

**Compensation Structure and Real CSR Reporting Activity:
CEO Dollars and Sustainable Sense**

Elizabeth O. Kohl University of Montana

elizabeth.kohl@umontana.edu

Reilly S. White University of New Mexico

reillywhite@unm.edu

Compensation Structure and Real CSR Reporting Activity: CEO Dollars and Sustainable Sense

ABSTRACT

The voluntarily disclosure of stand-alone Corporate Social Responsibility (CSR) reports in the United States (U.S.) has become more widespread in recent years. While academic literature about these voluntary disclosures has likewise grown, exploration into how Chief Executive Officer (CEO) compensation influences real firm decisions to issue voluntary CSR reports remains limited. To bridge this gap, we examine both U.S. CSR report initiation and ongoing U.S. CSR reporting from 2006 to 2020. Focusing on CEO pension compensation, we find that firms offering higher pension compensation are less likely to initiate CSR reporting, but more likely to engage in ongoing voluntary CSR disclosure post-initiation. We also find that ongoing CSR reporting is more likely when the CEO has higher pension compensation relative to other forms of compensation, such as cash-based compensation (salary and bonus) and equity-based compensation (stock options). Considering domestic policy influence on voluntary disclosure decisions, we find that compensation structure becomes more important for CSR initiation during the republican presidential administration in our sample period. CEOs with higher pension compensation are incentivized to make choices that preserve firm value in the long-run, ensuring their pension is paid. Our findings suggest that voluntary CSR reports serve both CEO and firm interests around preserving long-term value and decreasing risk. These findings have important implications with respect to our understanding of agency theory, compensation incentives, CSR reporting, and voluntary disclosure.

Keywords: Executive compensation; CSR reporting; performance-based pay

Data Availability: Data are available from the public sources cited in the text.

INTRODUCTION

This study examines the influence of Chief Executive Officer (CEO) compensation on United States (U.S.) firms' decisions to issue voluntary, stand-alone Corporate Social Responsibility (CSR) reports. More specifically, we leverage the combination of a 2006 change in U.S. disclosure rules surrounding executive pension and postretirement plans and an improved understanding of the influence of debt-like compensation on CEO incentives to consider – what role does a comprehensive view of CEO compensation play in the voluntary disclosure of U.S. CSR reports?

Since Jensen and Meckling (1976), agency theory and the optimal contracting and incentivizing of CEOs through compensation contracts has been researched as a critical component of firm dynamics. Edmans, Gabaix, and Jenter (2017) details how executive compensation affects short-term behavior, risk-taking, policies, firm profitability, and retention. Prior to 2006, most research focused on cash and equity-based CEO compensation, as finite disclosure information was available regarding pension and other postretirement plan compensation. In 2006, the Financial Accounting Standards Board's issuance of *SFAS 158* and the Securities and Exchange Commission's rule changes surrounding disclosure of pension and other postretirement plans shed new light on the type and structure of executive compensation utilized by publicly traded firms.

With a focus on debt-like components, we consider three perspectives on executive compensation. First, we examine the influence of compensation type on the likelihood of firm engagement in CSR reporting. Sundaram and Yermack (2007) describe pension-based compensation as a form of incentivizing CEOs to pursue strategies that reduce firm risk and preserve long-term pension value. As pension compensation incentivizes executives to be aligned with other long-term stakeholders (such as bondholders), this type of compensation is

considered debt-like and referred to as *inside debt* (Sundaram and Yermack, 2007; Edmans and Liu, 2011). CSR reporting embodies a sustainable, long-term framework for the firm, as such we expect a positive association between the presence of executive pension compensation and the likelihood of a firm to engage in voluntary CSR reporting.

Second, we examine the influence of compensation structure on the likelihood of firm engagement in CSR reporting. CEOs with compensation structure that includes inside debt face greater agency friction between the short-term incentives of their equity compensation and the long-term incentives of their debt-type compensation (Sundaram and Yermack, 2007). Similar to examining debt in the capital structure of the firm (leverage), we can also examine the amount of inside debt in the compensation structure for executives, referred to as *compensation leverage*. As CSR reporting inherently embodies a long-term decision horizon and contains stakeholder-oriented content (Richardson and Welker, 2001; Goss and Roberts, 2011; Dhaliwal, Radhakrishnan, Tsang, and Yang, 2012), we expect a positive association between executive compensation leverage and the likelihood of a firm to engage in voluntary CSR reporting.

Finally, we examine the influence of alignment/misalignment of CEO compensation structure to firm capital structure on the likelihood of firm engagement in CSR reporting. CEOs function in symbiosis with the firm. When a greater portion of executive compensation is derived from pensions (high compensation leverage), the CEO is incentivized to pursue strategies that reduce firm risk, to preserve long-term pension value, and faces greater agency friction. But what if the CEO is highly levered via compensation structure and, simultaneously, leverage in the firm's capital structure is low, suggesting executive compensation should influence short-term behavior and risk taking preferences (Edmans et al., 2017)?

Eisdorfer, Giaccotto, and White (2013) leverage the 2006 change in reporting requirements to examine the difference between firms' capital structure and executive compensation structure, described as the *leverage gap*. A large difference between the absolute value of firms' capital structure and the structure of executive pay is more likely to generate agency effects than when these structures are aligned and leverage gap is smaller (Eisdorfer et al., 2013; White, 2018). In our third examination of the influence of compensation on the likelihood of a firm to engage in CSR reporting, we consider this environment of alignment/misalignment of compensation and capital structure. As agency frictions often benefit by decreases in information asymmetry, we consider the influence of compensation-related agency behaviors on voluntary disclosure by examining the relationship between leverage gap and CSR reporting.

We begin our empirical analysis by utilizing CorporateRegister.com to identify U.S. publicly traded companies engaging in voluntary, stand-alone CSR reporting between the years 2006 and 2020. We use Compustat and Execucomp to identify firm and executive compensation data, and utilizing logistic regression models, we examine the influence of executive compensation on the likelihood of firms to engage in CSR reporting.

We find that firms offering higher executive pension-based compensation are less likely to initiate CSR reporting, but more likely to engage in ongoing voluntary CSR disclosure. With respect to CSR initiation, our findings suggest costs and risks associated with the initiation of voluntary disclosure remain high, consistent with Thorne et al. (2014), and these costs and risks are not yet offset by the perceived long-term benefits of voluntary CSR reporting. With respect to ongoing CSR reporting, we find that CSR reporting is more likely in the presence of higher executive pension-based compensation, supporting our hypothesis that ongoing CSR reporting

aligns with the presence of inside debt and the related CEO desire to decrease firm risk and preserve long-term value. We also find CSR reporting is more likely when pensions form a greater proportion of CEO compensation structure. We suggest that the positive association between compensation leverage and CSR reporting is driven in part by the presence of debt-like incentives and in part by potential agency frictions between the short-term incentives of CEO's equity compensation and the long-term incentives of their debt-type compensation. To further examine the influence of agency theory on firm behavior, we examine firm leverage gap – a measure of the environment of alignment/misalignment of compensation structure to firm capital structure. We find that CEOs in environments where alignment of compensation structure to firm capital structure minimizes agency risk are more likely to engage in CSR reporting. As setting compensation leverage close to firm leverage can reduce agency cost (Eisdorfer et al., 2013), this finding suggests CSR report issuances are more likely in environments where agency cost in the prior year is already minimized.

As a component of our additional analyses, we examine the affect of presidential administration policy on the relationship between CEO compensation and the likelihood of firms to initiate and engage in CSR reporting in the U.S. We find that compensation structure becomes more important for CSR initiation in the Republican presidential administration in our sample period. This suggests that the myriad of factors influencing CSR reporting during Democratic administrations – including expectations around the regulatory environment – are eclipsed by executive incentives during the Republican era. We also find that although male CEOs were more likely to engage in CSR reporting in the Democratic era, non-male CEOs were more likely to engage in CSR reporting in the Republican era. These findings suggest further research on the impact of domestic policy and gender on determinants of CSR reporting.

Agency theory examines the issues that arise when ‘agents’ – company executives – are hired to represent shareholder interest. The effects of compensation in aligning CEOs to shareholders have been well-studied, and extant literature (notably Sundaram and Yermack, 2007; Edmans and Liu, 2011) has also focused on the role of pension-based compensation as an important incentive. Extant research findings suggest that when firms pay executives more pension-based compensation, this compensation structure aligns executives with the long-term interests of bondholders over shareholders. More specifically, CEOs with pension-based compensation will avoid engaging in projects with substantial downside risk that could jeopardize long-term firm value. In our research, we examine how CSR reporting is affected by executive compensation and agency theory. Broadly speaking, our findings align well with agency theory: CSR reporting is a risky endeavor, and higher pension-based compensation discourages CSR report initiation. However, once firms issue CSR reports, higher pension-based compensation encourages CEOs to engage on ongoing reporting as the compensation structure of these CEOs encourages executives to think about preserving the firm’s long-term value – precisely what the commitment to CSR attempts to signal to investors.

Overall, our findings suggest CSR reports serve both firm and CEO interests around preserving long-term value and decreasing risk, factors more pronounced for highly levered firms. This study informs our understanding of the influence of executive compensation and compensation structure on management’s decision making as well as the influence of agency frictions generated by CEO compensation structure and firm capital structure on voluntary disclosure. To the best of our knowledge, we are the first paper to systematically examine the affect of pension-based compensation on real voluntary disclosure activities of U.S. CSR report initiation and ongoing U.S. CSR reporting. Our findings align well with literature regarding

agency theory (Sundaram and Yermack, 2007; Edmans and Liu, 2011) and executive compensation (Eisdorfer et al., 2013). Our results are fundamentally important to the understanding of why U.S. firms engage in voluntary CSR reporting and form an important link between agency theory and the growing literature around CSR reports. Our study suggests opportunities for future research in the areas of executive compensation, debt structure, voluntary disclosure, CEO performance and decision making, as well as gender and CSR reporting.

The remainder of this paper is organized as follows: background and hypotheses development, a description of the research design, a description of the data, empirical results, additional analyses, and a conclusion.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Stand-alone CSR reporting in the United States remains, to date, non-compulsory and unregulated. The content and consistency of CSR reporting is voluntary. The timing and distribution of CSR reporting is voluntary. And the voluntary nature of these reports makes them a rich environment to examine CSR's usefulness to firm stakeholders (Richardson and Welker, 2001; Dhaliwal et al., 2012), firm legitimacy (Dai, Du, Young, and Tang, 2018), agency cost mitigation (Goss and Roberts, 2011), and information asymmetry management (El Ghouli, Guedhami, Kwok, and Mishra, 2011; El Ghouli, Guedhami, Kim, and Park, 2018; T. Kim, H. Kim, and Park, 2020).

