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Capital Structure, Labor Relations, and Determinants of Voluntary Corporate Social Responsibility Reporting

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Capital Structure, Labor Relations, and Determinants of Voluntary
Corporate Social Responsibility Reporting

Elizabeth O. Kohl, Ph.D.

University of Connecticut, 2015

I examine the influence of labor, debtholders, and customers on the determinants of voluntary, stand-alone CSR report initiation. Exploring the influence of these stakeholder groups expands our understanding of how the demand for voluntary non-financial disclosure, embodied by CSR reporting, arises and provides a model to reduce selection bias in future CSR studies. I expect that CSR reports are relevant to employees who possess unemployment aversion and debtholders mindful of default risk. Consequently, when these stakeholders are more influential at a given firm, there should be a greater propensity to disclose CSR activities. Further, I posit that there can be an interactive effect between these two stakeholder groups on the propensity to disclose. Consistent with my predictions, I find firms with high labor pressure, a high degree of leverage, and greater advertising intensity are more likely to initiate disclosure of CSR activities. I also find the odds of CSR reporting are statistically higher as leverage increases in a sample with high labor pressure, as compared to a sample with low labor pressure. My findings suggest labor and debtholders influence voluntary CSR reporting and also that labor-related capital structure strategy influences voluntary non-financial disclosure activity.

Capital Structure, Labor Relations, and Determinants of Voluntary
Corporate Social Responsibility Reporting

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BBA, Texas A&M University, 2002

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A Dissertation

Submitted in Partial Fulfillment of the

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at the

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iii

APPROVAL PAGE

Doctor of Philosophy Dissertation

Capital Structure, Labor Relations, and Determinants of Voluntary

Corporate Social Responsibility Reporting

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Dedication

For my family.

To Carol and Dick Kohl,

Your unconditional love, support, encouragement, and kindness could never be measured, even by an overly educated accountant who by rough estimation loves you both “*this*” much. Thanks Mom. Thanks Pops.

To Neal, Dominique, Colin, and Clayton Kohl,

For always being a phone call away with good advice, warm stories, cookies, and a good laugh. May every generation dream big knowing they have such an amazing family to support them along the way.

To Anne Kohl,

This would not have been possible without tears and laughter, road trips and late night phone calls, early morning phone calls, midday phone calls, and constant reminders that I have a big head and little arms. Thank you for keeping me human, Sister.

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Table of Contents

	Page
I. Introduction.....	1
II. Hypothesis Development.....	8
A. Stakeholder Theory.....	9
B. Labor Pressure.....	11
C. Capital Structure.....	15
D. Labor Pressure and Capital Structure.....	16
E. Customer Influence.....	20
F. Related Studies.....	22
III. Sample and Methodology	
A. Sample Description.....	23
B. Empirical Model and Variables.....	24
C. Secondary Test of the Interaction Variable.....	25
IV. Results	
A. Descriptive Statistics.....	31
B. CSR Initiation.....	32
C. CSR Initiation Partitioned by Labor Pressure.....	35
D. Odds Ratios.....	36
V. Additional Analysis	
A. CSR Report Initiation Sample.....	37
i. Timing of Stakeholder Pressure and CSR Report Issuance.....	38
ii. Treatment of Post-Initiation Years.....	38
B. Ongoing Voluntary CSR Reporting.....	40
C. Consistent and Non-Consistent CSR Reporting.....	41
D. Robustness of Labor Pressure.....	43
E. Consideration of Distressed Firms.....	44
F. Endogeneity.....	45
G. Firm-Specific Advertising Intensity.....	45
VI. Conclusion.....	46
Appendix 1: CSR Report Content.....	48
Appendix 2: Labor Pressure.....	49
References.....	53
Figures and Tables.....	60

I. Introduction

Despite the increasing frequency of voluntary corporate social responsibility (CSR) disclosures, the current literature provides limited information on what motivates a firm's CSR disclosure decision (Dhaliwal, Li, Tsang, and Yang 2011). In this study, I examine the influence of labor, debtholders, and customers on determinants of voluntary, stand-alone CSR disclosures (reports) in order to expand our understanding of how the demand for voluntary non-financial disclosure arises and the influence of production-related frictions and capital structure strategy on firms' voluntary disclosure activities.

CSR reports are internally generated documents that outline economic, environmental, and social policies; actions; and commitments of the firm to stakeholders.¹ The number of publicly traded United States (US) firms issuing stand-alone CSR reports is relatively small – approximately 400 firms in 2012, corresponding to five percent of firms listed in Compustat's North America Fundamentals Annual – but CSR reporters represent 51 percent of the S&P 500. Although there are fewer CSR issuances in the US than abroad, CSR reports have been increasing in frequency in the last decade. Since 2002, CorporateRegister.com reports a 353 and 333 percent increase in domestic and global CSR reporting, respectively.²

With an emphasis on shareholder-value impact, the extant accounting literature finds CSR reporting is associated with better analyst coverage (Dhaliwal, Radhakrishnan, Tsang, and Yang 2012), an increase in institutional investors (Dhaliwal et al. 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

¹ An outline of recommended content for CSR reports can be found in Appendix 1.

² This trend is easily seen in Figure 1, which depicts the annual issuance of all CSR reports from 2002 to 2012 for US (Figure 1A) and global (Figure 1B) firms.

effects (Simnett, Vanstraelen, and Chua 2009; Pflugrath, Roebuck, and Simnett 2011; Dhaliwal et al. 2011). Although shareholder-value of CSR has been documented, CSR reports contain information directly related to, and often targeting, many stakeholders (Boston College 2010). There is little evidence regarding the usefulness of reporting to stakeholders (Healy and Palepu 2001), but CSR reports represent a unique setting in which to further explore the influence of several stakeholder groups on voluntary disclosure activities.

The first stakeholder group I examine is labor. Employees apply economic, social, and regulatory pressure on the firm. Although the strength of individual employees varies from firm to firm, prior research finds that when employees unionize, their collective bargaining power can influence compensation (Matsa 2010), accounting choice (D'Souza, Jacob, and Ramesh 2001), tax aggressiveness (Chyz, Leung, Li, and Rui 2013), equity value of the firm (Lee and Mas 2012), and influence firms to miss mean consensus analysts' estimates (Bova 2013). The extant literature examining the relationship between unionized employees and voluntary disclosure suggests management is incentivized to remain opaque when facing strong labor (Depoers 2000; Hilary 2006; Bova 2013). These studies suggest unionized employees use voluntary disclosures to extract above-market rents during the collective bargaining process, encouraging firms with strong employee stakeholders to decrease voluntary disclosures in order to maintain their bargaining position.

I build on economic theory advocating that given the cost of unemployment, workers require compensation in the form of higher wages, additional benefits, or improved working conditions to compensate for unemployment risk (Matsa 2010). Labor

unions bargain for groups of workers collectively and seek to maximize employee compensation functions to offset unemployment risk, but Leap (1991) finds that unions generally do not have access to an employer's production, financial, or personnel information.³ I suggest that voluntary disclosures represent a vehicle for the firm to communicate unemployment risk offsets. Unlike financial disclosures examined by prior studies, voluntary CSR reports provide firm-wide, labor-specific information, which may include: employee diversification statistics; training and education information; ethics policies; benefits; and volunteerism.⁴ Global Reporting Index guidelines also suggest CSR reports contain disclosures on the sustainability of the firm. With employee-specific content, CSR disclosures should represent an opportunity for firms to offset informational demands of labor unions and mitigate unemployment risk by disclosing non-financial personnel information, providing a long-term outlook for the firm, and disclosing information on employee benefits and working conditions. Given the content and long-term outlook of voluntary CSR disclosures, I posit that CSR reports are relevant to employees who possess unemployment aversion. In contrast to prior research that finds bargaining pressure from unionized employees decreases voluntary disclosure, I expect that firms facing strong labor pressure are more likely to issue voluntary, stand-alone CSR reports than their counterparts.

The second stakeholder group I examine in this study is debtholders. Extant accounting research finds that voluntary disclosures can be used to decrease the perception of default risk (Sengupta 1998), and studies by Weber, Scholz, and Michalik

³ The National Labor Relations Board requires "good faith" collective bargaining. Unions must request desired information and that information must be *relevant to the bargaining process* as well as not "unduly burdensome" to furnish. Typical information requests include employee wage information, benefits information, and terms/conditions of employment.

⁴ The Global Reporting Initiative (GRI) includes CSR disclosure guidelines for both labor and human rights. For more details on these suggested disclosures, see Appendix 1.

(2010) and Weber (2012) suggest social and environmental risks are relevant components in debtholder assessment of default risk. Although CSR disclosures, which provide a long-term outlook and contain both social and environmental content, appear to be a tool for default risk management, the debtholder-specific CSR literature focuses on consequences of CSR performance rather than debt as a determinant of voluntary, stand-alone CSR disclosure. In the finance literature, Goss and Roberts (2011) note firms with CSR concerns pay 7 to 18 basis points more on private loans, but they find no evidence that lenders reward CSR performance. Attig, El Ghouli, Guedhami, and Suh (2013) use a similar measure of CSR performance and find credit rating agencies tend to award relatively high ratings to firms with good CSR performance. Little is known about what drives the limited debt-CSR findings, but in effort to shed light on these results, I examine the influence of debt on the likelihood of a firm to initiate voluntary, stand-alone CSR reporting. Voluntary CSR disclosures should represent an opportunity for firms to signal a long-term outlook and address environmental and social risks embedded in default calculations. Therefore, I posit that firms facing high levels of debt in their capital structure are more likely to issue voluntary, stand-alone CSR reports than their counterparts.

Additionally, I consider how market frictions between stakeholders influence capital structure and voluntary disclosure activities. Graham and Leary (2011) note that the incentive effects of capital structure can affect contracting between the firm and non-financial stakeholders, including employees. The relationship between debt and employee stakeholders is further examined by Matsa (2010) who finds that for an additional 10 percent unionization, a firm is likely to experience approximately a 100 basis point

increase in leverage. Matsa suggests firms facing unionization take on debt as an eventual bargaining device. As a consequence of increasing leverage, the firm increases default risk and debt servicing, simultaneously moderating employee access to free cash flows and increasing unemployment risk. This capital structure strategy does not reduce employee demand for relief from unemployment risk, but it does limit employee access to pecuniary compensation. Given the content of CSR reports, I posit that firms engaging in capital structure strategy related to labor frictions are more likely to engage in voluntary CSR reporting as a form of non-pecuniary compensation used to offset higher levels of unemployment risk. Interacting debt and employee stakeholder characteristics provides a better understanding of the determinants of voluntary, stand-alone CSR reporting in a firm with complex, production-related market frictions.

Finally, I examine the influence of customers on voluntary CSR reporting. The CSR reports examined in this study are professional, stand-alone documents released by firms to the public and easily interpreted as marketing tools. Emphasizing the importance of customer stakeholders on CSR reporting, 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). However, customer influence on CSR reporting is uncertain as research in marketing also suggests that CSR can lead to higher levels of perceived hypocrisy and negative reputation, with customers believing that CSR reports are used only to further the self-interest of the company (Knight and Greenberg 2002; Prout 2006; Wagner, Lutz, and Weitz 2009).

I empirically examine the influence of labor, debtholders, capital structure, and customers on CSR activities between the years 2002 and 2012 by using CSR report data from CorporateRegister.com and unionization data from the Union Membership and Coverage Database. CSR reporting is voluntary and unregulated. As firms are not required to consistently issue CSR reports, I examine the decision to initiate voluntary, stand-alone CSR reporting. Labor pressure is used to proxy for the influence of labor on voluntary disclosure decisions. Labor pressure is a measure of employee bargaining power with the firm and a function of the percentage of employees participating in collective bargaining (the unionization rate) as well as the importance of employees to the production function of the firm (the labor to capital ratio). The unionization rate is provided by the Union Membership and Coverage Database and the labor to capital ratio is employees to total assets (Hilary 2006; Chen, Chen, and Liao 2011; Chen, Chen, and Wang 2012).⁵ A firm-specific leverage ratio is used to proxy for the influence of debtholders and customer influence on CSR activities is measured via advertising intensity, the ratio of reported annual advertising expense divided by average total assets (Luo and Bhattacharya 2006; Servaes and Tamayo 2013; Casey and Grenier 2014).

I find firms with high labor pressure and firms with a high degree of leverage in the prior year are more likely to initiate disclosure of CSR activities in the current year. This is consistent with CSR reporting mitigating unemployment risk and default risk. Further, interacting leverage and labor pressure, I find that the effect of debt in a firm's capital structure on the likelihood of a firm to initiate CSR reporting is greater at higher levels of labor pressure. This suggests firms with both high labor pressure and high levels of debt in their capital structure are more likely to initiate CSR disclosures. Partitioning

⁵ For a more detailed description of the labor pressure variable, see Appendix 2.

the sample into high and low levels of labor pressure, I find the effect of additional leverage on the firm's likelihood of issuing a CSR report is only significant when employees exert higher levels of labor pressure. These findings support that labor-related capital structure strategy influences voluntary disclosure activity.

Prior voluntary disclosure literature emphasizes the relationship between equity drivers, such as investors and analysts, and management's propensity to engage in voluntary disclosure (Healy and Palepu 2001; Lundholm and Van Winkle 2006; Dhaliwal et al. 2011). I contribute to the literature, expanding our understanding of how the demand for voluntary disclosure arises, by considering disclosure frictions and demands generated by an interactive system of stakeholders. Specifically, I examine the influence of frictions generated by the firm's production function on management's propensity to issue voluntary CSR disclosure and document the firm-level influence of labor and capital structure on voluntary disclosure.

I add to the literature regarding organized labor's influence on voluntary disclosure, extending the traditional research of Depoers (2000), Hilary (2006), and Bova (2013) beyond financial disclosure. My findings expand our understanding of labor's influence on firm activities, namely voluntary CSR disclosure. I also contribute to the debt-CSR literature, shedding light on debt as a determinant of voluntary CSR disclosure and the influence of capital structure policy on voluntary disclosure activity. I show our understanding of voluntary disclosure is improved by considering the conditional influences of stakeholders on disclosure decisions. I suggest that capital structure strategy used to manage labor cost influences debt structure, financial reporting, and also has a spillover influence on voluntary disclosure, providing an opportunity for future research

to examine the spillover effect of stakeholder interactions on voluntary disclosure and financial reporting. Finally, I contribute to future Corporate Social Responsibility research by providing a model to control for selection bias related to the CSR disclosure decision. The model in this paper can be used as the first step in two-staged research designs considering the consequences of CSR reporting and CSR quality.

