Corporate Social Responsibility, Firm Policies, and Performance

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Abstract

We examine several executive, firm, and industry-level characteristics that affect the propensity of firms to engage in activities that are socially responsible. First, we construct several aggregated and disaggregated measures that represent firms' engagement in socially responsible practices. We find that larger, older, cash rich, and solvent firms are more likely to employ actions considered socially responsible. Our results also suggest that firms in industries facing a recessionary trend are less likely to invest in social responsibility programs. Next, we examine the impact of corporate social responsibility (CSR) on firms' investment policies, organizational strategy, and performance. Our findings indicate that factors associated with CSR strengths positively relate to all three attributes whereas CSR concerns and firm attributes are negatively related, although the latter relation is statistically weaker. Finally, we perform several robustness checks that validate our findings.

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I. Introduction

The importance placed on factors besides profitability in evaluating the success of corporations is evident from a survey of over 1,500 corporate leaders at the 2004 *World Economic Forum* in Davos, Switzerland – less than 20% of those surveyed attributed profitability as the most important measure of corporate success (*The Economist*, January 22, 2004). While the results of this survey undermine the use of tangible metrics such as profitability, they do not necessarily imply the emergence of corporate social responsibility (CSR) as a new standard for the measurement of corporate success – less than 5% of respondents pointed to CSR as the single most important metric. However, about a fourth of all surveyed leaders indicated that good "corporate citizenship" matters most in defining corporate success. Regardless, industry leaders appear divided on what attributes best capture the success of publicly traded corporations.

Academic research on whether CSR is beneficial to firms has also burgeoned over the past decade. The primary focus of this stream of literature is whether it is financially beneficial for firms to engage in socially responsible practices. The empirical findings however, appear mixed, much like the divergent views of practitioners on the relative importance of attributes constituting corporate success.

In this study, we attempt to complement and extend the existing literature by examining two related questions: (i) What attributes determine the extent to which corporations engage in activities that constitute socially responsible behavior?, and (ii) How does CSR affect the investment policy, organizational strategy, and financial performance of firms. To this end, we compute several measures of CSR at the firm-year level using the KLD database and conduct our analyses on a sample of approximately 17,000 firm-year observations over the period 1996-2008.

First, we find that larger firms, older firms, cash rich firms, or firms that are less financially constrained, are more likely to engage in business practices that increase their score along the strengths *and* concerns dimensions in the CSR rating scale. This finding although apparently counter-intuitive is perhaps best illustrated with an anecdotal example: the corporation *Altria*, the parent company for *Phillip Morris* ranks high on the CSR "strengths" scale as well as on the "concerns" scale. The corporation's relatively high position in the strengths hierarchy is due to its long history and involvement in community development activities, while the nature of its business – tobacco industry, results in the firm's high rank in the concerns category. Our results also indicate that firms in industries with declining gross outputs over the previous year (or industries in a recessionary trend) have lower CSR rating scores; consistent with the argument that "non-essential" spending such as CSR programs would be the among the first to experience cost cutting measures.

Next, we investigate how strengths, concerns, and overall CSR ratings affect three important aspects of corporate policy and performance, namely, investment policy, organizational strategy, and firm value/performance. First, with respect to investment policy, we find that firms with higher CSR strength attributes invest more in capital expenditure (CAPEX) and Research & Development (R&D) while firms with greater CSR concerns on the regulatory front invest less in long-term investments (in CAPEX + R&D) and are less likely to engage in acquisitions. Next, we find that firms with high CSR strength scores relate positively with advertising as well as with selling, general and administrative expenses (SGA), respectively. Conversely, firms with high CSR concern scores are associated with

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lower levels of advertising and SGA expenditures. Taken together, the above findings are consistent with the argument that managers make investment and strategic choices that are in line with their firm's CSR attributes.

Finally, we examine if CSR attributes are recognized by market participants and whether they influence a firm's performance measured by its return on assets (ROA) and Tobin's Q. Consistent with some prior findings, we document a positive relation between CSR strengths and Firm Q – the ratio of a firm's market-to-book value. When firm performance is measured using ROA, we document a generally negative relation with respect to overall CSR concerns.¹ These findings are consistent with the idea that investors appear to reward socially responsible behavior, but a caveat is in order. Investor sentiment, manifested through overreaction could also explain our CSR-performance relation and our results need to be interpreted with this caveat in mind.

Our study contributes to the literature on CSR in two principal ways. First, we are to the best of our knowledge, the first to examine the relation between CSR and investment policy, as well as the relation between CSR and organizational strategy. Most prior studies have focused on the CSR-performance relation. Because performance is generally considered an output measure and not solely an artifact of managerial decisions, our study offers the first step in understanding the link between CSR programs and managerial decisions. Second, we contribute to the literature on the determinants of CSR strengths and concerns. In addition to the effect of firm size on CSR, we identify and show a significant relation between (new) variables such as firm age, Altman Z-score – a measure of the propensity of firms to be in

¹ The evidence in the prior literature is mixed in terms of the relation between firm performance and CSR strengths.

distress, cash holdings, and percentage change in industry gross output - a measure of the economic environment and trends in the industry.

In the next section, we discuss related literature and develop our hypotheses, followed by a description of our data and sample in Section III. We discuss our findings and robustness checks in Section IV and conclude in Section V.

II. Background and Development of Hypotheses

The debate on whether corporations should engage themselves in socially responsible programs has been ongoing for decades. For instance, Milton Friedman's article in the *New York Times* in 1970 asserts - "I share Adam Smith's skepticism about the benefits that can be expected from 'those who affected to trade for the public good'", and "... if these are 'social responsibilities', they are the social responsibilities of individuals, not of business". According to Friedman, active participation in CSR potentially drains corporate resources, distracts managers, and creates a situation that may encourage moral hazard. Proponents of CSR however, present a more supportive view of CSR. Freeman (1984) asserts that managers should satisfy numerous stakeholders, such as workers, customers, suppliers, and local community organizations.