Whereas other studies leverage CSR reports to examine firm CSR performance – utilizing a performance score generated from CSR report content by third-party organizations such as MSCI (formerly KLD) or Bloomberg – we utilize CSR reports to examine *real* firm activity in the form of voluntary disclosure. With an emphasis on equity shareholder-value

impact, the extant accounting literature finds real CSR reporting activity in the U.S. is associated with better analyst coverage (Dhaliwal et al., 2012), an increase in institutional investors (Dhaliwal, Li, Tsang, and Yang, 2011), a reduction in firms' cost of equity capital (Dhaliwal et al., 2011), higher earnings quality (Kim, Park, and Wier, 2012), tax avoidance (Watson, 2015), and positive reputational effects (Simnett, Vanstraelen, and Chua, 2009; Pflugrath, Roebuck, and Simnett, 2011; Dhaliwal et al., 2011). However, the content, timing, and stand-alone disbursement method of U.S. CSR reports suggest these voluntary disclosures are unlikely to be solely intended for equity market consumption. We posit that the non-compulsory nature, as well as the long-term and stakeholder-oriented content (Richardson and Welker, 2001; Goss and Roberts, 2011; Dhaliwal et al., 2012) of U.S. CSR reporting provides a unique setting to examine the relationship between executive compensation and voluntary disclosure.

Executive Compensation and Firm Effects

Executive compensation contracts arise optimally in response to particular agency frictions. Traditionally, extant literature examines optimal compensation structure from the perspective of the shareholder-principle and manager-agent models. Jensen and Meckling (1976) document how the separation between ownership and control creates different incentives for managers and shareholders. Firm boards have been aware of this dynamic, with Coughlan and Schmidt (1985) identifying how boards attempt to align compensation incentives with that of their firms to reduce agency costs. Early research in executive compensation focused on cash-based compensation (salary and bonus) and equity-based compensation. As research in executive compensation developed, it became evident that the type of compensation provided to executives created more specific firm effects. Mehran (1995) documented how the form of compensation

has important implications for firm performance, associating greater manager equity compensation with better firm performance. Meanwhile, Guay (1999), Core and Guay (1999) and Coles et al. (2006) found that stock options can increase managerial incentives for taking on riskier projects. Edmans et al. (2017) details how executive compensation affects short-term behavior, risk-taking, policies, firm profitability, and retention. Additionally, Graham, Li, and Qiu (2012) find that CEO compensation is robustly positively correlated with stock return volatility.

In 2006, the issuance of SFAS 158 and the SEC rule changes surrounding disclosure of pension and other postretirement plans shed new light on the type and structure of executive compensation utilized by publicly traded firms. In one of the first studies to examine the new disclosure content, pension-based compensation was described in detail by Sundaram and Yermack (2007), who find that managers compensated with higher levels of pension-based compensation are incentivized to pursue strategies that reduce firm risk and preserve their long-term pension value. If executive compensation, including pension-based compensation, is likely to affect a diverse array of firm outcomes, compensation may also affect the firm's decision to engage in the voluntary disclosure activity of CSR report issuance.

Several studies in the extant literature examine the relationship between CSR *performance* and executive compensation. Jian and Lee (2015) examine a sample of firms from 1992 to 2011 and find a negative relationship between total CEO Compensation and CSR performance (KLD/MSCI score). Karim, Lee, and Suh (2018) examine the question of corporate social responsibility and the structure of CEO compensation, finding that the social performance of a firm, measured by a modified KLD (MSCI) score, is negatively associated with the proportion of cash-based compensation and positively affected by the proportion of equity-based

compensation. Kim et al. (2020) examine how CEO inside debt holdings affect firms' CSR performance activities. Kim et al. (2020) find that CEO inside debt holdings are positively related to adjusted CSR scores (MSCI) and suggest CSR is crucial for risk mitigation in 'controversial industries' (as defined by Jo and Na, 2012). Firms also negotiate compensation contracts for executives that offer CSR-related incentives (Ikram, Li, and Minor, 2019). Radu and Smaili (2021) study the impact of CSR committee and CSR-linked executive compensation on CSR performance (Bloomberg's social and environmental score) as governance mechanisms. The authors examine a sample of Canadian firms from 2012 to 2018 and find that CSR-linked compensation has a significant impact on CSR performance. Of note, Ikram, Li, and Minor's 2019 research, which finds that CSR-contingent compensation practice varies significantly across industries for a sample of U.S. S&P 500 companies.

Since pensions incentivize the CEO to reduce firm risk and consider the long-term value of the company, we expect CEOs to consider sustainability as part of this framework. As CSR reporting embodies a sustainable, long-term outlook for the firm, we expect that CEOs compensated with higher debt-based compensation (such as pensions) are more likely to engage in CSR reporting. We also acknowledge that the decision to initiate and continue voluntary disclosure can be complex. Thorne, Mahoney, and Manetti (2014) note the costs of issuing CSR reports are non-trivial, so it would be reasonable to consider that CEOs are likely to reflect on these year-over-year CSR costs with respect to long-term profitability and firm value when considering compiling and engaging in voluntary CSR disclosure. Furthermore, CSR reporting in the United States remains voluntary and adoption of CSR reporting in the U.S. is not prolific. Descriptive statistics from our sample (see Table 2) suggest, on average, only 6.6 percent of firms per year across three-digit NAICS industry codes issue voluntary CSR reports (PCT_CSR).

The relatively low industry-specific adoption-level of CSR reporting in the United States drops to 4.5 percent when determined from the full 2006 to 2020 Compustat sample, suggesting CSR initiation first-mover advantages may have been realized while early adoption risks still remain. To address endogeneity and self-selection concerns related to U.S. voluntary CSR reporting and executive debt compensation, we employ a lead-lag approach and consider both the likelihood of a U.S. firm to *initiate* voluntary CSR reporting and to engage in *ongoing* voluntary CSR reporting. Our hypotheses follow:

H1a: The likelihood a firm will initiate in voluntary, stand-alone corporate social responsibility reporting is associated with executive debt compensation.

H1b: The likelihood a firm will engage in ongoing voluntary, stand-alone corporate social responsibility reporting is positively associated with executive debt compensation.

Compensation Structure

Sundaram and Yermack (2007) and Edmans and Liu (2011) define pensions as a form of *inside debt*. Inside debt is debt-like compensation that incentivizes the executive to be aligned with other long-term stakeholders (such as bondholders). High levels of equity-based compensation can incentivize managers to take on additional risks, while pension-based compensation incentivizes managers to be more cautious to preserve firm value.

Similar to examining debt in the capital structure of the firm (leverage), we can also examine a compensation structure for executives, or *compensation leverage*. Compensation

leverage of a CEO is defined by the actuarial present value of the CEO's accumulated pension benefit divided by the sum of pension and equity-based compensation. Following Sundaram and Yermack (2007) Eisdorfer et al. (2013) and Eisdorfer, Giaccotto, and White (2015), we define compensation leverage in a given year as pension-based compensation divided by the sum of pension-based compensation, stock awards, and option awards. The higher the pension-based compensation, the higher the compensation leverage. The higher the compensation leverage, the more likely executives are to face greater agency friction (Sundaram and Yermack, 2007). Although most executive compensation continues to be equity based, Cadman and Vincent (2015) find that the mean (median) overall pension value from 2006 to 2012 is 23 percent (15 percent) of the CEO's total wealth held in the firm. As such, Edmans et al. (2017) suggest that ignoring pensions can result in a significant under estimation of total CEO pay.

We posit that executives with greater compensation leverage are both more likely to consider long-term decision horizons due to their inside debt and also face greater agency friction between the short-term incentives of their equity compensation and the long-term incentives of their debt-type compensation. As CSR reporting inherently embodies a long-term decision horizon and contains stakeholder-oriented content (Richardson and Welker, 2001; Goss and Roberts, 2010; Dhaliwal et al., 2012), we expect that CEOs that receive a high ratio of pensions relative to other of forms of compensation (measured by compensation leverage) will be more likely to issue CSR reports.

H2: The likelihood a firm will engage in voluntary, stand-alone corporate social responsibility disclosures is positively associated with executive compensation leverage.

Capital Structure and Compensation Structure

In developing our final hypothesis, we consider the relationship between firm capital structure and executive compensation structure with respect to CSR reporting. As described by Sundaram and Yermack (2007) and Edmans and Liu (2011), compensation leverage is homologous with firm leverage. While leverage examines the ratio of debt in a firm's capital structure, compensation leverage measures the ratio of inside debt in executive compensation structure. Sundaram and Yermack (2007) and Edmans and Liu (2011) focus on the effect of inside debt compensation on risk level, but Eisdorfer et al. (2013) and White (2018) examine the difference between firms' capital structure and executive compensation structure, the *leverage gap*, in order to explore the effect of these ratios on agency behavior.

Extant literature argues that the demand for financial reporting and disclosure arises from information asymmetry and agency conflicts (Healy and Palepu, 2001). With respect to CSR performance, Cho, Lee, and Pfeiffer (2013) examined the direct relationship between KLD score and information asymmetry, finding that both positive and negative scores reduce information asymmetry. Moreover, Cho et al. (2013) find that informed investors are likely to act on CSR performance scores. Kim et al. (2020) also find adjusted CSR performance score (MSCI) can mitigate firm risk by decreasing information asymmetry. And Sundaram and Yermack (2007) note CEOs with greater compensation leverage face greater agency friction. As agency frictions often benefit by decreases in information asymmetry, we consider the influence of compensation-related agency behaviors on voluntary disclosure by examining the relationship between leverage gap and CSR reporting.

Following Eisdorfer et al. (2013) and White (2018), we define leverage gap in a given year as the absolute value of the difference between firm leverage, calculated as total debt divided by total assets, and compensation leverage. A large difference between the absolute value of firms' capital structure and the structure of executive pay is more likely to generate agency effects than when these structures are aligned and leverage gap is smaller (Eisdorfer et al., 2013; White, 2018). Examining the absolute difference between firm leverage and compensation leverage (leverage gap) allows us to study the effects of agency theory on firm behavior. Eisdorfer et al. (2013) provides empirical evidence that differences between firm leverage and compensation leverage can motivate managers to engage in agency-driven behavior, not just risk-incentive driven behavior. Eisdorfer et al. (2013) provide support for the proposition that setting the compensation leverage close to firm leverage can reduce agency costs.

When firm leverage is significantly different than compensation leverage, firms are more likely to experience agency friction between upside risk-averse equity holders and downside risk-averse debt constructs. When the leverage gap is small, firm and CEO incentives are in agreement. We posit that leverage gap can be used to explore the effect of executive compensation structure and agency-driven behavior on voluntary disclosure, specifically CSR reporting.

H3: The likelihood a firm will engage in voluntary, stand-alone corporate social responsibility disclosures is associated with the absolute value of leverage gap.