II. Hypothesis Development

As more firms issue voluntary corporate social responsibility (CSR) reports each year, research on why these voluntary, non-regulated disclosures are provided continues to expand. Prior accounting research takes a shareholder-centric approach and focuses on the benefits of CSR reporting related to decreasing the cost of equity capital (Dhaliwal et al. 2011), improving analyst coverage and forecasts (Dhaliwal et al. 2012), and increasing institutional investors (Dhaliwal et al. 2011). Additional research has also been conducted on how CSR reporting influences earnings management (Kim et al. 2012), corporate tax policy (Watson 2015), and the potential reputational benefits of CSR report assurance (Simnett et al. 2009; Pflugrath et al. 2011). Although the extant research finds equity-side benefits of CSR reporting, these voluntary disclosures contain a wide array of stakeholder-specific information, including information relating to: environmental concerns/strategy, diversity, employee relations, human rights, corporate governance, and community. The stakeholder information content of stand-alone CSR reports suggests that shareholder-oriented motivations for CSR reporting are not the complete story.⁶

⁶ The most widely used measure of CSR performance, the CSR rating provided by Kinder, Lydenberg, Domini Research & Analytics (KLD), supports the theory that CSR reports are stakeholder oriented. MSCI, the parent company of KLD, notes its KLD ratings – as seen in Dhaliwal et al. 2011; Dhaliwal et al. 2012; Goss and Roberts 2011; Attig et al 2013; Kim et al. 2012 – address a company’s environmental, social and governance performance in

Both Healy and Palepu (2001) and Dhaliwal et al. (2011) note there is little academic evidence regarding the value of reporting to stakeholders. As voluntary, stand-alone disclosures with a stakeholder emphasis, CSR reports represent a unique opportunity to examine the influence of stakeholders on voluntary disclosure and a forum for future research on the benefits, both financial and managerial, of voluntary disclosures on stakeholder interaction. The remainder of this section offers a brief review of stakeholder theory as it relates to CSR reporting, followed by the development of my hypotheses regarding the relationships between voluntary CSR reporting and labor pressure and capital structure.

A. Stakeholder Theory

Stakeholder theory suggests that management is influenced not only by the desire to maximize shareholder wealth, but also by the relationships and contracts of other parties within the system of the firm. Milton Friedman (1970) wrote that the mere existence of CSR was a signal of an agency problem within the firm, but Edward Freeman (1983) cited stakeholder theory to assert that managers must satisfy a variety of constituents who can influence firm outcomes.

Aguinis and Glavas (2012) review CSR literature from 588 journal articles and 102 books across the fields of management, ethics, marketing, psychology, organizational behavior, and organizational studies. The authors define CSR as “context-specific organizational actions and policies that take into account stakeholders’ expectations and the triple bottom line of economic, social, and environmental performance” (consistent

the context of five categories, covering key corporate stakeholders: environment, community and society, employees and supply chain, customers and governance and ethics (MSCI Research 2010).

with Aguinis 2011; Rupp 2011; and Rupp, Williams, and Aguilera 2010). Aguinis and Glavas (2012) summarize that stakeholders attempting to influence firms to engage in CSR include: shareholders, consumers, the media, the local community, and interest groups. Empirically, the management literature finds little evidence to suggest that managers taking a wider stakeholder view will jeopardize interests of stockholders (Bird, Hall, Momentè, and Reggianni 2007).

Early accounting studies by Holthausen and Leftwich (1983) and Watts and Zimmerman (1978) posit that management's accounting choices are systematically affected by firm contracts. Their theories were empirically examined by Bowen, DuCharme, and Shores (1995) who find that accounting method choice is influenced by a range of stakeholders, including: customers, suppliers, employees, and short-term creditors. Richardson and Welker (2001) examine the relation between financial and social disclosure and the cost of equity capital for Canadian firms in the early 1990's. In concluding their research, the authors proposed that social disclosures might benefit the firm through their effects on organizational stakeholders other than equity investors.

In 2012, Dhaliwal et al. published an empirical examination of international, stand-alone CSR reports. The authors do not examine the influence of specific stakeholders on CSR reporting, but their findings – that the issuance of stand-alone CSR reports is associated with lower analyst forecast error – are stronger in countries that are more stakeholder-oriented, where a broad spectrum of stakeholders are seen by society as possessing a legitimate interest in corporate activities and maximizing shareholder value is not the only objective of the firm. Dhaliwal et al. (2012) acknowledge that the US is

not a pure stakeholder country, but they posit, nonetheless, that US media, marketing, strategy, labor relations, and regulation could relate to CSR.

Like shareholders, debtholders and employees hold contracts with the firm that arise optimally in response to particular market frictions. Unlike shareholders who are exposed to upside risk, debtholders and employees are, respectively, more sensitive to default risk and unemployment risk. Exploring the influence of labor and debtholders expands our understanding of how the demand for voluntary non-financial disclosure, embodied by CSR reporting, arises and provides a foundation for future examination of the full economic costs and benefits of CSR reporting.

B. Labor Pressure

Employees act as both a claimant on firm cash flows and a component of the firm's production function. Labor also applies economic pressure via compensation and tax compliance, social pressure through community and reputation, and regulatory pressure from government agencies such as the United States Department of Labor. The influence of employees as a stakeholder group varies from firm to firm, industry to industry, but when employees elect to bargain collectively for wages and benefits, the extant literature suggests that employees recognize positive gains in bargaining power and the ability to exert economic pressure on management and other stakeholders, hereafter referred to as "labor pressure".⁷ Labor pressure has been found to influence accounting choice (D'Souza et al. 2001), tax aggressiveness (Chyz et al. 2013), equity

⁷ Labor pressure is, hereafter, defined as the economic influence of employees on the firm. I consider the social and regulatory pressure in additional analysis found in Section V, Part D.

value of the firm (Lee and Mas 2012), and management's incentive to signal a negative outlook (Bova 2013).

The extant literature examining the relationship between unionized employees and voluntary disclosure suggests management is incentivized to remain opaque when facing strong labor. Reynolds, Masters, and Moser (1998) and Kleiner and Bouillon (1988) note that firm disclosures – such as: financial condition, productivity, future investments, and relative wages – increase wages and benefits for employees. The authors suggest that information sharing on the part of the firm increases bargaining power for American unions. Reynolds et al. (1998) find firms with organized labor are incentivized to hoard information in order to maintain bargaining power with unions. These findings are consistent with Depoers (2000), who examined voluntary disclosures in French firms and found that as labor pressure increases, voluntary disclosure decreases.

Hilary (2006) regressed bid-ask spreads and analyst coverage against a measure of labor pressure. Although the author does not examine raw disclosures, he suggests collective bargaining creates information asymmetry in the financial markets and can have negative effects on firm disclosure. Bova (2013) examines 103 firms with collective bargaining contracts and finds unionized firms are more likely than a non-unionized control group to miss mean consensus analysts' earnings forecast. Further, the author suggests unionized firms appear to signal a negative outlook regardless of when collective bargaining agreement negotiations take place. The author's results are consistent with the hypothesis that managers of unionized firms seek to manipulate information signals when contracting with unionized employees.

Prior studies suggest unionized employees use voluntary disclosures to extract above-market rents during the collective bargaining process, encouraging firms with strong employee stakeholders to decrease voluntary disclosures. I add to the literature regarding organized labor's influence on voluntary disclosure, extending the traditional research of Depoers (2000), Hilary (2006), and Bova (2013) beyond financial disclosure.

Unlike shareholders, who face little downside risk other than the loss of their individual investments, employees are exposed to job loss (unemployment risk) in the event of firm termination. Matsa (2010) suggests that given the cost of unemployment, workers require compensation in the form of higher wages, additional benefits, or improved working conditions to compensate for unemployment risk. Representing groups of workers, labor unions seek to maximize employee compensation functions to offset unemployment risk. The extant economic literature finds unionized employees exert greater compensation pressure than their non-unionized counterparts, historically garnering premiums between 13 and 22 percent (Bratsburg and Ragan 2002). Furthermore, the US Bureau of Labor Statistics' 2012 Union Members report notes unionized employees have median usual weekly earnings that are 27 percent higher than those who were not union members (2013).

To maximize compensation, unionized employees engage in collective bargaining with the firm. The National Labor Relations Board (NLRB) requires "good faith" collective bargaining between labor unions and employees. In seeking information to improve their bargaining position, unions are entitled to make information requests of the firm, but that information must be relevant to the bargaining process as well as not

unduly burdensome to furnish.⁸ Despite the informational provisions of collective bargaining, Leap (1991) argues that unions generally do not have access to an employer's production, financial, or personnel information.

Prior research focuses on the relationship between voluntary financial disclosure and unionized employees. Unlike financial disclosures examined by prior studies, voluntary CSR reports provide firm-wide, employee-specific information, which may include: employee diversification statistics, training and education information, ethics policies, benefits, and volunteerism.⁹ With employee-specific content, CSR disclosures should represent an opportunity for firms to offset informational demands of labor unions and mitigate unemployment risk by disclosing non-financial personnel information, providing a long-term outlook for the firm, and disclosing information on employee benefits and working conditions.

Although prior research finds bargaining pressure from unionized employees decreases voluntary disclosure, I suggest that voluntary CSR disclosures can be used to mitigate unemployment risk and firms facing strong labor pressure are more likely to issue voluntary, stand-alone CSR reports than their counterparts:

⁸ The concept "relevant to the bargaining process" is important as some firms engage in collective bargaining with more than one unit of unionized employees. The Boeing Company, for example, discloses in their 2011 Form 10-K that they have principal collective bargaining agreements with: The International Association of Machinists and Aerospace Workers (IAM), The Society of Professional Engineering Employees in Aerospace (SPEEA), and The United Automobile, Aerospace and Agricultural Implement Workers of America (UAW). Boeing bargains with each labor union individually and is incentivized to maintain high levels of information asymmetry in order to improve their bargaining position with each unit.

⁹ CSR reports and their content are voluntary and unregulated. As such, disclosures vary from firm to firm. As of 2012, approximately 50% of all US CSR reporters adhered to the CSR content guidelines issued by the Global Reporting Initiative (GRI). An outline of CSR content per the GRI index can be found in Appendix 1.

H₁: The likelihood that a firm will initiate voluntary, stand-alone corporate social responsibility disclosures is positively associated with the firm's prior year labor pressure.

C. Capital Structure

The extant accounting literature generally examines voluntary CSR initiation from a shareholder perspective. Unlike shareholders, debtholders are highly sensitive to downside risk – the likelihood a firm terminates or files for bankruptcy. Prior research suggests CSR activity helps mitigate debtholder exposure to downside risk, specifically default risk (Sharfman and Fernando 2008; Attig et al. 2013; Weber et al. 2010; Weber 2012), but the extant literature focuses on the consequences of CSR performance on capital structure rather than the influence of debt as a determinant of voluntary CSR reporting.

Goss and Roberts (2011) examine private loans between 1996 and 2006 and find firms with CSR concerns pay 7 to 18 basis points more on private loans. However, using a modified KLD score of CSR performance, they find no evidence that private lenders reward CSR investment. Also utilizing a modified KLD score, Attig et al. (2013) find credit rating agencies tend to award relatively high ratings to firms with good CSR. The authors examine long-term issuer credit ratings compiled by Standard & Poor's for 1,585 unique firms over the period 1991 to 2010. Attig et al. (2013) posit that credit analysts view CSR activities favorably in their rating decision because the resulting improvements in long-term sustainability decrease the probability of default risk.

Both Goss and Roberts (2011) and Attig et al. (2013) examine the relationship between CSR performance and debtholders, where CSR performance is measured using an external rating of CSR activity – the KLD assessment of CSR performance.¹⁰ I contribute to the debt-CSR literature by examining the influence of debtholders on the propensity for raw voluntary non-financial disclosure, embodied by CSR reporting. I build from the extant research which finds that voluntary disclosures can be used to decrease the perception of default risk (Sengupta 1998) and bank surveys conducted by Weber et al. (2010) and Weber (2012) finding social and environmental risks are relevant components in debtholder assessment of default risk. I focus not on the ability of CSR performance to mitigate default risk, but the ability of voluntary CSR disclosures to provide a long-term outlook as well as social and environmental information relevant to debtholders. Given the inferences above, I suggest that firms facing high levels of debt in their capital structure are more likely to issue voluntary, stand-alone CSR reports than their counterparts:

H₂: The likelihood that a firm will initiate voluntary, stand-alone corporate social responsibility disclosures is positively associated with the level of debt in the firm's prior year capital structure.

¹⁰ MSCI ESG Research acquired KLD Research & Analytics Inc. and is the current compiler of the MSCI ESG Stats database, formerly known as the KLD database. The database includes environmental, social and governance performance indicators for the largest 3,000 US companies since 2003, the largest 1,000 companies since 2001, and for approximately 650 companies every year back to 1991. KLD data are widely used in CSR studies.

D. Labor Pressure and Capital Structure

In developing Hypotheses 1 and 2, I consider the independent influence of employee and debt stakeholders on the likelihood of the firm initiating voluntary CSR disclosures. But both the economic and finance literature suggests labor and unemployment risk impact corporate financing decisions (Berk, Stanton, and Zechner 2010; Graham and Leary 2011; Agrawal and Matsa 2013) and corporate financing decisions impact collective bargaining positions with unionized labor (Brander and Lewis 1986; Benmelech, Bergman, and Enriquez 2012; Matsa 2010). Further, classical economic theory suggests the production function of a firm requires both labor (human capital) and capital (financial capital). As such, I consider the interactive influence of labor and debt on voluntary, stand-alone CSR disclosure.

Agrawal and Matsa (2013) suggest unemployment risk associated with human capital influences financial policies and capital structure. The authors examine the impact of unemployment risk on financing decisions and find declining unemployment risk (increases in legally mandated unemployment benefits), leads to increases in corporate leverage. When examining the relationship between labor and capital structure, other studies focus on unemployment risk associated with bankruptcy. Graham and Leary (2011) review empirical capital structure research, noting leverage increases risk for employee stakeholders who are exposed to unemployment risk in the event of bankruptcy.

In the extant finance literature, Berk, Stanton, and Zechner (2010) examine the relationships between capital structure, human capital, and bankruptcy. Building from economic insights, the authors derive an optimal compensation contract for firms with

access to both equity and debt. In this setting, Berk et al. (2010) find that if the firm cannot make interest payments at the contracted wage level, the employee takes a temporary pay cut to ensure full payment of the debt and persistence of the firm. The findings suggest employees are sensitive to capital structure. Berk et al. (2010) go on to examine the impact of bankruptcy on employees. The authors note that in bankruptcy, firms can abrogate contracts and employees can be terminated and replaced with more productive employees. Berk et al. (2010) suggest that entrenched employees face substantial costs from bankruptcy filings – specifically, in the event of bankruptcy, these employees will be forced to take a wage cut and earn a current market wage. The authors posit that, *ceteris paribus*, higher leverage should be associated with higher wages to offset bankruptcy risks. As previously noted, unionized employees enjoy a strong wage premium relative to non-unionized employees. Building on the theories of Berk et al. (2010), unionized employees, therefore, are likely to be more sensitive to default risk due to the exposure to both wage premium loss and unemployment.

Employee sensitivity to default risk describes only one piece of the labor and capital structure relationship. Similar to Berk et al. (2010), Brander and Lewis (1986) suggest firms with substantial debt can argue employees must take a pay cut to help the firm avoid (emerge from) financial distress. The authors then go on to suggest management can use debt as a negotiating tool with employees. Matsa (2010) builds on these studies and finds for an additional 10 percent unionization, a firm is likely to experience approximately a 100 basis point increase in the debt ratio. Matsa (2010) suggests firms facing unionization take on debt as an eventual bargaining device to mitigate wage premiums associated with collective bargaining. Benmelech et al. (2012)

examine collective bargaining specifically within the airline industry during periods of financial distress. The authors find, in periods of distress, airlines are able to obtain wage concessions from employees whose pension plans are underfunded. Their findings are consistent with the theory that default risk plays an important role in collective bargaining.