Existing theories on the use of CSR can be classified into four groups: (i) the "enlightened value maximization" theory proposed by Jensen (2002) argues that CSR and long-term shareholder value maximization should be compatible with CSR being a vehicle for corporations to achieve the primary goal of value maximization, (ii) the "product differentiation" argument put forth by McWilliams and Siegel (2001) contends that benefits of CSR activities include differentiating the company or its products and advertising, or provide firms with a competitive advantage (Hart; 1995), (iii) the "strategic model" proposed

by McWilliams, Van Fleet and Cory (2002) which promotes the idea that CSR can be used as a political strategy to raise regulatory barriers on competitors, and (iv) the "risk management" theory of Godfrey (2005) who argues that engagement in CSR can provide shareholders with insurance-like protection for the firm's intangible assets.²

Prior literature shows that several firm and industry characteristics influence a firm's propensity to invest in socially responsible programs. For instance, larger firms tend to draw higher level of attention from the public, and have higher level of social impact (Cowen, Ferreri and Parker (1987)), suggesting that larger firms are more likely to engage in CSR. Stanwick and Stanwick (1998) provide supporting evidence that firm size is positively related to corporate social performance. The positive correlation between firm size and CSR can also be attributed to the scale of economy (McWilliams and Siegel (2001)). From a corporate governance perspective, Wang and Coffey (1992) document a positive relationship between several board composition variables (ratio of insiders to outsiders, percentage of stock ownership, and the proportion of female and minority board members) and firms' charitable contributions. On the other hand, Fich et al. (2009) find a positive link between charitable giving and weak governance. We include the Gompers, Ishii, and Metrick (2003) measure of governance index as a proxy for the level of corporate governance in the firm. Based on survey data, Waldman, Siegel and Javidan (2006) show that firms run by intellectually stimulating CEOs engage in more strategic CSR than comparable firms. In robustness checks we include CEO PPS and CEO tenure to try and capture this aspect.

In addition to the above variables, we include variables such as industry concentration, firm age, Altman Z-Score, level of cash holdings, and percentage change in gross industry output to examine the effect of additional firm, and industry characteristics on CSR strengths

² See Garriga and Melé (2004) for an excellent review of several existing theories.

and concerns. In more competitive industries CSR participation could either be higher because firms want to differentiate themselves from other firms in the industry (e.g., McWilliams and Siegel (2001)) or lower because increased competition could constrain firms from "non-essential expenses". The relation between industry concentration and CSR activity depends on the relative strengths of the two forces and is therefore ambiguous. Firm age may also impact the likelihood of socially responsible activities. Older, more mature firms may pay more attention to their involvement in such activities to maintain/improve their reputation as profit margins decline. On the other hand, younger firms may strive to be more socially responsible to differentiate themselves from their competitors.

A firm's propensity to engage in socially responsible activities is also dependent on its financial health. McGuire, Sundgren and Schneeweis (1988) find that the ratio of debt to assets is significantly negatively correlated with corporate social responsibility. This may be due to the possibility that firms with low financial risk can more easily continue to satisfy implicit claims, be less sensitive to certain external events such as governmental actions, and therefore can better afford to act in a socially responsible manner. In addition to a commonly used leverage ratio which is computed as total liabilities over total assets, we also measure firm's financial health by two other variables: the Altman Z-Score and the level of cash holdings. The former is a measure for the likelihood of financial distress while the latter measures the level of surplus cash. We hypothesize that firms' investment in programs that are socially responsible is negatively related to their financial leverage, and positively related to their financial health. Lastly, to capture the effects of economic environment in the industry on CSR strengths and concerns, we include percentage change in gross industry

output in our analysis. Declining industry prospects may make strategic CSR less likely as firms are forced to cut costs and refocus on profitability.

The above arguments offer perspectives of why CSR is beneficial to firms as well as potential reasons for the detrimental effects of CSR. Consequently, our hypothesis on the relation between CSR and its effect on the three aspects of firm policy and performance that we investigate are two-fold. In order to remain agnostic about the impact of CSR, we disentangle its measurement into strengths and concerns based on prior literature. We hypothesize that CSR strengths should relate positively with a firm's investment policy, organizational strategy, and performance. CSR concerns on the other hand are hypothesized to relate negatively with the three firm attributes we investigate.

II. Data, Sample, and Variable Definition

A. Measures of CSR (Main Independent Variables)

Our main variable of interest is the degree to which firms engage in socially responsible practices. Prior studies on CSR typically use the KLD data and construct the Corporate Social Performance (CSP) index (weighted or un-weighted) to measure firms' involvement in socially responsible practices.

We follow these studies and obtain our data from the KLD Stats database provided by *KLD Research & Analytics, Inc.* (recently acquired by *RiskMetrics Group*). The database covers firms' environmental, social and governance ratings as well as their controversial business involvements for S&P 500, Domini 400 Social, Russell 1000 and Russell 2000 firms from 1991 and 2006. Beginning in 2007, the database covers the largest 3,000 U.S. firms by market capitalization.³ Our initial sample results in 3,268 companies covered by

³For more detailed information about the KLD Stats, see the fact sheet at

KLD Stats from 1991 to 2008 (26,575 firm-year observations). We match the KLD data with *Compustat* and the *Center for Research in Securities Prices* (CRSP) to obtain other financial information. The final merged sample results in 17,325 firm-year observations over the period 1996 to 2008. The loss in the number of observations is primarily due to the unavailability of a common identifier such as CUSIP between the KLD database and Compustat / CRSP for years prior to 1995.

KLD evaluates companies on more than 280 data points to capture "strengths" and "concerns" under several categories that include community, diversity, employee relations, environment, human rights, products and governance. Waddock and Graves (1997) use a weighting scheme with the help of management experts to calculate a weighted average CSP index for each company. Similarly, Surroca, Tribo, and Waddock (2010) use Sustainanalytics weights to compute weighted sum of scores.⁴ On the other hand, Hillman and Keim (2001), and Garcia et al (2010) give equal importance to the KLD categories and construct their measures by simply summing the strengths and concerns of the KLD categories.

We aggregate the individual strength and concern values in all categories to form two index variables, *All Strengths* and *All Concerns*. Computing a single aggregate measure of CSR where concerns are deducted from strengths could potentially result in a wash with no meaningful "overall" measure of CSR. The two variables, *All Strengths* and *All Concerns*, are simple sums of strengths and concerns across all KLD categories. This is consistent with prevailing treatment of KLD data in the literature (Chatterji, Levin and Toffel (2009)). Then,

http://www.kld.com/research/data/KLD_STATS.pdf

⁴ "Sustainanalytics Responsible Investment Services" is the world's largest company specializing in the analysis of socially responsible investment. Sustainanalytics comprises 10 independent research institutions such as KLD.

for each firm-year observation, we compute two additional variables: *Rel All Strengths* and *Rel All Concerns* (relative variables) as follows:

First, we compute the variables, *Min* (*All Strengths*_{jt}) which is the minimum value of *All Strengths* in year t and two-digit SIC code industry j; and *Max* (*All Strengths*_{jt}) which is the maximum value of *All Strengths* in year t and industry j. We then define the variable *Rel All Strengths* for firm i and year t as follows:

$$Rel All Strengths_{it} = \frac{\sum_{s} AllStrengths_{it,s} - Min(AllStrengths_{jt})}{Max(AllStrengths_{jt}) - Min(AllStrengths_{jt})}.$$

The variable, Rel All Concerns, is constructed in an analogous manner:

Rel All Concerns_{it} =
$$\frac{\sum_{s} AllConcerns_{it,s} - Min(AllConcerns_{jt})}{Max(AllConcerns_{jt}) - Min(AllConcerns_{jt})}$$
.

