Corporate Social Performance, Financial Performance for Firms that Restate Earnings

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Abstract

This study examines corporate social performance (CSP) in firms that restate their financial statements and, using a match pair design, compares their performance to firms that do not restate their financial statements. Utilizing a randomized block design (two years prior to the restatement and two years after the restatement) for a sample of 44 U.S. firms, we found that CSP Strengths, CSP Weaknesses, CSP People Strengths, and CSP People Weaknesses all increased after restatement though weaknesses increased at a greater rate than strengths. Additionally, using panel data and a match pair design we found, we found that restating firms had a greater increase in CSP Strengths, CSP Weaknesses, CSP Product Strengths, CSP People Strengths and a greater decrease in Total CSP People than non-restating firms after the restatement period. When comparing the relationships between CSP and financial performance (FP), we found that the positive relationship between ROA and CSP Strengths is greater for restating firms than non-restating firms. In particular, we find that this positive relationship is a result of the People dimension of CSP, in particular CSP People Strengths.

Key Words: financial restatements, corporate social performance, financial performance.
CORPORATE SOCIAL PERFORMANCE AND THE ISSUE OF FINANCIAL RESTATEMENTS

The quality of financial reporting has come under increased scrutiny in recent years because of high-profile financial reporting failures, such as Enron and WorldCom, and the significant increase in the number of financial restatements. An October 2002 General Accounting Office (GAO) report documents that the number of financial restatements has increased 145 percent from 1997 to 2001 and that publicly traded companies lost billions in market capitalization in the days and months following a restatement announcement. The GAO report further concludes that the increase in restatements has negatively impacted investor confidence. For example, the GAO’s October 4, 2002 letter to Senator Paul Sarbanes states the following:

“The growing number of restatements and mounting questions about certain corporate accounting practices appear to have shaken investors’ confidence in our financial reporting system... empirical research studies and academic experts generally suggest accounting issues have negatively affected overall investor confidence and raised questions about the integrity of U.S. markets.”

Lawsuits against firms resulted in nearly a 1% loss in market value (Bhagat et al., 1998), in which an estimated one-third of this loss is attributed to harmed firm reputation (Karpoff and Lott, 1993). The problem does not end with the passage of Sarbanes-Oxley Act (SOX) but its continuation has implication for lack of stakeholder confidence in financial markets (Donoher et al., 2007) as well as a firm’s corporate social performance (CSP). According to Carroll (1979), CSP considers a variety of factors, including discretionary responsibility to the community, economic responsibility to investors and consumers, ethical responsibilities to society and legal responsibility to the government or the law. In this turbulent environment, these firms need to devise strategies that will enable them to survive and prosper in this environment in which stakeholders demand both financial performance (FP) and effective stakeholder responsiveness (Johnson and Greening, 1999). These firms may need to keep in mind CSP as they pursue superior performance through being responsive to the environment, maintaining product quality and being responsive to the communities in which it operates and the people it employs (Turban and Greening, 1997).

Though research concerning the nature of the relationship between CSP and FP continues to be mixed (See Griffin and Mahon, 1997; Roman et al., 1999), a number of findings indicate a positive association (Worrell et al., 1991; Preston and O’Bannon, 1997; Frooman, 1997; Roman et al., 1999; Orlitzky and Benjamin, 2001; Murphy, 2002; Simpson and Kohers, 2002). Furthermore, most of these findings are derived from companies that are not experiencing financial reporting failures. The objectives of this paper are twofold: First, we address the question of whether firms that restate financial statements have different levels of CSP than non-restating firms. Second, we address the questions on whether the relationship between CSP and FP is different between restating firms and non-restating firms. This re-
search study will contribute to the accounting research stream investigating financial restatements, as well as the ethics research of CSP, and extends the debate on the link between CSP and FP. The remainder of the paper is organized as follows. First, we examine the background, theory and hypotheses. Second, we explain our research methods and third, we present the results. The final section includes our summary, discussion and conclusions.

BACKGROUND, THEORY AND HYPOTHESES

Financial Reporting Failures

Financial reporting failures include both frauds and restatements. During the period of 1987-1996, the SEC found that a majority of frauds involved financial statement fraud (Beasley et al., 1999). These frauds included sham sales, recording conditional sales as finalized and recording revenues early. Thus, for the purpose of this study, we examine only accounting restatements. Restatements are an admission that previously issued financial statements were not in accordance with GAAP (Palmrose and Scholz, 2004). Early research focused on characteristics of restating firms. For example, Kinney and McDaniel (1989) find restatement firms are smaller, less profitable, have higher debt, and are slower growing. DeFond and Jiambalvo (1991) find earnings overstatements are more likely for firms with diffuse ownership and lower growth in earnings, and less likely for firms with audit committees.

Recent studies document significant negative economic consequences related to financial reporting failures. Palmrose et al. (2004) find a mean abnormal return of -9.2% in the two-day window (day 0, 1) around a restatement announcement, with more negative returns for restatements involving fraud (-20%). Palmrose and Scholz (2004) find the negative market reaction is greater for restatements of core earnings (i.e. pre-tax earnings from primary operations) than for non-core earnings (i.e. all other earnings). Anderson and Yohn (2002) document the long-term economic consequences of restatements by finding average cumulative abnormal returns of -7.97% for the period from three days before the restatement announcement through three days after the restatement filing with the SEC.

There are also legal consequences to a financial reporting failure. In the Palmrose and Scholz (2004) study, 38 percent of the companies in their restatement sample subsequently faced civil litigation. They found that companies with restatements of core earnings (primarily revenue restatements) and pervasive restatements (i.e. more than one accounting item restated) are more likely to be subject to litigation.

A financial reporting failure also damages the reputation of the firm, auditors, management, and the board of directors. For example, Srinivasan (2005) found that outside board members experience significant reputational costs following accounting restatements. Srinivasan finds significant turnover of board members in the three years following the restatement, including director turnover for 48 percent of firms that restate earnings downward. The likelihood of director turnover increases if the board member is also on the audit committee. The
study also finds outside directors lose positions on other boards following a restatement.

