured CEOs may attenuate the negative impact of NCA enforceability on CSR engagement, likely due to their greater autonomy and reduced sensitivity to dismissal threats.

Overall, the results using CSR strengths as an alternative dependent variable remain qualitatively consistent with those from the primary analyses, providing further support for our theoretical framework.

Second, CSR investment is a long-term process (Mahapatra, 1984), and the effect of CSR investment is not immediately visible (Adegbite, Guney, Kwabi, and Tahir, 2019). Therefore, in order to know whether CEOs keep their strategy to engage in CSR activities during the later years after the shock from the stricter NCAs, we reexamine Models (1) and (2) with one-year ahead CSR investments, that is, $CSRI_{t+1}$, rather than using the current *CSRI*. The empirical results are shown in Table 7. In Column (1), the coefficient on *NI* is significantly negative (-0.036, t = -9.50, p < 0.01), consistent with Hypothesis 1b. This result suggests that firms located in states with stricter non-compete enforceability continue to engage less in CSR investment in the subsequent year. In Column (2), *TENURE* remains negatively associated with $CSRI_{t+1}$ (-0.017, t = -6.76, p < 0.01), and the interaction term *NI*×*TENURE* is significantly positive (0.003, t = 5.87, p < 0.01), supporting Hypothesis 2b. These findings indicate that longer-tenured CEOs are more capable of mitigating the negative effect of NCA enforceability on CSR decisions, even over a forward-looking horizon.

Third, we replicate the above tests using two-year ahead CSR investments, that is, $CSRI_{t+2}$, and find the unchanged results shown in Table 8. Overall, we argue that the CEOs would keep their strategies to engage in CSR activities for several years after the shock from the stricter NCAs.

TABLE 6 OLS Estimates of the Effects of Non-Compete Enforceability and CEO Tenure on CSR Strengths

	H1	*H2*
	CSRI_STR	*CSRI_STR*
	(1)	(2)
Intercept	-3.697***	-3.645***
	(-19.06)	(-18.72)
NI	-0.029***	-0.041***
	(-9.61)	(-8.37)
TENURE		-0.012***
		(-6.51)
NI×TENURE		0.001***
		(3.60)
AD	2.346***	2.376***
	(7.30)	(7.37)
SIZE	0.506***	0.500***
	(63.35)	(62.87)
LOSS	0.095***	0.094***
	(4.85)	(4.80)
MB	0.025***	0.024***
	(8.56)	(8.07)
LEV	-0.471***	-0.458***
	(-8.28)	(-8.06)
CASH	0.727***	0.732***
	(14.14)	(14.24)
ZSCORE	-0.002	-0.001
	(-1.29)	(-0.75)
CEO_DELTA	-0.013***	-0.003
	(-3.96)	(-0.97)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	16,936	16,936
adj. R^2	0.416	0.418
F	69.142	67.932

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used in this regression; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. *CSRI_STR* is calculated by summing the CSR strength indicators across the five key KLD dimensions, dividing the total by five, and then standardizing the result within each year by subtracting the cross-sectional mean and dividing by the cross-sectional standard deviation. A detailed definition of other variables is provided in Appendix I.

TABLE 7 Analysis Using One-Year Ahead CSR Engagement

	H1	*H2*
	$CSRI_{t+1}$	$CSRI_{t+1}$
	(1)	(2)
Intercept	-2.958***	-2.847***
	(-13.32)	(-12.93)
NI	-0.036***	-0.062***
	(-9.50)	(-10.08)
TENURE		-0.017***
		(-6.76)
NI×TENURE		0.003***
		(5.87)
AD	3.061***	3.097***
	(7.73)	(7.82)
SIZE	0.297***	0.293***
	(33.32)	(32.79)
LOSS	-0.060**	-0.062**
	(-2.36)	(-2.47)
MB	0.031***	0.030***
	(7.80)	(7.47)
LEV	-0.363***	-0.348***
	(-5.30)	(-5.08)
CASH	0.553***	0.558***
	(8.78)	(8.85)
ZSCORE	-0.000	0.001
	(-0.09)	(0.35)
CEO_DELTA	-0.012***	-0.005
	(-3.06)	(-1.08)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	14,992	14,992
adj. R^2	0.195	0.198
F	29.976	29.427

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. We use one-year ahead dependent variables in these analyses, that is, $CSRI_{t+1}$ in Column (1) and (2). The detailed definition of other variables is provided in Appendix I.

