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UNIVERSITY OF CALIFORNIA,
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The Asymmetric Effects of Corporate social Responsibility across Firms and across Time:
The Role of Marketing Intensity

DISSERTATION

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in Management

by

Hannah Oh

Dissertation Committee:
Professor Imran Currim, Chair
Professor Jooseop Lim
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2014

DEDICATION

To

my husband (John Bae), my daughter (Isabel Bae), and my parents

in recognition of their endless encouragement and support

Your word is a lamp to guide my feet and a light for my path.
Psalm 119:105

Trust in the LORD with all your heart and lean not on your own understanding; in all your ways
acknowledge him, and he will make your paths straight.
Proverb 3:5-6

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ABSTRACT OF THE DISSERTATION

The Asymmetric Effects of Corporate Social Responsibility across Firms and across Time: The Role of Marketing Intensity

By

Hannah Oh

Doctor of Philosophy in Management

University of California, Irvine, 2014

Professor Imran Currim, Chair

Although there are a vast number of studies on the link between corporate social responsibility (CSR) and corporate financial performance (CFP), there is still inconsistency among past literature. In the management and strategy area, some have documented a positive relationship, some have reported a negative relationship, and others have even found no relationship between CSR and financial CFP. Unlike previous marketing literature, which examined the marketing outcomes of CSR activity, we consider the effects of CSR on financial outcomes by examining a firm's time-series stock return. Most of the previous literature that explored the effects of CSR did not distinguish corporate social irresponsibility (CSiR) from CSR. Since CSiR and CSR are a divergent construct, we treat them as separate constructs and examine the effects of responsible corporate social behavior (CSR strength) and irresponsible corporate social behaviors (CSR weakness) separately. To further explore why all firms do not benefit equally from CSR initiatives, we consider time-specific and firm-specific conditions.

In this study, we investigate 4 questions to figure out boundary conditions under which CSR initiatives can positively or negatively affect CFP: 1) Are the effects of CSR initiatives

different across time?; 2) Are the effects different for CSR strength vs. CSR Weakness?; 3) Are the effects different in the short-term vs. long-term?; and 4) Are the effects different between firms with high marketing intensity vs. firms with low marketing intensity? Using company data on CSR performance from the KLD database in conjunction with COMPUSTAT and CRSP data from 1990 to 2010, we examine the effects of CSR strength and CSR weakness on stock market returns. The empirical results indicate the positive effect of a firm's CSR strength in recent years. This phenomenon can be explained by the evolution of legitimacy theory. When we further look into the 4 questions, the results indicate that firms with high marketing intensity get punished when they have CSR weakness while firms with low marketing intensity get rewarded when they have CSR strength. These asymmetric effects could be explained by the visibility theory and shareholder expectation. Theoretical contribution and managerial implications are discussed.

1. INTRODUCTION

The importance of CSR is growing over time with all constituencies including stockholders, firms, and customers. As Du et al. (2011) indicated, most forward-looking firms are considering CSR as not merely their responsibility but as their imperative tool to achieve their strategic objectives. CSR is no longer a luxury or nicety for a firm or “the right thing to do” but rather a necessity and “the smart thing to do” (Smith, 2003). Thus, increasing the investment of firms on various dimensions of CSR is not news anymore. Reputation Institute's Global RepTrak 100™ (2013) report that the top 100 companies spend on average \$50 million a year on CSR activities. A firm’s diverse CSR initiatives tend to satisfy and increase value for not only its shareholders, but also its other stakeholders, e.g., employees, customers, government, and investors. Companies have been putting forth efforts to build strong employee and community relations, to provide quality products to customers, to reduce their negative footprint on the environment, to have efficient and fair corporate governance programs, and to practice operations in a manner that will not violate human rights.

With this mounting interest and attention to CSR, scholars across various fields have been examining the effect of CSR on firm performance. However, the results are equivocal (Aupperle et al., 1985; Cochran and Wood, 1984; Godfrey et al., 2009; Griffin and Mahon, 1997; Margolis and Walsh, 2003; Orlitzky et al., 2003; Waddock and Graves, 1997; Wood and Jones, 1995). Margolis and Walsh (2003) examined 127 published studies between 1972 and 2002. They find out that, among 109 studies that looked at CSR as an independent variable and CFP as a dependent variable, 54 studies reported positive relationship, 28 studies reported a non-significant relationship, 20 studies reported a mixed relationship and 7 studies reported a negative relationship. We start with the inconsistency of past literature, explore conditions under

which this inconsistency can be reduced, and uncover the various asymmetric effect of CSR under different conditions.

We ask four questions. The first question asks whether there is a growing effect of CSR activity over time. Within the time frame of our data, which ranges from 1990 to 2013, we choose year 2000 as a base point, and examined the effect of CSR before year 2000 and after year 2000. We hypothesize that the effect of CSR would appear significant in later years since managers begin to acknowledge the importance of CSR as it is gradually getting more attention in society. Our result supports the hypothesis that the effect of CSR strength is positive and statistically significant only after year 2000.

The second question asks whether the effects are different for CSR strength vs. CSR weakness. Unlike most of the previous studies that have considered CSR strength and CSR weakness as a single construct, we separate them since even one firm could engage in both responsible corporate activities and irresponsible activities concurrently. However, by aggregating the CSR and CSiR¹, the effect of responsible activities could be cancelled out by the effect of irresponsible activities. In other words, the genuine effect of CSR or CSiR could be suppressed. Thus, we segregate the effect of CSR strength and CSR weakness. The empirical results show the asymmetric effects of CSR strength and CSR weakness in different conditions.

The third question asks whether the effects are consistent or different in the short-term and long-term. We look at stock market returns after 1 year and after 5 years to examine the short-term and long-term effects of CSR/CSiR engagement.

The fourth question asks whether the effects are different depending on marketing intensity. We conjecture that marketing spending would play a key role since higher (lower)

¹ We use CSR and CSR Strength interchangeably and CSiR and CSR weakness interchangeably throughout the paper.

marketing spending can increase (decrease) a firm's visibility, and thus affect stakeholders' expectations of the firm's CSR efforts. The results show that firms with lower marketing intensity get rewarded in the stock market when they have strength in CSR, whereas firms with higher marketing intensity get penalized in the stock market when they have concern in CSR. These phenomenon could be explained by the expectation of stakeholders. Highly visible firms are expected to engage rigorously in various CSR activities so their actual engagement in CSR is not rewarded. On the other hand, those highly visible firms get penalized if they have CSR weakness, which is contrary to the expectation. In a similar vein, less visible firms face lower level of expectation from stakeholders to be socially responsible. However, when they have CSR strength, they get rewarded since they exceed shareholder expectations in a positive way. To the best of our knowledge, our study is the first to examine asymmetric effects of CSR strength and concern across time and across different levels of marketing intensity.

In the following sections, we introduce the definitions of CSR and stakeholder theory, and review inconsistent past literature in areas outside marketing and inside marketing. We then develop and test hypotheses that examine the link between CSP and CFP in different conditions. We conclude with a discussion of the empirical findings, as well as the theoretical and managerial implications of the results.

2. BACKGROUND

2.1 Definitions: CSR, CSP and Stakeholder Theory

According to Carroll (1991), corporate social responsibility refers to a business entity's fulfillment of responsibilities to multiple stakeholders which exist at various levels: economic, legal, ethical, and philanthropic. Wood (1991) generally defined corporate social performance as

the organization's responsiveness to the needs of its stakeholders. Among various versions of definitions of CSR and CSP², we choose to follow Carroll's (1991) and Wood's (1991) definitions since we focus on the firm's CSR activities, either good or bad, toward various stakeholders according to stakeholder theory. The stakeholder theory explains why a firm's objectives should include dealing with the various conflicting interests of various stakeholders in society beyond shareholders (Donaldson and Preston, 1995; Freeman, 1984; Harrison and Freeman, 1999; Jones 1995; Mitchell et al., 1997; Maignan et al., 2005). Freeman (1984, p.46) initiated the consideration of broader stakeholder relations into the field of management by describing how a firm relates to "any group or individual who can affect or is affected by the achievement of the organization's objective." Post et al. (2002, p.19) defined stakeholders in a corporation as "the individuals and constituencies that contribute, either voluntarily or involuntarily, to its wealth-creating capacity and activities, and are therefore its potential beneficiaries and/or risk bearers." According to the proponents of stakeholder theory (Barney, 1991; Russo and Fouts, 1997), either by saving costs or improving revenues, CSR is positively related with CFP. Stakeholders may interpret a company's good CSR actions as a result of superior management skill and thus, yielding lower explicit costs (Alexander and Bucholtz, 1978). McWilliams and Siegel (2001) contend that firms engage in CSR activities based on the demand from stakeholders in order to increase economic efficiency. The gist of this theory is that

² The distinction between CSR and CSP could be based on stakeholders' assessments (McWilliams and Siegel, 2000). If a firm engages in a socially responsible program, it is perceived as CSR whereas if the socially responsible programs are assessed by stakeholders, it is viewed as CSP. Turban and Greening (1996) argue that CSP emphasizes a company's success in holding its responsibilities to various stakeholders including employees, customers, and the society at large in addition to shareholders. In our study, we focus on 'CSR efforts.' CSR efforts are put into various dimensions of CSR initiatives by firm managers intentionally and strategically whereas the concept and definition of CSP involves the finalized assessment without considering firm's intention to be responsible. In this study, we are not looking at the effect of CSP but rather, firm's CSR efforts. Whether the firms' CSR efforts are perceived as good or bad is a next step and depends on the firm's marketing intensity as well. Therefore, we are interested in CSR efforts, not CSP.

superior management of various stakeholder demands is important to accomplish higher CFP (Jones, 1995). Based on the stakeholder theory, we investigate the impact of various CSR initiatives that cater needs of various stakeholders.