Another study, Desai et al. (2006), examined the reputational penalties to managers of restating firms and found that 60% of restating firms experience management turnover in the two years following a restatement as compared with 35 percent for a control sample. An audit firm’s reputation can be damaged by a financial reporting failure, as evidenced by the demise of Arthur Andersen. Barton (2005) examines the demand for auditor reputation by examining the client defections from Arthur Andersen. Barton (2005) finds firms that are more visible in the capital markets switched sooner to another Big 5 auditor, as they were concerned about their auditor’s reputation and the credibility of their financial reporting.

Accounting numbers used in contracts (e.g. compensation and debt contracts) must be verifiable for the contract to be enforceable in court (Watts, 2003). Based on prior literature, it is reasonable to assume that a financial reporting failure leads to greater uncertainty about the reliability and verifiability of the accounting numbers used in contracts. As a restatement casts doubt on the quality of the financial reports and increases the risk to the contracting parties, shareholders and lenders will demand an increased risk premium following a reporting failure. For example, empirical studies find that frauds and accounting restatements lead to an increased cost of capital (e.g., Dechow et al., 1996; Hribar and Jenkins, 2004). Investors demand a higher rate of return to compensate for the perceived riskiness of the firm due to less reliable accounting numbers following a financial reporting failure.

As for debt contracts, Sengupta (1998) suggests that quality of financial reporting is likely used by lenders in calculating default risk. Sengupta (1998) found that firms with high disclosure quality ratings from financial analysts are charged a lower cost of debt, and the importance of disclosure is greater when there is greater market uncertainty as measured by the variance of stock returns. Thus, lenders likely demand a higher risk premium following a reporting failure in part due to the perceived decrease in quality of the accounting reports.

The risk premium demanded by shareholders and debt holders also increases following a reporting failure because of the increased uncertainty about the future profitability and economic prospects of restatement firms. Palmrose et al. (2004) found a significant downward revision in earnings forecasts following restatements and a significant increase in analyst forecast dispersion (a proxy for uncertainty). Hribar and Jenkins (2004) found accounting restatements lead to decreases in expected future earnings.

In summary, restatements can have numerous negative effects. These include economic losses to investors; damage to the reputations of the firm, auditors, management, and the board of directors; an increase in the cost of capital; and a negative impact on future earnings power.

**CSP and FP**

Research on the relationship between CSP and FP has resulted in positive (Wokutch and Spencer, 1987; McGuire
et al., 1988, 1990; Waddock and Graves, 1997; Simpson and Kohers, 2002; Orlitzky and Benjamin, 2001; Mahoney and Roberts, 2007; Hill et al., 2007), negative (Waddock and Graves, 1997, Preston and O’Bannon, 1997; Patten, 2002) and neutral results (Alexander and Buchholz, 1978; Aupperle et al., 1985; Ullman, 1985; Cochran and Wood, 1984; Shane and Spicer, 1983; Fauzi, forthcoming; Moore, 2001; Fauzi et al., 2007). The negative view on the relationship between CSP and FP argues that firms incur costs to improve social performance and by doing so, they reduce profits and shareholder wealth. The positive view argues that better CSP is viewed as positive by various stakeholders, leading to improved FP (Jones, 1995; Jones and Wicks, 1999). Those who support the neutral relationship argue that the direct relationship between CSP and FP does not exist due to the complexity of the environment in which firms and society operate in (Mahoney and Roberts, 2007).

The problem of measuring CSP is argued by Waddock and Graves (1997) as the primary reason for the conflicting results found regarding the relationship between CSP and FP. Waddock and Graves (1997) found a positive relationship between CSP and FP when using an improved measurement of CSP, the KLD index. The KLD index provides access to a wide range of independent, consistently applied ratings of U.S. firms across a number of important social performance attributes that were determined by a knowledgeable group of individuals not connected with the firms (Waddock and Graves, 1997). KLD evaluates each company traded on the U.S. stock exchange over the dimensions of community, corporate governance, diversity, employee relations, environment, human rights, and product. The KLD index ratings are based upon data gathered from a broad range of sources; both internal and external to the firm (see Waddock and Graves, 1995 for further details). Subsequently, this multidimensional index has been regarded as one of the best information sources available to researchers studying CSP (Hillman and Keim, 2001) and has been used in many subsequent studies (McGuire et al., 2003; Hillman and Keim, 2001; Albiner and Freeman, 2000, Greening and Turban, 2000; Mahoney and Roberts, 2007; Mahoney et al., 2008; Johnson and Greening, 1999).

Research Questions

CSP: As discussed previously, there are significant negative economic, legal, reputational, and contractual consequences to a financial reporting failure. A financial reporting failure is evidence that previously issued accounting reports were incorrect, thus creating uncertainty about the credibility and verifiability of financial reports after the reporting failure. In response to financial reporting failures, studies find firms take steps to improve corporate governance mechanisms following a fraud or restatement in order to restore credibility and transparency in their financial reporting. For example, Farber (2005) finds fraud firms increase the number of audit committee meetings and the number and percentage of outside board members in the three-year period following the fraud. LaGore (2008) finds restating firms significantly increase the number of outside directors on the board, the number of audit committee meetings, and the number of outside directors and financial experts on the audit committee in the three-year
period following a restatement announcement. These changes in corporate governance may be mechanisms that constrain management’s opportunistic behavior and lead to more transparent reporting. However, it is unclear how this improvement in corporate governance following a fraud or restatement affects a firm’s CSP.

Prior research finds a positive relationship between disclosure level and CSP (Gelb and Strawser, 2001). Mahoney et al. (2008) examine CSP and executive compensation before and after the Sarbanes-Oxley Act (SOX) and find that the improvements in corporate governance required by SOX may be resulting in increased transparency regarding the measurement of CSP and an increase in accountability, as firms appear to be structuring compensation to promote CSP. Gelb and Strawser (2001) also find that more extensive disclosures are provided by firms with higher CSP ratings. Given that measures of CSP tend to rely on publicly available information, it may be that firms before the restatement would have been reluctant to make factors that are encapsulated in CSP weaknesses (bad news) available to the public. It follows that if improvements in corporate governance following a restatement encourage revelation and transparency, the resulting increase in information available may influence CSP in a negative direction. Furthermore, following the restatement period, firms may feel need to be more accountable, thus influencing CSP in a positive direction. However, it would be difficult to theoretically determine the net directional change in CSP as a result of restatement. Therefore, the first research question tested is:

**H1:** CSP (Total, Product and People) before restatement is different than CSP after restatement.

**CSP and FP:** As discussed before, empirical results concerning the nature of the relationship, if any, between CSP and FP, continues to be mixed (See Griffin and Mahon, 1997; Roman et al., 1999). Researchers have hypothesized and have given rational theoretical justification for negative, positive, and neutral links between CSP and FP. Waddock and Graves (1997) argue that the fundamental reason for the uncertainty between the CSP and FP relationship is the problem of measuring CSP. Hence, Waddock and Graves (1997) used the KLD database as an improved measure of CSP and found a significant relationship. Orlitzky (2008) found that there is an overall positive, but highly variable relationship between CSP and FP and noted that the large variability of findings in previous research is party due to primary study artifacts. As studies find financial restatements negatively affect firm performance and lead to increased uncertainty about the future profitability and economic prospects of restatement firms, it would be interesting to compare the association between CSP and FP between restating firms and non-restating firms. Based upon these inconsistencies in prior research, it is unclear how the negative effects of restatements on firm performance will impact CSP. Thus, since we are unable to predict a directional effect, the second research question tested is as follows:

**H2:** The relationship between CSP and FP is different for restating firms than non-restating firms.
METHODS

Sample Selections

Data on restating firms was obtained from the GAO-03-395R Financial Statement Restatement Database for the period of January 1, 1996 to June 30, 2002. Of the initial sample of 919 restating firms, 40 firms were eliminated because no ticker symbol or CNUM could be found. Ninety-three firms were deleted because of multiple restatements. The initial collection of financial data found that 153 firms were missing the required financial data. Furthermore, 174 firms were missing financial data in the post-restatement period only, 200 firms were missing financial data in the pre-restatement period only, and 48 firms were missing financial data in both the pre- and post-restatement periods. The missing data does not appear to be clustered in either the pre- or post-restatement period. The number of firms with missing Compustat data in the pre-restatement period is comparable to the post-restatement period, with 200 and 174 firms, respectively. Therefore, approximately 63 percent (575 firms) of the initial restatement sample of 919 firms did not have sufficient financial data from Compustat to be included in the final sample. This study requires financial data for the two years prior to and the two years following the restatement announcement year. A likely explanation for the loss of these firms is due to the fact that many restating firms declare bankruptcy or are delisted following the restatements. This could potentially lead to a survivorship bias, which may prevent the results from generalizing to the overall set of publicly traded firms. Finally, 15 firms were eliminated because their returns and earnings data are considered outliers with studentized residuals greater than the absolute value of three. Outliers are observations that are extreme or appear inconsistent with the remaining data. This resulted in a final sample of 196 firms that had restated their financial statements. Missing CSP data for two years prior and two years after the restatements reduced the final sample size to 44 firms. These 44 firms were matched based upon SIC code to firms that had not restated their financial statements. Thirty-one companies were matched based upon the four-digit SIC code, five companies were matched based upon the last 3 digits of the SIC code and eight companies were matched based upon the last two digits of the SIC code. The final sample consisted four years of data for 44 restating firms and 44 non-restating firms, for a total number of 88 firms with 352 observations.

The Model

To test hypotheses 1, a randomized block design was used to determine the effect, if any, of restatement on the CSP. To test hypotheses 2, panel data analysis was used to examine the impact of restatement firms on the association between the dependent variable CSP and the independent variable FP (ROA) with firm size, firm leverage and firm industry as control variables. In order to capture omitted factors that may lead to a difference in CSP levels between the prestatement years and the poststatement years, the indicator variable (as denoted by Post) is included as a separate independent control. Additionally, in order to capture the difference between restating firms and non-restating firms, the indicator variable (as denoted by Match) is also included as a separate independ-
ent variable. Two-factor interaction terms are added to the model to allow the effect of an independent variable on the dependent variable to vary by the level of another independent variable. For example, the interaction term ROA*Post allows the effect of ROA on the dependent variable CSP to differ for the prestatement years and the poststatement years. The three-factor interaction term ROA*Post*Match is added to the model to allow the ROA*Post interaction to differ between restating and non-restating firms. Hypotheses two is tested through the following regression equation:

\[
\text{CSP}_{i,t+1} = b_0 + b_1 \text{ROA}_{it} + b_2 \text{Match}_{it} + b_3 \text{Post}_{it} + b_4 \text{ROA} \times \text{Match}_{it} + b_5 \text{ROA} \times \text{Post}_{it} + b_6 \text{Match} \times \text{Post}_{it} + b_7 \text{ROA} \times \text{Post} \times \text{Match}_{it} + b_8 \text{Debt-to-Equity}_{it} + b_9 \text{Assets}_{it} + b_{10} \text{Industry}_{kit}
\]  

i: firm  
t: year  
k: 1-7 (number of SIC codes minus one)  
CSP = Corporate Social Performance Score Value for Total, People, Product, Strengths and Weaknesses  
Post = 1 if one or two years after restatement, 0 if otherwise  
Match = 0 if restatement firm, 1 otherwise  
ROA = Return on Assets  
Debt-to-Equity = Total Debt/Total Equity  
Industry_k = 1 if industry k, 0 otherwise

Results found regarding the characteristics of reporting firms, the quality of their reporting, and the relationship between social performance and economic performance (Roberts, 1992; Gray et al., 1995).

Shane and Spicer (1983) was one of the first published empirical studies to rely on externally produced ratings of CSP, using data developed by the U.S. Council on Economic Priorities (CEP). They argued that externally produced data was superior to voluntary disclosure when performing cross-sectional studies, stating:

In the absence of mandated disclosure and reporting standards, voluntary disclosures tend to be inconsistent and non-comparable from firm to firm, even in the same industry. On the other hand, externally produced data (at least as produced by the CEP) was gathered using consistent procedures for collection and reporting across firms. Comparisons across firms are thereby possible and potentially meaningful (p. 523).

