The Relation Between Corporate Social Performance and Financial Reporting Bias

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Research provides mixed evidence for the relation between discretionary accruals and corporate social performance. Because accruals reverse, a single year's observation may not represent the firm's overall discretion. Yet the literature does not consider the reversing nature of accruals, nor does it consider the articulation between the income statement and balance sheet. The current study considers both and examines the relation between a firm's cumulative earnings management and its corporate social performance. As earnings are managed upwards (downwards) this discretion in net income is also recognized in the balance sheet as higher (lower) net asset values. Ceteris paribus, lower net asset values represent a form of slack. Consistent with expectations, evidence shows higher corporate social performance strengths for firms that have a greater cumulative negative bias in earnings recognition.

INTRODUCTION

Corporate Social Performance (CSP) can be thought of as a corporation's overall citizenship. Kim, Park, and Wier (2012) note that a corporation's citizenship has become increasingly important to investors and other stakeholders, while Grant Thornton (2008) asserts that CSP is necessary for all businesses, not just large corporations. The precise meaning of CSP is elusive. Yet Carroll's (1979) definition is well accepted where he asserts, "The social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that society has of organizations…" (p. 500). Recognizing that society has economic expectations of a firm provides a foundation to link a firm's social responsibilities with its financial reporting. Consequently, there is a significant and growing literature which examines the relation between financial reporting and CSP.

One attribute of quality is the degree of bias in financial reporting. The literature recognizes that Generally Accepted Accounting Principles (GAAP) allow managers a degree of discretion in recognizing the accrual portion of earnings. A common theme for research in discretionary accruals is managerial intent, laying the groundwork to also relate managerial discretion in recognizing accruals to CSP. This literature yields mixed results (Hemingway & Maclagan, 2004; Prior, Surroca, & Tribo, 2008; Chi, Shen, & Kang, 2008; Kim, Park, & Wier, 2012). Yet, examining a single year's discretionary accruals makes it difficult to discern a firm's long-term reporting objective or bias, because accruals, by their very nature, will reverse over time. Thus income-increasing discretionary accruals will likely give rise to income-decreasing discretionary accruals in a later year. Consequently, the discretionary accruals recognized during a single period may or may not reflect an organization's overall reporting bias. For example, income-increasing discretionary accruals could be an artifact of (a) a continuation of an overall aggressive or income-increasing reporting bias, (b) a partial reversal of income-decreasing discretionary accruals stemming from an overall conservative reporting bias, or (c) an effort to smooth earnings. Each of these situations could have different implications for CSP (Kim et al., 2012), making the interpretation of current-period discretionary accruals tenuous.

In a related stream of literature, the association between slack resources and CSP is examined. This literature posits that a firm must have the available resources to meet the needs of its stakeholders (Seifert, Morris, & Bartkus, 2004), which includes investments in CSP. One measure for available resources is financial slack. Although Kim et al. (2012) find a negative relation between discretionary accruals and CSP, they also recognize that positive and negative discretionary accruals have different attributes, especially for a firm's slack resources. This occurs because of the articulation between the income statement that reflects current period earnings and the balance sheet that reflects the firm's assets, liabilities, and equity. As net income is recognized, this also results in recognizing net assets in the balance sheet so that, ceteris paribus, increases (decreases) in net income will result in increases (decreases) in net assets. These increases or decreases in net assets carry over from year to year and capture the cumulative effect of prior years' discretion in earnings recognition, and ultimately, become slack resources.

While prior studies consider a single year's accrual recognition, the current research draws upon theory from the financial slack research to examine the relation between the *cumulative* effect of earnings discretion and CSP. To accomplish this, a measure of slack that captures the cumulative balance sheet bias related to earnings discretion is used. This measure is established in the literature and examined by Barton and Simko (2002), who demonstrate a strong correlation between the financial slack measure and prior years' discretionary accruals. Considering how income recognition affects the balance sheet will help to distinguish firms with overall aggressive (income-increasing) earnings recognition from those with overall conservative (income-decreasing) earnings recognition and thus provide greater insight into the relation between a firm's cumulative bias in earnings recognition (slack) and CSP. This research also provides a direct link between the financial slack and earnings management literature when considering a firm's CSP.

