2012

More Than Money: Corporate Social Performance And Reporting And The Effect On Economic Performance

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MORE THAN MONEY: CORPORATE SOCIAL PERFORMANCE AND REPORTING AND THE EFFCT ON ECONOMIC PERFORMANCE

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of Accounting
in the College of Business
at the University of Central Florida
Orlando, Florida

Summer Term
2012

Major Professor: Robin W. Roberts

ABSTRACT

The three studies in this dissertation explore the relationship between Corporate Social Responsibility (CSR) and Corporate Financial Performance (CFP). CSR consists of social, ethical, and environmental performance dimensions that have not traditionally appeared in mandated financial reports and largely reflect societal expectations for corporate behavior *beyond* legal and regulatory constraints. CSR is reflected in both corporate actions (performance outcomes) and voluntary reporting (disclosure), and the two are not necessarily equivalent due to managerial discretion in disclosure. Although the mechanisms remain unclear, the general consensus is that there is a positive relationship between CSR and CFP. In considering the drivers and goals of CSR, two themes emerge and are used to inform these papers: a stakeholder view of organizational relationships and the need to signal legitimacy in the face of changing social norms. A stakeholder view asserts that a wide range of groups across society are important to the long-term success and health of the organization. Legitimacy theory provides the explanation of why the stakeholder view is important to organizational success and can produce significant strategic advantages.

The first study utilizes archival data in an exploration of how to model the relationship between Corporate Social Performance (CSP) and CFP. Using independent evaluations of organizational CSP from KLD STATS, I explore the CSP-CFP relationship at four different levels (overall CSP, component CSP, directional component CSP, and issue-based component CSP). I consider the effect of CSP on a range of outcome measures of CFP performance, at different levels of aggregated performance measures and linkage to stakeholder groups. Finally, I explore the pattern of significant CSP components on individual CFP outcome measures to

determine if there is evidence for changing associations based on relevant stakeholder groups, in answer to concerns raised by prior research (Wood and Jones 1995; Orlitzky, Schmidt, and Rynes 2003). I find that (a) stock market measures are extremely *insensitive* to CSP; (b) the appropriate measurement level of CSP varies with the degree to which the CFP measure is aggregated and attributable to a more focused group of stakeholders; and (c) significant CSP aspects and associated CFP outcomes do vary in patterns and sensitivity.

The second study examines the role voluntary social disclosure plays in economic performance through an attribute I term *resilience*. Resilience influences stakeholder resource allocation decisions in the face of unexpected poor performance attributable to an exogenous shock and is associated with perceived organizational legitimacy. To test this model, an experiment is conducted in which participants are asked to assess the perceived legitimacy of an organization based on information characteristics of voluntary CSR disclosure and then to make reallocation decisions in the face of poor performance caused by an industry crisis not involving the underlying organization. I find that high quality disclosure (driven by reporting accuracy) is significantly associated with greater perceived legitimacy. In turn, the legitimacy construct is significantly associated with resilience following an exogenous shock.

The final study considers organizational choices in CSR disclosure to preserve credibility in the face of a crisis threatening the legitimacy of the institutional framework. Using qualitative data surrounding the turbulent 2001 – 2002 period encompassing the Enron and WorldCom scandals and the fall of Andersen, I examine organizational voluntary disclosure decisions to ascertain how they sought to preserve their own informational credibility and legitimacy in the face of a threat that did not directly involve their actions. I find that organizations responded

throughout this period by increasing signals of both transparency (greater CSR disclosure) and credibility (greater use of external sources of assurance of that disclosure). I also find that third-party assurance was *not* widely used, and remained at a steady, minimal percentage over time. Overwhelmingly, organizations turned to the implementation of an independent, external reporting framework (e.g., the Global Reporting Initiative's widespread guidelines) that provided consistency and comparability in their reporting, made use of standardized measurements and definitions, and required specific items and measures.

ACKNOWLEDGMENTS

I wish to gratefully acknowledge the assistance of my Chair, Robin Roberts, and the members of my committee, Vicky Arnold, Greg Trompeter, and Rob Folger. I also wish to acknowledge the help and advice provided by Sean Robb in wading through massive archival analyses. Thanks are also due to my long-suffering cohort members, past and present, who have listened to countless versions of these studies, provided reading and editorial comments, and patiently listened to me talk through hypotheses, models, statistics, and theories. Thanks, Katharine Drake, Andrew Dill, Alexei Lyubimov, and Jeffrey Reinking! I also wish to acknowledge the helpful comments and critiques I have received on various stages of these studies from participants in the Center for Social and Environmental Accounting Research North American Conference (Orlando, FL, 2010), the American Accounting Association Annual Meetings (San Francisco, CA, 2010 and Denver, CO, 2011), the Critical Perspectives on Accounting Doctoral Scholars Symposium (St. Petersburg, FL, 2011), and the Public Interest Section Midyear meeting of the American Accounting Association (Orlando, FL, 2012), and from presentations at the University of New Mexico and the University of Colorado – Colorado Springs.

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CHAPTER ONE: INTRODUCTION

Introduction

Increasingly, social and environmental performance dimensions are becoming a factor of organizational life. Whether one believes with Friedman (1970) that a concern for anything other than stockholder profits represents a socialistic appropriation of wealth or with Freeman (Freeman 1984; Freeman, Harrison, and Wicks 2007) that globalization and technology have rendered the "stockholder centered" model obsolete, observation of the behavior of public companies demonstrates the astonishing number and diversity of firms claiming to be "green," "sustainable," or otherwise environmentally and socially responsible. Prior research has debated the reasons for firms engaging in Corporate Social Performance (CSP) reporting,[1] from both a theoretical and a practical standpoint. Although the mechanisms remain unclear, and temporal relations are cloudy, the general consensus is that CSP is associated with an economic benefit and that the stakeholder model is an important factor in this relationship (Jones 1995; Porter and van der Linde 1995; Wood and Jones 1995: Cormier and Magnan 1999; Ruf et al. 2001; Margolis and Walsh 2003; Orlitzky, Schmidt, and Rynes 2003; Barnett 2007; Margolis, Elfenbein, and Walsh 2007; Doh et al. 2010; Dhaliwal et al. 2011).

The purpose of this stream of research is to explore the relationship between Corporate Social Responsibility (CSR) and organizational economic performance. CSR is reflected both in corporate actions (social performance) and in reporting (social disclosure). As CSR disclosure is

[1] CSP reflects actual performance outcomes; Corporate Social Responsibility (CSR) reflects the organization's stated policies and positions on these issues. CSP (or CSR) is comprised of social, environmental, and governance elements.

largely voluntary, the lack of standardization and the degree of managerial discretion as to what is reported and how it is measured (and defined) can result in image management and non-credible information (more of "spin" than signaling) and what is disclosed might not truly reflect performance (Merkl-Davies and Brennan 2007). Both social disclosure and social performance might affect economic performance (Ullmann 1985), and the mechanisms among these three aspects of organizational behavior and outcomes are still not clearly understood. To add to the complexity, CSR does not consist of a single factor, and the factors might not be weighted identically or reflect the interests of identical groups of stakeholders.

Two themes emerge within the stream of CSR literature and are used to inform these papers. A stakeholder view asserts that a wide range of groups across society are important to the long-term success and health of the organization, and addressing their needs and interests can produce significant strategic advantages (Hill and Jones 1992; Jones 1995; Freeman 1984; Freeman, Harrison, and Wicks 2007). Legitimacy theory (Dowling and Pfeffer 1975) provides an explanation of why a stakeholder view of the firm is important to organizational success. Society controls the allocation of scarce resources (capital, labor, markets for goods, raw materials) and constrains organizational behavior via regulation to ensure that organizational processes and outcomes reflect and incorporate societal norms, values, and goals. Legitimacy is a continuum, however, rather than an absolute state. Basic legitimacy depends on organizational competence and compliance with institutional norms and expectations reflected in laws and regulation and upheld by industry and professional association conventions (Suchman 1995). Full legitimacy goes "above and beyond" these minimal requirements and reflects a broader, non-codified range of social and economic values, thus reflecting a longer-term relational

commitment, as opposed to an exclusively profit-centered, transactional emphasis. Where an organization lies on the legitimacy continuum is dependent on how much of the "legitimacy gap" between basic and full legitimacy it chooses to close (Lindblom 2010).

Mandatory disclosure establishes basic legitimacy. Voluntary disclosure, however, moves the organization beyond basic legitimacy and towards full legitimacy. The degree to which the legitimacy gap is closed is dependent on voluntary disclosure credibility and organizational trustworthiness. CSR disclosure predominates as this information reflects the non-mandated, non-economic societal values and goals not incorporated into mandated financial reporting. CSR disclosure will then logically influence resource allocation, based on the degree to which organizations have displayed greater respect for the informational needs of relevant stakeholder groups. Although mandatory disclosures (i.e., the financial statements) are determined in terms of content and format, the discretionary, non-financial information desired by the full range of stakeholders might vary widely in content, measures, and format. Some of this variance is due to the difficulty of establishing objective measures or developing new measurement methods; but much of this variance is also due to managerial discretion and might be attributed to organizational attempts at impression management (Arya and Mittendorf 2005: Cho, Roberts, and Patten 2010; Merkl-Davies and Brennan 2007). Stakeholders are aware of this and tend to be skeptical of organizational intentions and behaviors in the light of recent widespread ethical scandals (Bazerman, Loewenstein, and Moore 2002; Bazerman et al. 2006; Moore et al. 2006). Consequently, stakeholders assess organizational information in terms of both content and intent, discounting corporate disclosures due to credibility issues (Barnett 2007; Kothari, Li, and Short 2009).

The degree to which CSR disclosure and CSR performance correlate will determine the credibility of the information and its ability to affect economic performance. Where there is a low correlation (i.e., image management), the information is deemed less credible and might result in weaker (or less persistent) judgments of legitimacy and the concomitant allocation of resources. Consequently, organizational economic performance is partially dependent on social performance, the degree to which social performance is credibly reflected in social disclosure, and the degree to which various components of CSR reflect the interests of the organization's key stakeholders. CSR is not costless or easy to implement: therefore, organizations must believe such activities to be demonstrably in their best interest to engage in CSR actions and disclosures. A recent survey of top corporate officers for sustainability in major international organizations found that nearly half of the respondents thought that "sustainable practices would definitely improve profitability" for their companies, and one manager went so far as to state that for every dollar spent on sustainability, the company experienced a return of $1.50 to $2.00 (KPMG 2011, 3). CEOs also believe that CSR contributes to improved overall performance and that environmental, social, and governance factors need to be embedded within the core business model (Accenture 2010).

The motivation behind these studies is the recent escalation in organizations involved in reporting CSR. In an era of globalization, consumer activism, and economic uncertainty, organizations recognize that their success depends on a broader audience with wide-spread access to information via the Internet (KPMG 2005, 2008). These stakeholders desire information in order to assess overall organizational performance and define this performance much more broadly than stockholders or analysts. In response, organizations increasingly

engage in voluntary disclosures of CSR. KPMG reported in 2005 that 64% of the Global Fortune 250 published CSR information in some format, and that number jumped to 83% in 2008 (KPMG 2005, 2008).[2] New definitions of performance include qualitative and "citizenship" issues such as quality, governance, employee relations, sustainability, and human rights. Failure to address these concerns increases assessed risk and regulatory costs and decreases available resources. In a series of surveys of multinational firms' perceptions of their top risks, several items pertaining to CSR performance and resource allocation found their way into the top 10 (Ernst & Young 2009, 2010). "Access to credit" and "increased regulation and compliance" were in the top two slots for 2008, 2009, and 2010 (Table 1), while "reputation risks" rose to 10th place in 2009 and, specifically as "Social acceptance risk and corporate social responsibility," moved to 9th place in 2010. These risks reflect the influence of multiple key stakeholder groups beyond shareholders alone.

The Internet, market liberalization, globalization, and increased activism have resulted in a climate in which company performance (especially negative events) is quickly known around the world (Freeman, Harrison, and Wicks 2007). Disasters are no longer local: an oil spill in Australia can produce demands for increased environmental monitoring and safeguards at every company site, from North American to Africa (Deegan, Rankin, and Voght 2000) and can directly influence other, "innocent" members of the same industry (Blacconiere and Patten 1994). Well-organized and vocal stakeholder groups and the competitive, globalized economy

[2] Increasing European demand for CSR type disclosures (although this demand is not universal in terms of content, format or whether mandatory) also is a factor in the increase in reporting across the Global 250. However, the changes in European disclosure requirements have been greatly driven by stakeholder activism and thus also reflect stakeholder engagement pressures.

have produced increased public pressure and, in response, increased organizational sustainability reporting to demonstrate legitimacy (Neu, Warsame, and Pedwell 1998).

As a result, organizations face increasing pressures to disclose non-financial performance. The pressure arises not only from stakeholder groups (and society in general), but also from competitors who, if they are able to demonstrate greater responsiveness to societal concerns and values, might attract stakeholder support and scarce resources away from poorer performing organizations. Competitiveness and legitimacy have been found to be two of the driving forces behind organizational decisions to "go green" and engage in environmental reporting (Bansal and Roth 2000), but some organizations (e.g., Starbucks) are moving even further and acknowledging a responsibility to account for social, environmental, and governance performance. By voluntarily signaling long-term commitment to sustainability and stakeholder values, these firms should be perceived as more trustworthy, enjoy greater stakeholder commitment, and therefore have greater access to resources and less likelihood of governmental regulation.

Ullman's (1985) model of the possible interactions among social disclosure, social performance, and economic performance provides a framework for these three studies (Figure 1). Beginning with an archival exploration of the structure of the relationship between CSP and corporate financial performance (CFP), I seek to determine the appropriate factors and measurement level of organizational CSR. In the second study, I explore this relationship by proposing a psychological construct based on perceived legitimacy derived from information characteristics in voluntary disclosure ("resilience"). Resilience operates to benefit the more legitimate organization by influencing stakeholder resource allocation decisions in the face of

unexpected poor performance. Finally, in the third study, I consider voluntary reporting and external sources of credibility that are able to strengthen legitimacy following an exogenous shock from a loss of credibility in the surrounding institutional structure.

Study One: Exploring the Interface of Corporate Economic and Social Performance: What Matters to Whom?

Considerable effort has been expended in ascertaining what effect, if any, CSR performance and/or disclosure has on economic performance (Cochran and Wood 1984; Ullmann 1985; Berthelot, Cormier, and Magnan 2003; Orlitzky, Schmidt, and Rynes 2003; Margolis, Elfenbein, and Walsh 2007). The overall conclusion is that CSR has a positive effect on economic performance, but the mechanisms by which this occurs remain unclear (Cormier and Magnan 1999; Ruf et al. 2001; Margolis and Walsh 2003; Orlitzky, Schmidt, and Rynes 2003; Margolis, Elfenbein, and Walsh 2007; Doh et al. 2010; Dhaliwal et al. 2011). The uncertainty in the relationship (and variance across prior studies) includes questions of how CSR variables should be measured and the appropriate financial outcome measures to be used. Consequently, the first study explores measurement issues between CSR and economic performance via the lens of stakeholder theory.

Stakeholder theory asserts that organizations are dependent on a wide range of social groups for their success, and a myopic focus on a single group (i.e., shareholders) will result in, at best, lack of long-term competitive advantage and decreased performance (Freeman 1984; Freeman, Harrison, and Wicks 2007; Eccles, Ioannou, and Serafeim 2011). One of the chief explanations for inconsistent results in analysis of the CSP-CFP link is that the CSP and CFP

variables usually chosen reflect the interests of differing stakeholder groups, weakening their relationship (Wood and Jones 1995; Orlitzky, Schmidt, and Rynes 2003). There have also been indications that (a) the measurement level of CSP (e.g., aggregated, overall performance vs. individual issues) might be a significant cause of weaker statistical relationships, (b) negative and positive information might be weighted differently, and (c) relevant CSP factors might vary across groups or CFP measures (Carroll 1979; Berman et al. 1999; Cormier, Gordon, and Magnan 2004).

Using an independent assessment of CSP provided by KLD STATS and Compustat data for a variety of organizations across industries over three years, the study tests the relationships among different measurement levels of CSP and a range of CFP measures. Using hierarchical regression, four different models are evaluated for their ability to explain variance and differing patterns of CSP factors across a range of CFP outcomes designed to reflect differing stakeholder groups. The study contributes to the literature by exploring the still nebulous structure of the CSP-CFP relationship and the varying strength of this relationship across a broader range of CFP outcomes. I find that the most appropriate measurement level for CSP factors varies with the measurement level (and degree of aggregated performance) for the CFP outcome measure. For measures of stock price, overall CSP is only occasionally significant. For measures of net cash flow, the most appropriate CSP measurement level is directional at the individual component level (environmental, human rights, diversity, employee relations, community relations, governance, and product quality). For revenue, however, which is directly and clearly associated with a single stakeholder group (customers), the most sensitive CSP measurement level appears to be issue-based within components. Additionally, I find that the strength (and extensiveness)

of the association varies considerably across CFP outcome measures, and these associations might be directly related to the stakeholder groups predominantly concerned with the given outcome.

Study Two: The Benefit of the Doubt: Resilience in Stakeholder Assessments of Corporate Social Performance Disclosure

The second study explores the interaction between CSP disclosure and economic performance, specifically in the face of unexpected poor performance following an industry crisis. High quality voluntary CSR disclosures might close the legitimacy gap between institutional requirements and non-codified, often emergent societal norms and values by increasing perceived legitimacy, primarily through investor assessments of information credibility and organizational trustworthiness. When an organization demonstrates concern for broader social values, and goes "above and beyond" in its actions and reporting, this signals a commitment to longer-term, mutually beneficial relationships with its stakeholders. There is a strong link between this level of "full" legitimacy and "thick trust" (Vosselman and van der Meer-Kooistra 2009), with increases in voluntary disclosure quality leading to increased assessments of disclosure credibility. The quality of voluntary disclosures is largely determined by the completeness and the accuracy of the information. Higher quality disclosures will be more complete (including both positive and negative performance reports) and more accurate (containing more specific details and quantitative information) (Cormier and Magnan 1999; Merkl-Davies and Brennan 2007). The combination of completeness and accuracy also contributes to stakeholder perceptions of organizational *intent* in disclosure along the continuum

of impression management to transparency (Merkl-Davies and Brennan 2007). In turn, perceptions of intent and the extent of the disclosure will tend to produce assessments of organizational trustworthiness (Koonce and Mercer 2005).

Greater perceived legitimacy resulting from the information characteristics used in voluntary reporting will produce a fund of what I term "resilience" among stakeholders. Resilience reduces volatility in the face of unexpected poor performance by absorbing a portion of transactional or relational risk. As a result, organizations that enjoy a greater degree of resilience should suffer less of a decline in resources in the face of bad news. The importance of this relationship in an era of rapid, global change, technology-driven speed of communication, and an uncertain economic environment is considerable.

The model is first tested with ANCOVA using a 2 x 2 factorial design (accuracy x completeness) to assess information characteristics' influence on non-professional investors' perceptions of organizational legitimacy. Mean scores for individual items within the resilience factor display the expected relationships across conditions, with the greatest scores in the high accuracy/high completeness cell and the lowest scores in the low accuracy/low completeness cell. I find that high quality voluntary disclosure characteristics significantly explain variance in legitimacy, with accuracy driving the relationship. To test the link between perceived legitimacy and subsequent resilience to unexpectedly poor performance, the factor score for the construct of resilience is regressed on the factor score for the construct of perceived legitimacy. I find that perceived legitimacy significantly accounts for variance in the construct of resilience. Factor scores across individual cells also suggest that reporting accuracy is associated with perceived legitimacy and reporting completeness is associated with resilience.

Study Three: In Bad Company: Voluntary Disclosure and Preserving Credibility During External Crisis

The third and final study addresses the interaction between social disclosure and social performance through the lens of legitimacy theory. Social performance can be equated with legitimacy (Dowling and Pfeffer 1975) and will range from "basic" legitimacy reflective of competence and compliance with legal and regulatory requirements to "full" legitimacy that also incorporates *non*-mandatory incorporation of societal expectations. Basic legitimacy is reflected in mandatory disclosures, whereas the degree to which the organization covers the "legitimacy gap" between basic and full legitimacy (Lindblom 2010) is reflected in voluntary reporting. However, voluntary reporting can also serve another, vital function.

If basic legitimacy reflects compliance with institutional regulations and requirements, then the credibility of mandatory reporting is supported by the legitimacy of the institutional framework. When a critical piece of that framework suffers a credibility crisis, as occurred with public accounting firms during the Andersen/Enron disaster, then the credibility of the mandatory disclosures of reporting organizations also suffers, *even when the reporting organization has been uninvolved in the events surrounding the credibility crisis*. In this case, I predict that organizations will attempt to strengthen their own legitimacy by demonstrating increased transparency and credibility in voluntary reporting, signaling both their respect for societal norms and their difference from the failed institutional entity. In order for voluntary disclosure to be able to fulfill this function, however, it must be perceived as credible. Because of skepticism regarding management's discretionary choices in what and how they report, independent, external sources of credibility enhancement (such as a reporting framework or use

of a third-party assurer) are normally used (Merkl-Davies and Brennan 2007; Kothari, Li, and Short 2009; Simnett, Vanstraelen, and Chua 2009; O'Dwyer, Owen, and Unerman 2011; Pflugrath, Roebuck, and Simnett 2011).

Using qualitative data, I examine organizational voluntary CSR disclosure choices among S&P 500 companies during the turbulent 1998 – 2005 period. In so doing, I contribute to the literature by shedding light on how organizations use information disclosure to protect and repair perceptions of legitimacy and their strategies for enhancing the credibility of voluntary disclosures. Non-parametric analysis reveals that the use of both CSR disclosure and a reporting framework increases steadily and significantly before, during, and after a credibility crisis, while the use of third-party assurance (and auditors, specifically, as a source of third-party assurance) remains steady but minimal. In fact, I find that during a credibility crisis centered on the credibility/legitimacy of public accounting firms as a component of the institutional framework, the use of auditors is never more than 50% of overall third-party assurers and decreases during the crisis period. I find that disclosure *intensity* also increases during this period, with transparency being important immediately prior to the crisis, but transparency with at least one means of credibility enhancement accelerating during and after a crisis.

Conclusion

The association between CSP and CFP is a complex one. CSR performance and CSR reporting are each related to CFP, as well as to each other. CSR performance contributes to CFP, but the strength of the relationship will vary across measures of economic outcome, as will the individual CSR components that display an association with a given CFP factor. Additionally,

economic outcome measures based on stock market performance are highly insensitive to CSR as the associated stakeholder group (shareholders) is chiefly concerned with financial performance only. Therefore, a single, aggregated measure of CSR is not appropriate and measures that have used a single measure, or a single component of overall CSR performance, might explain the mixed results from prior studies.

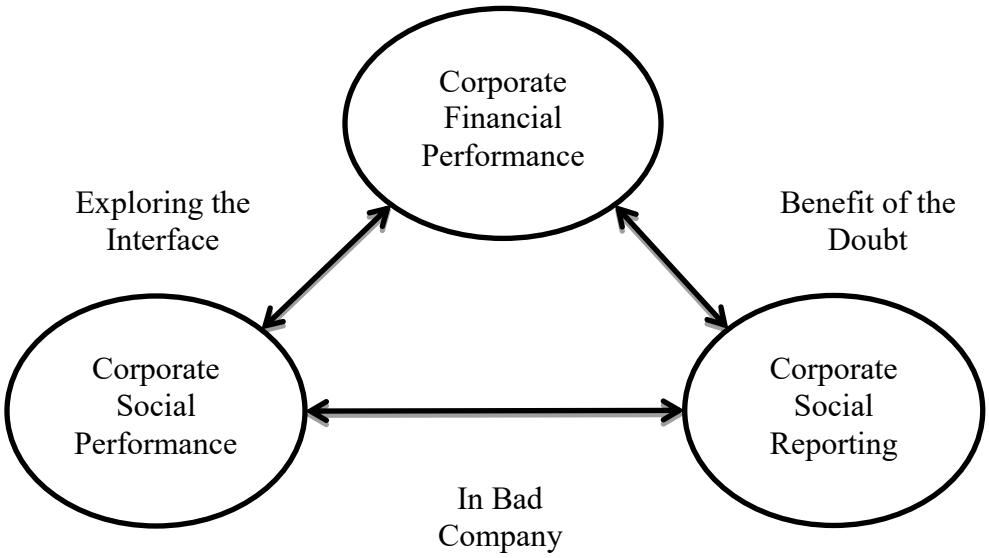
The relationship between CSR and CFP is not necessarily a direct one. CSR might positively affect CFP by its influence on intervening constructs. Some of the intervening constructs mentioned in the literature include organizational learning, strategic match, reputation, operational efficiency and effectiveness, and innovation. Organizational disclosures of CSR performance, and the degree to which they are perceived as credible and trustworthy measures of actual performance, also lead to stakeholder judgments of organizational legitimacy. Perceived legitimacy then affects stakeholders' subsequent resource allocation decisions.

The relationship between CSR performance and CSR disclosure is also an important contributor to CFP. CSR disclosure can reflect organizational intentions and values both through the amount of information voluntarily provided to stakeholders (transparency) and the degree to which that information is rendered credible by the support of external, independent sources. As such, choices in the information characteristics of voluntary CSR disclosures can help an organization close the legitimacy gap between institutionally mandated "basic" legitimacy and the "full" legitimacy reflective of societal norms *not* enshrined in regulation. More importantly, in cases where the legitimacy of the institutional framework itself is questioned due to ethical scandals, compromised independence, or perceptions of its failure to protect the public interest (Bazerman, Loewenstein, and Moore 2002; Bazerman et al. 2006; Moore et al. 2006; Nelson

2006), voluntary disclosure can bolster the affected mandatory disclosures of "innocent" reporting organizations, allowing them to preserve or repair threatened legitimacy.

The stream of research represented in this dissertation seeks to shed light on this complex, interdependent relationship through three studies examining each of the three possible associations among CSR performance, CSR disclosure, and CFP. The next three chapters each contain one of the studies. Chapter five concludes the dissertation, summarizing and linking the findings from the three individual studies, and discussing the overall themes emerging from research into organizational choices in CSR reporting and behavior.

Figures



Based on Ullmann's (1985) framework
Figure 1: Conceptual Framework of Research Stream

Tables

Table 1: Ernst & Young Surveyed Top Global Business Risks and Relationships to Stakeholder groups

Ernst & Young Top 10 Global Risk	Representative Stakeholder Group(s)	Rank in 2008	Rank in 2009	Rank in 2010
Access to credit	Creditors, Suppliers	2	1	2
Increased regulation and compliance	Regulators, Government, Local Communities	1	2	1
Radical greening	Consumers, Regulators	9	4	8
Non-traditional entrants	Competitors	16	5	7
Managing talent	Employees	11	7	4
Executing alliances and transactions	Suppliers, Partners, Customers	7	8	10
Reputation risks	All Stakeholders	22	10	
Social acceptance risk and corporate social responsibility (new in 2010)	Customers, Local Communities, Regulators, Government, Society	n/a	n/a	9

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CHAPTER TWO: EXPLORING THE INTERFACE OF CORPORATE FINANCIAL AND SOCIAL PERFORMANCE: WHAT MATTERS TO WHOM?

Introduction

The purpose of this study is to examine the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP). CSP is used as a label for corporate social, ethical, and environmental programs, processes, and outputs which, with one exception, are not required to be reported within the firm's financial statements or other mandated reports. The exception, of course, consists of the major costs and liabilities associated with failure in these areas (e.g., fines, environmental clean-up costs, and lawsuits). Although factors that comprise CSP might have significant impacts on overall firm performance (Litan and Wallison 2000), many are harder to assess with standardized, quantitative measures and might operate through implicit contracts and expectations (Cornell and Shapiro 1987). Examples of organizational performance areas that are often affected significantly by CSP factors include employee commitment and training, product quality, responsiveness and flexibility to market changes, and innovation (Moore 1993; Porter and van der Linde 1995; Grow, Hamm, and Lee 2005; Freeman, Harrison, and Wicks 2007; Boehe and Cruz 2010). This study seeks to explore the relationship between components of CSP and CFP and to examine the appropriate level of measurement and range of outcome measures. The key assumptions underlying this study are that (1) neither CFP nor CSP is adequately measured by a single variable and (2) relationships among variables will vary across stakeholder groups and contexts (Barnett 2007; Margolis et al. 2007).

Much ink and effort has been spent in prior research to argue for or against the role CSP plays in contributing to CFP, but our understanding of how corporate economic performance is affected by the interaction of stakeholder relationships and non-economic performance remains limited. Nevertheless, an understanding of these interactions is important. Stakeholder theory provides a meaningful theoretical base for examining the relationship between CSP and CFP (Freeman 1984; McWilliams and Siegel 2001; Barnett 2007; Freeman, Harrison, and Wicks 2007; Mackey, Mackey, and Barney 2007) by explaining why performance in non-economic areas important to key stakeholder groups will, in turn, influence economic performance via the resources controlled by those stakeholders (e.g., labor, capital, raw materials, market share, etc.). If an organization's stakeholders have expectations regarding non-financial performance, and these expectations determine subsequent allocation of resources (or willingness to forego increased regulation or contracting costs), then management needs to monitor, plan for, and report on the actions, policies, and outcomes affecting the relevant non-financial areas. Stakeholders will have an impact on organizational performance as they set expectations, evaluate outcomes, and reward or punish the firm based on that evaluation (Wood and Jones 1995; Grow, Hamm, and Lee 2005; Barnett 2007). Although stakeholder theory is the most frequent theoretical lens used to make the business case for Corporate Social Responsibility (CSR)[3], there seems to be a consistent mismatch between the stakeholder approach (requiring consideration of multiple stakeholder groups) and the outcome measures used (which tend to predominantly focus on the priorities of shareholders) (Wood and Jones 1995).

[3] It is important to differentiate between CSR, a measure of perceived responsibility, obligation, or philosophical orientation towards stakeholders, and CSP, a measure of actual performance, outcomes, or verifiable policies. CSP also differs from the measurement of perceptions of an organization, which are usually captured in reputational scores.

In general, reviews of prior literature have found a preponderance of evidence for at least a weakly positive correlation between CFP and CSP (Ullmann 1985; Orlitzky, Schmidt, and Rynes 2003; Margolis, Elfenbein, and Walsh 2007; Eccles, Ioannou, and Serafeim 2011). Study results, however, have been mixed and are often attributed to lack of theoretical underpinnings or methodological problems, including measurement levels, mismatch between CSP and CFP variables, and poor measures in general (Alexander and Buchholz 1978; Ullmann 1985; Wood and Jones 1995; McWilliams and Siegel 2000; Orlitzky, Schmidt, and Rynes 2003). Most prior research has concentrated on CFP as market-based performance measures or accounting measures at a relatively high level of aggregation (Margolis, Elfenbein, and Walsh 2007). However, aggregated measures (or those using only a limited subset of CSP components) might miss the relevant associations. For example, if CSP performance is strongly associated with sales via the customer stakeholder group, the overall influence on CFP might not be apparent at the net income or return on equity levels of CFP measurement.

A firm's worth is reflected in both market and operational performance (Easton and Harris 1991), so both types of CFP measurement are required to give a complete view of organizational value. The sensitivity of some CFP measures vary depending on the time frame or might be highly correlated with each other (McWiliams and Siegel 2000; Ruf et al. 2001). Failure to carefully match CSP and CFP measures with the same stakeholder group orientation has been an issue behind prior inconclusive findings (Ullmann 1985; Jones 1995; Wood and Jones 1995; Orlitzky, Schmidt, and Rynes 2003). This implies that different performance measures might be associated with different stakeholder groups and might vary across context (Carroll 1979; Cornell and Shapiro 1987; Miller and Bromiley 1990; Wood 1991; Hill and Jones

1992; Jones 1995; Wood and Jones 1995; Mitchell, Agle, and Wood 1997; Barnett 2007; Margolis, Elfenbein, and Walsh 2007). Consequently, I use multiple CFP outcome measures to evaluate the influence of CFP factors on performance, and to capture the interests of related groups of stakeholders.

In this study, I use an external assessment of CSP based on organizational outcomes, policies, and procedures, and a range of CFP measures for organizations in a variety of industries across three years. I contribute to the literature by evaluating four different models, reflecting different measurement levels of CSP, for their ability to explain variance across CFP outcomes. Patterns of significance across CSP components as they differ among CFP outcomes are also examined for potential evidence linking specific outcomes to specific stakeholder groups. I find the appropriate CSP measurement level, and the strength of the relationship, is related to the degree of aggregated performance in the CFP measure. I find that revenue, which is the least aggregated measure and most predominantly associated with a single stakeholder group (customers), has the strongest CSP-CFP relationship and is best described by the model using issue-level CSP component measurement. Measures of net cash flows, reflecting greater aggregated performance and two or more predominant stakeholder groups, are better described by a directional component model and have a weaker overall CSP-CFP relationship. Change in stock price, although associated with one predominant stakeholder group, might operate at such a high level of aggregation that no association with CSP was found at any measurement level, or might reflect the dominance of financial outcome goals for the associated stakeholder group (shareholders). I also find that issues are not treated homogeneously (some are dichotomous scales, some are measures of exposure, some are directional measures) and there are clear

differences in sensitivity to, and associations among, CSP components across CFP outcomes. These findings are important for researchers in helping to clarify measurement issues within the fields of CSR research and stakeholder theory. The results are also important for managers in understanding how CSR policies, processes, and outcomes affect different groups of key stakeholders and CFP measures, and in clarifying why the effort to measure and voluntarily disclose CSP is worthwhile.

The paper is organized into five sections. Section two reviews relevant literature on stakeholder theory and the CSP-CFP link and develops the research hypotheses. Section three describes the research design, datasets, and measures used. Section four presents the results of testing the competing measurement models across the range of CFP outcome measures. Section five concludes with a summary of key research findings and a discussion of the implications of these findings for future research.

Literature Review and Research Questions

Stakeholder Theory, Corporate Social Responsibility, and Social Performance

Roberts and Mahoney (2004) group stakeholder research into three levels of analysis: managerial agency, organizational, and societal. Agency theory (Jensen and Meckling 1976) focuses on principal-agent contracts and costs among owners, creditors, and managers, but fails to incorporate (often implicit) contracts with other key groups (Cornell and Shapiro 1987). As a result, stakeholder theory at the managerial agency level of analysis tends to focus on maximizing profit for shareholders and might ignore long-term costs to the organization or

society at large (e.g., unionization, increased governmental regulation, cleanup of Super Fund sites, etc.) from short-sighted or irresponsible decisions (Blacconiere and Patten 1994; McWilliams and Siegel 2000; Patten 2002; Mackey, Mackey, and Barney 2007). From a societal level of analysis, legitimacy theory (Dowling and Pfeffer 1975) posits that *society* allocates scarce resources to those organizations involved in activities that are economically viable, legal, and legitimate, with legitimacy defined as reflecting societal norms and values (Carroll 1979). This implies that organizations are judged on more than simply maximizing economic performance and are dependent on the judgments of society as a whole. Freeman's (1984) introduction of stakeholder theory, with its specific conceptualization of key stakeholder groups affecting (or affected by) organizational performance links legitimacy theory and agency theory and functions most clearly at the organizational level of analysis.

Stakeholder theory incorporates consideration of the values, interests, and goals of multiple stakeholder groups. Stakeholder groups have claims on the firm, but because claims are more implicit than explicit, stakeholder groups recognize they are vulnerable to moral hazard (Cornell and Shapiro 1987), especially in terms of the completeness and accuracy of information provided by management. The successful organization recognizes this and will signal its intention (via the voluntary provision of information on performance areas of interest) to align processes and outputs with the concerns and goals of stakeholder groups. By moving beyond mandated performance and disclosure (agency theory) and incorporating the non-mandated values and expectations of non-shareholder groups (stakeholder theory), the organization is able to demonstrate its legitimacy (Lindblom 2010) and honor implicit contracts.