Subsequent accounting studies also made use of CEP ratings (e.g., Cowen et al., 1987; Roberts, 1992).
In 1994, several U.S. researchers began to address the major problems in CSP measurement by using the Kinder, Lydenberg, Domini (KLD) database as a measurement of CSP. KLD rates over 650 corporations traded on the U.S. stock exchanges on various dimensions considered important to social performance. Because the KLD database was developed and maintained by an independent rating service that assessed CSP across a range of dimensions related to stakeholder concerns, researchers argued that the KLD database brought a new and improved consistent measurement of CSP for United States companies (Waddock and Graves, 1997). U.S. research flourished with this new measurement assessment (Graves and Waddock, 1994; Waddock and Graves, 1997; Grifﬁn and Mahon, 1997; Bendheim et al., 1998; Berman et al., 1999; Johnson and Greening, 1999; Greening and Turban, 2000; Albinger and Freeman, 2000; Ruf et al., 2001). The KLD database has been recognized as the best information available for researchers studying CSP in the U.S. (Hillman and Keim, 2001). Therefore, we use KLD’s ratings of social performance to measure CSP.

Following previous research (Johnson and Greening, 1999; Mahoney and Thorne, 2005), we use several different measurements of CSP that consider Total CSP, Total CSP Product, and Total CSP People across the dimensions of strengths and weakness. CSP Strengths are positive aspects of CSP; examples include positive union relations, strong community giving, and environmental planning. CSP Weaknesses are negative aspects of CSP; examples include safety problems, human rights violations, and environment ﬁnes. Figure 1 summarizes the different measures of CSP employed in this study.

**Figure 1**

**Summary of CSP Measures**

<table>
<thead>
<tr>
<th>Total CSP Variable</th>
<th>CSP Strengths Variable</th>
<th>CSP Weaknesses Variable</th>
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</thead>
<tbody>
<tr>
<td>Total CSP</td>
<td>Total CSP</td>
<td>Total CSP People</td>
</tr>
<tr>
<td>(Community, Diversity, Employee Relations, Environment, International, Product and Business Practices and Other)</td>
<td>Total CSP Product</td>
<td>CSP Product Strengths</td>
</tr>
<tr>
<td>Product Dimension (Product and Business Practices and Environment)</td>
<td>CSP Product Weaknesses</td>
<td></td>
</tr>
<tr>
<td>People Dimension (Community, Diversity and Employee Relations)</td>
<td>Total CSP People</td>
<td>CSP People Strengths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CSP People Weaknesses</td>
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</tbody>
</table>

*Per Mahoney and Thorne (2005)*
Each company is given a Total CSP rating by KLD along seven dimensions: community, diversity, employee relations, environment, international, product and business practices, and other[]. Each of these dimensions is given a strength rating and a weakness rating on a scale of zero to two. A rating of 0 indicates no strengths or no weaknesses while a rating of 2 represents a major strength or a major weakness. CSP Strengths are calculated by summing the strength ratings across all seven dimensions for each company while CSP Weaknesses are calculated by summing the weakness ratings across all seven dimensions. Finally, Total CSP is calculated by taking CSP Strengths and subtracting CSP Weaknesses.

Our second measure of CSP is a sub-dimension of Total CSP: Total CSP Product. Total CSP Product attempts to capture the extent to which a firm is committed to quality products and practices sound environmental policies. For example, executives concerned with consistent returns over time may likely avoid the imposition of costly environmental fines (Johnson and Greening, 1999; Silverstein, 1994). Total CSP Product is comprised of KLD’s product and business practices and environment dimensions that relate to product and service quality and to the firm’s stance toward the natural environment. This classification is consistent with ISO standards that require firms to establish a series of management subsystems, standards, and guidelines to ensure product quality as well as safe and environmentally responsible practices (Uzumeri, 1997).

Our third measure of CSP is a sub-dimension of Total CSP: Total CSP People. Total CSP People captures the contributions firms make to communities through their hiring of women and minorities and their treatment of employees. Executives may interpret the costs of hiring minorities as unnecessary short-term expenses; however, they may recognize the long-term benefits of proactive employment policies when considering the long-term avoidance of costly fines (Mahapatra, 1984). Furthermore, signaling theory suggests that hiring underrepresented groups sends a positive signal regarding a firm’s reputation and legitimacy (Turban and Greening, 1997).

Corporate governance would be expected to have bearing and an association on aspects or sub-dimensions of CSP that could be directly impacted by executives’ decisions while other sub-dimensions may be more impacted by the general business or cultural context in which a firm operates. For example, a firm’s diversity may be primarily impacted by the labor pool that is available, while its product dimensions may be more easily impacted by executive’s attention to control and safety aspects in product development. In fact, previous research has found differential associations between some aspects of corporate governance and the people/product aspects of CSP. For example, a positive relationship for U.S. firms between top executive equity and the total product dimension of CSP has been found (Johnson and Greening, 1999), without comparable associations on the people aspect of CSP.

As discussed before, firms take steps to improve corporate governance mecha-
nisms following a fraud or restatement in order to restore the credibility of their financial reports. In addition, it is expected that corporate governance would have bearing and an association on aspects or sub-dimensions of CSP that could be directly impacted by executives’ decisions. Thus it follows that improvements in corporate governance following a financial restatement may affect certain aspects or sub-dimensions of CSP, particularly those that could be directly affected by executive decisions.

**Independent Variables for Panel Data Analysis**

Following previous research, return on assets (ROA) was used to measure a firm’s FP (Waddock and Graves, 1997, Roman et al., 1999, Mahoney and Roberts, 2007; Fauzi, et al., 2007). Following the works of prior research (Waddock and Graves, 1997; Mahoney and Roberts, 2007), data on CSP was collected for the year following the year ROA was reported to provide an opportunity for capturing a lag between CSP and FP. Information on ROA was obtained from the Compustat database.

**Control Variables.** Consistent with prior research, we control for firm size, debt level and industry as previous research noted that they may cause differences in FP (Waddock and Graves, 1997; Graves and Waddock, 1994; Mahoney and Roberts, 2007). Consistent with prior research, total assets is used as a proxy for size of the firm (Mahoney and Roberts, 2007; Graves and Waddock, 1994; Waddock and Graves, 1997) and debt-to-equity (Mahoney and Thorne, 2006) is used to represent debt level. Information on total assets and debt-to-equity are obtained from the Compustat database. Industries are represented by dummy variables and were broken down by four-digit Standard Industrial Classification (SIC) code per Graves and Waddock (1994).