Evidence presented suggests that firms which have greater prior periods' downward earnings management have higher values for CSP strengths. This is consistent with the assertion from slack resource theory that a firm must have the available resources to meet the needs of stakeholders. This finding provides insight for the literature examining the relation between financial performance and CSP. Background and hypothesis development are discussed in the next section, followed by research method, sample and data description, and results.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Although the Financial Accounting Standards Board (FASB) sets accounting standards to be followed for financial reporting, these Generally Accepted Accounting Principles (GAAP) allow flexibility for managements' judgments and estimates. Thus, a firm's net income, and hence net assets, will to some degree reflect the judgments and estimates of management within the constraints of GAAP. There is a significant literature examining managements' discretion and motivations for using discretion when recognizing the accrual portion of net income (Jones, 1991; DeFond & Jiambalvo, 1994; Kothari, Leone,

& Wasley, 2005). The common theme of managerial intent provides a link, and subsequently researchers have also hypothesized about a relation between discretionary accruals and CSP with varying predictions and findings (Hemingway & Maclagan, 2004; Prior et al., 2008; Chi, Shen, & Kang, 2008; Kim et al., 2012). Yet these studies consider a single year's accrual recognition and don't examine the relation between the balance sheet and the income statement; although Kim et al. (2012) do note that income-increasing and income-decreasing discretionary accruals have different attributes, especially for a firm's slack resources.

This occurs because of the articulation between the income statement, which reflects current period earnings, and the balance sheet, which reflects the firm's assets, liabilities, and equity. As net income is recognized, this also results in recognizing net assets in the balance sheet so that, ceteris paribus, increases (decreases) in net income will result in increases (decreases) in net assets. These increases or decreases in net assets carry over from year to year and will capture the cumulative effect of prior years' discretion in earnings recognition.

To provide context we consider a firm's accounts receivable and adapt an example provided in Hong and Anderson (2011). If a firm makes a $30 sale on account and if that firm's past experience suggests that 10% of accounts are not collectible, the firm's net assets would reflect the net realizable value of accounts receivable $27 ($30–$3) and net income would also be $27 (sales revenue of $30 less bad debt expense of $3). Management has a degree of discretion in estimating bad debt expense, and if, ceteris paribus, management used that discretion to determine (in the extreme) that none of the accounts receivable are uncollectible, then net assets would be $30 and net income would also be $30, giving rise to a $3 overstatement of net asset values and net income. The opposite would occur if, ceteris paribus, management determined that a higher percentage of accounts receivable were uncollectible where net asset values and net income would be understated.

Accounts Receivable provides just one example; although not an exhaustive list, management also has discretion in determining the useful lives and salvage value of long-term assets, potential impairment of inventory and other assets, assumptions in determining pension liabilities, and inventory cost flow assumptions. In sum, management has a degree of flexibility in recognizing accruals that will affect both the balance sheet as net assets are recognized and the income statement as net income is recognized, and net assets have implications for financial slack.

According to Slack Resource Theory, a firm must have available resources before it can invest in CSP (Seifert, Morris, & Bartkus, 2004). The relation between net income and the balance sheet provides the link between negative discretionary accruals and slack. As a firm reports lower discretionary earnings, that firm will also report lower net asset values. Ceteris paribus, this firm will have the same economic value of assets yet report a lower book value for those assets when compared to a firm that did not recognize negative discretionary accruals. These unrecorded assets are a form of slack as they are available resources, and to the extent that net income is used for contractual obligations such as management bonuses etc., recording lower values of net income and net assets serves to retain firm value. Watts (2003) makes this point when he notes that conservative earnings recognition preserves firm value, making resources available to meet the needs of the various constituents. Research evidence does suggest a relation between how net income and assets are recorded for both CSP and a firm's flexibility in meeting expectations. For instance, Francis, Harrast, Mattingly, and Olsen (2013) show a positive relation between accounting conservatism and CSP Strengths, yet they limit their measure of conservatism to R&D, advertising, and inventory cost flow assumptions. Barton and Simko (2002) also show that when net operating assets are downward biased, management has more flexibility to meet analyst forecasts.