Thus, the values of *Rel All Strengths* and *Rel All Concerns* variables are bounded between zero and one. These variables allow us to (i) normalize the CSR measures between zero and one, (ii) preserve information on the relative magnitude of each firm's CSR strengths and concerns, and (iii) rank a firm's CSR measure in relation to its peer firms in the same industry.

Baron, Harjoto, and Jo (2009) further disaggregate KLD strengths (CSP) into strategic (C1) and responsive (C2); and KLD concerns into social pressure from public politics (Su) and social pressure from private politics (Sr). Strategic CSP components could directly increase revenue or productivity, whereas responsive CSP components are likely to be a response to a social pressure. Social pressure from public politics could arise due to government intervention in the form of regulation and enforcement in areas such as workplace safety and antitrust, whereas social pressures from private politics could stem from social activists in the form of boycotts, media campaigns, and harm to a firm's

reputation or brand equity. Baron, Harjoto and Jo (2009) scale the sum of strengths and concerns by their relative maximum values to achieve measures that are bounded between zero and one.

Following Baron, Harjoto, and Jo (2009), we compute variables *C1 Strengths*, *C2 Strengths*, and *C1C2 Strengths* for firm *i* in year *t* as follows:

$$C1 Strengths_{it} = \frac{\sum_{s} C1 Strenghts_{it,s}}{Max(C1 Strenghts_{t})}; \quad C2 Strengths_{it} = \frac{\sum_{s} C2 Strenghts_{it,s}}{Max(C2 Strenghts_{t})};$$

C1C2 Strengths = C1 Strengths + C2 Strengths.

Our *Su Concerns* (concerns from public pressure) and *Sr Concerns* (concerns from private pressure) variables are computed as:

$$Su \ Concerns_{it} = \frac{\sum_{s} Su \ Concerns_{it,s}}{Max(Su \ Concerns_{t})}; \quad Sr \ Concerns_{it} = \frac{\sum_{s} SrConcerns_{it,s}}{Max(SrConcerns_{t})};$$

SuSr Concerns = Su Concerns + Sr Concerns.

Baron, Harjoto and Jo (2009) acknowledge that the assignment of individual strength and concern indicators into categories of strategic/responsive CSP and public/private pressure is a subject to individual judgment. We provide the list of strength and concern indicators used in this study in the *Data Appendix*.

Panel B of Table 1 provides summary statistics for all the CSR strength variables used in our study. The median firm in our sample lists one strength overall. The average number of strengths per firm-year is 1.46. There is no significant difference between the disaggregated measures of CSR strengths – the mean and median values of *C1 Strengths* and *C2 Strengths* are identical. Panel C provides descriptive statistics for all CSR concerns. The mean (median) value for *All Concerns* is 1.73 (1.00), which is not significantly different from the corresponding figures for CSR strengths. These statistics indicate the importance of

disentangling strengths from concerns. Computing an aggregate measure of CSR where concerns are deducted from strengths could potentially result in a wash with no meaningful "overall" measure of CSR. This is one of the primary reasons for the design of our tests, which recognize and take into account the fact that strengths and concerns need to be separated. To investigate this further, we compute pair wise correlations among the strengths and concerns and report these in Table 2. The correlation between *All Strengths (Rel All Strengths)* and *All Concerns (Rel All Concerns)* is 0.3486 (0.2820), which is statistically significant at the five percent level (or better). Similarly the correlations between all strength variables and their corresponding concern variables are also positive and statistically significant. The correlations indicate that firms with larger CSR strengths are more likely to have large concerns and therefore reinforce the need for the separation of strengths and concerns in our analyses.

B. Measures of Firm Policies and Performance (Dependent Variables)

We follow Bertrand and Schoar (2003) to construct our dependent variables which we categorize into three groups. The first group is *Investment policy*: we proxy for the firm's investment policy using the following two variables: CAPEX + R&D, which is the sum of firm's capital expenditures and the research and development expenses scaled by total assets; and *Num Acq*, which is the number of acquisitions undertaken by the firm in a given year. We obtain data from Compustat in the construction of the variable CAPEX + R&D and the *Securities Data Company* (SDC) to obtain the number of acquisitions. Our second group is *Organizational strategy*, which we measure using the variables *Adv Expenses* and *SGA*. Both variables are constructed using data from *Compustat*. Finally, we include two variables in the group that measures *Firm performance: Firm Q* and *ROA* constructed using data from

Compustat. We winsorize all variables at the 1 and 99 percentiles to minimize the influence of outliers. All variables are defined in detail in the *Data Appendix*. Panel A of Table 1 presents summary statistics for all these variables.

C. Other Variables (Control Variables)

We largely follow Bertrand and Schoar (2003) and include several control variables at the executive, firm, and industry levels which are summarized Panel D of Table 1. These include firm characteristics such as *Firm Size* defined as the natural log of a firm's sales for each year in the sample and *Firm Age*, the number of years up to the sample year for which the firm appears on the *CRSP* database. The average firm's age in our sample is 18 years, while the median firm age is 15 years. The variable *Cash Flow* is used to proxy for the solvency level and/or cash profits. To account for firm performance and risk, we use the return on assets (*ROA*) defined as the ratio of the firm's net income to total assets and *Risk* which is the variance of the firm's monthly stock returns over the 12-month period prior to the sample year. To measure the effectiveness of corporate governance and degree of managerial entrenchment, we use the Governance Index (Gompers, Ishii and Metrick (2003)). This data is available directly from Professor Metrick's website.⁵

In robustness checks, we include the variables *CEO PPS* and *CEO Tenure*. CEO compensation and tenure data are initially obtained from Standard and Poor's ExecuComp database. We also try to supplement by manually collecting CEO compensation data from company's 10-K and proxy statements if they are not available from ExecuComp. We define *CEO PPS* as the sum of stock and option sensitivities to a \$100 change in shareholders' wealth:

CEO PPS = ((Number of shares held by the manager + delta of options * number of

⁵ <u>http://www.som.yale.edu/faculty/am859/data.html</u>

options held by the manager) / total number of shares outstanding) X 100.⁶

The variable *CEO Tenure* is the numbers of years a firm's CEO has held that position. The average CEO in our sample has held the title for nearly 8 years. To account for competition among firms in an industry we define *Ind Conc* which is the sales-based Herfindahl Index for each 2-digit SIC industry. To account for the level/propensity of financial distress, we construct the updated version of the Altman Z-score following Hillegeist (2004). Finally, we compute the growth rate in the gross output for each industry using data from the *Bureau of Economic Analysis* (BEA) to take into account the economic conditions and industry trends.