**Panel Data Models**

In summary, we investigate the behavior of CSP and its relation to FP by running nine separate regressions using panel data—three regressions using CSP as our dependent variable measure for Total CSP, Total CSP Product, and Total CSP People; three regressions using CSP Strengths for Total CSP Strengths, CSP Product Strengths, and CSP People Strengths and three regressions using CSP Weaknesses for Total CSP Weaknesses, CSP Product Weaknesses, and CSP Weaknesses, all with ROA as the independent variable.

**RESULTS**

**Descriptive Statistics and Correlation Analysis**

Table 1 shows the means, standard deviations, and correlations for our independent, dependent, and control variables for the entire sample consisting of non-restating and restatement firms. The means for Total CSP, CSP Strengths, and CSP Weaknesses are .15, 2.99, and 2.84 respectively. The means for Total CSP Product, CSP Product Strengths, and CSP Product Weaknesses are -.61, .50, and 1.11 respectively. The means for Total CSP People, CSP People Strengths, and CSP People Weaknesses are 1.53, 2.39, and .86 respectively. The mean ROA is 6.07% and is significantly positively correlated with Total CSP, Total CSP Product, and Total
Table 1
All Firms Pearson Correlation Matrix: Correlations with ROA, Control Financial Variables and Lagged CSP

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total CSP</td>
<td>.15</td>
<td>3.132</td>
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<tr>
<td>2. CSP Strengths</td>
<td>2.99</td>
<td>2.537</td>
<td>.622**</td>
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<td>3. CSP Weaknesses</td>
<td>2.84</td>
<td>2.523</td>
<td>-.616**</td>
<td>.234**</td>
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<tr>
<td>4. Total CSP Product</td>
<td>-.61</td>
<td>1.686</td>
<td>.707**</td>
<td>.095</td>
<td>-.782**</td>
<td></td>
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<tr>
<td>5. CSP Product Strengths</td>
<td>.50</td>
<td>.724</td>
<td>.378**</td>
<td>.665**</td>
<td>.200**</td>
<td>.203**</td>
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<tr>
<td>6. CSP Product Weaknesses</td>
<td>1.11</td>
<td>1.694</td>
<td>-.542**</td>
<td>.190**</td>
<td>.863**</td>
<td>-.908**</td>
<td>.225**</td>
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<tr>
<td>7. Total CSP People</td>
<td>1.53</td>
<td>2.121</td>
<td>.762**</td>
<td>.844**</td>
<td>-.097</td>
<td>.155**</td>
<td>.358**</td>
<td>-.001</td>
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<tr>
<td>8. CSP People Strengths</td>
<td>2.39</td>
<td>2.010</td>
<td>.609**</td>
<td>.952**</td>
<td>.201**</td>
<td>.050</td>
<td>.429**</td>
<td>.134*</td>
<td>.897**</td>
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<tr>
<td>9. CSP People Weaknesses</td>
<td>.86</td>
<td>.944</td>
<td>-.415**</td>
<td>.130*</td>
<td>.646**</td>
<td>-.241**</td>
<td>.108*</td>
<td>.286**</td>
<td>-.338**</td>
<td>.113**</td>
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</tr>
<tr>
<td>10. ROA</td>
<td>6.07%</td>
<td>6.78%</td>
<td>.199**</td>
<td>.074</td>
<td>-.173**</td>
<td>.183**</td>
<td>-.020</td>
<td>-.187**</td>
<td>.189**</td>
<td>.099</td>
<td>-.212**</td>
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</tr>
<tr>
<td>11. Debt-to-Equity</td>
<td>58.05%</td>
<td>18.86%</td>
<td>-.148**</td>
<td>.152**</td>
<td>.336**</td>
<td>-.361**</td>
<td>.010</td>
<td>.363**</td>
<td>.097</td>
<td>.193**</td>
<td>.193**</td>
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<td>12. Assets</td>
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<td>$16,104</td>
<td>-.120*</td>
<td>.445**</td>
<td>.596**</td>
<td>-.410**</td>
<td>.243**</td>
<td>.512**</td>
<td>.253**</td>
<td>.441**</td>
<td>.372**</td>
<td>-.077</td>
<td>.241*</td>
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**Significant at the 0.01 level.
*Significant at the 0.05 level.
Table 2
Restatement Firms Pearson Correlation Matrix: Correlations with ROA, Control Financial Variables and Lagged CSP

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<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
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<td>1. Total CSP</td>
<td>27</td>
<td>3.065</td>
<td></td>
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<td></td>
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<tr>
<td>2. CSP Strengths</td>
<td>3.11</td>
<td>2.837</td>
<td>.612**</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>3. CSP Weaknesses</td>
<td>2.84</td>
<td>2.607</td>
<td>-.509**</td>
<td>.368**</td>
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</tr>
<tr>
<td>4. Total CSP Product</td>
<td>-.68</td>
<td>1.737</td>
<td>.696**</td>
<td>.028</td>
<td>-.789**</td>
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</tr>
<tr>
<td>5. CSP Product Strengths</td>
<td>.49</td>
<td>.786</td>
<td>.315**</td>
<td>.717**</td>
<td>.410**</td>
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<tr>
<td>6. CSP Product Weaknesses</td>
<td>1.18</td>
<td>1.866</td>
<td>-.516**</td>
<td>.276**</td>
<td>.907**</td>
<td>-.907**</td>
<td>.369**</td>
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</tr>
<tr>
<td>7. Total CSP People</td>
<td>1.69</td>
<td>2.130</td>
<td>.741**</td>
<td>.859**</td>
<td>.063</td>
<td>.100</td>
<td>.397**</td>
<td>.074</td>
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</tr>
<tr>
<td>8. CSP People Strengths</td>
<td>2.49</td>
<td>2.201</td>
<td>.633**</td>
<td>.959**</td>
<td>.298**</td>
<td>.020</td>
<td>.511**</td>
<td>.196**</td>
<td>.921***</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. CSP People Weaknesses</td>
<td>.80</td>
<td>.862</td>
<td>-.213**</td>
<td>.327**</td>
<td>.606**</td>
<td>-.194**</td>
<td>.323**</td>
<td>.317**</td>
<td>-.118</td>
<td>.277**</td>
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</tr>
<tr>
<td>10. ROA</td>
<td>5.48%</td>
<td>6.59%</td>
<td>.151*</td>
<td>.034</td>
<td>-.140</td>
<td>.188*</td>
<td>-.017</td>
<td>-.182*</td>
<td>.108</td>
<td>.058</td>
<td>-.118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Debt-to-Equity</td>
<td>59.70%</td>
<td>18.60%</td>
<td>-.040</td>
<td>.236**</td>
<td>.304**</td>
<td>-.363**</td>
<td>.048</td>
<td>.358**</td>
<td>.244**</td>
<td>.282**</td>
<td>.120</td>
<td>-.145</td>
<td></td>
</tr>
<tr>
<td>12. Assets</td>
<td>$11,000</td>
<td>$11,401</td>
<td>-.058</td>
<td>.509**</td>
<td>.623**</td>
<td>-.511**</td>
<td>.361**</td>
<td>.628**</td>
<td>.398**</td>
<td>.487**</td>
<td>.260**</td>
<td>-.139</td>
<td>.329**</td>
</tr>
</tbody>
</table>
CSP People and significantly negatively correlated with CSP Weaknesses, CSP Product Weaknesses, and CSP People Weaknesses. The means for debt-to-equity is 58.05% and for assets are $12,357 million.