Under stakeholder theory, management is faced with multiple (often competing) stakeholder groups with differing levels of urgency, power, and importance (Mitchell, Agle, and Wood 1997). Jones (1995) synthesized stakeholder concepts, economic theory, insights from behavior science, and ethics in developing instrumental stakeholder theory to explain organizational management of (and prioritization among) competing stakeholder interests. In general, because costs are incurred to avoid opportunism, markets reward those able to contract efficiently by providing credible information to stakeholders. Therefore, ceteris paribus, stakeholder assessments of organizational credibility, trustworthiness, and integrity reduce agency costs and produce a competitive advantage.[4] How the organization responds to stakeholder groups, and which groups it regards as key, will therefore influence financial performance. The theory specifically allows for organizational behavior and relevant CSP factors to vary across stakeholder groups, subcultures within those groups,[5] and, presumably, situations (Mitchell, Agle, and Wood 1997; Barnett 2007; Margolis, Elfenbein, and Walsh 2007). Although the theoretical focus on stakeholder groups has produced a proliferation of claims for a wide range of groups,[6] this study focuses on key stakeholder groups defined as those that have expectations of future benefit (or harm) from organizational actions or products (Donaldson and Preston 1995).[7]

[4] Interestingly, McWilliams and Siegel (2001) assert that firms employing CSR to manage stakeholder relationships have higher costs, but also enjoy higher revenues because they operate on a higher demand curve at every price than do non-CSR firms.

[5] For example, an organization might have: activist and non-activist customers; suppliers determined by competitive bid and those tightly linked into the supply chain via a strategic partnership; domestic employees and international employees, etc.

[6] Up to and including the planet itself.

[7] Stakeholder groups are identified by their interests in the organization, whether or not the organization has a corresponding interest in them. This implies that some areas of CSR that organizations currently regard as unimportant (and consequently do not monitor or manage) might have unexpected influences on financial performance (Donaldson and Preston 1995; Margolis and Walsh 2003; Freeman, Harrison, and Wicks 2007).

Once we have accepted that other stakeholder groups beyond shareholders are important in determining organizational performance, addressing the expectations (and subsequent evaluations) of these stakeholders becomes necessary. These expectations usually go beyond simple profit maximization to include questions of fairness, ethics, governance, environmental stewardship, and so on. Stakeholder interests tend to be more complex and require tradeoffs among multiple performance goals. Although Friedman famously equated any consideration of goals beyond shareholder profit maximization as "theft and appropriation," he acknowledged that the organizational responsibility "to make as much money as possible" was contingent upon simultaneously "conforming to the basic rules of society, both those embodied in law and those embodied in ethical custom" (1970, 33).

Management's choice of the appropriate CSP components to incorporate into organizational policies and processes depends not only on their identification of key stakeholder groups, but also on perceived effectiveness of CSP and an understanding of the salient *indirect* links to CFP outcomes. Management's evaluation of components/associations can vary from a Friedman-like measurement of future cash flows and maximization of market value (Mackey, Mackey, and Barney 2007) to a wider duty to society and the public good (Margolis and Walsh 2003). Carroll's (1979) four-factor model of corporate performance (economic, legal, ethical, and discretionary) specifically noted that relevant social issues will differ both within and across industries, implying that (a) the significant CSP components affecting CFP outcomes will also vary across industries and/or (b) the ability of individual managements to identify key stakeholder groups and related critical CSP factors also varies within groups. Unfortunately, prior research in the CSP-CFP relationship has been plagued by methodology issues associated

with inconsistent findings (Alexander and Buchholz 1978; Ullmann 1985; Wood and Jones 1995; McWilliams and Siegel 2000; Orlitzky, Schmidt, and Rynes 2003) and that have largely not been examined beyond questions of the appropriate datasets to use for the operationalization of CSP construct(s).

Measures of Corporate Social Performance

The measures for CSP vary widely and have not been standardized. Definitions of key terms and operationalization of the construct(s) might be inappropriately related, ambiguous, or inconsistent (Ullmann 1985; Wood and Jones 1995; Orlitzky, Schmidt, and Rynes 2003). For example, operationalizations frequently include reputational measures (often self-reported), quantitative outcomes, categorical counts of the existence of a program/policy (regardless of effectiveness), or qualitative textual analysis of corporate disclosures or news releases. There are considerable differences between corporate reputation and corporate behavior, and studies that do not consider this difference in analyzing relationships to CFP might create spurious findings. Reputational and disclosure measures of CSR reflect internal actions and decisions. This study focuses on the link among corporate *actions* or *positions taken* and the association with related economic outcomes, so CSP measures are limited to those representing outcomes, policies, and programs.

Although the overall conclusion of recent research is that CSR has at least a slight positive association with CFP, the mechanism by which this occurs remains unclear (Cormier and Magnan 1999; Ruf et al. 2001; Margolis and Walsh 2003; Orlitzky, Schmidt, and Rynes 2003; Margolis, Elfenbein, and Walsh 2007; Doh et al. 2010; Dhaliwal et al. 2011; Eccles,

Ioannou, and Serafeim 2011). A major cause of the uncertainty rests with inconsistency in the construction or measurement level of CSP variables. Prior research has tended either to examine a single, limited aspect of CSP (e.g., environmental performance, human rights concerns, governance, etc.) or to use a single, aggregated measure to incorporate all aspects of CSP equally (Margolis, Elfenbein, and Walsh 2007). The CSP-CFP link might be better established using individual measures for separate CSP components, and not all components assumed to be significant in determining CSP might actually be so (or might vary depending on the CFP measure used to measure CSP-influenced performance). Orlitzky, Schmidt, and Rynes (2003), for example, in a meta-analysis of prior research found that environmental performance measures had a weaker direct relationship with CFP than social performance, and Berman et al. (1999) have found evidence that some CSP components might have an *indirect* relationship to CFP by moderating the relationship between strategy and performance. A high level of aggregation might hide significant variances in performance among individual components, and firms might consciously use this in order to bury poor performance in a key area with multiple reports of good performance in less important areas (Arya and Mittendorf 2005). Stakeholders might also differentially weight aspects of CSP performance and consciously engage in trade-offs in performance across CSP areas. This leads to the first hypothesis:

H1a: CSP component measures will explain a greater amount of variance in CFP measures than an aggregated overall CSP measure.

Negative and positive CSP might not be weighted equally: stakeholders might overweight negative information or perceive positive information to be less credible (Patten 2002; Margolis, Elfenbein, and Walsh 2007; Kothari, Li, and Short 2009; Linthicum 2010).

Prior capital markets research has demonstrated that directional (positive vs. negative) measures might be significantly more sensitive in establishing a statistical relation between CFP-oriented predictors and outcomes (Ball and Brown 1968), and the same effect might exist for CSP measures if stakeholders are more sensitive to reports of negative performance in key areas.[8] As a result, models incorporating CSP components that have different weights for positive and negative performance or which might have only one significant directional score might be more sensitive to the CSP-CFP link when CFP outcomes are properly matched with stakeholder groups. As a result, I derive my second hypothesis:

H1b: Directional CSP component measures will explain a greater amount of variance in CFP measures than aggregated CSP component measures.

If greater disaggregation results in greater explanatory power and there are differences in how directional measures affect the underlying component, then there might be another measurement level to be assessed. Research has largely focused on broad categories of CSP that are often based on reporting (or ratings agency) frameworks and that have very little variation among number of categories or issues within categories among competing frameworks. I have also followed this approach, adopting the seven components utilized by KLD STATS: Community, Corporate Governance, Diversity, Employee Relations, Environment, Human Rights, and Product.[9] Even this level of analysis, however, might be too aggregated. Stakeholders might focus on a specific issues or sub-categories within the CSP component scores

[8] This would conform to Kahneman and Tversky's (1979) prospect theory explaining decision making under conditions of risk.
[9] For a more complete discussion, please see the research design section.

(e.g., child labor under Human Rights, Superfund designation under Environment, or excessive executive compensation under Corporate Governance). Consequently, a factor analysis of items within the CSP components might indicate that each component actually reflects evaluations of performance for separate groups of items (reflecting underlying key issues), leading to the third hypothesis:

H1c: Issue-oriented CSP component measures, based on significant factors within each component, will explain a greater amount of variance in CFP measures than directional CSP component measures.

Measures of Corporate Financial Performance

Another methodological issue in the determination of the CSP-CFP relationship centers on the choice of the measure of CFP outcome and the degree to which the chosen measures predominantly reflect the interests and influence of a single stakeholder group (Wood and Jones 1995). Prior work has focused on accounting or market-based CFP outcome variables such as Return on Assets (ROA), Return on Equity (ROE), stock price, or earnings (Margolis and Walsh 2001). These outcome measures reflect the performance concerns of investors and shareholders who primarily concentrate on financial performance. Thus, associations with measures of non-financial performance (i.e., CSP factors) might not be significant. To adequately capture the effect of CSP on CFP, it is necessary to choose a range of CFP measures that capture the interests of key stakeholder groups.

For example, in considering the appropriate CFP outcome to associate with a CSP issue (e.g., human rights concerns for child labor in overseas sweat shops), researchers should consider which stakeholders (1) set expectations (customers, activist groups), (2) experience the direct effect of company behavior (suppliers, employees), (3) evaluate company performance (customers, activist groups), and (4) take action in response to corporate behavior (customers, activist groups) (Wood and Jones 1995). In other words, measures of whether child labor is involved in company manufacturing activity would probably not show a clear relationship to stock price, as the stakeholder group most clearly associated with stock price (shareholders) does not directly experience the effect of the company behavior. The same measure of child labor linked with sales revenue, however, should show a much clearer picture as customers set expectations of behavior, evaluate performance, and act in response to that evaluation by making a decision whether to boycott the company's product.

The level of aggregated performance represented by the chosen CFP outcome measure is also important. Measures based on stock market performance are often focused on short-term horizons, arbitrage opportunities due to momentary – and artificial – differences in value (Zhang 2010), and economic performance indicators (e.g., analyst earnings forecasts). Stock-marekt based measures might therefore be insensitive to the effect of CSP on intervening constructs such as learning, operational effectiveness, or strategy and their influence on longer-term economic performance. Accounting-based measures, such as ROA, might operate at too aggregated a performance level – such that CSP linkages to specific, focused measures of CFP become insignificant when those focused measures are "rolled up" into overall performance ratios. Different CSP components (or the factor-based issues within those components) capture different

risks to which the organization is exposed (and the degree to which organizational behavior affects those risks), and the relationship between these CSP-determined risks and potential CFP measures might vary based on the predominant stakeholder interest represented by the CFP measure, because different stakeholder groups assess the same risks differently (Miller and Bromiley 1990; Barnett 2007; Freeman, Harrison, and Wicks 2007; Margolis, Elfenbein, and Walsh 2007; Lindblom 2010).[10] Additionally, accrual based measures might add noise to the analysis by increasing the difficulty of linking CSP actions and decisions to the actual, *current* CFP actions and decisions. Outcome measures based on cash flow, on the other hand might be more sensitive to CSP influence due to their capture of "real time" effects, and not the noise caused by different recognition timelines. Net cash flow measures may also serve as a measure of earnings quality, and earnings quality measures – with their incorporation of transparency, honesty, and integrity – might be more sensitive to the CSP influence on CFP outcomes. Consequently, prior conflicting or weak research findings might be related to the aggregation level or accrual/cash basis of CFP outcomes measures, as well as to the measurement level of the CSP measures.

In general, CSP will be positively associated with CFP as organizations are able to demonstrate their legitimacy, and, thus, receive greater allocations of scarce resources. Individual CSP components will vary in strength of association among CFP outcomes based on the similarity among the predominant stakeholder group(s) represented by each measure. Although better CSP performance will produce increased economic performance in the long run, it is possible that there might be a negative association in the short run if current expenditures are

[10] Paine (2003) seems to suggest that the ethics components of CSP specifically affect risk via information credibility and costs, which then influence CFP.

required to produce later efficiencies or increased profitability. This study focuses on the business case for CSR, and the degree to which decisions and actions taken to reflect greater CSR will be associated with concurrent greater CFP due to a greater focus on operational efficiency and effectiveness, innovation, waste reduction, strategic matching, risk reduction, and stakeholder engagement.

Prior research has concentrated to a large degree on outcomes related to market performance. As such, these measures tend to concentrate on economic- and accrual-based performance. Measures focusing on operations and cash-based performance have been underutilized. The assumption has been that stock prices adequately reflect and incorporate long-term value and expectations of future cash flow. However, as Zhang (2010) demonstrated, High Frequency Trading (HFT) now predominates in the US capital markets, reducing investment horizons to an average of *seven months*, and significantly distorting market performance (specifically through the market's inability to quickly or accurately incorporate information). Consequently, there is valid cause for concern that market-based measures do *not* reflect long-term value and growth prospects, nor do they capture CSP influence.

Stakeholder theory implies that different stakeholder groups will emphasize different CSP concerns and goals, which implies that different CFP outcome measures might be associated more strongly with different stakeholder groups and that there might not be a single CFP measure that adequately captures the association between CSP and CFP outcomes for all stakeholder groups. Prior findings have indicated that there are significant differences in preferred outcome measures among shareholders and other stakeholder groups (Miller and Bromiley 1990; Wood and Jones 1995; McWilliams and Siegel 2001; Grow, Hamm, and Lee

2005; Boehe and Cruz 2010; Margolis, Elfenbein, and Walsh 2007). However, there has been considerable difficulty in disaggregating the various stakeholder groups (Wood and Jones 1995). I approach the problem from the other direction: by inspecting varying patterns of significant CSP components loading onto a range of CFP outcome measures, I attempt to match the revealed associations to the most likely associated stakeholder group responding to Wood and Jones' (1995) criticism of "mismatched" CSP-CFP linkages (i.e., an "appropriate" match between CSP and CFP measures). The mismatch appears to be based on both the overall association of the CFP measure with CSP (i.e., does stock price reflect concerns with CSR or simply a limited range of economic indicators?) and the appropriate match of the individual CFP measure with a CSP measure reflecting the same predominant stakeholder group(s) (reflected in the pattern of associated significant CSP components critical to that stakeholder group). Therefore, I investigate two related research questions:

RQ2a: Do CFP outcome measures differ in their sensitivity to CSP?

RQ2b: Are CFP outcome measures associated with different CSP components?

Research Design and Measures

Population and Data

The population for the study consists of organizations receiving a CSR rating from KLD STATS across the three year period 2007 to 2009. This period was chosen to reflect years in which the economy was good (2007), bad (2008), and recovering (2009) to address performance

across a range of economic conditions. The designation for each year was based on the annual percentage change in GDP: 2007 had a 2.33% increase, 2008 a 2.73% decrease, and 2009 displayed an early stage of recovery with a small, but positive, increase (0.25%).[11] Across this time period, there were 8,772 firm-years with KLD ratings. Financial performance and firm characteristic data were then extracted from Compustat for as many of these companies as possible, resulting in a sample size of 8,138 firm-years (2,643 in 2007; 2,723 in 2008; 2,772 in 2009).

KLD Research and Analytics'[12] KLD STATS[13] database provides annual ratings of approximately 3,100 of the largest US companies by market capitalization. KLD has a strong qualitative component and is based on independent evaluations of an organization's degree of exposure to risk or superior performance across CSP categories. These evaluations are based to a large degree on the objective presence/absence of a program or involvement in (or absence of) relevant controversies. Wood's (1991) model of CSP based on Carroll (1979) positions CSP as impacts, programs, or policies; consequently, KLD STATS scores for the presence/absence of these items align well with theoretical models. Investors have been shown to prefer such third-party reports, even with greater information costs, due to credibility and timeliness issues (Kothari, Li, and Short 2009); thus, KLD STATS is deemed a valid source of external assessment of organizational CSR performance and is widely used in the literature.

The database provides scores across seven major CSR areas: Community, Corporate Governance, Diversity, Employee Relations, Environment, Human Rights, and Product. A

[11] The average annual percentage change in GDP from 2000 to 2006 was 2.48%.
[12] KLD STATS has recently been purchased by MSCI ESG Research, which provides investment support tools to clients worldwide.
[13] "STATS" stands for Statistical Tool of Analyzing Trends in Social and Environmental Performance and is now found at www.msci.com/products/esg/stats.

difficulty with KLD stats in prior years arose from the change within each component as new CSP issues arose or were resolved. For example, organizations doing business in South Africa once received a concern score (now eliminated) and several social items have migrated across categories. Fortunately, major shifts in composition took place in 2002, well before the study timeframe, and categories seem to have stabilized.[14] Table 2 displays the number of items across categories which can vary considerably. Prior criticism has focused on problems with comparability due to variance in items between and among components. After conducting tests on summed scores, I also converted scores to percentages and conducted additional analyses with no significant differences in findings. Summed scores are preferred as they are more easily interpretable and provide a measure of relative exposure to CSR expectations via the number of items within strength and concern scores for each category.

Research Model

Relationships between CSP components and CFP outcomes are tested using correlational analysis and the competing measurement models are tested for each outcome measure using hierarchical regression. The general model tested is (subscripts for firm-years are omitted for simplicity):

$$CFP_p = \beta_0 + \Gamma_1 CSP_q + \varepsilon, \quad (1)$$

where:

[14] Nevertheless, two items were eliminated because they were not present in all years of the study period. Of those three items, only one had any companies scoring positively on the item (10 in 2008, 5 in 2009).

CFP_p = one of the group of p outcome measures (PRCHG, FINCF, INVCF, OPSCF, REV);

B_0 = the intercept;

Γ_1 = vector of slope coefficients for CSP_q;

CSP_q = one of q measurement models for CSP scores (overall, component, directional, item-based); and

ε = error term containing CFP variance *not* contributed to by CSP.

Measures

Dependent Variables

Five measures of CFP outcomes chosen to potentially represent the predominant interests of varying stakeholder groups are used within each of the four, alternate measurement models.[15] The percentage price change in the closing stock price at fiscal year-end, $[(Price_t - Price_{t-1})/Price_{t-1}]$, captures stock market performance (PRCHG) and represents shareholders. Three measures of cash flow are used to capture cash-based, "real time" operational performance: net cash flows from financing activities (FINCF), from investing activities (INVCF), and from operating activities (OPSCF). Within the cash flow measures, FINCF, in its focus on financing decisions, might predominantly capture management's decisions involving investors and lenders

[15] While all stakeholder groups should be interested in all aspects of performance, most groups should also tend to concentrate predominantly on a few measures due to simple heuristic and saliency effects on their decision making. For example, shareholders will focus on quarterly earnings reports, analysts' expectations, and share price movements (see Zhang 2010), whereas suppliers might focus more on cash flows, inventory levels, and investment plans. The key here is that different stakeholder groups will have different dominant concerns, even though they might (and should) incorporate multiple aspects of financial and non-financial performance.

as stakeholders. INVCF focuses on long-term investments in property, plant, and equipment and might capture relationships with local communities and governments and expectations regarding future regulation and taxation. OPSCF is used to represent relationships with employees, suppliers, and management.[16] All three measures are scaled by total assets to control for size effects. Finally, revenue (REV) is also used as a measure of (product) market performance, predominantly reflects actions and interests of customers, and is also scaled by total assets. While other studies have used a relatively few measures, the range of outcome measures used in this study is designed to respond to Wood and Jones' (1995) call to choose financial outcome measures that are matched to the interests, evaluations, and actions of stakeholder groups represented by the CSP measures used.

Independent Variables

KLD STATS reports dichotomous (1 = present) scores for multiple items categorized as "strength" or "concern" within each of seven categories:

COM = Community (Charitable giving, educational support, disadvantaged housing support, volunteer programs, in-kind giving, charitable drives, investment controversies, negative economic impact, tax disputes, etc.);

CGOV = Corporate Governance (executive compensation, ownership strength, transparency, political accountability, public policy support, etc.);

[16] OPSCF also incorporates relationships with customers, as does REV. Both measures are retained in order to contrast the effects of aggregation level and number of predominant stakeholder groups.

DIV = Diversity (female/minority presence in top ranks, as CEO, on Board, or as contractors; promotion, work/life benefits, employment of disabled, Gay & Lesbian policies, controversies, etc.);

EMP = Employee Relations (union relations, profit sharing program, employee involvement, retirement benefits and pension, health and safety, workforce reductions, etc.);

ENV = Environment (beneficial products/services, pollution prevention, recycling, clean energy, management systems, hazardous waste, regulatory problems, emissions, agricultural chemicals, climate change, etc.);

HUM = Human Rights (indigenous peoples relations, labor rights, involvement in Burma, etc.);

PRO = Product (quality, research and development, innovation, product safety, marketing/contracting practices, antitrust, mission to disadvantaged, etc.).

Within each component, items are grouped into strength and concern categories and summed (both summations producing positive values) for each firm-year. The individual strength [e.g., HUM(+)] and concern scores [e.g., CGOV(-)] for each component are then used in the *directional* component measurement model. The component strength and concern scores are combined (strength – concern) to produce the score for the *component* measurement model, which might be a positive or negative value. The seven component scores are then summed to produce the score for the *overall* measurement model which might, again, be either positive or negative. For both component and overall measurement models, a negative score represents a preponderance of concern items. An oblique factor analysis is conducted for all items (strength

and concern) within each component and the resulting scores for each factor are then used in the *item-based* component model.

Additional Variables of Interest

This study concentrates on measurement issues, and not on the construction of a predictive model to estimate the effects of individual firm characteristics. Consequently, certain qualitative variables that might produce variation based on categorical membership are used to partition the sample for sensitivity tests following the main analyses. These variables reflect profitability (net loss/net gain for reported net income), economic conditions (based on the three years of the study), and country of incorporation (United States or Other). The appropriate level of measurement should remain constant across partitions, although sensitivity to and patterns among significant CSP factors might vary.

Analysis and Discussion

An examination of descriptive statistics for each of the variables highlights some interesting relationships (Table 3). PRCHG shows a positive mean value, but a very large standard deviation. Mean INVCF is negative, reflecting the expected *outflow* of cash in organizational investments in property, plant, and equipment, with levels very similar to OPSCF. Overall CSP is negative, but with a fairly large range. Individual CSP components vary, with most having negative means. At the directional level (where both strength and concern scores are represented by a positive, summed number), there is considerable variation within the mean

and the range of scores. All factor-based issue scores have, by construction, identical means of 0 and standard deviations of 1; ranges, however, display considerable variation.

Directional scores, although more sensitive to different weights placed on strengths and concerns, might not sufficiently handle differences in weighting among issues. Some CSR issues might be predominantly negative, others predominantly positive, and others might be equally balanced. Some issues might have relatively few concern items, but those items might be so sensitive that they become highly weighted (e.g., use of child slave labor in outsourced production).[17] If this were the case, measurement of CSP outcomes on an issue-based level would result in greater explanations of variance for the CFP outcome measure. Principal component analysis (PCA) was conducted on all seven of the CSP components, using oblique rotation (oblimin) as inter-component items and factors are expected to be related to each other (Table 4). The pattern matrix reported allows the clearest interpretation of the contribution of individual items to each factor; although less easily interpretable, the structure matrix is reported as it incorporates the interdependent effects of items on each other (much as multiple regression does for a group of outcome variables).

For COM (Panel A), the overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .67, and all KMO values for individual items were greater than .639, which is well above the acceptable limit of .5 (Field 2009). Bartlett's test of sphericity $X^2(55) = 3301.478$, $p < .001$, indicated that correlations among items were sufficiently large for the PCA. An initial analysis resulted in three factors with eigenvalues over Kaiser's criterion of 1 and which, in

[17] These highly sensitive items are also the most fluid and ephemeral, often representing the current public "hot button" based on recent disasters or press releases. However, certain items are consistently of high salience and concern and would remain on this list over time and across stakeholder groups (e.g., regulatory fines for nuclear operators or concerns about inadequate storage of nuclear fuel rods).

combination, explained 37.38% of the variance. After inspecting the scree plot, I retained all three factors in the final analysis. Factor loadings after rotation suggest that COM1 represents community support (education, volunteerism, promotion of self-sufficiency among economically disadvantaged, affordable housing), COM2 represents the economic impact of operations on the community (community reinvestment, negative economic effects, affordable housing support, tax disputes), and COM3 represents charitable giving (charitable and in-kind giving, community opposition). Because charitable giving seems to be associated with controversies mobilizing community opposition, this is likely *reactive* charitable giving.

For CGOV (Panel B), after I dropped two items with inadequate individual KMO values, the remaining ten items had an overall KMO = .65 and the lowest individual item was KMO = .515. Bartlett's test of sphericity, $X^2(45) = 3311.188$, $p < .001$, confirmed sufficient inter-item correlation for the PCA. Four factors with eigenvalues greater than 1 resulted in 51.26% combined explanation of variance. Factor loadings after rotation suggest that CGOV1 represents accountability (transparency, political accountability, support for public policy benefitting the environment and society), CGOV2 represents executive compensation levels (positively related to limited compensation and negatively related to excessive compensation),[18] CGOV3 represents the (predominantly negative) tone at the top (presence of a strong corporate culture, ethics problems, failure to support public policy benefitting the environment and society), and CGOV4 represents failure/inability to address CSR issues (presence of a weak corporate culture, controlled by another firm with CSR problems/controls another firm with CSR problems).

[18] Limited compensation is considered to be less than $500,000 per year for a CEO or $30,000 per year for outside directors; the organization is considered to have excessive compensation when exceeding $10 million per year for a CEO or $100,000 per year for outside directors.

All items loaded adequately on DIV (Panel C), overall KMO = .764, individual KMO scores > .592, Bartlett's $X^2(55) = 9936.119$, $p < .001$. Three factors explained 45.44% of combined variation. After rotation, item loadings suggest that DIV1 represents the openness of the work environment to the concerns of diverse groups (work/life benefits, women and minority contracting, employment of disabled, gay & lesbian policies, commitment to diversity), DIV2 represents non representativeness (such that a minority/female CEO, promotion of minorities/females to line positions, and presence of minorities/women/disabled on the board of directors are negatively associated with this factor and a lack of women on the board or among senior line managers is positively associated with it), and DIV3 represents exposure to Affirmative Action/diversity controversies (recent substantial fines/penalties, involvement in controversies, lack of commitment to diversity).

One item was dropped from EMP (Panel D), with the final model displaying an overall KMO = .620, individual KMO scores > .571, and Bartlett's $X^2(45) = 2748.384$, $p < .001$. Initial analysis extracted four factors with a combined explained variance of 50.79%. Item loadings following rotation suggest that EMP1 represents the general work environment (good union relations, strong health and safety programs, and recent involvement in or finds from major health and safety controversies). Because EMP1 shows a positive correlation with recent involvement in Health/Safety controversy, this suggests *responsiveness* to employee concerns. Loadings on EMP2 suggest employee involvement (cash and profit sharing, stock options, information sharing, and other initiatives), on EMP3 suggest *poor* employee relations (history of poor union relations, other employee relations controversy), and on EMP4 suggest concerns

about pension funding and retirement obligations (negatively correlated with retirement benefits strength and positively correlated with underfunded or inadequate retirement benefits programs).

One item was also dropped from the original analysis of ENV. The resulting analysis (Panel E) has an overall KMO = .796, all individual KMO measures > .692, Bartlett's $X^2(66) = 10938.843$, $p < .001$, and three factors with a combined explained variance of 42.99%. Following rotation, item loadings suggest that ENV1 represents exposure to operational energy and pollution concerns (hazardous waste liabilities/penalties, fines/penalties for air/water violations, excessive toxic emissions, revenues highly related to coal/oil combustion, other controversy, significant recent efforts to increase energy efficiency and/or use clean or renewable fuels), ENV2 represents *proactive* internal operational control and efficiency (pollution prevention programs, recycling programs, management systems and certification, proactive activities), and ENV3 seems to represent an industrial variable, with negative values representing oil/coal exposure and positive values representing agricultural chemical exposure.

One item was also dropped from the initial analysis of HUM. The final analysis (Panel F) produced an overall KMO = .572, all individual KMO > .503, Bartlett's $X^2(15) = 2315.845$, $p < .001$, with three factors with a combined explained variance of 63.73%. After rotation, HUM1 seems to represent exposure to human/indigenous rights issues (transparency/disclosure, indigenous right concerns, other human rights controversies) and HUM2 seems to represent exposure to offshoring or overseas outsourcing issues (transparency in disclosure and monitoring, labor rights initiatives, labor standard controversies in supply chain). Both HUM1 and HUM2 are measures of *exposure* to these issues, not performance, as both strengths and

concerns load positively on the related factors. Finally, HUM3, with its single item for involvement in Burma, seems to be a measure of political exposure.

Finally, analysis of PRO resulted in overall KMO = .621, all individual KMO > .519, and Bartlett's $X^2(28) = 1752.560$, $p < .001$ (Panel G). Initial extraction produced three factors with a combined explained variance of 46.10%. Following rotation, item loadings suggest that PRO1 represents unethical treatment of consumers (product safety violations/fines, consumer fraud, misleading advertising, antitrust violations, predatory pricing, defective products, treatment of franchisees, etc.), PRO2 represents a reputation as a market leader in the quality and innovation of its products, and PRO3 represents a social mission.

Evidence on Appropriate Measurement Level

Once scores were calculated for each of the four measurement models (overall, component, directional, and item-based), a series of hierarchical regressions was conducted on each of the five CFP outcome measures (Table 5). Overall measures of R^2 are very small as much of CFP is associated with organizational size, and is controlled for in the model by scaling four of the five outcome variables.

Overall CSP was only able to contribute to the explanation of variance within REV but at an extremely low level ($F = 56.949$, $p < .001$, adjusted $R^2 = .007$). None of the measurement levels produced a model able to explain PRCHG adequately, highlighting the poor linkage between stock-market based performance and CSP. Component, directional, and issue based measurement levels all produced models with significant F-values for the remaining CFP outcomes. Change in R^2 indicates that the component level of measurement was able to explain

a greater amount of variance than an overall measure (H1a) and directional measures of CSP explained more variance in CFP outcome than component level (H1b). Results for H1c are mixed. The issue-based (factorial analysis of KLD STATS component) CSP measurement model explained more variance in REV than directional scores (change in R^2 = .024, p < .001, adjusted R^2 = .072), but there was no significant improvement in the directional model for FINCF, INVCF, or OPSCF; in fact, adjusted R^2 decreased slightly for FINCF and OPSCF. In general, it would appear that CSP should be measured at the directional level for net cash flow measures, and at the issue level for revenue, while market based measures are insensitive to the effect of CSP on CFP.

Evidence on Varying Association with CSP among CFP Measures

Correlations among outcome variables are all well below .80 (n. r.), indicating that multicollinearity is not an issue and different aspects of CFP are being captured by each measure. In fact, the two outcome measures of most concern, REV and OPSCF, are only correlated at r = .207, p < .001. Within CSP scores, all component scores are significantly (p < .001) positively correlated with the overall score (n. r.). As would be expected within directional scores, strength scores are significantly positively correlated and concern scores are significantly negatively correlated with the overall score (p <.001). Strength and concern scores also load appropriately onto each of the component scores (p < .001, n. r.), with the exception of HUM(+) which is insignificant. There are four directional measures with very high loadings on the associated component score (at r = .80 or better): CGOV(-), DIV(+), HUM(-), and PRO(-). The issue is more complicated at the issue-based score level (Table 6). All three COM factors are positively

correlated with component COM and all three HUM factors are negatively correlated with component HUM; the other component scores have mixed correlations with their factors, but all are at a $p < .001$ significance level. There are three factors with very high loadings on the underlying component score, and which appear to be driving that component: CGOV2 (executive compensation), DIV2 (non-representativeness), and PRO1 (unethical treatment of consumers).

Correlations among predictors and outcomes provide an insight into the conflicting results in prior research and the degree to which CSP measurement level affects results as all CSP measures are not correlated with all CFP outcomes, nor does a single CSP measure show consistent directionality among CFP outcomes. The overall measure (Table 7, Panel A) is correlated *negatively* to REV and *uncorrelated* with all other outcomes. Neither COM nor ENV is correlated to any of the outcome measures. CGOV and DIV have opposite effects on all measures except PRCHG (with which they are uncorrelated). EMP is negatively correlated with PRCHG (the only component to be correlated with this outcome) and REV. Both HUM and PRO are positively correlated with FINCF and negatively correlated with OPSCF; HUM is also negatively correlated with REV and PRO is negatively correlated with INVCF.

There are more correlations among directional components and CFP measures (Panel B). The outcome measure most related to shareholders and market performance, PRCHG, is only correlated with EMP(-) ($r = .037$, $p < .010$), such that a higher concern score produces greater change in stock price. FINCF is correlated with 13 out of 14 CSP directional scores, INVCF with 4 out of 14, OPSCF with 12 out of 14, and REV with 11 out of 14; this partially supports RQ2a by confirming a significant association between CSP and CFP measures, although the

relative strength of the association is very low. There are clear differences among CFP outcomes both in which CSP measures are significant and in the direction of the relationship, providing support for RQ2b by confirming that outcomes are differently affected by CSP. Intuitively, increased strengths should be associated with greater legitimacy and therefore greater resource allocation and superior opportunities, and increased concerns with decreased legitimacy, resource allocation, and opportunities, but many of the directional component relationships do not reflect this expectation The counter-intuitive interpretation suggests that CSP might not be a simple matter of the relative quantity of strengths versus concerns, but might better be measured by *issues* within each component, with each issue containing some combination of strengths and/or concerns.

Correlations among issue-based factors and CSP outcomes are displayed in Panel C. There are different patterns of directionality and significance among individual factors and CFP outcomes, supporting RQ2b's assertion that CSP impacts on CFP outcomes are not homogeneous. There are also differences in the number of significant factors (and the degree of relationship) associated with each CFP measures, supporting RQ2a's assertion that CFP outcomes are not equally sensitive to CSP. For example, PRCHG proves to be uncorrelated with *any* item-based measure of CSP, while FINCF is significantly correlated with 20 out of 23 factors. HUM1, HUM2, and PRO3 are uncorrelated with any of the tested CFP outcomes, while COM2, CGOV2, DIV1, and DIV2 are correlated with all CFP measures except PRCHG. It should be noted that the correlations, although significant, are not large (absolute values range from .012 to .163, both for REV).

In considering the CSP-CFP relationship when CFP is regressed on CSP at the directional level, there are clear differences in patterns of significant CSP scores across outcomes (Table 8). Referring back to the hierarchical regression results reported in Table 7, INVCF is the least sensitive (adjusted R^2 = .005) and REV the most sensitive (adjusted R^2 = .049), with OPSCF similar to INVCF (adjusted R^2 = .009) and FINCF (adjusted R^2 = .022) between INVCF and REV (RQ2a). The very small adjusted R^2 values suggest that the CFP outcome measures used might still be too aggregated to display the influence of CSP, and a finer level of analysis might better demonstrate the linkage.

For INVCF, only three concern scores are significant, with CGOV(-) leading to net cash inflows and DIV(-) and ENV(-) leading to net cash outflows. For REV, both measures of COM, CGOV, and EMP are significant, as are DIV(+) and HUM(-). EMP concerns have by far the largest effect on REV [nearly twice the size as the next largest effects, COM(+) and COM(-)]. All four CFP measures show different patterns of significant directional scores and of the directional scores that are associated with more than one CFP outcome, only CGOV(+) shows the same directional relationship for all CFP outcomes. Only ENV concerns show any significant association across CFP outcomes, with greater concerns producing greater net cash outflows from investing activities. Likewise, only concern scores for HUM are significantly associated with CFP, as an increase in HUM(-) results in a corresponding increase in REV. Neither directional score for PRO is significantly associated with any CFP measures, which would suggest that perhaps the directional score is not capturing the effect of CSP on CFP as we would logically expect issues of product quality, innovation, and monopoly to have significant effects on REV, at the very least.