D. Estimation methods

To examine the effects of CSR on CFP as well as various firm policies, we estimate the following OLS regressions:

$$\begin{aligned} &Investments_{it} = \alpha + \beta \times CSR_{it} + \delta \times Control \ Variables_{it} + \gamma \times Industry \ Dummies + \\ &+ \eta \times Year \ Dummies + \varepsilon_{it}; \end{aligned}$$

$$Org. \ Strategy_{it} = \alpha + \beta \times CSR_{it} + \delta \times Control \ Variables_{it} + \gamma \times Industry \ Dummies + \\ &+ \eta \times Year \ Dummies + \varepsilon_{it}; \end{aligned}$$

$$Firm \ Perf_{it} = \alpha + \beta \times CSR_{it} + \delta \times Control \ Variables_{it} + \gamma \times Industry \ Dummies + \\ &+ \eta \times Year \ Dummies + \varepsilon_{it}; \end{aligned}$$

We estimate the above specifications based on models used in Bertrand and Schoar (2003). The control variables we employ in these regressions are almost identical to those used by the authors. The specifications also include our measures of CSR. In particular, we use the variables *Lag Firm Q*, *Cash Flow*, *Lag Firm Size*, *Firm Risk*, *GI*, and *Ind Conc* as

⁶ We use the percentage of stock ownership at the beginning of the year to obtain the stock-based sensitivity of an executive's equity portfolio. For option holdings, we follow Murphy (1999) and determine an average exercise price for all previously granted options based on their year-end intrinsic value. We treat all option holdings as a single grant with a five-year time to maturity and obtain the risk-free rate from the five-year treasury bills constant maturity series. We compute the average delta of prior option grants using the modified Black-Scholes formula.

control variables in *Investment Policy* regressions. We drop the variables *Lag Firm Q* and *Cash Flow*, but include *ROA* when *Num Acq* is the dependent variable instead of *CAPEX+R&D*. We use the variables *Cash Flow*, *ROA*, *Lag Firm Size*, *Firm Risk*, *GI*, and *Ind Conc* as control variables in *Organization Strategy* regressions and use *Lag Firm Size*, *Firm Risk*, *Ind Conc*, *Leverage*, and *GI* as control variables in the *Firm Performance* regressions.

IV. Discussion of Results

A. Determinants of CSR Strengths and Concerns

Table 3 presents estimates from the regressions examining the determinants of CSR. The dependent variables in these specifications are *Rel All Strengths* and *Rel All Concerns*, as well as each of the components in the *C1C2 Strengths* and *SuSr Concerns* from Baron et al. (2009). We find that firm size is positively and significantly related to both CSR strengths and concerns, indicating that larger firms tend to carry out activities that attract attention from various stakeholder groups such as employees, customers, the community, and suppliers, as well as government, NGOs, and social activists. Similarly, we find that firm age is positively and significantly related to both CSR strengths and concerns, with private pressure being the only exception.

Further, firms with high leverage tend to have lower *Rel All Strengths* and higher *Rel All Concerns*. The coefficients on updated Altman Z variable are positive and significant across all six models, but the coefficient is relatively small in magnitude indicating a lack of economic significance. In addition, firm's cash holding is positively and significantly related to both CSR strengths and concerns indicating that large, mature, cash rich firms tend to carry out activities that attract attention from various stakeholder groups.

B. Effect of CSR on Investment Policy

Table 4 presents estimates from the regressions for the effect of CSR on firm's investment policy. We base the specifications of the investment regressions on models in Bertrand and Schoar (2003) and use control variables similar to theirs in addition to our CSR measures. The first two columns in Table 4 report regressions using *Rel All Concerns* and *Rel All Strengths* as CSR measures, while last two columns report regressions using *Cl strengths, C2 strengths, Su Concerns,* and *Sr Concerns* from Baron et al. (2009) as CSR measures.

First, positive and significant coefficient (significant at the 10% level) on *Rel All Strengths* in column (1) indicates that good CSP positively impacts firm's investment policy even after controlling for firm performance, cash flow, firm size, firm risk, and industry concentration. However, such positive impact is not observed when we measure firm's investments by the number of acquisitions by the firm (column (2)). Using Baron et al. (2009)'s definition of CSP (reported in column (3)) confirms the positive impact of CSP on firm's investments. However, the positive impact of *Rel All Strengths* appears to be driven by the effect of *C1 Strengths*. This is not surprising given that *C1 Strengths* capture firm's activities aimed at directly increasing revenue or productivity, whereas *C2 Strengths* capture firm's responses to social pressure.

Second, while first two columns of Table 4 indicate *Rel All Concerns* has no impact on firm's investments, *Su Concerns* has a significant and negative impact on capital expenditures and R&D, as well as number of acquisitions. This result suggests that social pressure from public politics in the form of regulation and enforcement is counterproductive in that it reduces firm's investments.

Across all models in Table 4, the coefficients on the control variables are generally in the direction we expect. Firm performance (*Firm Q* and *ROA*) has a positive effect on firm's investments. Firm size has a negative impact on levels of capital expenditure and R&D, but positive impact on number of acquisitions, suggesting that larger firms carry out more acquisitions, while smaller firms invest internally. This is also consistent with the negative and significant coefficient on cash flow. Moreover, riskier firms invest more internally in the form of capital spending and R&D.

C. Effect of CSR on organizational strategy

Table 5 presents results from regressions for the effect of CSR on organizational strategy. The first two columns in Table 5 report regressions using *Rel All Concerns* and *Rel All Strengths* as CSR measures, while last two columns report regressions using *C1 strengths, C2 strengths, Su Concerns*, and *Sr Concerns* from Baron et al. (2009) as CSR measures.

The significant and positive coefficient on *Rel All Strengths* in both columns (1) and (2) suggests that good CSP has a positive impact on organizational strategy, which is confirmed by the significant and positive coefficients on *C1 Strengths* as well as *C2 Strengths*. Therefore, no matter whether it is strategic initiative from the firm, or response to social pressure, firm's CSP has a positive impact on the amount of advertising and selling, general, and administrative expenses. While *Rel All Concerns* has no impact on organizational strategy, *Su Concerns* has a significant and negative effect on organizational strategy. Similar to the results on effect of CSR on investment policy, these results suggest that social pressure from public policy is counterproductive.