TABLE 8 Analysis Using Two-Year Ahead CSR Engagement

	H1	*H2*
	$CSRI_{t+2}$	$CSRI_{t+2}$
	(1)	(2)
Intercept	-3.104***	-2.976***
	(-13.21)	(-12.81)
NI	-0.038***	-0.067***
	(-9.19)	(-10.13)
TENURE		-0.019***
		(-7.18)
NI×TENURE		0.003***
		(6.19)
AD	3.461***	3.499***
	(7.99)	(8.08)
SIZE	0.319***	0.314***
	(33.20)	(32.63)
LOSS	-0.065**	-0.069**
	(-2.32)	(-2.46)
MB	0.035***	0.034***
	(7.95)	(7.63)
LEV	-0.335***	-0.317***
	(-4.45)	(-4.21)
CASH	0.595***	0.601***
	(8.82)	(8.90)
ZSCORE	0.002	0.003
	(0.89)	(1.34)
CEO_DELTA	-0.014***	-0.006
	(-3.32)	(-1.28)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	13,131	13,131
adj. R^2	0.211	0.213
F	29.579	29.106

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. We use two-year ahead dependent variables in these analyses, i.e., $CSRI_{t+2}$ in Columns (1) and (2). A detailed definition of other variables is provided in Appendix I.

Fourth, to address potential bias from missing values in CEO tenure, we impute missing observations using the industry-level median CEO tenure in our main analysis. To further ensure the robustness of our findings, we construct an alternative measure of CEO tenure, *DUM_TENURE*, which equals one if a CEO's tenure is above the 75th percentile within the same industry, and zero if below the 25th percentile. We then re-estimate Model (2) using this indicator variable and its interaction with *NI*.

The results, reported in Table 9, show that the main effect of *NI* on CSR investment remains significantly negative for both *CSRI* (Column 1) and *CSRI_STR* (Column 2). Importantly, the interaction term *NI×DUM_TENURE* is significantly positive in both models, providing further evidence that longer CEO tenure mitigates the negative impact of non-compete enforceability on CSR. These results suggest that the presence of missing tenure data does not materially affect our main conclusions.

Fifth, the primary measure of corporate social responsibility, *CSRI*, offers a straightforward and comprehensive aggregation of CSR strengths and concerns across all dimensions, making it widely applicable in empirical analyses. However, one limitation of *CSRI* is that it does not adjust for differences in the number of indicators within each dimension, which may result in an overrepresentation of dimensions with more items.

To address this concern, we employ an alternative measure, *CSRI_M*, which balances strengths and concerns by first computing the average number of strengths and concerns for each of the five CSR dimensions: Environment, Employee, Product, Community, and Diversity. The differences between the averages are then summed and standardized by year, ensuring equal weighting across dimensions. Similarly, we construct *CSRI_STR_M*, which is calculated by averaging the number of CSR strengths across the five dimensions and standardizing the result annually.

The empirical results are presented in Columns (1) and (2) of Table 10. We find that the effect of *NI* on both *CSRI_M* and *CSRI_STR_M* remains significantly negative (t = -7.33, $p < 0.01$; t = -10.39, $p < 0.01$), consistent with Hypothesis 1b.

Columns (3) and (4) incorporate the CEO tenure variable and its interaction with *NI*. The interaction terms in both models are significantly positive (t = 4.92 for *CSRI_M*; t = 3.50 for *CSRI_STR_M*), supporting Hypothesis 2b. These findings suggest that our results are robust to alternative CSR measurement specifications.

Sixth, Table 11 reports the results of robustness tests in which we include the lagged CSR score (*Lag_CSRI*) as an additional control variable to account for the persistence of CSR behavior. Specifically, we re-estimate the main models corresponding to Hypotheses 1 and 2, incorporating *Lag_CSRI* to control for firms' prior CSR engagement.