The financial slack literature also recognizes that agency conflicts give rise to competing hypotheses. For instance, John, Li, and Pang (2017) recognize that managers may utilize financial slack for private benefits (wasteful spending hypothesis), or alternatively, slack may be retained for future uncertainties (precautionary needs hypothesis). Yet because firms must have the available resources to meet the needs of their constituents, and firms that report earnings conservatively create a form of financial slack that provides the flexibility to meet the needs of constituents, the following hypothesis is presented:

H1: *CSP Strengths will be greater when the cumulative bias in a firm's net income is more negative.*

RESEARCH METHOD

Proxies for the cumulative bias in earnings recognition and corporate social performance will be discussed in turn. This discussion will be followed by sample and data description.

Cumulative Bias in Earnings Recognition

Although GAAP provides a framework for earnings recognition, management still has flexibility within the boundaries set by GAAP. There is a significant literature that examines and measures the degree to which managers exercise discretion in recognizing the accrual portion of earnings (Jones, 1991; Beneish, 1998; Hunt, Moyer, & Shevlin, 1996; Teoh, Wong, & Rao, 1998; Prior et al., 2008; Kim et al., 2012). Articulation between the income statement and the balance sheet provides that an upward (downward) bias in net income will be reflected in an upward (downward) bias in net asset values. Although net asset values were previously discussed within the context of accounts receivable, there are numerous opportunities for management to exert judgement within the framework of GAAP. Some examples include inventory cost flow assumptions, pension assumptions, contingent liabilities, and lease accounting, as well as estimates for the salvage value and useful life of fixed assets. If, over time, a firm were to tend toward income-decreasing judgment in earnings recognition, these lower net incomes would accumulate and be reflected in lower net asset values. Although net income is an artifact of the current period, the cumulative effect of prior periods' bias in earnings recognition remains on the books as a bias in net asset values until the asset is sold or otherwise converted. Hence, a firm's bias in net assets captures the cumulative effect of prior periods' bias in earnings recognition.

This premise underlies Barton and Simko's (2002) measure for assessing a firm's cumulative bias in prior periods' earnings recognition. Specifically, their proxy is the beginning of period net operating assets scaled by sales (NOA/Sales). They scale by sales because, ceteris paribus, overstated values of net operating assets, adjusted for industry, would be less efficient at generating sales. Accordingly, a higher ratio of net operating assets to sales would indicate an income-increasing bias in prior periods' earnings recognition, whereas a lower ratio of net operating assets to sales would indicate an income-decreasing bias. Barton and Simko (2002) provide confidence in this relation by partitioning their sample into quintiles of NOA/Sales and showing that firms with a higher (lower) ratio of NOA/Sales had recognized more income-increasing (decreasing) discretionary accruals in prior periods (p. 10). When comparing differences between the upper and lower quintiles, these differences were statistically significant, lending confidence to the notion that their measure captures bias in prior periods' accounting choices. Consistent with Barton and Simko (2002), NOA/Sales will proxy for financial reporting bias with a higher (lower) value representing overall more income-increasing (decreasing) bias in prior periods' earnings recognition. This measure, net assets scaled by sales, differs from commonly used measures in the financial slack literature, because it proxies for the cumulative balance sheet bias, or unrecorded balance sheet slack, created via managements' discretion over time. These slack resources are typically not captured when using balance sheet measures such as net assets, current ratio, or working capital alone. See Shahzad, Mousa, and Sharfman (2016) for a short description of financial slack measures commonly used in the literature.