Table 2 shows the means, standard deviations, and correlations for our independent, dependent, and control variables for restatement firms only. The means for Total CSP, CSP Strengths, and CSP Weaknesses are .27, 3.11, and 2.84 respectively. The means for Total CSP Product, CSP Product Strengths, and CSP Product Weaknesses are -.68, .49, and 1.18 respectively. The means for Total CSP People, CSP People Strengths, and CSP People Weaknesses are 1.69, 2.49, and .80 respectively. The mean ROA is 5.48% and is significantly positively correlated with Total CSP and Total CSP Product and significantly negatively correlated with CSP Product Weaknesses. The mean debt-to-equity is 59.7% and the mean assets are $11,000 million.

Table 3 shows the means, standard deviations, and correlations for our independent, dependent, and control variables for non-restating firms only. The means for Total CSP, CSP Strengths, and CSP Weaknesses are .03, 2.87, and 2.84 respectively. The means for Total CSP Product, CSP Product Strengths, and CSP Product Weaknesses are -.55, .51, and 1.05 respectively. The means for Total CSP People, CSP People Strengths, and CSP People Weaknesses are 1.37, 2.28, and .91 respectively. The mean ROA is 6.64%. Similar to non-restating firms, ROA is significantly positively correlated with Total CSP and Total CSP Product and significantly negatively correlated with CSP Product Weaknesses. Unlike non-restating firms, ROA for restatement firms is also significantly positively related to Total CSP People and CSP People Strengths along with being significantly negatively related to CSP Weaknesses and CSP People Weaknesses. Additionally, the mean debt-to-equity is 56.4 % and the mean assets are $13,713 million for non-restating firms. Overall, restatement firms tend to have a higher level of Total CSP, CSP Strengths, and CSP People Strengths and CSP Weaknesses while non-restatement firms have a higher level of CSP People Strengths and CSP People Weaknesses.

Hypothesis 1

To test hypothesis 1 a randomized block design, equivalent to a paired t-test, was used to determine the effect, if any, of a restatement on Total CSP, CSP Strengths, and CSP Weaknesses; Total CSP Product, CSP Product Strengths, and CSP Product Weaknesses; and Total CSP People, CSP People Strengths, and CSP People Weaknesses. The dependent variable consisted of CSP scores which were compared at different time periods, i.e., one year before and after restatement and two years before and after restatement. Table 4 summarizes the average Total, Strengths, and Weaknesses CSP scores for these time periods and indicates which differences are statistically significant. Note that the average total for a score is equal to the difference between the corresponding average strength and average weakness.

Most of the significant differences are found by looking at two years before and two years after restatement. CSP Strengths and CSP Weaknesses significantly increased at p<.01 in the period
### Table 3
Non-Restating Firms Pearson Correlation Matrix: Correlations with ROA, Control Financial Variables and Lagged CSP

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total CSP</td>
<td>.03</td>
<td>3.201</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CSP Strengths</td>
<td>2.87</td>
<td>2.199</td>
<td>.647**</td>
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<td></td>
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<td></td>
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<tr>
<td>3. CSP Weaknesses</td>
<td>2.84</td>
<td>2.444</td>
<td>-.728**</td>
<td>.052</td>
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<tr>
<td>4. Total CSP Product</td>
<td>-.55</td>
<td>1.635</td>
<td>.725**</td>
<td>.193*</td>
<td>-.776**</td>
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</tr>
<tr>
<td>5. CSP Product Strengths</td>
<td>51</td>
<td>.659</td>
<td>.456**</td>
<td>.590**</td>
<td>-.067</td>
<td>.390**</td>
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<tr>
<td>6. CSP Product Weaknesses</td>
<td>1.05</td>
<td>1.505</td>
<td>-.587**</td>
<td>.049</td>
<td>.813**</td>
<td>-.915**</td>
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<tr>
<td>7. Total CSP People</td>
<td>1.37</td>
<td>2.107</td>
<td>.782**</td>
<td>.839**</td>
<td>-.269**</td>
<td>.221**</td>
<td>.317**</td>
<td>-.101</td>
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<td>8. CSP People Strengths</td>
<td>2.28</td>
<td>1.798</td>
<td>.589**</td>
<td>.943**</td>
<td>.077</td>
<td>.094</td>
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<td>.035</td>
<td>.876**</td>
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<tr>
<td>9. CSP People Weaknesses</td>
<td>91</td>
<td>1.019</td>
<td>-.577**</td>
<td>-.071</td>
<td>.692**</td>
<td>-.292**</td>
<td>-.106</td>
<td>.271**</td>
<td>-.523**</td>
<td>-.046</td>
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<tr>
<td>10. ROA</td>
<td>6.64%</td>
<td>6.93%</td>
<td>.252**</td>
<td>.135</td>
<td>-.208**</td>
<td>.173*</td>
<td>-.008</td>
<td>-.192*</td>
<td>.281**</td>
<td>.160*</td>
<td>-.300**</td>
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<tr>
<td>11. Debt-to-Equity</td>
<td>56.40%</td>
<td>19.04%</td>
<td>-.256**</td>
<td>.043</td>
<td>.374**</td>
<td>-.355**</td>
<td>-.033</td>
<td>.371**</td>
<td>-.060</td>
<td>.081</td>
<td>.266**</td>
<td>-.479**</td>
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</tr>
<tr>
<td>12. Assets</td>
<td>$13,713</td>
<td>$19,659</td>
<td>-.155*</td>
<td>.470**</td>
<td>.626**</td>
<td>-.386**</td>
<td>.189*</td>
<td>.502**</td>
<td>.195*</td>
<td>.472**</td>
<td>.431**</td>
<td>-.059</td>
<td>.219**</td>
</tr>
</tbody>
</table>