2.2 Previous inconsistent results on CSR-CFP link in areas outside marketing

The majority of previous studies find a positive relationship between CSR and various indicators of firm financial performance in terms of both accounting-³ and market-based measures (Bowman and Haire, 1975; Dolandson and Preston, 1995; Hillman and Keim, 2001; Jones, 1995; McGuire et al., 1988; McWilliams and Siegel, 2000; Mitchell et al., 1997; Shane and Spicer, 1983; Waddock and Graves, 1994, 1997; Wokutch and Spencer 1987). Moskowitz (1992) revealed that firms with high CSR ratings outperformed the market, but only to a certain extent. Accounting literature also showed that firms ranked high in social responsibility exhibit substantially higher average returns than their low-ranked counterparts (Derwall et al., 2005). In the management field, Waddock and Graves (1997) showed that prior financial performance is positively linked to high levels of CSP, which in turn is positively linked to superior future financial performance. Good relationships with stakeholders can increase firm revenue and profitability (Choi and Wang, 2009), and can limit a firm's likelihood of myopic opportunistic behavior (Benabou and Tirole, 2010) that could yield positive financial performance. Lee and Faff (2009) show that higher CSP scores are related with lower idiosyncratic risk, while, in a similar vein, Goss (2009) argues that low CSR scores are related with higher likelihood of

³ Examples of accounting-based measures are return on equity (ROE), return on total assets (ROA), and earnings per share (EPS). The accounting-based measures represent a company's internal efficiency (Cochran and Wood, 1984) since they rely on managers' discretionary allocation of resources and represent managerial performance rather than market response to firms' actions. Thus, the accounting-based measures are under scrutiny of managerial manipulation and differ by accounting procedures (Guney and Schilke, 2010). Rust et al. (2004, p.79) describe that "accounting measures are retrospective and examine historical performance." Therefore, our study focus on stock market-based measures rather than accounting-based measures.

experiencing financial distress. Instrumental stakeholder theorists contend that there is a positive association between CSR and CFP (Donaldson and Preston, 1995; Mitchell et al., 1997).

Stakeholder theory explains that satisfying needs of various stakeholders is crucial in achieving superior CFP (Jones, 1995).

Advocates of the positive link between CSR and CFP present several advantages that firms could receive from engaging in CSR initiatives and these advantages help firms reap superior CFP. Some argued that the investment in CSR could act as a source of competitive advantage (Porter and Kramer, 2006; Smith, 2003), and effective employment of CSR initiatives by managers could differentiate not only their products, but also their brands from their competitors (Smith and Higgins, 2000; Varadarajan and Menon, 1988). Thus, CSR can be regarded as a form of strategic investment similar to R&D and advertising (Gardberg and Fombrun, 2006; McWilliams et al., 2006). Fombrun et al. (2000) posit that CSR activities act as a safety net to shield companies from random negative events. Godfrey (2005) showed that CSR works as some kind of insurance policy to companies from risks and also create positive “moral capital,” which could directly affect market value of a firm by improving employee morale and productivity (Solomon and Hansen, 1985).

Moreover, CSR can provide better access to valuable resources (Cochran and Wood, 1984; Waddock and Graves, 1997), attract and hold quality employees (Turban and Greening, 1997), increase employee commitment in terms of time, energy, and dedication (Maignan et al., 1999), avoid pricey governmental fines (Shane and Spicer, 1983), convey better marketing for products and services (Moskowitz, 1972), grab unanticipated opportunities (Fombrun et al., 2000), and gain social legitimacy (Hawn et al., 2011). Since reports on CSR represent additional disclosure for a firm, accounting researchers have become more interested in the role that such

disclosure plays in firm valuation. Hong and Andersen (2011) revealed that more socially responsible firms have higher quality accruals, which implies transparency in financial reporting, which is regarded important in terms of a firm's CSP (Waddock and Bodwell, 2004). In sum, there are numerous advantages firms could enjoy by reconciling the different needs of various stakeholders.

Yet, many studies have found no relationship (Aupperle et al., 1985; Alexander and Bucholtz, 1978; Cochran and Wood, 1984; Coffey and Fryxell, 1991; McWilliams and Siegel, 2001; Servaes and Tamayo, 2012; Waddock and Graves, 1997). Ullman (1985) argues that "there are so many variables intervening that no relationship can be found."

Some scholars have found a negative relationship (Aupperle et al., 1985; Bragdon and Marlin, 1972; Friedman, 1970; Hillman and Keim, 1999; Jensen, 2001; McWilliams and Siegel, 1997; Vance, 1975; Waddock and Graves, 1997). Advocates of Friedman (1970), who has a neoclassical economic view, believe that CSR actions incur costs and thus, negatively affects financial returns. For instance, Brammer et al. (2006) argue that investing in CSR reduces shareholder value.

To make matters worse, some studies have even found contradicting results within their own research (Griffin and Mahon, 1997). They found inconsistency within the same study by showing a positive and negative link at the same time (Coffey and Fryxell, 1991; McGuire et al., 1988).

Scholars have argued that the reason behind these equivocal results are due to 'several important theoretical and empirical limitations' of prior studies (McWilliams and Siegel, 2000); not clearly defined CSR measurement (Waddock and Graves, 1997), lack of validity and reliability of the CSP and CFP measures, mismatching between stakeholders and CSR activities

(Wood and Jones, 1995), and misspecification coming from endogeneity issues and omitted variable bias (Aupperle et al., 1985; Cochran and Wood, 1984; Ullman, 1985). In order to address these possible limitations on measurement, we employ KLD data that incorporates various dimensions of CSR activities targeted toward various stakeholders. Moreover, we separately explored the effect of CSR and CSiR. The technical steps we take to address endogeneity issues are discussed later in the paper.

2.3 CSR-CFP in marketing area

Because of increased attention to corporate practices from consumers and other stakeholders, marketing scholars have also displayed a strong interest in the field of CSR (Kotler and Lee, 2005; Maignan et al., 2005). Traditionally, marketing scholars have emphasized customer orientation and focused on one or two key stakeholders in marketing function, which are customers and channel members (Maignan and Ferrel, 2004). Maignan et al. (1999) showed a positive association between CSR and customer loyalty through a managerial survey. Maignan et al. (2005) contend that most of previous literature focus on narrow dimensions of stakeholder orientation in marketing. In other words, marketing scholars have been employing rather narrow definitions of corporate social responsibility, which is focusing on and catering to customer needs. However, there is a growing contention that organizations must focus not only on their direct customers, but also to the various important stakeholder groups. Maignan and Ferrel (2004) call for expanding the scope to broader stakeholders. In line with the stakeholder theory, we view CSR as a complicated multi-faceted construct that incorporates not only customers, but also a wide range of stakeholders including investors, community, employee, and government (Aupperle et al., 1985; Wood, 1991).

In contrast to profuse amounts of literature in the management and strategy areas, there has been limited amount of research conducted in the marketing area. Most studies examined the marketing outcome of CSR efforts such as consumer reactions to CSR initiatives (Sen and Bhattacharya, 2001), customer-company identification (Sen and Bhattacharya, 2001), customer attitudes toward the company and positive product evaluations (Brown and Dacin, 1997; Cryer and Ross, 1997; Ellen et al., 2000), increased loyalty (Du et al., 2007; Luo and Bhattacharya, 2006), willingness to pay premium prices (Bhattacharya and Sen, 2004), willingness to support companies committed to CSR (Barone et al. 2000; Berger and Kanetkar, 1995; Cryer and Ross, 1997), willingness to donate to company-supported nonprofit organizations (Lichtenstein et al., 2004), and decreased attribution of blame in the face of a crisis (Klein and Dawar, 2004). Peloza and Shang (2011) reviewed the past literature and found out that marketers have limited knowledge of stakeholders' responses to CSR activities. Margolis and Walsh (2003) revealed an equivocality of the marketing success of CSR. In order to reduce the inconsistency and relevancy, we take a step further from past literature by considering financial outcome of CSR initiatives that includes reactions of various stakeholders.

3. HYPOTHESES

3.1 CSR Strength and Concerns

Most of the past studies on CSR-CFP link have used a combined CSR measure, counting a firm's responsible behavior and irresponsible behavior at the same time. However, when CSR and CSiR are aggregated to predict firm financial performance, as has been done in most past studies (Waddock and Graves, 1997), strengths can counterbalance weaknesses, reducing variation in the dependent variable (Strike et al., 2006). Recently, there are a few studies that treat CSR

strength and weakness separately. Mattingly and Berman (2006) empirically revealed that the strength and weakness items in the KLD database are two different constructs. Similarly, Van der Lann et al. (2008) contend that the weaknesses or negative CSR should be treated differently from strength or positive CSR based on the prospect decision theory, which tells that “losses loom larger than gains” (Kahneman and Tversky, 1979). Therefore, CSiR may be regarded as a more important determinant of a firm’s value than CSR (Clark 2008; Frooman, 1997; McGuire et al., 2003). In a similar vein, Doh et al. (2010) revealed that concerns on social responsibility are related to poor financial performance while strengths on social responsibility are not much related to financial performance. Servaes and Tamayo (2012) examined the effects of CSR strengths and weaknesses separately on firm value for firms with high (low) public awareness, which is proxied by the firm’s advertising intensity. Maignan and Ferrell (2004) suggest future researchers to exclusively evaluate the effects of CSiR. Therefore, we examine the effect of CSR and CSiR separately.

3.2 Short-term and long-term effects of CSR/CSiR

The benefits of socially responsible initiatives taken in earlier periods could be realized in the later periods. However, only a few past studies explicitly consider the long-term horizon within their analysis of CSP-CFP link (Brammer and Millington, 2008). Brammer and Millington (2008) assert the importance of longitudinal analysis of CSP-CFP link. It takes time for financial markets to fully incorporate and appreciate a firm’s strategic actions, e.g., CSR, and thus the financial outcome of firm’s strategic investments need to be examined over extended period of time (Lehmann, 2004; Mizik and Jacobson, 2007). Most studies employ a cross-sectional research design and examine a contemporaneous relationship between CSP and CFP, while other studies

use lags in variables, usually over a one-year period (Aupperle et al., 1985; Griffin and Mahon, 1997; Hillman and Keim, 2001; McGuire et al., 1988; Waddock and Graves, 1997). There might be an incompatibility between an institutional owner's time horizon and the time required to realize the benefits from engaging in CSR initiatives (Graves and Waddock, 1994) because investments in CSR initiatives are considered to be long-term investment (Mahapatra, 1984). Thus, to reflect this different time-horizon, our study looks not only at immediate short-term effects (1 year after the engagement in CSR initiatives) of CSR strengths and weaknesses but also at longer-term effects (5 years after the engagement in CSR initiatives) of CSR strengths and weaknesses.