In addition, results in Table 5 indicate that firm risk has positive impact on organizational strategy. Firms with high levels of ROA, and firms in concentrated industries spend more on

advertising. Negative and significant coefficient on governance index in models (2) and (4) suggests that firms with weaker governance have lower levels of selling, general, and administrative expenses.

D. Effect of CSR on firm performance

Table 6 presents results from regressions for the effect of CSR on firm performance. The first two columns in Table 6 report regressions using *Rel All Concerns* and *Rel All Strengths* as CSR measures, while last two columns report regressions using *C1 strengths*, *C2 strengths*, *Su Concerns*, and *Sr Concerns* from Baron et al. (2009) as CSR measures.

The significant and positive coefficient on *Rel All Strengths* in both columns (1) and (2) suggests that good CSP has a positive impact on firm performance, which is confirmed by the significant and positive coefficients on *C1 Strengths* as well as *C2 Strengths*. It is interesting to note that while both *C1 Strengths* and *C2 Strengths* have positive and significant impact on Firm Q, only *C1 Strengths*, and not *C2 Strengths* (firm's strategic CSP and not responsive CSP) have positive effect on firm's ROA. This is confirmed by stronger effect of *Rel All Strength* on Firm Q compared to its effect on ROA.

While *Rel All Concerns* has negative and significant impact on firm's ROA, the components of *SuSr Concerns* (which are *Su Concerns* and *Sr Concerns*) don't exhibit any significant effect on ROA. Thus, the effect of KLD strengths on firm performance is more robust than the effect of KLD concerns on firm performance.

As for the control variables, leverage is consistently negative across all four models. Regardless of the measure of firm performance, and measure of CSR, leverage is negatively related to firm performance. Firm size has positive and significant effect on *Firm Q*, and firm risk has negative and significant effect on *ROA*. Lastly, firms with stronger governance are associated with higher *Firm Q*.

E. Robustness Checks

Table 7 presents results from robustness tests. Since prior literature shows that CEO incentives and tenure have a significant effect on various firm policies and performance, we include the variables *CEO PPS* and *CEO Tenure* as additional explanatory variables. However, intersection of our data with *Execucomp* results in significant reduction in sample size. For expositional ease, we select one regression each for examining the effect of CSR on the investment policy (*CAPEX*+*R*&*D*), organizational strategy (*Adv Expenses*), and firm performance (*Firm Q*).

Despite the significant reduction in sample size, our main results still hold. Specifically, *Rel All Strengths* has a statistically significant and positive effect on firms' investment policy, organizational strategy, and firm performance. When KLD strengths are disaggregated into *C1 Strengths* and *C2 Strengths* following Baron et al. (2009), we find that *C1 Strengths* (strategic CSP) has a positive and significant impact on firms' investments, and *Firm Q*, whereas *C2 Strengths* (responsive CSP) has a positive and significant impact on *Adv Expenses* and *Firm Q*. The KLD concern variable, *Rel All Concerns* has negative and significant impact on *Adv Expenses*, possibly due to social pressure from public politics (*Su Concerns*).

CEO PPS has a positive and statistically significant effect on firm's organizational strategy, but no significant effect on investment policy and firm performance. The coefficient on *CEO Tenure* appears to have no significant impact on firm policy or performance.

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V. Conclusions

Corporate Social Responsibility (CSR) has assumed increasing importance in the practitioner as well as in the academic community. The debate on whether CSR is financially rewarding however remain a contentious issue. To address this issue, prior research has examined the effect of CSR on firm performance with mixed results. In this study, we complement and extend the extant research by including two additional dimensions to a firm's characteristics. The novelty in our approach and our main contribution is the inclusion of variables that are the direct result of managerial decisions – a firm's investment policy and its organizational strategy. In other words, we examine the effect of CSR on firm characteristics that result from choices that corporate executives make, in addition to accounting and market based outputs (which are not solely under management's control).

Our results indicate that CSR strengths are positively associated with both investment policy and organization strategy. We also find evidence consistent with the argument that market participants reward investment in socially responsible programs, but do not penalize CSR concerns as strongly as they reward CSR strengths. We also add to the prior literature on determinants on CSR and identify at least two other factors which significantly influence firms' participation in CSR programs – their likelihood of becoming distressed and the level of cash holdings. Overall, our study offers a comprehensive analysis of the determinants of corporate social responsibility and its effect along multiple dimensions on a firm's policies and performance.

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Data Appendix

Variable	Definition
Panel A: CSR Variables	
All Strengths	Sum of all KLD strengths in community, corporate governance, diversity, employee relations, environment, human rights, and product areas for each firm year.
Rel All Strengths	Sum of all KLD strengths minus minimum of all KLD strengths over maximum of all KLD strengths minus minimum of all KLD strengths.
All Concerns	Sum of all KLD concerns in community, corporate governance, diversity, employee relations, environment, human rights, and product areas; as well as concerns in controversial business issues such as alcohol, gambling, tobacco, firearms, military, and nuclear power for each firm year.
Rel All Concerns	Sum of all KLD concerns minus minimum of all KLD concerns over maximum of all KLD concerns minus minimum of all KLD concerns.
C1 Strengths	Strategic CSP Index (Baron, Harjoto, and Jo 2009). It is calculated from the sum of all strategic choice criteria (C1) for each firm in year t divided by the maximum sum of all KLD strengths for all firms in year t.
C2 Strengths	Responsive to Social Pressure Index (Baron, Harjoto, and Jo 2009). It is calculated from the sum of all reactions to social pressure criteria (C2) for each firm in year t divided by the maximum sum of all KLD strengths for all firms in year t.
C1C2 Strengths	Corporate Social Performance (CSP) Index (Baron, Harjoto, and Jo 2009), which is equal to sum of C1 and C2 strengths defined above.
Su Concerns	Public Pressure Index (Baron, Harjoto, and Jo 2009). It is calculated from the sum of all public pressure criteria (Su) for each firm in each year t divided by the maximum sum of all KLD concerns for all firms in year t.
Sr Concerns	Private Pressure Index (Baron, Harjoto, and Jo 2009). It is calculated from the sum of all private pressure criteria (Sr) for each firm in each year t divided by the maximum sum of all KLD concerns for all firms in year t.
SuSr Concerns	Social Pressure Index from Public (Su) and Private (Sr) Pressures.