RESEARCH DESIGN

Empirical Models and Variables

In this study, we examine the determinants of CSR reporting. As CSR reporting is voluntary in the United States, each issuance of a stand-alone CSR report represents a decision to engage in voluntary disclosure. Although the timing of CSR reports is discretionary, an examination of monthly CSR Report Alerts from CorporateRegister.com suggests that most CSR reports are issued between May and July, suggesting a lag between report year and year of disclosure. As such, the following tests are designed to examine the influence of executive compensation type in the prior year on the likelihood of management to engage in voluntary CSR reporting. The logistic regression model to examine voluntary CSR report initiation is specified as follows:

$$\begin{aligned} \log[\text{prob}(\text{CSR_YR1}_{i,t})/(1 - \text{prob}(\text{CSR_YR1}_{i,t})) = & \quad (1) \\ & \beta_0 + \beta_1\text{SIZEMVE}_{i,t-1} + \beta_2\text{SALARYBONUS}_{i,t-1} + \\ & \beta_3\text{STOCKOPTIONS}_{i,t-1} + \beta_4\text{PENSION}_{i,t-1} + \beta_5\text{EXECUTIVEAGE}_{i,t-1} + \\ & \beta_6\text{GENDER}_{i,t-1} + \beta_7\text{LEV}_{i,t-1} + \beta_8\text{LP}_{i,t-1} + \beta_9\text{ADV_INT}_{i,t-1} + \beta_{10}\text{REG}_{i,t-1} + \\ & \beta_{11}\text{LITRISK}_{i,t-1} + \beta_{12}\text{ROA}_{i,t-1} + \beta_{13}\text{TOBINQ}_{i,t-1} + \beta_{14}\text{GLOBAL}_{i,t-1} + \\ & \beta_{15}\text{COMPETITION}_{i,t-1} + \beta_{16}\text{PCT_CSR}_{i,t-1} + \Sigma\text{IND}_{i,t} + \Sigma\text{YEAR}_{i,t} + \varepsilon_{i,t} \end{aligned}$$

The logistic regression model to examine voluntary CSR reporting is specified as follows:

$$\begin{aligned} \log[\text{prob}(\text{CSR_PUBYR}_{i,t})/(1 - \text{prob}(\text{CSR_PUBYR}_{i,t})) = & \quad (2) \\ & \beta_0 + \beta_1\text{SIZEMVE}_{i,t-1} + \beta_2\text{SALARYBONUS}_{i,t-1} + \end{aligned}$$

$$\begin{aligned} & \beta_3\text{STOCKOPTIONS}_{i,t-1} + \beta_4\text{PENSION}_{i,t-1} + \beta_5\text{EXECUTIVEAGE}_{i,t-1} + \\ & \beta_6\text{GENDER}_{i,t-1} + \beta_7\text{LEV}_{i,t-1} + \beta_8\text{LP}_{i,t-1} + \beta_9\text{ADV_INT}_{i,t-1} + \beta_{10}\text{REG}_{i,t-1} + \\ & \beta_{11}\text{LITRISK}_{i,t-1} + \beta_{12}\text{ROA}_{i,t-1} + \beta_{13}\text{TOBINQ}_{i,t-1} + \beta_{14}\text{GLOBAL}_{i,t-1} + \\ & \beta_{15}\text{COMPETITION}_{i,t-1} + \beta_{16}\text{PCT_CSR}_{i,t-1} + \Sigma\text{IND}_{i,t} + \Sigma\text{YEAR}_{i,t} + \varepsilon_{i,t} \end{aligned}$$

In model (1) above, *CSR_YR1* is an indicator variable equal to 1 for the year in which a public U.S. firm issues their first CSR report per CorporateRegister.com, and 0 otherwise. In model (2) above, *CSR_PUBYR* is an indicator variable equal to 1 for years in which a publicly traded U.S. firm *i* issues a stand-alone CSR report per CorporateRegister.com; zero otherwise. Observations where *CSR_PUBYR* are equal to zero include firms that never issue a CSR report in the sample period as well as firms who simply do not issue a CSR report in year *t*. The control group for tests of our hypotheses are all non-CSR initiating or non-CSR reporting firm-year observations.

In both CSR initiation (1) and CSR reporting (2) models, we control for firm size (*SIZEMVE*) as size has been found to influence the firm's contractual relationships, visibility, disclosure, and political pressure (Lang and Lundholm, 1993; Healy and Palepu, 2001; Dhaliwal et al., 2011). Size is the market value of equity at the beginning of each year. As the initial investment in voluntary CSR reporting is relatively lower for large firms, we expect the propensity to disclose voluntary non-financial CSR reports is positively associated with size.

The primary variables of interest in the first tests of our hypotheses examine three types of executive compensation. *SALARYBONUS* is defined as the combined executive cash salary and bonus compensation, and was computed as the computed as sum of *SALARY* and *BONUS* variables for each CEO executive during the year. *STOCKOPTIONS* measures the fair value of

all stock and option awards given as compensation to the CEO, and is calculated by adding both *STOCK_AWARDS* (the total value of restricted stock granted) and *OPTION_AWARDS* (the total value of options granted) under FAS 123R. And PENSION is calculated as the actuarial present value of accumulated pension benefits from all CEO pension plans, or *PENSION-VALUE-TOT* in Execucomp. To control for CEO characteristics, we also include a measure of the CEO's age (EXECUTIVEAGE), in years, and an indicator variable equal to 1 if the CEO is non-male; 0 otherwise.

Pension data limited the age of the sample, since actuarial present values for pensions are not available prior to 2006. Effective for firms with fiscal years ending on or after December 15, 2006, Securities and Exchange Commission Title 17 CFR Section 229.402, (Item 402) *Executive compensation*, required firms to report the actuarial value of their pension benefit. Prior to this date, pension information was included in a table that required manual computation to determine the actuarial present value of the executive's pension benefit. Sundaram and Yermack (2007) document the required calculations to determine actuarial pension size.

We also consider the influence of other major stakeholders on management's decision to engage in voluntary CSR reporting. We consider the influence of debtholders by assessing the capital structure of the firm and including leverage (LEV). Leverage is a proxy for the influence of debt (debtholders) on management (the firm). LEV is defined as the ratio of a firm's total debt divided by total assets for each observation year. Although debtholders are considered quasi-insiders, prior literature suggests social responsibility disclosures may be viewed by management as a way to meet certain debtholder expectations (Roberts, 1992).

Next, labor pressure (LP) captures the economic influence of employees on the firm by measuring collective bargaining power, or employees' ability to make demands of the firm from

a strong bargaining position. Labor pressure is calculated as the industry-level unionization rate times firm-level labor intensity (Hilary, 2006; T. Chen, Y. Chen, and Liao, 2011 and S. Chen, Y. Chen, and Wang, 2015). Industry-level unionization rates are provided by the Union Membership and Coverage Database, which is maintained annually by Barry Hirsch and David Macpherson.¹ Union data comes from the Bureau of Labor Statistics' monthly Current Population Survey. A description of the Union Membership Coverage Database can be found in Hirsch and Macpherson (2003).

The CSR reports examined in this study are professional, stand-alone documents released by firms to the public and easily interpreted as marketing tools. Marketing literature finds that CSR reports have a positive impact on global brand equity, awareness, image, credibility, and engagement (Hoeffler and Keller, 2002; Torres, Bijmolt, Tribó, and Verhoef, 2012). To control for the influence of customers on CSR reporting, we include advertising intensity (ADV_INT) as a proxy for customer stakeholders, calculated as the ratio of reported annual advertising expense divided by average total assets per three-digit NAICS industry classification (Luo and Bhattacharya, 2006; Casey and Grenier, 2014; Servaes and Tamayo, 2013).²

We also control for firm fundamentals in our determinants models. We control for regulated industries (REG), Management literature suggests that regulation is an institutional-level predictor of CSR actions and policies (Buehler and Shetty, 1974; Fineman and Clarke, 1996). As such, we control for industries classified as regulated following Hogan and Jeter (1999) and Ozbas and Scharfstein (2010). Prior literature (Skinner, 1979; Healy and Palepu,

¹ Barry Hirsch, W.J. Usery Chair of the American Workplace in the Department of Economics at Andrew Young School of Policy Studies at Georgia State University, and David Macpherson, E.M. Stevens Professor of Economics at Trinity University provide union membership data at no charge via their website: unionstats.com.

² Cohen, Mashruwala, and Zach (2010) note promotional materials and direct-response advertising is included as part of the advertising expense in Compustat. Because Compustat has many missing data points for firm advertising expenditure, we use an industry-specific measure in order to preserve sample size.

2001) documents that litigation risk is related to voluntary disclosure decision and that litigation potentially reduces incentives to provide disclosure. Following Dhaliwal et al. (2012), litigation risk (LITRISK) is an indicator variable equal to 1 if a firm operates in a high litigation industry and 0 otherwise.

We include two control variables for the financial state of the firm – return on assets (ROA) and Tobin’s Q (TOBINQ). Lang and Lundholm (1993) find disclosure ratings are increasing in firm performance, and both marketing (Luo and Bhattacharya, 2006) and accounting (Dhaliwal et al., 2011) literature suggest that firms with better financial performance are more likely to engage in CSR activities. ROA is calculated as income before extraordinary items scaled by total assets at the beginning of each year. TOBINQ is the control variable for firm growth. Dhaliwal et al. (2011) find a negative and significant relationship between growth and CSR initiation in their 2002 to 2007 international CSR report sample. The authors suggest that firms in an expansionary period are more financially constrained and have fewer resources for CSR activities and disclosure.

We control for competitive market pressures to issue CSR reports at the international and industry levels. As issuance of CSR reports increases in international markets, firms operating globally face greater pressure to issue CSR reports – at a minimum exploiting the opportunity for a lower cost of equity capital (Dhaliwal et al., 2011). As such, we include an indicator variable (GLOBAL) equal to 1 if a firm reports non-zero foreign income, and 0 otherwise.

Dhaliwal et al. (2011), suggest industry-specific characteristics influence CSR reporting. To control for industry peer pressure, we include PCT_CSR, a variable measuring the percentage of the top 50 firms in the three-digit NAICS industry who issue CSR reports. The higher the top 50 percentage, the more pressure a firm is under to follow the industry leaders. Under the

proprietary cost hypothesis, firms' decisions to disclose information are influenced by concern that such disclosures can damage their competitive position in product markets (Verrecchia, 1983; Healy and Palepu, 2001). To control for product competition (COMPETITION), we use the Herfindahl-Hirschman Index to measure competitiveness of the firm within its industry. The Herfindahl index is calculated by taking the sum of the squared market share of the 50 largest firms in each three-digit NAICS industry. Market share is measured as each firm's percentage of total sales in its three-digit NAICS industry for the year. For industries with fewer than 50 firms, the Herfindahl index is calculated using all firms in the industry. Finally, the Herfindahl index is multiplied by -1, so that firms with a larger (less negative) index represent firms in industries with more concentration and less competition.

To control for the industry effects, we estimate the model using industry fixed effects (three-digit NAICS). Industry fixed effects control for the effect of a particular industry on the likelihood of CSR issuance. Finally, we include year fixed effects to control for macroeconomic events.