In our study, we develop and test 3 sets of hypotheses, 1) on the different effects of CSR strength and weakness on the stock market over time, 2) on the negative effect of CSR weakness on stock market performance for firms with high marketing intensity for years after 2000, and 3) on the positive effect of CSR strength on stock market performance for firms with low marketing intensity for years after 2000.

3.3 Evolution of Legitimacy Theory

The majority of past studies looked at the relationship between CSR and CFP in a contemporaneous setting or within a short period of time (Aupperle et al., 1985; Griffin and Mahon, 1997; Hillman and Keim, 2001; McGuire et al., 1988; Waddock and Graves, 1997). This study investigates the relationship over a longer period of time and tries to figure out whether there is a growing trend of CSR effects over time. We hypothesize that the effects of CSR strengths and weaknesses are becoming remarkably significant over time. The rationale of the hypothesis could be explained by the evolution of legitimacy theory.

Society's expectations on the legitimate business behaviors of a firm have evolved over time (Sharfman, 1994). Parasuraman et al. (1988) defined expectations as "consumers' desires or wants based on what they feel a company should do rather than what a company would do." Epstein (1987) argues that it is necessary, but not sufficient, to obey the law in order for firms to be considered legitimate. Thus, legitimacy is regarded as a "license to operate" or the permission a firm gets from the society to do business (Dow, 2002). Thus, legitimacy is a crucial factor of the firm's intangible resources (Dowling and Pfeffer, 1975; Wood, 1991), and moreover, an essential condition for firm's survival (Dowling and Pfeffer, 1975; Rao, 1994). Firms are facing greater pressures from many constituents in society to be more legitimate and thus, become decent corporate citizens. In other words, firms are expected to contribute to the society's benefit or welfare to build their legitimacy, which ensures a firm's current and future existence, and these expectations on firms are getting bigger. This phenomenon is called the evolution of legitimacy (Sharfman, 1994). According to Gollin Harris's report (2004), "American society specifically and global society generally are increasing their expectations (demands) for the fees for the legitimacy-based license to operate, that is, more CSP." In a similar vein and in response to these increased expectations and pressures, firms are getting more deeply involved in CSR efforts (Chiu and Sharfman, 2011) since the engagement in CSR activities bestows legitimacy to firms (Rao, 1994). Providing abundant benefits to the society has become a critical factor for a firm to obtain legitimacy.

As explained in the introduction section, we separate firms based on year 2000, which is the median year in our sample. Guney and Schilke (2010) also examined the period after 2001 to 2007 and argued that an increasing number of companies realized the importance of CSR during

that period. Thus, we hypothesize that the effect of CSR strength (concern) will be different after year 2000 than before 2000.

H1: The effect of CSR strength (concern) on stock market return will be positive (negative) and greater in recent years.

3.4 Visibility Theory and Stakeholder Expectation

After we find out the positive effects of CSR strengths after year 2000, we delve into the results more deeply to figure out why, and under which conditions, there is an origin for the effect. Servaes and Tamayo (2013) investigated the effect of customer awareness, proxied by advertising intensity, on firm value. They found that CSR and firm value are positively related for firms with higher customer awareness. Our study differs from Servaes and Tamayo (2013) that we use ‘marketing intensity’ to observe the effect of visibility of a firm on the relationship between firm’s CSR efforts and future stock returns across time. This study focuses on the effect of the high/low firm visibility, which affect stakeholders’ expectations regarding firm’s CSR efforts. We are interested in not only customers but also other stakeholders, and how their expectations regarding firm’s CSR efforts influences the relationship between CSR and CFP. Whether the stakeholder’s expectations for highly (low) visible firm CSR efforts are met or not determines whether the firms are rewarded or punished in the stock market. Hence, stakeholder expectation, engendered from the visibility of a firm, plays a key role in determining the outcome of CSR activities. In other words, whether greater CSR efforts leads to higher CFP depends on firm’s success or failure to meet their stakeholders’ expectations, and the stakeholders’ expectations are formed based on the visibility of a firm, which is determined by their marketing intensity.

Highly visible firms, i.e., firms spending greater amounts in marketing, are expected to have greater social responsibility from their stakeholders. Firms that are more visible in the public eye are more likely to face legitimacy pressures, or expectation to be legitimate (Chiu and Sharfman, 2011; Dowling and Pfeffer, 1975). As expected, the CSR efforts done by highly visible firms are taken for granted by stakeholders, yielding no reward in the stock market. Stakeholders expect those highly visible firms to be more responsible, which can be represented as CSR initiatives. However, when the highly visible firms are not socially responsible, i.e., have CSR weaknesses, their actions get punished in the stock market. CSiR of highly visible firms are regarded as a violation of stakeholder expectations. Consequently, we could expect no significant effect of CSR strength for highly visible firms but significant negative effect of CSR weaknesses on its future stock market return.

H2: The negative effect of CSR weaknesses on stock market return in recent years will come from high marketing intensity firms.

Less visible firms, i.e., firms spending smaller amounts in marketing, are not expected to have as much social responsibility as highly visible firms. Shareholders are generally more lenient with the less visible firms in terms of their CSR efforts. Thus, if the less visible firms engage in greater CSR efforts, they get rewarded in the stock market as a result of their unanticipated firm behavior. On the other hand, their anticipated firm behaviors, e.g., not much investing in CSR efforts, are not penalized in the stock market as their CSR weaknesses are in line with stakeholders' expectation. Subsequently, we could expect no significant effect of CSR weaknesses for less visible firms but significant positive effect of CSR strengths on its future stock market return.

H3: The positive effect of CSR strengths on stock market return in recent years will come from low marketing intensity firms.

4. MODELS

4.1 Models to Test the Hypotheses

The models to test our hypotheses are:

$$(1) \quad \Delta\text{TSR}_{it+k|t} = \beta_0' + \beta_1' \Delta\text{CSR}_{it}^S + \beta_2' \Delta\text{MKTG}_{it} + \beta_3' \Delta\text{CSR}_{it}^S \times \Delta\text{MKTG}_{it} + \beta_4' \Delta\text{CAPEX}_{it} + \beta_5' \Delta\text{SALES}_{it} + \beta_6' \Delta\text{RISK}_{it} + \beta_7' \text{YEAR}_t + \varepsilon_{it}'$$

$$(2) \quad \Delta\text{TSR}_{it+k|t} = \beta_0'' + \beta_1'' \Delta\text{CSR}_{it}^C + \beta_2'' \Delta\text{MKTG}_{it} + \beta_3'' \Delta\text{CSR}_{it}^C \times \Delta\text{MKTG}_{it} + \beta_4'' \Delta\text{CAPEX}_{it} + \beta_5'' \Delta\text{SALES}_{it} + \beta_6'' \Delta\text{RISK}_{it} + \beta_7'' \text{YEAR}_t + \varepsilon_{it}''$$

Where $\text{TSR}_{it+k|t}$ are cumulative or total stock returns for firm i , for $k=1$ and 5 , one and five years later (TSR_1 and TSR_5); $\Delta\text{TSR}_{it+k|t}$ are total stock returns for firm i in year t minus total stock returns for the same firm in year $t-1$ obtained from CRSP database; and ΔCSR_{it}^S is firm i 's aggregate CSR strengths at time t minus firm i 's aggregate CSR strengths at time $t-1$ obtained from KLD database. We take first differences to address for the correlated omitted variables problems in level-based regressions (Kimbrough and McAlister 2009) and potential endogeneity problem.

Unlike previous studies that frequently used accounting-based measures such as return on asset (ROA), return on equity (ROE), and asset growth, we employ the stock market return, which is a market-based measure, to capture a firm's performance not subject to managerial manipulation, which is often present in accounting-based measures (Branch 1983). Past studies that used accounting-based measures do not control for differences in risk. In our study, we also do not control for risk but, as a robustness check, we also examine the effects of CSR on the market adjusted cumulative stock return as alternative dependent variable, which adjust for

market risk. Ullman (1985) emphasizes the need to adjust risk and industry characteristics when using accounting-based measures. Accounting-based measures also could be influenced by management's discretionary allocation of resources. There are risks of suffering from managerial manipulation or differences in accounting procedures when accounting-based measures are used. Therefore, we chose to use market-based measures to negate the problem associated with accounting-based measures.

We tested the both equation 1 (CSR strength) and 2 (CSR concern) separately for years before 2000 and years after 2000 to test H1 by dividing our sample into 2 subsamples with year 2000 as the basis for the split. In order to test H2 and H3, we further split our sample based on median marketing spending. Firms spending more than median amount of marketing expenditure are considered as high marketing intensity firms whereas firms spending less than median amount of marketing spending are considered as low marketing intensity firms. Consequently, we have 8 sets of models to test our 3 hypotheses, which are constructed as 2 (strength and concern) x 2 (before 2000 and after 2000) x 2 (high marketing intensity and low marketing intensity).

CAPEX, SALES, and RISK are the control variables we include. Year fixed effects, which control for dynamics during the period studies, including effects of the economic condition and employ Generalized Least Squares (GLS) to correct for correlated errors.