Issue level analysis of the CSP relationship to CFP outcomes proves somewhat easier to analyze (Table 9). Excessive executive pay, negative tone at the top, and employee antagonism reduce FINCF, as do good employee relations (although this latter might possibly reflect a lesser *need* for increased financing due to increased operational efficiency and productivity). The more non-representative the upper levels of the company and the more exposed the company is to pollution concerns, the greater is FINCF. Economic impact on the community (which is largely negative for this issue) produces net cash *inflows* for investing activities, as does a negative tone at the top, the failure/inability to address CSP issues and membership in the agricultural chemicals industry. Non-representativeness of upper management, on the other hand, seems to increase INVCF. OPSCF is increased by a negative economic impact on the community (including issues such as plant closings and tax disputes), by excessive executive compensation, and by good employee relations, and is decreased by employee antagonism and non-representativeness of senior management. REV is increased by negative economic impact on a community (possibly via contracted services at unfavorable terms for the community), excessive executive compensation, involvement in an Affirmative Action controversy, good employee relations, employee antagonism, pension funding issues, and exposure to outsourcing/offshoring issues. REV is decreased by community support activities, the failure/inability to address CSP issues, non-representativeness of senior management, exposure to pollution concerns, exposure to Indigenous/Human Rights issues, and involvement in unethical treatment of customers.

While there are several individual issues that display puzzling relationships to CFP outcomes, the overall conclusion is that RQ2b is supported and individual CSP measures are associated with different CFP outcomes, and in different combinations. It is especially notable

that PRCHG, which is focused on shareholders and financial performance, does *not* display significant associations with CSP issues which, nevertheless, do contribute significantly to CFP via net cash flow measures and revenue. REV shows the greatest range of significant relationships – the extent (and counter-intuitive directionality) might suggest the effect of reported CSP on customer perceptions and associated factors of noise and reporting delay.

Additional Analysis of Sensitivity to Qualitative Characteristics

It is possible that the relationship between CSP and CFP is driven by overall profitability. There has been an ongoing debate whether good CFP provides the operational slack to devote to CSP, or whether good CSP results in improved CFP due to improved stakeholder relationships. At least one study has also found that *negative* CFP might drive CSP efforts in certain highly-visible areas as a means of restoring legitimacy (Chen, Patten, and Roberts 2003). By partitioning the sample into net loss and net profit reporting organizations, comparisons of the modeled relationships might be made (Table 10, Panel A). If parsimonious model selection criteria are used (significant *F*-value and a significant increase in R^2 from the prior level), it appears that REV is best modeled at the issue-level of CSP for both types of organization, echoing the overall model. However, there are some differences. Net profit organizations appear to best model the relationship between FINCF and INVCF and CSP at the component level and between OPSCF and CSP at the issue level. Net loss organizations, on the other hand, model FINCF-CSP at the directional level (mirroring the overall model) but use a *less*-detailed measure of CSP for OPSCF (component) and INVCF (overall) – interestingly, these organizations *also* show a significant model for the relationship between PRCHG and overall

CSP suggesting that the stock market becomes more sensitive to organizational non-financial performance when financial performance is suffering.

It is also possible that differences in the country of incorporation might be significant. Organizations incorporated outside the United States might place more emphasis on CSR performance, or might emphasize different aspects of CSP. For example, organizations in Europe have far greater regulatory and public pressure on environmental issues, as reflected in the Kyoto protocol, the Greens party, and widespread concern with greenhouse gas emissions. European and Asian companies also have significantly different regulations regarding employee-employer relations and workplace conditions. Partitioning on country of incorporation (United States or Other) and using the parsimonious model criteria from above, it appears that US-incorporated organizations mirror the overall model, with the exception of INVCF that is modeled at the component level (Panel B). Non US-incorporated organizations model the relationship at the component level for FINCF, OPSCF, and REV, but more appropriately model the CSP-INVCF relationship at the directional level.

Conditions in the surrounding economic environment might also affect the model. The sample covers a three-year period, with 2007 reflecting a good economy, 2008 a bad economy, and 2009 the beginning of an economic recovery. Parsimonious model criteria would suggest that in years with a good economy, PRCHG is not directly associated with CSP; FINCF is modeled at the directional level; INVCF and OPSCF at the component level, and REV at the issues level (Panel C). During years with a bad economy, REV and PRCHG are significantly associated with issue level CSP; FINCF, INFCF, and OPSCF are all modeled at the component level. In years with a recovering economy, PRCHG is still associated with CSP, but at the

overall level; FINCF at the component level; OPSCF at the directional level; REV at the issue level; and INVCF is not significantly associated with CSP. However, if we use a less restrictive model (significant *F*-value, highest adjusted R^2) to help with the lesser power caused by both the smaller sample size and the single year in each condition, the pattern better reflects the overall model and isolates a few interesting variations. In the less restrictive condition, INVCF is still unassociated with CSP at any level during an economic recovery and PRCHG is significantly associated with CSP during a poor economy (at issue level) and a recovering economy (at directional level).

Differences in partitioned samples might also be reflected in differences in aspects of CSP contributing to CFP. Table 11 illustrates the standardized Betas for REV regressed on CSP issue-level measurements for the overall model and across partitions. Net profit-reporting organizations mirror the complete model, whereas net loss-reporting organizations do *not* include the significant relationships with CGOV4, DIV3, ENV1, and PRO1 found in the original model. Additionally, the relationship for COM2 is far weaker, the relationships for DIV2, EMP1, and HUM1 are far stronger, and there is an additional positive relationship to PRO3. Organizations incorporated in the United States mirror the original model, whereas organizations not incorporated in the United States display a completely different model, with almost none of the same significant associations. Only DIV1, EMP4, ENV3, HUM2, and HUM3 are significant, with HUM2 being far stronger than in the original model or the US-incorporated group. The patterns of significance largely hold across all four economic conditions. In good years, CGOV4 and ENV1 are not significant; in bad years, DIV3, ENV1, HUM1, and PRO1 are no longer significant; and in recovering years, only HUM1 and PRO1 continue to be non-significant. For

both bad and recovering economic years, COM2 contributes much less to a variance in REV than it does in good years or the overall model.

Table 12 provides a comparison of the standardized Betas for the net cash flow measures regressed on CSP directional-level measures. Interpretation of FINCF is not clear-cut as the level of cash flows can reflect a greater *need* for investment funds or easier *access* to investment funds (or both). When FINCF is partitioned on profitability (Panel A), EMP strengths and concerns and DIV concerns drop out of the model, most probably due to issues of power. For profitable organizations, COM strengths and ENV concerns increase inflows, whereas CGOV concerns and DIV strengths reduce inflows. It should be noted that ENV concerns are not significant for either the overall model or the net loss group. FINCF for net loss firms, on the other hand, is only significantly related to CGOV: both strengths and concerns for this component decrease inflows. When partitioned on country of incorporation, there are clear differences in the CSP factors contributing to FINCF. COM strengths increase inflows whereas CGOV strengths and concerns, DIV strengths, and EMP strengths and concerns decrease inflows for US firms' FINCF. Non-US firms' FINCF, on the other hand, are only significantly related to COM concerns (decrease inflow) and DIV concerns (increase inflow). Economic conditions also show different patterns, although these results should be interpreted with caution due to sample size and power. In good economic years, CGOV concerns decrease and DIV concerns increase financing inflows. In bad economic years, COM strengths increase and CGOV concerns, DIV strengths, and EMP strengths decrease financing inflows. At the beginning of an economic recovery, CGOV and EMP concerns decrease financing inflows.

Net cash flow from investing is normally an *outflow*, and the standardized Beta values must be interpreted accordingly (Panel B). In the original model, greater CGOV concerns reduce investment (or increase disinvestment), whereas greater DIV and ENV concerns lead to greater investment outflows. When the sample is partitioned on profitability, ENV concerns are no longer significant for either net profit organizations, but PRO concerns significantly reduce investment outflows. Net loss firms also appear to weight ENV and DIV concerns more heavily than the overall sample whereas net profit firms weight DIV concerns less than the overall sample. Only DIV concerns are significant for INVCF in both US and non-US incorporated organizations (and are much more heavily weighted for non-US firms). Across economic conditions, recovery years show *no* significant directional CSP relationships, and good economic years do not show the relationship to ENV concerns from the overall model.

Interpretation of OPSCF is also confused as changes in cash flow might be the result of increased inflows from sales or decreased outflows from greater efficiencies. In the original model, OPSCF were increased by CGOV concerns, DIV strengths, and EMP strengths, and decreased by COM strengths. Partitioning the sample on profitability produces very different patterns for OPSCF (Panel C). Net profit-reporting firms are much more sensitive to COM strengths (increasing cash outflows) and to DIV and EMP strengths (increasing cash inflows). Additionally, DIV, EMP, and HUM concerns also increase cash inflows (or reduce outflows), whereas COM, ENV, and PRO concerns reduce cash inflows (or increase outflows). Only CGOV and ENV concerns are significant for net loss-reporting organizations; ENV concerns increase inflows/decrease outflows for this group in contrast to profitable companies. Once again, there are considerable differences between US and non-US companies. Organizations

incorporated in the United States show increased operational cash inflows (or decreased outflows) for CGOV and DIV strengths and CGOV concerns, and decreased inflows (or increased outflows) for COM strengths. Organizations incorporated outside the United States, on the other hand, show increased cash inflows for COM concerns and both strengths and concerns in EMP, whereas CGOV strengths reduce inflows/increase outflows. The contribution of EMP strengths to cash inflows are especially highly weighted for non-US organizations (Beta = .244, $p < .001$) in contrast to US firms (Beta = .027, $p < .05$). Good economic years mirror the overall model (although CGOV concerns seem to be more weighted in their ability to increase cash inflows/decrease cash outflows). In years with a bad or recovering economy, however, only CGOV concerns are significant (and contribute to increased cash inflow/decreased cash outflow).

Overall, the sensitivity analyses have indicated potential areas for future research into the influence of key stakeholder groups, and their particular associated CSP concerns, on organizational CFP. There are differences between net profit and net loss organizations, and during a bad or recovering economy, suggesting that scrutiny may increase in areas of non-financial performance during times of financial difficulties. Future research could pursue this implication and seek to determine if there are specific, predictable CSP components or issues that become critical during organizational performance failures. A preliminary analysis also suggested that country of incorporation also influences the level of association between CSP and CFP measures. A recent survey of European investors (Novethic 2010) supports this implication in finding that investors in different countries use different methods of evaluating organizations (e.g., performance monitoring, positive "best in class" screening, negative screening, etc.).

Conclusion

There were mixed results for the first set of hypotheses, with the measurement level explaining the greatest amount of variance in CFP outcomes varying across CFP measures. CSP measured at the issue level (H1c) appears to measure the greatest degree of variance in REV as a measure of CFP. This might suggest that customers, the stakeholder group most directly responsible for REV, are focused on specific issues that are important to them or are widely-reported. Measures of net cash flows, on the other hand, seem to have more variance explained with a CSP measure of directionality within components (H1b). This might indicate that net cash flow measures are still at too aggregated of a level and that the CSP-CFP relationship might differ across items contributing to cash flow. Additionally, the CFP measures are not clearly associated with a single group of stakeholders, but rather related groups and this might also affect the degree of sensitivity in the measurement level. Finally, variance in changes in stock price are not significantly explained by CSP, supporting Wood and Jones' (1995) suggestion that prior research findings were contradictory due to mismatches among CSP and financial outcome variables.

I suggest that these findings provide evidence that CSP *does* contribute to CFP, but that the link is not necessarily direct, nor is it the same for all types of financial performance. CSP might most clearly be linked at the issue level with REV, which is then contained within OPSCF at the directional level. By the time cash flows contribute to PRCHG, CSP shows no significant ability to explain variance within stock market measures. The CSP-CFP relationship seems to be stronger as CFP is less aggregated and reflects fewer stakeholder groups. Future research could

concentrate in these areas by examining the major accounts contributing to cash flow measures and their association both with CSP outcomes and with stakeholder groups.

There were clear differences in patterns of association across CFP outcome measures for both directional and issue-based measurement levels, suggesting that different CFP outcomes capture the interests of differing stakeholder groups. Patterns varied in terms of which CSP aspects were related to a given outcome measure (RQ2b) as well as relative strengths for the same CSP aspect on different CFP outcomes (RQ2a). The sensitivity of the individual outcome measures to CSP measures also varied: within the significant models INVCF was the least sensitive (adjusted R^2 = .005 at a directional level of measurement) and REV the most sensitive (adjusted R^2 = .049 at an issue-based level of measurement), further supporting RQ2a.

Company profitability might affect how stakeholders evaluate CSP. Profitable companies might be assessed by performance within CSP categories, except for revenue which is affected by customer focus on salient issues. Non-profitable companies, however, might be assessed with a greater weight placed on negative performance and more sensitivity to CSP in stock market reactions. Stakeholders in non-US incorporated companies might assess CFP at an overall component level whereas stakeholders in US incorporated companies place greater weight on negative performance. These differences might be related to differences in the degree to which social and environmental performance is regulated among the United States and other countries. During years with a poor or recovering economy, CSP appears to be significantly related to change in stock prices and might be used to differentiate organizations. This also might reflect prior findings (Blacconiere and Patten 1994) that better CSR disclosure in the face of an industry crisis resulted in less of a stock price downturn. INVCF might no longer be

significantly related to CSP during an economic recovery if corporate investment itself is being constrained due to the economic environment.

Limitations of this study include the limited sample size across economic conditions. Future extensions could examine changes in CSP-CFP relationships both over time and across varying economic environments. Additionally, further work is needed in moving to a more disaggregated level of CFP measure and attempting to associate specific stakeholder groups to specific measures. This study has begun the process by grouping stakeholders into associated groups, but continued analysis would be very helpful. The clear-cut differences among organizations incorporated within and outside the United States also indicate that future research in comparative CSR disclosure and performance would be fruitful and provide important insights into public policy, stakeholder relations, and corporate strategy. At a more specific level, it could be interesting to apply these models at industry levels to determine if relationships and sensitivity vary significantly and predictably across industries. Finally, this study has sought to answer methodological issues related to measurement levels, stakeholder-measure relationships, and variance within CSP-CFP relationships. As such, the study is descriptive and focused on contemporaneous associations. The logical next step is to take the evidence for CSP-CFP relationships found herein and work towards a predictive model of the influence of CSP on subsequent CFP, including the important question of the length of time among organizational choices in CSR action, CSP outcomes, and the final CFP outcomes.

Tables

Table 2: Number of Strength and Concern Items within each KLD STATS Component

Component	Number of strength items	Number of concern items
Community	7	4
Corporate Governance	6	6
Diversity	8	3
Employee Relations	6	5
Environment	6	7
Human Rights	3	4
Product	4	4

Table 3: Descriptive Statistics for CSP and CFP Measures

		N	Mean	SD	Minimum	Maximum
CFP measures						
Price Change		7950	.1078	4.95327	-.98	417.57
Cash Flows from Financing[#]		8124	.0010	.18036	-4.70	1.69
Cash Flows from Investing[#]		8124	-.0626	.15048	-.99	4.91
Cash Flows from Operations[#]		8124	.0701	.20046	-8.24	.75
Revenue[#]		8128	.8580	.78861	-.33	13.18
#Scaled by total assets						
Aggregated measurement level						
Overall CSP		8138	-0.6268	2.23768	-11.00	15.00
Component measurement level						
COMM		8138	0.0015	0.4842	-2.00	4.00
CGOV		8138	-0.2518	0.7789	-4.00	2.00
DIV		8138	0.1698	1.2665	-2.00	7.00
EMP		8138	-0.2443	0.8960	-4.00	5.00
ENV		8138	-0.0686	0.6566	-5.00	4.00
HUM		8138	-0.0424	0.2284	-3.00	1.00
PRO		8138	-0.1911	0.5978	-4.00	2.00
Directional measurement level						
COM(+)	*Out of 7*	8138	0.11	0.423	0	5
COM(-)	*Out of 4*	8138	0.11	0.333	0	3
CGOV(+)	*Out of 6*	8138	0.19	0.419	0	3
CGOV(-)	*Out of 6*	8138	0.44	0.639	0	4
DIV(+)	*Out of 8*	8138	0.60	1.043	0	7
DIV(-)	*Out of 3*	8138	0.43	0.515	0	2
EMP(+)	*Out of 6*	8138	0.30	0.621	0	5
EMP(-)	*Out of 5*	8138	0.54	0.725	0	4
ENV(+)	*Out of 6*	8138	0.15	0.512	0	4
ENV(-)	*Out of 7*	8138	0.22	0.657	0	5
HUM(+)	*Out of 3*	8138	0.01	0.073	0	1
HUM(-)	*Out of 4*	8138	0.05	0.240	0	3
PRO(+)	*Out of 4*	8138	0.05	0.224	0	2
PRO(-)	*Out of 4*	8138	0.24	0.580	0	4

Issue-based measurement level

Factor	Minimum	Maximum	Factor	Minimum	Maximum	Minimum	Maximum	Maximum
COM1	-2.0344	12.2774	DIV1	-1.1215	12.6702	ENV1	-1.3058	8.0342
COM2	-6.1012	12.5653	DIV2	-4.4195	2.0693	ENV2	-1.8011	10.5080
COM3	-1.6470	16.7751	DIV3	-14.9919	8.3137	ENV3	-4.1942	13.8777
CGOV1	-1.0223	16.2148	EMP1	-1.2508	6.2804	HUM1	-1.2832	20.6706
CGOV2	-3.1654	2.7064	EMP2	-0.9692	7.8973	HUM2	-0.7785	16.0790
CGOV3	-2.3922	18.6047	EMP3	-2.2125	6.9442	HUM3	-5.9985	23.8207
CGOV4	-9.6857	13.1123	EMP4	-3.5483	2.1227	PRO1	-1.3752	6.8940
						PRO2	-7.3884	10.0229
						PRO3	-2.0409	13.7260

For all factors, n = 8138, mean = 0, SD =1.0

Table 4: Pattern and Structure Matrices for Principal Component Analysis on Individual KLD STATS Components

Panel A: Community						
	Pattern Matrix			**Structure Matrix**		
	1	**2**	**3**	**1**	**2**	**3**
COM _str_G	.650			.635		
COM_str_B	.614			.611		
COM_str_D	.549			.593		
COM_con_A		.563			.549	
COM_con_B		-.500			-.510	
COM_str_C	.420	.496			.477	
COM_con_D		-.420			-.434	
COM_con_X			.610			.581
COM_str_X			.608			.581
COM_str_F			.537			.585
COM_str_A			.486			.517

Panel B: Corporate Governance								
	Pattern Matrix				**Structure Matrix**			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**
CGOV_str_F	.732				.710			
CGOV_str_E	.693				.703			
CGOV_str_D	.623				.659			
CGOV_str_A		.746				.725		
CGOV_con_B		-.726				-.731		
CGOV_con_G						-.425		.401
CGOV_str_X			.643	-.446			.597	
CGOV_con_X			.606				.622	
CGOV_con_J			.571				.591	
CGOV_con_F				.772				.768

Panel C: Diversity						
	Pattern Matrix			**Structure Matrix**		
	1	**2**	**3**	**1**	**2**	**3**
DIV_str_E	.704			.723		
DIV_str_D	.686			.702		
DIV_str_F	.648			.644		
DIV_str_G	.561			.616		
DIV_str_A		-.657			-.620	
DIV_str_B		-.637			-.645	
DIV_con_B		.624			.639	
DIV_str_C		-.554			-.607	
DIV_con_A			.597			.626
DIV_str_X	.432		-.597			-.556
DIV_con_X			.528			.545

Panel D: Employee Relations								
	Pattern Matrix				Structure Matrix			
	1	2	3	4	1	2	3	4
EMP_str_A	.756				.709			
EMP_str_G	.625				.656			
EMP_con_B	.571				.621		.470	
EMP_str_D		.718				.705		
EMP_str_X		.651				.662		
EMP_str_C		.590				.593		
EMP_con_X			.693				.688	
EMP_con_A			.692				.690	
EMP_str_F				-.742				-.742
EMP_con_D				.696				.692

Panel E: Environment						
	Pattern Matrix			Structure Matrix		
	1	2	3	1	2	3
ENV_con_B	.750			.750		
ENV_con_A	.673			.697		
ENV_con_F	.630		-.410	.555		-.412
ENV_con_D	.607			.659		
ENV_con_X	.448			.448		
ENV_str_D	.427			.504	.463	
ENV_str_G		.648			.695	
ENV_str_B		.604			.621	
ENV_str_C		.566			.530	
ENV_str_X		.449			.443	
ENV_str_A						
ENV_con_E			.837			.836

Panel F: Human Rights						
	Pattern Matrix			Structure Matrix		
	1	2	3	1	2	3
HUM_str_X	.769			.743		
HUM_con_G	.699			.701		
HUM_con_X	.624			.654		
HUM_str_G		.812			.807	
HUM_con_F		.788			.792	
HUM_con_C			.945			.947

Panel G: Product						
	Pattern Matrix			**Structure Matrix**		
	1	**2**	**3**	**1**	**2**	**3**
PRO_con_D	.671			.675		
PRO_con_X	.658			.647		
PRO_con_E	.625			.628		
PRO_con_A	.497			.510		
PRO_str_B		.682			.674	
PRO_str_A		.636			.647	
PRO_str_X			.738			.721
PRO_str_C			.601			.618

Loadings below .4 have been suppressed

Table 5: Hierarchical Regression of Measurement Models across CFP Outcome Variables

Model	PRCHG	FINCF	INVCF	OPSCF	REV
1: Overall CSP (baseline)					
F	2.436	.025	2.286	.174	56.949***
Adj R^2	.000	.000	.000	.000	.007
2: Component CSP to Overall (H1a)					
F	1.191	18.592***	5.235***	6.664***	40.744***
Adj R^2	.000	.015	.004	.005	.033
ΔR^2	.001	.016***	.004***	.006***	.027***
3: Directional CSP to Component (H1b)					
F	1.097	14.093***	3.861***	6.212***	30.676***
Adj R^2	.000	.022	.005	.009	.049
ΔR^2	.001	.008***	.003*	.005***	.016***
4: Issue CSP to Directional (H1c)					
F	.258	7.199***	3.492***	3.967***	28.307***
Adj R^2	-.002	.017	.007	.008	.072
ΔR^2	-.001	-.004	.003	.000	.024***

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 6: Pearson Correlations among Factors and Component Scores (2-tailed)

Predictor	COM1	COM2	COM3	CGOV1	CGOV2	CGOV3	CGOV4	DIV1	DIV2	DIV3
Overall	.291 ***	.150 ***	.158 ***	.253 ***	.228 ***	-.104 ***	-.120 ***	.307 ***	-.456 ***	-.169 ***
COM	.519 ***	.312 ***	.268 ***	.192 ***	-.064 ***	.073 ***	-.017	.279 ***	-.138 ***	.055 ***
CGOV	-.094 ***	.099 ***	-.043 ***	.157 ***	.901 ***	-.299 ***	-.265 ***	-.170 ***	.119 ***	-.121 ***
DIV	.380 ***	-.072 ***	.260 ***	.297 ***	-.245 ***	.200 ***	.026 *	.613 ***	-.851 ***	-.070 ***
EMP	.138 ***	-.015	.065 ***	.106 ***	.009	.005	-.006	.100 ***	-.035 **	-.118 ***
ENV	.091 ***	.156 ***	.028 *	.078 ***	.006	-.123 ***	.006	.088 ***	-.063 ***	-.010
HUM	-.182 ***	.223 ***	-.147 ***	-.199 ***	.125 ***	-.232 ***	-.093 ***	-.251 ***	.066 ***	-.051 ***
PRO	-.253 ***	.099 ***	-.194 ***	-.213 ***	.185 ***	-.266 ***	-.108 ***	-.304 ***	.150 ***	-.164 ***

Predictor	EMP1	EMP2	EMP3	EMP4	ENV1	ENV2	ENV3	HUM1	HUM2	HUM3	PRO1	PRO2	PRO3
Overall	-.044 ***	.418 ***	-.266 ***	-.246 ***	-.241 ***	.346 ***	-.054 ***	-.151 ***	.072 ***	-.059 ***	-.173 ***	.171 ***	.126 ***
COM	-.040 ***	.235 ***	.028 *	-.015	-.107 ***	.177 ***	-.049 ***	.010	.172 ***	-.057 ***	.100 ***	.077 ***	.070 ***
CGOV	-.090 ***	-.086 ***	-.161 ***	.045 ***	-.089 ***	-.056 ***	-.025 *	-.074 ***	-.055 ***	-.038 **	-.222 ***	-.072 ***	.011
DIV	.170***	.296***	.177***	-.109***	.166***	.308***	.013	.101***	.174***	.036**	.327***	.137***	.095***
EMP	.055 ***	.500 ***	-.507 ***	-.598 ***	.004	.107 ***	-.022 *	-.007	-.018	.018	-.029 **	.078 ***	.020
ENV	-.208 ***	.140 ***	-.103 ***	.047 ***	-.642 ***	.522 ***	-.052 ***	-.260 ***	.093 ***	-.059 ***	-.078 ***	.100 ***	.082 ***
HUM	-.180 ***	-.056 ***	-.221 ***	.081 ***	-.314 ***	-.139 ***	-.055 ***	-.572 ***	-.402 ***	-.397 ***	-.240 ***	-.070 ***	-.022 *
PRO	-.162 ***	-.021	-.228 ***	.076 ***	-.233 ***	-.107 ***	-.047 ***	-.178 ***	-.090 ***	-.012	-.910 ***	.182 ***	.089 ***

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 7: Pearson Correlations among CSP Predictors and CFP Outcomes (2-tailed)

Panel A: Overall and Component Scores to Outcomes								
Outcome variable	**Overall**	**COM**	**CGOV**	**DIV**	**EMP**	**ENV**	**HUM**	**PRO**
PRICECHG	-.018	-.005	-.008	-.004	-.031 **	-.001	.001	.003
FINCF	-.002	-.011	.098 ***	-.090 ***	.002	-.003	.031 **	.053 ***
INVCF	.017	.019	-.044 ***	.048 ***	-.001	.021	.008	-.024 *
OPSCF	-.005	-.005	-.055 ***	.052 ***	.002	-.011	-.036 **	-.029 **
REV	-.083 ***	-.009	-.085 ***	.036 **	-.154 ***	-.015	-.057 ***	-.003

Panel B: Directional Scores to Outcomes														
Outcome variable	**COM (+)**	**COM (-)**	**CGOV (+)**	**CGOV (-)**	**DIV (+)**	**DIV (-)**	**EMP (+)**	**EMP (-)**	**ENV (+)**	**ENV (-)**	**HUM (+)**	**HUM (-)**	**PRO (+)**	**PRO (-)**
PRICECHG	-.008	-.004	-.013	.001	-.007	-.005	-.001	.037 **	.004	.005	-.002	-.001	.001	-.003
FINCF	-.035 **	-.029 **	-.023 *	-.135 ***	-.090 ***	.039 ***	-.058 ***	-.052 ***	-.045 ***	-.032 **	-.019	-.035 **	-.041 ***	-.071 ***
INVCF	.012	-.012	-.001	.053 ***	.036 **	-.045	.002	.003	.000	-.021	.002	-.007	.008	.028 *
OPSCF	.023 *	.037 **	.025 *	.083 ***	.060 ***	-.006	.051 ***	.041 ***	.041 ***	.043 ***	.019	.040 ***	.029 **	.041 ***
REV	-.051 ***	-.052 ***	-.035 **	.080 ***	.046 ***	.003	-.019	.173 ***	.023 *	.033 **	.017	.059 ***	.023 *	.012

Panel C: Factor Component Scores to Outcomes										
Outcome variable	**COM1**	**COM2**	**COM3**	**CGOV1**	**CGOV2**	**CGOV3**	**CGOV4**	**DIV1**	**DIV2**	**DIV3**
PRICECHG	-.008	-.004	-.003	.000	-.008	.000	.000	-.003	.005	-.004
FINCF	-.035 **	.036 **	-.030 **	-.030 **	.090 ***	-.075 ***	-.025 *	.073 ***	.072 ***	-.026 *
INVCF	.012	.029 **	-.008	-.008	-.031 **	.048 ***	.033 **	.022*	-.046 ***	.008
OPSCF	.023 *	-.056 ***	.036 **	.034 **	-.055 ***	.031**	-.003	.050 ***	-.039 ***	.016
REV	-.065 ***	-.083 ***	.012	.006	-.088 ***	.018	-.034 **	.024 *	-.056 ***	.066 ***

Outcome variable	**EMP1**	**EMP2**	**EMP3**	**EMP4**	**ENV1**	**ENV2**	**ENV3**	**HUM1**	**HUM2**	**HUM3**	**PRO1**	**PRO2**	**PRO3**
PRICECHG	.014	-.004	.012	.000	.004	.006	.007	.003	-.005	-.001	-.002	.002	-.005
FINCF	-.048 ***	-.047 ***	-.062 ***	.028 *	-.030 **	-.046 ***	-.024 *	-.012	-.039 ***	-.005	-.067 ***	-.044 ***	.003
INVCF	-.018	.014	-.005	-.007	-.020	.017	.029 **	-.011	.006	-.011	.025 *	.012	-.005
OPSCF	.059 ***	.037 **	.061 ***	-.017	.041 ***	.032 **	.005	.020	.035 **	.012	.040 ***	.026 *	.001
REV	.081 ***	-.009	.163 ***	.012 ***	.021	.025 *	.025 *	-.020	.097 ***	.092	.003	.023 *	.011

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 8: Patterns of Significance for CFP Outcomes Regressed on Directional CSP Predictors

	FINCF		INVCF		OPSCF		REV	
	Beta	*t*	**Beta**	*t*	**Beta**	*t*	**Beta**	*t*
COM(+)	.034	2.552 *	-.006	-.459	-.029	-2.148 *	-.089	-6.687 ***
COM(-)	.001	.062	-.015	-1.262	.012	1.022	-.081	-6.779 ***
CGOV(+)	-.028	-2.366 *	.006	.526	.023	1.940	-.027	-2.316 *
CGOV(-)	-.118	-9.532 ***	.053	4.218 ***	.067	5.387 ***	.058	4.787 ***
DIV(+)	-.041	-2.968 **	.017	1.247	.033	2.349 *	.063	4.600 ***
DIV(-)	.024	2.102 *	-.041	-3.550 ***	.006	.557	.005	.413
EMP(+)	-.027	-2.148 *	-.004	-.292	.027	2.091 *	-.038	-3.031 **
EMP(-)	-.025	-2.135 *	.003	.260	.016	1.385	.167	14.374 ***
ENV(+)	.008	.062	-.007	-.547	-.002	-.148	.019	1.455
ENV(-)	.015	1.102	-.028	-2.095 *	.007	.527	.001	.067
HUM(+)	-.005	-.408	.002	.144	.006	.488	.008	.686
HUM(-)	.008	.676	-.016	-1.256	.007	.520	.046	3.727 ***
PRO(+)	-.013	-1.078	.002	.207	.007	.600	.011	.981
PRO(-)	-.021	-1.610	.021	1.607	-.001	-.112	-.020	-1.615

Betas reported are standardized coefficients

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

PRCHG did not produce a significant *F*-value for the model. However, EMP(-) was significantly related to PRCHG, Beta = .042, $t = 3.507$***

Table 9: Patterns of Significance for CFP Outcomes Regressed on Item-level CSP Predictors

	FINCF		INVCF		OPSCF		REV	
	Beta	*t*	**Beta**	*t*	**Beta**	*t*	**Beta**	*t*
COM1	.021	1.551	-.011	-.792	-.012	-.905	-.109	-8.356 ***
COM2	.018	1.463	.029	2.404 *	-.041	-3.361 **	-.072	-6.174 ***
COM3	.011	.862	-.023	-1.854	.009	.752	-.014	-1.127
CGOV1	-.001	-.054	-.008	-.570	.004	.281	-.008	-.588
CGOV2	.057	4.791 ***	-.022	-1.865	-.030	-2.548 *	-.066	-5.758 ***
CGOV3	-.051	-4.061 ***	.054	4.286 ***	.005	.410	.005	.387
CGOV4	-.013	-1.136	.027	2.405 *	-.009	-.809	-.040	-3.710 ***
DIV1	-.015	-.959	.015	.933	.003	.181	.007	.490
DIV2	.050	4.383 ***	-.041	-3.518 ***	-.024	-2.068 *	-.048	-4.252 ***
DIV3	.000	.036	-.004	-.373	.001	.121	.036	3.193 **
EMP1	-.028	-2.146 *	-.019	-1.455	.043	3.218 **	.079	6.180 ***
EMP2	-.020	-1.676	.003	.268	.021	1.742	-.002	-.144
EMP3	-.031	-2.579 *	-.014	-1.175	.040	3.272 **	.148	12.512 ***
EMP4	.018	1.637	-.006	-.533	-.009	-.815	.094	8.662 ***
ENV1	.032	2.198 *	-.020	-1.321	-.017	-1.159	-.044	-3.072 **
ENV2	.008	.571	.009	.679	-.011	-.839	-.011	-.857
ENV3	-.017	-1.561	.026	2.362 *	.001	.107	.017	1.607
HUM1	.013	1.074	-.010	-.841	-.002	-.187	-.033	-2.835 **
HUM2	-.013	-1.140	.001	.108	.015	1.301	.088	7.676 ***
HUM3	.002	.168	-.007	-.637	.003	.258	-.005	-.430
PRO1	-.019	-1.429	.013	.991	.004	.328	-.031	-2.391 *
PRO2	-.022	-1.802	.009	.758	.006	.460	.007	.561
PRO3	.006	.565	-.009	-.795	.001	.101	.021	1.926

Betas reported are standardized coefficient

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 10: Sensitivity Analyses of Hierarchical Regressions of Measurement Models across CFP Outcomes Partitioned on Profitability, Country of Incorporation, and Economic Conditions

Panel A: Split by Performance										
Model	PRCHG		FINCF		INVCF		OPSCF		REV	
	Net Profit	Net Loss	Net Profit	Net Loss	Net Profit	Net Loss	Net Profit	Net Loss	Net Profit	Net Loss
1: Overall CSP (baseline)										
F	1.414	9.503 **	.869	1.754	.364	4.394 *	1.977	2.807	43.216 ***	16.278 ***
Adj R^2	.000	.004	.000	.000	.000	.001	.000	.001	.007	.007
2: Component CSP to Overall (H1a)										
F	1.012	1.913	9.238 ***	9.389 ***	4.380 ***	2.433 *	11.110 ***	3.566 **	30.314 ***	14.517 ***
Adj R^2	.000	.003	.010	.025	.004	.004	.012	.008	.034	.039
ΔR^2	.001	.002	.011 ***	.027 ***	.005 **	.005	.013 ***	.010 **	.028 ***	.035 ***
3: Directional CSP to Component (H1b)										
F	.988	1.472	6.479 ***	8.079 ***	2.875 ***	2.222 **	11.603 ***	3.122 ***	24.181 ***	10.993 ***
Adj R^2	.000	.003	.013	.041	.005	.007	.025	.013	.053	.057
ΔR^2	.001	.003	.004	.019 ***	.002	.006	.014 ***	.008	.020 ***	.021 ***
4: Issue CSP to Directional (H1c)										
F	.241	1.134	4.643 ***	3.258 ***	2.667 ***	1.555 *	12.074 ***	1.675 *	19.535 ***	11.209 ***
Adj R^2	.000	.001	.014	.022	.007	.005	.042	.007	.068	.092
ΔR^2	-.001	.003	.003	-.015 *	.003	.002	.019 ***	-.002	.017 ***	.038 ***

Panel B: Split by Country of Incorporation										
Model	PRCHG		FINCF		INVCF		OPSCF		REV	
	USA	Non-USA	USA	Non-USA	USA		USA	Non-USA	USA	Non-USA
1: Overall CSP (baseline)										
F	2.465	1.164	.000	1.030	1.737	.103	.204	4.052 *	67.353 ***	.005
Adj R^2	.000	.001	.000	.000	.000	-.004	.000	.013	.008	-.004
2: Component CSP to Overall (H1a)										
F	1.169	.845	17.467 ***	5.046 ***	4.903 ***	1.712	6.212 ***	3.259 **	39.455 ***	9.634 ***
Adj R^2	.000	-.005	.014	.107	.003	.021	.005	.063	.033	.204
ΔR^2	.001	.022	.015 ***	.130 ***	.004 ***	.050	.005 ***	.074 *	.026 ***	.227 ***
3: Directional CSP to Component (H1b)										
F	1.073	.892	13.823 ***	3.018 ***	3.515 ***	1.991 *	6.159 ***	3.810 ***	28.452 ***	6.353 ***
Adj R^2	.000	-.006	.022	.100	.004	.052	.009	.134	.046	.228
ΔR^2	.001	.026	.009 ***	.016	.002	.054	.006 ***	.091	.014 ***	.043
4: Issue CSP to Directional (H1c)										
F	.253	.549	6.890 ***	2.141 **	3.329 ***	1.274	3.701 ***	2.585 ***	27.872 ***	5.995 ***
Adj R^2	-.002	-.050	.017	.100	.007	.026	.008	.134	.073	.327
ΔR^2	-.001	.007	-.004	.038	.004	.017	.000	.036	.027 ***	.123