Returning to the previous example for accounts receivable and considering two firms, Firm A and Firm B. Recall, Firm A shows net accounts receivable of $27 because accounts receivable were reduced by estimated uncollectible accounts ($3), ultimately reducing net accounts receivable from $30 to $27 and net income by $3. Firm B shows net accounts receivable of $30 because Firm B used discretion and did not recognize bad debts and hence did not reduce either the asset, accounts receivable or net income. Ceteris paribus, if we compared net assets alone, Firm B appears to have higher slack because net assets are $30 and exceed the net assets of Firm A by $3. However, Firm B has $3 in unproductive assets because they will not convert the $3 in accounts receivable to cash. To accommodate, if we were to scale net assets by sales, the productivity of assets will materialize through the NOA to Sales ratio. So again, ceteris paribus, both firms realize $100 in sales. Firm A has NOA/Sales = 27/100 = 27%, whereas Firm B has NOA/Sales = 30/100 = 30%, revealing that Firm A generates the same sales with a lower book value of net operating assets.

Barton and Simko (2002) examine several measures of net operating assets. Total net operating assets (NOA) are measured as shareholders' equity less cash and marketable securities plus total long-term debt. Total long-term debt is represented by long-term debt plus long-term debt in current liabilities plus notes payable. This measure of net operating assets includes property, plant, and equipment, yet the nature of these fixed assets makes their effect on the relative over or under statement of net assets and earnings somewhat ambiguous. For instance, higher net asset values could be a result of optimistic earnings recognition through higher useful life and/or salvage value assumptions giving way to lower depreciation expense and higher (optimistic) net income. Conversely, higher net asset values for property, plant, and equipment could represent a relatively conservative earnings recognition policy through higher investment in productive assets, which, in turn, ultimately increases depreciation expense and reduces net income. In sum, higher net asset values could be associated with either an aggressive or a conservative bias in earnings. Because property, plant, and equipment may be confounding, the current research uses a second measure of net operating assets that excludes net property, plant, and equipment, (NOA-PPE). Working capital represents the portion of net operating assets that is most liquid and thus most available to meet the needs of a firm's constituents. Further, evidence suggests that current accruals are more easily managed than long-term accruals (Hunt et al., 1996; Beneish, 1998; Teoh et al., 1998). Consequently, this research also examines the cumulative bias in earnings as it is reflected in working capital through the articulation between the income statement and balance sheet. Working capital (WCAP) is measured as current assets minus cash and marketable securities minus current liabilities plus notes payable and long-term debt in current liabilities.

Corporate Social Performance

The Kinder, Lydenberg, Domini (KLD) Social Ratings dataset, now MSCI-ESG, has been identified as the best source of corporate social performance measures available (Hillman & Keim, 2001). Mattingly and Berman (2006) reiterate this sentiment when they assert that the KLD data "has become the standard for quantitative measurement of corporate social action" (p. 28). This dataset covers more than 3,000 firms and includes multiple company attributes while using objective screening criteria and independent reviews by analysts who apply the same criteria to all companies over time. Within the database, strengths and concerns are reported in seven social issue areas: human rights, corporate governance, diversity, employee relations, the environment, product characteristics, and community relations. Mattingly and Berman (2006) point out that strengths and concerns are independent constructs such that "when scholars speak of corporate social action, we must indicate whether we refer to positive or negative action. Generalizations made about positive action on the basis of prior research do not necessarily hold in the inverse for negative action and vice versa" (p. 38). Accordingly, the current research considers CSP strengths for hypothesis testing.

SAMPLE AND DATA DESCRIPTION

To be included in the sample, a firm-year observation must be part of the S&P 1,500 and have sufficient information in the MCSI-ESG to calculate corporate social strengths and concerns. The firm-year observation must also have sufficient data contained in Compustat to calculate beginning of period net operating assets and size. This provides a sample of 7,971 firm-year observations and 1,327 distinct firms across the years 2003–2012. Table 1 and Table 2 show sample characteristics.