4.2 Aggregate CSR Strength and Concern

Aggregate CSR engagement is computed as sum of number of all strength/concerns items across 7 dimensions in KLD, which include community relations, diversity, employee relations, corporate governance, environment, human rights, and product. KLD data consists of binary

summary of strengths and concerns for particular issues within each dimension. For example, under community dimension, firms could get maximum 8 binary summaries of strength and maximum 4 binary summaries of concerns. Since all items are binary responses, firms could get certain number of strengths and concerns for each dimension if we take sum.

$$CSR\ Strength_{i,t} = \sum_{d=1}^7 (\#\ of\ CSR\ Strength_{i,d,t})$$

$$CSR\ Weaknesses_{i,t} = \sum_{d=1}^7 (\#\ of\ CSR\ Weaknesses_{i,d,t})$$

Most of the previous literature looked at the aggregate CSR construct, which is calculated as the difference between sum of strengths scores and sum of weaknesses scores. However, since the number of strengths items and weaknesses items don't match equally among dimensions, some scholars divide the sum of CSR strengths (weaknesses) items by maximum possible number of strengths (weaknesses) items to scale them (Maignan and Ferrell, 2004). Unlike them, our study separately examine the effect of CSR and CSiR, we follow Kacperczyk (2009)⁴'s approach to sum all strength items across all seven dimensions. The stakeholder theory suggests that a company's actions appeal to the multi-dimensional stakeholders (Maignan et al., 2005) and "generalized customer" that encompasses both actual and potential members of various stakeholder groups (Daub and Ergenzinger, 2005). Moreover, stakeholders are concerned about not only issues that are directly related to their welfare, but also issues that do not affect them directly (Maignan and Ferrell, 2004). Therefore, we include all seven dimensions to incorporate a company's various CSR efforts catered to various stakeholders.

⁴ In Kacperczyk (2009)'s study, he only examined the strengths items across 5 dimensions, excluding corporate governance and human rights dimensions.

4.3 Marketing Spending

We use ‘marketing spending’ instead of ‘advertising spending’ to measure a firm’s visibility. Following previous literatures, we calculate marketing spending as selling and general administrative expenditures (Compustat item XGSA) minus R&D expenditures (Compustat item XRD) scaled by lagged total assets (Compustat item AT) (Mizik and Jacobson, 2007; Luo, 2008; Currim, Lim, and Zhang, 2013). Under Generally Accepted Accounting Principles (GAAP), firms are not required to report their advertising spending in their income statement as a separate item, while this is not the case for SG&A and R&D. Consequently, use of advertising spending greatly decreases the number of available data and would potentially bear risk of selection bias. Therefore we use marketing spending as a proxy of visibility.

$$\text{Marketing Intensity}_{i,t} = \frac{SG\&A_{i,t} - R\&D_{i,t}}{\text{Total Asset}_{i,t}}$$

Yet, there is a limitation of measuring marketing spending as SG&A expense minus R&D expense. Although it has theoretical and empirical justification (Kurt and Hulland, 2013; Mizik and Jacobson, 2007), this measure includes general non-operation and legal costs as well (Luo, 2008). However, isolating the exact marketing spending only is almost impossible with the current COMPUSTAT data due to the nature of the reporting. Thus, in future studies, it would be ideal to separate pure marketing spending to get more precise effect of marketing.

4.4 Control Variables for the Models

Following the accounting and finance literature, we employ several control variables to account for effects coming from firm characteristics. First, we use sales (SALES) to control for past market performance of the firm. Although past research has found mixed results on the

relationship between firm size and firm performance, there is some evidence supporting a positive relationship. This variable is calculated as the firm's total sales by the end of the fiscal year. Second, we use the ratio of firm's total debt to total assets as the leverage (RISK). A firm's leverage influences stock returns, because a firm's capital structure may affect its future cash flows. Last, we use capital spending intensity, which uses the ratio of capital expenditure to total assets (CAPEX). Capital expenditure refers to the money spent to acquire and maintain the physical assets of a company. COMPUSTAT describes capital expenditures as the cash outflow for additions to property, plant, and equipment. Capital expenditure is used as a measure of a firm's investment in future revenue-generating activities.

One of the advantages of employing a fixed effect model is that the model could account for the time-invariant heterogeneity among companies (Kotchen and Moon, 2012). Nelling and Webb (2009) figure out that CSP is influenced more by firm-specific factors and employ the fixed effects specification, which allows different intercepts for firms, to control for unobservable firm-specific factors.

The study of the link between CSR and CFP bears ever-present danger of the endogeneity problem, which is the correlation between the independent variables and error term. Certain characteristics of firms might determine whether firms choose to invest in CSR to begin with, and this causes an endogeneity issue as well as it will overstate the CSR's contribution to firm value (Greene, 1993). Additionally, the direction of causation between CSR and CFP could be problematic, since it could be argued that abundant resources of better performing firms, i.e., firms with higher CFP, allow the firms to invest intensively in CSR, i.e., increasing CSP. In this case, the causality is reversed as higher CFP leads to higher CSP, consistent with the argument by slack resource theory (Waddock and Graves, 1997). Their results imply that CSP and CFP

affect each other mutually and continuously through a virtuous cycle (Waddock and Graves, 1997). To address this endogeneity issue, we do not examine the contemporaneous relationship between CSR and stock market return. Instead, we investigate the effects of CSR efforts done in year t on the stock market return in year $t+1$ (short term) and $t+5$ (long term). In addition, the first differenced model specification allows us to avoid potential endogeneity problem. To mitigate problems with outliers, we winsorized all of our variables at the 1st and the 99th percentile level. All the model specification includes year-fixed effects. The advantage of employing a fixed effect is that the model controls for all time-invariant heterogeneity among companies (Kotchen and Moon, 2012).

5. DATA

Our database is obtained from KLD, COMPUSTAT, and CRSP database. KLD Research & Analytics, Inc. provides annual data of the environmental, social, and governmental performance of companies rated by KLD. It contains strength and concern ratings for multiple indicators within seven qualitative areas, which are Community, Corporate Governance, Diversity, Employee Relations, Environment, Human Rights, and Products. Definitions of each indicator of 7 dimensions for both items of strength and concern ratings are represented in Table 1. Sharfman (1996) tested KLD data's construct validity and concluded that it is one of the best measures of CSP among other existing measures. Standard & Poor's COMPUSTAT database provides fundamentals of company and market data for all publicly traded U.S. companies. University of Chicago's CRSP (Center for Research in Security Prices) maintains the stock

market data for NYSES, AMEX, and NASDAQ. We merged KLD, COMPUSTAT, and CRSP database and, as a result, our final sample consists of 5,881 firms in years 1990-2013.

5.1 KLD

KLD is the most frequently referenced source of CSP in academic literature (Waddock and Graves 1997; Hillman and Keim 2001; Chatterji, Levine, and Toffel 2009; Barnett and Salomon 2012). Sharfman (1996) tested KLD data's construct validity and concluded that it is one of the best measures of CSP among other existing measures. The advantage of KLD data is that it encompasses various stakeholder dimensions of CSR initiatives. The ratings are determined by third-party raters with expertise in corporate social behavior who have no direct interest in the firms.

With all the advantages of using KLD, it still has some limitations. KLD contains the risk of subjectivity due to the qualitative nature of the data since it is based on company social ratings by KLD analysts in binary responses (yes or no) (Cai, Jo, and Pan 2012). It also has a risk of a sample selection bias because, in the 1990s, firms in the KLD database included those in the S&P 500 and those selected for the Domini 400 Social Index; where the selection for the database itself was based on the CSR strengths and concerns (Cai, Jo, and Pan 2012). In other words, the firms included in the early years in KLD database tend to be more socially responsible. However, the fixed effects method that we employ in our study could attenuate this selection bias.

The treatment of the KLD database could yield some limitations. The equal weighting of individual items under each dimension and equal treatment of various dimensions might be unrealistic since certain CSR programs might be more crucial for the company and some stakeholders might be more influential than others. Another concern for using the KLD data,

which includes a multi-industry sample, is that it might attenuate unique industry effects because certain dimensions in CSR are more closely related to certain specific stakeholder groups and in certain industry (Griffin and Mahon 1997). Therefore, unequal weighting and investigation of differential industry effects could be done in the future studies.

6. RESULTS

In Table 1, we report the descriptive statistics for CSR variables (CSR strength and CSR weaknesses), marketing spending, control variables (CAPEX, SALES, RISK), and firm financial performance variables (cumulative stock return at year 1, cumulative stock return at year 5) that are included in our study. The correlation matrix is presented in Table 2. It shows that CSR strength and CSR weaknesses are positively correlated, although not significant. The positive correlation indicates that those two items are not the same construct. If CSR and CSiR were the same construct as in past literature, the correlation should be negative since they could be considered as mirror images. Table 3.1 and Table 3.2 show our finding that there is no overall effect of CSR Strength and CSR concern on the future stock return across all years and all firms.

To test H1, we report results (in Table 4 and Table 5) for total stock return TSR_t (Equation 1) for $t=1, 5$. Strength ratings in Equation 1 and concern ratings in Equation 2 of the models for TSR_1 and TSR_5 are estimated separately using a panel regression approach.

As hypothesized in H1, Table 4.1 represent that there is a significant positive effect of CSR strength in years after 2000 for both the short-term ($p<.05$) and the long-term ($p<.01$). Table 5.1 shows that there is not a significant effect of CSR concern for either the short-term or long-term in years after 2000. There is not a significant effect for either CSR strength or CSR concern before year 2000 (Table 4.2 and Table 5.2).

As hypothesized in H2, the result shows that there is a significant negative effect of CSR concern on future stock returns for high marketing intensity firms in years after 2000 (Table 7.1 and Table 7.2). Table 7.1 shows that engagement in aggregate CSR concern is found to be negatively associated with future stock market returns in the long term ($p < .05$).

As hypothesized in H3, the result shows that there is a significant positive effect of CSR strength on future stock returns for low marketing intensity firms in years after 2000 (Table 6.1 and Table 6.2). Table 6.2 shows that firms with CSR strength are positively associated with future stock market returns in the long term ($p < .05$).