Panel C: Split by Economic Condition															
Model		PRCHG			FINCF			INVCF			OPSCF			REV	
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
1: Overall CSP (baseline)															
F	.615	1.839	5.201 *	.182	2.465	3.773	.319	2.527	.214	.441	.174	.335	18.478 ***	21.876 ***	16.701 ***
Adj R^2	.000	.000	.002	.000	.001	.001	.000	.001	.000	.000	.000	.000	.007	.008	.006
2: Component CSP to Overall (H1a)															
F	.632	1.538	2.985 **	9.207 ***	7.435 ***	4.158 ***	3.184 **	2.833 **	1.010	4.323 ***	2.156 *	1.851	13.915 ***	13.226 ***	14.729 ***
Adj R^2	-.001	.001	.005	.021	.016	.008	.006	.005	.000	.009	.003	.002	.033	.030	.034
ΔR^2	.002	.003	.006 *	.024 ***	.018 ***	.009 ***	.008 **	.006 *	.003	.011 ***	.006 *	.005	.029 ***	.025 ***	.030 ***
3: Directional CSP to Component (H1b)															
F	.627	1.847 *	2.755 ***	7.103 ***	5.132 ***	3.697 ***	2.247 **	2.223 **	.902	3.545 ***	1.896 *	2.202 **	11.373 ***	10.048 ***	10.350 ***
Adj R^2	-.002	.004	.009	.031	.021	.013	.007	.006	.000	.013	.005	.006	.052	.044	.045
ΔR^2	.002	.006	.006	.013 **	.007	.008	.004	.004	.002	.008	.004	.006	.021 ***	.016 ***	.014 ***
4: Issue CSP to Directional (H1c)															
F	.122	2.126 **	1.519	4.223 ***	3.031 ***	1.678 *	2.483 ***	1.836 **	1.109	3.039 ***	1.166	1.262	10.381 ***	9.081 ****	9.717 ***
Adj R^2	-.008	.010	.004	.027	.017	.006	.013	.007	.001	.005	.001	.002	.076	.064	.067
ΔR^2	-.003	.008	-.001	-.001	-.001	-.004	.009	.004	.004	.007	.000	-.001	.027 ***	.023 ***	.025 ***

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 11: Comparison of Significant CSP Relationships for Revenue across Sensitivity Analysis Partitions

Model		COM1	COM2	COM3	CGOV1	CGOV2	CGOV3	CGOV4	DIV1	DIV2	DIV3	EMP1	EMP2	EMP3	EMP4	ENV1	ENV2	ENV3	HUM1	HUM2	HUM3	PRO1	PRO2	PRO3
Complete	+										.036 **	.079 ***		.148 ***	.094 ***					.088 ***				
	-	.109 ***	.072 ***			.066 ***		.040 ***		.048 ***						.044 **			.033 **			.031 *		
Net Profit	+										.042 **	.054 ***		.148 ***	.093 ***					.085 ***				
	-	.117 ***	.081 ***			.069 ***		.050 ***		.037 **						.055 **			.030 *			.034 *		
Net Loss	+											.133 ***		.130 ***	.111 ***					.114 ***				.055 **
	-	.096 ***	.046 *			.076 ***				.070 **									.066 **					
USA	+										.036 **	.078 ***		.152 ***	.093 ***					.087 ***				
	-	.097 ***	.088 ***			.068 ***		.040 ***		.040 ***						.051 **			.037 **			.030 *		
Non USA	+								.385 ***						.156 *			.357 ***		.330 **				
	-																				.161 *			

Model		COM1	COM2	COM3	CGOV1	CGOV2	CGOV3	CGOV4	DIV1	DIV2	DIV3	EMP1	EMP2	EMP3	EMP4	ENV1	ENV2	ENV3	HUM1	HUM2	HUM3	PRO1	PRO2	PRO3
2007	+										.046 *	.076 **		.147 ***	.084 ***					.100 ***				
	-	.106 ***	.097 ***			.063 **				.047 *									.040 *			.048 *		
2008	+											.091 ***		.149 ***	.094 ***					.084 ***				
	-	.107 ***	.059 **			.071 ***		.042 *		.043 *														
2009	+										.038 *	.070 **		.151 ***	.105 ***					.084 ***				
	-	.119 ***	.060 **			.065 **		.051 **		.053 **						.080 **								

Standardized coefficients reported

Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 12: Comparison of Significant CSP Relationships for Net Cash Flows across Sensitivity Analysis Partitions

Panel A: FINCF

Model	Direction	COM (+)	COM (-)	CGOV (+)	CGOV (-)	DIV (+)	DIV (-)	EMP (+)	EMP (-)	ENV (+)	ENV (-)	HUM (+)	HUM (-)	PRO (+)	PRO (-)
Complete	+	.034 *					.024 *								
	-			.028 *	.118 ***	.041 **		.027 *	.025 *						
Net Profit	+	.050**									.038 *				
	-				.086 ***	.042 *									
Net Loss	+														
	-			.052 *	.173 ***										
USA	+	.032 *													
	-			.030 *	.122 ***	.041 **		.027 *	.027 *						
Non USA	+						.214 **								
	-		.243 ***												
2007	+						.047 *								
	-				.139 ***										
2008	+	.062 **													
	-				.109 ***	.066 **		.050 *							
2009	+														
	-				.110 ***				.052 *						

Panel B: INVCF

Model	Direction	COM (+)	COM (-)	CGOV (+)	CGOV (-)	DIV (+)	DIV (-)	EMP (+)	EMP (-)	ENV (+)	ENV (-)	HUM (+)	HUM (-)	PRO (+)	PRO (-)
Complete	+				.053 ***										
	-						.041 ***				.028 *				
Net Profit	+				.056 ***										.035 *
	-						.030 *								
Net Loss	+				.047 *										
	-						.065 **				.065 **				
USA	+				.053 ***										
	-						.037 **				.029 *				
Non USA	+														
	-						.213 **								
2007	+				.082 ***										
	-						.048 *								
2008	+				.062 **										
	-						.044 *				.048 *				
2009	+														
	-														

Panel C: OPSCF

Model	Direction	COM (+)	COM (-)	CGOV (+)	CGOV (-)	DIV (+)	DIV (-)	EMP (+)	EMP (-)	ENV (+)	ENV (-)	HUM (+)	HUM (-)	PRO (+)	PRO (-)
Complete	+				.067 ***	.033 *		.027 *							
	-	.029 *													
Net Profit	+				.070 ***	.057 **	.028 *	.081 ***	.041 **				.039 *		
	-	.100 ***	.034 *								.066 ***				.055*
Net Loss	+				.087 ***						.052 *				
	-														
USA	+			.027 *	.071 ***	.033 *									
	-	.028 *													
Non USA	+		.244 ***					.244 ***	.162 *						
	-			.179 *											
2007	+				.085 ***	.050 *		.047 *							
	-	.050 *													
2008	+				.065 **										
	-														
2009	+				.063 **										
	-														

Standardized coefficients reported
Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$

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CHAPTER THREE: THE BENEFIT OF THE DOUBT: RESILIENCE IN STAKEHOLDER ASSESSMENTS OF CORPORATE SOCIAL PERFORMANCE DISCLOSURE

Introduction

The purpose of this paper is to propose a new construct of *resilience* to explain why organizations choosing to engage in greater voluntary social disclosure will suffer less of a downturn (or recover more quickly) than others facing the same conditions. Prior research has shown that voluntary corporate social responsibility (CSR) information might reduce reaction to an industry disaster (Blacconiere and Patten 1994; Patten and Nance 1998), might be able to repair damaged legitimacy (Milne and Patten 2002), is more closely allied to exposure risk and public pressure via industry membership and size (Patten 1991), and is negatively related to the associated CSR performance, especially for less regulated industries (Patten 2002). *Resilience*, then, is the degree to which organizations providing voluntary CSR disclosure are insulated against performance shocks.

Simply providing a single CSR disclosure is not likely to be sufficient to produce resilience. A history of disclosure prior to the related performance shock (Blacconiere and Patten 1994; Patten and Nance 1998) is important, as is the individual exposure to risk due to location (Patten and Nance 1998), size (Patten 1991; Patten and Nance 1998), industry (Patten 1991, 2002; Blacconiere and Patten 1994; Patten and Nance 1998), or investment horizon (Milne and Patten 2002). The qualitative characteristics of the disclosure are equally important, including information credibility (O'Dwyer and Owen 2005; O'Dwyer, Unerman, and Bradley 2005; Merkl-Davies and Brennan 2007; Simnett, Vanstraelen, and Chua 2009; Pflugrath,

Roebuck, and Simnett 2011) and the verbal tone used in the disclosure (Cho, Roberts, and Patten 2010). The extent to which disclosure correlates with actual performance will also produce organizational trustworthiness (Ullmann 1985; Wagner, Lutz, and Weitz 2009), with repeated evidence over time strengthening the effect.

Resilience is the degree of protection from unexpected poor performance. This assumes that the organization has an overall track record of competence and compliance with legal and regulatory requirements and the poor performance in question is unexpected and might be due to events outside of management control. Prior studies have indicated that greater voluntary CSR disclosure insulates an "innocent" organization against industry disasters (Blacconiere and Patten 1994; Patten and Nance 1998) and that greater voluntary financial disclosure might have insulated companies to a degree against the economy-wide shock of the Wall Street Crash of 1929 (Barton and Waymire 2004). This paper is motivated by a desire to understand the *mechanism* by which prior disclosure resulted in resilience to an industry disaster and the relevant *information characteristics* that influenced the mechanism involved. In this paper I examine resilience to an industry scandal in which the organization of interest is not directly implicated, but which nevertheless has resulted in a significant market downturn for the entire industry and increased regulatory uncertainty.

Globalization, liberalization of markets, and recent economic crises have increased the degree of interdependence and international exposure across industries and increased uncertainty and public scrutiny as a result (Porter and van der Linde 1995; Tomkins 2001; Doh and Guay 2004; Freeman, Harrison, and Wicks 2007). Widespread advances in information technology have increased the extent and timeliness of information available to investors, and the spread of

the Internet has made the ease of access to this information greater. The Internet, global media, and the recent expansion of societal attention to social and environmental issues have contributed to the demand for disclosure and a focus on matching CSR claims to actual performance (Brown and Deegan 1998; McWilliams and Siegel 2001; Berthelot, Cormier, and Magnan 2003; Cormier, Gordon, and Magnan 2004; Freeman, Harrison, and Wicks 2007; Aerts and Cormier 2009). The combination of increased risk exposure, economic uncertainty, and public scrutiny emphasizes the importance of the role credible information, in the form of voluntary CSR disclosures, might play in investor decisions in the face of unexpectedly poor performance. The study contributes to the literature by introducing the concept of resilience and further exploring the role voluntary CSR disclosure plays in organizational performance. I also contribute by examining the information characteristics of voluntary disclosures which lead to subsequent resilience, via intervening perceptions of organizational legitimacy, extending prior research that examined the role between disclosure and post-shock financial performance.

Using a 2 x 2 between-participants design with 100 non-professional but experienced investors, I first examine the relationship between information characteristics (accuracy x completeness) and perceived legitimacy. I subsequently test the relationship between perceived legitimacy and resilience to unexpectedly poor performance. I find that accuracy of voluntary disclosures significantly influences perceived legitimacy. Perceived legitimacy then significantly positively influences resilience following an industry shock.

The paper is organized into five sections. Section two reviews relevant literature and develops the hypotheses for the theorized model. Section three describes the research design, setting, and measures used. Section four presents the analysis of the survey data. Section five

concludes with a summary of key research findings and a discussion of the implications of these findings for future research.

Literature Review and Research Questions

Information characteristics of voluntary disclosures affect stakeholder perceptions of the organization (Merkl-Davies and Brennan 2007). Because the disclosures are voluntary, differences in transparency are reflected in organizational choices in how much to report and how to present the information, with greater accuracy and completeness contributing to higher quality disclosures. The demonstrated openness and honesty beyond the legal requirements of mandated disclosures influences stakeholder perceptions of organizational legitimacy (Lindblom 2010). Perceived legitimacy influences actions taken or choices made in interactions with that organization, particularly in the face of crises or unexpectedly poor performance (Figure 2). Organizations choosing to issue higher-quality voluntary disclosures should be perceived as more legitimate and greater legitimacy should result in greater resilience to crises and downturns.

In the experimental model (Figure 3), higher quality disclosures are those with CSR voluntary reports with greater reporting accuracy and completeness. These characteristics should strongly influence perceived legitimacy through assessments of disclosure credibility, organizational stability, and management integrity. Perceived legitimacy should then result in greater resilience available to cushion the effects of performance shock in the form of higher assessments of investment quality or less disinvestment following an industry shock. It also might be reflected in greater investor patience in waiting for the organization to recover

financially, with greater resilience producing a "premium" of allowed time for recovery beyond initial expectations of the time required.

Disclosure Quality

There are several, interrelated information characteristics that determine the quality of voluntary disclosures. Prior research has considered accuracy, completeness, and timeliness to be among the most salient characteristics leading to high-quality disclosure (O'Dwyer and Owen 2005; O'Dwyer, Unerman, and Bradley 2005; Merkl-Davies and Brennan 2007; Kothari, Li, and Short 2009; Simnett, Vanstraelen, and Chua 2009; Pflugrath, Roebuck, and Simnett 2011). In this study, I concentrate on the degree of accuracy and completeness in a voluntary CSR disclosure as the experimental environment does not lend itself to timeliness manipulations.

Disclosures that are high in accuracy will report items clearly, using specific language and quantitative measures that are then able to be compared to performance across time and across organizations. Disclosures that are high in completeness will include reports of positive achievements and admission of negative performance and will report across a wide range of areas covering social, environmental, governance, and strategic concerns and not simply "cherry pick" those areas that are most visible or have the best performance. Better completeness in disclosure will support perceptions of accountability and honesty and support perceptions of a *lack* of image management.[19] Greater accuracy in disclosure will support perceptions of honesty, consistency, and management control and will contribute to comparability. Greater accuracy

[19] Greater completeness might also support perceptions of management's competence in being aware of, and monitoring, multiple aspects of non-financial performance.

also supports perceptions of disclosure as incremental information provision to assist in decision making (as opposed to image management). Therefore, the first hypotheses are:

H1a: Voluntary disclosure accuracy will be positively associated with perceived organizational legitimacy.

H1b: Voluntary disclosure completeness will be positively associated with perceived organizational legitimacy.

H1c: Voluntary disclosures with both high accuracy and high completeness will result in the greatest perceived organizational legitimacy.

H1d: Voluntary disclosures with both low accuracy and low completeness will result in the least perceived organizational legitimacy.

Legitimacy

Organizational legitimacy is a reflection of the degree to which organizational actions, goals, and values reflect those of society at large (e.g., responsible use of scarce resources, ethical treatment of employees, fair dealing with customers, etc.). Legitimacy is especially reflected in organizational actions and accountability that go beyond regulations and mandatory requirement; thus, voluntary disclosure should help form stakeholders' perceptions of organizational legitimacy. Organizations which are perceived as more legitimate should be those which are considered to demonstrate credibility in reporting and trustworthiness in actions and intentions. Voluntary disclosures should support assessments of credibility and trustworthiness

through the information characteristics chosen for reporting, with higher quality disclosures leading to greater perceived legitimacy.

Credibility

Once the decision has been made to engage in discretionary reporting, the organization must make a series of choices that will determine the credibility of the information.[20] These decisions will determine *what* the organization discloses, *who* the key recipients are, *when* the information is disclosed, *where* the information is disclosed, and *how* the information is reported. To a great extent, these decisions are determined by *why* the organization chooses to engage in voluntary disclosure. The reasons involved can range from pure impression management to pure incremental information provision, although most organizations fall somewhere along this continuum and display mixed motives. Impression management attempts to hide poor performance, to present a false impression of the organization's goals and values, or to control external information search (Dowling and Pfeffer 1975; Arya and Mittendorf 2005; Merkl-Davies and Brennan 2007; Lindblom 2010). Incremental information provision, on the other hand, assumes that the firm is signaling behavior because this allows it to (1) differentiate itself from competitors based on true performance, (2) reduce contracting costs, (3) and/or manage diverse stakeholder interests (Porter and van der Linde 1995; Koonce and Mercer 2005; Freeman, Harrison, and Wicks 2007; Merkl-Davies and Brennan 2007; Lindblom 2010).

[20] Mandatory reporting is less able to influence perceived credibility because it does not involve a decision *whether* to report or, in the majority of cases, *what*, *when*, *where*, and *how* to report.

Stakeholders are well-aware that organizations are likely to engage in some degree of impression management and as a result the credibility of voluntary disclosure is harder to establish due to the degree of managerial discretion involved (Berthelot, Cormier, and Magnan 2003; O'Dwyer and Owen 2005; Kothari, Li, and Short 2009). The voluntary nature of CSR disclosure causes problems with consistency, comparability, completeness, the degree to which specific or qualitative data are provided, and reliability. Consequently, voluntary disclosure is often met with skepticism as to the degree to which it provides incremental information versus an attempt at image management through "spin" in reporting (Merkl-Davies and Brennan 2007; Kothari, Li, and Short 2009). The difference between the two extremes of disclosure intent is determined by the attributed degree of credibility in that disclosure. Greater credibility is associated with higher-quality disclosure, based on key information characteristics of accuracy and completeness (Merkl-Davies and Brennan 2007; Kothari, Li, and Short 2009).

Trustworthiness

Trust is defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, and Schoorman 1995, 713). Trustworthiness reflects the degree to which an organization will continue to perform as expected without constant monitoring or intervention. Two items adapted from Mayer and Davis (1999) are used to capture this quality. The first measures the extent to which the organization itself is perceived to be stable and predictable in its operations and results. The second measures the extent to which organizational management is expected to

exhibit integrity and resist moral hazard pressures by acting in the long-term interests of stakeholders.

Organizational trustworthiness determines whether the stakeholder makes the *initial* decision to engage in a transaction or enter into a relationship based on expectations of future behavior and assessments of associated risk. Resilience is derived from this but reflects the *post hoc* use of prior assessments of trustworthiness in current performance assessments and determinations of future partnerships. Mayer, Davis, and Schoorman (1995) posit three antecedents to trustworthiness. Ability trust encompasses judgments of basic organizational competence. Integrity trust includes concepts related to legal and regulatory compliance, governance, structures, and ethical behavior. Benevolence trust reflects demonstrated organizational actions that indicate a desire for a long-term, mutually beneficial relationship and includes issues of transparency, equity, respect, and accountability; these are characteristics that go *beyond* legal and regulatory requirements. Ability and integrity trust – sometimes referred to as "thin" trust (Vosselman and van der Meer-Kooistra 2009) – reflect a basic level of legitimacy, or compliance with (but no more than) legal expectations (Lindblom 2010). Ability, integrity, *and* benevolence ("thick" trust) reflect compliance above and beyond basic legal expectations and incorporate social values and norms, thus increasing perceptions of legitimacy (Vosselman and van der Meer-Kooistra 2009; Lindlbom 2010).

Resilience

Resilience functions as a repository of goodwill towards an organization, or the belief that poor outcomes are (1) honest mistakes (not questions of incompetence or illegal/unethical

behavior), (2) at least partially due to extenuating circumstances, or (3) the result of reasonable attempts to develop a new area of organizational learning or expertise which did not work out as expected. As such, it is highly dependent on the perceived credibility of prior disclosures and the perceived trustworthiness of the reporting organization and its management. This study extends Blacconiere and Patten's (1994) findings that organizations engaging in prior CSR disclosure suffered less of a decrease in their stock price following an industry disaster. I extend this stream of research by suggesting that prior disclosure insulated the reporting organizations from the industry shock by establishing them as more legitimate. I concentrate on accuracy and completeness as the underlying determinants of higher-quality voluntary disclosures, with higher-quality disclosures leading to perceived legitimacy which subsequently produces resilience to an unexpected performance downturn.

Resilience will be reflected in multiple aspects of the stakeholder-organization relationship. It can lead to a greater or longer-term allocation of resources, decreased governance costs, or smaller required returns. Resilience might appear both as judgments (in re-assessments following unexpected outcomes leading to *less* of a penalty applied or *greater* acceptable performance variability) and as actions (in the decision to buy or sell investments or in *longer* recovery times allowed prior to divestiture).

Resilience operates mainly through the mechanism of decreasing relational risk (Das and Teng 2001), which then dampens the volatility of reaction to unexpected bad news, permitting recovery from (honest) mistakes, learning curves, industry issues, and economic downturns. During times of unexpected market turbulence, resilience can insulate the organization, because the decreased relational risk permits the absorption of greater environmental uncertainty (Barton

and Waymire 2004). Resilience is a cumulative account and will change over time and might be depleted or damaged if voluntary information becomes non-credible or is reduced. Newer organizations, which have not yet had the opportunity to establish a track record of relational outcomes, might still be able to establish resilience by disclosing greater amounts of (or higher quality) voluntary CSR disclosure.

Unexpected poor performance outcomes might be the result of internal or external factors. External factors include uncertainty in the environment and the actions of others and are beyond direct control of organizational management. Examples of such factors include a general economic downturn, stock market crashes, natural disasters, or industry related disasters or scandals that do not directly involve the organization. Prior research has included industry issues, such as the Exxon *Valdez* (Patten and Nance 1998) or the tragedy at Bhopal (Blacconiere and Patten 1994); political issues, such as elections in South Africa (de Villiers and van Staden 2006); and overall economic shocks, such as the 1929 market crash (Barton and Waymire 2004). Internal factors include mistakes, incompetence, and fraud, as well as more benign internal issues such as learning curves, estimates in the face of new technology or markets, or reasonable assumptions that turned out to be incorrect.

In this study, I choose to focus on an industry shock because CSR issues have been shown to be significantly related to industry (Ullmann 1985; Patten 2002; Margolis, Elfenbein, and Walsh 2007). Further, industry-related downturns might be caused by external shocks – industry disasters which do not involve misbehavior by the specific organization studied – *and* influenced by internal characteristics, practices, or conventions common to all industry members.

The research cited above has done much to establish that organizations perceived as more accountable to society (by the decision to engage in voluntary CSR disclosures) have not suffered as greatly (or have recovered more quickly) during economic downturns or industry crises. Consequently, after an industry shock I expect revised assessments of quality, disinvestment decisions, and expected future performance will be related to perceived legitimacy derived from the information characteristics of the organization's voluntary disclosure. Those organizations that, prior to the industry crisis, were perceived as exhibiting greater legitimacy should be granted the benefit of the doubt regarding their involvement in and ability to control conditions leading to an industry wide shock.

The construct of resilience is reflected in multiple aspects. Perceived investment quality of all members of an industry might decline following an industry shock, but organizations enjoying the benefit of resilience might still be considered higher quality investments, paralleling Blacconiere and Patten's (1994) finding that prior-disclosing organizations experienced less of a stock price decline in the wake of an industry disaster. Perceived quality and expectations of future performance should interact to affect volatility, with resilience leading to *less* disinvestment following the crisis. Additionally, expectations of future performance should be affected such that investors are willing to show greater patience in waiting for a partial or full recovery in economic performance following an industry crisis, even beyond their initial expectations for time required. In all cases, investor evaluations of quality and future performance expectations should be positively associated with perceived legitimacy.

H2: Perceived organizational legitimacy will be positively associated with resilience.

Research Methods

Experimental Design and Administration

This study uses a 2 x 2 between-participants design (Figure 4) for the initial hypothesis, followed by regression analysis for the second hypothesis. The manipulated independent variables consist of two information characteristics leading to a high-quality voluntary disclosure: accuracy and completeness. Endogenous organizational characteristics are held constant in the case to isolate the effect of disclosure quality on non-professional investor judgments and actions. An industry shock (in which the case organization is not directly involved) is used to measure change in investor judgments and consequent actions which represent the construct of resilience. To control for individual differences among participants in the level of acceptable investment risk which might affect perceptions of the investment and subsequent decisions, a validated scale measuring risk appetite specifically in a business setting is used as a covariate in the analysis (Sitkin and Weingart 1995).

After logging in to the site, reading the summary explanation of research required by the IRB, and indicating their willingness to participate, respondents were asked a series of screening and demographic questions. Those that passed the screens then received the experimental materials (Appendix A) and were informed that they had inherited 10,000 shares in Dryad Forestry, Inc., a large, growth-and-income timber and forestry-products company listed on the New York Stock Exchange. The company was reported to be considered a good addition to the participant's investment portfolio by their investment advisor. The amount was reported to double the participant's investment portfolio and was selected to be large enough for serious

consideration but not so large as to be perceived as unbelievable. Participants were prompted to think of a long-term investment account, as prior research has indicated significant differences between investment decisions based on short- and long-term strategy and the consequent appraisal of a risk-reward relationship (Milne and Patten 2002).

All participants next received Part One, containing basic background and industry information for Dryad, along with excerpts from its financial reports (including audit opinion, analyst recommendation and earnings forecast, and outstanding litigation or regulatory issues). The background information included the manipulation of completeness and accuracy, with each group receiving a different excerpt from Dryad's Sustainability Report. After reading the excerpted financial and CSR performance reports, participants were asked to evaluate the overall quality of an investment in Dryad (PRE), the credibility of the Sustainability Report (CRED), and general comfort with investment stability (STABL) and management integrity (INTEG).

In Part Two, participants were told of an industry scandal that did not involve misbehavior by Dryad, but which negatively impacted economic performance across the industry and increased uncertainty as to future regulatory impacts in response to the crisis. The description was accompanied by an excerpt from an article from the business press.[21] Participants were then told they had the opportunity to shift any portion of their investment in Dryad to an indexed mutual fund linked to the S&P 500. They were asked to re-evaluate their perception of investment quality following the crisis (POST) and report what percentage (in deciles) of their portfolio they would shift to the market-linked fund (SHIFT). They were also

[21] Prior research (Kothari, Li, and Short 2009) has indicated that investors perceive the business press to be significantly more credible than either management or analysts; hence the decision to reinforce the information on the industry crisis and Dryad's non-involvement in the illegal behavior using an article from the business press.

asked to estimate the time required for Dryad to make both a partial (EPART) and a full (EFULL) recovery of the drop in net income following the industry crisis, and the maximum time they would be willing to wait for Dryad to actually make a partial (WPART) and full (WFULL) recovery. Manipulation check questions followed regarding Dryad's role in the industry crisis and the information characteristics contained in the manipulated Sustainability Report. The experiment concluded with the six items of the Business Risk Propensity Scale (Sitkin and Weingart 1995).

The experimental materials were pilot tested twice. PhD faculty and eight doctoral students participated in the first round, and changes in phrasing and organization were made based on their input. The resulting materials were then pretested with a group of 35 master's level business students. Two items were added for clarification, and minor editing was conducted to improve readability for a non-academic audience. Following Institutional Review Board (IRB) approval of revisions, the experimental materials were programmed on a new hosting website, Qualtrics (www.Qualtrics.com), and the panel company, EMpanel Online (www.EMpanelOnline.com), began the screening process.

Participants

The success of an organization depends upon multiple groups of stakeholders. Because stakeholder groups vary in preferences for CSR components and in emphasized aspects of financial performance (Jones 1995; Wood and Jones 1995; Mitchell, Agle, and Wood 1997; Freeman, Harrison, and Wicks 2007; Lindblom 2010), I restrict this study to a single stakeholder group, non-professional investors. This group has considerable, hidden influence due to their

choices in mutual funds and stocks held within investment and retirement portfolios, which are often measured at the aggregated, analyst-centered level.

To test the hypotheses, I used experimental data collected from non-professional investors provided by a professional panel service, EMpanel Online. The company screened participants from its registrants based on (1) age (greater than 18 years), (2) non-professional status, (3) possession of an investment or retirement account, (4) at least some degree of participation in the management of that account, (5) comfort reading financial statements, and (6) use of financial or investment media. To be included in the experiment, participants also had to pass the manipulation checks, pass an attention check item embedded in the experiment, and take a reasonable amount of time to complete the experiment. During the screening process, 623 prospective participants passed the initial screenings. After attention (186 failed), manipulation (322 failed), and time checks (14 failed), 101 individuals completed the instrument.[22] The final participant pool consists of 100 participants who were randomly distributed in each of the four cells, with 25 participants per cell.[23]

Participants were 57% male, predominantly in age ranges from 40 to 59 years, 38% held an undergraduate degree, and predominantly employed in manufacturing (12%), finance/accounting/insurance (14%), and "other" (33%). The majority of participants (56%) reported that they were solely responsible for the management of their portfolio, reported

[22] Within each sample, the pattern of failed manipulation checks resulted in an interesting discovery: participants were easily able (only 25% manipulation check failure) to recognize a very high quality disclosure (high accuracy and high completeness), but had difficulties (manipulation failure ranging from 53% to 58% across the cells) distinguishing between information characteristics for low quality (low accuracy and low completeness) and mixed disclosures. In general, failed manipulations consisted in failure to distinguish one of the characteristics, suggesting that accuracy and completeness might not be sharply distinguished in participant perceptions of high quality disclosure.

[23] Due to a math error in quota adjustments, there were initially 26 good completes in Cell C. One participant was randomly deleted to equalize cell populations.

experience was evenly split between "some" (46%) and "considerable" (47%), 43% reported an average portfolio of $100,001 to $500,000, 61% were "definitely" likely to invest in the next 12 months, and participants tended to be optimistic (48%) or neutral (38%) about the market (Table 13). Correlation analysis indicated that there were no significant differences among groups in relation to either measured or manipulated variables.

Variable Measures

Manipulated Variables

The construct representing the information characteristics influencing voluntary disclosure quality consists of two manipulated variables: ACCURACY and COMPLETENESS. Information characteristics of specificity, completeness, and accuracy have been found to be important in determining perceived voluntary disclosure quality and credibility (O'Dwyer and Owen 2005; O'Dwyer, Unerman, and Bradley 2005; Merkl-Davies and Brennan 2007; Kothari, Li, and Short 2009; Simnett, Vanstraelen, and Chua 2009; Pflugrath, Roebuck, and Simnett 2011). Operationalization of these measures has included third-party assurance (Simnettt, Vanstraelen, and Chua 2009; Pflugrath, Roebuck, and Simnett 2011), the use of credible frameworks or standardized reporting to ensure consistency and completeness (O'Dwyer and Owen 2005; O'Dwyer, Unerman, and Bradley 2005), the use of specific, quantifiable measures (Merkl-Davies and Brennan 2007), and the inclusion of both positive and negative information (Kothari, Li, and Short 2009).

In this study, ACCURACY is manipulated as the degree to which the Sustainability Report contains specific language with quantifiable, comparable measurements (High Accuracy) versus vague language and non-verifiable or non-quantifiable measures which could not be compared to prior years' or other organizations' performance (Low Accuracy) (Cho, Roberts, and Patten 2010).[24] COMPLETENESS is operationalized as the inclusion of items within the Sustainability Report across a range of non-financial performance areas and the disclosure of both positive and negative performance within these areas (High Completeness). Low Completeness, on the other hand, reports only a few areas within the Sustainability Report and only discloses good performance (O'Dwyer and Owen 2005; O'Dwyer, Unerman, and Bradley 2005). The combination of accuracy and completeness determines the degree to which the voluntary disclosure can be considered high quality.

Measured Variables

There are two groups of measured variables that address the constructs of Legitimacy and Resilience, with both constructs having multiple measures. ANCOVA analysis of the effect of information characteristics on the legitimacy construct is used to test the first hypotheses. A regression of the construct of resilience on the legitimacy construct tests the second hypothesis.

[24] As an example, the high accuracy condition might contain wording such as "achieved our goal of a 5% increase in philanthropic contributions" while the low accuracy conditions might report this as "increased philanthropic contributions".

Legitimacy

Legitimacy is operationalized as three measures reflecting societal expectations for organizational credibility and trustworthiness. Credibility (CRED) of the Sustainability Report (CRED) directly reflects perceived honesty and transparency of the information disclosed. Trustworthiness is a measure of willingness to be vulnerable to unmonitored/uncontrolled outcomes and is assessed by two items. Investor comfort level with the unmonitored investment (STABL) reflects perceptions of organizational stability. Investor comfort level with management's intentions or unmonitored actions (INTEG) reflects perceptions of management integrity. All three items are measured on a Likert scale ranging from 1 (very believable/very comfortable) to 7 (very doubtful/very uncomfortable).

Factor analysis confirmed that all three measures loaded onto a single construct, explaining 59.805% of variance. Kaiser-Meyer-Olkin measures of sampling adequacy were mediocre for both the overall model (KMO = .652) and for individual items (lowest KMO = .635 for CRED and INTEG). Bartlett's Test of Sphericity ($p < .001$) confirmed that items are correlated, but all correlations were well under .80 and the determinant of the correlation matrix was .646, well above the required .000001 level (Field 2009) to establish lack of multicollinearity. Factor scores were therefore retained for use as the dependent variable representing the legitimacy construct.

Resilience

The Resilience construct is operationalized by four measures representing perceived post-crisis quality of investment[25], disinvestment percentage, and a "buffer" allowed for both partial and full recovery in organizational net income following an industry crisis *beyond* original expectations for required recovery time. Post-crisis quality of investment (POST) is measured on a Likert scale ranging from 1 (an excellent investment – low risk and great long-term potential) to 7 (a very poor investment – high risks and a lot of uncertainty about long-term growth potential). Disinvestment is measured by an item asking for percentage (by decile) of Dryad holdings participants would choose to shift to a market-indexed mutual fund following the industry crisis (SHIFT). Both POST and SHIFT are then reverse coded for ease of interpretation, such that higher values reflect greater assessments of quality and a greater percentage of the investment retained.

Participants are asked two items to evaluate the flexibility allowed Dryad in recovery, should that recovery not occur within the original estimate of time required, assuming they adopted a "wait and see" strategy. These measures represent a "premium", or additional buffer, allowed for recovery and the degree of acceptable volatility in future expectations. Expectations of the time required for a partial recovery of at least 10% of the post-crisis decline in net income are subtracted from the length of time investors are willing to wait for a partial recovery to produce the first premium measure (PREMPART). Both expected time and the time investors are willing to wait are measured on a four point scale: (1) one month or less, (2) six months or

[25] A pre-crisis assessment of quality is used as a covariate to control for individual differences in perceived risk (see following section).

less, (3) one year or less, and (4) more than one year. The same measure is taken for the allowed buffer for a full recovery of the level of net income prior to the crisis (PREMFULL). Expected time and the time investors are willing to wait for full recovery are measured on six point scales: (1) one month or less, (2) six months or less, (3) one year or less, (4) between one and three years, (5) more than three years and up to five years, and (6) five years or more.

Factor analysis confirmed that all four measures loaded onto a single construct, explaining 64.007% of variance. Kaiser-Meyer-Olkin measures of sampling adequacy were good for both the overall model (KMO = .741) and for individual items (lowest KMO = .716 for SHIFT). Bartlett's Test of Sphericity ($p < .001$) confirmed that items are correlated, but all correlations were under .80 and the determinant of the correlation matrix was .240, well above the required .000001 level (Field 2009). Factor scores were therefore retained for use as the dependent variable representing the resilience construct.

Covariates

Individual psychological aspects affecting risk appetite might be potentially significant. Mayer, Davis, and Schoorman (1995) specifically included both individual risk propensity and perceived risk in their seminal model of organizational trust. The Business Risk Propensity Scale (BRPS), which measures individual risk propensity in business settings (Sitkin and Weingart 1995), is incorporated to control for differences in participant risk appetite that might affect assessments of investment quality and subsequent decisions. The BRPS scale has been validated (Huff et al. 1997) and used in prior literature and is based on 7 point Likert scales (1 = "Much less than others" to 7 = "Much more than others") with a midpoint of 4 reflecting a

neutral value. Factor analysis indicated that all 6 items loaded onto a single construct which explained 56.02% of variance. The overall KMO score was .816 ("great" according to Field 2009) and individual scores were no less than .730. Bartlett's test was significant ($p < .001$) and the determinant of the correlation matrix was .085. The resulting factor score is used as a covariate in both the ANCOVA and the regression analysis.