TABLE 9 Robustness Checks with Alternative CEO Tenure Measures

	CSRI	*CSRI_STR*
	(1)	(2)
Intercept	-2.585***	-3.367***
	(-11.38)	(-13.77)
NI	-0.045***	-0.037***
	(-6.35)	(-5.99)
DUM_TENURE	-0.226***	-0.205***
	(-5.03)	(-5.22)
NI×DUM_TENURE	0.041***	0.026***
	(4.44)	(3.20)
AD	2.580***	2.351***
	(5.41)	(5.32)
SIZE	0.262***	0.474***
	(23.84)	(45.44)
LOSS	-0.050	0.093***
	(-1.61)	(3.50)
MB	0.022***	0.021***
	(5.12)	(5.90)
LEV	-0.436***	-0.587***
	(-5.20)	(-7.66)
CASH	0.717***	0.823***
	(8.95)	(11.79)
ZSCORE	-0.006**	-0.007***
	(-2.26)	(-3.03)
CEO_DELTA	-0.006	-0.003
	(-1.17)	(-0.67)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	9,266	9,266
adj. R^2	0.177	0.405
F	18.689	37.604

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. In these analyses, we use an indicator variable, *DUM_TENURE*, and that equals one if CEO tenure is larger than that of the industry 75th percentile value or zero if CEO tenure is less than that of the industry 25th percentile value. The detailed definition of other variables is provided in Appendix I.

TABLE 10 Robustness Checks with Alternative CSR Engagement Measures

	H1		*H2*	
	CSRI_ M	*CSRI_STR_M*	*CSRI_ M*	*CSRI_STR_M*
	(1)	(2)	(3)	(4)
Intercept	-2.344***	-3.785***	-2.258***	-3.734***
	(-9.22)	(-18.97)	(-8.93)	(-18.65)
NI	-0.026***	-0.032***	-0.046***	-0.043***
	(-7.33)	(-10.39)	(-8.21)	(-8.81)
TENURE			-0.014***	-0.012***
			(-6.00)	(-6.31)
NI×TENURE			0.002***	0.001***
			(4.92)	(3.50)
AD	3.025***	2.662***	3.056***	2.690***
	(8.41)	(8.00)	(8.49)	(8.06)
SIZE	0.154***	0.506***	0.150***	0.500***
	(19.01)	(63.32)	(18.46)	(62.86)
LOSS	-0.080***	0.100***	-0.082***	0.099***
	(-3.29)	(5.14)	(-3.37)	(5.09)
MB	0.016***	0.025***	0.015***	0.024***
	(4.50)	(8.34)	(4.19)	(7.86)
LEV	-0.274***	-0.485***	-0.262***	-0.472***
	(-4.27)	(-8.52)	(-4.09)	(-8.31)
CASH	0.383***	0.739***	0.387***	0.743***
	(6.45)	(14.38)	(6.51)	(14.48)
ZSCORE	-0.004*	-0.003*	-0.003	-0.002
	(-1.76)	(-1.67)	(-1.39)	(-1.15)
CEO_DELTA	-0.009**	-0.012***	-0.002	-0.003
	(-2.38)	(-3.62)	(-0.47)	(-0.73)
Industry fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes
N	16,936	16,936	16,936	16,936
adj. R^2	0.114	0.417	0.115	0.418
F	22.417	66.570	22.185	65.595

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used in this regression; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. In Column (1) and (3), we use the alternative measure *CSRI_M*. This composite score was calculated by first determining the average number of strengths and concerns for each of the five CSR aspects: Environment, Employee, Product, Community, and Diversity. For each aspect, the difference between the mean strengths and mean concerns was computed. These differences were then summed across the five aspects, and the total was divided by five to yield the final *CSRI_M*. In Column (2) and (4), we use *CSRI_STR_M*, which represents the average number of strengths for each of the five CSR aspects. For each aspect, the mean strengths were summed and divided by five to calculate the final *CSRI_STR_M*, providing a direct measure of positive CSR contributions.

In Column (1), the coefficient on *Lag_CSRI* is positive and highly significant (t = 115.15, p < 0.01), confirming the strong temporal persistence of CSR engagement. Importantly, the coefficient on *NI* remains significantly negative (-0.009, t = -3.71, p < 0.01), which supports Hypothesis 1b and indicates that stricter enforcement of non-compete agreements continues to deter CSR investments, even after accounting for firms' prior CSR behavior. In Column (2), we investigate the moderating role of CEO tenure. The results indicate that CEO tenure (*TENURE*) is negatively associated with CSR engagement (-0.004, t = -2.79, p < 0.01), while the interaction term *NI*×*TENURE* is positive and significant (0.001, t = 2.35, p < 0.05). These findings are consistent with Hypothesis 2b and suggest that longer-tenured CEOs are more capable of resisting the conservative effects of stricter NCAs on CSR strategies.