In sum, all three of our hypotheses are supported. The effects of CSR strength is positive in years after 2000. Among the firms in years after 2000, firms with high marketing intensity get penalized for their CSR weaknesses while firms with low marketing intensity get rewarded for their CSR strengths.

6.1 Robustness Checks

We tested our model on market-adjusted cumulative return as an alternative measure of stock return. The results are shown in separate columns next to TSR in Tables 3-7. The results exhibit the same pattern as the results of cumulative stock return, also supporting our hypotheses. This controls for the effect of the stock market in general. The CSR effects are examined after year 2000. When we narrow our sample to after 2000, the CSR strength is rewarded for the less visible firms and the CSR concern is penalized for the highly visible firms. The results are in line with our hypotheses.

We also conduct moving-window analysis⁵ of both 5 years window and 10 years window. With 18 different models of 5 years-window (e.g., 1991-1996, 1992-1997,...,2007-2012, 2008-2013) and 13 models of 10 years-window (e.g., 1991-2001, 1992-2002,...,2002-2012, 2003-2013), we could discover positive significant effect of CSR in the later years during 1997-2006, 1999-2008, and in every later 10 year time period window.

6.2 Additional Analyses

The results of profiling analysis on the firms (see Table 8) indicate that high marketing spending firms are more prevalent in B2C industry ($p < 0.1$) and have high R&D intensity ($p < 0.5$) as well. On the other hand, according to the profiling analysis, firms with low marketing spending are more prevalent in B2B industry ($p < 0.1$) and have less R&D intensity ($p < 0.5$). Finally, firms with higher marketing intensity have higher absolute levels of marketing spending ($p < 0.5$), lower sales ($p < 0.5$), and higher marketing spending to sales ratios ($p < 0.5$).

In order to further explore where the effects of H2 and H3 are coming from, we disaggregate CSR dimensions into seven separate dimensions⁶. By including all seven dimensions in one model, we try to look at which dimension is significantly associated with the stock market return. The results show that the effect of H2 is coming from a ‘Human Rights’ dimension ($p < 0.1$) and the effect of H3 is coming from a ‘Diversity’ dimension ($p < 0.5$). In other words, having strengths in the diversity dimension would yield greater stock market return for firms with low marketing intensity and having weaknesses in the human rights dimension would receive punishment in the stock market for firms with high marketing intensity. The overall effect of CSR strength, regardless of the level of marketing intensity, is coming from ‘Diversity.’

⁵ The results are not reported in the paper but will be available upon request.

⁶ The results are not reported in the paper but will be available upon request.

7. CONCLUSION

Notwithstanding the increasing attention and importance of CSR and sheer volume studies on the link between CSR and CFP, the results have been surprisingly equivocal. Past literature could not agree on the effect of CSR, whether it is positive, negative, mixed, insignificant, or no effect at all. This inconsistency has been caused by various reasons such as mis-measurement of CSR, omitting variables, endogeneity issues, and etc. In order to reduce the inconsistency, we examine conditions under which CSR and CSiR affects stock market performance either positively or negatively. This study is the first to examine the increasing effect of time, the asymmetric effect of CSR and CSiR, the long-term effect of CSR and CSiR, and the asymmetric effect of marketing intensity all at the same time.

We cast a wide net in four different directions to further our understanding of the gradually increasing effect of CSR strength across time, the asymmetric effects of CSR strengths and concerns on firm financial performance, the long-term effect of CSR and CSiR on firm financial performance, and the differential effect of marketing intensity. Our study provides the following theoretical contributions. First, we figure out the growing effects of CSR activities over time, e.g., less modern time before year 2000 vs. modern times after year 2000. This phenomenon could be explained by the evolution of legitimacy theory. As the legitimacy required for firm operations is evolving to become more socially responsible, more firms are getting more deeply engaged in CSR initiatives. Second, we consider corporate social responsibility (strength) and corporate social irresponsibility (concern) separately and find out

the differential effects of CSR strength and concern. Unlike profuse amounts of previous studies that considered CSR strength and concern as a single construct, we treat them separately because the impact of CSR strength and concern could be different. Moreover, true effects of CSR strength and concern could be masked by aggregating them since a single firm can simultaneously have strength and concern. Third, we examined the effects of a firm's CSR efforts in the short-term and long-term horizon, differentiating from most of previous studies, which only looked at the effects after one year. Fourth and most importantly, we further investigate where the effects of CSR come from by considering the visibility of a firm as proxied by its marketing spending intensity. More visible firms are facing higher standard of expectation on their CSR initiatives from stakeholders. Therefore, their CSR strengths are treated as granted, and thus not rewarded in the stock market. In contrast, their CSR concerns are punished since the expectations are not met. Less visible firms are facing not much expectation on their CSR initiatives from stakeholders. Therefore, their CSR concerns are not punished as stakeholders understand and expect them to have CSR concerns. However, their CSR strengths are rewarded since stakeholders get surprised in a positive way.

The asymmetric results across time, which we examine the effects prior to 2000 vs. after 2000, across CSR strength and CSR weakness, and across firms based on the level of marketing intensity theoretically contribute to the CSR-CFP study. Also, our results have strategic implications for practitioners regarding their investment decisions on CSR initiatives, based on their marketing spending intensity. For low marketing and R&D spending firms with relative low visibility operating in B2B industry, it is generally expected that these firms should not invest in developing in CSR strengths because of low visibility. However, our results suggest that they should invest more in CSR strengths because the CSR strengths will exceed stakeholders' low

expectations and would result in stock market rewards. For high marketing and R&D spending firms with relative high visibility operating in B2C industry, it is generally expected that these firms should invest in developing CSR strengths because of high visibility. However, our results suggest that the increased investment in CSR strengths will not be rewarded because it is regarded as granted from stakeholders.

Future research can be built upon on this current effort and solve a few limitations identified in our study. More complex models, i.e., latent class model, concomitant finite mixture models, might be required to understand heterogeneity effects to explore whether there are segments of firms that are different in terms of yielding positive or negative effects of CSR on a firm's future stock returns.

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Table 1. Summary Descriptive Statistics

Table below shows the summary statistics of our CSR Strength and CSR weakness variables as well as other firm characteristics that are used in the empirical analysis. Using KLD data by KLD Research and Analytics, CSR strength score and CSR weakness score of each firm is calculated during each year as the following:
 $CSR\ Strength_{i,t} = \sum_{d=1}^7(\#\ of\ CSR\ Strength_{i,d,t})$, $CSR\ Weakness_{i,t} = \sum_{d=1}^7(\#\ of\ CSR\ Concern_{i,d,t})$ where # of strengths and concerns are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats.

	Mean	Standard Deviation	Number of Firms Available
CSR Strength	1.449	2.198	34823
CSR Concern	1.865	1.837	34823
Marketing Expenditure	0.242	0.202	14841
Capital Expenditure	0.048	0.059	31482
Sales	4589.245	14688.497	32460
Risk	0.218	0.191	32342
Cumulative Stock Return (year 1)	0.113	10.156	32392
Cumulative Stock Return (year 5)	0.604	1.932	19549

Table 2. Correlation Matrix

Table below shows correlation coefficient of our CSR Strength and CSR weakness variables as well as other firm characteristics that are used in the empirical analysis. Using KLD data by KLD Research and Analytics, CSR strength score and CSR weakness score of each firm is calculated during each year as the following: $CSR\ Strength_{i,t} = \sum_{d=1}^7(\#\ of\ CSR\ Strength_{i,d,t})$, $CSR\ Weakness_{i,t} = \sum_{d=1}^7(\#\ of\ CSR\ Weakness_{i,d,t})$ where # of strengths and weaknesses are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats.

	CSR Strength	CSR Weakness	Marketing Expenditure	Capital Expenditure	Sales	Risk	Cumulative Stock Return (year 1)	Cumulative Stock Return (year 5)
CSR Strength	-							
CSR Concern	0.324	-						
Marketing Expenditure	-0.042	-0.169	-					
Capital Expenditure	0.007	0.034	0.088	-				
Sales	0.452	0.486	-0.064	0.014	-			
Risk	0.030	0.094	-0.191	0.042	0.053	-		
Cumulative Stock Return (year 1)	-0.000	0.007	0.267	0.008	-0.002	0.036	-	
Cumulative Stock Return (year 5)	0.018	0.026	0.066	0.057	0.007	0.043	0.592	-

Table 3.1 Regression Results for CSR Strength across all years and all firms

Table below shows the results from the panel regression of firm's CSR strength on firm financial performance. Using KLD data by KLD Research and Analytics, CSR strength score of each firm is calculated during each year as the following: $CSR\ Strength_{i,t} = \sum_{d=1}^7 (\#\ of\ CSR\ Strength_{i,d,t})$, where # of strengths are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Strength	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.03 (0.02)	0.01 (0.01)	0.01 (0.01)
Δ Marketing	1.15** (0.14)	1.13** (0.13)	0.99** (0.13)	1.33** (0.13)	1.14** (0.28)	1.42** (0.29)	1.05** (0.21)	1.27** (0.21)
Δ (CSR Strength * Marketing)	0.04 (0.03)	0.03 (0.03)	-0.00 (0.02)	0.03 (0.03)	-0.04 (0.06)	-0.06 (0.06)	0.00 (0.05)	-0.01 (0.05)
Control Variables								
Δ Capital Expenditure		-0.23 (0.24)		-0.16 (0.24)		1.32** (0.46)		0.88** (0.34)
Δ Sales		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)
Δ Risk		0.85** (0.09)		0.86** (0.09)		1.42** (0.18)		1.12** (0.13)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	9682	9550	9682	9550	5817	5741	5817	5741
R ²	0.29	0.30	0.04	0.05	0.35	0.36	0.06	0.07