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Data Appendix (Continued)

KLD Category	Strategic (C1)	Responsive (C2)
Community	Charitable giving	Innovative giving
5	Non-US charitable giving	Support for housing
	Other strength	Support for education
Environment	Beneficial products & services	Recycling
	Pollution prevention	Other strength
	Clean energy	
	Property, plant, and equipment	
Diversity	Promotion	CEO
	Work/life benefits	Board of directors
		Women and minority contracting
		Employment of the disabled
		Gay and lesbian policies
		Other strengths
Employee relations	Cash profit sharing	No layoff policy
	Retirement benefits strength	Employee involvement
	Health and safety strength Other strength	union relations
Human Rights	Labor rights	Positive record in South Africa
C	Other strength	Indigenous peoples relations
Product	Quality	Benefits to economically disadvantaged
	R&D/Innovation	
Corporate governance		Limited compensation
		Ownership strength

KLD Category	Public Pressure (Su)	Private Pressure (Sr)
Community		Investment controversies
		Negative economic impact
		Other concerns
Environment	Regulatory problems	Ozone depleting chemicals
		Substantial emissions
		Climate change
Diversity	Controversies	Non-representation
Employee relations	Union relations	Workforce reductions
	Health and safety concerns	Retirement benefit concerns
Human rights		South Africa Northern Ireland Burma Mexico
		Labor rights
		Indigenous peoples relations Concern
Product	Product safety	
	Antitrust	
	Other concerns	
Corporate governance		High compensation
		Ownership concerns

Data Appendix (Continued)

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Data Appendix (Continued)

Panel D: Other Variables

CAPEX + R&D	Capital expenditures plus research and development expenses scaled by total assets.
Num Acq	Total number of acquisitions in the fiscal year (from SDC).
Adv Expenses	Ratio of advertising expenditures over lagged total assets
SGA	Ratio of selling, general, and administrative expenses over sales
Firm Q	Market value of assets divided by the book value of assets, where the market value of assets equals the book value of assets plus the market value of common equity less the sum of the book value of common equity and balance sheet deferred taxes.
ROA	Ratio of EBITDA over lagged total assets
Firm Size	Natural log of firm sales
Firm Age	Number of years since the beginning date on CRSP
Leverage	Long-term debt plus debt in current liabilities over total assets
Z Score	Altman's (1968) Z-score, calculated using updated coefficients from Hillegeist et al (2004). Lower Z-score indicates higher levels of financial distress.
Cash Holdings	Cash and short-term investments over total assets
Cash Flow	Sum of earnings before extraordinary items and depreciation over net property, plant and equipment at the beginning of the fiscal year.
Risk	Standard deviation of monthly returns in the fiscal year
GI	Governance index from Gompers et al (2003). It ranges from 1 to 24, high G-index implies weak governance and low G-index implies strong governance.
CEO PPS	(# of Shares owned + Average Delta of options X # of options) / Total Shares outstanding X 100
CEO Tenure	Number if years since becoming CEO (from ExecuComp).
Ind Concentration	Herfindahl-Hirschman Index calculated based on firms' annual sales.

Table 1: Summary Statistics

The table presents summary statistics for variables used in the study. Panel A reports summary statistics for the variables used to proxy for firms' Investment Policy, Organization Strategy, and Performance. Panels B and C present summary statistics for variables representing CSR strengths and concerns respectively. Panel D presents summary statistics for all other variables used in the study. The construction of all variables are described in the *Data Appendix*.

Variable	Ν	Mean	SD	Lower Quartile	Median	Upper Quartile
Panel A: Dependent Variables						
Investment Policy						
CAPEX + R&D	16,408	0.10	0.12	0.03	0.07	0.13
Num Acq	17,087	0.31	0.72	0.00	0.00	0.00
Organization Strategy						
Adv Expenses	17,073	0.01	0.03	0.00	0.00	0.01
SGA	14,383	0.28	0.21	0.14	0.24	0.36
<u>Firm Performance</u>						
Firm Q	17,047	2.13	1.45	1.20	1.61	2.45
ROA	17,071	0.04	0.13	0.01	0.05	0.09
Panel B: CSR Strengths						
All Strengths	17,325	1.46	2.01	0.00	1.00	2.00
Rel All Strengths	17,194	0.19	0.27	0.00	0.09	0.27
C1 Strengths	17,325	0.05	0.07	0.00	0.00	0.07
C2 Strengths	17,325	0.05	0.07	0.00	0.00	0.07
C1C2 Strengths	17,325	0.09	0.13	0.00	0.06	0.13
Panel C: CSR Concerns						
All Concerns	17,325	1.73	1.84	1	1	2
Rel All Concerns	17,203	0.25	0.26	0	0.17	0.33
Su Concerns	17,325	0.02	0.05	0	0	0
Sr Concerns	17,325	0.07	0.06	0	0.06	0.12
SUSR Concerns	17,325	0.09	0.09	0	0.07	0.13
Panel D: Other Variables and Controls						
Lag Firm Q	13,334	2.14	1.45	1.21	1.62	2.46
Cash Flow	17,003	0.8	3.03	0.19	0.49	1.12
Lag Firm Size	13,356	7.56	1.67	6.34	7.47	8.65
ROA	17,309	0.04	0.13	0.01	0.05	0.09
Risk	16,801	0.1	0.05	0.06	0.09	0.12
GI	17,287	9.21	2.17	8	9	10
CEO PPS	9,545	2.61	4.76	0.39	0.98	2.37
CEO Tenure	9,156	7.92	7.38	3	6	10
Ind Conc	17,325	0.06	0.06	0.03	0.04	0.07
Leverage	17,199	0.42	0.43	0.09	0.35	0.6
Cash Holdings	17,308	0.21	0.29	0.03	0.08	0.26
Firm Age	17,262	18.28	13.03	8	15	30
Updated Z Score	14,411	182.54	382.43	0.53	1.48	16.22
Per Chg Ind Output	14,304	0.06	0.07	0.03	0.06	0.08

Table 2: Correlations among CSR variables

The table presents pairwise correlations among all the variables that proxy for CSR strengths and concerns. * represents statistical significance at the 5% or better. All variables are defined in the *Data Appendix*.