An initial assessment (PRE), using the same scale as POST, was also taken following the manipulation of information characteristics but prior to informing the participants of the industry crisis. This measure is entered as a covariate during the regression of resilience on legitimacy to control for individual differences in initial quality evaluations and perceived risk. As with POST, initial scores for PRE were subsequently reverse-coded for ease of interpretation. Using PRE as a covariate is preferred to a difference measure of the change in perceived quality due to its greater sensitivity.

Model

The initial stage of the model reflects the influence of information characteristics of voluntary disclosure on judgments of legitimacy. This stage is evaluated by a ANCOVA analysis of the 2 x 2 experimental design, with the BRPS factor score as a covariate and the legitimacy factor score as the dependent variable:

$$Legitimacy = ACCURACY + COMPLETENESS + BRPS. \quad (2)$$

The second stage reflects the influence of legitimacy on resilience to unexpectedly poor performance following an industry crisis. This stage is evaluated by regressing the factor score

for resilience on the legitimacy factor score. The BRPS factor score and PRE (reverse coded) are used as covariates to adjust for individual differences in risk propensity and perceived risk (Mayer, Davis, and Schoorman 1995).

$$Resilience = Legitimacy + PRE + BRPS \quad (3)$$

Following initial results, follow up tests are conducted to determine the sensitivity of individual components of the factor scores used as outcome measures.

Results

Variable Descriptive Statistics

Table 14 presents descriptive statistics. For the overall sample, individual items tend to be optimistic (above the midpoint), with a wide range of reported variables. For individual cells, the legitimacy items (CRED, STABL, and INTEG) exhibit the hypothesized relationship, with high quality disclosure (Cell A: high accuracy/high completeness) consistently showing the greatest mean and the low quality disclosure (Cell C: low accuracy/low completeness) displaying the lowest mean. The initial quality rating (PRE) also shows this pattern. However, the items used to measure the construct of resilience (POST, SHIFT, PREMPART, PREMFULL) do not display consistent or clear relationships, suggesting that information characteristics of voluntary disclosures are not directly associated with resilience. As a general validity check, POST scores are lower than PRE scores for overall and individual cell means, indicating that respondents perceived a drop in investment quality following an industry crisis.

The two constructed measures (PREMPART and PREMFULL) show identical means in the overall sample, but considerable variation among the four cells. Based on cell means, high completeness seems to contribute to a greater willingness to wait for a partial recovery, whereas willingness to wait for full recovery seems to strongly (and negatively) differentiate the low quality disclosure (low accuracy/low completeness). Factor scores, by construction, have a mean of 0.000 and a standard deviation of 1.000 for the overall sample. Individual cell scores suggest that information accuracy might be associated with legitimacy assessments (both high accuracy cells display positive scores, and both low accuracy cells display negative scores). Completeness, on the other hand, seems to be associated with resilience, such that both cells with high completeness have positive factor scores for resilience, whereas both conditions with low information completeness display negative factor scores.

For the perceived legitimacy factor score, and for the individual measures contained within that factor score, H1c and H1d are both supported. Greatest perceived legitimacy occurs in cell A (high accuracy/high completeness) and least perceived legitimacy occurs in cell C (low accuracy/low completeness). Likewise, the greatest assessments of credibility, stability, and management integrity are found in cell A and the lowest assessments are in cell C.

Influence of Information Characteristics on Perceived Legitimacy

Higher quality (greater accuracy and completeness) voluntary disclosures should produce greater investor assessments of legitimacy. The accuracy and completeness of reported CSR items in Dryad's Sustainability report are manipulated (high vs. low) to produce perceptions of quality. Using ANCOVA analysis (Table 15), with the BRPS factor score as a covariate to

control for individual risk preferences and the legitimacy factor score as the outcome variable, the model was found to be significant, $F(4, 95) = 3.320$, $p < .05$. There was a significant effect of accuracy, $F(1, 95) = 10.168$, $p < .01$, on the factor score for legitimacy. Examining parameter estimates, low accuracy, when compared to high accuracy conditions, will significantly decrease overall perceived legitimacy ($t = -2.170$, $p < .05$). Consequently, H1a is supported and H1b is not supported.

Influence of Perceived Legitimacy on Resilience

Greater perceived legitimacy should produce greater resilience to unexpectedly poor performance, as investors are willing to offer reporting organization the "benefit of the doubt" as to the cause of the poor performance and expectations for future recovery. The factor score for resilience was regressed on the perceived legitimacy factor score (Table 16), with PRE and BRPS scores as covariates to adjust for individual differences in risk perceptions and risk appetite.[26] The model itself significantly explains variance in resilience, $F(3, 96) = 8.201$, $p < .001$, adjusted $R^2 = .179$. Within the model, legitimacy ($t = 3.469$, $p < .01$) significantly and positively affected the outcome variable, with a standardized Beta of $b = .381$. Consequently, H2 is supported, with greater legitimacy producing greater resilience to unexpected poor performance following an industry crisis.

[26] Results were nearly identical if the factor score for resilience was regressed on the individual items comprising the factor score for legitimacy, PRE, and BRPS, $F(5, 94) = 5.332$, $p < .001$, adjusted $R^2 = .180$, and if resilience was regressed on the factor score for legitimacy, PRE, BRPS, and accuracy and completeness, $F(5, 94) = 5.415$, $p < .001$, adjusted $R^2 = .182$.

Conclusion

The relationship between information characteristics of high quality disclosure and resilience to unexpectedly poor performance following an industry crisis operates through perceptions of organizational legitimacy. In this case, the construct of perceived legitimacy is specifically operationalized as perceived disclosure credibility, organizational stability, and management integrity. In evaluating voluntary CSR disclosures, investors should tacitly incorporate perceptions of organizational honesty, integrity, and transparency, and these evaluations determine the extent to which the investor perceives the reporting organization as a responsible and contributing member of society. In turn, the degree of assessed organizational legitimacy determines the degree of latitude granted organizational performance in terms of post-crisis assessed quality of investment, disinvestment, and acceptable recovery time (all measures of the construct of resilience). Voluntary disclosures and the information characteristics incorporated therein do not have a direct influence on resilience, but appear to operate through perceived legitimacy, with higher quality disclosures (specifically in terms of accuracy) leading to higher investor perceptions of organizational legitimacy.

Initial ANCOVA analysis indicated that information characteristics leading to high quality voluntary disclosures did significantly explain variation in perceived legitimacy. Accuracy appears to be the primary driver of perceived legitimacy. Individual cell means for factor scores of legitimacy also demonstrated a difference between high and low accuracy, with high accuracy producing positive perceived legitimacy and low accuracy leading to negative legitimacy scores. Consequently, the hypothesis that greater accuracy is associated with greater perceived legitimacy is supported (H1a). The hypothesized relationship between reporting

completeness and perceived legitimacy is only unsupported supported for the measure of credibility. The hypothesized interaction of accuracy x completeness is partially supported. The interaction was non-significant in the ANCOVA model. However, the individual cell means for legitimacy factor scores do show the hypothesized relationships, with the greatest perceived legitimacy associated with high accuracy and high completeness (cell A, H1c) and the least perceived legitimacy associated with low accuracy and low completeness (cell C, H1d). In the second step of the model, regressing a resilience factor score on perceived legitimacy scores was also able to explain a significant part of the variation in resilience, supporting H2. Interestingly, individual cell means for resilience also suggested that greater completeness in disclosures was associated with greater resilience.

The results suggest that, when faced with a choice, organizations should devote resources to ensuring accurate, quantitative measures of reported indicators that also support comparability and consistency in reporting. It would seem that investors prefer a few measures done well and precisely to a broad range of issues with vague or incomplete measurement. The significant association of accuracy with perceived legitimacy would also imply that organizations should emphasize quantifiable, consistent, and comparable reporting and avoid "feel good" prose designed more for information management than information provision. Nevertheless, after controlling for perceived legitimacy, completeness of disclosure does appear to be associated with greater resilience to performance shocks.

The implication is that high quality voluntary disclosure can benefit organizational financial performance during exogenous shocks by its effect on perceived legitimacy. Organizations demonstrating incorporation of societal values, such as transparency,

accountability, and truthfulness, in their reporting are perceived as more credible and trustworthy, and, thus, more legitimate. The costs of more extensive, detailed reporting are offset by the benefits of resilience, or the degree to which investors are willing to wait for recovery or maintain current positions in the organization's stock despite performance shocks. Results suggest that management should emphasize openness and stakeholder engagement to address the long-term interests of all key groups (not just management and/or shareholders). Mean factor scores for resilience across conditions suggest that this openness might be supported by reporting completeness, incorporating both positive and negative performance and multiple performance areas.

This study focused on only two characteristics of information quality. Future work should continue to explore the factors producing high-quality voluntary disclosures to understand how information characteristics interact with cognitive, affective, and behavioral user characteristics in affecting organizational performance. As future research increases the number of information characteristics and potential measures of these characteristics, the model could profitably be studied using a structural equation modeling approach. The focus in this experiment was on non-professional investors, a large but understudied group often directly affected by non-financial performance through direct experience with an organization and whose financial influence is often buried inside aggregated data for mutual fund companies or analyst reports. Future research could move beyond this single group to compare the effects of information characteristics on the judgments and actions of other key stakeholder groups following unexpectedly poor performance.

There are some additional limitations with this study that could be addressed in future versions. Completeness might not have been sufficiently apparent to the participants without a contrasting CSR disclosure. Future research projects could ask participants to rank a series of CSR disclosures based on the degree of completeness to explore this information characteristic in more detail. The nature of the experiment also might not have provided sufficient time between a pre-industry crisis quality assessment and post-crisis quality assessment. Future research might address this via an experimental markets-type experiment over several months using repeated measures analysis. Finally, the allowed buffer measures might not be sufficiently sensitive as the participants were not asked for their expectations regarding financial recovery of other organizations affected by the industry crisis. Future research could also concentrate on this area, specifically examining the degree of volatility allowed in expected performance.

Figures

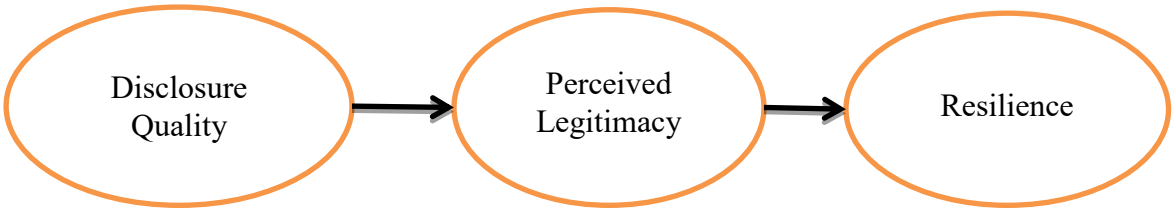

Figure 2: Theoretical Model of Relationship among Disclosure Quality, Perceived Legitimacy, and Resilience

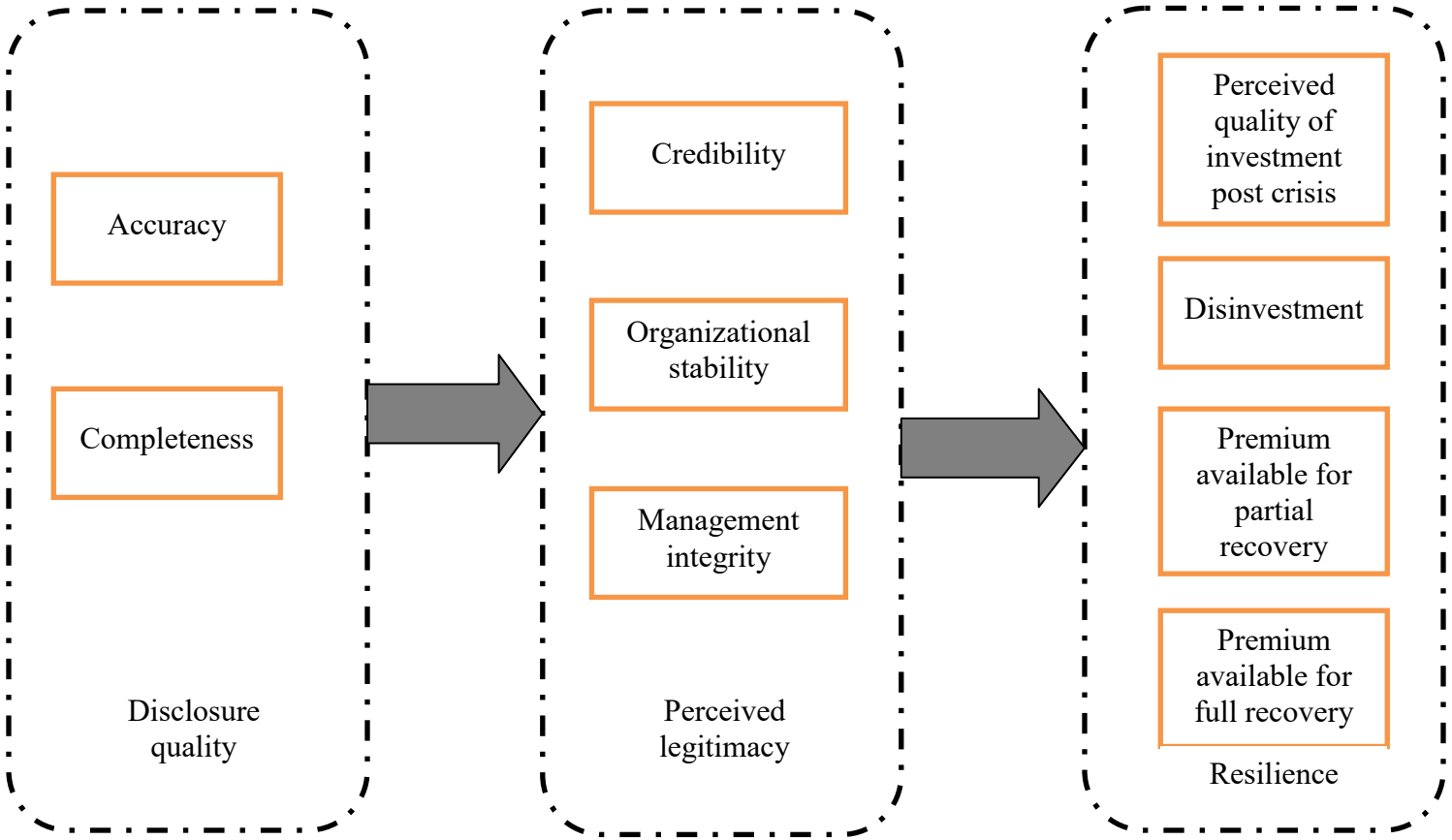

Figure 3: Research Model of Relationships among Information Characteristics, Perceived Legitimacy, and Resilience

		Information Completeness	
		High	Low
Information Accuracy	High	Cell A:	Cell B:
	Low	Cell D:	Cell C:

Figure 4: Research Design

Tables

Table 13: Demographic Description of Sample Population

Age	21-29 years	6	Experience with investing	Very little	4
	30 – 39 years	16		Some	46
	40 – 49 years	35		Considerable	47
	50 – 59 years	26		Expert	3
	60 or older	17	Average portfolio size	Under $10,000	4
Gender	Male	57		$10,000 - $100,000	24
	Female	43		$100,001 - $500,000	43
Industry in which respondent employed	Manufacturing	12		$500,001 - $1,000,000	18
	Finance/Accounting/Insurance	14		Over $1,000,000	11
	Marketing/Sales/Retail	5	Likely to invest (in any vehicle other than real estate) in next 12 months	Not at all	2
	Agriculture/Forestry/Fisheries	1		About 50/50	37
	Personal Services	3		Definitely	61
	Transportation/Logistics	2	Perception of market	Optimistic	48
	Law/Military/Security	1		Pessimistic	13
	Health Care/Medicine	7		Neutral	38
	Government/Not for profit	3		Don't know/No opinion	1
	Education	9	Highest degree earned	High School	2
	Information Service/Technology	8		Some college/Associate's degree	19
	Engineering/Aeronautics	1			
	Retired	1		Undergraduate degree	38
	Other	33		Some graduate school	10
Responsibility for management of portfolio	Self	56		Graduate/Professional degree	1
	Self + advisor	32			
	Self + spouse	12			

n = 100, numbers represent percentages

Table 14: Descriptive Statistics for Variables

	Overall Sample			Cell Mean (S.D.)			
	Max. Scale	Mean (S.D)	Range	High Accuracy/ High Completeness	High Accuracy/ Low Completeness	Low Accuracy/ Low Completeness	Low Accuracy/ High Completeness
Overall, assuming you were not concerned about balancing your stock portfolio, how would you rate this company? (PRE)[1]	7	5.420 (0.843)	4.00	5.560 (0.821)	5.520 (0.963)	5.200 (0.913)	5.400 (0.646)
How believable did you find Dryad's Sustainability Report? (CRED)[1]	7	5.530 (0.999)	5.00	6.040 (0.790)	5.720 (0.936)	5.000 (1.041)	5.360 (0.952)
Under normal economic conditions, and without considering a need to balance your portfolio, how comfortable would you be holding this investment and not monitoring it regularly? (STABL)[1]	7	5.290 (1.289)	6.00	5.600 (1.354)	5.480 (1.358)	5.000 (1.384)	5.080 (0.997)
If there was a crisis and you could not monitor management's actions, how comfortable would you be that top management would do what's in the best long-term interests of the company and its stakeholders, and not simply in their short-term interest? (INTEG)[1]	7	4.990 (1.227)	5.00	5.280 (1.173)	5.160 (1.179)	4.560 (1.227)	4.960 (1.274)
Overall, assuming you were not concerned about balancing your stock portfolio, how would you rate this company? (POST)[1]	7	4.770 (1.563)	6.00	4.640 (1.655)	4.680 (1.651)	4.920 (1.441)	4.840 (1.573)
If you were not concerned with diversifying your investments, and if you had the opportunity to do so without transaction costs, what percentage of your original, inherited investment in Dryad would you shift to a market-indexed mutual fund? (SHIFT)[1]	10	7.960 (2.881)	9.00	8.200 (3.215)	7.840 (2.968)	7.960 (2.606)	7.840 (2.868)
If you were to choose a "wait and see" strategy, and assuming that all industry stocks recovered at the same rate, what is the maximum time you would be willing to wait to see a partial recovery in Dryad stock of at least 10% of the fall in Net Income? (WPART) – All else being equal, how long would you expect it to take for Dryad Stock to show a partial recovery of at least 10% of the recent decrease in Net Income? (EPART) = (PREMPART)[2]	3[4]	0.210 (0.977)	5.00	0.320 (0.852)	0.120 (1.269)	0.040 (0.935)	0.360 (0.810)

	Overall Sample			Cell Mean (S.D.)			
	Max. Scale	Mean (S.D)	Range	High Accuracy/ High Completeness	High Accuracy/ Low Completeness	Low Accuracy/ Low Completeness	Low Accuracy/ High Completeness
If you were to choose a "wait and see" strategy, and assuming that all industry stocks recovered at the same rate, what is the maximum time you would be willing to wait to see a full recovery to the level of Net Income prior to the industry scandal? (WFULL) – All else being equal, how long would you expect it to take for Dryad stock to show a full recovery of the recent decrease in Net Income? (EFULL) = (PREMFULL)[2]	5[5]	0.210 (0.880)	6.00	0.240 (0.831)	0.280 (1.061)	0.000 (0.866)	0.320 (0.748)
Summated score for Business Risk Propensity Scale (BRPS)[3]	42	20.800 (6.008)	29.00	20.800 (5.260)	19.560 (6.378)	20.800 (6.416)	22.040 (6.017)
Factor Scores							
Factor score for Business Risk Propensity Scale (BRPS)	n/a	0.000 (1.000)	4.758	-0.013 (0.893)	-0.190 (1.065)	-0.006 (1.071)	0.210 (0.981)
Factor score for Legitimacy	n/a	0.000 (1.000)	4.603	0.428 (0.769)	0.205 (1.041)	-0.481 (1.071)	-0.152 (0.896)
Factor score for Resilience	n/a	0.000 (1.000)	5.222	0.045 (0.948)	-0.037 (1.219)	-0.093 (0.989)	0.086 (0.860)

[1]Reported statistics represent reversed scores for ease of interpretation. Higher values indicated greater ratings of quality, credibility, stability and trustworthiness and a greater percentage of retained investment.
[2]Higher scores indicated a greater amount of time investors were willing to wait for recovery beyond initial expectations of time required.
[3]Higher scores indicate a greater tendency to accept risk in business situations.
[4]There are 4 ordinal categories in both EPART and WPART, so the maximum difference would be 4 (more than one year) – 1 (one month or less).
[5]There are 6 ordinal categories in both EFULL and WFULL, so the maximum difference would be 6 (five years or more) – 1 (one month or less).

Table 15: Statistical Results for Tests of Information Characteristics' Effect on Perceived Legitimacy

ANCOVA Results for H1a and H1b Source of Variance	Type III SS	df	*F*-value	*p*-value
Overall Model with Factor Score for Legitimacy				
Model	12.141	4	3.320	.014
Independent Variables:				
Accuracy	10.168	1	11.121	.001
Completeness	1.786	1	1.953	.165
*Accuracy*Completeness*	.068	1	.075	.785
Covariate:				
BRPS	.131	1	.144	.706
Error	86.859	95		

Table 16: Statistical Results for Tests of the Effect of Perceived Legitimacy on Resilience

Regression Results for H2			
	$F(3, 96)$	Sig.	Adjusted R^2
Overall model	8.201	.000	.179
Independent Variables	Unstandardized Coefficient	*t*-stat	Sig.
Intercept	-.707	-.994	.323
Legitimacy	.381	3.469	.001
PRE	.131	1.003	.319
BRPS	.012	.130	.897

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CHAPTER FOUR: IN BAD COMPANY: VOLUNTARY DISCLOSURE AND PRESERVING CREDIBILITY DURING EXTERNAL CRISIS

Introduction

The purpose of this paper is to explore voluntary disclosure choices used by organizations in response to an exogenous credibility crisis. Such a crisis occurs when an external source of assurance for (mandatory) organizational information loses its own legitimacy, especially when that source of assurance is a member of the institutional framework supporting economic markets. If the third party is not perceived to reflect the values and norms of society, then its own credibility suffers. The assurance offered by such a third party is inherently non-credible and consequently the "innocent" disclosing organization might be perceived as less credible even if the disclosing organization itself has done nothing to merit this skepticism. Voluntary disclosure, as a signal of greater transparency and by the inclusion of non-mandated reporting that nonetheless reflects areas of performance of concern to society as a whole, might be used by organizations as a means of preserving their own legitimacy in the face of a crisis affecting the institutional framework surrounding mandatory financial reports.

Public accounting firms and their attestation of the reliability of mandatory financial reporting were intended to protect the public interest by independent, credible examination of organizational disclosures. As such, they serve as a key component of the institutional framework supporting the capital market and overall economy. US audit firms suffered a severe shock to credibility after the Enron/Andersen scandal in 2001 – 2002 and the emergence of other scandals involving all of the major public accounting firms. Concurrently with accounting

scandals and regulatory oversight failure, corporations, audit firms, and legislators were perceived to be in collusion and compromised by lobbyist activity (Bazerman, Loewenstein, and Moore 2002; Bazerman et al. 2006; Moore et al. 2006). This study is the first to examine how organizations attempt to use voluntary reporting, as a means of signaling transparency and credibility, to preserve legitimacy in the face of an external threat involving the institutional framework of the market itself. I contribute to the academic literature by theorizing regarding the role voluntary disclosure and credibility-enhancing disclosure choices play in organizational legitimacy. I also contribute to practitioner understanding of how voluntary disclosure choices might serve to insulate an "innocent" organization from scandals affecting the surrounding institutional environment.[27]

By examining patterns of voluntary Corporate Social Responsibility (CSR)[28] disclosure choices (whether to engage in voluntary disclosure and whether to enhance credibility through the use of independent assurance and/or reporting frameworks) within the S&P 500 around the Enron scandal, I shed light on how firms use information disclosure to affect their perceived legitimacy. Discretionary reporting strategies might be conceptualized as choices involving both the elements of discretionary reporting used (increased disclosure, reporting framework, third-party assurance) and the *combination* of those elements used (for example, the use of CSR disclosure alone versus the use of CSR disclosure within a reporting framework). Using qualitative data of CSR disclosure strategies used by the S&P 500 over an eight year period, I

[27] Throughout the rest of this chapter, "institutional environment" is to be understood to specifically refer to those institutions supporting the capital market and overall economic environment. These institutions consist principally of governmental and professional regulatory bodies, professional associations, financial exchanges, and the public accounting firms. This chapter extends Chapter 3, *The Benefit of the Doubt*, where the exogenous shock affecting organizational credibility and legitimacy was due to a crisis within the same industry.

[28] Corporate Social Responsibility includes aspects of organizational social, environmental, and ethical performance.

find that the use of both CSR disclosure and a reporting framework increases steadily and significantly across all time frames while the use of third-party assurance remains steady and extremely minimal. I also find that the use of auditors as third-party assurance providers is never more than 50% and drops significantly during the crisis period. Finally, I find that the combination of CSR disclosure with one means of credibility enhancement (primarily the use of a reporting framework) accelerates following the crisis while CSR disclosure alone remains fairly steady (although at a high level).

The next section presents the theorization of the role of voluntary CSR disclosure choices in establishing organizational legitimacy. The key role of information *credibility* in establishing that legitimacy is postulated and a theory of organizational behavior in the face of an exogenous threat to legitimacy centered on the institutional framework is presented. The following sections outline the methodology used, analyze the findings, and conclude with a discussion of limitations and future research directions.

Development of Theory and Research Questions

Legitimacy is based on compliance with expected norms of legal/economic behavior *and* societal values which might not be incorporated into legislation (Dowling and Pfeffer 1975). This implies that there is both a basic level of legitimacy, supported by mandatory disclosure (determined and vouched for by the institutional framework),[29] and "full" legitimacy, supported by voluntary disclosure. Full legitimacy is largely theoretical; most organizations will fall

[29] Details of the mandatory framework, the emphasis on individual components, the expectations of corporate responsibility to society, and the degree of involvement in the marketplace will vary with culture and over time (Doh and Guay 2006; Freeman, Harrison, and Wicks 2007; Ioannou and Serafeim 2010).

somewhere along the continuum between basic and full legitimacy, which is also referred to as the "legitimacy gap" (Lindblom 2010).

The use of voluntary CSR disclosure to signal differing compliance with societal values is especially evident in the United States, where very little mandated reporting exists with regard to CSR performance and/or disclosure. The KPMG International Survey of Corporate Responsibility Reporting (2008) highlights the increasing focus of US organizations on CSR disclosure: among the 100 largest US companies by revenue, CSR reporting rose dramatically from 32% in 2005 to 74% in 2008. The range of definitions, methodologies, and reporting formats within CSR disclosures complicates assessments and comparison of organizational performance, as does the extent of managerial discretion in reporting and a severe organizational aversion to reporting the "wrong answer" (Gray 2010).[30] Because US CSR disclosure is not required to be audited, the credibility of such disclosure remains in question.[31] In response to this issue, external sources of credibility enhancement might be utilized, such as an independent reporting framework or the use of a third-party assurance provider. Third-party assurance providers might be public accounting firms,[32] consulting firms specializing in CSR assurance and possessing the necessary technical skills to assess environmental impacts, or non-governmental organizations (NGOs) which might also provide certifications for the organization to display (e.g., Fair Trade, the Forestry Stewardship Council, etc.). Within the United States, public accounting firms aggressively positioned themselves as the primary providers of third-

[30] I.e., one that either discloses poor performance or inaccurately reflects stakeholder concerns and therefore leads to negative consequences.
[31] A recent study found that of US organizations engaging in environmental reporting only 3% used external assurance of those reports (Simnett, Vanstraelen, and Chua 2009).
[32] A notable study (O'Dwyer, Owen, and Unerman 2011) examined the process by which audit firms positioned themselves as legitimate third-party assurers of CSR disclosures.

party assurance (Power 1997, 2003; O'Dwyer and Owen 2005); consequently, a credibility crisis affecting public accounting firms might result in a shift to other forms of credibility enhancement of voluntary disclosure during the crisis.

Role of Voluntary Disclosure in Legitimacy

The success of the legitimation process depends on stakeholders' *knowledge* of the organization's efforts to reflect social norms in its outcomes, processes, and procedures and their interpretations/perceptions of the organizational information provided (Milne and Patten 2002; Cormier, Gordon, and Magnan 2004). Thus, organizations will engage in voluntary disclosure in order to bring this information to public attention and/or to differentiate themselves from competitors, especially organizations whose behavior is in fact reflective of societal norms but is largely unobservable to the (probably misinformed) public (Buhr 2002; Lindblom 2010).[33] Consequently, legitimacy theory is an appropriate lens to examine organization choices in disclosure (Chen and Roberts 2010). The revolution in information technology, the growth of the Internet, and the liberalization of the global marketplace have increased stakeholder demand and the availability of information from other, independent sources (Freeman, Harrison, and Wicks 2007). This, in turn, creates pressures for the organization to increase voluntary CSR disclosure as a way of controlling information (Arya and Mittendorf 2005) or in an effort to avoid being perceived as secretive, or less than transparent. Increased disclosure implicitly

[33] In fact, communication of organizational behaviors does not have to be originated by the organization itself, as many companies know to their great discomfort. In the Internet era, organizational (mis)deeds are quickly communicated world-wide with rapid effects on reputation, profits, and stock price (Brown and Deegan 1998; Freeman, Harrison, and Wicks 2007; Aerts and Cormier 2009).

acknowledges the desire of stakeholders for information and that key stakeholder groups have interests and concerns that are not covered by mandatory reporting. As a result, the decision to engage in voluntary CSR disclosure supports legitimacy through increased transparency.[34]

Organizational choices in voluntary CSR disclosure represent signaling behavior to establish or repair public legitimacy. Brown and Deegan (1998) found that when media coverage of environmental issues threatened legitimacy in environmentally sensitive industries, those industries responded by increasing the extent of disclosure. CSR information will vary across voluntary disclosers in terms of its quality, depth, breadth, completeness, and timeliness (Adams, Hill, and Roberts 1998; Patten 2002; Cormier, Gordon, and Magnan 2004; Aerts and Cormier 2009) and some organizations might initiate CSR in a proactive, direct engagement with stakeholders whereas others simply do so to manage legitimacy (Chen and Roberts 2010). Organizational decisions that determine *what* information is included in voluntary CSR disclosure, as well as *when* it is disclosed and *how* it is measured and reported, will determine the perceived legitimacy of the organization, especially in relation to its competitors. Mere publication of information is not enough to ensure legitimacy. The process depends on the credibility of the information as well as its availability.

[34] This does not automatically assume that increased disclosure is completely honest, accurate, or open. In this case, transparency is narrowly defined as simply the provision of additional desired information beyond that required by GAAP. Issues of honesty, openness, and accuracy are addressed through the means utilized to enhance the credibility of information disclosed.

Role of Information Credibility in Legitimacy

Legitimacy not only depends on the information provided in voluntary CSR disclosure, but also on the public's perception of the *credibility* of this information. Credibility of disclosure is driven by its perceived accuracy and completeness (Merkl-Davies and Brennan 2007; Aerts and Cormier 2009; Kothari, Li, and Short 2009).[35] Completeness can be both the inclusion of positive and negative performance and the extent of coverage across a range of stakeholder concerns (O'Dwyer and Owen 2005; Merkl-Davies and Brennan 2007). One means of ensuring completeness is to utilize an accepted framework. An accepted framework developed by an independent third party also provides consistency in definitions and stakeholders to assess the degree of reliability of the information disclosed (and/or of the systems used to produce that information), conferring legitimacy through information credibility (Doh et al. 2010). In 2005, KPMG reported that 660 companies throughout 50 countries had adopted the framework supplied by the Global Reporting Initiative (GRI). By 2008, the majority of the Global 250 and N100 companies were found to use the GRI Guidelines (KPMG 2008).

Public accountants, despite concerns regarding their technical competence in non-financial fields (Power 1997), have reportedly been the preferred source of third-party assurance for US corporations (Solomon 2000; Simnett, Vanstraelen, and Chua 2009; Pflugrath, Roebuck, and Simnett 2011), most probably due to their familiar role as auditors of financial statements (O'Dwyer, Owen, and Hession 2005). One study found that companies seeking to enhance CSR disclosure were more likely to use assurance, although it did not seem to matter whether the

[35] Timeliness (and manipulation of timing of disclosure) is also a potentially important element in credibility; at least one study (Aerts and Cormier 2009) finds that proactive environmental disclosures seem to be completely discounted as impression management.

assurance provider was a professional auditor and the use of auditors is minimal (Simnett, Vanstraelen, and Chua 2009).[36] For the period 2002 – 2004, out of 40,993 firm-years, 2,113 provided sustainability reports, with 31% of those being assured and 42% of those assured (n = 275) using auditors (Simnett, Vanstraelen, and Chua 2009).[37] The key point is that third-party assurance provides information credibility in voluntary disclosures, but the choice of third-party assurer is not necessarily automatically a public accounting firm nor is third-party assurance necessarily the main source of information credibility.

Role of External Credibility in Legitimacy

Legitimacy is not simply a matter of the degree of the accuracy, completeness, and truthfulness of information provided by a reporting organization, but also of the credibility of the source of assurance that the information is accurate, truthful, and complete. The fundamental source of organizational information signals to stakeholders is mandatory financial reporting and the credibility of that information is supported by the institutional framework as embodied in public accountants. When the credibility (and even legitimacy) of the institutional framework is shaken, organizational legitimacy will be threatened even if the reporting organization itself has done nothing to damage its own credibility and the economy will be disrupted (Kothari, Li, and Short 2009). When the credibility of mandatory disclosures is compromised, a legitimacy gap (Lindblom 2010) develops between what society expects and what the institutional framework is

[36] A follow-up study found that US financial analysts perceived CSR disclosures assured by professional auditors to have greater credibility than those assured by other sources, although this did not hold with UK and Australian analysts (Pflugrath, Roebuck, and Simnett 2011).
[37] It should be noted that this represents a 5.15% CSR disclosure rate, but of the total 40,993 international companies only 1.6% used assurance and only 0.7% used auditor-based assurance.

perceived to be capable of assuring. Voluntary CSR disclosure might reduce this gap and establish (comparatively greater) legitimacy. However, the public is often skeptical of voluntary disclosure intent and truthfulness (Merkl-Davies and Brennan 2007). Increased disclosure partially increases perceptions of completeness, but credibility enhancement choices, such as the use of reporting frameworks and third-party assurance, provide a greater degree of comfort regarding the completeness and accuracy of the information provided. Nevertheless, a threat to the credibility of the institutional framework increases uncertainty in the market and the legitimacy gap and can have significant performance implications for the "innocent" organization which may experience credit shortages or decreases in stock price as investors and creditors reassess the risk and decision-usefulness of reported information. This will be especially powerful in conditions of greater economic uncertainty or in the face of industry-related disasters.

CSR accounting and reporting have emerged in an environment of increasing public attention to organizational behavior and its impact on society. Failure to address issues of concern might result in public pressure to increase regulation. To some extent, increased voluntary disclosures function as a means of staving off future increases in regulation by demonstrating an organization's concern with issues of CSR and thus the organization's alignment with societal values (Walden and Schwartz 1997; Neu, Warsame, and Pedwell 1998; Buhr 2002). Credible public disclosures bridge the gap between the (functioning) regulatory environment and internal management actions and support the public interest (Power 1997). The source of credibility assurance must be perceived as independent and credible itself, however, or alternative sources will be sought. In the wake of Enron, the success of organizations such as

GRI, Fair Trade, the Forest Stewardship Council (FSC), the International Organization for Standardization (ISO), and AccountAbility, among others, has provided alternative sources of third-party information assessment and assurance in response to stakeholder skepticism regarding the credibility and independence of public accountants and the overall institutional environment.