TABLE 1
DESCRIPTIVE STATISTICS

N=7,971	*Mean*	*Median*	*Min*	*Max*	*Std. Dev.*
Net Operating Assets	*3,977.08*	*906.67*	*-4,291.00*	*177,512.00*	*11,163.81*
Net Operating Assets - PPE	*1,641.07*	*368.98*	*-56,303.00*	*89,927.00*	*5,807.74*
Working Capital	*234.49*	*113.20*	*-12,804.00*	*16,808.00*	*1,140.56*
Sales	*7,751.69*	*1,833.05*	*4.03*	*467,231.00*	*23,818.39*
Earnings Before Extraordinary Items	*532.84*	*95.04*	*-16,998.00*	*45,220.00*	*2,095.78*
Market Value of Equity	*9,662.22*	*2,082.79*	*18.41*	*626,550.35*	*27,999.01*
Size	*7.82*	*7.64*	*4.88*	*11.92*	*1.50*
Strengths	*0.481*	*-0.222*	*-0.696*	*12.27*	*1.83*
Weaknesses	*0.342*	*0.169*	*-0.793*	*6.42*	*0.99*

Net Operating Assets = stockholders' equity - cash and marketable securities + long-term debt + long-term debt in current liabilities + notes payable (Compustat names: seq-che+dltt+ddl+np).
Net Operating Assets - PPE = net operating assets - net property, plant and equipment (Compustat name: PPENT).
Working Capital = current assets - cash and marketable securities - current liabilities + notes payable + long-term debt in current liabilities (Compustat names: act-che-lct+np+ddl).
Sales = net sales (Compustat name: sale).
Earnings before Extraordinary Items = earnings before extraordinary items (Compustat name: ib).
Market Value of Equity = market value of common shares outstanding at fiscal year- end, common shares outstanding * price per share (Compustat names: prcc_f*csho).
Size = the natural log of market value of equity.
Strengths = a firm's overall 'score' for its corporate social performance strengths. A firm's strengths across environment, community, human rights, employee relations, diversity, product, and corporate governance are averaged and then combined. These values are standardized by year.
Weaknesses = a firm's overall 'score' for its corporate social performance weaknesses. A firm's weaknesses across environment, community, human rights, employee relations, diversity, product, and corporate governance are averaged and then combined. These values are standardized by year.

Table 1 reveals the raw values for net operating assets, sales, earnings, and market value of equity in millions. The mean (median) total net operating assets are 3,977.08 (906.67) while the mean (median) sales are 7,751.69 (1,833.05). The differences in mean and median values in conjunction with the large standard deviations indicate that the sample has a wide variance in assets and sales. This is also evident when examining the market value of equity where the mean value is 9,662.22 and the median is 2,082.79. These market values are consistent with Francis et al. (2013), and a quick calculation of net operating assets scaled by sales is 0.513 (3,977.08/7,751.69), meaning that, on average, net operating assets is roughly 51% of net sales. The values for Strengths and Weaknesses represent firms' standardized scores for Corporate Social Performance strengths and weaknesses, respectively.

Corporate Social Performance data are categorized across seven areas for both strengths and weaknesses. Within each category, a firm is assigned a value of "1" if the firm exhibits that particular strength or weakness and a "0" if it does not. Simply summing the strengths or weaknesses is problematic because each category contains a different number of attributes to be assessed and data collected by KLD relative to MSCI-ESG also contain a different number of items. For this reason, scores are standardized by category and year to yield a comparable score across categories and time. The standardized scores for overall strengths and weaknesses are shown in Table 1.