The down side to firms strategically using debt as a bargaining shield is that increasing debt ratios enough to shield cash flows from employees also increases default risk and debt servicing while simultaneously moderating employee access to free cash flows and increasing unemployment risk. This capital structure strategy does not reduce employee demand for relief from unemployment risk, but it does limit employee access to pecuniary compensation. Although constrained with respect to wage maximization in the face of a highly levered firm, where financial resources are more likely to be prioritized to debt, the objective of the labor union remains - mitigate unemployment risk by maximizing the components of compensation. Restraint of firm financial resources therefore shifts labor pressure to non-wage compensation, such as additional benefits or improved working conditions. Given the content of CSR reports, I posit that firms engaging in capital structure strategy related to labor frictions are more likely to engage in voluntary CSR reporting as a form of non-pecuniary compensation used to offset higher levels of unemployment risk. Therefore, I suggest that firms facing simultaneously high levels of labor pressure and high levels of debt in their capital structure are more likely to issue voluntary, stand-alone CSR reports than their counterparts:

H₃: The effect of debt in the prior year's capital structure of the firm on the likelihood of a firm to initiate CSR reporting is greater at higher levels of labor pressure.

E. Customer Influence

In this study, customer focus is management's awareness and perceived importance of the firm's customer constituency. Customers are a significant stakeholder group and many firms invest heavily in relationship marketing to create, sustain, and enhance close relationships with their customers, assuming such investments lead to positive financial outcomes (Mende, Bolton and Bitner 2013). For over a decade, marketing research has been investigating the relationship and value of environmental and social disclosures with respect to customer stakeholders.

Building from prior branding literature, Hoeffler and Keller (2002) posit that corporate social marketing can enhance customer brand metrics, including equity, awareness, image, credibility, feelings, a sense of community, and engagement. Werther and Chandler (2005) suggest that customer loyalty is connected to CSR, which acts as implicit brand insurance. The authors state that the linkage between stakeholders and brands is the purpose of branding. As the value of the relationship grows, so does the strategic importance of CSR, which represents conflict prevention between customers and the firm and can be thought of as modern day boiler insurance (Werther and Chandler 2005).

CSR and customer relationships have also been empirically examined in the marketing literature. Torres et al. (2012) examine 57 global brands from 2002 to 2008 and find that CSR reporting targeting stakeholders (customers, shareholders, employees,

suppliers, and community) has a positive impact on global brand equity. Luo and Bhattacharya (2006) also conduct an empirical examination of the relationship between CSR and customer stakeholders. The authors examine under what conditions CSR results in positive financial performance. Luo and Bhattacharya find CSR reports are associated with market value, but customer satisfaction partially mediates this relationship. The authors also find that in firms with low innovativeness capability, CSR actually reduces customer satisfaction levels and, through lowered satisfaction, harms market value – a function they refer to as “the dark side of CSR”.

Wagner et al. (2009) describe CSR activities as proactive and reactive. They find proactive communication strategy (when the firm’s CSR statements precede conflicting observed behavior) leads to higher levels of perceived hypocrisy than a reactive strategy (when the firm’s CSR statements follow observed behavior). Wagner et al. also note that inconsistent information in proactive or reactive reporting increases perceptions of hypocrisy, such that CSR statements can actually be counterproductive.

Regardless of the positive or negative effect of CSR reporting, Schuler and Cording (2006) note customers must be aware of CSR characteristics for CSR differentiation to be successful. As such, I suggest that management’s focus on customers influences management’s decision to engage in CSR reporting activity:

H₄: The likelihood that a firm will initiate voluntary, stand-alone corporate social responsibility disclosures is positively associated with the firm’s prior year customer focus.

F. Related Studies

My study is related to, but differs from, the 1992 study of Roberts entitled *Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory*. A primary difference in our studies is the CSR disclosure sample selection. Roberts (1992) uses data from the book *Rating America's Corporate Conscious* (1986) compiled and published by the US Council on Economic Priorities (CEP). The CEP samples 130 large Fortune 500 corporations in 1984, 1985 and 1986, rating the level of corporate social responsibility disclosures for each company included in their study. The dependent variable for social disclosure (CSR) in Roberts (1992) is the level of CSR disclosure for firm i in period t (0, poor; 1, good; 2, excellent) based on the CEP ratings. I examine stand-alone CSR reports issued directly by corporations. I do not consider the external ratings or performance of CSR, but focus instead on the initiation of voluntary CSR information disclosure. Roberts (1992) uses a debt to equity ratio to proxy for potential creditor influence on determinants of CSR and finds a positive association between the debt ratio and CSR disclosure. Robert's study does not consider the influence of labor on voluntary CSR disclosure.

My study is also related to, but differs from, Dhaliwal et al. (2011). Again, the primary difference in our studies is the CSR disclosure sample as well as my focus on debt and employee stakeholders. Dhaliwal et al. (2011) also examines voluntary CSR reports, gathering data from *CorporateRegister.com* and directly from corporate websites. The period tested in their study is 1993 to 2007. I examine voluntary CSR reporting from 2002 to 2012, updating the sample period and emphasizing an era of CSR reports that are

more likely to have a uniform and broad scope than early CSR issuances.¹¹ Dhaliwal et al. (2011) also models determinants of CSR initiation. While debtholders are not the primary focus of the authors' study, a control variable is included for financial leverage. Further discussion can be found in the results section of this paper.

III. Sample and Methodology

A. Sample Description

For the period of 2002 to 2012, I collect data from three primary sources: CorporateRegister.com, Compustat North American Fundamentals Annual, and the Union Membership and Coverage Database. Table 2, Panel A, provides a breakdown of the sample. I begin with all observations in Compustat and drop observations missing total assets (AT) and values for market value of equity (SIZEMVE), Tobin's Q (TOBINQ), employees (EMP), labor pressure (LP) and profitability (ROA). I am left with 51,957 firm-year observations spanning 8,720 firms from 2002 to 2012.

[Insert Table 2, parts A & B]

I utilize CorporateRegister.com to collect a sample of firms issuing stand-alone CSR reports in the United States from 2002 to 2012. CorporateRegister.com is an independent, privately held and self-funded organization that maintains a database of

¹¹ Manually examining CSR reports from CorporateRegister.com, I note a shift between the years 2000 and 2002 in the emphasis of firm's CSR reporting. Early reports are more likely to emphasize environmental content, while more recent reports offer broader stakeholder content. Further, although CSR reports continue to be unregulated voluntary disclosures, there is a noticeable shift in the use of globally recognized content guidelines for CSR reporting post 2002. CorporateRegister.com reports approximately 3, 30, and 50 percent of US issuers follow GRI standards to compile their CSR reports in 2002, 2007, and 2012, respectively. This suggests more recent content is more likely to be both comprehensive and consistent than that of early period CSR reports.

corporate responsibility reports as well as limited descriptive information on the reports.^{12,13} Each publicly traded CSR issuer is identified and hand matched by company name with Compustat data.¹⁴ Table 2, Panel B, describes the CSR report sample by year.¹⁵

CorporateRegister.com provides data for 2,639 US CSR reports from 2002 to 2012. Table 2 Part B details the 1,788 CSR reports issued by 454 publicly traded firms meeting the criteria for the sample in this study. Of the 454 firms in the sample, 347 firms initiated their CSR reporting practices in the sample period. The Global Reporting Initiative is a non-profit organization that produces standards for sustainability reporting (GRI). Although few CSR reports utilized the global reporting index early in the sample, by 2012 approximately 50 percent of the sample is constructing their CSR reports using GRI guidelines.

B. Empirical Models and Variables

In this study, I test the determinants of voluntary, non-financial disclosure by examining the initiation of voluntary CSR reporting. As CSR disclosure policies may be sticky, particularly if standards are not used to create consistency across years and firms,

¹² CorporateRegister.com populates its database via reports directly provided by firms and active research via the Internet and direct contact/inquiry with companies. The database features reports and reviews, but not brochures or marketing and related publications. CorporateRegister.com does not feature publications, which are sales material, have no reference year, no quantitative CR data and no statement of CR policy.

¹³ Dhaliwal et al. (2011) also utilize the CorporateRegister.com database and perform a comparison of stand-alone CSR reports and CSR content in annual reports (10-Ks). The authors find that, on average, stand-alone CSR reports are significantly longer – 28.3 pages versus 1.5 pages – and cover significantly more CSR issues – 6.4 issues versus 1.5 issues – compared to annual reports. Dhaliwal et al.’s findings are consistent with KPMG (2008), which finds that among the largest 100 U.S. firms, only about 1 percent of them adequately integrate CSR reports into their annual reports.

¹⁴ Note, company names are matched and GVKEY’s assigned to public CSR reporters. Subsidiary companies have been assigned to their parent company’s GVKEY. For example: Ben & Jerry’s is a Unilever subsidiary and, therefore, assigned the GVKEY for Unilever. In this study, a parent company is only permitted one CSR observation per year.

¹⁵ CorporateRegister.com occasionally lists multiple reports for a single issuer in a firm-year. In addition to the firm’s CSR report, these can be summary reports of the comprehensive CSR report itself or additional environmental disclosures. I count multiple reports as a single firm-year observation.

I follow the partitioning of initiating and non-initiating CSR reporters found in Dhaliwal et al. (2011) to test the first-time issuance of stand-alone CSR reports against all other firms in the population. The following test is designed examine the influence of labor and debtholders in the prior year on the likelihood of management to initiate voluntary CSR reporting. The logistic regression model is specified as follows:

$$\begin{aligned}
 \text{CSR_YR1}_{i,t} = & \beta_0 + \beta_1 \text{LP}_{i,t-1} + \beta_2 \text{LEV}_{i,t-1} + \beta_3 \text{LEV}_{i,t-1} * \text{LP}_{i,t-1} + \beta_4 \text{ADV_INT}_{i,t-1} \quad (1) \\
 & \beta_5 \text{SIZEMVE}_{i,t-1} + \beta_6 \text{REG}_{i,t-1} + \beta_7 \text{GLOBAL}_{i,t-1} + \beta_8 \text{PCT_CSR}_{i,t-1} + \\
 & \beta_9 \text{COMPETITION}_{i,t-1} + \beta_{10} \text{ROA}_{i,t-1} + \beta_{11} \text{TOBINQ}_{i,t-1} + \\
 & \beta_{12} \text{LITRISK}_{i,t-1} + \Sigma \text{IND}_{i,t} + \Sigma \text{YEAR}_{i,t} + \varepsilon_{i,t}
 \end{aligned}$$

In the model above, CSR_YR1 is an indicator variable equal to 1 in the first year (initiating year) a stand-alone CSR report is recorded for firm i in the CorporateRegister.com database, and 0 otherwise. Observations where CSR_YR1 are equal to 0 include firm years where no CSR report has been issued by a firm, as well as firm years in which non-initiating-year CSR reports are issued. The control group for test one of my hypotheses is all non-CSR-initiators. Sensitivity testing of the control sample can be found in Section V under *CSR Report Initiation Sample*.

The first variable of interest is labor pressure (LP), which captures the economic influence of labor on the firm by measuring employees' collective bargaining power, or their 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; Chen et al. 2011 and 2012). Industry-level unionization rates are

provided by the Union Membership and Coverage Database, which is maintained annually by Barry Hirsch and David Macpherson.¹⁶ Union data comes from the Bureau of Labor Statistics' monthly Current Population Survey and a description of the Union Membership Coverage Database can be found in Hirsch and Macpherson (2003). I specifically collect Hirsch and Macpherson data on union membership, coverage, density, and employment by industry for the sample period. The data is provided by Census Industrial Classification Codes, which are then converted into NAICS codes at the two-, three-, four-, and five-digit level depending on specification for the CIC industry. Labor intensity, also referred to as the labor to capital ratio, is a measure of the sensitivity of a firm's production function to labor. Labor intensity is the total number of employees reported scaled by total assets for each firm. Labor pressure is the interaction of the size of the employee's bargaining unit and the sensitivity of the firm's production function to labor. I expect that as labor pressure increases, the likelihood of the firm engaging in voluntary CSR reporting will also increase. For more details and examples of the labor pressure calculation, see Appendix 2.

The second variable of interest is leverage (LEV). Leverage is a proxy for the influence of debt in a firm's capital structure on management. LEV is defined as the ratio of a firm's total debt divided by total assets for each observation year. Prior literature suggests social responsibility disclosures may be viewed by management as a way to meet certain debtholder expectations (Roberts 1992). I expect that as the influence of debtholders increases, the likelihood of CSR reporting will also increase.

¹⁶ 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.

To consider the relationship between labor, debtholders, and voluntary non-financial disclosure, I include the pairwise product of LP and LEV. I expect a positive value for the effect of the interaction, which implies that the higher the labor pressure, the greater (more positive) the effect of leverage on the likelihood of a firm to initiate CSR reporting. Similarly, the higher the leverage, the greater (more positive) the effect of labor pressure on the likelihood of a firm to initiate CSR reporting.

The final variable of interest is advertising intensity. Advertising intensity (ADV_INT) is a proxy for customer focus and 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). Cohen, Mashruwala, and Zach (2010) note promotional materials and direct-response advertising is included as part of the advertising expense in Compustat, but because Compustat has many missing data points for firm advertising expenditure, I use an industry-specific measure in order to preserve sample size. I do, however, perform sensitivity analysis wherein the sample size is reduced in order to examine the influence of firm-specific advertising intensity.

I 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, I expect the propensity to disclose voluntary non-financial CSR reports is positively associated with size. I also control for regulated industries (REG), such as: mining, oil and gas, food and beverage, transportation,

communication and utilities. Social welfare contributes to the regulation of industries in the US and regulated industries are also subject to high levels of political pressure and visibility (Stigler 1971). Management literature also suggests that regulation is an institutional-level predictor of CSR actions and policies (Buehler and Shetty 1974; Fineman and Clarke 1996). As such, I control for industries classified as regulated following Hogan and Jeter (1999) and Ozbas and Scharfstein (2010).¹⁷

I control for competitive market pressures to issue CSR reports at the international and industry levels. As issuance of CSR reports increases in international markets (see Figure 1), 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, I 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, I 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), I use the Herfindahl-Hirschman Index to measure competitiveness of the firm within its industry. The Herfindahl index is

¹⁷ Hogan and Jeter classify the following two-digit SIC codes as regulated, following *Regulatory Reform: What Actually Happened* (Weiss and Klass 1986) and Danos and Eichenseher (1982): 10, 12-14, 20, 29, 40-42, 44-46, 48, 49, 60-64, 67. Per Ozbas and Scharfstein (2010), no regulated two-digit SIC industries have been deregulated, but two-digit codes 43 and 47 are also classified as regulated post 1993.

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.

In addition to controlling for firm size, I 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.

Prior literature (Skinner 1979; Healy and Palepu 2001) documents that litigation risk is related to voluntary disclosure decision and that litigation potentially reduces incentives to provide disclosure. Litigation risk (LITRISK) is an indicator variable equal to 1 if a firm operates in a high litigation industry and 0 otherwise.¹⁸

¹⁸ Following Dhaliwal et al. (2011), litigation risk industries are those in the following SIC industry classifications: 2833-2836, 3570-3577, 3600-3674, 5200-5961, and 7370.

To control for the industry effects, I 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, I include year fixed effects to control for macroeconomic events.