Development of Research Questions

Voluntary CSR disclosures provided to stakeholders are intended to bridge the legitimacy gap between institutional and societal values through demonstrated transparency and respect for societal values and concerns. The intent of the disclosure provided is evaluated by individual stakeholders based on reputation, prior experience, and perceptions of organizational motivation and interacts with informational content (completeness and accuracy) to produce evaluations of credibility. Credibility is especially dependent on external validation, so the use of an independent reporting framework (e.g., the GRI Guidelines) and/or the use of third-party assurance become important sources of credibility enhancement and support evaluations of organizational legitimacy. The combination of framework-and-assurance might be especially potent as it mirrors the structure of the familiar financial reporting format. In short, organizations have three options to increase perceived legitimacy: (1) increase the amount of information provided, (2) use a reporting framework to enhance credibility, or (3) use third-party assurance to enhance credibility. Further, a combination of options might provide different levels of voluntary disclosure *intensity*.

Organizations that had not previously engaged in voluntary CSR disclosure are still affected by a credibility crisis centered on public accounting firms as such a crisis affects the credibility of (auditor-assured) mandatory disclosures. Non-voluntary disclosing organizations in especially socially- or environmentally-sensitive industries (or those whose financial statements had formerly been audited by Andersen) might face an increased threat to their legitimacy and choose to begin engaging in voluntary disclosure in response. There should be no reduction in voluntary CSR disclosure as this would signal decreased transparency, increase information uncertainty, and produce greater costs to the organization.[38] Following the credibility crisis, increased use of *meaningful* voluntary disclosure should continue due to the sunk costs involved in management systems developed to provide the disclosure and the negative effect on reputation that would accompany a subsequent decrease in transparency. For CSR disclosures consisting largely of unsupported "feel good" statements (e.g., "We support the environment", "We care about our community") and representing image management more than the provision of incremental information, however, the use of such voluntary disclosure might decrease following the resolution of the crisis as there have been no significant investments into management systems and no significant reputation for openness and accuracy of reporting has been established. The first research question addresses this basic state as the frequency of CSR voluntary disclosure as both a component choice (all instance of CSR disclosure) and an intensity level (organizations choosing *only* to provide CSR disclosure without any other means of enhancement).

[38] It is, however, possible that very high levels of market uncertainty might lead to non-rational behavior where all firms reduce signaling behavior and wait for the instability to resolve. This should appear only when the *source* of the threat is not clear, which was not the case with the Enron crisis.

RQ1a: To what degree will S&P 500 organizations provide voluntary CSR disclosures before, during, and after an exogenous legitimacy threat?

RQ1b: To what degree will S&P 500 organizations provide voluntary disclosures alone (without additional credibility enhancements) before, during, and after an exogenous legitimacy threat?

Information credibility depends on assessments of accuracy and completeness supported by external, independent sources. Theoretically, stakeholders should prefer less, but more accurate, information to large amounts of misleading or meaningless information (see Chapter Three for evidence of this preference). Third-party assurance functions to provide at least a degree of comfort regarding information accuracy (sampled information found to be accurately reported) and uses procedures and providers familiar to the organization from the auditing of its financial statements.[39] This would suggest that under most threats to legitimacy an organization might seek to enhance credibility by adopting third-party assurance even before the use of a framework (and the associated extensive adoption of managerial systems). A basic source of credibility enhancement is the use of a reporting framework to emphasize the completeness and extent of information, however, without the problematic (in terms of high-annual cost, assurance of only targeted areas, and questions of competence to assure more scientific/technical performance issues) question of third-party assurance. Because they also increase consistency and comparability, stakeholders might prefer the use of reporting frameworks to third-party

[39] Theoretically, it might also provide a degree of comfort regarding the completeness of the information provided (an accurate representation, omitting no salient facts) but in practice third-party assurance of CSR disclosures tends to be confined to specific, limited subtopics that are more easily quantified and verifiable.

assurance. Further, during a crisis centered on institutional providers of assurance, organizations previously utilizing third-party assurance might choose to shift their emphasis from third-party assurance to an independent framework. Following resolution of the crisis, and given the sunk costs involved in supporting either third-party assurance or a reporting framework, the likelihood is that the use of either option will continue.

RQ2a: To what degree will those S&P 500 organizations engaging in voluntary CSR disclosure before, during, and after an exogenous legitimacy threat utilize an independent reporting framework to enhance credibility?

RQ2b: To what degree will those S&P 500 organizations engaging in voluntary CSR disclosure before, during, and after an exogenous legitimacy threat utilize third-party assurance to enhance credibility?

When credibility enhancement is considered as a measurement of *intensity*, and not simply the individual components, two options are possible. Either option is dependent on the initial decision to increase transparency by providing voluntary CSR disclosure. Once that decision is made, reporting organizations can choose to provide a disclosure with *one* source of credibility enhancement, either a reporting framework *or* third-party assurance (CSR-OR), or to provide voluntary disclosure with *two* sources of credibility enhancement, a reporting framework *and* third-party assurance (CSR-AND). When the credibility crisis is focused on public accountants, and if auditors are the usual source of third-party assurance of voluntary disclosure, CSR-OR organizations should prefer to add a framework. For organizations already using one

method but perceiving a need to enhance legitimacy, the most likely option is to add the second method.

RQ3a: To what degree will S&P 500 organizations provide voluntary CSR disclosures with one source of credibility enhancement, either a reporting framework OR third-party assurance, before, during, and after an exogenous legitimacy threat?

RQ3b: To what degree will S&P 500 organizations provide voluntary CSR disclosures with two sources of credibility enhancement, both a reporting framework AND third-party assurance, before, during, and after an exogenous legitimacy threat?

Finally, within the subcategory of organizations choosing to use third-party assurance, what will be the source of that third-party assurance? In a legitimacy threat centered on public accounting firms, organizations previously using auditors to provide third-party assurance of voluntary information are likely to shift to a different source of third-party assurance. The audit profession has claimed to be pre-eminently qualified to provide assurance on voluntary CSR disclosures due to experience in performing financial audits, although at least one study finds that consultants are more likely to assess completeness and consistency than are auditors (O'Dwyer and Owen 2005). Alternatives to auditor-based third-party assurance exist in the use of external consultants or NGOs, which might also provide certifications for the organization to display on their packaging, advertising, or website.

RQ4: To what degree will those S&P 500 organizations using third-party assurance of voluntary CSR disclosure before, during, and after an

exogenous legitimacy threat utilize public accounting firms to provide that assurance?

A summary of these predictions for CSR component choice is presented in Table 17. No predictions are made for CSR intensity.

Research Design and Methodology

Population

The population for this study consists of the S&P 500 for the period 1998 to 2005. This population captures the largest actively traded companies in the United States listed on either the NYSE or NASDAQ exchanges. Composition of the S&P 500 does change slightly from year to year and within years (consequently, the sample ranges from $n = 503$ to $n = 526$), but relative rank within the index is not important. For certain of the statistical tests used in this study, it is important that the cell sizes are equal and that the same companies are in each cell: in such instances, the population is restricted to those organizations present in each of the eight years ($n = 337$). Concentration on large-cap, publicly traded companies and US markets restricts the sample to organizations that are most likely to be affected by an exogenous legitimacy threat centered on the institutional framework supporting the US market and on the largest public accounting firms which provide assurance of their mandatory financial disclosures. These organizations cover a range of industries and should better reflect an exogenous legitimacy threat and not simply perceived risk from an implicated industry or market segment. This is an exploratory study of organizational behavior in the aggregate during a credibility crisis, not a

case study of individual organization reactions. Therefore, the focus is on the overall frequency of CSR components or intensity levels utilized within each time segment within the entire S&P 500, rather than on changes within individual organizations; the study is descriptive, rather than predictive.

Research Design and Methods

When the Enron scandal surfaced in 2001, audit firms entered a turbulent period of accounting scandals, independence crises, and prosecution that continued through the collapse of WorldCom and the dissolution of Andersen in 2002 (Table 18). There had been warning signals in prior years, and other incidents followed, but the years 2001 – 2002 produced a crisis of confidence in the entire audit profession and resulted in vocal societal and governmental pressure for increased industry regulation. This study examines corporate voluntary CSR disclosure behavior across the period 1998 – 2005, divided into three groups: pre-crisis, crisis, and post-crisis. There might be a lagged period before firms are able to implement systems and internal processes to change reporting behaviors and biennial voluntary reporting cycles are common during the test period, so each group consists of at least two years.

Using frequency counts of the behavior of interest across the period, the patterns of US voluntary CSR disclosure behavior before, during, and after a credibility crisis involving audit firms are examined. Largely exploratory in nature, the study utilizes graphical analysis of relationships between qualitative variables and tests of changes in frequencies and proportions over time. As the data are categorical and only partially independent, non-parametric tests are utilized. Friedman's non-parametric ANOVA is initially used to determine whether there are

significant differences in either the use of individual components or in intensity levels across the entire test period. Wilcoxon's signed-rank tests are then used to test for difference in reporting choices or intensity levels among the three testing groups (pre-crisis, crisis, post-crisis). Finally, two-proportion z-tests of changes in frequency are used to determine which specific components or intensity levels are significantly different. The significance level used is $\alpha = .05$ (adjusted using Bonferroni corrections where appropriate) with one-tailed tests.

Data for this study come from the Global Reporting Initiative (GRI) and CorporateRegister.com websites. GRI not only has developed one of the most widely adopted and endorsed frameworks for CSR reporting, but also maintains a database of organizations using the framework and subscribing to GRI procedures. The reporting framework features profile disclosures, performance indicators, and management disclosures designed to be adopted incrementally across key areas of CSP. The original G1 Guidelines (launched in 2000) were much less elaborate, but the G2 Guidelines (released in 2002) introduced distinctions within levels of reporting frameworks and encouraged the additional use of third-party assurance.[40] The CorporateRegister.com website contains a unique, proprietary database of all known CSR reports, including listings of frameworks utilized, source of external assurance, and .pdf files of historical reports. For each year of the period 1998 – 2005, each of the S&P 500 companies for that year is checked to see if they published voluntary CSR disclosures, which might consist of "sustainability," "environmental," "social," "citizenship," or any other reporting title that is discretionary, primarily involves non-financial performance, and includes information reflecting CSR. A categorical nominal variable is coded for each firm-year for the presence of each

[40] The current GRI Guidelines are in version G3.1 (2011), replacing G3 (2006). The release of G4 is projected for May 2013.

potential CSR component choice (CSR Disclosure, Framework, Assurance, Auditor Assurance) and a categorical ordinal variable is used to reflect the selected intensity level (CSR-ONLY, CSR-OR, CSR-AND).

Independent variables are simply the years of the study or the grouping variables (pre-crisis, crisis, post-crisis) to which the years belong. Dependent variables are measures of the frequency with which individual CSR components or CSR intensity levels were utilized. As these are categorical variables with counts, the calculation of means is meaningless; however, frequencies can be compared across unequal cell sizes. CSR components are coded (0 = not present, 1 = present) for each potential choice: the production of a CSR disclosure (CSR) the use of an independent reporting framework (FRAMEWORK), the use of third-party assurance (ASSURE), and the use of an auditor, specifically, as third-party assurer (AUDITOR). FRAMEWORK and ASSURE are nested within CSR (an organization must produce a CSR disclosure in order to use a framework or third-party assurance, but there are CSR-disclosing organizations that provide neither framework nor third-party assurance); AUDITOR is nested within ASSURE. For any firm-year, there might be more than one component.[41]

The measure for CSR disclosure intensity is based on the assumption that the combination of individual components to produce legitimacy is more telling than simple counts of components present. Three levels of intensity, reflecting progressively greater efforts to signal legitimacy, are coded as ordinal variables. CSR-ONLY (coded "1") are those organizations which produce a CSR disclosure alone, with no additional source of credibility enhancement (neither a reporting framework nor third-party assurance). Organizations which

[41] For example, a single company with (1) a CSR disclosure using both (2) a framework and (3) third-party assurance, with the third party assurer being (4) a public accounting firm will have a count in all four components.

use one method of credibility enhancement, either a reporting framework or third-party assurance (CSR-OR), are coded "2". Organizations using both methods of credibility enhancement, a reporting framework and third-party assurance (CSR-AND), are coded "3". For any given firm-year, there can be only one level of intensity, although intensity might change across firm-years.

Certain industries might be more sensitive to the credibility crisis than others, due to greater perceived risk, exposure to environmentally/socially sensitive areas, or association with organizations directly implicated in the crisis. Information on each organization's industry membership, quality rating, financial statement auditor, and relative risk was obtained from Compustat or CRSP. Additionally, since a credibility crisis involving public accounting firms (and thus the credibility of the audited financial statements) might affect financial performance, measures of total assets, revenues, and net income for each firm-year were also tracked.

Analysis and Discussion

The initial time period of interest was estimated to be between 1998 and 2005 to bracket a period of increasing auditor-focused crises, with 1998 and 2005 both containing no significant crises (refer to Table 18). However, there are two factors that might influence where and how the time frame is broken into related periods: this introduction of the GRI first generation framework in 2000 and a possible time-lag effect for reporting. Graphing the frequency of CSR disclosure components across each year of the study (Figure 5), there appear to be three distinct periods for CSR: an increase across 1998 – 2001; a plateau for 2002 – 2003; and an increase again for 2004 – 2005. However, there appear to be four periods for FRAMEWORK: relatively

low and flat for 1998 – 1999; an increase during 2000 – 2001; a plateau during 2002 – 2003; and an increase during 2004 – 2005. ASSURE (and within this component AUDITOR) displays a consistently low frequency with no clearly discernible pattern.

Organizational signaling behavior consists not only of individual components, but also of a measure of intensity in how those components are combined. A visual inspection of the frequency of CSR disclosure intensity across the time frame (Figure 6) seems to indicate that there are four distinct periods. For CSR-ONLY organizations, there is a low but increasing period in 1998 – 1999; a sudden increase but relatively flat period in 2000 – 2001; and a slight increase but relatively flat period from 2002 – 2005. For CSR-OR organizations, 1998 – 1999 is relatively flat; there is an increase across 2000 – 2001; 2002 – 2003 plateaus at a higher level; and 2004 – 2005 displays another sharp increase in frequency. There were no CSR-AND organizations until 2000; the frequency of this intensity level remains relatively flat from 2000 – 2002 and then increases slowly through 2005.

Based on the graphed frequencies, the eight-year testing period is grouped into four 2-year periods. The period 1998 – 1999 functions much as a "base line," prior to the introduction of the GRI framework and (allowing for a one year reporting lag) prior to major accounting scandals. The following period, 2000 – 2001, represents a pre-crisis period, with the presence of accounting scandals but without the widespread public skepticism and regulatory backlash that occurred in the wake of Enron. Disclosures released during 2002 – 2003 represent the crisis period in reactions to Enron (2001), WorldCom (2002), and the fall of Andersen (2002). Finally, 2004 – 2005 represents a post-crisis period, following the passage of the Sarbanes-Oxley Act, the

creation of the Public Company Accounting Oversight Board (PCAOB), and a decrease in the number of auditor-based scandals.

CSR Components

The research questions in this study concentrate on increases in specific behaviors shown in response to an exogenous legitimacy threat that can be perceived to threaten an organization's reporting credibility and overall legitimacy. Counts of the frequency of each of four behaviors (CSR, FRAMEWORK, ASSURE, AUDITOR) are tabulated and two-proportion *z*-tests for differences in frequencies are used to check for significant changes across the grouping periods. There are clear increases in both CSR and FRAMEWORK across all years (Table 19, Panel A). ASSURE, however, only begins to increase (and that a minimal level) during the post-crisis years, while AUDITOR fluctuates but remains extremely limited and never returns to the 1998 level of 50% of ASSURE.

The increase in the absolute use of CSR disclosure and of an independent reporting framework is significant for changes across all four periods (Table 20, Panel A). Neither the use of third-party assurance nor of auditor provided third-party assurance of the CSR disclosure is significant for any of the time periods. As there is some ambiguity in the years 2000 – 2001, an alternate analysis was conducted using only three periods (baseline, crisis, post-crisis) with identical results for trends in CSR component frequency.

CSR Intensity

Individual components of voluntary disclosure are not necessarily of most interest. Instead, the *combination* of these components differentiates organizational behavior in demonstrations of transparency and credibility. Consequently, the analysis continues by looking at CSR disclosure intensity across the groups centered on the crisis period. We would expect to see an increase in disclosure intensity in response to increased legitimacy pressure during the crisis. Following the crisis, behavior will depend on perceived effectiveness of credibility enhancement versus transparency and perceptions of relative effectiveness between FRAMEWORK and ASSURE. The frequency counts for each intensity level across the study period are given in Table 19, Panel B. As the data are not independent, but are ordinal repeated measures, Friedman's non-parametric ANOVA is used to test for significant changes across the entire period for the restricted set ($n = 337$), $X^2(3) = 108.498$, $p < .001$.[42] Next, Wilcoxon signed-rank tests (based on negative ranks)[43] is used to follow up the initial finding, using both a 3- and 4-group analysis.[44] Voluntary CSR disclosure intensity significantly increases across every period, from the base period (1998) to pre-crisis (2000), $z = -5.458$, $p < .001$, $r = 0.210$; from pre-crisis to crisis (2002), $z = -3.238$, $p < .001$, $r = 0.125$; and from crisis to post-crisis (2005), $z = -3.887$, $p < .001$, $r = 0.150$. If the analysis is conducted using only three periods (comparing 1998 to 2002), the significant increase is even more apparent, $z = -6.458$, $p < .001$, r

[42] It is not appropriate to additively combine frequency counts of ordinal data or to calculate a mean. Therefore, the analysis uses the years 1998, 2000, 2002, and 2005 as the representative years of each sample. 2005 is used to bracket the final year of the study period, but if 2004 is used to represent the post-crisis period, the analysis does not change.

[43] Wilcoxon signed-rank tests based on negative ranks indicate an *increase* in later periods and will produce a negative z-score.

[44] Bonferroni corrections were applied and all effects are reported at a .0125 level of significance.

= 0.250. Although there is a significant increase across all three periods in the intensity of disclosure period, the effect size for the initial movement from base period is much larger than from crisis to post-crisis, indicating a sharp increase in intensity, most probably as organizations adopted the newly-available GRI G1 framework in 2000 and the improved G2 version in 2002.

Finally, a series of two-sample *z*-tests for differences in proportion for each level of intensity is conducted across the grouping periods (Table 20, Panel B). These tests use the entire sample of S&P 500 firms across all 8 years. CSR-ONLY shows a significant increase from baseline to pre-crisis periods, $X^2(1) = 10.29$, $p = .001$, but does not significantly increase in subsequent periods. CSR-OR shows significant increases across all groups, with the greatest increase occurring in the final crisis to post-crisis stage, $X^2(1) = 10.46$, $p = .001$. There are no instances of CSR-AND until 2000, and the frequency of organizations at this intensity level is quite small across time, producing non-significant results across all periods.

Sensitivity Analyses

It is possible that factors endogenous to an organization might render that organization more vulnerable to exogenous threats and thus produce different patterns of CSR disclosure behavior. Four contextual factors (Andersen-audited, membership in certain industries, quality, and risk) were used to partition the data and compare findings (Table 21). The exogenous crisis in this study centers around two devastating audit failures and the subsequent dissolution of Andersen. It is possible, therefore, that all disclosures from organizations with financial statements audited by Andersen at any point during 1998 – 2002 might be treated with more skepticism. Friedman's ANOVA was significant for the Andersen group ($n = 63$, $X^2(3) =$

12.810, $p < .01$), indicating a significant relationship overall between time period and disclosure intensity. Wilcoxon signed-rank tests (with Bonferroni correction), however, demonstrated no significant differences between pairs of groups. To untangle these conflicting results, two-sample *z*-tests for differences in proportion were conducted for each level of CSR disclosure between each grouping period. These results indicated that Andersen-audited organizations showed a significant increase between pre-crisis and crisis periods for both CSR-ONLY ($X^2(1) = 4.800$, $p < .05$) and CSR-OR ($X^2(1) = 14.470$, $p < .001$). For organizations which were not audited by Andersen at any point during the study period, overall intensity level changed significantly across all three groups at the $p < .01$ level or better. CSR-ONLY and CSR-AND significantly increased from both baseline to pre-crisis and pre-crisis to crisis ($p < .05$ or better), while CSR-OR significantly increased across all three groups ($p < .01$ or better).

Industry membership has been shown to be an important covariate for CSR research (Margolis and Walsh 2001). Additionally, financial firms and public utilities are frequently excluded from research data because it is felt that the highly regulated nature of their industries – which results in extensive, detailed mandatory reporting and restrictions on management actions – might give non-typical results. Two separate analyses were run on the data to test for a significant effect for either of these groups. Organizations with Industry Segment Codes relating to the energy industry ($n = 38$) had a significant Friedman's ANOVA, $X^2(3) = 8.792$, $p < .05$, but insignificant Wilcoxon signed-rank tests for overall intensity between groups, unless tested between baseline and crisis, $z = -2.352$, $p < .05$. None of the individual *z*-tests were significant. Organizations in the financial services and utilities sectors ($n = 79$) also had a significant Friedman's ANOVA, $X^2(3) = 24.920$, $p < .001$, but had significant Wilcoxon's signed-rank tests

between both baseline to pre-crisis, $z = -3.153$, $p = .001$, and pre-crisis to crisis, $X^2(1) = 2.324$, $p < .05$. These results were driven by significant differences in CSR-ONLY between baseline and pre-crisis, $X^2(1) = 7.239$, $p < .01$. In contrast, the remaining part of the sample in both instances displayed significant increases in overall intensity across all groups at $p < .01$ or better, and an identical pattern of CSR-ONLY significantly increasing from baseline to pre-crisis and CSR-OR significantly increasing from both pre-crisis to crisis and crisis to post-crisis at $p < .05$ or better.

Organizational characteristics such as quality and risk might also affect sensitivity to exogenous shocks. Using the S&P Quality ratings from Compustat, organizations were divided into high quality (A+, A, A-, B+) and low quality (B, B-, C, D). The low quality group ($n = 138$) had a significant Fisher's ANOVA, $X^2(3) = 37.298$, $p < .001$, with Wilcoxon's signed-rank tests indicating significant increases in overall intensity across all three groups (baseline to pre-crisis, $z = -3.900$, $p < .001$; pre-crisis to crisis, $z = -1.874$, $p < .05$; crisis to post-crisis, $z = -2.148$, $p < .05$. These differences were driven by significant increases in CSR-ONLY from baseline to pre-crisis, $X^2(1) = 3.466$, $p < .05$, and in CSR-OR from crisis to post-crisis, $X^2(1) = 4.563$, $p < .05$. In both instances, when comparing baseline to crisis the increase was also significant at the $p < .05$ level. The only difference in this pattern with high quality organizations ($n = 198$) was that CSR-OR also significantly increased from pre-crisis to crisis at the $p < .05$ level.

Using Betas from the CRSP database, a high risk group was formed based on Beta values greater than 1.5 ($n = 66$). Friedman's ANOVA was significant, $X^2(3) = 23.749$, $p < .001$, with Wilcoxon's signed-rank test indicating the significant increase was concentrated in the baseline to pre-crisis period, $z = -3.051$, $p < .001$, or, alternatively, baseline to crisis, $z = -3.368$, $p < .001$. CSR-ONLY from baseline to pre-crisis, $X^2(1) = 5.893$, $p < .05$, drove these results. In

comparison, all other organizations showed significant increases in overall intensity across all groups ($p < .001$ or better) and showed significant increases in CSR-ONLY from baseline to pre-crisis ($p < .05$) and CSR-OR from crisis to post-crisis ($p < .01$).

Discussion

The purpose of this study was to explore whether organizations change their signaling behavior in response to exogenous crises in which the reporting organizations are not themselves directly implicated, but which might nevertheless impact the credibility of their disclosures, voluntary and otherwise. The expectation is that organizations would change voluntary disclosure behavior in an attempt to increase transparency and credibility and reinforce their claims to be a legitimate, trustworthy entity. An initial analysis confirmed that there was a change over time in voluntary disclosure behavior, with three to four distinct groups during the study period. The questionable group, years 2000 – 2001, also brought to light an important point. Voluntary CSR disclosure behavior not only consists of the individual components (CSR, FRAMEWORK, ASSURE), but also of the degree of *intensity* of voluntary disclosure behavior created by the combination of these components. Intensity consists of three levels: CSR-ONLY (transparency), CSR-OR (credibility), and CSR-AND (credibility). Table 22 summarizes the research findings for both CSR components (Panel A) and CSR intensity (Panel B).

Components of voluntary disclosure seem to group 2000 – 2001 with 1998 – 1999, and there is a clear increase in the use of CSR disclosure between 1998 (pre-crisis) and 2002 (crisis), a plateau during the crisis, and another increase in the use of CSR disclosure between 2002 and 2005 (post-crisis). Further testing indicated that both increases were significant, with the

majority of the pre-crisis to crisis change occurring during the common baseline years of 1998 – 1999. Thus, to answer RQ1a, absolute use of CSR disclosure rises over time, up to a crisis; plateaus during a crisis; and then continues to increase following the resolution. The plateau during the crisis period might reflect a pause to allow reporting organizations to assess the magnitude and source of the crisis and determine the best means of response.

The use of independent reporting frameworks also showed a similar pattern, although the pre-crisis period 1998 – 2001 is clearly broken into two periods, the baseline (1998 – 1999) and pre-crisis (2000 – 2001), most probably due to the introduction of the GRI G1 framework in 2000. There is a significant increase in FRAMEWORK between all three groups, with an increase prior to a crisis, during a crisis but at a slower rate, and then escalating again post-crisis (RQ2a).

On the other hand, neither the use of third-party assurance (RQ2b) nor the use of an auditor to provide such assurance (RQ4) demonstrate any significant change across the period and remain at quite minimal levels. Interestingly, and in contrast with prior findings, the use of auditors as a proportion of third-party assurance providers is not as high as expected, with a range of 50% (1998) to 17% (2003). Although changes in AUDITOR did not reach significance, primarily due to the extremely small number of cases, during a crisis centered on public accounting firms, AUDITOR fell dramatically between the pre-crisis and crisis period, and then recovered partially (29% of third-party assurance utilized) by 2005 in the post-crisis period. Audit firms never regained their formal share of overall ASSURE, indicating continued skepticism of their ability to enhance credibility following a legitimacy crisis based on auditors as a member of the institutional framework.

Voluntary CSR disclosure intensity across the testing period might be a better way of conceptualizing organizational response to a perceived legitimacy threat. Visual inspection of these three ordinal measures across the time period confirmed the grouping patterns exhibited by CSR components. Organizations issuing a CSR disclosure alone (with *no* additional source of independent credibility enhancement) increased from baseline (1998 – 1999) to pre-crisis (2000 – 2001) and then largely stabilized (RQ1b). The level of CSR-OR intensity grew sharply during the pre-crisis period, held at a plateau during the crisis, and then accelerated post-crisis (RQ3a). There were no instances of CSR-AND during the baseline, but starting in 2000 instances began to appear in very small numbers and then began to increase (while never reaching significance) post-crisis (RQ3b). Overall, it appears that there was a sudden increase in transparency efforts around 2000, with subsequent increases in disclosure intensity mainly coming from efforts to establish transparency *and* credibility. CSR-OR behavior increased in significance, largely replacing CSR-ONLY around 2000, possibly due to the introduction of the G1 Guidelines. When comparing baseline to crisis, there were significant increases across all levels of intensity, but following the crisis only CSR-OR continued to be significant. It is also noteworthy (see Table 19, Panel B) that within the CSR-OR level, the overwhelming majority of organizations at this level are using an independent reporting framework (92% by 2002 and 98% by 2005).

Sensitivity tests for the influence of organizational-level factors on these overall relationships showed some interesting differences. Organizations whose financial statements were audited by Andersen did increase CSR-ONLY and CSR-OR behavior between pre-crisis and crisis periods, suggesting a response to an increased legitimacy threat. Prior to 2001, all CSR-OR for Andersen-audited organizations was based on third-party assurance; in 2001 there

was a shift, with one of the three CSR-OR instances using a framework; there were *no* instances of CSR-OR disclosures released in 2002 or 2003 using third-party assurance. In contrast, other organizations showed increased CSR-ONLY and CSR-AND across baseline, pre-crisis, and crisis periods and CSR-OR across all three periods. This would suggest that the Andersen audited organizations increased reporting behaviors in response to an increased legitimacy threat, while non-Andersen organizations steadily continued to increase voluntary disclosure, possibly to differentiate themselves from the Andersen-tainted organizations. It also appears that between crisis and post-crisis, non-Andersen firms determined both that (a) transparency alone was not sufficient to preserve legitimacy and that (b) third-party assurance did not significantly add to credibility, probably due to public skepticism of auditor independence.

The influence of industry segments is even more of a contrast. Organizations concentrated in the vulnerable energy sectors, or the highly regulated financial services and utilities sectors, showed no significant changes, with the exception of an increase in CSR-ONLY reporting between the baseline and pre-crisis periods for financial services/utilities which appears to be driven by philanthropy reports released by banks. All other organizations first significantly increased CSR-ONLY behavior between baseline and pre-crisis and then significantly increased CSR-OR behavior between pre-crisis and crisis and again between crisis and post-crisis periods. There are two possible explanations for this result: (1) energy, utilities, and financial services are so highly regulated that mandatory reporting is deemed sufficient to assess organizational behavior, or (2) organizations *not* in those segments are signaling their differential reflections of societal values. Further, it appears that the majority of organizations first tried increased transparency, but then switched intensity behavior to CSR-OR in response to

a crisis. Apparently real benefits were perceived from this behavior, as the significant increase in CSR-OR intensity behavior continues into the post-crisis period.

When partitioned along S&P quality ratings, the high quality group shows a significant increase between baseline and pre-crisis for CSR-ONLY, which is then replaced by CSR-OR between pre-crisis and crisis and again between crisis and post-crisis, as before. Low quality organizations, on the other hand, also increased transparency efforts from baseline to pre-crisis, and then made no significant changes in behavior until a tardy increase in CSR-OR intensity level between crisis and post-crisis. Apparently, lower quality organizations are associated with a reluctance to provide credibility-enhanced voluntary disclosures. When partitioned on risk based on Beta values, higher risk organizations only show a significant increase in transparency efforts (CSR-ONLY) between baseline and pre-crisis and no efforts to provide credibility-enhanced voluntary disclosures.[45] Lower risk organizations (all organizations with a Beta < 1.5), on the other hand, show increased transparency (CSR-ONLY) efforts for both baseline to pre-crisis and pre-crisis to crisis periods, and credibility-enhancement efforts (CSR-OR) between baseline and again between pre-crisis and crisis and crisis and post-crisis. This would suggest that lower risk is associated with responding to an exogenous crisis by first increasing transparency, followed by enhancing the credibility of those disclosures. It should also be noted that lower risk organizations were those that adopted credibility enhancement measures (CSR-OR) earlier than any of the others.

[45] What is truly interesting is that this pattern exactly mirrors those of organizations in the Financial Services/Utilities sector, down to the finding that *only* in these two groups do we find no instances of CSR-AND intensity behavior whatsoever. As 67% of the organizations within the Financial Services/Utilities sectors are associated with Financial Services, this suggests that Financial Services were considered to be high risk, a conclusion borne out by subsequent events.

One of the persistent questions in prior research is whether CSR disclosure is driven by the size or profitability of the organization, or whether a focus on CSR within the company leads to increased size and profitability due to increased efficiency and effectiveness. Although solving this "chicken-or-egg" riddle is beyond the scope of this study, it is informative to examine CSR disclosure intensity behaviors by relative size or profitability. Size is operationalized by total assets (a widely used proxy across literatures and profitability by net income).

When intensity level is graphed against mean total assets across the entire study period (Figure 7), several patterns are apparent. Smaller organizations do indeed tend to be associated with no CSR reporting; the very smallest organizations between 2000 and 2004, however, are associated with CSR-AND intensity levels. An examination of the specific companies displaying CSR-AND behavior (Table 23) reveals that few consistently use this method (Baxter International, Newmont Mining, Starbucks), but for the majority the "extra enhancement" is suspiciously coincidental with a potential or recent scandal (and taking into account necessary lag time to produce the report). This would suggest that third-party assurance is *not* regarded as adding long-term value, but is, instead, used for the purposes of image management and short-term credibility enhancement. The largest organizations, on the other hand, are consistently associated with CSR-OR behavior, with the exception of a single year (2001). By 2002, CSR-ONLY is associated with mid-range organizations. It is interesting to note that the chart suggests that the rate of change in the size of organizations is greatest for those choosing CSR-OR behaviors, whereas the size of those organizations choosing not to engage in any CSR disclosure behavior remains fairly level across time.

Behaviors accounted for by CSR-AND intensity levels are somewhat difficult to interpret due to the relative non-persistence of organizations within the category: a single entrance or exit can drastically alter the measure of mean size or profitability for that year. Setting aside CSR-AND, and using net income to differentiate organizations by profitability, we see a clear dip in mean net income across all other intensity levels from 2001 – 2002, with organizations choosing *not* to use CSR disclosure being associated with a net *loss* in 2002 (Figure 8). While we cannot infer causation from this, it is a clear indication that organizations using greater transparency and enhancing the credibility of their voluntary CSR disclosures are associated with far greater profitability during legitimacy threats to the surrounding institutional framework.

Overall, firms not providing CSR disclosure remain associated with a consistently low level of profitability across time. CSR-ONLY firms are also fairly stable, recovering from the across-the-board dip in profitability during 2001 and 2002. CSR-OR organizations are nearly equivalent to CSR-ONLY prior to 2001, suggesting that credibility enhancements were not considered necessary (both CSR-ONLY and CSR-OR contain CSR reports). However, in 2001, the profitability of CSR-ONLY firms exceeds CSR-OR, possibly hinting at a backlash against third-party assurers (16% of the CSR-OR category at this point).

By 2002, when the use of a reporting framework accounts for 92% of the CSR-OR behavior, the profitability of CSR-OR organizations surpasses CSR-ONLY companies and continues at a positive rate of growth. By 2004, CSR-OR behavior is clearly associated with the highest profitability levels, CSR-ONLY with mid-range levels, and organizations choosing not to provide voluntary CSR disclosure are associated with the lowest profitability levels. Overall, organizations utilizing CSR disclosure appear to enjoy greater profitability than those which

choose not to do so, and those firms choosing also to incorporate a reporting framework see greater rates of growth in profitability.

Conclusion

This study has looked at qualitative characteristics of voluntary CSR reporting behavior for firms confronting an exogenous legitimacy threat centered on the institutional framework. Public accounting firms are a critical component of that framework through their role in assuring mandatory financial statements. The public skepticism regarding auditor independence in the wake of Enron and the fall of Andersen created a climate of mistrust towards all organizational disclosures. Lack of credibility in the institutional framework created a legitimacy gap between societal expectations of corporate behavior and institutional enforced expectations and created a credibility crisis for the "innocent" reporting firms which had not been directly involved in the scandal. Although this study is an initial exploration of this area, the research questions addressed are of great relevance in the current environment of global uncertainty and volatile economic conditions. If "innocent parties" are able to insulate themselves through their voluntary disclosure behaviors from the increased risk and uncertainty caused by exogenous forces beyond their control, the importance of this question for practitioners and corporate stakeholders is evident.

An examination of discretionary reporting behaviors over an eight year period surrounding the 2001 – 2002 Enron/Andersen crisis supports this study's suppositions. In regards to individual CSR disclosure components, the use of third-party assurance is very limited and the proportion of that assurance provided by auditors remains insignificant and decreases

during the crisis period. In regards to CSR disclosure intensity levels, the results are even clearer. Organizations sought to demonstrate their commitment to societal norms and values by first increasing the amount of voluntary disclosure and then, as the crisis deepened, by enhancing credibility of voluntary disclosures through the use of an independent reporting framework. The perceived efficacy of this strategy was great enough that following the crisis, the frequency of organizations engaging in CSR-OR intensity behavior continued to increase at a strong rate of growth and CSR-AND behavior slowly began to make an appearance. Additionally, lower quality/higher risk organizations seem to choose lower levels of CSR disclosure (including no CSR disclosure) or to delay in adopting credibility enhancement measures. Smaller, less profitable organizations are associated with no CSR disclosure whereas, by 2002, the largest, most profitable organizations are associated with CSR disclosure with credibility enhancement.