Overall, the results in Table 11 confirm that our main findings remain robust after controlling for the persistence of CSR engagement. The inclusion of lagged CSR does not alter the central conclusion that stronger NCA enforceability deters CSR investment, and that CEO tenure moderates this relationship.

TABLE 11 Robustness Checks with the Lagged CSR Control Variable

	H1	*H2*
	CSRI	*CSRI*
	(1)	(2)
Intercept	-0.633***	-0.607***
	(-3.73)	(-3.58)
Lag_CSRI	0.800***	0.800***
	(115.15)	(115.13)
NI	-0.009***	-0.015***
	(-3.71)	(-4.00)
TENURE		-0.004***
		(-2.79)
NI*×*TENURE		0.001**
		(2.35)
AD	0.565**	0.578**
	(2.37)	(2.42)
SIZE	0.077***	0.076***
	(15.25)	(14.88)
LOSS	-0.002	-0.002
	(-0.13)	(-0.16)

TABLE 11 Robustness Checks with the Lagged CSR Control Variable (Continue)

	H1	*H2*
	CSRI	*CSRI*
	(1)	(2)
MB	0.006**	0.005**
	(2.54)	(2.38)
LEV	-0.080*	-0.076*
	(-1.91)	(-1.83)
CASH	0.135***	0.136***
	(3.53)	(3.58)
ZSCORE	0.002	0.002
	(1.13)	(1.29)
CEO_DELTA	-0.004	-0.002
	(-1.51)	(-0.66)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	14,643	14,643
adj. R^2	0.708	0.708
F	233.504	228.681

Notes: The table reports the results based on OLS estimation, with robust *t*-statistics based on heteroscedasticity-consistent standard error which are reported in parentheses. Two-tailed tests are used in this regression; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The Model includes *Lag_CSRI*, which represents the one-period lag of the CSR index and is used to account for the persistence of CSR behavior.

Finally, to effectively mitigate endogeneity concerns and improve the reliability of the results, we employ a dynamic panel GMM estimator, which uses internal instruments based on deeper lags of the endogenous variables. The results are presented in Table 12. Consistent with prior tables, Column (1) presents the results related to H1, while Column (2) corresponds to H2.

In Column (1), the coefficient on the lagged CSR variable remains strongly positive and statistically significant, indicating persistence in CSR behavior. The negative and significant coefficient on *NI* further reinforces our main finding that stricter non-compete enforceability is associated with reduced CSR investment. Column (2) provides additional support for our moderating hypothesis: the interaction term *NI*×*TENURE* is positive and statistically significant, suggesting that longer-tenured CEOs are less constrained by enforceability of NCAs when formulating CSR strategies.

The consistency of these results across OLS, lagged dependent variable models, and GMM estimations provide strong evidence supporting the robustness of both H1 and H2.

TABLE 12 Robustness Checks Using Dynamic Panel GMM Estimation

Panel A	*H1*	*H2*
	CSRI	*CSRI*
	(1)	(2)
Intercept	-0.766***	-0.740***
	(-5.59)	(-5.48)
Lag_CSRI	0.759***	0.759***
	(28.22)	(28.18)
NI	-0.010***	-0.016***
	(-3.91)	(-3.64)
TENURE		-0.004**
		(-2.41)
NI×TENURE		0.001*
		(1.80)
AD	0.730**	0.744***
	(2.57)	(2.62)
SIZE	0.086***	0.084***
	(9.65)	(9.50)
LOSS	0.021	0.021
	(1.14)	(1.14)
MB	0.005*	0.005*
	(1.80)	(1.70)
LEV	-0.095**	-0.092*
	(-2.01)	(-1.96)
CASH	0.127***	0.128***
	(2.69)	(2.71)
ZSCORE	0.001	0.001
	(0.64)	(0.78)
CEO_DELTA	-0.002	-0.000
	(-0.73)	(-0.11)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	14,643	14,643
Wald Chi^2	20,387	52,983
AR (1)	-15.042 (p = 0.000)	-15.035 (p = 0.000)
AR (2)	-1.629 (p = 0.103)	-1.640 (p = 0.101)