CEO Compensation Structure and CSR Reporting

Our third test continues to examine the determinants of CSR reporting. Utilizing the model (3) below, we focus on CEO compensation structure and the likelihood of CSR reporting. As such, the following test is designed examine the influence of executive compensation structure in the prior year on the likelihood of management to engage in voluntary CSR reporting. The logistic regression model is specified as follows:

$$\log[\text{prob}(\text{CSR_PUBYR}_{i,t}) / (1 - \text{prob}(\text{CSR_PUBYR}_{i,t}))] = \quad (3)$$

$$\begin{aligned}
& \beta_0 + \beta_1 \text{SIZEMVE}_{i,t-1} + \beta_2 \text{SALARYBONUS}_{i,t-1} + \\
& \beta_3 \text{STOCKOPTIONS}_{i,t-1} + \beta_4 \text{PENSION}_{i,t-1} + \beta_5 \text{COMPLEV}_{i,t-1} + \\
& \beta_6 \text{LEVGAP}_{i,t-1} + \beta_7 \text{EXECUTIVEAGE}_{i,t-1} + \beta_8 \text{GENDER}_{i,t-1} + \\
& \beta_9 \text{LEV}_{i,t-1} + \beta_{10} \text{LP}_{i,t-1} + \beta_{11} \text{ADV_INT}_{i,t-1} + \beta_{12} \text{REG}_{i,t-1} + \\
& \beta_{13} \text{LITRISK}_{i,t-1} + \beta_{14} \text{ROA}_{i,t-1} + \beta_{15} \text{TOBINQ}_{i,t-1} + \beta_{16} \text{GLOBAL}_{i,t-1} + \\
& \beta_{17} \text{COMPETITION}_{i,t-1} + \beta_{18} \text{PCT_CSR}_{i,t-1} + \Sigma \text{IND}_{i,t} + \Sigma \text{YEAR}_{i,t} + \varepsilon_{i,t}
\end{aligned}$$

Additional variables of interest in model (3) are COMPLEV and LEVGAP.

Compensation leverage (COMPLEV) is the ratio of debt to equity compensation to the CEO.

The *compensation leverage* of a CEO is defined by the actuarial present value of their accumulated pension benefit divided by the sum of pension and equity-based compensation.

Following Sundaram and Yermack (2007) and Eisdorfer et al. (2013 and 2015), we define compensation leverage in a given year as the actuarial present value of the CEO's accumulated pension benefit divided by the sum of pension and equity-based compensation.

Compensation leverage is analogous to firm leverage, which we define as firm debt divided by total assets. The difference between firm leverage and compensation leverage (LEVGAP) allows us to study the effects of agency theory on firm behavior. A large difference between the firms' capital structure and the structure of executive pay is more likely to generate agency effects than when they are aligned (Eisdorfer et al., 2013; White, 2018). The leverage gap is defined as the absolute value of the difference between firm leverage and compensation leverage.

DATA

Sample Selection

Our sample period begins in 2006 with the subjection of firms to SFAS 158 and SEC regulated pension and postretirement plan disclosure and ends in 2020. As seen in Table 1, our initial sample includes all 168,372 unique observations in Compustat North American Fundamentals Annual from 2006 to 2020.

[Insert Table 1]

The sample is reduced to 69,267 observations by excluding observations missing total assets (AT), market value of equity (SIZEMVE), Tobin's Q (TOBINQ), labor pressure (LP), and profitability (ROA). We utilize Execucomp to obtain CEO compensation data. Our sample is further reduced to exclude firms with missing compensation information. We are left with 20,916 firm-year observations spanning 2,135 firms.

To identify publicly traded companies engaging in real CSR reporting activities, we utilize CorporateRegister.com to collect a sample of firms issuing stand-alone CSR reports in the United States from 2006 to 2020. Each publicly traded CSR issuer is identified and hand-matched with Compustat data. Our sample includes 4,261 observations of CSR reporting by 790 firms, and 682 initiations of CSR reporting in the sample period.

Descriptive Statistics

Table 2 presents the summary statistics for the independent variables used in our analysis.

[Insert Table 2]

Unlike the models used to test our hypotheses, the descriptive statistics do not consider industry or year partitions. As seen in Table 2, CSR reporters on the whole are significantly larger than non-reporting firms (mean SIZEMVE: 9.3481 for reporters and 7.1481 for non-reporters). In our sample, CEOs of CSR reporters receive statistically greater compensation regardless of type. The mean value of cash compensation (SALARYBONUS) for the full sample was approximately \$736,000. Mean cash compensation rose to approximately \$1,080,000 for CSR reporters, but declines to approximately \$736,000 for non-reporters. The larger size of the reporting firms also resulted in a similar presentation for other compensation variables. Equity awards (STOCKOPTIONS) averaged approximately \$2.60 million for all executives, \$5.18 million for CSR reporters and \$1.95 million for non-reporters. Whereas the median firm offered no pension in our sample, the mean actuarial PENSION size was \$2.2 million. The majority of the larger CSR reporting firms offered pensions, averaging approximately \$6.5 million with a substantial standard deviation of approximately \$12.0 million. Non-reporters averaged much less pension compensation: approximately \$1.2 million.

In considering the underlying structure of compensation, compensation leverage COMPLEV averaged 0.300 for the entire sample, rising to 0.347 for CSR-reporters and falling to 0.290 for non-CSR reporters. In general, CSR-reporting firms had both higher amounts of inside debt (pension compensation) and offer CEOs a larger proportion of debt-like compensation than other firms (compensation leverage). LEVGAP, the absolute value of the difference between the compensation leverage of the executive (COMPLEV) and the leverage of the firm (LEV) averaged 0.2170 for all sample firms. For CSR-reporters, the mean value was 0.3598 and 0.1774 for non-CSR reporters. The average AGE of a CEO in the sample was 55 years and 10 months.

While non-CSR reporting CEOs were also about 55 years-old on average, CSR-reporters' CEOs averaged 57 years and 4 months old. GENDER, defined as 1 if the CEO is identified as non-male, was not statistically different across the sample, with approximately 6 percent of the sample and sub-samples identified as non-male.

Descriptive statistics indicate significantly more leverage (LEV) in the firm's capital structure of CSR reporting observations than non-reporting observations. This suggests that with respect to all firms in the sample period, debtholders of CSR reporting firms have more leverage, or influence, on management. Descriptive statistics in Table 2 also report mean labor pressure is significantly lower for CSR reporters. This is likely driven by the small number of overall CSR reporters in the sample period (790 firms). Mean advertising intensity is significantly different for CSR reporters and non-reporters, suggesting a greater customer emphasis by non-CSR reporters.

Statistics from Table 2 also suggest CSR reporters are significantly more likely to be found in a regulated industry, and less likely to be found in litigiously risky industries. Financially, CSR reporters are significantly more profitable (ROA) than non-reporters and significantly less likely to be experiencing high growth (TOBINQ). Furthermore, firms voluntarily engaging in CSR reporting have a significantly higher level of global operations, and competition within the firm's industry is statistically different between the reporting and non-reporting samples. Finally, descriptive statistics from our sample (see Table 2) suggest, on average, only 6.6 percent of firms per year across three-digit NAICS industry codes issue voluntary CSR reports (PCT_CSR), suggesting CSR initiation first-mover advantages may have been realized while early adoption risks still remain.

Correlation Table

Table 3 presents the Spearman correlations for each of our variables, with starred values indicating statistical significance at least the 10 percent level.

[Insert Table 3]

Aligning with existing literature (Eisdorfer et al., 2013), compensation variables reported positive and significant correlation with one another. However, LEVGAP was not correlated to any individual form of executive compensation, including COMPLEV. Many of the remaining 17 variables in the correlation table reflect results that are generally consistent with expectations regarding firm financial condition and measures of firm value. The correlation coefficients did not give rise to concerns regarding multicollinearity.

EMPIRICAL RESULTS

CSR Report Initiation

The first test of our hypotheses utilizes model (1), where we examine how lagged financial and compensation variables affect firms' decisions to initiate CSR reporting. The results of our logistic regression model are presented in Table 4.

[Insert Table 4]

Panel I in Table 4 omits executive compensation variables in order to focus on firm-level characteristics. Size (SIZEMVE) and firm leverage (LEV) are positive and significant at the one

and five percent level, respectively. These results suggest that larger firms (SIZEMVE) and firms with more highly-levered capital structures are more likely to initiate CSR reporting. Greater labor pressure (LP) and advertising intensity (ADV_INT) were also positively and significantly associated with a firm's likelihood to engage in voluntary CSR report initiation. With respect to the financial state of the firm, firms with strong financial performance (ROA) are more likely to initiate CSR reporting. That CSR initiation is positively and significantly associated with firms exhibiting higher profitability is consistent with Thorne et al. (2014), who note the costs of issuing CSR reports are non-trivial. Unlike profitability, firm growth (TOBINQ) appears statistically inversely related to the likelihood of a firm to initiate a CSR report. Consistent with extant literature, firms with international pressure (GLOBAL) are significantly more likely to initiate CSR reporting, and consistent with our suggestion that CSR initiation first-mover advantages may have been realized while early adoption risks still remain, firms in industries with a pre-existing level of CSR reporters (PCT_CSR) are less likely to initiate CSR reporting. The PCT_CSR finding may also suggest CSR initiating firms are less risk-averse than their counterparts.

Table 4, Panel II considers CSR report initiation with the inclusion of executive compensation variables. In Panel II, we find higher pension compensation is negatively correlated with firm likelihood of CSR report initiation. We know from extant literature (Sundaram and Yermack, 2007; Edmans and Liu, 2011) that higher pension-based compensation aligns the CEO with the long-term interests of the company and is positively associated with greater risk aversion. In initiating a CSR report, the company is undertaking a voluntary disclosure with uncertain consequences for its stakeholders. This risk, coupled with a yet-unproven payoff strategy for initiating standalone reports, affirms that high pension

compensation is inversely correlated with CSR report initiation. In Panel III, the addition of LEVGAP, COMPLEV, and GENDER offer no significant statistical insights with regards to report initiation. However, pension compensation remains a strong negative predictor of CSR report initiation.

Ongoing CSR Reporting

In our next model, we study how lagged compensation and financial variables affect the firm's decision to issue ongoing CSR reports. The results of our logistic regression model (2) are presented in Table 5, where Panel I again omits the executive and executive compensation variables to focus on firm characteristics.

[Insert Table 5]

The strong statistical significance of SIZEMVE is indicative that larger firms are more likely to issue CSR reports. More highly levered firms (LEV) are likewise more likely to issue CSR reports. In the context of agency theory, firms with higher levels of debt are more likely to be aligned with bondholders who seek long-term security for their holdings. In this context, firms thinking long-term would be incentivized to issue CSR reports. Consistent extant studies, labor pressure (LP) is also positive predictor of the issuance of CSR reports. Tobin's Q (TOBINQ) was negative and significant, implying that firms with less expensive stock relative to their replacement cost (an 'undervalued' firm) are more likely to issue CSR reports. GLOBAL firms are also more likely to issue reports.