C. Secondary Test of the Interaction Variable

Applied economic research argues that assessing the statistical significance of interaction effects in nonlinear models, such as the logit model used in my study, with a simple statistical test on the coefficient on the interaction term is subject to complication (Ai and Norton 2003; Greene 2010; Ozer Balli and Sørensen 2013). Greene (2010) notes the interaction effect in the nonlinear model is at least partly an artifact of the functional form chosen (Greene 2010). Both LP and LEV are continuous variables, which further complicates the interpretation of the interaction in my study. To address this concern, I perform additional analysis by examining the effect of debtholders on voluntary CSR reporting at two levels of labor pressure. I bisect the sample into firms characterized as having lower LP (below the median) and higher LP (above the median). This test is designed to examine the influence of debtholders in the prior year on the likelihood of management to initiate voluntary CSR reporting under (I) low levels of labor influence and (II) high levels of labor influence. The logistic regression model is specified as follows:

$$\begin{aligned}
\text{CSR_YR1}_{i,t} = & \beta_0 + \beta_1\text{LEV}_{i,t-1} + \beta_2\text{ADV_INT}_{i,t-1} + \beta_3\text{SIZEMVE}_{i,t-1} + & (2) \\
& \beta_4\text{REG}_{i,t-1} + \beta_5\text{GLOBAL}_{i,t-1} + \beta_6\text{PCT_CSR}_{i,t-1} + \\
& \beta_7\text{COMPETITION}_{i,t-1} + \beta_8\text{ROA}_{i,t-1} + \beta_9\text{TOBINQ}_{i,t-1} + \\
& \beta_{10}\text{LITRISK}_{i,t-1} + \Sigma\text{IND}_{i,t} + \Sigma\text{YEAR}_{i,t} + \varepsilon_{i,t}
\end{aligned}$$

To control for the industry effects, I 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, I include year fixed effects to control for macroeconomic events.

IV. Results

A. Descriptive Statistics

Descriptive statistics and correlations for the full sample can be found in Table 3, Panel A and B, respectively. As seen in Table 3, Panel A, mean labor pressure is significantly lower for CSR initiators (0.0004 for initiators versus 0.0007 for non-initiators where $p < 0.01$) and CSR initiators have significantly lower leverage (LEV) than non-initiators ($p < 0.01$). These statistics suggest that labor and debtholders have less leverage, or influence, on management of firms initiating CSR activity. Mean advertising intensity is not significantly different for CSR report initiators and non-initiators (ADV_INT: 0.0125 and 0.0115, respectively), suggesting a similar customer emphasis by both groups.

[Insert Table 3]

Firms initiating CSR reporting are significantly larger (SIZEMVE: 8.5387 for initiators and 5.1053 for non-initiators), significantly more likely to be found in a regulated industry (REG $p < 0.01$), and have a significantly higher level of global operations (GLOBAL: 0.6772 for initiators and 0.2903 for non-initiators). Initiating firms are also more likely to experience peer pressure on CSR issuance as the percentage of the top 50 firms (sales leaders) issuing CSR reports in their industry is significantly higher for initiators (PCT_CSR: 0.0559) than non-initiators (PCT_CSR: 0.0250). Competition within the firm's industry is not statistically different between the sample, where COMPETITION is -0.0808 for initiators and -0.0751 for non-initiators.

Financially, initiators are significantly more profitable (ROA of 0.0639) than non-initiators (-0.3093) and significantly less likely to be experiencing high growth (TOBINQ: 1.6908 for initiators and 3.5650 for non-initiators). Finally, firms initiating CSR reports have significantly lower levels of litigation risk than their non-initiating counterparts ($p < 0.01$).

B. CSR Initiation

I predict labor, debtholders, and customers influence firms' CSR reporting in Hypotheses 1, 2, and 3, respectively. I empirically examine the influence of these stakeholders on the likelihood of the firm to initiate stand-alone, voluntary CSR reports in test 1 below. I report regression results for Equation (1) in Table 4. Column I includes all first-time reporting firm-year observations. Column II includes the interaction of leverage

and labor pressure (LEV*LP). Columns III and IV test the robustness of the results by excluding utilities and limited to environmentally sensitive industries.¹⁹

[Insert Table 4]

Across all four specifications of the dependent variable, the results support H1 and H2. Labor pressure (LP) in year $t-1$ is significantly and positively associated with a firm's likelihood of voluntarily initiating the issuance of a stand-alone CSR report in year t (coef: 12.414; 12.387; 12.530; 11.258 and $p < 0.01$; 0.01; 0.01; 0.01 for Columns I, II, III, and IV, respectively). Leverage (LEV) in year $t-1$ is also significantly and positively associated with a firm's likelihood of voluntarily initiating the issuance of a stand-alone CSR report in year t (coef: 0.786; 0.785; 0.827; 1.262 and $p < 0.01$; 0.01; 0.0; 0.01 for Columns I, II, III, and IV, respectively). H4, that customer focus (ADV_INT) in year $t-1$ is significantly and positively associated with a firm's likelihood of voluntarily initiating the issuance of a stand-alone CSR report in year t , is supported in all specifications of the dependent variable (coef: 55.942; 55.943; 55.715; 57.452 and $p < 0.05$; 0.05; 0.05; 0.10 for Columns I, II, III, and IV, respectively). The marginal effect of labor pressure, leverage, and advertising intensity is 0.083; 0.0053; and 0.375, respectively. Thus the likelihood of CSR report initiation increases with all three primary variables of interest at a rate such that, if the rate were constant, the likelihood of CSR report initiation would increase by 8.3%; 0.53%; and 37.5% if labor pressure, leverage, or advertising increased

¹⁹ Utilities are all firms in the two-digit NAICS code 22. Environmentally sensitive industries include included in the US Environmental Protection Agency's Toxics Release Inventory Program (TRI). A detailed listing of these industries can be found at <http://www2.epa.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry>. Sensitivity analysis of environmental industries was conducted following Plumlee, Brown, Hayes and Marshall (2014) who classify the following industries as environmentally sensitive: oil & gas, chemical, food and beverage, pharmaceutical and electrical utilities.

by 1, respectively. These results suggest that when labor, debtholders, and customers are more influential at a given firm, there should be a greater propensity to disclose CSR activities.

In my first test of H3, the interactive effect between labor and debtholders on the propensity to disclose, I examine the results of LEV*LP in Table 4, columns II, III, and IV. The interaction of debt and labor (LEV*LP) is also significantly and positively associated with the dependent variable across all three model specifications (coef: 2.500; 2.508; 2.122 and $p < 0.01$; 0.01; 0.01 for Columns II, III, and IV, respectively). This suggests that the higher the labor pressure, the greater (more positive) the effect of leverage on the likelihood of a firm to initiate CSR reporting. Similarly, the higher the leverage, the greater (more positive) the effect of labor pressure on the likelihood of a firm to initiate CSR reporting. More generally, my findings suggest the interaction between two stakeholder groups influence voluntary disclosure activities.

The coefficient estimates on the control variables are generally consistent with expectations per the prior literature, with one significant exception: ROA. As seen in Table 4, ROA is positive and significant across all four specifications of the dependent variable with a coefficient of 1.860; 1.861; 1.846; 2.209 and $p < 0.01$; 0.01; 0.01; 0.01 for columns I, II, III, and IV, respectively. Dhaliwal et al. (2011) also report a positive association between CSR initiation and ROA, but they do not show the relationship to be significant. Empirical evidence from the marketing literature (Luo and Bhattacharya 2006) finding positive association between CSR and market value (measured using ROA) supports the findings in this paper suggesting ROA is positively and significantly associated with the likelihood of a firm to initiate CSR reporting.

C. CSR Initiation Partitioned by Labor Pressure

In Hypothesis 3, I predict the interaction of labor and debt influence the likelihood of the firm to initiate stand-alone, voluntary CSR reports. I report results for Equation (2), further examining the interaction between labor and debt on voluntary CSR disclosure, in Table 5, where Column I includes all firms with labor pressure below the median (lower) and Column II includes all firms with labor pressure above the median (higher).

[Insert Table 5]

As seen in Column I, leverage (LEV) is positive (coef: 0.295) but not statistically significant ($p > 0.10$) in the sample of firms with lower levels of labor pressure. This suggests that in an environment in which employees have low levels of bargaining power, capital structure of the firm is less likely to influence firms' decision to initiate voluntary CSR reporting. However, in a sample of firms with higher levels of labor pressure (Column II), leverage is both positive and significant (coef: 1.171 and $p < 0.01$) with respect to voluntary CSR initiation. This suggests firms with high labor pressure and a high degree of leverage are more likely to initiate disclosure of CSR activities.

To further test the difference between LEV (I) from the lower LP sample and LEV (II) from the higher LP sample, I estimate Equation 2 with the addition of two variables – a binary variable (HIGH) equal to 1 if labor pressure for the observation is in the higher partition and zero if the observation is in the lower partition. The second additional variable is an interaction of the new binary variable and $LEV*(HIGH*LEV)$. The 1.650 coefficient on $HIGH*LEV$ is positive and statistically significant ($p < 0.10$).

The marginal effect of leverage on CSR initiation is higher in the high LP sample (0.008) than the low LP sample (0.006). The marginal effects are statistically different ($p < 0.01$), again suggesting the likelihood of a firm initiating CSR reporting is greater at higher leverage for firms in the top half of labor pressure. Overall, the combined results of Columns I and II suggest capital structure strategy influences voluntary disclosure activity and the influence of labor on CSR reporting dominates the influence of debtholders.

D. Odds Ratios

Coefficients in logit models represent log-odds units and are interpreted differently than standard OLS coefficients. For an additional interpretation of the results, beyond the marginal effects related to the results found in Tables 4 and 5, I estimate the odds ratios of the dependent variable. Odds ratios range between zero and infinity and are generated from probabilities. Here, the odds ratios are the ratio of the probability of the binary outcome of the dependent variable, CSR report initiation. The coefficients in the following specification represent the odds of CSR initiation ($CSR_YR1 = 1$) when the dependent variable increases by one unit. The odds of CSR initiation increases (decreases) if the coefficient for the independent variable is greater than 1 (less than 1).

[Insert Table 6]

As seen in Table 6, the odds ratios for LP, LEV, and ADV_INT are all greater than 1 (OR: 239,598; 2.193; and greater than 1 billion, respectively) suggesting the odds of

voluntary CSR report initiation increases with labor pressure, debt, and customer awareness. The odds ratios can also be reduced to interpret the effect of the independent variables on CSR report initiation. For example, a 1 percent increase in LP increases the odds of a firm initiating CSR reporting by 2,396. Furthermore, the significant p-values for labor pressure, debtholders, and customer awareness seen in the CSR Initiation Sample results reported in Table 6 ($p < 0.01$; 0.01; and 0.05 for LP; LEV; and ADV_INT, respectively) suggest all three of the primary variables of interest have a significant influence on voluntary CSR report initiation. Columns I and II of Table 6 report the results of Equation 2 with odds ratios. The odds of debtholders (LEV) influencing voluntary CSR report initiation are not significant in the sample with lower labor pressure ($p > 0.10$). But capital structure does have a positive influence on a firm initiating CSR reporting in a sample of firms with higher labor pressure ($p < 0.01$), where the odds of a firm initiating CSR disclosures increases 3.227 when LEV increases by 1 unit. These results support the hypothesis in this study.

V. Additional Analyses

A. CSR Report Initiation Sample

I report the results of sensitivity analysis on the CSR initiation sample in Table 6. I consider the timing of CSR report initiation and the use of lagged independent variables, as seen in Equation 1, in Column I of Table 6. Columns II and III report results using alternate methods for generating the control group ($CSR_YR1 = 0$).

i. Timing of Stakeholder Pressure and CSR Report Issuance

CSR reporting is voluntary in the US 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, stakeholder pressure in the year covered by the CSR report, rather than the prior year, could influence CSR disclosure. As such, I re-examine CSR initiation and disclosure with non-lagged variables of interest and controls. The results of examining CSR disclosure hold, in both directional association and significance. As seen in Column I of Table 7, Labor pressure (LP) in year $t-1$ is significantly and positively associated with a firm's likelihood of voluntarily initiating the issuance of a stand-alone CSR report in year t (coef: 10.744 and $p < 0.01$). Debtholders and customers also remain significantly and positively associated with voluntary CSR report initiation (coef: 0.833; 52.641 and $p < 0.01$; $p < 0.05$, respectively for LEV and ADV_INT). The interactive relationship between LEV*LP also holds in Column I (coef: 2.327 and $p < 0.05$).

[Insert Table 7]

ii. Treatment of Post-Initiation Years

For the primary tests in this study, observations where CSR_YR1 are equal to 0 include firm years where no CSR report has been issued by a firm, as well as firm years in which non-initiating-year CSR reports are issued. I test the sensitivity of the control

sample in two ways. First, I drop all observations for CSR issuing firms subsequent to their CSR report initiation year (*post-initiation drop*). This treatment drops 118 firms from the sample that initiated CSR reporting prior to 2002, including 11 firms that did not engage in CSR reporting during the sample period and 107 firms who did. Dropping firms post-CSR initiation isolates the decision to initiate CSR reporting. This sample to test CSR initiation has 49,894 firm-year observations spanning 8,602 firms from 2002 to 2012. As seen in Column II of Table 7, labor pressure (LP) in year $t-1$ is significantly and positively associated with a firm's likelihood of voluntarily initiating the issuance of a stand-alone CSR report in year t (coef: 14.843 and $p < 0.01$). Debtholders and customers also remain significantly and positively associated with voluntary CSR report initiation (coef: 0.851; 48.969 and $p < 0.01$; $p < 0.05$, respectively for LEV and ADV_INT). The interactive relationship between LEV*LP also holds in the post-initiation drop results reported in Column II (coef: 2.993 and $p < 0.01$).

For the second sensitivity analysis of the CSR initiation control sample, I again drop firms subsequent to their initiation of CSR reporting. But in this analysis, I only drop CSR reporting firms post-initiation if the firm is classified as a consistent CSR reporter. Consistent reporters are identified as firms that do not stop issuing stand-alone CSR reports in the sample period once they initiate CSR reporting. This method for generating the control group includes non-initiation years for non-consecutive CSR reporters, as these firms are likely to engage in ongoing CSR initiation decisions. As seen in Column III of Table 7, labor pressure (LP) in year $t-1$ is significantly and positively associated with a firm's likelihood of voluntarily initiating the issuance of a stand-alone CSR report in year t (coef: 12.498 and $p < 0.01$). Debtholders and customers also remain

significantly and positively associated with voluntary CSR report initiation (coef: 0.825; 56.234 and $p < 0.01$; $p < 0.05$, respectively for LEV and ADV_INT). The interactive relationship between LEV*LP also holds in Column I (coef: 2.536 and $p < 0.01$).

B. Ongoing Voluntary CSR Reporting

The primary tests in my study examine the influence of labor and debt on voluntary CSR disclosure initiation. An argument can be made that each CSR report released is the result of a decision to engage in voluntary disclosure. As such, I examine the determinants of all CSR report issuances in the sample period by following Equation 1, but changing the dependent variable to all CSR report issuances (CSR_PUBYR):

$$\begin{aligned}
 \text{CSR_PUBYR}_{i,t} = & \beta_0 + \beta_1 \text{LP}_{i,t-1} + \beta_2 \text{LEV}_{i,t-1} + \beta_3 \text{LEV}_{i,t-1} * \text{LP}_{i,t-1} + & (3) \\
 & \beta_4 \text{ADV_INT}_{i,t-1} + \beta_5 \text{SIZEMVE}_{i,t-1} + \beta_6 \text{REG}_{i,t-1} + \\
 & \beta_7 \text{GLOBAL}_{i,t-1} + \beta_8 \text{PCT_CSR}_{i,t-1} + \beta_9 \text{COMPETITION}_{i,t-1} + \\
 & \beta_{10} \text{ROA}_{i,t-1} + \beta_{11} \text{TOBINQ}_{i,t-1} + \beta_{12} \text{LITRISK}_{i,t-1} + \\
 & \Sigma \text{IND}_{i,t} + \Sigma \text{YEAR}_{i,t} + \varepsilon_{i,t}
 \end{aligned}$$

As seen in Table 7, the results from my primary examination of CSR reporting hold when testing is extended to all 1,788 CSR reports issued by 454 companies from 2002 to 2012. The coefficients for labor and debtholders are both positive and significant for all CSR reporters (coef: 15.628; 0.696 and $p < 0.01$; 0.01, respectively for LP and LEV). The association between customer focus and ongoing CSR report issuance is not significant,

but the interaction LEV*LP is consistently positive with a coefficient of 2.653 and significant at the 1 percent level.