Notes: The table reports results based on GMM estimation, with robust z-statistics derived from heteroscedasticity-consistent standard errors, reported in parentheses. Two-tailed tests are used in this regression; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The model includes *Lag_CSRI*, which represents the one-period lag of the CSR index and is used to account for the persistence of CSR behavior. AR(1) and AR(2) statistics test for first- and second-order serial correlation in the differenced residuals. A significant AR(1) but insignificant AR(2) indicates valid moment conditions.

V. Conclusions

This paper investigates whether CEOs tend to use non-financial-related CSR activities in response to stricter NCAs and how managerial characteristics affect such decisions. Based on a sample of U.S. publicly held companies during the period from 2000 to 2014, we find that CEOs tend to exhibit a lower level of CSR activities when NCAs are stricter. Our results further show that such a negative effect is mitigated by CEO tenure, suggesting that longer-tenured CEOs will invest more in CSR when NCAs are stricter.

Overall, the findings from our study suggest that CEO tenure can be an important mechanism through which firms can mitigate the negative impact of NCAs on CSR activities. Thus, our evidence indicates that the tenure of key executives can play an important role in preventing CEOs from investing less in CSR to respond to stricter NCAs.

The research results are limited to the inclusion of NCAs in the contracts signed by CEOs. We were unable to investigate the effects of the enforceability of NCAs on CEOs who do not have NCAs in their employment contracts because of data availability. However, according to past literature (Garmaise, 2011; Kini et al., 2021), there are about 70% of CEOs signing NCAs in their compensation contracts. It can be seen that NCAs are popular in CEOs' contracts, and our empirical results should be persuasive. In addition, due to data availability constraints, this study includes empirical results only up to 2014, which may not fully capture the evolving dynamics of CSR practices and non-compete enforceability in recent years. This represents a limitation of the study.

References

Abernethy, M. A., Y. F. Kuang, and B. Qin. 2015. The influence of CEO power on compensation contract design. *The Accounting Review* 90 (4): 1265-1306.

Adegbite, E., Y. Guney, F. Kwabi, and S. Tahir. 2019. Financial and corporate social performance in the UK listed firms: The relevance of non-linearity and lag effects. *Review of Quantitative Finance and Accounting* 52 (1): 105-158.

Ali, A., and W. Zhang. 2015. CEO tenure and earnings management. *Journal of Accounting and Economics* 59 (1): 60-79.

Allgood, S., and K. A. Farrell. 2003. The match between CEO and firm. *The Journal of Business* 76 (2): 317-341.

Altman, E. I. 1968. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance* 23 (4): 589-609.

Anagnostopoulou, S. C., A. E. Tsekrekos, and G. Voulgaris. 2021. Accounting conservatism and corporate social responsibility. *The British Accounting Review* 53 (4): 100942.

Arthur, N. 2001. Board composition as the outcome of an internal bargaining process: Empirical evidence. *Journal of Corporate Finance* 7 (3): 307-340.

Barnea, A., and A. Rubin. 2010. Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics* 97 (1): 71-86.

Bebchuk, L. A., and J. M. Fried. 2006. Pay without performance: Overview of the issues. *Academy of Management Perspectives* 20 (1): 5-24.

Bishara, N. D., K. J. Martin, and R. S. Thomas. 2015. An empirical analysis of noncompetition clauses and other restrictive postemployment covenants. *Vanderbilt Law Review* 68 (1): 1-51.

Borghesi, R., J. F. Houston, and A. Naranjo. 2014. Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance* 26: 164-181.

Brokaw, L. 2012. Marks and spencer's emerging business case for sustainability. *MIT Sloan Management Review*. Accessed April 16, 2026. https://sloanreview.mit.edu/article/marks-and-spencers-emerging-business-case-for-sustainability/

Brooks, C., and I. Oikonomou. 2018. The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *The British Accounting Review* 50 (1): 1-15.