Adding compensation data into Panel II, we focus on how primary executive compensation variables incentivize a firm to issue a CSR report. Higher salaries and bonuses in the prior year (SALARYBONUS) were negatively correlated with a firm's likelihood to engage in CSR reporting. This is consistent with these forms of compensation as being short-term and relatively determinate, particularly around salaries. When the compensation is tied to the long-term viability of the company (such as pensions), we find a positive relationship between PENSION and CSR reporting. Higher levels of long-term, debt-like compensation encourage executives to think about the firm's long-term viability. These affects increase the attractiveness of CSR reports and provide a signal about the firm's prospects. No significance was found in Panel II surrounding equity compensation, which often carries a vesting period of several years. The control variables reported similar significance in Panel II as in Panel I.

The initial results confirm Kim et al. (2020)'s findings that firms with high levels of CEO pensions are more likely to offer CSR reports, and confirm our first hypothesis. We extend this stream of literature by examining two additional measures that provide greater context around inside debt: COMPLEV, the compensation leverage of the executive that measures the size of pension compensation relative to other forms of compensation; and LEVGAP, the difference between the structure of CEO compensation and the capital structure of the firm. Results of testing these variables are found in Table 5, Panel III.

Panel III reports that while the coefficient for pension is reduced, the statistical significance of PENSION, relative to the likelihood of CSR reporting, remains at the one percent level. Higher amounts of debt relative to equity in the compensation structure of a CEO (COMPLEV) also statistically increases the likelihood of CSR reporting, confirming our second hypothesis (H2). When a greater portion of compensation is derived from pensions, the

executives have an incentive to think about the long-term viability of the firm. This encourages the CEO to mitigate risks in a way that preserves long-term value. When we compare the leverage of the firm to the composition of executive pay in LEVGAP, we're effectively examining the agency relationship between CEO and firm in greater detail. If the firm is highly levered but the executive is not, would this 'incentive noise' create less incentive to issue CSR reports? To this end, we find that LEVGAP maintains a statistically-significant negative relationship to the likelihood of a firm engaging in CSR reporting. The smaller the gap between executive and firm compensation structure, the more likely the firm will issue a CSR report. Inversely, differences between firm and executive compensation structure reduce the likelihood of a firm issuing a CSR report.

In this scenario, we are observing two important factors occurring simultaneously. In the first, high-levered firms are eager to signal to bondholders that the firm is engaging in activities which reduce risk and promote long-term viability. At the CEO-level, high pension-based compensation incentivizes executives to promote CSR reports while preserving the likelihood of their pension payouts.³ When both leverage measures are aligned, this increases the likelihood of a firm issuing a CSR report for highly-levered firms.

ADDITIONAL ANALYSES

Domestic Policy and Voluntary Disclosure Environments

Although stand-alone CSR reporting remains voluntary throughout our sample period, prior research has studied the relationship between political administration and disclosure content

³ Many pensions are set up as Supplemental Executive Retirement Plans (SERPs) and remain protected in *Rabbi Trusts*. While many pensions offer lump-sum options at retirement (see Eisdorfer et al., 2015), the median age of sampled executives (55) suggests that is effectively 'long-term' compensation.

(Antonini & Patten, 2021), the location and political affiliation of firm leadership (Di Giuli & Kostovestky, 2014), and the political motivations of major institutional shareholders (Kim, Ryou, and Yang, 2020). As such, we also consider the influence of domestic political policy on voluntary (CSR) disclosure decisions. We begin by partitioning our sample into two periods: CSR reports initiated under a ‘Democratic Regime’ (2007-2015) and those issued under a ‘Republican Regime’ (2017-2020). The policy regimes roughly correspond to the lagged variables associated with the Obama and Trump presidential administrations, respectively. We first consider policy influence on the determinants of CSR report initiation and report our results in Table 6.

[Insert Table 6]

With respect to firm likelihood to initiate CSR reporting, policy regime did not alter the direction or statistical significance of the influence of debt-like pension compensation. The results in Table 6, Panels II do indicate a larger coefficient for PENSION and a statistically significant (negative) relationship between SALARYBONUS during the Trump administration, suggesting that compensation structure becomes more important for the likelihood of CSR initiation during the Republican presidential administration in our sample period. These results also suggest firms deciding to initiate CSR reports during the Trump administration may have perceived additional risk: for example, the issuance of a CSR report could be viewed as an intentional reaction to the administrations policies or an unnecessary expenditure of resources by investors. Since pension-based compensation incentivizes CEOs to behave in a risk-averse manner to preserve the long-term viability of the firm, that higher pension-based compensation

was significantly negatively correlated to CSR report initiation during this time appears consistent with our initial findings.

We next consider policy influence on the determinants of ongoing CSR reporting and report our results in Table 7.

[Insert Table 7]

With respect to firm likelihood to engage in CSR reporting, policy regime did not alter the direction or statistical significance of the influence of debt-like pension compensation. As seen in Table 7, Panel III, compensation structure friction (COMPLEV) remains positive and statistically significant under both policy regimes, but this CEO friction – specifically, higher amounts of debt relative to equity in the compensation structure of the CEO – does appear to have a stronger relationship with the likelihood of CSR reporting under the Obama administration. The difference in the COMPLEV coefficient suggests the relative importance of pensions within the compensation package of the CEO was a stronger determinant of ongoing CSR reporting under the Obama administration than in the Trump administration. In Panels III, LEVGAP appears negative and significant in both eras, consistent with our primary findings and indicating that the greater the agreement between CEO compensation leverage and firm leverage, the more likely the firm is to engage in ongoing CSR reporting.

A unique finding while examining the likelihood to engage in CSR reporting, partitioned by policy era, can be seen in Table 7, Panels II, for GENDER. Although male CEOs were more likely to engage in CSR reporting in the Obama era, non-male CEOs were more likely to engage

in CSR reporting in the Trump era. This finding suggests further research on the impact of gender on determinants of CSR reporting.

Timing of CEO Compensation and CSR Report Issuance

CSR reporting is voluntary in the U.S. and there is no standardized reporting deadline for firms who issue stand-alone reports. An examination of CSR Report Alerts from CorporateRegister.com for the period of 2011 to 2012 suggests that 78 percent of CSR reports are issued between May and July. Given the gap between a standard December 31 fiscal year end and the potential issuance month of the CSR report, CEO compensation in the year of the CSR report issuance, rather than the prior year, could influence CSR disclosure. As timing could be a source of potential endogeneity effects, we re-examine CSR disclosure with non-lagged variables of interest and controls. The primary results of examining the likelihood of CSR initiation and reporting with respect to executive compensation hold, in both directional association and significance.

CONCLUSION

In this study, we examined the influence of CEO compensation on firms' decisions to issue voluntary Corporate Social Responsibility (CSR) reports. We found that higher pension-based compensation increases the likelihood that firms will issue CSR reports and that CSR reporting is more likely when pensions form a greater proportion of CEO compensation structure. These findings are consistent with research that executives who are incentivized to pursue long-term risk mitigating strategies are more likely to engage in voluntary disclosures that embody long-term horizons and contain stakeholder-oriented content. Executive compensation structure and

its role in risk shifting was similarly observed in Srviastav, Armitage, and Hagendorff (2014) and Krapl and White (2016).

Examining firm leverage gap, we also find that CEOs in environments where alignment of compensation structure to firm capital structure minimizes agency risk are more likely to engage in CSR reporting. Agency risks and incentives, documented by Jensen and Meckling (1976) and later research examining pension-based compensation in Sundaram and Yermack (2007) and Eisdorfer, Giaccotto, and White (2015), are important components in the broader narrative of why firms engage in CSR reporting. The alignment and composition of CEO compensation incentives and firm capital structure can be a powerful influence on the decision to engage in any voluntary disclosure. Further, these findings have important implications for future research regarding compensation incentives, CSR reporting, and voluntary disclosure.

Appendix A

Variable Descriptions

Dependent Variables

CSR_YR1	= 1 for years in which a public US firm issues a CSR report per CorporateRegister.com; 0 otherwise.
CSR_PUBYR	= 1 for years in which a public US firm issues a CSR report per CorporateRegister.com; 0 otherwise.

Independent Variables

SIZEMVE	= the market value of equity at the beginning of each year following Dhaliwal et al. (2011) and Lang and Ludholm (1993). Measured as the natural logarithm of the market value of common equity ($PRCC_F * CSHO$) at the beginning of each year.
SALARYBONUS	= Combined cash salary and bonus compensation.
STOCKOPTIONS	= Fair value of all stock and option awards given as compensation to CEO
PENSION	= Actuarial present value of accumulated pension benefits from all CEO pension plans
COMPLEV	= The ratio of debt to equity compensation to the CEO, defined as $(PENSION / (STOCKOPTIONS + PENSION))$, following Eisdorfer et al. (2013)
LEV GAP	= Absolute value of the difference between firm leverage $((DLTT + DLC) / \text{Total Assets})$ and compensation leverage to the CEO $(PENSION / (STOCKOPTIONS + PENSION))$
AGE	= Age of the CEO in years: 1 for female.
GENDER	= 1 if the CEO identifies as non-male; 0 otherwise.
LEV	= leverage ratio, defined as the ratio of total debt $(DLTT + DLC)$ divided by total assets.
LP	= labor pressure, calculated as firm-level labor intensity interacted with the industry unionization rate. Labor intensity is Compustat EMP scaled by AT for each firm (Hilary, 2006) and unionization rate data comes from the Union Membership and Coverage Database at unionstats.com (Hirsch and Macpherson, 2003).
ADV_INT	= the advertising intensity for the three-digit NAICS industry for the year; defined as the ratio of annual advertising expense divided by average total assets.
REG	= indicator variable that equals 1 if the two-digit SIC code industry is considered regulated per Weiss and Klass (1986) and Ozbas and Scharfstein (2010); 0 otherwise.
LITRISK	= 1 if SIC industry k is a high litigation-risk; 0 otherwise. Per Dhaliwal et al. (2011) high-litigation industries include SIC codes of: 2833-2836, 3570-3577, 3600-3674, 5200-5961 and 7370.
ROA	= total return on assets per firm year measured as income before extraordinary items (IB) divided by total assets (AT) at the beginning of year t .
TOBINQ	= Tobin's Q, measured as the market value of common equity plus the book value of preferred stock (PSTKL), book value of long-term debt (DLTT) and current liability (LCT), scaled by the book value of total assets.
GLOBAL	= indicator variable that equals 1 if the firm reports non-zero foreign income (Compustat PIFO); 0 otherwise.
COMPETITION	= Herfindahl-Hirschman Index multiplied by -1. I calculate the Herfindahl-Hirschman Index by summing the squares of the market shares of the 50 largest companies in a three-digit NAICS industry. I then calculate a firm's market share by dividing the sales (SALE) of a firm in year t by the total sales of all the 50 largest companies in a three-digit NAICS code industry in that year. In cases where there are fewer than 50 companies in an industry, I use all companies in that industry to calculate the market share of each firm.
PCT_CSR	= percentage of firms issuing CSR reports in year t per three-digit NAICS industry codes. CSR reports are identified via CorporateRegister.com.