TABLE 2
INDUSTRY REPRESENTATION

2- Digit SIC Code	Firm-Year Observations	Percent of Sample
00-09; Agriculture, Forestry and Fishing	21	0.26
10-19; Mining and Construction	521	6.54
20-29; Food, Tobacco, Textile and Paper Products	1,561	19.58
30-39; Rubber, Metal and Equipment Manufacturing	2,834	35.56
40-49; Transportation	430	5.39
50-59; Wholesale and Retail	1,223	15.34
70-79; Hotels, Personal and Business Services	1,002	12.58
80-89; Health and Mgt. Services	369	4.62
90-99; Other	10	0.13
Total	**7,971**	**100.00**

Table 2 shows the sample distribution by industry. Consistent with Barton and Simko (2002) firms in the utilities and financial services industries are excluded because they are subject to regulatory requirements that differentially affect their accounting. These firms are represented by the 2-digit SIC codes 49 and 60 through 67. The final sample includes firms from 56 different 2-digit SIC codes with Manufacturing comprising 35.56 percent of the sample and Food, Tobacco, Textile and Paper Products comprising almost 20% of the sample.

RESULTS

The current research uses existing theory which suggests a positive relation between slack resources and corporate social strengths. Specifically, if a firm's tendency was toward overall downward earnings management, the articulation between the balance sheet and income statement dictates that, ceteris paribus, this tendency would also manifest in lower book values for net operating assets and create slack in the balance sheet. In turn, and again ceteris paribus, if net operating asset values are biased downward, these net operating assets will be more efficient at generating sales revenues making the ratio of net operating assets to sales (NOA/SALES) also lower. As such, this research posits a negative relation between the ratio of net operating assets to sales and corporate social strengths because a lower ratio of net operating assets to sales represents more slack resources.

TABLE 3
SELECTED CORRELATION COEFFICIENTS
PEARSON (UPPER DIAGONAL) AND SPEARMAN (LOWER DIAGONAL)

N=7,971	Variable					
	STRA	**WKNA**	**NOAA**	**NOA-PPEA**	**WCAPA**	**MVE**
STRA	*1.0000*	*0.2276 (p<0.001)*	*-0.0290 (p=0.0096)*	*-0.0391 (p<0.001)*	*-0.1847 (p<0.001)*	*0.4388 (p<0.001)*
WKNA	*0.1481 (p<0.001)*	*1.0000*	*-0.0211 (p=0.0596)*	*-0.0049 (p=0.6633)*	*-0.0637 (p<0.001)*	*0.3435 (p<0.001)*
NOAA	*-0.0218 (p=0.0514)*	*-0.0003 (p=0.9761)*	*1.0000*	*0.7058 (p<0.001)*	*0.1768 (p<0.001)*	*-0.0128 (p=0.2551)*
NOA-PPEA	*-0.0481 (p<0.001)*	*0.0059 (p=0.5987)*	*0.7120 (p<0.001)*	*1.00*	*0.2935 (p<0.001)*	*0.0012 (p=0.9131)*
WCAPA	*-0.2249 (p<0.001)*	*-0.0782 (p<0.001)*	*0.2239 (p<0.001)*	*0.3291 (p<0.001)*	*1.0000*	*-0.1230 (p<0.001)*
MVE	*0.4815 (p<0.001)*	*0.2700 (p<0.001)*	*0.0291 (p=0.0093)*	*0.0170 (p=0.1300)*	*-0.2450 (p<0.001)*	*1.0000*

STRA = a firm's overall score for corporate social performance strengths, adjusted for the industry mean for that year. A firm's corporate social strength is described in Table 1. Industry is defined as that firm's 2-digit SIC code.

WKNA = a firm's overall score for corporate social performance weaknesses, adjusted for the industry mean for that year. A firm's corporate social weakness is described in Table 1. Industry is defined as that firm's 2-digit SIC code.

NOAA = a firm's beginning of period net operating assets scaled by sales for the current period. The final NOAA is adjusted for the industry mean for that year. A firm's net operating assets and sales are described in Table 1. Industry is defined as that firm's 2-digit SIC code.