**Note:** Significant correlations are marked with **(*)** for 0.05 levels of significance, and **(**) for 0.01 levels of significance.
following restatement though CSP Weaknesses increased by a greater amount than CSP Strengths. This significance appears to be driven by the People dimensions of CSP as both CSP People Strengths and CSP People Weaknesses significantly increased at p<.01. Also, CSP People Weaknesses increased by a greater amount than CSP People Strengths. When looking at one year before and one year after restatement, we do find that Total CSP significantly decreased and CSP Weaknesses significantly increased at p<.01. Additionally, Total CSP Product significantly decreased at p<.05.

**Hypothesis 2**

Because we have cross-sectional and time series data, we used panel data analyses to further investigate the change in CSP and test hypothesis two. In all equations, size, debt-to-equity ratio, and industry were included as control variables. Consistent with prior literature, a one-year lag between the FP variable and the dependent and control variables was used. Table 5 presents the results of our three panel data regressions that include Total CSP, CSP Strengths, and CSP Weakness as our dependent variable and ROA as our independent variable. For Total CSP, similar to the results found in the randomized block design, the Post variable was significantly negatively related at p<.05, indicating that CSP significantly declined for all firms in the two years following the restatement period. For the regression with CSP Strengths as the independent variable, we found that the Post variable was significantly posi-
tively related at p<.05 indicating that CSP Strengths are higher after the re-statement period for all firms, which is consistent with our results found in the randomized block design. Additionally, we found the interaction term of Match*Post was significantly negatively at p<.01. As shown in Figure 2, though CSP Strengths increased for all firms after the restatement period the increase was higher for restatement firms than non-restatement firms, suggesting that restatement firms may be more accountable after the period of restatement by managing their CSP Strengths. The interaction term of ROA*Match is significantly negatively related at p<.01 indicating that the effect of ROA on CSP Strengths is greater for restatement firms than non-restatement firms, supporting hypothesis 2. The interaction term of ROA*Post*Match was significantly positively related to CSP Strengths at p<.01 indicating that the effect of ROA on CSP Strengths also varies in the periods prior and after restatement. For the regression using CSP Weaknesses as the dependent variable, we found the Post variable was significantly positively related at p<.01, indicating that for all firms the average CSP Weakness increased in the period following the restatement. These results are also consistent with our findings in the randomized block design. Also the interaction term of Match*Post was significantly negatively related at p<.05. As shown in Figure 3, restatement firms had a greater increase in CSP Weaknesses than non-restatement firms. This is consistent with increased transparency following the restatement period as more negative information concerning the firm is made available.

Table 6 presents the results of our three

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Total CSP</th>
<th>CSP Strengths</th>
<th>CSP Weakness</th>
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<td>ROA</td>
<td>-.015</td>
<td>.025</td>
<td>.009 .016</td>
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<tr>
<td>Match</td>
<td>.293</td>
<td>.669</td>
<td>.483 .498</td>
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<tr>
<td>Post</td>
<td>-.653</td>
<td>.272*</td>
<td>-.074 .039</td>
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<tr>
<td>ROA*Match</td>
<td>-.017</td>
<td>.364*</td>
<td>.024 .034</td>
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<tr>
<td>ROA*Post</td>
<td>.024</td>
<td>.343</td>
<td>-.012 .023</td>
</tr>
<tr>
<td>Match*Post</td>
<td>-.426</td>
<td>.400</td>
<td>-.426 .400</td>
</tr>
<tr>
<td>ROA<em>Post</em>Match</td>
<td>.073</td>
<td>.046</td>
<td>.103 .031**</td>
</tr>
<tr>
<td>Control</td>
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<td></td>
</tr>
<tr>
<td>Debt-to-Equity</td>
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<td>1.169</td>
<td>.609 .804</td>
</tr>
<tr>
<td>Assets</td>
<td>-.001</td>
<td>.000</td>
<td>.001 .000**</td>
</tr>
<tr>
<td>R²</td>
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<td>.284</td>
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<tr>
<td>Wald chi-square</td>
<td>40.3**</td>
<td>66.8**</td>
<td>133.46**</td>
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</tr>
<tr>
<td>Number of Firms</td>
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<tr>
<td>Number of Observations</td>
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<td>352</td>
<td>352</td>
</tr>
</tbody>
</table>

*p<.05  
**p<.01
Figure 2
CSP Strengths

Figure 3
CSP Weaknesses
panel data regressions that include Total CSP Product, CSP Product Strengths, and CSP Product Weakness as our dependent variable and ROA as our independent variable. For Total CSP Product, we found no significant relationships. For the regression with CSP Product Strengths as the dependent variable, we found that the interaction term of Match*Post was significantly negatively related at p<.05. As shown in Figure 4, restatement firms showed a slight increase in CSP Product Strengths in the period following restatement while non-

restatement firms showed a decrease. Again, suggesting that restatement firms may be more accountable after the period of restatement and managing their CSP Product Strengths. For the regression using CSP Product Weaknesses as the dependent variable, only the Post term was significantly positively related at p<.05 indicating that CSP Product Weaknesses increased for all firms in the period following the restatement.