REFERENCES

- Antonini, C., Olczak, W., & Patten, D.M. (2021, April). Corporate climate change disclosure during the Trump administration: evidence from standalone CSR reports. In *Accounting Forum* (Vol. 45, No. 2, pp. 118-141). Routledge.
- Buehler, V., & Shetty, Y. (1974). Motivations for Corporate Social Action. *Academy of Management Journal* 17: 767-771.
- Cadman, B., & Vincent, L. (2015). The role of defined benefit pension plans in executive compensation. *European Accounting Review*, 24 (4): 779-800.
- Casey, R. J., & Grenier, J. H. (2015). Understanding and contributing to the enigma of corporate social responsibility (CSR) assurance in the United States. *Auditing: A Journal of Practice & Theory*, 34(1), 97-130.
- Chen, T.K., Chen, Y.S., & Liao, H.H. (2011). Labor Unions, Bargaining Power and Corporate Bond Yield Spreads: Structural Credit Model Perspectives. *Journal of Banking & Finance* 35: 2084-2098.
- Chen, S. S., Chen, Y. S., & Wang, Y. (2015). Does labor power affect the likelihood of a share repurchase?. *Financial Management*, 44 (3): 623-653.
- Cho, S. Y., Lee, C., & Pfeiffer Jr., R. J. (2013). Corporate social responsibility performance and information asymmetry. *Journal of Accounting and Public Policy* 32 (1): 71-83.
- Cohen, D., Mashruwala, R., & Zach, T. (2010). The Use of Advertising Activities to Meet Earnings Benchmarks: Evidence from Monthly Data. *The Review of Accounting Studies* 15: 808-832.

- Coles, J. L., Daniel, N. D., & Naveen, L. (2006). Managerial incentives and risk-taking. *Journal of Financial Economics* 79 (2): 431-468.
- Core, J., & Guay, W. (1999). The use of equity grants to manage optimal equity incentive levels. *Journal of Accounting and Economics* 28 (2): 151-184.
- Coughlan, A. T., & Schmidt, R. M. (1985). Executive compensation, management turnover, and firm performance: An empirical investigation. *Journal of Accounting and Economics* 7 (3): 43-66.
- CorporateRegister.com. (2022). Advanced Reports Search.
- Dai, N. T., Du, F., Young, S. M., & Tang, G. (2018). Seeking legitimacy through CSR reporting: Evidence from China. *Journal of Management Accounting Research* 30(1): 1-29.
- Dhaliwal, D., Li, O., Tsang, A., & Yang, Y. (2011). Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting. *The Accounting Review* 86(1): 59-100.
- Dhaliwal, D., Radhakrishnan, S., Tsang, A., & Yang, Y. (2012). Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility. *The Accounting Review* 87(3): 723-759.
- Di Giuli, A., & Kostovetsky, L. (2014). Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Financial Economics*, 111(1), pp.158-180.
- Edmans, A., Gabaix, X., & Jenter, D. (2017). Executive compensation: A survey of theory and evidence. *The handbook of the economics of corporate governance* 1: 383-539.
- Edmans, A., & Liu, Q. (2011). Inside debt. *Review of finance* 15 (1): 75-102.

- Eisdorfer, A., Giaccotto, C., & White, R. (2013). Capital structure, executive compensation, and investment efficiency. *Journal of Banking & Finance* 37 (2): 549-562.
- Eisdorfer, A., Giaccotto, C., & White, R. (2015). Do corporate managers skimp on shareholders' dividends to protect their own retirement funds? *Journal of Corporate Finance* 30, 257-277.
- El Ghoul, S., Guedhami, O., Kim, H., & Park, K. (2018). Corporate environmental responsibility and the cost of capital: International evidence. *Journal of Business Ethics* 149 (2): 335–361.
- El Ghoul, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance* 35(9): 2388–2406.
- Fineman, S., & Clarke, K. (1996). Green Stakeholders: Industry Interpretations and Response. *Journal of Management Studies* 33: 715-713.
- Goss, A., & Roberts, G. (2011). The Impact of Corporate Social Responsibility on the Cost of Bank Loans. *Journal of Banking & Finance* 35: 1794-1810.
- Graham, J. R., Li, S., & Qiu, J. (2012). Managerial attributes and executive compensation. *The Review of Financial Studies* 25 (1): 144-186.
- Guay, W. (1999). The sensitivity of CEO wealth to equity risk: an analysis of the magnitude and determinants. *Journal of Financial Economics* 53 (1): 43-71.
- Healy, P., & Palepu, K. (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. *Journal of Accounting and Economics* 31(1-3): 405-440.
- Hilary, G. (2006). Organized labor and information asymmetry in the financial markets. *Review of Accounting Studies* 11: 525-548.

- Hirsch, B., & Macpherson, D. (2003). Union membership and coverage database from the current population survey: note. *Industrial and Labor Relations Review* 56: 349-354.
- Hoeffler, S., & Keller, K. L. (2002). Building Brand Equity through Corporate Social Marketing. *Journal of Public Policy & Marketing*: 78-89.
- Hogan, C.E., & Jeter, D. (1999). Industry Specialization by Auditors. *Auditing: A Journal of Practice and Theory* 18: 1-17.
- Ikram, A., Li, Z., & Minor, D. (2019). CSR-contingent executive compensation contracts. *Journal of Banking & Finance* 105655.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4): 305-360.
- Jian, M., & Lee, K. (2015). CEO compensation and corporate social responsibility. *Journal of Multinational Financial Management* 29: 46-65.
- Jo, H., & Na, H. (2012). Does CSR reduce firm risk? Evidence from controversial industry sectors. *Journal of Business Ethics* 110 (4): 441-456.
- Karim, K., Lee, E., & Suh, S. (2018). Corporate social responsibility and CEO compensation structure. *Advances in Accounting* 40: 27-41.
- Kim, Y., Park, M., & Wier, B. (2012). Is Earnings Quality Associated with Corporate Social Responsibility? *The Accounting Review* 87(3): 761-796.
- Kim, I., Ryou, J.W., & Yang, R. (2020). The color of shareholders' money: Institutional shareholders' political values and corporate environmental disclosure. *Journal of Corporate Finance*, 64, p.101704.
- Kim, T., Kim, H., & Park, K. (2020). CEO inside debt holdings and CSR activities. *International Review of Economics & Finance* 70: 508-529.

- Krapl, A., & White, R. (2016). Executive pensions, risk-shifting, and foreign exchange exposure. *Research in International Business and Finance* 38: 376-392.
- Lang, M., & Lundholm, R. (1996). Corporate Disclosure Policy and Analyst Behavior. *The Accounting Review* 71: 467-492.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing* 70(4): 1-18.
- Mehran, H. (1995). Executive compensation structure, ownership, and firm performance. *Journal of Financial Economics* 38 (2): 163-184.
- Ozbas, O., & Scharfstein, D. S. (2010). Evidence on the Dark Side of Internal Capital markets. *The Review of Financial Studies* 23(2): 581-599.
- Pflugrath, G., Roebuck, P., & Simnett, R. (2011). Impact of Assurance and Assurer's Professional Affiliation on Financial Analysts' Assessment of Credibility of Corporate Social Responsibility Information. *Auditing: A Journal of Practice and Theory* 30(3): 239-254.
- Radu, C., & Smaili, N. (2021). Alignment versus monitoring: an examination of the effect of the CSR committee and CSR-linked executive compensation on CSR performance. *Journal of Business Ethics*, 1-19.
- Richardson, A., & Welker, M. (2001). Social disclosure, financial disclosure and the cost of equity capital. *Accounting, Organizations and Society* 26: 597-616.
- Roberts, R.W. (1992). Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Accounting Organizations and Society* 17(6): 595-612.
- Servaes, H., & Tamayo, A. (2013). The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness. *Management Science* 59 (5): 1526-5501.

- Simnett, R., Vanstraelen, A., & Chua, W. (2009). Assurance on Sustainability Reports: An International Comparison. *The Accounting Review* 84 (3): 937-967.
- Skinner, D. (1979). Earnings Disclosure and Stockholder Lawsuits. *Journal of Accounting and Economics* 23: 249-282.
- Srivastav, A., Armitage, S., & Hagendorff, J. (2014). CEO inside debt holdings and risk-shifting: Evidence from bank payout policies. *Journal of Banking and Finance* 47: 41-53.
- Sundaram, R., & Yermack, D. (2007). Pay me later: Inside debt and its role in managerial compensation. *The Journal of Finance* 62 (4): 1551-1588.
- Thorne, L., Mahoney, L.S., & Manetti, G. (2014). Motivations for issuing standalone CSR reports: A survey of Canadian firms. *Accounting, Auditing & Accountability Journal* 27: 686-714.
- Torres, A., Bijmolt, T., Tribó, J., & Verhoef, P. (2012). Generating Global Brand Equity Through Corporate Social Responsibility to Key Stakeholders. *International Journal of Research in Marketing* 29: 13-24.
- Verrecchia, R. (1983). Discretionary disclosure. *Journal of Accounting and Economics* 5, 179-194.
- Watson, L. (2015). Corporate Social Responsibility, Tax Avoidance, and Earnings Performance. *The Journal of the American Taxation Association* In-Press.
- White, R. (2018). Executive pensions, compensation leverage, and firm risk. *International Journal of Managerial Finance*.

Table 1 Sample Selection**Panel A: Sample Determination**

All Compustat Observations (2006 - 2020)	168,372
<i>Firms</i>	21,821
Drop observations with missing data:	
Total Assets (<i>AT</i>)	46,364
Mkt. Value Equity (<i>SIZEMVE</i>)	22,802
Growth (<i>TOBINQ</i>)	16,878
Labor Pressure (<i>LP</i>)	12,953
Profitability (<i>ROA</i>)	108
Compustat Sample Observations (<i>N</i>)	69,267
<i>Sample Firms (n)</i>	9,793
Drop missing Execucomp data:	48,351
Final Sample Observations (<i>N</i>)	20,916
<i>Sample Firms (n)</i>	2,135

Panel B: CSR Report Data for U.S. Public Firms

Year	Compustat	Final	CSR Reports ¹ (<i>CSR_PUBYR</i>)		CSR Initiation ¹ (<i>CSR_YR1</i>)	
	Sample	Sample	Compustat	Final	Compustat	Final
2006	5,330	1,132	140	112	27	18
2007	5,191	1,383	167	151	33	27
2008	5,154	1,596	202	176	48	38
2009	5,173	1,625	249	217	69	58
2010	4,734	1,521	297	261	69	60
2011	4,553	1,492	312	276	51	44
2012	4,530	1,475	324	284	34	28
2013	4,514	1,445	326	284	31	25
2014	4,522	1,420	340	297	23	19
2015	4,465	1,378	348	310	61	53
2016	4,443	1,354	348	308	34	27
2017	4,304	1,329	358	313	24	17
2018	4,199	1,293	388	338	79	61
2019	4,102	1,248	458	395	90	70
2020	4,053	1,225	656	539	193	137
Obs. (<i>N</i>)	69,267	20,916	4,913	4,261	866	682
Firms (<i>n</i>)	9,793	2,135	994	790	866	682

¹ Represents the number of publicly traded United States firms issuing stand-alone CSR reports per CorporateRegister.com.