NOA-PPEA = a firm's beginning of period net operating assets - beginning of period PPE scaled by current period sales. The final NOA-PPEA is adjusted for the industry mean for the current year. Net operating assets - PPE and sales are described in Table 1. Industry is defined as that firm's 2-digit SIC code.

WCAPA = A firm's beginning of period working capital scaled by current period sales. The final WCAPA is adjusted for the industry mean for that year. Working capital and sales are described in Table 1. Industry is defined as that firm's 2-digit SIC Code.

MVE = the market value of common equity as described in Table 1.

Table 3 presents Pearson and Spearman correlation coefficients for the three measures of net operating assets and corporate social strengths and weaknesses, along with market value of equity. All variables except market value of equity are adjusted for the industry mean, by year, to yield industry-adjusted values that provide comparability across industries and time. These variables are also winsorized at 1% and 99% to control for extreme outliers. Table 3 shows that each of the proxies for cumulative earnings management is negatively correlated with corporate social strengths providing initial support for our hypothesis. NOAA,

which represents the cumulative effect of earnings management on total net operating assets, exhibits the weakest negative correlation but is still significant at $p < .01$ for the Pearson correlation and $p = .0514$ for the Spearman correlation. Removing the property, plant, and equipment component of net operating assets (NOA-PPEA) shows a stronger correlation between cumulative earnings management and corporate social strengths. Both Pearson and Spearman correlation coefficients of -0.0391 and -0.0481 are significant at $p < 0.001$. The correlation coefficients increase in magnitude when examining the most current component of net operating assets, working capital (WCAPA). This yields a Pearson (Spearman) correlation coefficient of -0.1847 (-0.2249) and a significance level of $p < 0.001$. Thus, as hypothesized, initial evidence suggests a negative relation between corporate social strengths and the proxies for cumulative earnings management.

Corporate social strengths and weaknesses are also positively correlated. This is not surprising, and Mattingly and Berman (2006) recognize this relation when they note "firms that tend to adopt environmentally friendly programs are often those that tend also to cause harm or extract from it" (p. 34). Market value of equity is also correlated with the measures of net operating assets as well as corporate strengths and weaknesses. For this reason, both corporate social performance weakness (WKNA) and size, calculated as the natural logarithm for the market value of equity, will be included as control variables in later regression analyses.

TABLE 4
TESTS OF DIFFERENCES FOR CUMULATIVE EARNINGS MANAGEMENT
PARTITIONED ON CSP STRENGTHS

	NOAA *Mean (Median)*	NOA-PPEA *Mean (Median)*	WCAPA *Mean (Median)*
STRA:			
Low Partition	*0.0015* *(-0.0474)*	*0.0160* *(-0.0238)*	*0.0277* *(0.0214)*
Middle Partition	*0.0185* *(-0.0481)*	*0.0050* *(-0.0301)*	*0.0073* *(0.0045)*
High Partition	*-0.0244* *(-0.0640)*	*-0.0201* *(-0.0618)*	*-0.0270* *(-0.0250)*
Tests of Differences High < Low:			
T-test	*t=2.42* *p=0.016*	*t=4.19* *p<0.001*	*t=19.45* *p<0.001*
Wilcoxon Rank Sums Test	*z=2.53* *p=0.012*	*z=5.25* *p<0.001*	*z=20.47* *p<0.001*
Medians Test	*z=1.91* *p=0.056*	*z=5.82* *p<0.001*	*z=18.91* *p<0.001*

All variables are as described in Table 3

Table 4 presents mean and median values for each of the proxies for cumulative earnings management across partitions of corporate social strengths (STRA). The sample is partitioned into high, medium, and low values of STRA, by year, and the mean and median values for cumulative earnings management proxies are assessed across these partitions. The results show that when excluding the property, plant, and