Cespa, G., and G. Cestone. 2007. Corporate social responsibility and managerial entrenchment. *Journal of Economics and Management Strategy* 16 (3): 741-771.

Chang, Y. K., W. Y. Oh, and J. G. Messersmith. 2013. Translating corporate social performance into financial performance: Exploring the moderating role of high-performance work practices. *The International Journal of Human Resource Management* 24 (19): 3738-3756.

Chatterjee, A., and D. C. Hambrick. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Administrative Science Quarterly* 52 (3): 351-386.

Chen, T. Y., G. Zhang, and Y. Zhou. 2018. Enforceability of non-compete covenants, discretionary investments, and financial reporting practices: Evidence from a natural experiment. *Journal of Accounting and Economics* 65 (1): 41-60.

Chen, W., G. Zhou, and X. Zhu. 2019. CEO tenure and corporate social responsibility performance. *Journal of Business Research* 95: 292-302.

Chen, L., C. H. Liao, A. Tsang, and L. Yu. 2023. CEO career concerns in early tenure and corporate social responsibility reporting. *Contemporary Accounting Research* 40 (3): 1545-1575.

Cho, S. Y., and C. Lee. 2019. Managerial efficiency, corporate social performance, and corporate financial performance. *Journal of Business Ethics* 158 (2): 467-486.

Choi, J., and H. Wang. 2009. Stakeholder relations and the persistence of corporate financial performance. *Strategic Management Journal* 30 (8): 895-907.

Coles, J. L., N. D. Daniel, and L. Naveen. 2006. Managerial incentives and risk-taking. *Journal of Financial Economics* 79 (2): 431-468.

Coughlan, A. T., and R. M. Schmidt. 1985. Executive compensation, management turnover, and firm performance: An empirical investigation. *Journal of Accounting and Economics* 7 (1-3): 43-66.

Dai, X., F. Gao, L. L. Lisic, and I. X. Zhang. 2023. Corporate social performance and the managerial labor market. *Review of Accounting Studies* 28: 307-339.

Davidson, R. H., A. Dey, and A. J. Smith. 2019. CEO materialism and corporate social responsibility. *The Accounting Review* 94 (1): 101-126.

Di Giuli, A., and L. Kostovetsky. 2014. Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Financial Economics* 111 (1): 158-180.

Dikolli, S. S., W. J. Mayew, and D. Nanda. 2014. CEO tenure and the performance-turnover relation. *Review of Accounting Studies* 19 (1): 281-327.

Duanmu, J., Q. Huang, Y. Li, and G. McBrayer. 2021. Can hedge funds benefit from corporate social responsibility investment? *The Financial Review* 56 (2): 258-278.

Dunbar, C., Z. F. Li, and Y. Shi. 2020. CEO risk-taking incentives and corporate social responsibility. *Journal of Corporate Finance* 64: 101714.

Ertimur, Y., C. Rawson, J. L. Rogers, and S. L. C. Zechman. 2018. Bridging the gap: Evidence from externally hired CEOs. *Journal of Accounting Research* 56 (2): 521-579.

Flammer, C. 2015. Does product market competition foster corporate social responsibility? Evidence from trade liberalization. *Strategic Management Journal* 36 (10): 1469-1485.

Flammer, C., and A. Kacperczyk. 2019. Corporate social responsibility as a defense against knowledge spillovers: Evidence from the inevitable disclosure doctrine. *Strategic Management Journal* 40 (8): 1243-1267.

Frost, T., L. Li, A. Tsang, and M. Yu. 2022. Corporate social irresponsibility and firm value: International evidence from media coverage. *Asia-Pacific Journal of Financial Studies* 51 (3): 401-430.

Garmaise, M. J. 2011. Ties that truly bind: Noncompetition agreements, executive compensation, and firm investment. *The Journal of Law, Economics, and Organization* 27 (2): 376-425.

Griffin, J. J., and J. F. Mahon. 1997. The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business and Society* 36 (1): 5-31.

Guo, J., P. Huang, and Y. Zhang. 2020. Accounting conservatism and corporate social responsibility. *Advances in Accounting* 51: 100501.

Hambrick, D. C. 2007. Upper echelons theory: An update. *Academy of Management Review* 32 (2): 334-343.