** , * indicates 1% and 5% confidence levels respectively.

Table 3.2 Regression Results for CSR Weaknesses across all years and all firms

Table below shows the results from the panel regression of firm's CSR weaknesses on firm financial performance. Using KLD data by KLD Research and Analytics, CSR weakness score of each firm is calculated during each year as the following: $CSR\ Weakness_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Weaknesses_{i,d,t})$ where # of weaknesses are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Weaknesses	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.01 (0.02)	-0.01 (0.02)	-0.00 (0.01)	-0.00 (0.01)
Δ Marketing	1.25** (0.14)	1.45** (0.14)	1.22** (0.13)	1.42** (0.14)	1.02** (0.28)	1.27** (0.28)	1.03** (0.20)	1.23** (0.21)
Δ (CSR Weaknesses * Marketing)	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)	0.03 (0.06)	0.02 (0.06)	0.01 (0.04)	0.01 (0.04)
Control Variables								
Δ Capital Expenditure		-0.25 (0.24)		-0.18 (0.24)		1.31** (0.46)		0.87 (0.34)
Δ Sales		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)
Δ Risk		0.84** (0.09)		0.86** (0.09)		1.43** (0.18)		1.13** (0.13)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	9674	9542	9674	9542	5809	5733	5809	5733
R ²	0.29	0.30	0.04	0.04	0.35	0.36	0.06	0.07

** , * indicates 1% and 5% confidence levels respectively.

Table 4.1. Regression Results for CSR Strength after 2000

Table below shows the results from the panel regression of firm's CSR strength on firm financial performance for firms after 2000. Using KLD data by KLD Research and Analytics, CSR strength score of each firm is calculated during each year as the following: $CSR\ Strength_{i,t} = \sum_{d=1}^7 (\#\ of\ CSR\ Strength_{i,d,t})$, where # of strengths are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Strength	0.02*	0.02*	0.02*	0.02*	0.05**	0.05**	0.02	0.03
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
Δ Marketing	1.23**	1.40**	1.23**	1.40**	1.53**	1.70**	1.33**	1.46**
	(0.15)	(0.15)	(0.14)	(0.14)	(0.30)	(0.30)	(0.24)	(0.24)
Δ (CSR Strength * Marketing)	-0.01	-0.01	-0.01	-0.01	-0.12	-0.12	-0.05	-0.05
	(0.03)	(0.03)	(0.03)	(0.03)	(0.07)	(0.07)	(0.06)	(0.06)
Control Variables								
Δ Capital Expenditure		0.11		0.21		1.29**		1.05
		(0.28)		(0.27)		(0.53)		(0.41)
Δ Sales		-0.00*		-0.00*		-0.00*		-0.00**
		(0.00)		(0.00)		(0.00)		(0.00)
Δ Risk		0.80**		0.85**		1.14**		0.94**
		(0.10)		(0.10)		(0.20)		(0.15)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	7840	7763	7840	7763	4207	4173	4207	4173
R ²	0.33	0.33	0.03	0.04	0.42	0.42	0.04	0.05

** , * indicates 1% and 5% confidence levels respectively.

Table 4.2. Regression Results for CSR Strength before 2000

Table below shows the results from the panel regression of firm's CSR strength on firm financial performance for firms before 2000. Using KLD data by KLD Research and Analytics, CSR strength score of each firm is calculated during each year as the following: $CSR\ Strength_{i,t} = \sum_{d=1}^7 (\#\ of\ CSR\ Strength_{i,d,t})$, where # of strengths are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Strength	-0.03 (0.02)	-0.02 (0.02)	-0.03* (0.02)	-0.02 (0.02)	-0.03 (0.03)	-0.01 (0.04)	-0.04 (0.02)	-0.02 (0.02)
Δ Marketing	1.59** (0.38)	2.04** (0.39)	1.33** (0.35)	1.77** (0.36)	0.60 (0.70)	1.33 (0.73)	0.57 (0.42)	1.00* (0.44)
Δ (CSR Strength * Marketing)	0.13* (0.06)	0.11 (0.06)	0.12* (0.06)	0.10 (0.06)		-0.00 (0.12)	0.09 (0.07)	0.05 (0.07)
Control Variables								
Δ Capital Expenditure		-1.33** (0.51)		-1.22** (0.47)		1.53 (0.96)		0.69 (0.58)
Δ Sales		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)
Δ Risk		1.19** (0.22)		1.08** (0.20)		2.26** (0.42)		1.37** (0.26)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	1816	1762	1816	1762	1566	1525	1566	1525
R ²	0.07	0.10	0.08	0.11	0.11	0.14	0.14	0.17

** , * indicates 1% and 5% confidence levels respectively.

Table 5.1. Regression Results for CSR Weaknesses after 2000

Table below shows the results from the panel regression of firm's CSR weaknesses on firm financial performance for firms after 2000. Using KLD data by KLD Research and Analytics, CSR weakness score of each firm is calculated during each year as the following: $CSR\ Weakness_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Weaknesses_{i,d,t})$ where # of weaknesses are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Weaknesses	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.00 (0.02)	0.00 (0.02)	-0.01 (0.01)	-0.00 (0.01)
Δ Marketing	1.26** (0.15)	1.43** (0.15)	1.26** (0.15)	1.43** (0.15)	1.32** (0.30)	1.51** (0.30)	1.22** (0.23)	1.36** (0.24)
Δ (CSR Weaknesses * Marketing)	-0.03 (0.03)	-0.03 (0.03)	-0.02 (0.03)	-0.03 (0.03)	0.01 (0.06)	0.01 (0.06)	0.02 (0.05)	0.02 (0.05)
Control Variables								
Δ Capital Expenditure		0.10 (0.28)		0.20 (0.27)		1.29** (0.53)		1.04** (0.41)
Δ Sales		-0.00 (0.00)		-0.00 (0.00)		-0.00 (0.00)		-0.00** (0.00)
Δ Risk		0.79** (0.10)		0.85** (0.10)		1.13** (0.20)		0.94** (0.15)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	7840	7763	7840	7763	4207	4173	4207	4173
R ²	0.33	0.33	0.03	0.04	0.41	0.42	0.04	0.05

** , * indicates 1% and 5% confidence levels respectively.

Table 5.2. Regression Results for CSR Weaknesses before 2000

Table below shows the results from the panel regression of firm's CSR weaknesses on firm financial performance for firms before 2000. Using KLD data by KLD Research and Analytics, CSR weakness score of each firm is calculated during each year as the following: $CSR\ Weakness_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Weaknesses_{i,d,t})$ where # of weaknesses are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Weaknesses	0.01 (0.02)	0.01 (0.02)	0.00 (0.02)	0.00 (0.02)	-0.03 (0.03)	-0.03 (0.03)	-0.02 (0.02)	-0.02 (0.02)
Δ Marketing	1.88** (0.36)	2.30** (0.38)	1.60** (0.34)	2.01** (0.35)	0.61 (0.68)	1.23 (0.71)	0.71 (0.41)	1.08** (0.43)
Δ (CSR Weaknesses * Marketing)	0.00 (0.06)	-0.00 (0.06)	0.01 (0.06)	0.01 (0.06)	0.09 (0.12)	0.06 (0.12)	0.04 (0.07)	0.02 (0.07)
Control Variables								
Δ Capital Expenditure		-1.33** (0.52)		-1.23** (0.48)		1.52 (0.96)		0.68 (0.58)
Δ Sales		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)		-0.00** (0.00)
Δ Risk		1.20** (0.22)		-1.23** (0.48)		2.25** (0.42)		1.37** (0.26)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	1816	1762	1816	1762	1566	1525	1566	1525
R ²	0.07	0.09	0.08	0.10	0.11	0.14	0.14	0.17

** , * indicates 1% and 5% confidence levels respectively.

Table 6.1. Regression Results for CSR Strength after 2000, for high marketing intensity firms

Table below shows the results from the panel regression of firm's CSR strength on firm financial performance for firms after 2000 with higher marketing intensity. Using KLD data by KLD Research and Analytics, CSR strength score of each firm is calculated during each year as the following: $CSR\ Strength_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Strength_{i,d,t})$, where # of strengths are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Strength	0.03 (0.02)	0.03 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.05)	0.04 (0.05)	-0.00 (0.04)	0.01 (0.03)
Δ Marketing	1.20** (0.16)	1.28** (0.17)	1.18** (0.16)	1.26** (0.16)	1.29** (0.38)	1.27** (0.38)	1.19** (0.29)	1.19** (0.29)
Δ (CSR Strength * Marketing)	-0.03 (0.04)	-0.02 (0.04)	-0.02 (0.05)	-0.02 (0.04)	-0.03 (0.12)	-0.09 (0.12)	0.01 (0.09)	-0.00 (0.09)
Control Variables								
Δ Capital Expenditure		-0.24 (0.45)		-0.10 (0.43)		1.67 (0.89)		0.83 (0.68)
Δ Sales		-0.00** (0.00)		-0.00** (0.00)		-0.00 (0.00)		-0.00** (0.00)
Δ Risk		0.77** (0.16)		0.79** (0.15)		1.04** (0.33)		0.87** (0.25)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	3855	3822	3855	3822	1988	1971	1988	1971
R ²	0.31	0.32	0.03	0.04	0.39	0.40	0.07	0.08

** , * indicates 1% and 5% confidence levels respectively.

Table 6.2. Regression Results for CSR Strength after 2000, for low marketing intensity firms

Table below shows the results from the panel regression of firm's CSR strength on firm financial performance for firms after 2000 with lower marketing intensity. Using KLD data by KLD Research and Analytics, CSR strength score of each firm is calculated during each year as the following: $CSR\ Strength_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Strength_{i,d,t})$, where # of strengths are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Strength	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.06* (0.03)	0.06* (0.03)	0.04 (0.02)	0.04 (0.02)
Δ Marketing	1.46** (0.37)	1.93** (0.38)	1.41** (0.36)	1.89** (0.36)	2.29** (0.72)	2.68** (0.73)	2.35** (0.57)	2.83** (0.58)
Δ (CSR Strength * Marketing)	0.01 (0.11)	0.03 (0.11)	0.03 (0.11)	0.05 (0.11)	-0.29 (0.22)	-0.26 (0.22)	-0.29 (0.18)	-0.28 (0.18)
Control Variables								
Δ Capital Expenditure		-0.37 (0.37)		-0.30 (0.36)		0.29 (0.70)		0.46 (0.55)
Δ Sales		-0.00 (0.00)		-0.00 (0.00)		-0.00 (0.00)		-0.00 (0.00)
Δ Risk		0.78** (0.14)		0.84** (0.13)		1.16** (0.26)		1.01** (0.20)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	3948	3904	3948	3904	2186	2168	2186	2168
R ²	0.36	0.36	0.04	0.05	0.43	0.44	0.03	0.05