[Insert Table 8]

Reported in Columns I and II of Table 7 are the results of a secondary test of the interaction variable from Equation 3. The findings in Table 5 also hold when utilizing the full CSR reporting sample from 2002 to 2012 to more closely examine the interaction between CSR reporting, labor pressure, and debt. I am unable to reject the null of Hypothesis 2 for the partition of the full sample that has labor pressure in the lower 50 percent of the sample (Column I LEV coef: 0.307 and $p > 0.10$), whereas the coefficient for LEV in the upper level of labor pressure (Column II) is 0.980 and significant at the 1% level. Additional testing finds the coefficients for LEV from the low and high partitioned tests of the full sample to be positive and significant (coef: 1.042 and $p < 0.01$). This finding suggests the influence of labor and capital structure extend to ongoing stand-alone, voluntary CSR reporting.

C. Consistent and Non-Consistent CSR Reporting

The results for the primary variables of interest LEV, LP, and LEV*LP hold when the CSR reporting sample is constrained to firms who issue consecutive (consistent) CSR reports. Consistent CSR reporting firms do not stop releasing reports in the sample period once they have started issuing stand-alone CSR reports. The results for LEV and LP also hold when the sample is constrained to non-consecutive (non-consistent) CSR report

issuers. Non-consistent CSR reporting firms are those who either skip CSR reporting years or who stop issuing CSR reports after one or two years of CSR reporting activity. Table 9 reports the results of examining CSR initiation (Equation 1) and ongoing CSR reporting (Equation 2).

[Insert Table 9]

Examining CSR report initiation, I find coefficients for both labor pressure (LP) and debtholder influence (LEV) are positive and significant for consistent reporters (coef: 18.451; 0.833 and $p < 0.01$; 0.01) as well as for non-consistent reporters (coef: 8.304; 0.785 and $p < 0.01$; 0.01). The results of LP and LEV are also consistent for ongoing CSR reporting by consistent reporters (coef: 12.540; 0.919 and $p < 0.01$; 0.01) as well as for non-consistent reporters (coef: 18.239; 0.549 and $p < 0.01$; 0.01). These findings support Hypotheses 1 and 2 as well as the results found in Table 4. Hypothesis 3 is also supported across consistent (coef: 4.613 and $p < 0.01$) and non-consistent reporters (coef: 1.356 and $p < 0.10$). Additional testing of LEV*LP for ongoing CSR reporting is also supported across consistent (coef: 1.770 and $p < 0.01$) and non-consistent reporters (coef: 3.319 and $p < 0.01$). However, when the sample is partitioned by consistent and non-consistent reporters, customer influence is only positively and significantly associated with non-continuous CSR report initiators (coef: 81.448 and $p < 0.05$). This suggests that non-continuous issuers are more likely to consider CSR reporting a marketable event, as opposed to their continuously reporting counterparts.

D. Robustness of Labor Pressure

I state in Hypothesis 1 that the likelihood a firm will initiate voluntary, stand-alone corporate social responsibility disclosures is positively associated with the firm's prior year labor pressure. The primary measure of labor pressure (LP) in this study is an economic measure of the influence of employees vis-à-vis extraction of economic rents from the firm. As an alternative to measuring economic labor pressure, I consider the social, reputational, and regulatory risk of labor pressure (hereafter, "labor risk") on voluntary disclosure, embodied by CSR reporting. Using the "List of Goods Produced by Child Labor or Forced Labor" released by the U.S. Department of Labor's Bureau of International Labor Affairs (2013), I identify three-digit NAICS industries related to goods that are considered high risk for affiliation with child or forced labor. These industries are more closely monitored by federal agencies and face greater risk of reputational and societal effects associated with the discovery of illegal and/or unethical labor practices.²⁰ I report the determinants of voluntary CSR report initiation in Table 10 with labor risk (LP_RISK) as the primary measure of labor's influence on CSR reporting (Column I). All variables of interest remain positive and statistically significant, including labor risk (coef: 1.484 and $p < 0.05$). As seen in column IV, I add back the economic measure of labor pressure for a comprehensive examination of labor and CSR reporting. I find the likelihood of voluntary CSR report initiation increases as both economic (LP coef: 12.387 and $p < 0.01$) and reputational/regulatory (LP_RISK coef: 1.491 and $p < 0.05$) labor pressure increase. The results found in Table 10 support

²⁰ Many firms include in their CSR reports disclosures of labor policies specifically related to illegal and unethical labor practices, such as: labor trafficking, child labor, and forced labor. Apple's CSR reports are dominated by disclosures related to labor in international factories producing Apple products. See also Nike (Marshall 1997; Knight and Greenberg 2002) and Del Monte (U.S. EEOC 2011) for examples of labor risk.

Hypothesis 1, that firms are more likely to issue voluntary CSR reports in industries exposed to higher labor pressure.

[Insert Table 10]

E. Consideration of Distressed Firms

Distressed firms, or firms a high probability of bankruptcy, face incentive effects associated with debt that non-distressed firms do not (see Jensen and Meckling 1978; Eisdorfer 2008). Using Altman's Z-score (Altman 1968), I find 97 of the 347 CSR initiators in the sample period are classified as distressed at the time of disclosure initiation ($CSR_YR1 = 1$), having an Altman's Z-score of less than 1.81. To minimize the risk of these highly levered firms biasing my study, I exclude distressed firms and re-examine the results found in Table 5. The results of this sensitivity analysis are reported in Table 11.

[Insert Table 11]

When the sample is partitioned by labor pressure and restricted to firms characterized as not distressed, 28 CSR initiating observations are dropped from the lower LP sample and 69 observations are dropped from the higher LP sample. In both estimations, LEV is consistent with prior results – positive, but not significant in the lower LP sample (coef: 0.336; $p > 0.10$), and positive and significant in the higher LP sample (coef: 2.052; $p < 0.01$). Furthermore, I find a positive and significant difference in

the coefficients of the two samples when distressed firms are excluded (coef: 1.806; $p < 0.05$). The results of the sensitivity analysis suggest distressed firms do not influence the primary findings of my study.

F. Endogeneity

Timing could be a source of potential endogeneity effects, particularly as the timing relates to debt issuances (impacting LEV) and advertising campaigns (impacting ADV_INT). By addressing timing concerns in Table 7, Column I, I am also addressing the endogenous timing effects impacting LEV and ADV_INT. The non-lagged results reported in Table 7 (Column I) remain consistent with the lagged regression model reported in Table 4, where non-lagged LP, LEV, ADV_INT, and the interaction LEV*LP all remain positive (coef: 10.774; 0.833; 52.641; and 2.327) and significantly associated with voluntary CSR initiation ($p < 0.01$; 0.01; 0.05; and 0.05). Although a firm may defer a debt issuance or major advertising campaign for a year to reap the reputational benefits of CSR issuance, it is less likely the reputational benefits of CSR are strong enough to influence a two-year hold in material capital market or marketing strategy for the firm.

G. Firm-Specific Advertising Intensity

Advertising intensity is calculated as ratio of reported annual advertising expense divided by average total assets per three-digit NAICS industry classification following Luo and Bhattacharya (2006), Casey and Grenier (2014) and Servaes and Tamayo (2013). As an additional analysis, I recalculate advertising intensity at the firm level as advertising expense (Compustat: XAD) scaled by total assets. As Compustat has many

missing data points for firm-level advertising expenditure, this specification decreases the sample size from 51,957 to 18,236. Despite the decrease in sample size, I find for a sample of 191 CSR reporters, the coefficients for LP, LEV, and the firm-level advertising measure are positive and significant (coef: 9.052; 0.4891; 1.933 and $p < 0.001$; 0.001, 0.05, respectively). The interaction of LP and LEV also remains positive and significant (coef: 15.1626 and $p < 0.01$) with the alternate specification of customer pressure and the reduced sample size. These results suggest customer pressure at the firm level is positively and significantly associated with CSR disclosure.

VI. Conclusion

The number of firms issuing voluntary CSR reports in the US is small, but steadily increasing from year to year. Despite the visibility and economic impact of these firms, extant literature provides limited information on what motivates their decision to engage in voluntary CSR disclosures (Dhaliwal et al. 2011). I examine the influence of labor, debtholders, customers, and capital structure strategy on determinants of voluntary, stand-alone CSR reports in order to expand our understanding of how the demand for voluntary non-financial disclosure arises and the influence of production-related frictions on firms' voluntary disclosure activities. I find firms with high labor pressure, a high degree of leverage, and high levels of advertising intensity in the prior year are more likely to initiate disclosure of CSR activities in the current year. Further, I examine the interactive influence of labor and leverage on the likelihood of a firm to engage in voluntary CSR disclosure activity. I find firms more likely to deploy high leverage as a capital market strategy to offset pecuniary labor compensation are also more likely to

initiate voluntary CSR reporting than their counterparts. My findings indicate labor, debt, and capital structure strategy influence voluntary disclosure activity.

The objective of this paper is to contribute to the prior CSR and voluntary disclosure literature by empirically examining stakeholder influence on the determinants of voluntary, stand-alone CSR reporting. I contribute to future Corporate Social Responsibility research by providing a model to control for selection bias related to the CSR disclosure decision. The model in this paper can be used as the first step in two-staged research designs considering the consequences of CSR reporting and CSR quality.

Furthermore, CSR reports represent a unique opportunity to examine the influence of stakeholders on voluntary disclosure and a forum for future research on the benefits, both financial and managerial, of voluntary disclosures on stakeholder interaction. My findings suggest opportunities for future research on the value of employee-related disclosures, specifically research on how CSR reports can be used to mitigate direct and indirect costs of the production function.

Appendix 1: CSR Report Content GRI G3 Sustainability Reporting Guidelines

The following is an outline of CSR report content as recommended by the Global Reporting Initiative. Under G3 Guidelines,²¹ standard disclosures include:

A. Firm Strategy and Profile

This section includes strategy and analysis, a profile of the organization, report parameters; governance, commitments, and firm engagements; and a discussion of management approach and performance indicators. Often, these issues are addressed in the form of a letter from the CEO.

B. Economic

Economic CSR disclosures include firm performance, market presence, and a discussion of indirect economic impacts.

C. Environmental

Environmental disclosures discuss materials, energy, water, biodiversity, emissions/waste, products and services, compliance, and transport.

D. Social – Labor Practices and Decent Work

This section includes employee descriptives (i.e.: gender, geography, age), as well as disclosures relating to occupational health and safety; training and education, labor/management relations; diversity and equal opportunity; and equal remuneration for women and men.

E. Social – Human Rights

Human rights disclosures may discuss non-discrimination, employee's freedom of association and right to engage in collective bargaining, child labor, forced labor, Indigenous rights, human rights investment, and remediation.

F. Social – Society

This section is intended to discuss interactions with local communities, public policy, compliance activities, anti-competitive behaviors, and corruption concerns/issues.

G. Social – Product Responsibility

Product responsibility disclosures include customer health and safety, product and service labeling, marketing communications, customer privacy, and compliance.

²¹ GRI's G3 Guidelines were implemented in 2006 and can be found at www.globalreporting.org.

Appendix 2: Labor Pressure (LP)

I define Labor pressure (LP) as an economic measure of employee bargaining power with the firm. As employee bargaining power increases, employees are able to demand greater compensation and exert wage pressure on the firm. In my study, bargaining power is measured as a function of the size of the employee bargaining unit and the importance of employees to the production function of the firm.

One way employees improve their bargaining power is to unionize and bargain with the firm in larger, collective units. The US Bureau of Labor Statistics 2012 Union Members report notes unionized employees have median usual weekly earnings that are 27 percent higher than those who were not union members. Bargaining power, however, is not just a function of the percentage of employees participating in the collective bargaining unit, but also a function of the importance of employees to the production function of the firm. To that end, the variable LP in this study is intended to capture not just unionization of employees, but the larger degree of influence held by employee stakeholders over a firm's production function.

Hilary (2006) and Chen et al. (2011) suggest labor strength (bargaining power) is a product of the unionization rate and labor intensity, where labor intensity is measured as the number of employees scaled by total assets – a measure also known as the labor to capital ratio. Further discussion of each component can be found below:

Unionization

Under the Labor-Management-Reporting and Disclosure Act of 1959 (LMDRA), labor unions and firms are not required file copies of collective bargaining agreements

with the US Department of Labor's Office of Labor Management Standards (OLMS).²² As such, firm-specific data relating to the number of employees covered by a collective bargaining agreement (unionized employees) is only disclosed by voluntary firm or employee action.

As firm-specific data is difficult to obtain and may be incomplete per publicly available resources, researchers turn to industry measures of unionization, notably the Hirsch and Macpherson database at unionstats.com. In the Hirsch and Macpherson database, 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). I specifically collect Hirsch and Macpherson data on union membership, coverage, density, and employment by industry for the sample period. The data is provided by Census Industrial Classification Codes, which are then converted into NAICS codes at the two-, three-, four-, and five-digit level depending on specification for the CIC industry.

Labor Intensity

Classical economists, including Adam Smith and David Ricardo, describe the production of a firm with the following function:

$$Y = f(L, K, N)$$

, where Y is firm production, L is land, K is capital, and N is labor.

²² Labor-Management Reporting and Disclosure Act of 1959, As Amended. See Right to Copies of Collective Bargaining Agreements (29 U.S.C. 414).

Capital can be defined as financial capital (funds used to operate and expand business) or fixed capital (plant, property, equipment). In this study, land and capital are combined and measured as the total assets of a firm.²³ The labor to capital ratio, also referred to as labor intensity (Hilary 2006; Chen, Chen, and Liao 2011; Chen, Chen, and Wang 2012), is a measure of the sensitivity of a firm's production function to labor.

Labor Pressure

Firms with high labor intensity have a greater sensitivity to economic factors, such as workforce supply and unemployment rates. In the presence of organized labor, labor sensitive firms are subject to the bargaining pressures of employees not as a single unit, but as collective units. Following Hilary (2006); Chen et al. (2011); and Chen et al. (2012), I interact labor intensity with the Hirsch and Macpherson unionization rate at the greatest level of firm specificity. For a better understanding of the labor pressure measure, below is an example of LP calculated for firms across two different three-digit NAICS industries for the year 2011. The Crop Production industry (three-digit NAICS: 111) has a Hirsch and Macpherson unionization rate of 0.0190 for all firms at the three-digit NAICS level. I also include the top 20 percent of firms, based on total assets, from the 2011 Food Manufacturing industry (three-digit NAICS: 311). Hirsch and Macpherson identify a total of seven different unionization rates for the Food Manufacturing industry, five of which are represented in the top 20 percent sample.

I include data on whether or not firms issued a CSR report in 2011, but it should be noted that not all firms who issue CSR reports do so continuously. Chiquita Brands International, for example, issued a CSR report in 2010, but not in 2011.