Hambrick, D. C., and G. D. S. Fukutomi. 1991. The seasons of a CEO's tenure. *The Academy of Management Review* 16 (4): 719-742.

Hambrick, D. C., and P. A. Mason. 1984. Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review* 9 (2): 193-206.

Henderson, A. D., D. Miller, and D. C. Hambrick. 2006. How quickly do CEOs become obsolete? Industry dynamism, CEO tenure, and company performance. *Strategic Management Journal* 27 (5): 447-460.

Hermalin, B. E., and M. S. Weisbach. 1998. Endogenously chosen boards of directors and their monitoring of the CEO. *The American Economic Review* 88 (1): 96-118.

Hillman, A. J., and G. D. Keim. 2001. Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal* 22 (2): 125-139.

Ho, F. N., H. M. D. Wang, N. Ho-Dac, and S. J. Vitell. 2019. Nature and relationship between corporate social performance and firm size: A cross-national study. *Social Responsibility Journal* 15 (2): 258-274.

Hrazdil, K., J. B. Kim, and X. Li. 2021. What shapes CSR performance? Evidence from the changing enforceability of non-compete agreements in the United States. *Review of Financial Economics* 39 (3): 334-359.

Huang, H. W., E. Rose-Green, and C. C. Lee. 2012. CEO age and financial reporting quality. *Accounting Horizons* 26 (4): 725-740.

Hubbard, T. D., D. M. Christensen, and S. D. Graffin. 2017. Higher highs and lower lows: The role of corporate social responsibility in CEO dismissal. *Strategic Management Journal* 38 (11): 2255-2265.

Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4): 305-360.

Jo, H., and M. A. Harjoto. 2011. Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics* 103 (3): 351-383.

Jones, T. M. 1995. Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review* 20 (2): 404-437.

Kang, J. 2013. The relationship between corporate diversification and corporate social performance. *Strategic Management Journal* 34 (1): 94-109.

Kini, O., R. Williams, and S. Yin. 2021. CEO noncompete agreements, job risk, and compensation. *The Review of Financial Studies* 34 (10): 4701-4744.

Lins, K. V., H. Servaes, and A. Tamayo. 2017. Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance* 72 (4): 1785-1824.

Mahapatra, S. 1984. Investor reaction to a corporate social accounting. *Journal of Business Finance and Accounting* 11 (1): 29-40.

Malsberger, B. M. 2004. *Covenants not to compete: A state-by-state survey*. Washington DC: BNA Books.

Margolis, J. D., H. A. Elfenbein, and J. P. Walsh. 2007. Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. Working paper, Harvard Business School, Boston, MA.

Marx, M., and L. Fleming. 2012. Non-compete agreements: Barriers to entry … and exit? *Innovation Policy and the Economy* 12: 39-64.

McClelland, P. L., V. L. Barker III, and W. Y. Oh. 2012. CEO career horizon and tenure: Future performance implications under different contingencies. *Journal of Business Research* 65 (9): 1387-1393.

McWilliams, A., and D. Siegel. 2000. Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal* 21 (5): 603-609.

McWilliams, A., and D. Siegel. 2001. Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review* 26 (1): 117-127.

Oh, W. Y., Y. K. Chang, and R. Jung. 2018. Experience-based human capital or fixed paradigm problem? CEO tenure, contextual influences, and corporate social (ir)responsibility. *Journal of Business Research* 90: 325-333.

Petrenko, O. V., F. Aime, J. Ridge, and A. Hill. 2016. Corporate social responsibility or CEO narcissism? CSR motivations and organizational performance. *Strategic Management Journal* 37 (2): 262-279.

Porter, M. E., and M. R. Kramer. 2006. Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review* 84 (12): 78-92.

United Nations Global Compact. 2004. *The Global Compact Leaders Summit 2004—Final Report*. Accessed May 21, 2026. https://unglobalcompact.org/library/255.

Saeidi, S. P., S. Sofian, P. Saeidi, S. P. Saeidi, and S. A. Saaeidi. 2015. How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research* 68 (2): 341-350.

Shaukat, A., Y. Qiu, and G. Trojanowski. 2016. Board attributes, corporate social responsibility strategy, and corporate environmental and social performance. *Journal of Business Ethics* 135 (3): 569-585.

Shleifer, A., and R. W. Vishny. 1989. Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics* 25 (1): 123-139.