Table 2 Descriptive Statistics*Test Statistics for Final Sample of US Non-CSR Issuing Observations vs. US CSR Issuing Observations from 2006 - 2020*

	Full Final Sample			Non-CSR Reporting Obs <i>CSR_PUBYR = 0</i>			CSR Reporting Obs <i>CSR_PUBYR = 1</i>			Mean Diff	<i>t-value</i>
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD		
SIZEMVE	7.5963	7.5116	1.7638	7.1481	7.1537	1.5439	9.3481	9.3391	1.4494	87.2280	***
SALARYBONUS	806.42	625.08	1,229.66	736.26	564.54	1,159.30	1,080.69	973.04	1,440.50	14.46	***
STOCKOPTIONS	2,606.82	1,125.00	4,871.92	1,948.49	827.42	4,189.24	5,180.05	3,460.40	6,293.40	31.77	***
PENSION	2,246.10	0.0000	7,064.32	1,169.42	0.0000	4,420.40	6,454.51	389.72	12,098.62	28.04	***
COMPLEV	0.3024	0.2675	0.2779	0.2900	0.2456	0.2915	0.3471	0.3383	0.2164	13.6818	***
LEVGAP	0.2171	0.0000	0.3438	0.1774	0.0000	0.3250	0.3598	0.2700	0.3706	28.4240	***
AGE	55.8416	57.0000	11.1937	55.4612	56.0000	11.6984	57.3283	58.0000	8.7968	11.4963	***
GENDER	0.0612	0.0000	0.2398	0.0610	0.0000	0.2393	0.0622	0.0000	0.2415	0.2873	
LEV	0.2659	0.2318	1.0161	0.2567	0.2106	1.1353	0.3016	0.2879	0.1728	4.8763	***
LP	0.00033	0.00014	0.0007	0.00035	0.00014	0.0007	0.00029	0.00012	0.0005	5.6330	***
ADV_INT	0.0116	0.0067	0.0151	0.0120	0.0068	0.0153	0.0099	0.0054	0.0141	8.4310	***
REG	0.2128	0.0000	0.4093	0.1878	0.0000	0.3905	0.3107	0.0000	0.4628	15.9514	***
LITRISK	0.5239	1.0000	0.4994	0.5400	1.0000	0.4984	0.4609	0.0000	0.4985	9.2419	***
ROA	0.0415	0.0507	0.3026	0.0365	0.0485	0.3364	0.0612	0.0588	0.0819	8.5406	***
TOBINQ	1.9663	1.5091	1.8979	1.9811	1.5002	2.0253	1.9086	1.5421	1.2849	2.8783	***
GLOBAL	0.6539	1.0000	0.4757	0.6241	1.0000	0.4844	0.7702	1.0000	0.4207	19.5892	***
COMPETITION	-0.0824	-0.0537	0.0901	-0.0829	-0.0537	0.0897	-0.0802	-0.0520	0.0917	1.6842	*
PCT_CSR	0.0657	0.0484	0.0600	0.0567	0.0435	0.0499	0.1012	0.0769	0.0799	34.6566	***
N			20,916			16,655			4,261		
n			2,135			2,052			790		

*For detailed variable descriptions, see Appendix A**Note: ***, **, * Indicate the difference between means is statistically significant at the 1%, 5% and 10% levels, respectively.*

Table 3 Spearman Correlations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	
(1) CSR_PUBYR	1																			
(2) SIZEMVE	0.5040*	1																		
(3) SALARYBONUS	0.3129*	0.4994*	1																	
(4) STOCKOPTIONS	0.3576*	0.6432*	0.6672*	1																
(5) PENSION	0.3111*	0.3184*	0.2794*	0.1829*	1															
(6) LEVGAP	0.1421*	0.1860*	0.1775*	0.0466*	0.3393*	1														
(7) COMPLEX	0.2443*	0.2541*	0.2152*	0.0527*	0.8269*	0.4288*	1													
(8) AGE	0.0938*	0.1247*	0.2410*	0.1035*	0.1775*	0.1178*	0.1555*	1												
(9) GENDER	0.0009	-0.0207*	-0.0516*	-0.0575*	0.0170*	-0.0229*	0.0106	-0.0819*	1											
(10) LEV	0.1686*	0.2267*	0.2026*	0.1748*	0.1777*	0.6445*	0.1598*	0.0446*	-0.0022	1										
(11) LP	-0.0319*	-0.1567*	0.0205*	-0.1602*	0.1386*	0.0727*	0.1815*	0.0603*	-0.0035	0.0094	1									
(12) ADV_INT	-0.0737*	-0.0814*	0.0007	-0.0384*	-0.0903*	-0.0946*	-0.0862*	-0.0591*	0.0700*	-0.1137*	0.0668*	1								
(13) REG	0.1272*	0.1626*	0.1028*	0.0789*	0.1503*	0.1537*	0.1530*	0.0533*	-0.0124*	0.2210*	-0.0524*	-0.4184*	1							
(14) LITRISK	-0.0700*	-0.0536*	-0.1293*	0.0000	-0.1827*	-0.1952*	-0.1998*	-0.0810*	0.0311*	-0.2346*	-0.2581*	0.4355*	-0.5478*	1						
(15) ROA	0.0772*	0.3056*	0.1163*	0.1432*	0.0246*	-0.1320*	0.0268*	0.0459*	0.0210*	-0.1964*	0.0623*	0.1209*	-0.0950*	0.0811*	1					
(16) TOBINQ	0.0115	0.2164*	-0.0534*	0.1099*	-0.1676*	-0.2074*	-0.1865*	-0.0463*	0.0122*	-0.1760*	-0.1057*	0.2368*	-0.2645*	0.2975*	0.5380*	1				
(17) GLOBAL	0.1175*	0.1883*	0.0848*	0.1654*	0.0740*	-0.0051	0.0491*	0.0111	-0.0349*	-0.0626*	-0.0787*	0.1067*	-0.3111*	0.2404*	0.0612*	0.1110*	1			
(18) COMPETITION	0.0389*	0.0150*	-0.0656*	-0.0224*	0.0653*	-0.0308*	0.0823*	-0.0209*	0.0156*	-0.0415*	-0.2322*	-0.0646*	-0.0365*	0.3247*	-0.0340*	0.0368*	0.1024*	1		
(19) PCT_CSR	0.2700*	0.1665*	0.1100*	0.1164*	0.2025*	0.1130*	0.1421*	0.1353*	0.0451*	0.1567*	0.1557*	-0.1153*	0.0861*	-0.1297*	-0.0064	-0.0408*	0.0388*	0.0754*	1	

For detailed variable descriptions, see Appendix A

A correlation coefficient followed by * indicates that the correlation is statistically significant at least at the 10 percent level.

Table 4 Executive Compensation and Determinants of CSR Report Initiation: 2006 to 2020

Variables	CSR Initiation (I)			Executive Comp (II)			Inside Debt (III)		
	<i>Dep. Variable: CSR_YRI</i>			<i>Dep. Variable: CSR_YRI</i>			<i>Dep. Variable: CSR_YRI</i>		
	Coef.	SE	P-value	Coef.	SE	P-value	Coef.	SE	P-value
SIZEMVE _{t-1}	0.422 ***	0.016	0.000	0.316 ***	0.030	0.000	0.298 ***	0.032	0.000
SALARYBONUS _{t-1}				-0.00002	0.00006	0.703	-0.00009	0.00007	0.233
STOCKOPTIONS _{t-1}				-0.00001	0.00001	0.281	-0.00001	0.00001	0.445
PENSION _{t-1}				-0.00002 ***	0.00001	0.003	-0.00002 ***	0.00001	0.010
COMPLEV _{t-1}							0.150	0.181	0.409
LEVGAP _{t-1}							-0.074	0.231	0.747
AGE _{t-1}				-0.003	0.004	0.485	-0.003	0.005	0.511
GENDER _{t-1}				-0.007	0.175	0.966	-0.040	0.181	0.824
LEV _{t-1}	0.064 **	0.027	0.018	0.090 *	0.047	0.055	0.207	0.249	0.406
LP _{t-1}	29.401 ***	10.693	0.006	56.248	60.589	0.353	60.967	64.074	0.341
ADV_INT _{t-1}	21.416 **	9.550	0.025	20.534 *	11.436	0.073	16.881	12.423	0.174
REG _{t-1}	-0.392	0.325	0.228	-0.552	0.583	0.344	-0.466	0.668	0.485
LITRISK _{t-1}	-0.183	0.186	0.324	-0.069	0.224	0.757	0.015	0.235	0.950
ROA _{t-1}	0.007 ***	0.001	0.000	0.794 **	0.320	0.013	0.764 **	0.328	0.020
TOBINQ _{t-1}	-0.053 **	0.023	0.022	-0.027	0.036	0.460	-0.023	0.041	0.578
GLOBAL _{t-1}	0.937 ***	0.084	0.000	0.365 ***	0.116	0.002	0.326 ***	0.121	0.007
COMPETITION _{t-1}	-1.762	1.454	0.226	-1.970	1.723	0.253	-2.559	1.805	0.156
PCT_CSR _{t-1}	-8.147 ***	1.459	0.000	-8.752 ***	1.750	0.000	-9.224 ***	1.820	0.000
Year Indicators			Yes			Yes			Yes
Industry Indicators			Yes			Yes			Yes
Pseudo R2			0.1796			0.0993			0.0946
Pseudo likelihood			-3,813			-2,617			-2,416
N: number of obs.			68,711			19,588			17,180
n: (<i>dep. var. CSR_YRI = 1</i>)			866			682			642

For detailed variable descriptions, see Appendix A

Note: This table presents logistic regression results. ***, **, * Indicate the estimated coefficient is statistically significant at the 1%, 5% and 10% levels, respectively. Robust estimated standard errors used in all models. All t-statistics are corrected using the Huber-White Procedure.