** , * indicates 1% and 5% confidence levels respectively.

Table 7.1. Regression Results for CSR Weaknesses after 2000, for high marketing intensity firms

Table below shows the results from the panel regression of firm's CSR weaknesses on firm financial performance for firms before 2000 with high marketing intensity. Using KLD data by KLD Research and Analytics, CSR weakness score of each firm is calculated during each year as the following: $CSR\ Weakness_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Weaknesses_{i,d,t})$ where # of weaknesses are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Weaknesses	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.09* (0.04)	-0.10* (0.04)	-0.09** (0.03)	-0.09** (0.03)
Δ Marketing	1.12** (0.17)	1.20** (0.18)	1.11** (0.17)	1.19** (0.17)	0.92** (0.38)	0.83* (0.37)	0.89** (0.28)	0.89** (0.28)
Δ (CSR Weaknesses * Marketing)	0.03 (0.05)	0.03 (0.05)	0.03 (0.05)	0.03 (0.05)	0.22* (0.11)	0.21* (0.11)	0.21** (0.08)	0.21** (0.08)
Control Variables								
Δ Capital Expenditure		-0.26 (0.45)		-0.12 (0.43)		1.60 (0.89)		0.75 (0.68)
Δ Sales		-0.00** (0.00)		-0.00** (0.00)		-0.00 (0.00)		-0.00** (0.00)
Δ Risk		0.77** (0.16)		0.79** (0.15)		1.04** (0.33)		0.86** (0.25)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	3855	3822	3855	3822	1988	1971	1988	1971
R ²	0.31	0.31	0.03	0.04	0.39	0.40	0.07	0.08

** , * indicates 1% and 5% confidence levels respectively.

Table 7.2. Regression Results for CSR Weaknesses after 2000, for low marketing intensity firms

Table below shows the results from the panel regression of firm's CSR weaknesses on firm financial performance for firms before 2000 with low marketing intensity. Using KLD data by KLD Research and Analytics, CSR weakness score of each firm is calculated during each year as the following: $CSR\ Weakness_{i,t} = \sum_{d=1}^7 (\# \text{ of } CSR\ Weaknesses_{i,d,t})$ where # of weaknesses are the sum of indicators for each corresponding 7-dimensions of CSR recorded by KLD stats. Marketing spending is calculated as the difference between SG&A and R&D expenditure scaled by the total assets of the firms.

	Year 1				Year 1-Year 5			
	Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return		Δ Cumulative Stock Return		Δ Market Adjusted Cumulative Stock Return	
	No Controls	Controls	No Controls	Controls	No Controls	Controls	No Controls	Controls
Main Variables								
Δ CSR Weaknesses	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)	0.02 (0.03)	0.02 (0.03)	0.02 (0.02)	0.02 (0.03)
Δ Marketing	1.42** (0.41)	1.91** (0.42)	1.40** (0.40)	1.92** (0.41)	2.09** (0.78)	2.65** (0.80)	2.15** (0.62)	2.62** (0.63)
Δ (CSR Weaknesses * Marketing)	0.04 (0.13)	0.03 (0.13)	0.03 (0.13)	0.02 (0.13)	-0.13 (0.26)	-0.11 (0.26)	-0.15 (0.21)	-0.13 (0.21)
Control Variables								
Δ Capital Expenditure		-0.38 (0.37)		-0.31 (0.36)		0.28 (0.70)		0.44 (0.55)
Δ Sales		-0.00 (0.00)		-0.00 (0.00)		-0.00 (0.00)		-0.00 (0.00)
Δ Risk		0.77** (0.14)		0.83** (0.13)		1.15** (0.26)		1.00** (0.20)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	3948	3904	3948	3904	2186	2168	2186	2168
R ²	0.36	0.36	0.04	0.05	0.43	0.44	0.03	0.04

** , * indicates 1% and 5% confidence levels respectively.

Table 8. Profiling Analysis

Table below shows the profiling analysis on the high marketing intensity and low marketing intensity firms based on firm characteristics such as firm size, asset, sales, marketing spending (in million \$), and R&D spending and industry characteristics such as B2B vs. B2C and competition (Herfindahl Index).

	High Marketing Intensity	Low Marketing Intensity	T-Stats	Sig.
Size	1.3077 (n=7387)	1.6469 (n=7361)	-11.3067	*
Size (no log)	20.7295 (n=7389)	19.2380 (n=7363)	1.3541	
Asset	3122.7823 (n=7428)	8308.4611 (n=7413)	-31.4796	*
Sales	4303.8769 (n=7428)	6606.2141 (n=7413)	-7.5232	*
Marketing Spending (in million \$)	1002.2794 (n=7428)	743.8705 (n=7412)	5.4677	*
R&D Spending	0.0626 (n=7428)	0.0514 (n=7413)	8.6154	*
B2C	46.9% (n=3486)	37.9% (n=2812)	11.11	**
B2B	53.1% (n=3942)	62.1% (n=4601)	-11.11	**
Herfindahl Index	0.2563 (n=7428)	0.2444 (n=7413)	3.7188	*

Appendix A. KLD Items

Community	Definition
Strength	
Charitable Giving	The company has consistently given over 1.5% of trailing three-year net earnings before taxes (NEBT), or has otherwise been notably generous in its giving.
Innovative Giving	The company has a notably innovative giving program that supports nonprofit organizations, particularly those promoting self-sufficiency among the economically disadvantaged. Companies that permit nontraditional federated charitable giving drives in the workplace are often noted in this section as well.
Housing Support	The company is a prominent participant in public/private partnerships that support housing initiatives for economically disadvantaged, e.g., the National Equity Fund or the Enterprise Foundation.
Education Support	The company has either been notably innovative in its support for primary or secondary school education, particularly for those programs that benefit the economically disadvantaged, or the company has prominently supported job-training programs for youth.
Non-US Charitable Giving	The company has made a substantial effort to make charitable contributions abroad, as well as in the U.S. To qualify, a company must make at least 20% of its giving, or have taken notably innovative initiatives in its giving program, outside the U.S.
Volunteer Programs	The company has an exceptionally strong volunteer program.
Community Engagement	The company has a notable community engagement program concerning involvement of local communities in areas where the firm has major operations.
Other Strength	The company has either an exceptionally strong in-kind giving programs or engages in other notably positive community activities.
Concern	
Investment Controversies	The company is a financial institution who's lending or investment practices have led to controversies, particularly ones related to the Community Reinvestment Act.
Negative Economic Impact	The company's actions have resulted in major controversies concerning its economic impact on the community. These controversies can include issues related to environmental contamination, water rights disputes, plant closings, "put-or-pay" contracts with trash incinerators, or other company actions that adversely affect the quality of life, tax base, or property values in the community.
Tax Disputes	The company has recently been involved in major tax disputes involving Federal, state, local or non-U.S. government authorities, or is involved in controversies over its tax obligations to the community.
Other Concern	The company is involved with a controversy that has mobilized community opposition, or is engaged in other noteworthy community controversies.
Corporate Governance	
Strength	
Limited Compensation	The company has recently awarded notably low levels of compensation to its top management or its board members. The limit for a rating is total compensation of less than \$500,000 per year for a CEO or \$30,000 per year for outside directors.
Ownership	The company owns between 20% and 50% of another company KLD has cited as having an area of social strength, or is more than 20% owned by a firm that KLD rated as having social strengths. When a company owns more than 50% of another firm, it has a controlling interest, and KLD treats the second firm as if it is a division of the first.

Transparency	The company is particularly effective in reporting on a wide range of social and environmental performance measures, or is exceptional in reporting on one particular measure.
Political Accountability	The company has shown markedly responsible leadership on public policy issues and/or has an exceptional record of transparency and accountability concerning its political involvement in state or federal-level U.S. politics, or in non-U.S. politics.
Public Policy	This indicator measures a firm's support for public policies that have noteworthy benefits for the environment, communities, employees, or consumers. Factors affecting this evaluation include, but are not limited to, support/lack of support for regulations addressing climate change, improved labor rights, enhancement of shareholder rights, and protections for consumers.
Other Strength	The company has a unique and positive corporate culture, or has undertaken a noteworthy initiative not covered by KLD's other governance ratings.
Concern	
High Compensation	The company has recently awarded notably high levels of compensation to its top management or its board members. The limit for a rating is total compensation of more than \$10 million per year for a CEP or \$100,000 per year for outside directors.
Ownership	The company owns between 20% and 50% of a company KLD has cited as having an area of social concern, or is more than 20% owned by a firm KLD has rated as having areas of concern. When a company owns more than 50% of another firm, it has a controlling interest, and KLD treats the second firm as if it is a division of the first.
Accounting	The company is involved in significant accounting-related controversies.
Transparency	The company is distinctly weak in reporting on a wide range of social and environmental performance measures.
Political Accountability	The company has been involved in noteworthy controversies on public policy issues and/or has a very poor record of transparency and accountability concerning its political involvement in state or federal level U.S. politics, or in non-U.S. politics.
Public Policy	This indicator measures a firm's lack of support for public policies that have noteworthy benefits for the environment, communities, employees, or consumers. Factors affecting this evaluation include, but are not limited to, support/lack of support for regulations addressing climate change, improved labor rights, enhancement of shareholder rights, and protections for consumers.
Governance Structures Controversies	This indicator measures the severity of controversies related to a firm's executive compensation and governance practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in compensation-related legal cases, widespread or egregious instances of shareholder or board-level objections to pay practices and governance structures, resistance to improved practices, and criticism by NGOs and/or other third-party observers.
Other Concern	The company is involved with a controversy not covered by KLD's other corporate governance ratings.
Diversity	
Strength	
CEO	The company's chief executive officer is a woman or a member of a minority group.
Promotion	The company has made notable progress in the promotion of women and minorities, particularly to line positions with profit-and-loss responsibilities in the corporation.