equipment portion of net operating assets, NOA-PPEA and WCAPA, there is a monotonic decrease in the mean and median net operating asset values scaled by sales. This suggests a greater downward bias in earnings recognition as we move from lower to higher corporate social performance strengths. The decrease from the low partition of STRA to the high partition of STRA is not monotonic for NOAA; however, unreported tests of means and medians suggests the differences between the low and middle partition are insignificantly different from zero. Further examining the differences in the cumulative earnings management proxies between the high and low partitions of STRA shows that for both parametric (t-test) and nonparametric tests (Wilcoxon Rank Sums and Medians tests) values for earnings management are significantly less in the high STRA partition than in the low STRA partition. This holds for all measures with the t-values and z-values being greatest for WCAPA, the effect of cumulative earnings management on current net operating assets. Again, these results provide support for the hypothesis that negative (cumulative) earnings management is associated with higher levels of corporate social performance strengths.

Regressions are also estimated, which allows an opportunity to assess the relation while controlling for corporate social performance weakness (WKNA) and size. The regression equation is:

$$STRA = \alpha_0 + \beta_1 CUM\ EARN\ MGT + \beta_2 WKNA + \beta_3\ SIZE + \beta_4 YEAR\ FIXED\ EFFECTS \tag{1}$$

Results are shown in Table 5, and to control for correlation in the residuals across firms and/or years, standard errors are clustered by firm, and fixed effects for years are included in the regression model. The coefficient on size is significant for all regressions. Consistent with the current hypothesis, there is a significant and negative coefficient on all proxies for cumulative earnings management. This again indicates that as cumulative earnings management is more income decreasing, corporate social performance strengths are greater and supports the hypothesis.

TABLE 5
REGRESSION ANALYSES FOR HYPOTHESIS TESTING

$STRA = \alpha_0 + \beta_1 CUM\ EARN\ MGT + \beta_2 WKNA + \beta_3 SIZE + \beta_4 YEAR\ FIXED\ EFFECTS$			
N=7,971	**Proxy for Cumulative Earnings Management**		
	NOAA	**NOA-PPEA**	**WCAPA**
Independent Variables	*Estimate (Std. Error)*	*Estimate (Std. Error)*	*Estimate (Std. Error)*
INTERCEPT	*-0.0306 (0.0666)*	*-0.0303 (0.0665)*	*0.0290*** (0.0667)*
CUM EARN MGT	***-0.1602*** (0.0602)***	***-0.3013*** (0.0841)***	***-0.6239** (0.3004)***
WKNA	*-0.0114 (0.0396)*	*-0.0113 (0.0394)*	*0.0051 (0.0395)*
SIZE	*0.6815*** (0.0291)*	*0.6830*** (0.0291)*	*0.6673*** (0.0303)*
	All Models include the Year Fixed Effects		

*, **, and *** represent p < .10, p < .05, and p < .01, respectively.

SIZE = The natural log of the Market Value of Equity where both Size and Market Value of Equity are described in Table 1.
All other variables are as described in Table 3.

CONCLUSION

Carroll's (1979) definition of corporate social responsibility implicitly recognized that society has economic expectations of a firm, which provides a foundation to link a firm's social responsibilities with its financial reporting. Specifically, researchers have examined how financial reporting bias (an attribute of financial reporting quality) is related to corporate social performance. However, most of these studies consider a single year's accrual recognition and don't examine the relation between the balance sheet and the income statement, thus yielding mixed findings.

The current research recognizes the articulation between the balance sheet and income statement where an overall bias toward decreasing net income results in lower net asset values and, ceteris paribus, creates slack resources. The slack literature posits that a firm must have available resources before it can invest in CSP. This research hypothesizes that firms which use discretion in managing earnings downward will exhibit more positive social performance. Results are consistent with expectations.

Our paper contributes to the literature by considering the articulation between the income statement and balance sheet while drawing upon theory from the financial slack research to examine the relation between the cumulative effect of earnings discretion and CSP. Our method offers insights for the literature's mixed findings relating earnings management to CSP and provides a theoretical link between earnings management and financial slack within the context of CSP. This is an important consideration for future research and for making inferences about the implications of available resources and/or earnings for a firm's actions.

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