Table 5 Executive Compensation and Determinants of CSR Reporting: 2006 to 2020

Variables	(I) CSR Reporting			(II) Compensation Type			(III) Compensation Structure		
	Dep. Variable: CSR_PUBYR			Dep. Variable: CSR_PUBYR			Dep. Variable: CSR_PUBYR		
	Coef.	SE	P-value	Coef.	SE	P-value	Coef.	SE	P-value
SIZEMVE _{t-1}	0.901 ***	0.013	0.000	1.109 ***	0.026	0.000	1.105 ***	0.027	0.000
SALARYBONUS _{t-1}				-0.00011 ***	0.00004	0.008	-0.00010 **	0.00004	0.020
STOCKOPTIONS _{t-1}				0.00000	0.00001	0.679	0.00000	0.00001	0.830
PENSION _{t-1}				0.00003 ***	0.00000	0.000	0.00001 ***	0.00000	0.002
COMPLEV _{t-1}							0.847 ***	0.124	0.000
LEVGAP _{t-1}							-0.573 ***	0.168	0.001
AGE _{t-1}				-0.004 *	0.002	0.063	-0.007 ***	0.003	0.010
GENDER _{t-1}				-0.133	0.106	0.211	-0.220 *	0.114	0.053
LEV _{t-1}	0.232 ***	0.019	0.000	0.378 ***	0.036	0.000	0.730 ***	0.163	0.000
LP _{t-1}	97.634 ***	7.094	0.000	198.333 ***	32.572	0.000	212.197 ***	35.474	0.000
ADV_INT _{t-1}	9.528	6.203	0.125	8.817	7.547	0.243	3.698	7.960	0.642
REG _{t-1}	0.045	0.178	0.800	0.535 *	0.315	0.09	0.902 ***	0.324	0.005
LITRISK _{t-1}	-0.271 **	0.110	0.013	0.097	0.154	0.528	0.134	0.164	0.413
ROA _{t-1}	0.015 ***	0.001	0.000	0.086	0.273	0.754	-0.121	0.285	0.671
TOBINQ _{t-1}	-0.196 ***	0.016	0.000	-0.253 ***	0.026	0.000	-0.231 ***	0.028	0.000
GLOBAL _{t-1}	1.536 ***	0.049	0.000	0.454 ***	0.069	0.000	0.381 ***	0.072	0.000
COMPETITION _{t-1}	-1.357 *	0.760	0.074	-1.154	1.038	0.266	-0.857	1.104	0.438
PCT_CSR _{t-1}	3.671 ***	0.712	0.000	3.716 ***	0.857	0.000	3.525 ***	0.894	0.000
Year Indicators			Yes			Yes			Yes
Industry Indicators			Yes			Yes			Yes
Pseudo R2			0.4254			0.3938			0.3906
Pseudo likelihood			-10,172			-6,156			-5,644
N: number of obs.			68,831			19,703			17,315
n: (dep. var. CSR_PUBYR = 1)			4,913			4,261			4,046

For detailed variable descriptions, see Appendix A

Note: This table presents logistic regression results. ***, **, * Indicate the estimated coefficient is statistically significant at the 1%, 5% and 10% levels, respectively. Robust estimated standard errors in all models. All t-statistics are corrected using the Huber-White Procedure.

Table 6 Executive Compensation and Determinants of CSR Report Initiation by U.S. Presidential Regime

Variables	Democrat Regime 2007 to 2015						Republican Regime 2017 to 2020					
	Dependent variable: CSR_YRI						Dependent variable: CSR_YRI					
	Initiation (I)		Exec. Comp (II)		Inside Debt (III)		Initiation (I)		Exec. Comp (II)		Inside Debt (III)	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
SIZEMVE _{t-1}	0.527 ***	0.000	0.491 ***	0.000	0.466 ***	0.000	0.298 ***	0.000	0.131 ***	0.005	0.128 ***	0.009
SALARYBONUS _{t-1}			-0.00002	0.736	-0.00007	0.379			-0.00031 **	0.035	-0.00028 *	0.075
STOCKOPTIONS _{t-1}			-0.00001	0.334	-0.00001	0.458			0.00000	0.720	-0.00001	0.597
PENSION _{t-1}			-0.00001 *	0.066	-0.00002 *	0.062			-0.00004 **	0.013	-0.00004 *	0.052
COMPLEV _{t-1}					0.408 *	0.095					-0.099	0.787
LEV _{t-1}					-0.348	0.263					0.389	0.402
AGE _{t-1}			0.000	0.949	-0.001	0.906			-0.011	0.185	-0.010	0.287
GENDER _{t-1}			-0.512	0.112	-0.502	0.121			0.315	0.152	0.280	0.225
LEV _{t-1}	0.016	0.940	0.202 **	0.020	0.596 *	0.083	0.027	0.225	0.157	0.529	-0.421	0.361
LP _{t-1}	54.476 **	0.012	109.355 *	0.080	130.167 *	0.055	15.136	0.783	-26.589	0.873	-46.537	0.777
ADV_INT _{t-1}	-26.178	0.349	-20.263	0.500	-32.131	0.272	49.103 **	0.018	51.428 **	0.029	46.191 *	0.054
REG _{t-1}	-0.025	0.955	-0.162	0.82	-0.202	0.806	-1.231 **	0.043	-0.617	0.47	-0.565	0.594
LITRISK _{t-1}	-0.262	0.371	0.160	0.672	0.233	0.549	-0.304	0.241	-0.324	0.301	-0.230	0.480
ROA _{t-1}	0.009 ***	0.000	1.412 ***	0.009	1.652 ***	0.001	0.012 ***	0.000	0.235	0.519	-0.015	0.968
TOBINQ _{t-1}	-0.106 **	0.023	-0.110	0.113	-0.110	0.160	-0.023	0.206	0.044	0.268	0.045	0.273
GLOBAL _{t-1}	0.984 ***	0.000	0.456 ***	0.004	0.440 ***	0.009	0.930 ***	0.000	0.234	0.209	0.227	0.238
COMPETITION _{t-1}	0.131	0.967	-1.163	0.736	-0.625	0.863	-5.267	0.275	-6.907	0.23	-7.629	0.184
PCT_CSR _{t-1}	-5.667 **	0.020	-6.391 **	0.022	-7.237 **	0.015	-11.939 ***	0.000	-14.788 ***	0.000	-14.167 ***	0.001
Year Indicators		Yes		Yes		Yes		Yes		Yes		Yes
Industry Indicators		Yes		Yes		Yes		Yes		Yes		Yes
Pseudo R2		0.1871		0.1090		0.1059		0.1586		0.1055		0.1026
Pseudo likelihood		-1,894		-1,431		-1,311		-1,533		-973		-912
N: number of obs.		40,321		12,483		10,729		16,140		4,879		4,470
n: (dep. var. CSR_YRI = 1)		419		352		329		386		285		275

For detailed variable descriptions, see Appendix A

Note: This table presents logistic regression results. ***, **, * Indicate the estimated coefficient is statistically significant at the 1%, 5% and 10% levels, respectively. Robust estimated standard errors used in all models. All t-statistics are corrected using

Table 7 Determinants of Ongoing CSR Reporting by U.S. Presidential Regime

Variables	Democrat Regime 2007 to 2015						Republican Regime 2017 to 2020					
	Dependent variable: CSR_PUBYR						Dependent variable: CSR_PUBYR					
	Initiation (I)		Exec. Comp (II)		Inside Debt (III)		Initiation (I)		Exec. Comp (II)		Inside Debt (III)	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
SIZEMVE _{t-1}	0.970 ***	0.000	1.263 ***	0.000	1.249 ***	0.000	0.811 ***	0.000	0.924 ***	0.000	0.936 ***	0.000
SALARYBONUS _{t-1}			-0.00014 **	0.016	-0.00016 **	0.012			-0.00007	0.387	-0.00003	0.645
STOCKOPTIONS _{t-1}			-0.00001	0.253	0.00000	0.953			0.00000	0.601	0.00000	0.938
PENSION _{t-1}			0.00003 ***	0.000	0.00001	0.117			0.00003 ***	0.000	0.00003 ***	0.006
COMPLEV _{t-1}					1.054 ***	0.000					0.405 **	0.035
LEVGAP _{t-1}					-0.575 **	0.039					-0.883 ***	0.001
AGE _{t-1}			-0.002	0.495	-0.005	0.118			-0.012 **	0.019	-0.011 **	0.047
GENDER _{t-1}			-0.547 ***	0.001	-0.620 ***	0.001			0.266 *	0.084	0.174	0.292
LEV _{t-1}	0.119	0.401	0.262	0.154	0.424 *	0.058	0.137 ***	0.000	0.735 ***	0.000	1.306 ***	0.000
LP _{t-1}	138.790 ***	0.000	172.223 ***	0.000	188.803 ***	0.000	130.212 ***	0.000	354.501 ***	0.000	323.957 ***	0.000
ADV_INT _{t-1}	-0.577	0.962	-2.669	0.849	-12.913	0.378	-6.851	0.656	-8.988	0.624	-11.393	0.560
REG _{t-1}	0.349	0.122	0.954 **	0.013	1.197 ***	0.002	-0.487	0.133	-0.139	0.819	0.543	0.495
LITRISK _{t-1}	-0.593 ***	0.000	-0.059	0.788	-0.004	0.987	-0.058	0.732	0.253	0.288	0.259	0.308
ROA _{t-1}	0.017 ***	0.000	0.378	0.348	0.239	0.596	0.025 ***	0.000	0.094	0.824	-0.202	0.629
TOBINQ _{t-1}	-0.290 ***	0.000	-0.385 ***	0.000	-0.358 ***	0.000	-0.113 ***	0.000	-0.146 ***	0.000	-0.139 ***	0.000
GLOBAL _{t-1}	1.483 ***	0.000	0.287 ***	0.002	0.234 **	0.017	1.640 ***	0.000	0.682 ***	0.000	0.596 ***	0.000
COMPETITION _{t-1}	0.084	0.953	0.616	0.728	0.939	0.619	-7.733 ***	0.007	-6.882 **	0.035	-6.458 *	0.06
PCT_CSR _{t-1}	3.705 ***	0.001	3.306 ***	0.008	2.987 **	0.022	1.482	0.390	-0.078	0.971	0.344	0.881
Year Indicators		Yes		Yes		Yes		Yes		Yes		Yes
Industry Indicators		Yes		Yes		Yes		Yes		Yes		Yes
Pseudo R2		0.4274		0.4086		0.4060		0.3980		0.3429		0.3400
Pseudo likelihood		-5,499		-3,540		-3,212		-3,502		-2,066		-1,929
N: number of obs.		41,186		12,871		11,107		16,554		5,069		4,640
n: (dep. var. CSR_PUBYR = 1)		2,565		2,256		2,143		1,860		1,585		1,517

For detailed variable descriptions, see Appendix A

Note: This table presents logistic regression results. ***, **, * Indicate the estimated coefficient is statistically significant at the 1%, 5% and 10% levels, respectively. Robust estimated standard errors used in all models. All t-statistics are corrected using the Huber-White Procedure.