	All Strengths	Rel All Strengths	All Concerns	Rel All Concerns	C1 Strengths	C2 Strengths	C1C2 Strengths	Su Concerns	Sr Concerns	SuSr Concerns
All Strengths	1									
Rel All Strengths	0.7850*	1								
All Concerns	0.3486*	0.2553*	1							
Rel All Concerns	s 0.2449*	0.2820*	0.7786*	1						
C1 Strengths	0.8225*	0.6946*	0.2621*	0.1950*	1					
C2 Strengths	0.8224*	0.6873*	0.2394*	0.2064*	0.5088*	1				
C1C2 Strengths	0.9469*	0.7953*	0.2889*	0.2309*	0.8733*	0.8638*	1			
Su Concerns	0.3145*	0.2658*	0.7418*	0.5657*	0.2659*	0.2342*	0.2882*	1		
Sr Concerns	0.1521*	0.0860*	0.7433*	0.6343*	0.1152*	0.1030*	0.1257*	0.2589*	1	
SUSR Concerns	0.2780*	0.2046*	0.9306*	0.7576*	0.2254*	0.1996*	0.2449*	0.7230*	0.8545*	1

Table 3: Determinants of CSR

The table presents regressions for the determinants of strength and concern variables for CSR. The dependent variables in the first three columns represent strengths and represent concerns in the next three columns respectively. The *t*-statistics shown in parentheses below all estimates are computed based on standard errors that are robust to the presence of heteroskedasticity and clustered by firm. All specifications include year and 2-digit SIC industry dummies. ^{*}, ^{**}, and ^{****} represent statistical significance at the 10%, 5%, and 1% levels respectively. All variables are defined in the *Data Appendix*.

	(1)	(2)	(3)	(4)	(5)	(6)
	Rel All Strengths	C1 Strengths	C2 Strengths	Rel All Concerns	Su Concerns	Sr Concerns
Firm Size	0.062^{***}	0.018^{***}	0.018^{***}	0.076^{***}	0.014^{***}	0.014***
	(12.63)	(10.09)	(9.50)	(20.30)	(14.95)	(14.31)
Firm Age	0.002^{***}	0.001^{***}	0.000^{***}	0.001^{***}	0.000^{***}	0.000
	(4.21)	(4.47)	(3.21)	(3.52)	(3.87)	(1.12)
Leverage	-0.035**	-0.006	-0.006	0.025^{*}	-0.001	0.003
	(-2.32)	(-1.26)	(-1.20)	(1.86)	(-0.33)	(1.03)
Cash Holdings	0.055^{***}	0.011***	0.018^{***}	0.054^{***}	0.000	0.011***
-	(5.14)	(3.00)	(4.85)	(5.74)	(0.01)	(3.68)
Updated Z Score	0.000^{***}	0.000^{*}	0.000^{***}	0.000^{***}	0.000^{***}	0.000^{***}
-	(3.17)	(1.96)	(3.81)	(4.46)	(3.72)	(4.14)
Per Chg Ind Output	0.025	-0.021*	-0.007	-0.022	-0.021***	-0.015
C X	(0.63)	(-1.95)	(-0.81)	(-0.70)	(-3.37)	(-1.58)
Ind Conc	-0.081	0.043	-0.052	-0.258	0.011	0.045
	(-0.30)	(0.61)	(-1.22)	(-0.91)	(0.27)	(0.97)
Constant	0.062	-0.053**	-0.068***	-0.003	-0.079***	-0.001
	(0.34)	(-1.99)	(-3.01)	(-0.02)	(-4.00)	(-0.04)
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.257	0.282	0.208	0.290	0.300	0.164
Adjusted R^2	0.253	0.278	0.203	0.286	0.296	0.159
Observations	11,377	11,439	11,439	11,392	11,439	11,439

Table 4: Effect of CSR on Investment Policy

The table presents regressions for the effect of CSR strengths and concerns on firm's investment policy. The dependent variable in columns (1) and (3) is CAPEX + R&D and Num Acq in columns (2) and (4), respectively. The *t*-statistics shown in parentheses below all estimates are computed based on standard errors that are robust to the presence of heteroskedasticity and clustered by firm. All specifications include year and 2-digit SIC industry dummies. *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels respectively. All variables are defined in the *Data Appendix*.

	(1)	(2)	(3)	(4)
	CAPEX + R&D	Num Acq	CAPEX + R&D	Num Acq
Rel All Concerns	0.002	-0.036		
	(0.37)	(-0.81)		
Rel All Strengths	0.007^{*}	-0.040		
	(1.80)	(-1.18)		
Lag Firm Q	0.023***		0.023***	
	(20.38)		(20.17)	
Cash Flow	-0.008***		-0.008***	
	(-12.27)		(-12.25)	
Lag Firm Size	-0.008***	0.073***	-0.008***	0.073***
	(-7.76)	(6.24)	(-7.70)	(6.45)
Risk	0.236***	-0.021	0.232***	-0.060
	(8.72)	(-0.11)	(8.62)	(-0.33)
Ind Conc	-0.062	-0.032	-0.074^{*}	0.104
	(-1.54)	(-0.10)	(-1.87)	(0.34)
GI	-0.000	-0.009	-0.000	-0.008
	(-0.75)	(-1.12)	(-0.78)	(-1.06)
ROA		0.270^{***}		0.268^{***}
		(3.14)		(3.13)
C1 Strengths			0.034**	-0.128
			(2.29)	(-0.86)
C2 Strengths			0.025	0.306
			(1.62)	(1.37)
Su Concerns			-0.046**	-0.669***
			(-2.13)	(-2.60)
Sr Concerns			0.015	0.159
			(0.94)	(1.19)
Constant	0.088^{***}	-0.028	0.098^{***}	-0.174
	(3.95)	(-0.13)	(4.58)	(-0.89)
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes
R^2	0.489	0.060	0.489	0.061
Adjusted R^2	0.486	0.054	0.485	0.055
Observations	12,685	13,168	12,774	13,259

Table 5: Effect of CSR on Organizational Strategy

The table presents regressions for the effect of CSR strengths and concerns on organizational strategy. The dependent variable in columns (1) and (3) is *Adv Expenses* and *SGA* in columns (2) and (4), respectively. The *t*-statistics shown in parentheses below all estimates are computed based on standard errors that are robust to the presence of heteroskedasticity and clustered by firm. All specifications include year and 2-digit SIC industry dummies. *, **, and *** represent statistical significance at the 10%, 5%, and 1% levels respectively. All variables are defined in the *Data Appendix*.