²³ For sensitivity analysis of the combined capital and land measure of total assets, see Section V.

Appendix 2: Labor Pressure (LP) – Continued

Labor Pressure (LP) Calculation - 2011 NAICS Industry Sample

Company Name	EMP ÷	AT	= Labor Intensity *	Unionization Rate	= LP	LP * 1,000	CSR
NAICS 111: Crop Production							
DOLE FOOD CO INC	71.00	4,270.07	0.0166	0.0190	0.0003	0.3159	Yes
CHIQUITA BRANDS INTL INC	21.00	1,937.96	0.0108	0.0190	0.0002	0.2059	
YASHENG GROUP	15.00	2,057.50	0.0073	0.0190	0.0001	0.1385	
ROYAL HAWAIIAN ORCHARDS-LP	0.29	57.04	0.0051	0.0190	0.0001	0.0966	
LIMONEIRA CO	0.20	159.03	0.0013	0.0190	0.0000	0.0243	
TEJON RANCH CO	0.15	321.98	0.0005	0.0190	0.0000	0.0086	
ALICO INC	0.13	180.04	0.0007	0.0190	0.0000	0.0141	
VIASPACE INC	0.10	10.21	0.0102	0.0190	0.0002	0.1935	
NAICS 311: Food Manufacturing							
TYSON FOODS INC -CL A	115.00	11,071.00	0.0104	0.2030	0.0021	2.1087	Yes
SMITHFIELD FOODS INC	46.35	7,611.80	0.0061	0.2030	0.0012	1.2361	Yes
PILGRIM'S PRIDE CORP	39.50	2,879.55	0.0137	0.2030	0.0028	2.7846	
LEUCADIA NATIONAL CORP	11.71	9,263.19	0.0013	0.2030	0.0003	0.2566	
CAMPBELL SOUP CO	17.50	6,862.00	0.0026	0.1780	0.0005	0.4539	Yes
SMUCKER (JM) CO	4.50	8,324.58	0.0005	0.1780	0.0001	0.0962	Yes
DEAN FOODS CO	24.07	5,754.36	0.0042	0.1370	0.0006	0.5730	
PEPSICO INC	297.00	72,882.00	0.0041	0.1020	0.0004	0.4157	Yes
COCA-COLA CO	146.20	79,974.00	0.0018	0.1020	0.0002	0.1865	Yes
GENERAL MILLS INC	35.00	18,674.50	0.0019	0.0940	0.0002	0.1762	Yes
BUNGE LTD	34.00	23,275.00	0.0015	0.0940	0.0001	0.1373	Yes
KELLOGG CO	30.67	11,901.00	0.0026	0.0940	0.0002	0.2423	Yes

Variable Descriptions

EMP	=	The number of 2011 employees reported for the firm per Compustat.
AT	=	Total assets (AT) reported for the firm in 2011 per Compustat.
LP	=	Labor pressure per this study and Hilary (2006); Chen, Chen and Liao (2011) and Chen, Chen and Wang (2012 WIP).
CSR	=	Yes if 2011 is a year in which a firm issues a CSR report (CSR_PUBYR==1).

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Figure 1

Figure 1A:

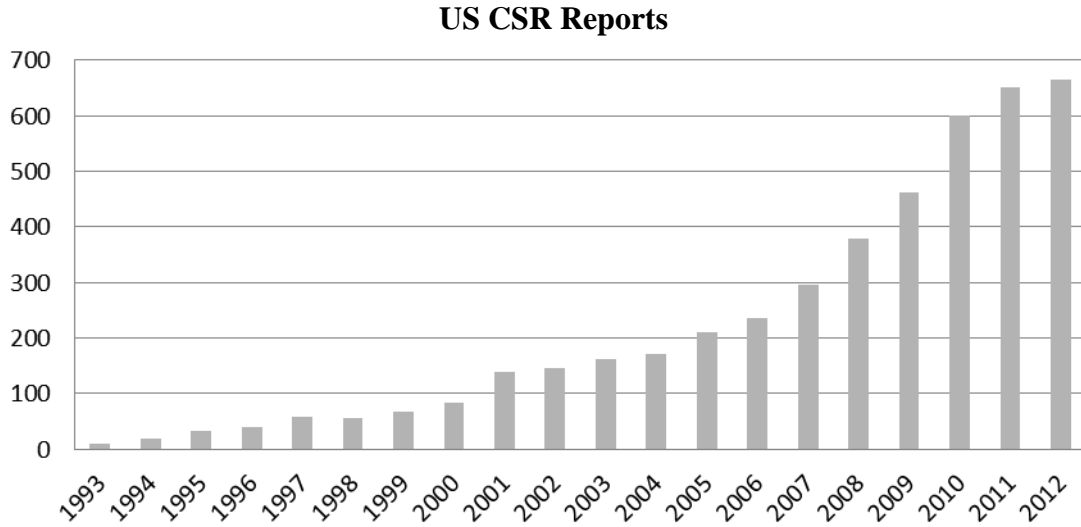
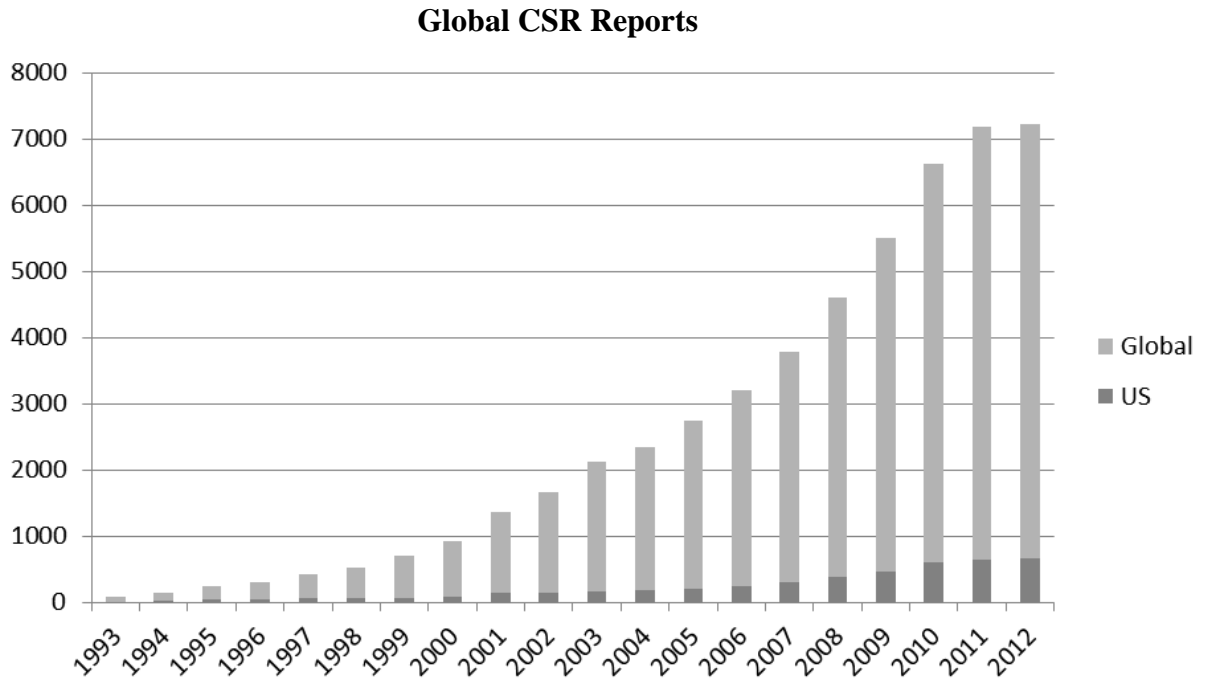


Figure 1B:



Figures 1A & B, above, indicate the number of stand-alone CSR reports issued each year from 1993 to 2012 per data found at CorporateRegister.com

Table 1
Variable Descriptions

Dependent Variables

CSR_YR1	= 1 in the first year t (initiating year) a public US firm issues a stand alone CSR report per CorporateRegister.com; 0 in any non-initiating year t or for all non-CSR report issuers. The control group (CSR_YR1=0) represents all years in which no CSR reports are issued.
CSR_PUBYR	= 1 for years in which a public US firm issues a CSR report per CorporateRegister.com; 0 otherwise.

Independent Variables

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).
LP_RISK	= indicator variable that equals 1 if the firm is in a three-digit NAICS industry at higher risk for child labor or forced labor per the United States Department of Labor and International Labor Affairs Bureau's <i>List of Goods Produced by Child Labor or Forced Labor</i> ; 0 otherwise.
LEV	= leverage ratio, defined as the ratio of total debt (DLTT + DLC) divided by total assets.
LEV * LP	= the interaction between the leverage ratio and labor pressure.
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.
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.
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.
GLOBAL	= indicator variable that equals 1 if the firm reports non-zero foreign income (Compustat PIFO); 0 otherwise.
PCT_CSR	= percentage of firms issuing CSR reports in year t per three-digit NAICS industry codes. CSR reports are identified via CorporateRegister.com.
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.
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.
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.

Table 2
Sample Details

Panel A: Sample Determination

	Full Sample
All Compustat Observations (2002 - 2012)	121,584
<i>Firms</i>	18,776
Drop observations with missing:	
Total Assets (<i>AT</i>)	19,699
Mkt. Value Equity (<i>SIZEMVE</i>)	19,467
Growth (<i>TOBINO</i>)	15,994
Employees (<i>EMP</i>)	7,134
Labor Pressure (<i>LP</i>)	6,979
Profitability (<i>ROA</i>)	354
Sample Observations (<i>N</i>)	51,957
Sample Firms (<i>n</i>)	8,720

Panel B: CSR Report Data for Public Firms

Year	Full Sample	US CSR Reports CR.com ¹	Final CSR Report Sample			
			CSR Firms	Initiators	GRI Used	
2002	5,226	109	79	18	2	3%
2003	4,872	116	65	15	8	12%
2004	4,978	134	90	17	16	18%
2005	4,885	161	101	25	27	27%
2006	4,874	177	116	23	38	33%
2007	4,719	210	135	25	40	30%
2008	4,681	250	167	37	57	34%
2009	4,664	299	198	55	73	37%
2010	4,506	381	265	65	97	37%
2011	4,303	402	284	42	120	42%
2012	4,249	400	288	25	143	50%
Obs. (<i>N</i>)	51,957	2,639	1,788	347	621	
Firms (<i>n</i>)	8,720	494	454	347	206	

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

Table 2
Sample Details - Continued

Panel C: Industry Details

Two-Digit NAICS Industry Sectors	<i>CSR</i>	<i>CSR</i>
<i>CSR Reporting Sample:</i>	<u><i>Initiation</i></u>	<u><i>Reports</i></u>
11 Agriculture, Forestry, Fishing and Hunting ¹	0	8
21 Mining, Quarrying, and Oil and Gas Extraction	23	131
22 Utilities	19	48
23 Construction	4	17
31 Manufacturing	27	139
32 Manufacturing	49	407
33 Manufacturing	96	497
42 Wholesale Trade	7	26
44 Retail Trade	17	67
45 Retail Trade	8	39
48 Transportation and Warehousing	14	62
49 Transportation and Warehousing	1	18
51 Information	28	132
52 Finance and Insurance	11	39
53 Real Estate and Rental and Leasing	5	14
54 Professional, Scientific, and Technical Services	13	51
56 Administrative and Support and Waste Management and Remediation Services	8	24
61 Educational Services	1	6
62 Health Care and Social Assistance	6	17
72 Accommodation and Food Services	10	46
	<u>347</u>	<u>1,788</u>
<i>Non-CSR Reporting Sectors</i>		
55 Management of Companies and Enterprises		
71 Arts, Entertainment, and Recreation		
81 Other Services (except Public Administration)		
92 Public Administration		

¹ The Agriculture, Forestry, Fishing and Hunting NAICS classification (11) contains three firms that issued CSR reports in the 2002 to 2012 sample period, but issued their first (initiation) CSR report prior to 2002.

Table 3
Descriptive Statistics and Correlations

Panel A: Statistics for Non-CSR Issuing Observations vs. CSR Issuing Observations

	Full Sample			Non-CSR Initiation Obs <i>CSR_YRI = 0</i>			CSR Initiation Obs <i>CSR_YRI = 1</i>			Mean Diff
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	<i>t-value</i>
LP	0.0007	0.0002	0.0109	0.0007	0.0002	0.0109	0.0004	0.0002	0.0006	-5.2607 ***
LEV	0.3022	0.1572	0.6397	0.3026	0.1561	0.6417	0.2517	0.2320	0.1672	-5.3914 ***
ADV_INT	0.0115	0.0085	0.0135	0.0115	0.0085	0.0135	0.0125	0.0081	0.0168	1.0493
SIZEMVE	5.1292	5.2047	2.3676	5.1053	5.1847	2.3560	8.5378	8.5620	1.3203	47.8964 ***
REG	0.2182	0.0000	0.4131	0.2177	0.0000	0.4127	0.2939	0.0000	0.4562	3.1039 ***
GLOBAL	0.2930	0.0000	0.4551	0.2903	0.0000	0.4539	0.6772	1.0000	0.4682	15.3435 ***
PCT_CSR	0.0252	0.0173	0.0286	0.0250	0.0173	0.0283	0.0559	0.0426	0.0469	12.2826 ***
COMPETITION	-0.0751	-0.0583	0.0718	-0.0751	-0.0583	0.0717	-0.0808	-0.0610	0.0760	-1.3871
ROA	-0.3067	0.0175	1.4532	-0.3093	0.0171	1.4579	0.0639	0.0579	0.0839	46.9453 ***
TOBINQ	3.5520	1.4860	8.8719	3.5650	1.4870	8.9012	1.6908	1.3653	1.0178	-27.6799 ***
LITRISK	0.5479	1.0000	0.4977	0.5484	1.0000	0.4977	0.4640	0.0000	0.4994	-3.1398 ***
N			49,894			49,547			347	
n			8,602			8,584			347	

For detailed variable descriptions, see Table 1

CSR_YRI	= 1 for CSR initiation year; 0 otherwise.	GLOBAL	= 1 if reporting non-zero foreign income; 0 otherwise.
LP	= labor pressure.	PCT_CSR	= percentage of CSR reports industry year.
LEV	= leverage ratio.	COMPETITION	= Herfindahl-Hirschman Index multiplied by -1.
ADV_INT	= advertising intensity.	ROA	= total return on assets per firm year.
SIZEMVE	= size using the market value of equity.	TOBINQ	= Tobin's Q.
REG	= 1 if the industry <i>k</i> is regulated; 0 otherwise.	LITRISK	= 1 if industry <i>k</i> is a high litigation-risk; 0 otherwise.