Board of Directors	Women, minorities, and/or the disabled hold four seats or more (with no double counting) on the board of directors, or one-third or more of the board seats if the board numbers less than 12.
Work/Life Benefits	The company has outstanding employee benefits or other programs addressing work/life concerns, e.g., childcare, elder care, or flextime.
Women & Minority Contracting	The company does at least 5% of its subcontracting, or otherwise has a demonstrably strong record on purchasing or contracting, with women-and/or minority-owned businesses.
Employment Disabled	The company has implemented innovative hiring programs; other innovative human resource programs for the disabled, or otherwise has a superior reputation as an employer of the disabled.
Gay & Lesbian Policies	The company has implemented notably progressive policies toward its gay and lesbian employees. In particular, it provides benefits to the domestic partners of its employees.
Employment of Underrepresented Groups	This indicator measures a firm's efforts to promote diversity in its workforce. Factors affecting this evaluation include, but are not limited to, its recruitment efforts to women and minority communities, and its participation in multi-stakeholder diversity initiatives.
Other Strength	The company has made a notable commitment to diversity that is not covered by other KLD ratings.
Concern	
Controversies	The company has either paid substantial fines or civil penalties as controversies related to affirmative action issues.
Non-Representation	The company has no women on its board of directors or among its senior line managers.
Board Diversity	This indicator measures the diversity of a firm's board. Factors affecting this evaluation include, but are not limited to, the representation of women and minorities on the board, with adjustment for nation-specific demographic conditions.
Other Concern	The company is involved in diversity controversies not covered by other KLD ratings.
Employee Relations	
Strength	
Union Relations	The company has taken exceptional steps to treat its unionized workforce fairly.
No-Layoff Policy	The company has maintained a consistent no-layoff policy.
Cash Profit Sharing	The company has a cash profit-sharing program through which it has recently made distributions to a majority of its workforce.
Employee Involvement	The company strongly encourages worker involvement and/or ownership through stock options available to a majority of its employees; gain sharing, stock ownership, sharing of financial information, or participation in management decision-making.
Retirement Benefits	The company has a notably strong retirement benefits program.
Health and Safety	The company has strong health and safety programs.
Supply Chain Policies, Programs & Initiatives	This indicator measures a firm's policy commitments and management systems designed to monitor the human and labor rights performance of its suppliers and contractors. Factors affecting this evaluation include, but are not limited to, the protection of supply chain workers' rights, including freedom of association, freedom from forced labor and child labor, safe working environments and other rights described by the International Labor Organization (ILO) Conventions and other applicable standards, and initiatives towards improving the labor conditions

	of its supply chain workforce. Factors affecting this evaluation include, but are not limited to, efforts to use purchasing power to improve performance, company-led programs that improve the labor conditions and health of supply chain workers, and participation in multi-stakeholder initiatives.
Other Strength	The company has strong employee relation initiatives not covered by other KLD ratings.
Concern	
Union Relations	The company has a history of notably poor union relations.
Health and Safety	The company recently has either paid substantial fines or civil penalties for willful violations of employee health and safety standards, or has been otherwise involved in major health and safety controversies.
Workforce Reductions	The company has made significant reductions in its workforce in recent years.
Retirement Benefits	The company has either a substantially underfunded defined benefit pension plan, or an inadequate retirement benefits program.
Supply Chain Controversies	This indicator measures the severity of controversies related to a firm's supply chain. Factors affecting this evaluation include, but are not limited to, a history of involvement in supply chain related legal cases, widespread or egregious instances of abuses of supply chain employee labor rights – including forced labor, supply chain employee safety, resistance to improved practices, and criticism by NGOs and/or other third-party observers.
Other Concern	The company is involved in an employee relations controversy that is not covered by other KLD ratings.
Environment	
Strength	
Beneficial Products and Services	The company derives substantial revenues from innovative remediation products, environmental services, or products that promote the efficient use of energy, or it has developed innovative products with environmental benefits. (The term "environmental service" does not include services with questionable environmental effects, such as landfills, incinerators, waste-to-energy plants, and deep injection wells.)
Pollution Prevention	The company has notably strong pollution prevention programs including both emissions reductions and toxic-use reduction programs.
Recycling	The company either is a substantial user of recycled materials as raw materials in its manufacturing processes, or a major factor in the recycling industry.
Clean Energy	The company has taken significant measures to reduce its impact on climate change and air pollution through use of renewable energy and clean fuels or through energy efficiency. The company has demonstrated a commitment to promoting climate-friendly policies and practices outside its own operations.
Property, Plant, and Equipment	The company maintains its property, plant, and equipment with above average environmental performance for its industry.
Management Systems	The company has demonstrated a superior commitment to management system through ISO 14001 certification and other voluntary programs.
Other Strength	The company has demonstrated a superior commitment to management systems, voluntary programs, or other environmentally proactive activities.
Concern	
Hazardous Waste	The company's liabilities for hazardous waste sites exceed \$50 million, or the company has recently paid substantial fines or civil penalties for waste management violations.
Regulatory	The company has paid substantial fines or civil penalties for violations of air, water, or other environmental regulations, or it has a pattern of regulatory

	controversies under the Clean Air Act, Clean Water Act or other major environmental regulations.
Ozone Depleting Chemicals	The company is among the top manufacturers of ozone depleting chemicals such as HCFCs, methyl chloroform, methylene chloride, or bromines.
Substantial Emissions	The company's legal emissions of toxic chemicals (as defined by and reported to the EPA) from individual plants into the air and water are among the highest of the companies followed by KLD.
Agricultural Chemicals	The company is a substantial producer of agricultural chemicals, <i>i.e.</i> , pesticides or chemical fertilizers.
Climate Change	The company derives substantial revenues from the sale of coal or oil and its derivative fuel products, or the company derives substantial revenues indirectly from the combustion of coal or oil and its derivative fuel products. Such companies include electric utilities, transportation companies with fleets of vehicles, auto and truck manufacturers, and other transportation equipment companies.
Negative Impact of Products and Services	This indicator measures the negative environmental impact of a firm's products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that involve regulated substances, the production/consumption of hazardous chemicals, and controversial products such as those that use genetically modified organisms or nanotechnology.
Land Use & Biodiversity	This indicator measures the severity of controversies related to a firm's use or management of natural resources. Factors affecting this evaluation include, but are not limited to, a history of involvement in natural resource-related legal cases, widespread or egregious impacts due to the firm's use of natural resources, resistance to improved practices, and criticism by NGOs and/or other third-party observers.
Non Carbon Releases	This indicator measures the severity of controversies related to a firm's non-GHG emissions. Factors affecting this evaluation include, but are not limited to, a history of involvement in land, air, or water emissions-related legal cases, widespread or egregious impacts due to corporate non-GHG emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.
Other Concern	The company has been involved in an environmental controversy that is not covered by other KLD ratings.
Human Rights	
Strength	
South Africa	The company's social record in South Africa is noteworthy.
Indigenous Peoples Relations Strength	The company has established relations with indigenous peoples near its proposed or current operations (either in or outside the U.S.) that respect the sovereignty, land, culture, human rights, and intellectual property of indigenous peoples.
Labor Rights	The company has outstanding transparency on overseas sourcing disclosure and monitoring, or has particularly good union relations outside the U.S., or has undertaken labor rights-related initiatives that KLD considers outstanding or innovative.
Other Strength	The company has undertaken exceptional human rights initiatives, including outstanding transparency or disclosure on human rights issues, or has otherwise shown industry leadership on human rights issues not covered by other KLD human rights ratings.
Concern	
South Africa	The company faced controversies over its operations in South Africa.
Northern Ireland	The company has operations in Northern Ireland.
Burma	The company has operations or direct investment in or sourcing from Burma.

Mexico	The company's operations in Mexico have had major recent controversies, especially those related to the treatment of employees or degradation of the environment.
Labor Rights	The company's operations have had major recent controversies primarily related to labor standards in its supply chain.
Indigenous Peoples Relations	The company has been involved in serious controversies with indigenous peoples (either in or outside the U.S.) that indicate the company has not respected the sovereignty, land, culture, human rights, and intellectual property of indigenous peoples.
Operations in Sudan	The company has operations or direct investment in, or sourcing from, Sudan.
Other Concern	The company's operations have been the subject of major recent human rights controversies not covered by other KLD ratings.
Product	
Strength	
Quality	The company has a long-term, well-developed, company-wide quality program, or it has a quality program recognized as exceptional in U.S. industry.
R&D/Innovation	The company is a leader in its industry for research and development (R&D), particularly by bringing notably innovative products to market.
Economically Disadvantaged	The company has as part of its basic mission the provision of products or services for the economically disadvantaged.
Access to Capital	This indicator measures the positive impact of a firm's products. Factors affecting this evaluation include, but are not limited to, strong commitment to microfinance, and community development loans and investments.
Other Strength	The company's products have notable social benefits that are highly unusual or unique for its industry.
Concern	
Safety	The company has recently paid substantial fines or civil penalties, or is involved in major recent controversies or regulatory actions, relating to the safety of its products.
Marketing/Contracting	The company has recently been involved in major marketing or contracting controversies, or has paid substantial fines or civil penalties relating to advertising practices, consumer fraud, or government contracting.
Antitrust	The company has recently paid substantial fines or civil penalties for antitrust violations such as price fixing, collusion, or predatory pricing, or is involved in recent major controversies or regulatory actions relating to antitrust allegations.
Other Concern	The company has major controversies with its franchises, is an electric utility with nuclear safety problems, defective product issues, or is involved in other product-related controversies not covered by other KLD ratings.