Simsek, Z. 2007. CEO tenure and organizational performance: An intervening model. *Strategic Management Journal* 28 (6): 653-662.

van Essen, M., J. Otten, and E. J. Carberry. 2015. Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management* 41 (1): 164-202.

Waddock, S. A., and S. B. Graves. 1997. The corporate social performance—financial performance link. *Strategic Management Journal* 18 (4): 303-319.

Wang, H., J. Choi, and J. Li. 2008. Too little or too much? Untangling the relationship between corporate philanthropy and firm financial performance. *Organization Science* 19 (1): 143-159.

Warner, J. B., R. L. Watts, and K. H. Wruck. 1988. Stock prices and top management changes. *Journal of Financial Economics* 20: 461-492.

Weisbach, M. S. 1988. Outside directors and CEO turnover. *Journal of Financial Economics* 20: 431-460.

Yuan, Y., G. Tian, L. Y. Lu, and Y. Yu. 2019. CEO ability and corporate social responsibility. *Journal of Business Ethics* 157 (2): 391-411.

Appendix I Variable Definitions

CSRI	A year-level standardized measure of CSR investment. It is calculated by taking the difference between the total number of CSR strengths and concerns across the five key KLD dimensions—Environment, Employee, Product, Community, and Diversity—and dividing the result by five. The resulting value is then standardized within each year by subtracting the cross-sectional mean and dividing by the cross-sectional standard deviation.
CSRI_STR	A year-level standardized measure of CSR strengths. It is computed by summing the CSR strength indicators across the five key KLD dimensions, dividing the total by five, and then standardizing the result within each year by subtracting the cross-sectional mean and dividing by the cross-sectional standard deviation.
CSRI_M	A year-level standardized measure of CSR investment based on the average of dimension-level scores. It is calculated by first computing the average number of CSR strengths and concerns for each of the five key KLD dimensions—Environment, Employee, Product, Community, and Diversity. For each dimension, the difference between the mean number of strengths and concerns is calculated, and the five resulting values are then averaged. This value is then standardized within each year by subtracting the cross-sectional mean and dividing by the cross-sectional standard deviation.
CSRI_STR_M	A year-level standardized measure of CSR strengths based on the average of dimension-level scores. It is calculated by first computing the mean number of CSR strengths for each of the five key KLD dimensions—Environment, Employee, Product, Community, and Diversity. These five means are then averaged. The resulting value is then standardized within each year by subtracting the cross-sectional mean and dividing by the cross-sectional standard deviation.
NI	A variable that measures the degree of enforceability of non-compete agreements (NCAs) based on the index developed by Garmaise (2011). This index reflects state-level legal variation in how strictly NCAs are enforced, with scores ranging from 0 (least enforceable) to 9 (most enforceable). It captures both cross-sectional and temporal differences in NCA enforceability across U.S. states over time.

Appendix I Variable Definitions (Continue)

TENURE	CEO tenure, measured as the number of years a CEO has been employed in the incumbent position. To avoid too many missing values of CEO tenure, we replace these missing values with the CEO's median tenure of the same industry and fiscal year.
AD	A measure for advertising expense, calculated as advertising expense over net sales.
SIZE	A measure for the firm size, calculated as the natural logarithm of sales.
LOSS	An indicator variable equal to 1 if a firm reports negative income before extraordinary items, and 0 otherwise.
MB	A measure for firms' market-to-book ratio, calculated as firms' market value of equity divided by the book value of equity.
LEV	A measure for firms' leverage, calculated as long-term debt divided by the total assets.
CASH	A measure for firms' holding cash, calculated as firm's holding cash balances over assets.
ZSCORE	A measure for firms' financial distress. The score is computed as a weighted sum of five accounting ratios: working capital to total assets (weighted at 1.2), retained earnings to total assets (1.4), earnings before interest and taxes (EBIT) to total assets (3.3), market value of equity to total liabilities (0.6), and sales to total assets (1.0).
CEO_DELTA	A measure of the sensitivity of the CEO's stock holdings to a 1% change in the firm's stock price. We calculate it by multiplying the number of shares held by the fiscal year-end stock price, and then scale the result by the CEO's total compensation. Lastly, we take the natural logarithm of one plus this value.