*Note: All continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * Indicate the difference between means is statistically significant at the 1%, 5% and 10% levels, respectively.*

Table 3 - Continued
Descriptive Statistics and Correlations

Panel B: Pearson (bottom)/Spearman Correlation

	<u>CSR_YR1</u>	<u>LP</u>	<u>LEV</u>	<u>ADV_INT</u>	<u>SIZEMVE</u>	<u>REG</u>	<u>GLOBAL</u>	<u>PCT_CSR</u>	<u>COMP.</u>	<u>ROA</u>	<u>TOBINQ</u>	<u>LITRISK</u>
CSR_YR1	1	0.004	0.027	-0.007	0.115	0.015	0.071	0.075	-0.007	0.049	-0.013	-0.014
LP	-0.002	1	0.190	-0.018	-0.123	-0.014	-0.027	0.048	-0.032	0.031	-0.096	-0.199
LEV	-0.007	0.077	1	-0.102	0.030	0.165	-0.057	-0.015	-0.119	-0.126	-0.102	-0.235
ADV_INT	0.006	-0.007	-0.023	1	-0.040	-0.406	0.038	0.078	0.241	-0.059	0.148	0.493
SIZEMVE	0.121	-0.039	-0.211	-0.008	1	0.123	0.293	0.093	-0.058	0.409	-0.011	-0.094
REG	0.015	0.020	0.026	-0.218	0.127	1	-0.180	0.017	-0.209	0.054	-0.106	-0.582
GLOBAL	0.071	-0.016	-0.104	-0.007	0.282	-0.180	1	0.092	0.108	0.152	-0.055	0.136
PCT_CSR	0.090	0.004	-0.006	0.083	0.113	0.071	0.052	1	0.192	0.003	-0.036	0.078
COMP.	-0.007	-0.012	0.005	-0.122	-0.021	-0.113	0.082	-0.031	1	-0.139	0.127	0.435
ROA	0.021	-0.059	-0.448	0.004	0.286	0.037	0.130	0.016	-0.043	1	-0.022	-0.123
TOBINQ	-0.018	0.136	0.557	0.006	-0.214	-0.051	-0.118	-0.033	0.035	-0.604	1	0.219
LITRISK	-0.014	-0.029	-0.035	0.248	-0.091	-0.582	0.136	-0.047	0.289	-0.070	0.084	1

For detailed variable descriptions, see Table 1

CSR_YR1	= 1 if t is the first year a firm issues a CSR report; 0 otherwise.
LP	= labor pressure.
LEV	= leverage ratio.
ADV_INT	= advertising intensity.
SIZEMVE	= the market value of equity at the beginning of each year.
REG	= 1 if the two-digit SIC industry k is regulated; 0 otherwise.
GLOBAL	= 1 if the firm reports non-zero foreign income; 0 otherwise.
PCT_CSR	= percentage of CSR reports per three-digit NAICS industry year.
COMP.	= COMPETITION: Herfindahl-Hirschman Index multiplied by -1.
ROA	= total return on assets per firm year.
TOBINQ	= Tobin's Q.
LITRISK	= 1 if two-digit SIC industry k is a high litigation-risk; 0 otherwise.

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

A correlation coefficient in bold indicates that the correlation is statistically significant at least at the 10 percent level.

Table 4
Determinants of CSR Initiation

Variables	Sign	CSR Initiation (I)			With Interaction (II)			Excluding Utilities (III)			Environmental (IV)		
		Dep. Variable: CSR_YRI			Dep. Variable: CSR_YRI			Dep. Variable: CSR_YRI			Dep. Variable: CSR_YRI		
		Coef.	SE	Prob.	Coef.	SE	Prob.	Coef.	SE	Prob.	Coef.	SE	Prob.
LP _{t-1}	+	12.414	2.755	0.000 ***	12.387	2.755	0.000 ***	12.530	2.781	0.000 ***	11.258	3.292	0.001 ***
LEV _{t-1}	+	0.786	0.183	0.000 ***	0.785	0.183	0.000 ***	0.827	0.181	0.000 ***	1.262	0.232	0.000 ***
LEV _{t-1} * LP _{t-1}	+				2.500	0.693	0.000 ***	2.508	0.694	0.000 ***	2.122	0.814	0.009 ***
ADV_INT _{t-1}	+	55.942	22.228	0.012 **	55.943	22.228	0.012 **	55.715	22.279	0.012 **	57.452	32.964	0.081 *
SIZEMVE _{t-1}	+	0.644	0.029	0.000 ***	0.644	0.029	0.000 ***	0.651	0.030	0.000 ***	0.565	0.034	0.000 ***
REG _{t-1}	+/-	0.040	0.532	0.940	0.040	0.532	0.939	0.038	0.537	0.944	-0.198	0.636	0.756
GLOBAL _{t-1}	+	0.864	0.138	0.000 ***	0.864	0.138	0.000 ***	0.891	0.141	0.000 ***	1.018	0.178	0.000 ***
PCT_CSR _{t-1}	+	26.462	3.459	0.000 ***	26.463	3.459	0.000 ***	26.910	3.669	0.000 ***	27.765	4.619	0.000 ***
COMPETITION _{t-1}	+	3.177	3.432	0.355	3.177	3.432	0.355	3.112	3.431	0.364	-0.925	4.332	0.831
ROA _{t-1}	+	1.860	0.527	0.000 ***	1.861	0.527	0.000 ***	1.846	0.537	0.001 ***	2.209	0.649	0.001 ***
TOBINQ _{t-1}	-	-0.296	0.071	0.000 ***	-0.296	0.071	0.000 ***	-0.297	0.072	0.000 ***	-0.280	0.083	0.001 ***
LITRISK _{t-1}	+/-	-0.259	0.304	0.393	-0.259	0.304	0.393	-0.260	0.305	0.394	-0.215	0.590	0.716
Year Indicators				Yes			Yes			Yes			Yes
Industry Indicators				Yes			Yes			Yes			Yes
Pseudo R2				0.2467			0.2467			0.2481			0.2284
Pseudo likelihood				-1,551			-1,551			-1,493			-981
N: number of obs.				48,397			48,397			47,781			29,440
n: (dep. var. CSR_YRI = 1)				347			347			333			215

For detailed variable descriptions, see Table 1

CSR_YRI	= 1 if <i>t</i> is the first year a firm issues a CSR report; 0 otherwise.	GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
LP _{t-1}	= labor pressure.	PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
LEV _{t-1}	= leverage ratio.	COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
LEV _{t-1} * LP _{t-1}	= the interaction between leverage and labor pressure.	ROA _{t-1}	= total return on assets per firm year.
ADV_INT _{t-1}	= advertising intensity.	TOBINQ _{t-1}	= Tobin's Q.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.	LITRISK _{t-1}	= 1 if two-digit SIC industry <i>k</i> is a high litigation-risk; 0 otherwise.
REG _{t-1}	= 1 if the two-digit SIC industry <i>k</i> is regulated; 0 otherwise.		

Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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
Determinants of CSR Initiation - Partitioned by Labor Pressure

<u>CSR_YRI =</u>	<u>Sign</u>	<u>Lower LP (I)¹</u>				<u>Higher LP (II)¹</u>			
		<u>Coef.</u>	<u>SE</u>	<u>z</u>	<u>Prob.</u>	<u>Coef.</u>	<u>SE</u>	<u>z</u>	<u>Prob.</u>
LEV _{t-1}	+	0.295	0.371	0.790	0.427	1.171	0.277	4.230	0.000 ***
ADV_INT _{t-1}	+	84.120	44.490	1.890	0.059 *	51.848	24.919	2.080	0.037 **
SIZEMVE _{t-1}	+	0.701	0.047	14.870	0.000 ***	0.618	0.038	16.070	0.000 ***
REG _{t-1}	+/-	-0.222	0.938	-0.240	0.813	0.056	0.629	0.090	0.929
GLOBAL _{t-1}	+	1.116	0.240	4.650	0.000 ***	0.681	0.177	3.860	0.000 ***
PCT_CSR _{t-1}	+	24.746	8.372	2.960	0.003 ***	27.854	4.473	6.230	0.000 ***
COMPETITION _{t-1}	+	-1.217	5.606	-0.220	0.828	8.007	5.286	1.510	0.130
ROA _{t-1}	+	1.338	0.586	2.290	0.022 **	2.051	0.914	2.240	0.025 **
TOBINQ _{t-1}	-	-0.198	0.093	-2.140	0.032 **	-0.375	0.105	-3.560	0.000 ***
LITRISK _{t-1}	+/-	-0.535	0.393	-1.360	0.173	-0.018	0.657	-0.030	0.978
Year Indicators					Yes				Yes
Industry Indicators					Yes				Yes
Pseudo R2					0.2784				0.2312
Pseudo likelihood					-622				-909
N: number of obs.					24,423				23,201
n: (dep. var. CSR_YRI = 1)					140				207

Difference in Lower/Higher LEV_{t-1} Coef. (Prob.)² 0.098 *

For detailed variable descriptions, see Table 1

LP _{t-1}	= labor pressure.
LEV _{t-1}	= leverage ratio.
ADV_INT _{t-1}	= advertising intensity.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.
REG _{t-1}	= 1 if the two-digit SIC industry <i>k</i> is regulated; 0 otherwise.
GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
ROA _{t-1}	= total return on assets per firm year.
TOBINQ _{t-1}	= Tobin's Q.
LITRISK _{t-1}	= 1 if two-digit SIC industry <i>k</i> is a high litigation-risk; 0 otherwise.

¹ The sample is partitioned in two halves based on the variable LP. Observations with smaller values for LP are in the "Lower LP" partition, while the observations with larger LP are in "Higher LP".

² Additional testing finds the coefficients for LEV_{t-1} from (I) and (II) are statistically different at the 10% level.

Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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 6
Logit Model Estimating Odds Ratios

Variables	Sign	CSR Initiation Sample				Lower LP (I) ¹				Higher LP (II) ¹			
		<i>Dependent Variable: CSR_YRI</i>				<i>Dependent Variable: CSR_YRI</i>				<i>Dependent Variable: CSR_YRI</i>			
		Odds Ratio	SE	z	Prob.	Odds Ratio	SE	z	Prob.	Odds Ratio	SE	z	Prob.
LP _{t-1}	+	239,598	660,153	4.500	0.000								
LEV _{t-1}	+	2.193	0.402	4.290	0.000	1.343	0.498	0.790	0.427	3.227	0.894	4.230	0.000
LEV _{t-1} * LP _{t-1}	+	12.179	8.435	3.610	0.000								
ADV_INT _{t-1}	+	> 1 Bil.	> 1 Bil.	2.520	0.012	> 1 Bil.	> 1 Bil.	1.890	0.059	> 1 Bil.	> 1 Bil.	2.080	0.037
SIZEMVE _{t-1}	+	1.905	0.056	22.030	0.000	2.016	0.095	14.870	0.000	1.855	0.071	16.070	0.000
REG _{t-1}	+/-	1.041	0.554	0.080	0.939	0.801	0.752	-0.240	0.813	1.058	0.666	0.090	0.929
GLOBAL _{t-1}	+	2.373	0.328	6.250	0.000	3.054	0.733	4.650	0.000	1.977	0.349	3.860	0.000
PCT_CSR _{t-1}	+	> 1 Bil.	> 1 Bil.	7.650	0.000	> 1 Bil.	> 1 Bil.	2.960	0.003	> 1 Bil.	> 1 Bil.	6.230	0.000
COMPETITION _{t-1}	+	23.977	82.289	0.930	0.355	0.296	1.660	-0.220	0.828	3,002	15,866	1.510	0.13
ROA _{t-1}	+	6.428	3.388	3.530	0.000	3.811	2.232	2.290	0.022	7.779	7.112	2.240	0.025
TOBINQ _{t-1}	-	0.744	0.053	-4.170	0.000	0.820	0.076	-2.140	0.032	0.687	0.072	-3.560	0.000
LITRISK _{t-1}	+/-	0.771	0.234	-0.850	0.393	0.586	0.230	-1.360	0.173	0.982	0.646	-0.030	0.978
Indicators ²					Yes				Yes				Yes
Pseudo R2					0.2467				0.2784				0.2312
Pseudo likelihood					-1,551				-622				-909
N: number of obs.					48,397				24,423				23,201
n: (dep. var. CSR_YRI = 1)					347				140				207

For detailed variable descriptions, see Table 1

CSR_YRI	= 1 if t is the first year a firm issues a CSR report; 0 otherwise.	REG _{t-1}	= 1 if the two-digit SIC industry <i>k</i> is regulated; 0 otherwise.
LP _{t-1}	= labor pressure.	GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
LEV _{t-1}	= leverage ratio.	PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
LEV _{t-1} * LP _{t-1}	= the interaction between leverage and labor pressure.	COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
ADV_INT _{t-1}	= advertising intensity.	ROA _{t-1}	= total return on assets per firm year.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.	TOBINQ _{t-1}	= Tobin's Q.
		LITRISK _{t-1}	= 1 if two-digit SIC industry <i>k</i> is a high litigation-risk; 0 otherwise.

¹ The sample is partitioned in two halves based on the variable LP. Observations with smaller values for LP are in the "Lower LP" partition, while the observations with larger LP are in "Higher LP".

² The estimation includes both year and industry (three-digit NAICS) indicator variables.

Note: This table presents logistic regression results reporting odds ratios where all continuous variables are winsorized at the 1st and 99th percentiles. Robust estimated standard errors used in all models. All *t*-statistics are corrected using the Huber-White Procedure. + (-) Indicate the variable has a significant influence on the dependent variable and the odds of CSR initiation increases (decreases) if the odds ratio for the independent variable is greater than 1 (less than 1).

Table 7
CSR Report Initiation Sample Sensitivity

Variables	Sign	(I) CSR Initiation No Lag				(II) CSR Initiation Drop Firms Post-CSR Initiation				(III) CSR Initiation Drop Consistent CSR Reporters Only			
		<i>Dependent Variable: CSR_YRI</i>				<i>Dependent Variable: CSR_YRI</i>				<i>Dependent Variable: CSR_YRI</i>			
		Coef.	SE	z	Prob.	Coef.	SE	z	Prob.	Coef.	SE	z	Prob.
LP _{t-1}	+	10.744	2.654	4.050	0.000 ***	14.843	2.801	5.300	0.000 ***	12.498	2.787	4.480	0.000 ***
LEV _{t-1}	+	0.833	0.171	4.860	0.000 ***	0.851	0.184	4.620	0.000 ***	0.825	0.184	4.490	0.000 ***
LEV _{t-1} * LP _{t-1}	+	2.327	0.940	2.470	0.013 **	2.993	0.739	4.050	0.000 ***	2.536	0.704	3.600	0.000 ***
ADV_INT _{t-1}	+	52.641	22.199	2.370	0.018 **	48.969	20.669	2.370	0.018 **	56.234	22.586	2.490	0.013 **
SIZEMVE _{t-1}	+	0.669	0.028	24.020	0.000 ***	0.886	0.037	23.770	0.000 ***	0.721	0.031	22.900	0.000 ***
REG _{t-1}	+/-	-0.005	0.532	-0.010	0.992	0.371	0.503	0.740	0.460	0.064	0.525	0.120	0.903
GLOBAL _{t-1}	+	0.832	0.139	5.990	0.000 ***	1.231	0.137	8.990	0.000 ***	0.930	0.136	6.850	0.000 ***
PCT_CSR _{t-1}	+	26.655	3.486	7.650	0.000 ***	28.576	3.326	8.590	0.000 ***	27.350	3.463	7.900	0.000 ***
COMPETITION _{t-1}	+	5.432	3.640	1.490	0.136	2.443	3.431	0.710	0.476	2.727	3.514	0.780	0.438
ROA _{t-1}	+	0.257	0.304	0.850	0.398	1.842	0.602	3.060	0.002 ***	1.796	0.548	3.280	0.001 ***
TOBINQ _{t-1}	-	-0.241	0.065	-3.680	0.000 ***	-0.344	0.072	-4.770	0.000 ***	-0.299	0.071	-4.210	0.000 ***
LITRISK _{t-1}	+/-	-0.296	0.306	-0.970	0.333	-0.335	0.322	-1.040	0.298	-0.264	0.306	-0.860	0.388
Year Indicators					Yes				Yes				Yes
Industry Indicators					Yes				Yes				Yes
Pseudo R2					0.2443				0.3174				0.2696
Pseudo likelihood					-1,556				-1,395				-1,500
N: number of obs.					48,396				46,393				47,635
n: (dep. var. CSR_YRI = 1)					347				347				347

For detailed variable descriptions, see Table 1

CSR_YRI	= 1 if t is the first year a firm issues a CSR report; 0 otherwise.	REG _{t-1}	= 1 if the two-digit SIC industry k is regulated; 0 otherwise.
LP _{t-1}	= labor pressure.	GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
LEV _{t-1}	= leverage ratio.	PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
LEV _{t-1} * LP _{t-1}	= the interaction between leverage and labor pressure.	COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
ADV_INT _{t-1}	= advertising intensity.	ROA _{t-1}	= total return on assets per firm year.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.	TOBINQ _{t-1}	= Tobin's Q.
		LITRISK _{t-1}	= 1 if two-digit SIC industry k is a high litigation-risk; 0 otherwise.

*Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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 8
Ongoing CSR Reporting

Variables	Sign	CSR Reporting Sample				Lower LP (I) ¹				Higher LP (II) ¹			
		Dependent Variable: CSR_PUBYR				Dependent Variable: CSR_PUBYR				Dependent Variable: CSR_PUBYR			
		Coef.	SE	z	Prob.	Coef.	SE	z	Prob.	Coef.	SE	z	Prob.
LP _{t-1}	+	15.628	1.493	10.470	0.000 ***								
LEV _{t-1}	+	0.696	0.141	4.920	0.000 ***	0.307	0.250	1.230	0.219	0.980	0.213	4.610	0.000 ***
LEV _{t-1} * LP _{t-1}	+	2.653	0.407	6.510	0.000 ***								
ADV_INT _{t-1}	+	12.984	12.170	1.070	0.286	35.694	22.837	1.560	0.118	3.506	15.225	0.230	0.818
SIZEMVE _{t-1}	+	1.063	0.022	47.730	0.000 ***	1.205	0.037	32.530	0.000 ***	1.012	0.030	34.060	0.000 ***
REG _{t-1}	+/-	0.584	0.271	2.150	0.031 **	-0.863	0.630	-1.370	0.170	0.856	0.324	2.640	0.008 ***
GLOBAL _{t-1}	+	1.500	0.075	19.880	0.000 ***	1.435	0.128	11.240	0.000 ***	1.498	0.095	15.720	0.000 ***
PCT_CSR _{t-1}	+	20.908	1.494	13.990	0.000 ***	31.556	4.019	7.850	0.000 ***	19.426	1.734	11.200	0.000 ***
COMPETITION _{t-1}	+	-1.426	1.960	-0.730	0.467	-2.006	3.286	-0.610	0.541	-0.540	2.949	-0.180	0.855
ROA _{t-1}	+	0.787	0.262	3.010	0.003 ***	0.618	0.422	1.460	0.144	0.467	0.344	1.360	0.174
TOBINQ _{t-1}	-	-0.365	0.036	-10.080	0.000 ***	-0.265	0.048	-5.550	0.000 ***	-0.447	0.055	-8.210	0.000 ***
LITRISK _{t-1}	+/-	-0.226	0.178	-1.270	0.205	-0.508	0.235	-2.160	0.031 **	-0.612	0.439	-1.390	0.164
Year Indicators					Yes				Yes				Yes
Industry Indicators					Yes				Yes				Yes
Pseudo R2					0.4639				0.5099				0.4363
Pseudo likelihood					-4,117				-1,569				-2,488
N: number of obs.					49,033				24,669				23,931
n: (dep. var. CSR_PUBYR = 1)					1,788				140				207
Difference in Lower/Higher LEV _{t-1} Coef. (Prob.) ²											0.002 ***		

For detailed variable descriptions, see Table 1

CSR_PUBYR	= 1 for years in which a firm issues a CSR report; 0 otherwise.	REG _{t-1}	= 1 if the two-digit SIC industry <i>k</i> is regulated; 0 otherwise.
LP _{t-1}	= labor pressure.	GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
LEV _{t-1}	= leverage ratio.	PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
LEV _{t-1} * LP _{t-1}	= the interaction between leverage and labor pressure.	COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
ADV_INT _{t-1}	= advertising intensity.	ROA _{t-1}	= total return on assets per firm year.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.	TOBINQ _{t-1}	= Tobin's Q.
		LITRISK _{t-1}	= 1 if two-digit SIC industry <i>k</i> is a high litigation-risk; 0 otherwise.

¹ The sample is partitioned in two halves based on the variable LP. Observations with smaller values for LP are in the "Lower LP" partition, while the observations with larger LP are in "Higher LP".

² Additional testing finds the coefficients for LEV_{t-1} from (I) and (II) are statistically different at the 1% level.

Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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 9
Consistent and Non-Consistent CSR Reporting

	CSR Initiation				Ongoing CSR Reporting			
	<i>Dep. Variable: CSR_YRI</i>							
	Consistent CSR		Non-Consistent CSR		Consistent CSR		Non-Consistent CSR	
	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	
LP _{t-1}	18.557 ***	18.451 ***	8.304 ***	8.281 ***	12.577 ***	12.540 ***	18.275 ***	18.239 ***
LEV _{t-1}	0.834 ***	0.833 ***	0.785 ***	0.785 ***	0.920 ***	0.919 ***	0.551 ***	0.549 ***
LEV _{t-1} * LP _{t-1}		4.613 ***		1.356 *		1.770 ***		3.319 ***
ADV_INT _{t-1}	36.262	36.269	81.450 **	81.448 **	23.051	23.053	8.086	8.083
SIZEMVE _{t-1}	0.756 ***	0.756 ***	0.708 ***	0.708 ***	1.170 ***	1.170 ***	1.073 ***	1.073 ***
REG _{t-1}	0.276	0.276	-0.044	-0.044	1.248 ***	1.248 ***	0.251	0.251
GLOBAL _{t-1}	1.182 ***	1.182 ***	0.897 ***	0.897 ***	1.946 ***	1.946 ***	1.550 ***	1.550 ***
PCT_CSR _{t-1}	22.157 ***	22.159 ***	32.837 ***	32.838 ***	16.754 ***	16.755 ***	21.573 ***	21.575 ***
COMPETITION _{t-1}	9.837 **	9.837 **	-4.693	-4.694	-2.942	-2.942	-0.415	-0.415
ROA _{t-1}	3.134 ***	3.135 ***	1.060 **	1.061 **	0.581 *	0.582 *	0.898 ***	0.900 ***
TOBINQ _{t-1}	-0.459 ***	-0.459 ***	-0.190 **	-0.190 **	-0.261 ***	-0.261 ***	-0.440 ***	-0.440 ***
LITRISK _{t-1}	-0.218	-0.218	-0.308	-0.308	-0.158	-0.158	-0.238	-0.238
Pseudo R2		0.3027		0.2571		0.4948		0.4329
Pseudo likelihood		-768		-868		-2,251		-2,457
N: number of obs.		45,066		43,907		45,446		44,949
n: (dep. var. = 1)		167		180		909		880

For detailed variable descriptions, see Table 1

CSR_YRI	=	1 if t is the first year a firm issues a CSR report; 0 otherwise.	REG _{t-1}	=	1 if the two-digit SIC industry k is regulated; 0 otherwise.
CSR_PUBYR	=	1 for years in which a firm issues a CSR report; 0 otherwise.	GLOBAL _{t-1}	=	1 if the firm reports non-zero foreign income; 0 otherwise.
LP _{t-1}	=	labor pressure.	PCT_CSR _{t-1}	=	percentage of CSR reports per NAICS industry year.
LEV _{t-1}	=	leverage ratio.	COMPETITION _{t-1}	=	Herfindahl-Hirschman Index multiplied by -1.
LEV _{t-1} * LP _{t-1}	=	the interaction between leverage and labor pressure.	ROA _{t-1}	=	total return on assets per firm year.
ADV_INT _{t-1}	=	advertising intensity.	TOBINQ _{t-1}	=	Tobin's Q.
SIZEMVE _{t-1}	=	the market value of equity at the beginning of each year.	LITRISK _{t-1}	=	1 if the industry k is a high litigation-risk; 0 otherwise.

*Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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. All models in this table include year and NAICS industry fixed effects.*

Table 10
Additional Tests of Labor Pressure

Variables	Sign	(I) High Risk LP			(II) Unionized LP			(III) Including Interaction			(IV) Comprehensive LP		
		Dep. Variable: CSR_YRI			Dep. Variable: CSR_YRI			Dep. Variable: CSR_YRI			Dep. Variable: CSR_YRI		
		Coef.	SE	Prob.	Coef.	SE	Prob.	Coef.	SE	Prob.	Coef.	SE	Prob.
LP _{t-1}	+				12.414	2.755	0.000 ***	12.387	2.755	0.000 ***	12.387	2.755	0.000 ***
LP_RISK _{t-1}	+	1.484	0.705	0.035 **							1.491	0.705	0.034 **
LEV _{t-1}	+	0.783	0.183	0.000 ***	0.786	0.183	0.000 ***	0.785	0.183	0.000 ***	0.785	0.183	0.000 ***
LEV _{t-1} * LP _{t-1}	+							2.500	0.693	0.000 ***	2.500	0.693	0.000 ***
ADV_INT _{t-1}	+	55.902	22.225	0.012 **	55.942	22.228	0.012 **	55.943	22.228	0.012 **	55.943	22.228	0.012 **
SIZEMVE _{t-1}	+	0.644	0.029	0.000 ***	0.644	0.029	0.000 ***	0.644	0.029	0.000 ***	0.644	0.029	0.000 ***
REG _{t-1}	+/-	0.036	0.531	0.946	0.040	0.532	0.940	0.040	0.532	0.939	0.040	0.532	0.939
GLOBAL _{t-1}	+	0.864	0.138	0.000 ***	0.864	0.138	0.000 ***	0.864	0.138	0.000 ***	0.864	0.138	0.000 ***
PCT_CSR _{t-1}	+	26.449	3.458	0.000 ***	26.462	3.459	0.000 ***	26.463	3.459	0.000 ***	26.463	3.459	0.000 ***
COMPETITION _{t-1}	+	3.178	3.431	0.354	3.177	3.432	0.355	3.177	3.432	0.355	3.177	3.432	0.355
ROA _{t-1}	+	1.854	0.526	0.000 ***	1.860	0.527	0.000 ***	1.861	0.527	0.000 ***	1.861	0.527	0.000 ***
TOBINQ _{t-1}	-	-0.294	0.071	0.000 ***	-0.296	0.071	0.000 ***	-0.296	0.071	0.000 ***	-0.296	0.071	0.000 ***
LITRISK _{t-1}	+/-	-0.260	0.304	0.391	-0.259	0.304	0.393	-0.259	0.304	0.393	-0.259	0.304	0.393
Year Indicators				Yes			Yes			Yes			Yes
Industry Indicators				Yes			Yes			Yes			Yes
Pseudo R2				0.2466			0.2467			0.2467			0.2467
Pseudo likelihood				-1,551			-1,551			-1,551			-1,551
N: number of obs.				48,397			48,397			48,397			48,397
n: (dep. var. CSR_YRI = 1)				347			347			347			347

For detailed variable descriptions, see Table 1

CSR_YRI	= 1 if t is the 1st year a firm issues a CSR report; 0 otherwise.	REG _{t-1}	= 1 if the two-digit SIC industry k is regulated; 0 otherwise.
LP _{t-1}	= labor pressure.	GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
LP_RISK _{t-1}	= 1 if the labor risk is higher for the industry; 0 otherwise.	PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
LEV _{t-1}	= leverage ratio.	COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
LEV _{t-1} * LP _{t-1}	= the interaction between leverage and labor pressure.	ROA _{t-1}	= total return on assets per firm year.
ADV_INT _{t-1}	= advertising intensity.	TOBINQ _{t-1}	= Tobin's Q.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.	LITRISK _{t-1}	= 1 if two-digit SIC industry k is a high litigation-risk; 0 otherwise.

Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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 11
CSR Report Initiation: Partitioned by Labor Pressure and Excluding Distressed Firms

<u>CSR_YRI =</u>	<u>Sign</u>	<u>Lower LP (I)¹</u>				<u>Higher LP (II)¹</u>			
		<u>Coef.</u>	<u>SE</u>	<u>z</u>	<u>Prob.</u>	<u>Coef.</u>	<u>SE</u>	<u>z</u>	<u>Prob.</u>
LEV _{t-1}	+	0.336	0.494	0.680	0.495	2.052	0.611	3.360	0.001 ***
ADV_INT _{t-1}	+	64.716	44.238	1.460	0.143	49.277	26.622	1.850	0.064 *
SIZEMVE _{t-1}	+	1.012	0.073	13.880	0.000 ***	0.953	0.071	13.510	0.000 ***
REG _{t-1}	+/-	-4.601	0.614	-7.490	0.000 ***	0.916	0.795	1.150	0.249
GLOBAL _{t-1}	+	1.325	0.260	5.100	0.000 ***	1.065	0.230	4.620	0.000 ***
PCT_CSR _{t-1}	+	32.286	9.543	3.380	0.001 ***	37.326	6.140	6.080	0.000 ***
COMPETITION _{t-1}	+	3.512	5.917	0.590	0.553	13.773	8.441	1.630	0.103
ROA _{t-1}	+	0.650	0.881	0.740	0.460	1.764	1.193	1.480	0.139
TOBINQ _{t-1}	-	-0.199	0.098	-2.030	0.043 **	-0.369	0.120	-3.070	0.002 ***
LITRISK _{t-1}	+/-	-0.332	0.517	-0.640	0.521	-0.183	0.913	-0.200	0.841
Year Indicators					Yes				Yes
Industry Indicators					Yes				Yes
Pseudo R2					0.3247				0.3183
Pseudo likelihood					-437				-522
N: number of obs.					13,355				13,070
n: (dep. var. CSR_YRI = 1)					112				138
Difference in Lower/Higher LEV _{t-1} Coef. (Prob.) ²									0.017 **

For detailed variable descriptions, see Table 1

LP _{t-1}	= labor pressure.
LEV _{t-1}	= leverage ratio.
ADV_INT _{t-1}	= advertising intensity.
SIZEMVE _{t-1}	= the market value of equity at the beginning of each year.
REG _{t-1}	= 1 if the two-digit SIC industry <i>k</i> is regulated; 0 otherwise.
GLOBAL _{t-1}	= 1 if the firm reports non-zero foreign income; 0 otherwise.
PCT_CSR _{t-1}	= percentage of CSR reports per three-digit NAICS industry year.
COMPETITION _{t-1}	= Herfindahl-Hirschman Index multiplied by -1.
ROA _{t-1}	= total return on assets per firm year.
TOBINQ _{t-1}	= Tobin's Q.
LITRISK _{t-1}	= 1 if two-digit SIC industry <i>k</i> is a high litigation-risk; 0 otherwise.

¹ The sample is partitioned in two halves based on the variable LP. Observations with smaller values for LP are in the "Lower LP" partition, while the observations with larger LP are in "Higher LP".

² Additional testing finds the coefficients for LEV_{t-1} from (I) and (II) are statistically different at the 5% level.

Note: This table presents logistic regression results where all continuous variables are winsorized at the 1st and 99th percentiles. ***, **, * 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.