There are several limitations of this study. First, overall numbers for third-party assurance (and, within that group, auditor provided assurance) are very small, making it difficult to meaningfully test changes in frequency of behavior over time. These numbers need to be treated cautiously as an indicator of overall trends but with the realization that they are statistically negligible. Also, the first generation of GRI Guidelines was released for comment in 1999 and became available in 2000 and this fact *per se* might have contributed to the increase in the use of reporting frameworks between the baseline and pre-crisis periods. The use of the S&P 500 allowed us to look at a group of economically powerful companies which are exposed to a range of stakeholder interests and pressures; however, this might also produce a dispersion of stakeholder power which insulated them somewhat from legitimacy pressures. Further, due to the study population, tests of the association of CSR intensity behavior with size and profitability

of firms is also restricted to the largest, most profitable firms in the US market. Finally, the categorical nature of the data restricts the types of testing possible, as do the unequal numbers of reporting organizations within the S&P 500 during each period.

Future extensions of this study would help to clarify some of the associations, especially extensions which might be able to examine general growth over time in disclosure behaviors versus those resulting from specific events. It would be interesting to compare reporting behaviors from small and mid-sized organizations to see if there is a difference in vulnerability to legitimacy pressures. Extending the study to behavior around the 2008 market collapse and general economic crisis would be informative. Finally, an examination of lagged financial performance would be helpful in determining the subsequent effect of CSR disclosure choices. The continued examination of how voluntary disclosure behavior (and associated stakeholder perceptions of credibility and trustworthiness) might insulate the organization against external crises has the potential to be extremely useful to regulators, stakeholders, and organizational management faced with the uncertainty inherent in an interdependent global marketplace.

Figures

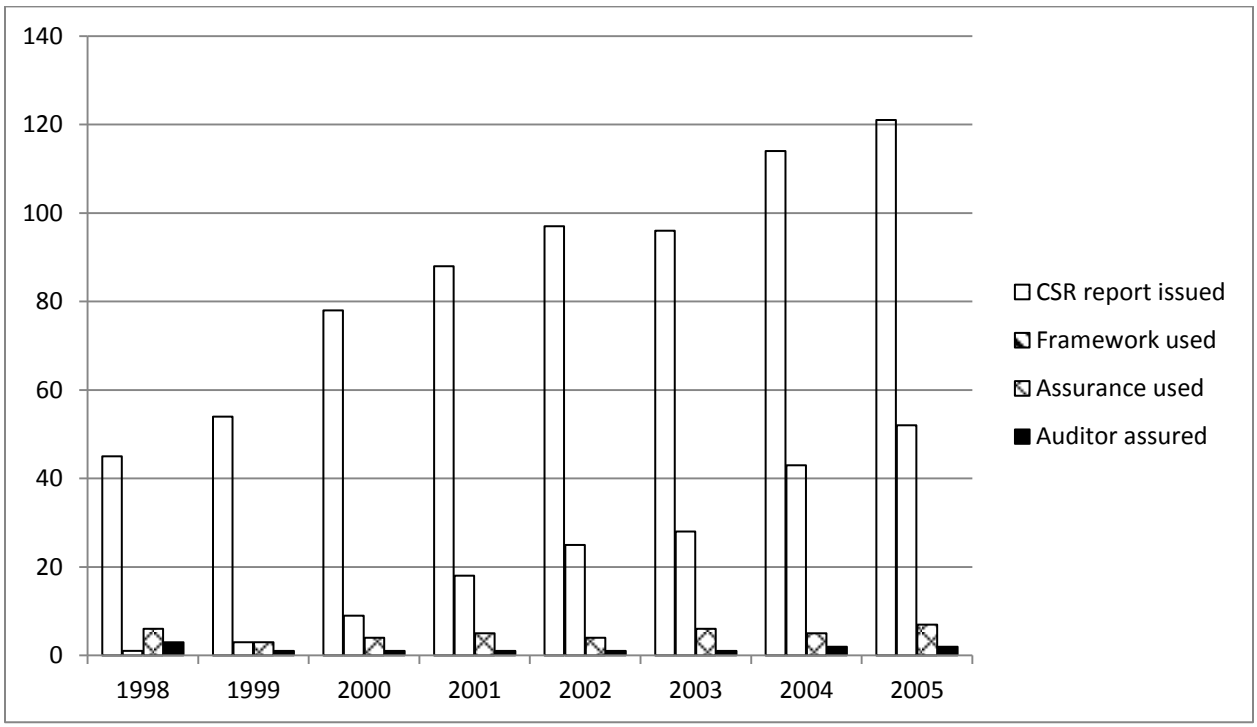

Figure 5: Frequency of CSR Disclosure Components across Time Period

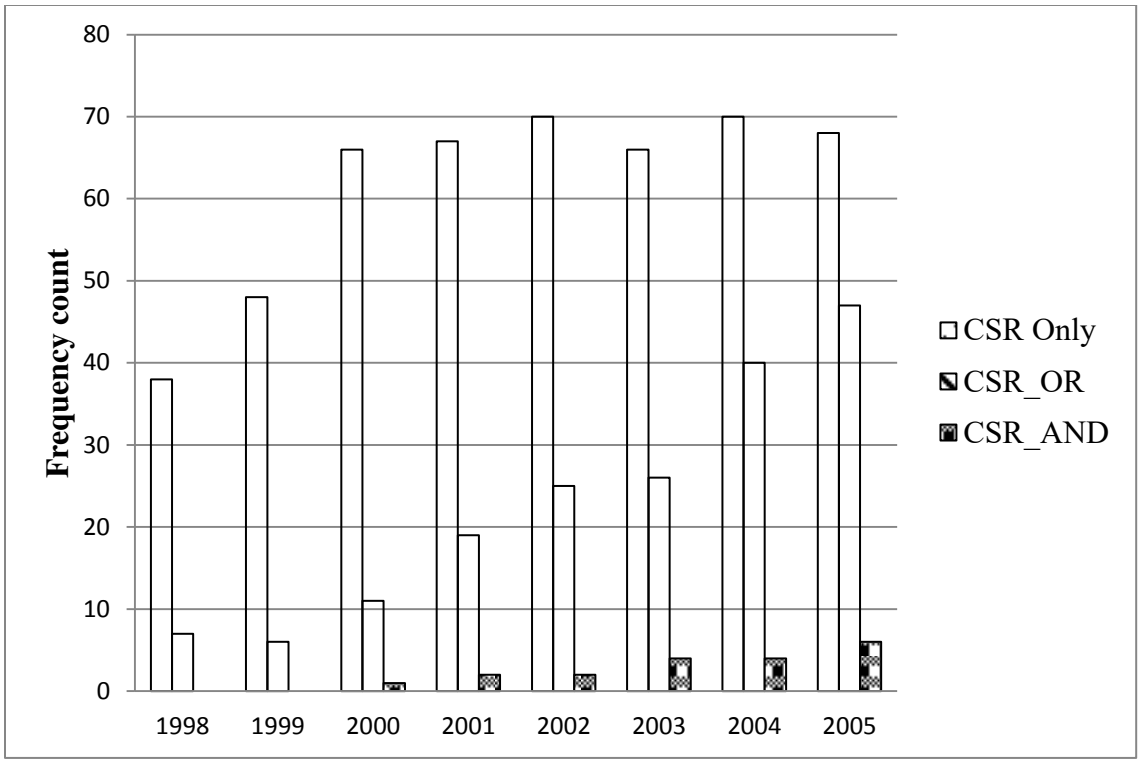

Figure 6: Frequency of CSR Disclosure Intensity across Time Period

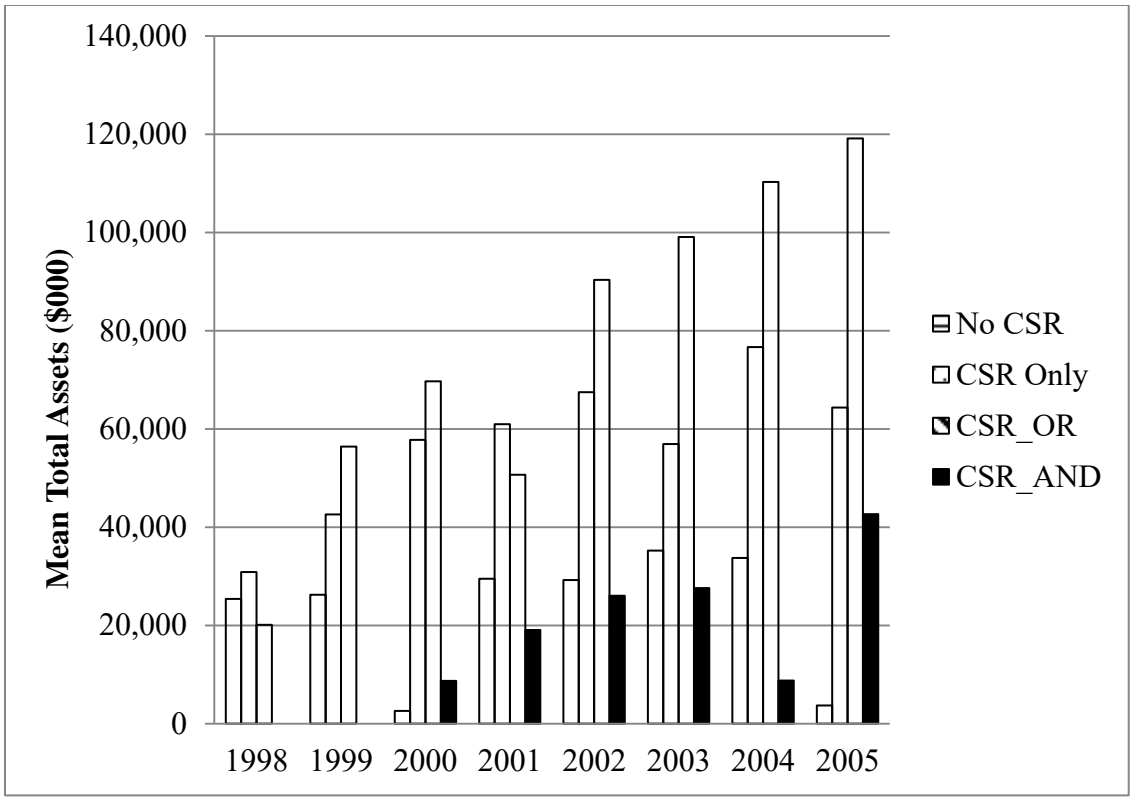

Figure 7: CSR Disclosure Intensity Behavior by Organizational Size (Total Assets)

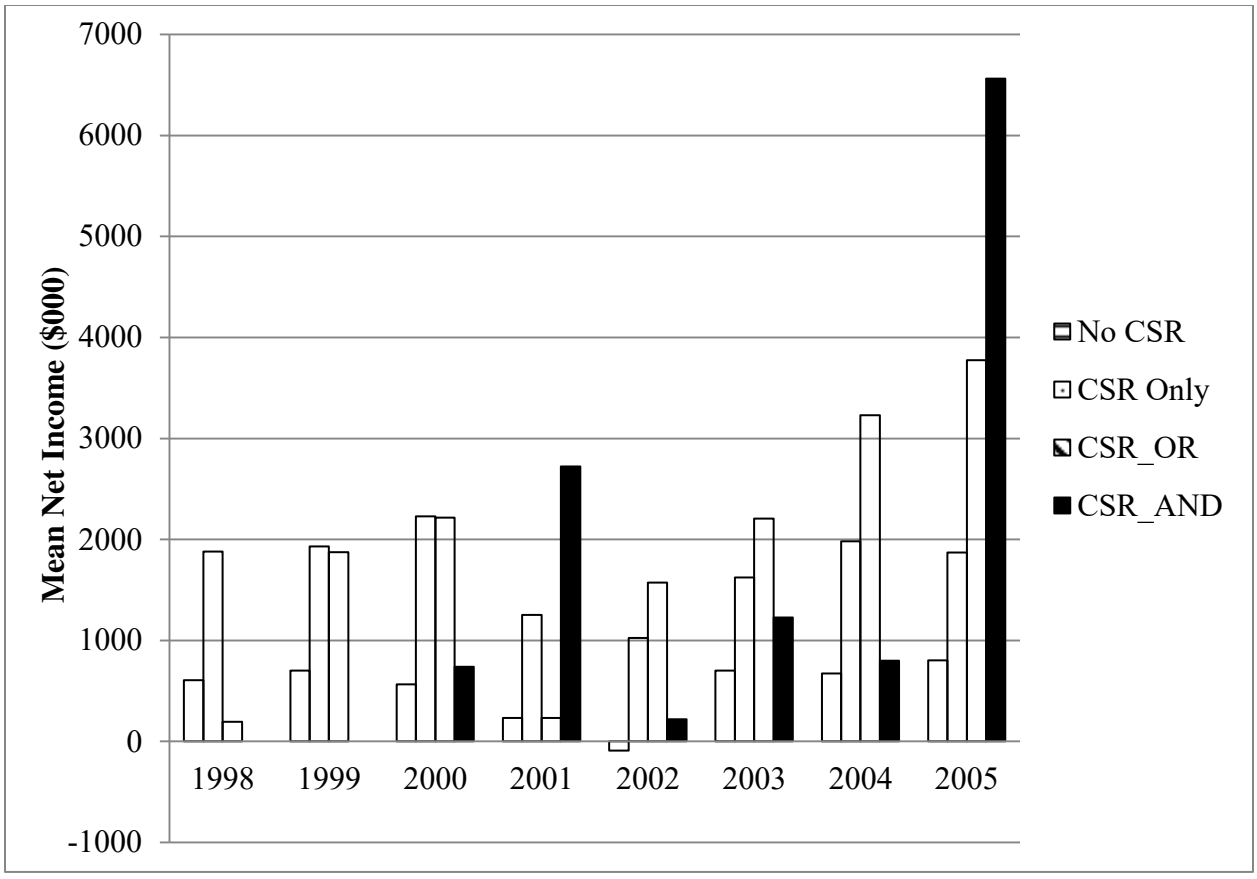

Figure 8: CSR Disclosure Intensity Behavior by Organizational Profitability

Tables

Table 17: Research Predictions

Pre-Crisis: 1998	**Expected Change**	**Crisis: 2001 - 2002**	**Expected Change**	**Post-Crisis: 2005**
Disclosing companies/ total companies	<	Disclosing companies/ total companies	?	Disclosing companies/ total companies
Framework/ total disclosing companies	<	Framework/ total disclosing companies	<=	Framework/ total disclosing companies
Assurance/ total disclosing companies	> <	Assurance/ total disclosing companies	<=	Assurance/ total disclosing companies
Auditor assurance/ total assuring companies	>	Auditor assurance/ total assuring companies	?	Auditor assurance/ total assuring companies

Table 18: Major Accounting Scandals 1999 – 2004

Year	Companies	Accounting firms
1999	Waste Management	Andersen
2000	MicroStrategy, Computer Associates, Xerox	PricewaterhouseCoopers, KPMG
2001	Enron	Andersen
2002	Adelphia, AOL, Bristol-Myers Squibb, CMS Energy, Duke Energy, Dynergy, El Paso Corporation, Global Crossing, Halliburton, ImClone, Kmart, Nicor, Reliant Energy, Tyco, WorldCom	Andersen, Deloitte & Touche, Ernst & Young, KPMG, PricewaterhouseCoopers
2003	Royal Ahold, Parmalat, HealthSouth, Nortel, tax shelter fraud	Deloitte & Touche, Ernst & Young, Grant Thornton, KPMG
2004	AIG	PricewaterhouseCoopers

Table 19: Frequency of CSR Disclosure Components and Intensity Levels for S&P 500 1998 – 2005

Panel A: Frequency of CSR disclosure component by year								
	1998	1999	2000	2001	2002	2003	2004	2005
S&P 500 population	508	510	526	512	515	505	507	503
CSR disclosure	45	54	78	88	97	96	114	121
Use of framework*	1	3	9	18	25	28	43	52
Use of third-party assurance*	6	3	4	5	4	6	5	7
Use of auditor for third-party assurance*	3	1	1	1	1	1	2	2
Panel B: Frequency of CSR disclosure intensity level by year								
	1998	1999	2000	2001	2002	2003	2004	2005
CSR disclosure only	38	48	66	67	70	66	70	68
CSR disclosure with framework OR assurance	7	6	11	19	25	26	40	47
Percentage of CSR-OR using framework as method of credibility enhancement	*14%*	*50%*	*73%*	*84%*	*92%*	*92%*	*98%*	*98%*
CSR disclosure with framework AND assurance	0	0	1	2	2	4	4	6

*Values are nested: framework and third-party assurance are proportions of CSR disclosure for each period and use of auditor is a proportion of third-party assurance.

Table 20: Two-Proportion *z*-test for Change in Frequency across Periods

Panel A: CSR component	Baseline to pre-Crisis	Pre-Crisis to Crisis	Crisis to Post Crisis
CSR disclosure	17.98***	3.065*	5.760**
Use of framework	8.972**	6.459**	7.873**
Use of third-party assurance	1.319	0.010	0.001
Use of auditor for third-party assurance	1.000	0.014	0.489
Panel B: CSR intensity	**Baseline to pre-Crisis**	**Pre-Crisis to Crisis**	**Crisis to Post Crisis**
CSR report only	10.29***	0.123	0.047
CSR report with framework OR assurance	6.531**	6.057**	10.461***
CSR report with framework AND assurance	2.966	1.058	1.048

Test statistic is X^2 (1) for all cases
Exact Significance (one-sided): $p < .05$*, $p < .01$**, $p < .001$***

Table 21: Sensitivity Analyses Using Two-Proportion *z*-tests for Change in Frequency for CSR Intensity Levels across Groups

		Entire Sample	Andersen audited[a]	Energy sector[b]	Financial services/ utilities sector[c]	Low quality[d]	High quality[d]	High risk[e]	Low risk[e]
Sample size		336	63	38	79	138	198	66	270
CSR-ONLY	Baseline to Pre-Crisis	10.29***	0.000	1.754	7.239**	3.466*	5.428*	5.893*	4.305*
	Pre-Crisis to Crisis	0.123	4.800*	0.060	0.918	0.0992	0.074	0.000	0.217
	Crisis to Post-Crisis	0.047	0.878	0.244	0.318	1.216	0.158	1.234	0.013
CSR-OR	Baseline to Pre-Crisis	6.531**	0.000	0.347	1.006	1.833	0.677	1.008	1.630
	Pre-Crisis to Crisis	6.057**	14.470***	0.214	1.026	0.852	4.168*	1.871	3.3032
	Crisis to Post-Crisis	10.461***	1.260	0.157	0.149	4.563*	5.036*	2.877	6.733**
CSR-AND	Baseline to Pre-Crisis	2.966	---	--	--	--	1.003	--	1.002
	Pre-Crisis to Crisis	1.058	2.032	--	--	1.004	0.000	--	0.335
	Crisis to Post-Crisis	1.048	1.008	1.013	--	0.337	0.336	--	0.674

Pearson Chi-square reported for two-sample *z*-test of difference among proportions at significance levels: $p < .05$ *, $p < .01$ **, $p < .001$***

[a]Andersen audited organizations are those which had Andersen as financial statement auditor at any time during the period 1998 – 2002

[b]S&P ISC codes used to indicate involvement in Energy sector: 170, 375, 380, 382, 385, 390, 705, 710, 720

[c]S&P ISC codes used to indicate involvement in Financial Services or Utility sector: 462, 463, 705, 710, 715, 720, 725, 810, 815, 817, 820, 822, 823, 825, 830, 835, 837, 840, 845, 850

[d]Based on S&P Quality rating from Compustat, where A+, A, A-, B+ = high quality; B, B-, C, D = low quality

[e]High risk companies are those with a Beta ≥ 1.5

Table 22: Summary of Findings

Base line: 1998 - 1999	Relation	Pre-Crisis: 2000 - 2001	Relation	Crisis: 2002 - 2003	Relation	Post-Crisis: 2004 - 2005
Panel A: CSR components						
Disclosing companies/ total companies	<	Disclosing companies/ total companies	<	Disclosing companies/ total companies	<	Disclosing companies/ total companies
Framework/ total disclosing companies	<	Framework/ total disclosing companies	<	Framework/ total disclosing companies	<	Framework/ total disclosing companies
Assurance/ total disclosing companies	=	Assurance/ total disclosing companies	=	Assurance/ total disclosing companies	=	Assurance/ total disclosing companies
Auditor assurance/ total assuring companies	=	Auditor assurance/ total assuring companies	=	Auditor assurance/ total assuring companies	=	Auditor assurance/ total assuring companies
Panel B: CSR intensity						
CSR disclosure only	<	CSR disclosure only	=	CSR disclosure only	=	CSR disclosure only
CSR disclosure with framework OR assurance	<	CSR disclosure with framework OR assurance	<	CSR disclosure with framework OR assurance	<	CSR disclosure with framework OR assurance
CSR disclosure with framework AND assurance	=	CSR disclosure with framework AND assurance	=	CSR disclosure with framework AND assurance	=	CSR disclosure with framework AND assurance

Table 23: Organizations Choosing CSR-AND Behavior

Company	Industry	2000	2001	2002	2003	2004	2005	Comments
Baxter International	Health Care	X	X	X		X	X	
Bristol-Myers Squibb	Health Care		X		X			Series of accounting scandals of manipulated earnings surfaced in 2002
Dow Chemical	Chemicals			X	X			Dioxin scandal came to light in 2002
Newmont Mining	Gold & Precious Metals Mining				X	X	X	
AES	Power Producer				X			Implicated in Enron scandals
Nike	Retailer – Footwear					X		2002 – 2004 intensive effort by company to recover from child labor scandal
Gap	Retailer – Specialty Apparel					X		2003 class action lawsuit by sweatshop workers in Saipan (unsafe working conditions, unpaid overtime)
Starbucks	Restaurants					X	X	
Exxon	Oil (International)						X	2003 foreign bribery scandals
Applied Materials	Semiconductors						X	
Office Depot	Retailer – Specialty						X	

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CHAPTER FIVE: CONCLUSION

Introduction

Corporate Social Responsibility (CSR) has its roots in the social activism of the 1960s and 1970s. The early emphasis on social change agendas led to Milton Friedman's (1970) famous denunciation of such policies as "theft". In more recent years, the emphasis has shifted from business's responsibility in shaping society in response to a social or political agenda, to business's accountability for operations (including long-lasting effects on surrounding communities) and ethical behavior. Such a shift in understanding is not outside of Friedman's conception of management's responsibility to "make as much money as possible *while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom* (Friedman 1970, 33; emphasis added)." The latter part of Friedman's statement is often omitted, but it has clear parallels to the concept of organizational legitimacy, where the social contract between business and society determines the allocation of scarce resources (Dowling and Pfeffer 1975). In fact, the degree to which organizations move beyond mandated behavior to incorporate "ethical custom" (and societal expectations for behavior) determines the relative degree of legitimacy (Lindblom 2010).

The emphasis within CSR has also shifted over time. Whereas the 1960s tended to emphasize social programs, the focus has shifted in recent decades to environmental, sustainability, and ethical factors. This is not to say that environmentalism did not appear in earlier periods. Rachel Carson's *Silent Spring* (1962) focused widespread public attention on the issue of the long-term health effects of chemical contamination. The Love Canal crisis in the

late 1970s intensified these concerns in the light of the effect on surrounding communities from the irresponsible use and disposal of chemical waste, as did the dangerously rising mercury levels in the Great Lakes. The Three Mile Island accident (1979) and the oil crises of 1973 and 1979 also contributed to an interest in alternative energy sources and increased energy efficiency. During the 1980s an increasing dissatisfaction with quality, innovation, and competitiveness led to attempts in the 1990s to expand organizational performance measures to capture aspects of non-financial performance (Johnson and Kaplan 1991; Kaplan and Norton 1996; Elkington 1999) and to address the concerns of stakeholder groups beyond shareholders (Freeman 1984). An increasing number of ethical scandals in the early years of the 21st century, following the excesses of the 1980s, also produced a greater interest in questions of ethical behavior in business, governance structures, and the role of independent boards in increasing accountability and responsibility for organizational actions (Paine 2003). CSR, then, reflects an organization's stewardship and accountability to a broad audience. Stewardship and accountability, in turn, influence organizational efficiency, effectiveness, and strategy.

The current business environment is one that increasingly embraces CSR, while making a business case for doing so.[46] While, admittedly, many organizations employ CSR reporting as image management and fail to report anything of actual substance, others are making efforts to report non-financial performance and learning as they go. These efforts are driven by solid, performance-oriented reasons. Top management increasingly associates sustainability efforts with gains in efficiency and innovation (KPMG 2011), superior *long-term* value creation

[46] I note a recent trend to refer to these matters as "ESG" – Environment, Social, and Governance – reports, thus distancing non-financial responsibility, performance, and reporting from the more activist-oriented perception of the term CSR.

(Generation 2012), and the ability to manage risks, enhance reputations, and identify potential strategic opportunities (IIGCC et al. 2010), and obtain financial benefits from higher credit ratings, lower cost of debt, and greater access to capital (Bauer and Hann 2010; Generation 2012). Researchers have also found that sustainable firms have significant increases in profits and stock returns when compared to a matched sample (Eccles, Ioannou, and Serafeim 2011; Generation 2012), significantly outperform organizations with lower sustainability in the long-term (Eccles, Ioannou, and Serafeim 2011), and have a clearer link between strategic decisions and capital (Cheng, Ioannou, and Serafeim 2010). Prior research has also speculated that the growth of non-financial performance reporting is linked to the dramatic decline in tangible asset market value from around 80% in 1975 to less than 20% in 2009 (Eccles, Ioannou, and Serafeim 2011, Eccles, Serafeim, and Krzus 2011). Measures, methodologies, and direct relationships are not always clear, but there is increasing evidence that there is a "mutually reinforcing relationship between financial and non-financial performance (Eccles, Ioannou, and Serafeim 2011, 1)" and a significant market interest in the degree of organizational transparency regarding CSR (Eccles, Serafeim, and Krzus 2011).

Within the stream of research contained in this dissertation, I have examined the relationship between financial and non-financial performance using a legitimacy perspective and a focus on stakeholder groups. I have found evidence suggesting that stakeholder groups differ in their emphasis on areas of non-financial performance and that the measurement level most sensitive to variance in financial outcomes is dependent on the level of aggregation in the outcome measure as well as the number of stakeholder groups associated with it and the ability to isolate the interests of these groups (Study One). I have also found evidence that CSR

disclosure has important effects on financial performance via an increased tolerance for unexpected poor performance. CSR disclosure produces this increased tolerance (*resilience*) by leading to greater perceived legitimacy (Study Two). Organizations seem to have at least an intuitive grasp of the benefit of increased transparency, especially during threats to perceived legitimacy caused by an external credibility crisis affecting the market's institutional framework (Study Three). During such an event, organizations might seek to protect their own legitimacy by emphasizing their credibility and transparency, increasing the amount of CSR reporting, and utilizing independent sources of credibility enhancement (primarily reporting frameworks).

The Relationship between Financial and Non-Financial Performance

There are many reasons behind the growth of CSR. Mandatory reporting by US GAAP covers financial performance, but does not cover reporting of non-financial performance.[47] Mandatory reporting also does not allow for flexible, evolving measures of non-tangible assets or the incorporation of strategic initiatives, nor does it address non-economic concerns of key stakeholder groups. Voluntary reporting (CSR, ESG, Sustainability, etc.) is able to address this need, as well as demonstrate differential legitimacy in the degree to which organizations move beyond mandated compliance to reflect societal expectations. It is not a costless process, but organizations have found the benefits outweigh the costs.

[47] There is an increase in reporting within the European Union and under IASB rules. However, reporting is not mandatory in all countries, for all companies, or for all (or even the same aspects) of CSR performance. In many cases, organizations can evade regulation by not listing on the country-based exchange, not engaging in certain activities, or maintaining in-country employment below a certain threshold.

Incentives to engage in CSR vary widely, and might range across items such as top management's personal convictions, organizational reputation, risk management, and financial performance (Novethic 2010). Top corporate management publicly states that good corporate citizenship makes a tangible contribution to the bottom line (BCCCC 2007) and that increased disclosure adds business value (SustainAbility 2010). Institutional investors have gone through a recent sea-change in their attitude to CSR disclosure; just a few years ago consideration of non-financial performance was regarded as a conflict with fiduciary duty, but a strategy that includes non-financial performance assessment is now believed to maximize long-term client benefit (Novethic 2010). Importantly, firms with better CSR performance and disclosure appear to have significantly lower capital constraints (Kothari, Li, and Short 2009; Cheng, Ioannou, and Serafeim 2010; Dhaliwal et al. 2011) and outperform equivalent, non-CSR firms in the stock market (Eccles, Ioannou, and Serafeim 2011). Greater access to capital appears to be the result of reduced agency costs and increased revenue opportunities resulting from increased stakeholder engagement and the reduced information asymmetry costs resulting from increased transparency (Kothari, Li, and Short 2009; Cheng, Ioannou, and Serafeim 2010).

Market leaders appear to be setting the pace and standards of CSR reporting practices (KPMG 2011). However, stakeholders are driving the need for CSR reporting. Investors and consumers incorporate rankings into their decisions (often as a measure of risk), and the more a company discloses, the better it is likely to score on these ratings, which often are based solely on publicly-available information (SustainAbility and GlobeScan 2010).[48] CSR, especially

[48] According to a recent international survey of institutional and individual investors (Novethic 2010), 69% of investors incorporate ESG into their asset management decisions and 38% believe ratings agencies (*non*-analyst rankings) to be the most useful source of information. This supports findings from Kothari, Li, and Short (2009) that analysts and management are not regarded as credible sources of information by investors.

environmental performance and policies, affects exposure to legal, reputational, and regulatory risk, influencing corporate solvency and credit, risk, and quality ratings (Bauer and Hann 2010). Rankings are also highly volatile and stakeholders appear to regard CSR as *dynamic*, with an emphasis on "what have you done *lately*?" in their evaluations (SustainAbility and GlobeScan 2010). Overall, change is constant and one measure or method does not address the needs of all stakeholder groups at all times (SustainAbility 2011). Earlier discussions of CSR had objected that attempts to increase disclosure would harm more transparent companies, especially if organizations had to report less-than-ideal performance. However, recent surveys have indicated that if it is not publicly reported, the organization is *assumed* to either be ignoring or failing in the relevant CSR area and that stakeholders reward responsiveness, even in the face of poorer performance (SustainAbility 2011).

In general, then, acceptance of the need for CSR disclosure is not the issue; rather, it is the *execution* of CSR reporting that remains problematic (Accenture 2010). Organizations have increasingly focused on CSR as an investment driving their business model for long-term competitiveness and flexibility, rather than an additional cost (Porter and van der Linde 1995; Environics 1999; KPMG 2011). The integration of CSR into core business values (and thus long-term strategy) causes it to function as a long-term investment (KPMG 2011) and to drive perceptions of organizational leadership and reputation (SustainAbility and GlobeScan 2010).

The adoption of CSR reporting and its integration with the long-term business model tend to proceed in three distinct, overlapping phases (Generation 2012). First, organizations use CSR reporting to align themselves with key stakeholders to enhance their strategic position through brand enhancement, increased public trust and reputation, and improved competitive positioning.

The second phase produces operational benefits as organizations realize that the stewardship focus of CSR can reduce waste, increase energy efficiency, improve human capital benefits, and generally lower the capital structure. Following prior stages of profit enhancement and cost minimization, the final stage focuses on compliance and risk management, improving internal control and governance, and increasing predictability and stakeholder confidence in management's integrity and ethical behavior. Eccles, Ioannou, and Serafeim (2011) hypothesize that CSR-disclosing companies are perceived as less risky by the markets because greater transparency decreases uncertainty about ability (and thus, expectations for future performance).

Increased organizational responsibility for actions, and subsequent results, is becoming a global expectation (Environics 1999; Generation 2012). The Millennium poll in 1999 was the largest global survey of public expectations of corporations, across 23 countries and 6 continents. In all but three countries, responses from the majority of citizens presented a view of the proper role of business as somewhere between Friedman's profit maximization and the maximization of stakeholder interests. Specifically, organizational behavior was expected to (1) demonstrate commitment to societal values and contribute to societal goals; (2) insulate society from any negative impacts of business operations or products; (3) share benefits with key stakeholders (not shareholders alone); and (4) make profits by "doing the right thing" (Environics 1999). These expectations closely echo legitimacy theory; organizations are expected to behave in a manner that reflects and respects the implied societal contract in their allocation of resources and permission to continue operating. This is not the radical view for supporting social engineering that Friedman protested. Capitalism is supported, but capitalism held accountable for long-term outcomes, behavior, and choices.

> ...[W]hile the present form of Capitalism has proven its superiority, it is nevertheless abundantly clear that some of the ways in which it is now practiced do not incorporate sufficient regard for its impact on people and the planet...These include short-termism, overreliance on GDP growth as a primary metric of prosperity, diverting wealth into shadow banking and financial engineering and away from addressing real needs...(and) also include rising inequality, increasing volatility in the global financial market, and growing contributions to the climate crisis perpetuated by a resistance to internalize externalities. (Generation 2012, 6)

Public expectations for greater corporate responsibility in addressing social and environmental challenges continue, with increasing regulatory pressure outside of the United States to influence behavior in these areas (BCCCC 2007). However, large gaps remain between organizational perceptions of responsibility and public expectations for organizational behavior: 55% of businesses and 79% of the public believe business has a responsibility to produce sustainable products or use only sustainable materials; 35% of businesses and 62% of the public believe business has a responsibility in preventing or resolving Human Rights issues (BCCCC 2007). Increasing public mistrust and skepticism from corporate ethical scandals and rising anger over excessive CEO pay in the face of increasing economic marginalization of workers are increasing pressure for government intervention and regulation, although confidence in governmental leaders and belief in their ability to fairly enforce the social contract has been severely eroded (Bazerman, Loewenstein, and Moore 2002; Bazerman et al. 2006; SustainAbility and GlobeScan 2010). In order to preserve the functioning of a free market, and prevent government control, there is an urgent need for organizations to shift their focus to long-term economic value creation (a shift from "quarterly capitalism"), to address "real needs," incorporate all costs, and address the needs of all stakeholders (Barton 2011; Generation 2012).

Relationships with key stakeholders provide the critical interface between organizational economic actions and legitimacy:

> ...society ultimately does require, in one way or another, that a company earns the right to operate. When managers do not consider the impact of their decisions on all stakeholders, not just shareholders, we believe that they are putting this license to operate at risk. (Generation 2012, 8)

With the recognition of the importance of non-financial performance to overall organizational outcomes, there has been a gradual shift towards stakeholder engagement,[49] although there is a wide range within the process used or extent of engagement (Novethic 2010). Stakeholder engagement has also demonstrated both that stakeholders do consider non-financial factors important (Environics 1999)[50] and that there are considerable differences among CSR aspects of interest between investors and other stakeholders (IFAC 2012).

Mainstream economic theory is heavily dependent on investors, to the point of implying that organizations are more dependent for their existence on shareholders than they are on customers (Eccles, Ioannou, and Serafeim 2011). There is an obvious fallacy involved here, as without customers to purchase the product or service the organization will cease to operate (or, at the very least, to have a meaningful existence as more than a vehicle for "shadow banking"[51]). Customers as stakeholders drive organizational profits and their interests and information

[49] Stakeholder engagement is the process of specifically determining, from the stakeholders themselves, the areas of both financial and non-financial performance of concern to key stakeholders and their desired measures and targets for performance in these areas.

[50] When asked to choose from a list of factors to describe their impression of individual companies, 49% of those surveyed chose social responsibility items, 40% also chose quality or reputational items, and 32% used business fundamentals (Environics 1999).