	(1)	(2)	(3)	(4)
	Adv Expenses	SGA	Adv Expenses	SGA
Rel All Concerns	-0.003	0.008		
	(-1.33)	(0.80)		
Rel All Strengths	0.009^{***}	0.088^{***}		
	(3.18)	(8.37)		
Cash Flow	0.000	-0.002	0.000	-0.002
	(0.89)	(-0.88)	(0.84)	(-0.97)
ROA	0.024^{***}	-0.569***	0.024***	-0.568***
	(3.98)	(-11.79)	(4.03)	(-11.81)
Lag Firm Size	-0.001	-0.033***	-0.001	-0.033***
	(-1.22)	(-12.00)	(-1.34)	(-11.57)
Risk	0.034***	0.161***	0.031***	0.140^{**}
	(3.51)	(2.71)	(3.22)	(2.36)
Ind Conc	0.034^{*}	0.118	0.044^{**}	0.114
	(1.95)	(1.60)	(2.31)	(1.56)
GI	-0.000	-0.004***	-0.000	-0.003**
	(-1.15)	(-2.66)	(-0.95)	(-2.22)
C1 Strengths			0.019^{**}	0.137***
			(2.09)	(3.06)
C2 Strengths			0.030^{***}	0.281^{***}
			(3.38)	(6.29)
Su Concerns			-0.024**	-0.144**
			(-1.99)	(-2.18)
Sr Concerns			-0.003	0.058
			(-0.47)	(1.44)
Constant	-0.006	0.362***	-0.008	0.420^{***}
	(-0.99)	(6.69)	(-1.32)	(5.89)
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes
R^2	0.274	0.424	0.278	0.429
Adjusted R^2	0.269	0.419	0.273	0.425
Observations	12,959	10,947	13,050	11,021

Table 6: Effect of CSR on Firm Performance

The table presents regressions for the effect of CSR strengths and concerns on firm performance. The dependent variable in columns (1) and (3) is *Firm Q* and *ROA* in columns (2) and (4), respectively. The *t*-statistics shown in parentheses below all estimates are computed based on standard errors that are robust to the presence of heteroskedasticity and clustered by firm. All specifications include year and 2-digit SIC industry dummies. *, **, and **** represent statistical significance at the 10%, 5%, and 1% levels respectively. All variables are defined in the *Data Appendix*.

	(1)	(2)	(3)	(4)
	Firm Q	ROA	Firm Q	ROA
Rel All Concerns	0.063	-0.013***		
	(0.93)	(-2.84)		
Rel All Strengths	0.556^{***}	0.009^*		
	(7.04)	(1.92)		
Lag Firm Size	-0.154***	0.003**	-0.156***	0.002
	(-7.12)	(2.02)	(-7.11)	(1.06)
Risk	-0.066	-0.709***	-0.148	-0.710****
	(-0.15)	(-17.22)	(-0.34)	(-17.34)
Ind Conc	0.598	0.066	0.526	0.077^*
	(1.01)	(1.50)	(0.91)	(1.75)
Leverage	-0.318***	-0.052^{***}	-0.321***	-0.052***
	(-4.08)	(-8.86)	(-4.14)	(-9.01)
GI	-0.025**	-0.001	-0.022**	-0.001
	(-2.58)	(-1.51)	(-2.36)	(-1.61)
C1 Strengths			1.040^{***}	0.065^{***}
			(2.84)	(3.20)
C2 Strengths			1.758^{***}	0.006
			(4.64)	(0.30)
Su Concerns			-0.645	-0.001
			(-1.54)	(-0.05)
Sr Concerns			0.300	-0.030
			(1.12)	(-1.47)
Constant	3.417***	0.086^{***}	3.848***	0.107***
	(5.87)	(5.32)	(6.33)	(4.48)
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes
R^2	0.244	0.188	0.251	0.190
Adjusted R^2	0.239	0.183	0.247	0.184
Observations	13,085	13,084	13,176	13,175

Table 7: Robustness Checks

The table presents robustness checks for the effect of CSR strengths and concerns on firms' investment policy, organizational strategy, and performance. The dependent variables in the three sets of two specifications each are CAPEX + R&D, Adv *Expenses*, and *Firm Q*, respectively. The *t*-statistics shown in parentheses below all estimates are computed based on standard errors that are robust to the presence of heteroskedasticity and clustered by firm. All specifications include year and 2-digit SIC industry dummies. ^{*}, ^{**}, and ^{***} represent statistical significance at the 10%, 5%, and 1% levels respectively. All variables are defined in the *Data Appendix*.

defined in the Data App						
	(1)	(2)	(3)	(4)	(5)	(6)
	CAPEX + R&D	CAPEX + R&D		Adv Expenses	Firm Q	Firm Q
Rel All Concerns	-0.005		-0.005**		-0.037	
	(-1.12)		(-2.09)		(-0.45)	
Rel All Strengths	0.009^{**}		0.008^{***}		0.512^{***}	
	(2.25)		(2.63)		(5.22)	
Lag Firm Q	0.020^{***}	0.020^{***}				
-	(14.12)	(13.91)				
Cash Flow	-0.006***	-0.006***	0.001	0.000		
	(-5.39)	(-5.28)	(1.03)	(1.03)		
Lag Firm Size	-0.005***	-0.005***	0.000	0.000	-0.082**	-0.098***
C	(-4.07)	(-4.42)	(0.72)	(0.29)	(-2.51)	(-3.07)
Risk	0.190^{***}	0.181^{***}	0.020^{*}	0.017	-1.636***	-1.715***
	(5.96)	(5.80)	(1.78)	(1.55)	(-3.21)	(-3.36)
Ind Conc	-0.020	-0.040	0.028	0.039*	0.759	0.745
	(-0.47)	(-0.95)	(1.39)	(1.68)	(1.02)	(1.04)
GI	-0.001*	-0.001*	-0.000	-0.000	-0.032***	-0.028**
	(-1.86)	(-1.94)	(-0.70)	(-0.47)	(-2.76)	(-2.51)
CEO PPS	-0.000	-0.000	0.001*	0.001*	0.010	0.010
020115	(-1.22)	(-1.28)	(1.80)	(1.75)	(0.92)	(0.93)
CEO Tenure	0.000	0.000	-0.000	-0.000	0.003	0.003
020 10000	(0.03)	(0.22)	(-0.75)	(-0.75)	(0.60)	(0.64)
C1 Strengths		0.049***		0.016	()	0.832**
er strengtils		(3.32)		(1.61)		(2.03)
C2 Strengths		0.008		0.026***		1.763***
C2 Strengths		(0.54)		(2.73)		(4.26)
Su Concerns		-0.034		-0.030**		-0.751
Su concerns		(-1.57)		(-2.07)		(-1.47)
Sr Concerns		0.008		-0.005		0.175
51 Concerns		(0.46)		(-0.69)		(0.55)
ROA		(0.10)	0.033***	0.032***		(0.00)
KOA			(3.34)	(3.32)		
Leverage			(3.34)	(3.32)	-0.561***	-0.555***
Levelage					(-4.94)	(-4.92)
Constant	0.099^{***}	0.114***	-0.010	-0.012	(-4.94) 2.853 ^{***}	3.675***
Constant	(3.83)	(5.02)	(-1.22)	-0.012 (-1.45)	(4.55)	(4.99)
V D				· · · ·		、 <i>,</i>
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.449	0.448	0.300	0.305	0.258	0.269
Adjusted R^2	0.443	0.442	0.292	0.298	0.249	0.261
Observations	7,379	7,457	7,581	7,659	7,633	7,711