Table 7 presents the results of our three panel data regressions that include Total CSP People, CSP People Strengths, and CSP People Weakness as our dependent variable and ROA as our independent variable. For our regression with Total CSP People, the interaction term of ROA*Match is significantly negatively related at p<.01 indicating that the effect of ROA on Total CSP People is greater for restatement firms than non-restating firms, supporting hypothesis 2. The interaction term of ROA*Post*Match is also significantly positively related to Total CSP People at p<.01 indicating that the effect of ROA on CSP Strengths

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Total CSP Product</th>
<th>CSP Product Strengths</th>
<th>CSP Product Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>-.009 .011</td>
<td>-.004 .005</td>
<td>.005 .009</td>
</tr>
<tr>
<td>Match</td>
<td>.219 .319</td>
<td>.066 .152</td>
<td>-.155 .297</td>
</tr>
<tr>
<td>Post</td>
<td>-.181 .118</td>
<td>.026 .057</td>
<td>.206 .104*</td>
</tr>
<tr>
<td>ROA*Match</td>
<td>-.003 .017</td>
<td>-.000 .008</td>
<td>.004 .015</td>
</tr>
<tr>
<td>ROA*Post</td>
<td>.010 .015</td>
<td>-.005 .007</td>
<td>-.015 .013</td>
</tr>
<tr>
<td>Match*Post</td>
<td>.057 .174</td>
<td>-.168 .083*</td>
<td>-.218 .153</td>
</tr>
<tr>
<td>ROA<em>Post</em>Match</td>
<td>-.004 .020</td>
<td>.009 .010</td>
<td>.013 .018</td>
</tr>
</tbody>
</table>

Control

| Debt-to-Equity | -.306 .522 | -.132 .250 | .124 .467 |
| Assets        | -.001 .000** | .001 .000 | .001 .000** |
| R²            | .3363       | .177      | .407      |
| Wald chi-square | 62.72**     | 26.26**  | 74.52**   |

| Number of Firms | 88 | 88 | 88 |
| Number of Observations | 352 | 352 | 352 |
also varies in the periods prior and after restatement. The interaction term of Match*Post is significantly negatively related at p<.05. Per figure 5, restatement firms had a bigger decrease in Total CSP People after restatement than non-restatement firms. For the regression using CSP People Strengths as the dependent variable, we found that the Post variable is significantly positively related at p>.05 indicating that for all firms CSP People Strengths significantly increased in the two years following the restatement period. We also found that the interaction term of ROA*Match is significantly negatively related at p<.01, indicating that the effect of ROA on CSP People Strengths is greater for restatement firms than non-restating firms, supporting hypothesis 2. The interaction term of ROA*Post*Match is also significantly positively related to CSP People Strengths at p<.01, indicating that the effect of ROA on CSP People Strengths also varies in the periods prior and after restatement. The interaction term of Match*Post is significantly negatively related at p<.05. Per figure 6, restatement firms had a bigger increase in CSP People Strengths after restatement than non-restatement firms, again suggesting the restatement firms may be more accountable in the period following restatement by focusing in on CSP strengths. For our CSP People Weaknesses regression, the only significant variable that we found was the Post variable at p<.01, indicating that for all firms CSP People Weaknesses significantly increased in the two years following the restatement period.

SUMMARY AND DISCUSSION

This study was undertaken to investigate CSP in restatement firms along with investigating the relationship of CSP to FP
for these same firms. Consistent with prior research on accountability and disclosure (Mahoney et al., 2008), we found Total CSP after restatement of earnings was significantly lower than the average Total CSP before restatement. In particular, even though CSP Strengths increased, it was offset by a greater increase in CSP Weaknesses. This increase in strengths may be due to the efforts by the firms to be accountable and improve the reputation of the firm. However, this may have been offset by the negative impact of transparency surrounding financial restatement. These findings support hypothesis 1 for Total CSP which differs before and after restatement.

We also compared restatement firms with matched non-restating firms in our panel data analysis. We found that CSP Strengths, CSP Weaknesses, and CSP People Strengths for restatement firms showed a greater increase than non-restatement firms. For Total CSP People, we found that restatement firms showed a greater decrease than non-restatement firms. For CSP Product Strengths, we found that while restatement firms increased slightly, non-restating firms showed a significant decrease. These findings are consistent with prior research on reporting failure that show that restating firms take steps to improve corporate governance mechanisms following restatement in order to restore credibility and transparency.
(Farber, 2005; LaGore, 2008) and provide additional support for hypothesis 1.

We also find support for hypothesis 2, since a stronger positive relationship exists between ROA on CSP Strengths for restatement firms than non-restating firms. In particular, we find that this effect is a result of the People dimension of CSP with significant relationships for Total CSP People and CSP People Strengths while no relationship was found for any dimension of CSP Product. These results provide further support for the previous literature on the positive relationship between CSP and FP and that CSP and FP may be mutually reinforcing organizational activities (Orlitzky, 2008).

Like all research, ours has limitations associated with the measures, methodology and sample size. The use of KLD ratings to measure CSP are questionable (Chatterji and Levine, 2006; Chatterji, et al., forthcoming; Orlitzky and Swanson, 2008; Porter and Kramer, 2006) since they are determined by an independent firm and are the result of Kinder, Lydenberg, Domini Research & Analytics’ definition and evaluations of CSP. Previous research has found that while KLD weakness ratings are a good summary of past environmental performance, KLD strengths do not accurately predict pollution levels or compliance violations (Chatterji et al., forthcoming). Research has also found that KLD is not optimally using publicly available data (Chatterji et al., forthcoming). Furthermore, the equal weighting and content of each dimension of CSP is another limitation (Chatterji and Levine, 2006). Future research on the investigation of the construction validity of KLD, the impact of equal weighting of dimension and critiques of KLD’s perspective on CSP would aid in the development of this research stream.

The sample selection bias is also a potential alternative explanation of the results. There are some possible selection biases in our final sample of restatement firms since the research design requires each sample firm to have data for a consecutive 5-year period, the two years before and after the restatement announcement. Thus, the final sample tends to include surviving and larger firms that may be perceived as more reliable. Therefore, the external validity of the study may be in question as the results may not generalize to the overall population of publicly traded companies. On the other hand, larger firms receive more media coverage and regulatory attention than smaller firms and therefore may be under more pressure to change financial reporting and corporate social performance following a restatement in order to restore the public’s trust in their financial reporting. The results of this analysis are encouraging because the prospect of a positive CSP and FP ownership links means that even restatement firms can be socially responsible and financially successful following the period of restatement.

REFERENCES


______, & Benjamin, J.D. (2001)


40, No. 3, pp. 658-672.