[51] "Shadow banking" is the system of financial vehicles, practices, organizations, and networks that exist outside of existing regulation (including regulation for monitoring or reporting exchanges). This is the realm of financial instruments and deals structured to take advantage of loopholes in current regulations or between countries.

demands should drive CSR performance and disclosure (Accenture 2010).[52] Consumers surveyed scrutinized corporations most in areas of employee health and safety, equal treatment of all employees, bribery and corruption, environmental impacts, and the use of child labor. Further, consumers held corporations accountable for their behavior in these areas *before* holding them accountable for profitable operations or paying a fair share of taxes (Environics 1999).

For investors, on the other hand, CSR is focused more on measuring risk exposure and potential rewards through strategy and innovation, and appears to function as an assessment of management quality (Eccles, Ioannou, and Serafeim 2011; Eccles, Serafeim, and Krzus 2011). Regardless of the overwhelming focus on shareholders in corporate decision making, there is still a mismatch between the CSR reporting provided by the organization and that demanded by shareholders (Eccles, Searfeim, and Krzus 2011). Further contradicting the claim that investors do not care about non-financial performance, Eccles, Serafeim, and Krzus (2011) found that over six months (using Bloomberg data) investors accessed a long list of environmental or social performance metrics approximately 34 *million* times. Environmental factors, which can dramatically effect legal liability or fines, future remediation risks, and access to critical resources, are especially influential as risk factors in investment strategies: for example, 87% of asset managers and 98% of asset owners consider climate change to be a material investment risk (IIGCC et al. 2010).

[52] The stakeholder group of customers can affect ongoing organizational performance through means other than their own purchasing power. A majority of consumers talk to others about corporate behavior, influencing potential customers and other stakeholder groups, and one in five consumers reports boycotting or publicly speaking out against a company (Environics 1999). The growth of internet consumer rating sites (e.g., Amazon.com's customer reviews or consumer ratings of personal services on Angieslist.com) has accelerated the speed and impact of consumer opinions.

It has been argued that explicitly incorporating CSR factors into corporate financial models results in long-term, holistic business models better able to make resource allocation decisions (Eccles and Serafeim 2011). Likewise, by engaging with stakeholders honestly, and seeking to develop trust, credibility, and a long-term focus, organizations are able to avoid increased costs to prevent opportunistic behavior (Eccles, Ioannou, and Serafeim 2011). Short-termism seems to be a significant factor in organizations that have poor CSR performance and/or choose not to engage in CSR disclosure. The investment horizon of an organization's investors can ultimately end up affecting its decision making process and benchmarks. Companies appear to be able to attract investors with different investment horizons based on their disclosure policies (IFAC 2012), with sustainable organizations apparently attracting longer-term investors (Eccles, Ioannou, and Serafeim 2011). An emphasis on short-term performance, chiefly through quarterly earnings guidance, tends to attract momentum investors and results in much greater volatility for the underlying stock (IFAC 2012). A survey of CIOs from top asset management firms recently reported that only 20% have time horizons longer than a year and fully 55% have time horizons of a quarter or less (Generation 2012).

A focus on meeting the demands of short-term focused investors also tends to lead to a decrease in value through the failure to engage in long-term investments to support product or process improvements and also tends to impose externality costs disproportionately on other stakeholders; in essence, the organization trades short-term profits for long-term value (Eccles, Ioannou, and Serafeim 2011; Generation 2012).[53] The effect of the "pernicious orthodoxy of short-termism" (Generation 2012) produces wide-ranging effects: managers use inappropriate

[53] The International Federation of Accountants (2012) reported that 80% of CFOs would sacrifice future economic value to satisfy investor expectations of short-term returns.

discount rates, causing them to mistakenly reject profitable long-term projects, the return horizon does not match the asset horizon, and managers reject positive NPV projects based on the effect on analysts' quarterly earnings estimates (Haldane and Davies 2011). Over 75% of managers report they would give up economic value in order to smooth earnings (Haldane and Davies 2011) and extreme short-term CEO tenures with the accompanying IBG/YGB ("I'll be gone/You'll be gone", Knee 2006, 23) attitude towards maximizing their ability to cash out stock options exacerbates the problem (Generation 2012).

The average holding period of securities was about 7 years and relatively stable from 1940 to the mid-1970s, but the rise of computer trading, especially High Frequency Transactions (HFT), has caused holding periods to fall dramatically to only around 7 *months* (Barton 2011; Generation 2012). From 1995 on, the decreased return horizon especially accelerated with the emphasis on quarterly returns and performance reporting (Haldane and Davies 2011). HFT now accounts for around 70% of consolidated US trading volume and is positively correlated with stock price volatility, particularly during periods of market instability (Zhang 2010; Barton 2011; Generation 2012). The combination of short-termism and stock price volatility encourages market instability, especially in the presence of HFT (Generation 2012). In effect, HFT prevents the market from efficiently incorporating financial fundamentals into asset prices (Zhang 2010).

Short-termism, and the market distortion it creates, causes inefficient capital allocation for long-term investments (Generation 2012). However, firms with better CSR performance and disclosure appear to have significantly lower capital constraints. Greater access to capital appears to be the result of reduced agency costs and increased revenue opportunities resulting from increased stakeholder engagement and the reduced information asymmetry costs resulting

from increased transparency (Cheng, Ioannou, and Serafeim 2010). Eccles, Ioannou, and Serafeim (2011) hypothesize that CSR disclosing companies are perceived as less risky by the markets because the greater transparency decreases uncertainty about ability (and thus, expectations for future performance). CSR, especially environmental performance and policies, affects exposure to legal, reputational, and regulatory risk, influencing corporate solvency, and credit, risk, and quality ratings (Bauer and Hann 2010).

Conclusion

CSR performance and reporting function on several levels to enhance organizational economic value. The linkage operates through intervening constructs which affect both cost structures and revenues. CSR demonstrates incorporation of extra-legal societal values, hence legitimacy, and engages across multiple stakeholder groups. Credibility and transparency increase trustworthiness/reputation effects and decrease risk and uncertainty, significantly decreasing contracting and agency costs. Recent surveys of managers, investors, professional investment managers, consumers, and citizens have confirmed that CSR is perceived as a critical component in the corporate business model and as contributing to superior performance – the uncertainty remaining concerns tradeoffs, priorities, reporting mechanisms, and intervening mechanisms. The stream of research within this dissertation seeks to explore the tradeoffs and disclosure processes that link non-financial to financial performance.

Study one, *Exploring the Interface*, responds to Wood and Jones' (1995) assertion that CSR variables need to be appropriately matched with economic outcome measures, and that those measures will differ across stakeholder groups and CSR areas covered. I find support for

their argument, with a much clearer link between CSR and financial performance and non-market based measures, which also supports Zhang's (2010) contention that the contemporary stock market is "broken", with short-termism and HFT leading to distortions in the incorporation of information into accurate valuation. I find that measurement levels *do* vary across outcome measures based on the degree of aggregation and the degree to which the outcome can be associated with a predominant stakeholder group (Wood and Jones 1995; Cheng, Ioannou, and Serafeim 2010). I also find confirmation that different stakeholder groups require different CSR performance evaluations (IFAC 2012) and that, while environmental and social factors are fairly direct in their association with economic outcomes, governance items are either non-significant or contradictory (Cheng, Ioannou, and Serafeim 2010; Eccles, Ioannou, and Serafeim 2011).

Study two, *The Benefit of the Doubt*, specifically explores the role of information characteristics contributing to high-quality disclosures (accuracy and completeness) in producing perceived legitimacy as operationalized by information credibility and organizational trustworthiness. Perceived legitimacy then contributes to resilience in the face of unexpected poor performance following an industry crisis. I find that accuracy is the primary driver in non-professional judgments of legitimacy, which seems to support the need for quantifiable measures (with associated materiality and thresholds) that are consistent and comparable (IIGCC et al. 2010; IFAC 2012). I also find evidence for the role of perceived legitimacy as the link between social responsibility and corporate image as displayed in voluntary CSR reporting and market performance (BCCCC 2007; Accenture 2010).

Finally, study three, *In Bad Company*, examines the alteration of organizational disclosure behavior in the presence of an exogenous threat to legitimacy. When the institutional

framework supporting the economic environment and capital markets suffers from a credibility crisis, organizations try to demonstrate their own legitimacy by increasing disclosure. More, the majority of disclosing organizations also seek to specifically increase the credibility of their disclosures via the use of independent third-party frameworks incorporating both accuracy and completeness. Surprisingly, I find that the use of third-party assurance was extremely low overall, and did not significantly increase over the crisis period, supporting findings by Eccles, Ioannou, and Serafeim (2011). The corporate response to the Enron/Andersen scandal in 2001 – 2002, demonstrating an increase in CSR reporting, was repeated again during the economic downturn in 2008, and thus confirms that organizations accelerate the introduction of CSR disclosure during financial crises (Accenture 2010; Eccles, Ioannou, and Serafeim 2011).

Taken together, these three studies forward our understanding of CSR reporting by targeting three critical factors in organizational performance and disclosure. First, the CSP-CFP relationship is not simple, is usually not direct, and operates at many levels. The more a CFP outcome measure captures a single stakeholder group and the less it aggregates multiple performance items, the more direct the relationship appears, often operating at the level of stakeholder reactions to individual issues. In order to monitor and asses CSP performance and outcomes, then, organizations should carefully select the appropriate economic measures. Stock market performance, and stakeholder assessments based on stock performance, is very insensitive to the influence of CSP on overall financial outcomes. Second, different stakeholder groups emphasize different aspects of non-financial performance, which implies that an organization's ability to identify and engage with key stakeholder groups will produce superior operational efficiencies and strategic direction. Third, the effect of CSP on corporate economic

outcomes appears to work by enhancing legitimacy with stakeholders. The increased legitimacy appears to be driven by perceived credibility of disclosure (linked to transparency), and the accompanying effect on perceived trustworthiness of management. Credibility specifically appears to be enhanced by information characteristics leading to high-quality disclosure (accuracy and completeness) and by an independent, external source of credibility enhancement such as a reporting framework. This implies that organizations can produce increased, long-term value creation the more that they align corporate values with societal norms. It also implies that organizations which are able to achieve this distinction will outperform their competitors who are not able to do so, or be insulated from external crises or uncertainty to a greater degree. The key, overall implications for management are three fold: (1) identify key stakeholders and engage with them to identify their concerns, (2) use appropriate measures to monitor performance in these areas so that the effect of CSR programs and policies is not lost in surrounding "noise", and (3) increase transparency in reporting this performance through voluntary disclosure and credibility through the use of an independent, comprehensive reporting framework.

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APPENDIX A: EXPERIMENTAL INSTRUMENT

Title of Project: The Benefit of the Doubt: Resilience in Stakeholder Assessments of Corporate Social Performance Disclosures
Principal Investigator: Kimberly A. Zahller
Other Investigators: Faculty Supervisor: Dr. Robin W. Roberts

You are being invited to take part in a research study. Whether you take part is up to you.

The purpose of this research is to investigate the relationships between voluntary information disclosures, investor perceptions of the disclosing company, and subsequent investment decisions.

During this study you will be asked to read a short description of a hypothetical company and excerpts from its annual report and voluntary Corporate Social Responsibility disclosure. You will be asked to think about and respond to some questions regarding how you perceive the company and an investment in its stock. You will also be asked some questions to measure your general risk appetite in business situations, your experience with investing, and some general demographic items. None of this information will be identifiable or traced to you specifically, in any way. · The experiment should take about 15 to 20 minutes to complete.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints you may contact Kimberly Zahller, PhD Student, Dixon School of Accounting, College of Business at (407) 823-1478 or by email at kzahller@bus.ucf.edu or Dr. Robin Roberts, Faculty Supervisor, Dixon School of Accounting, College of Business at (407) 823-6726 or by email at rroberts@bus.ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

By choosing to participate in the study below you are indicating that you understand the above and voluntarily consent to participate in the research. You are also affirming that you are at least 18 years of age. Thank you very much for agreeing to participate.

Screening Block/Demographic Questions:

Please answer a few final questions that help us understand your background and experience and how that affects the decisions you have made. All answers are confidential and cannot be traced to an individual.

S1 What is your age group?

- ❍ Less than 18 years
- ❍ 18 to 20 years
- ❍ 21 to 29 years
- ❍ 30 - 39 years
- ❍ 40 - 49 years
- ❍ 50 - 59 years
- ❍ 60 or older

S2 Please check the box indicating the primary industry in which you work:

- ❍ Manufacturing
- ❍ Banking/Investments
- ❍ Finance/Accounting/Insurance
- ❍ Marketing/Sales/Retail
- ❍ Hospitality/Entertainment/Tourism
- ❍ Agriculture/Forestry/Fisheries
- ❍ Personal Services
- ❍ Transportation/Logistics
- ❍ Law/Military/Security
- ❍ Health Care/Medicine
- ❍ Government/Non-profit
- ❍ Education (NOT as a student)
- ❍ Information Services/Technology
- ❍ Engineering/Aeronautics
- ❍ Mining/Oil & Gas Extraction or Refining
- ❍ Retired
- ❍ Other
- ❍ I am not currently employed

S3 Do you currently have an investment or retirement account?

- ❍ Yes
- ❍ No

S4 Who manages your investment portfolio?

- ○ I do, using my own research and analysis.
- ○ I do, using recommendations or research from an advisor.
- ○ Both my spouse/partner and I make management decisions together
- ○ My spouse/partner manages our family investments alone -- I don't get involved.
- ○ I leave the management to a professional advisor.

S5 Are you comfortable reading financial statements?

- ○ Yes
- ○ No

S6 Which of the following sources of investment information do you regularly watch or read? (please select all that apply)

- ☐ CNN Financial
- ☐ Edward Robinson's The Smart Investor
- ☐ Bloomberg TV
- ☐ The Economist
- ☐ The Wall Street Journal
- ☐ New York Times Financial Pages
- ☐ Dundee Financial News
- ☐ I subscribe to an Investment newsletter
- ☐ The Motley Fool
- ☐ Jim Cramer's Mad Money
- ☐ Money Magazine
- ☐ I don't read/watch financial publications or TV programming

S7 How much experience have you had with investments?

- ○ Very little. I'm just getting started with investments.
- ○ Some. I make automatic contributions to a retirement account or occasionally purchase an investment.
- ○ Considerable. I regularly research and invest in stocks, bonds, and mutual funds and am comfortable doing so.
- ○ Expert. I am able to support myself by own investments.

S8 Roughly how large is your investment portfolio? (IRAs, 401ks, CDs, stocks, bonds, mutual funds, annuities....do NOT include real estate)

- ❍ Under $10,000
- ❍ Between $10,000 and $100,000
- ❍ Between $100, 001 and $500,000
- ❍ Between $500,001 and $1,000,000
- ❍ Over $1,000,000

S9 How likely are you to invest in the next 12 months?

- ❍ Not at all likely.
- ❍ About 50/50. I will have the funds and will invest if I find a good return with appropriate risk and performance.
- ❍ Definitely plan to invest.

S10 What is your perspective on the market over the next year?

- ❍ Optimistic
- ❍ Pessimistic
- ❍ Neutral: neither optimistic or pessimistic. I expect it to stay about the same.
- ❍ Don't know/No opinion

S11 How many business or investment classes have you taken in the past year? (Please enter zero or a positive number)

S12 What is your highest level of completed education?

- ❍ High School
- ❍ Some college/Associate's degree
- ❍ Undergraduate degree (BA/BS)
- ❍ Some graduate school
- ❍ Graduate degree (Master's, Doctorate, or Professional degrees)

If High School Is Selected, Then Skip To What is your gender?

S13 What was your undergraduate major?

S14 What is your gender?

- ❍ Male
- ❍ Female
- ❍ Prefer not to answer

Introduction Block:
Thank you for participating in this study of financial reporting and investment decisions. During this study, you will receive information regarding a hypothetical company and will provide feedback on your perceptions of that company.

While completing this case, suppose that your wealthy aunt in Texas died recently and you inherited 10,000 shares in Dryad Forestry, Inc, a large timber and forestry products company listed on the New York Stock Exchange. You are a business professional and have been contributing to your 401k plan at work as part of your retirement planning, but your aunt's legacy has doubled your investment portfolio overnight. The company is considered "growth and income" stock (which means it provides both dividends and expected growth in share price) and your investment advisor thinks it is a good addition to your portfolio. You are very excited about this inheritance and want to research and monitor the company very carefully.

You will be given information on Dryad and extracts from the company's voluntary reporting. You will then be asked to evaluate the company and your inherited investment. You will also be asked questions to evaluate your preferred risk level and to gather some general demographic information. Your answers will be completely confidential and your thoughtful completion of this study is both important and greatly appreciated!

Part One:

Dryad is a large U.S. forest products firm with a history of steady growth and regular dividend payments, and is considered to be of average risk. Dryad has operations in three countries, although the majority of their revenues come from U.S. operations. Dryad manages a total of 20.5 million acres of forest worldwide and has 13,400 employees in the U.S. and Canada. The majority of leased acreage is in Canada, but all corporate-owned acreage is in the U.S. The remaining acreage is leased in timber plantations in Costa Rica, where exotic wood trees are raised from seedlings to maturity and do not involve harvesting of wild timber or clearance of existing rain forest.

Dryad's financial performance has been slightly stronger than other members of the industry. The company is showing positive growth in recent years. The industry is heavily regulated, is characterized by average revenue volatility (because of demand in the construction industry) and is expecting 3.5% annual revenue growth over the next five years. Competition is medium (the top firm has 6% share of the market) and requires fairly extensive capital investment in timberlands, leases, and harvesting equipment, although labor prices are low.

The next page displays excerpts from the financial statements in Dryad's annual report, dated August 31, 2011, and from a stand-alone Corporate Sustainability Report that the company publishes on its web site.

Excerpt from financial statements published in Annual Report, dated August 31, 2011.

DRYAD FORESTRY	Projected 2011	2010	2009	2008
Revenue ($Million)	20,800	19,131	18,916	16,836
Net Income ($Million)	825	733	640	527
Net Basic Earnings per Share	$3.12	$3.00	$2.84	$2.56
Dividends per Share	$1.60	$1.60	$1.60	$1.60
Stock Price Range	$72.12 - 58.00 (year to date)	$71.52 - 56.04	$70.26 - 53.87	$73.94 – 49.56
Audit Opinion	N/A	Unqualified	Unqualified	Unqualified
Analyst Recommendation	BUY	BUY	BUY	BUY
Analyst Forecast of Annual Earnings	$3.15 – 3.06			
Litigation or Regulatory Fines	None	None	None	None

Manipulation: Cell A HA/HC

Excerpt from introduction to voluntary Corporate Sustainability Report published by Dryad and available from company website:

We believe that a sustainable business model requires stewardship of all of our assets and resources and responsibility for the outcomes of our actions. We believe that we are answerable for our choices and performance to many stakeholders: our investors, suppliers, customers, employees, and local community all have a great impact on our success.

We evaluate and measure our actions across a range of areas including financial, operational, and safety performance to capture the concerns of our key stakeholders and our impact on our environment and local community. We seek to set realistic, measurable goals and evaluate our achievement of these goals periodically during the year, as well as at year end.

For the past year, we set several ambitious goals:

· We seek to demonstrate our commitment to sustainability through pursuing certification of our forestlands as sustainably managed. Certification is provided by an independent third-party and requires us to meet a series of performance requirements across eight different areas of operations. We have met our goal of certifying 100% of our non-foreign forestlands this year.

· We seek to implement the business processes and systems necessary to achieve and maintain certification as a sustainable business. Our goal for this year was to ensure that 80 – 90% of our environmental systems conformed to ISO 1400X standards. Unfortunately, we missed our goal and only achieved 78% compliance.

· We seek to develop, promote and retain our employees while providing a safe and supportive workplace. Our goal was to minimize employee turnover to less than 4% and we achieved this goal with 3.75% turnover. Our goal for safety was less than one recordable incident and no fatalities. Unfortunately, we failed to meet either of these goals. Our recordable incident rate for the year was 1.23 and, tragically, we also had one fatality. In March, a contract employee grading a fire-access road into a new lease was killed when a sinkhole opened under the earthmover he was operating. We have reexamined safety procedures, introduced training specifically related to heavy equipment rollovers, and are working with our contractors to install safety cages on all equipment working in new or potentially unstable areas.

· We seek to support our local communities and be good citizens. This year we also provided a grant to three local school districts to purchase related lesson materials and sent a science teacher from each district to a workshop on environmental science education. We also give back to those in need in our local community. We achieved our goal of a 5% increase in philanthropic contributions and exceeded our goal of a 10% increase in employee voluntarism this year.

Manipulation: Cell B HA/LC

Excerpt from introduction to voluntary Corporate Sustainability Report published by Dryad and available from company website:

We believe that a sustainable business model requires stewardship of all of our assets and resources and responsibility for the outcomes of our actions. We believe that we are answerable for our choices and performance to many stakeholders: our investors, suppliers, customers, employees, and local community all have a great impact on our success.

We evaluate and measure our actions across a range of areas including financial, operational, and safety performance to capture the concerns of our key stakeholders and our impact on our environment and local community. We seek to set realistic, measurable goals and evaluate our achievement of these goals periodically during the year, as well as at year end.

For the past year, we achieved several ambitious goals:

· We seek to demonstrate our commitment to sustainability through pursuing certification of our forestlands as sustainably managed. Certification is provided by an independent third-party and requires us to meet a series of performance requirements across eight different areas of operations. We have met our goal of certifying 100% of our non-foreign forestlands this year.

· We seek to support our local communities and be good citizens. This year we also provided a grant to three local school districts to purchase related lesson materials and sent a science teacher from each district to a workshop on environmental science education. We also give back to those in need in our local community. We achieved our goal of a 5% increase in philanthropic contributions and exceeded our goal of a 10% increase in employee voluntarism this year.

Manipulation: Cell C LA/LC

Excerpt from introduction to voluntary Corporate Sustainability Report published by Dryad and available from company website:

We believe that a sustainable business model requires stewardship of all of our assets and resources and responsibility for the outcomes of our actions. We believe that we are answerable for our choices and performance to many stakeholders: our investors, suppliers, customers, employees, and local community all have a great impact on our success.

We evaluate our actions across a range of areas including financial, operational, and safety performance to capture the concerns of our key stakeholders and our impact on our environment and local community. We seek to set realistic, measurable goals and evaluate our achievement of these goals periodically during the year, as well as at year end.

For the past year, we achieved several ambitious goals:

· We seek to demonstrate our commitment to sustainability through pursuing certification of our forestlands as sustainably managed. Certification is provided by an independent third-party and requires us to meet a series of performance requirements across a wide range of operations. We have met this goal as significantly all of our non-foreign forestlands are certified this year.

· We seek to support our local communities and be good citizens. We continue to fund environmental science education in our local school districts. We also give back to those in need in our community. We increased philanthropic contributions and employee voluntarism this year.

Manipulation: Cell D LA/HC

Excerpt from introduction to voluntary Corporate Sustainability Report published by Dryad and available from company website:

We believe that a sustainable business model requires stewardship of all of our assets and resources and responsibility for the outcomes of our actions. We believe that we are answerable for our choices and performance to many stakeholders: our investors, suppliers, customers, employees, and local community all have a great impact on our success.

We evaluate our actions across a range of areas including financial, operational, and safety performance to capture the concerns of our key stakeholders and our impact on our environment and local community. We seek to set realistic, measurable goals and evaluate our achievement of these goals periodically during the year, as well as at year end.

For the past year, we set several ambitious goals:

· We seek to demonstrate our commitment to sustainability through pursuing certification of our forestlands as sustainably managed. Certification is provided by an independent third-party and requires us to meet a series of performance requirements across a wide range of operations. We have met this goal as significantly all of our non-foreign forestlands are certified this year.

· We seek to implement the business processes and systems necessary to achieve and maintain certification as a sustainable business. Our goal for this year was to ensure that our environmental systems conformed to ISO 1400X standards. By year end, we were slightly under our goal for compliance but should complete the process within the coming year.

· We seek to develop, promote and retain our employees while providing a safe and supportive workplace. Our goal was to minimize employee turnover and we achieved this goal with a lower turnover rate than prior years. Unfortunately, we did not achieve our safety goals as our recordable incident rate exceeded our target and there was a contractor fatality.

· We seek to support our local communities and be good citizens. We continue to fund environmental science education in our local school districts. We also give back to those in need in our community. We increased philanthropic contributions and employee voluntarism this year.

[Return to common stream of information and questions]

Initial Evaluation Questions:

After reading Dryad's disclosures, please provide your evaluations of the company and its reporting below. Please read the responses carefully and indicate your choice.

Q1 Overall, assuming you were not concerned about balancing your stock portfolio, how would you rate this company?

- ❍ An excellent investment -- low risk and great long-term growth potential
- ❍ A good investment -- a little risk but a lot of long-term growth potential
- ❍ A slightly better than average investment -- a little less risk and/or uncertainty than average
- ❍ An average investment -- not really different from most companies
- ❍ A slightly worse than average investment -- a little more risk and/or uncertainty than average
- ❍ A poor investment -- a little riskier but a lot of uncertainty about long-term growth potential
- ❍ A very poor investment -- high risks and a lot of uncertainty about long-term growth potential

Q2 How believable did you find Dryad's Sustainability Report?

- ❍ Very believable -- they really seem to make an effort to provide good information to investors
- ❍ Fairly believable -- I think I'm getting most of the real story, although they may try to report it as positively as possible
- ❍ Somewhat believable -- I think I'm getting some of the real story, although not the whole picture
- ❍ Average -- like most companies, I think I'm getting some real information and some that's more public relations and they're going to pick and choose to make themselves look good
- ❍ Somewhat doubtful -- I think I'm getting most of the story, but I think it's all public relations
- ❍ Fairly doubtful -- I think I'm not getting most of the story, and I think the part I get is just public relations
- ❍ Very doubtful -- they are actively trying to give a false picture of non-financial performance

Q3 Under normal economic conditions, and without considering a need to balance your portfolio, how comfortable would you be holding this investment and not monitoring it regularly?

- ❍ Very comfortable
- ❍ Generally comfortable
- ❍ Slightly comfortable
- ❍ Neither comfortable nor uncomfortable
- ❍ Slightly uncomfortable
- ❍ Generally uncomfortable
- ❍ Very uncomfortable

Q4 If there were to be a crisis and you could not monitor management's actions, how comfortable would you be that top management would do what is in the best long-term interests of the company and its stakeholders (investors, creditors, suppliers, customers, employees, local community, etc.), and not simply in management's own short-term interest?

- ❍ Very comfortable
- ❍ Generally comfortable
- ❍ Slightly comfortable
- ❍ Neither comfortable nor uncomfortable
- ❍ Slightly uncomfortable
- ❍ Generally uncomfortable
- ❍ Very uncomfortable

Part Two:
Now, imagine that six months have elapsed....

A major forestry company has been caught illegally harvesting timber from protected lands in Malaysia. This illegal activity has involved bribery and corruption to local officials, destructive clear-cutting with associated environmental degradation, forced removal and violence to indigenous groups, and the killing of a rare species. The company involved is being prosecuted and a widespread media campaign has generated public outrage and demands for increased certification of the source of timber used in construction.

As a result, the market for forestry and timber products has plummeted 30% amid questions regarding sustainable practices, legal harvesting of exotic hardwoods and future industry regulation and increased labeling/reporting requirements.

Dryad is not directly involved in this scandal, although its share price has declined 23% along with the market and Net Income is down 10% due to falling orders from retailers. Although the company does harvest and sell exotic hardwoods, its timber comes from plantations in Costa Rica and Dryad has no operations in Malaysia. Should increased labeling regulation be passed, Dryad will be subject to these requirements along with all members of the industry.

Below is an article from the business press regarding the illegal logging scandal:

Timber industry stocks drop as Northern Timber indicted – increased regulation on way?
In the wake of the recent scandal involving bribery and corruption of the Malaysian government in an illegal logging scheme on the island of Borneo, timber industry stocks have dropped to a five year low. Northern Timber, Ltd. has been indicted under both the Foreign Corrupt Practices Act and the Lacey Act and faces prosecution for the knowing violation of international law, smuggling and theft of timber, and bribery of foreign officials.

The international community is demanding stricter controls on international timber companies and US regulators are expected to pass legislation requiring stricter and more extensive documentation of the source of logged timber. Consumers have also increased pressure on retailers and on home construction companies to disclose the source of lumber, lumber products, wood flooring, cabinetry, and furniture. Home Depot and Lowe's, which both display Forest Stewardship Council certification on qualifying lumber, are moving to provide increased labeling for the origin of wood or wood-engineered products.

In the meantime, the market remains optimistic in the face of uncertainty about increased regulation and decreased access to international timber markets. Timber companies which produce easily-documentable "plantation" exotic hardwoods are expected to see a sharp increase

in market share as a result of the public and governmental backlash from the Malaysian timber scandal.

Re-evaluation Questions:

You are given the opportunity to shift any part of your investment in Dryad to an indexed mutual fund linked to the S&P 500. This fund consists of stocks from the companies in the S&P 500, which means that the fund's performance will match the S&P 500 and reflect the same risk and volatility as the economy. You may choose to shift a part or all of your investment or you may choose not to move your investment out of Dryad.

Bearing in mind the current scandal facing the forestry industry, and the associated uncertainty, how would you now evaluate an investment in Dryad? Please read the responses carefully and indicate your choice.

Q5 Overall, assuming you were not concerned about balancing your stock portfolio, how would you rate this company?

- ❍ An excellent investment -- low risk and great long-term growth potential
- ❍ A good investment -- a little risk but a lot of long-term growth potential
- ❍ A slightly better than average investment -- a little less risk and/or uncertainty than average
- ❍ An average investment -- not really different from most companies
- ❍ A slightly worse than average investment -- a little more risk and/or uncertainty than average
- ❍ A poor investment -- a little riskier but a lot of uncertainty about long-term growth potential
- ❍ A very poor investment -- high risks and a lot of uncertainty about long-term growth potential

Q6 Now, without considering diversification and balance in your overall portfolio, and if you had the opportunity to do so without transaction costs, what percentage of your original, inherited investment in Dryad would you shift to a market-indexed mutual fund? Please choose one of the ranges below to reflect your choice.

	0 - 10%	11 - 20%	21 - 30%	31 - 40%	41 - 50%	51 - 60%	61 - 70%	71 - 80%	81 - 90%	91 - 100%
Percentage of original investment shifted to market-indexed mutual fund:	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Q7 All else being equal, how long would you expect it to take for Dryad stock to show a partial recovery of at least 10% of the recent decrease in Net Income?

- ❍ One month or less
- ❍ Six months or less
- ❍ One year or less
- ❍ More than one year

Q8 If you were to choose a "wait and see" strategy, and assuming that all industry stocks recovered at the same rate, what is the maximum time you would be willing to wait to see a partial recovery in Dryad stock of at least 10% of the recent decrease in Net Income?

- ❍ One month or less
- ❍ Six months or less
- ❍ One year or less
- ❍ More than one year

Q9 All else being equal, how long would you expect it take for Dryad stock to show a full recovery of the recent decrease in Net Income?

- ❍ One month or less
- ❍ Six months or less
- ❍ One year or less
- ❍ Between one and three years
- ❍ More than three years and up to five years
- ❍ Five years or more

Q10 If you were to choose a "wait and see" strategy, and assuming that all industry stocks recovered at the same rate, what is the maximum time you would be willing to wait to see a full recovery in Dryad stock of the recent decrease in Net Income?

- ❍ One month or less
- ❍ Six months or less
- ❍ One year or less
- ❍ Between one and three years
- ❍ More than three years and up to five years
- ❍ Five years or more

[Additional screening question for attention]

S15 Please click on "Generally uncomfortable" below

- ❍ Very comfortable
- ❍ Generally comfortable
- ❍ Slightly comfortable
- ❍ Neither comfortable nor uncomfortable
- ❍ Slightly uncomfortable
- ❍ Generally uncomfortable
- ❍ Very uncomfortable

Manipulation Check Block:

Please answer the following questions about the case:

Q11 A scandal involving illegal logging in Malaysia caused a severe market downturn for the entire industry.

- ❍ Dryad was one of the companies directly involved in the illegal logging
- ❍ Dryad was not one of the companies directly involved in the illegal logging

Q12 Dryad's Sustainability Report disclosed:

- ❍ Only areas of good performance
- ❍ Areas where the company had both good and bad performance

Q13 Dryad's Sustainability Report used:

- ❍ Specific language with numbers you could compare to prior years and other companies (e.g. "achieved our goal of a 5% increase in philanthropic contributions).
- ❍ Vague language and non-verifiable or non-measurable amounts you can't compare to prior years and other companies (e.g. "increased philanthropic contributions").

Business Risk Propensity Scale Block:

Please answer the following questions about your comfort level with risk in business situations. There are no right or wrong answers. Do not spend too much time on any one statement. Choose one of the responses for each question.

Q14 How much do you think you tend to take on risky projects, compared to other people?

- ❍ Much less than other people
- ❍ Less than other people
- ❍ A little less than other people
- ❍ About the same as other people
- ❍ A little more than other people
- ❍ More than other people
- ❍ Much more than other people

Q15 Now, imagine that you are the manager of a major project and face a decision that affects your organization's financial future. Given this circumstance, how would you evaluate:

	Much less than other people	Less than other people	A little less than other people	About the same as other people	A little more than other people	More than other people	Much more than other people
Your tendency to choose more risky alternatives, when you have to rely on other people's assessment of those alternatives?	❍	❍	❍	❍	❍	❍	❍
Your tendency to choose more risky alternatives, when you have to use very technical and complex information?	❍	❍	❍	❍	❍	❍	❍
Your tendency to choose more risky alternatives which could have a major impact on the strategic direction of your organization?	❍	❍	❍	❍	❍	❍	❍
Your tendency to initiate a strategic corporate action which has the potential to backfire?	❍	❍	❍	❍	❍	❍	❍
Your tendency to support a decision when you know the relevant analyses were done without several pieces of information?	❍	❍	❍	❍	❍	❍	❍

APPENDIX B: IRB APPROVAL FORMS

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Kimberly A. Zahller**

Date: **February 28, 2012**

Dear Researcher:

On 02/28/2012, the IRB approved the following activity as human participant research that is exempt from regulation:

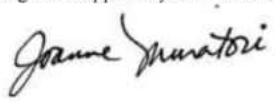
Type of Review:	Exempt Determination
Project Title:	The Benefit of the Doubt: Resilience in Stakeholder Assessments of Corporate Social Performance Disclosures
Investigator:	Kimberly A Zahller
IRB Number:	SBE-12-08240
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 02/28/2012 11:47:53 AM EST



IRB Coordinator

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Kimberly A. Zahller**

Date: **April 05, 2012**

Dear Researcher:

On 4/5/2012, the IRB approved the following minor modification to human participant research that is exempt from regulation:

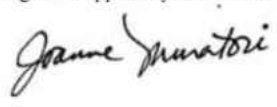
Type of Review:	Exempt Determination
Modification Type:	Due to insufficient response rate from MBA/ MSA students, there will be a change to how study participants are recruited: EMpanel Online, a survey company with a prior history of working with UCF researchers will recruit and screen participants based on study criteria. Data will be delivered via SurveyMonkey. No other changes have been made to the study or consent document.
Project Title:	The Benefit of the Doubt: Resilience in Stakeholder Assessments of Corporate Social Performance Disclosures
Investigator:	Kimberly A Zahller
IRB Number:	SBE-12-08240
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 04/05/2012 11:50:25 AM EDT



IRB Coordinator

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Orlando, Florida 32826-3246
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www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Kimberly A. Zahller**

Date: **April 10, 2012**

Dear Researcher:

On 4/10/2012, the IRB approved the following minor modifications to human participant research that is exempt from regulation:

Type of Review:	Exempt Determination
Modification Type:	Based on the pilot study, a few minor changes were made to the instrument in order to improve clarity. In addition, some minor revisions were made to the demographic questionnaire. No other changes have been made to the study.
Project Title:	The Benefit of the Doubt: Resilience in Stakeholder Assessments of Corporate Social Performance Disclosures
Investigator:	Kimberly A Zahller
IRB Number:	SBE-12-08240
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 04/10/2012 03:48:49 PM EDT

IRB Coordinator