

The impact of corporate social responsibility on shareholder's wealth: Evidence from mergers

Yang Zhang, Marco Navone, Dave Michayluk,
University of Technology Sydney

Eliza Wu
University of Sydney

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Abstract

This study examines the ongoing debate about the effects of corporate social responsibility on shareholders' wealth effect from a new perspective. Using a large sample of U.S. mergers and alternative CSR measures, our study empirically examine and extend the stakeholder value maximization theory. We find that market react to firm's responsible and irresponsible CSR activities differently. There is no evidence that the stock market rewards socially-responsible acquirers in the short-term. However, we do find strong evidence that the market judges investments by socially irresponsible firms more negatively. Our findings are more pronounced on employment relations, environment, human rights and corporate governance CSR dimensions. These results suggest that while firms cannot create shareholder value by simply investing in more socially responsible activities, they can achieve this result by minimizing socially irresponsible behaviors.

Keywords: Corporate social responsibility; CSR concerns; Merger; Shareholder wealth.

1. Introduction

The world sustainable development has become an important part of business development, and the increasing number of companies has incorporate sustainable business practices to ensure the long-term success. As an important part of the company's operations, corporate social responsibility (CSR) actions affect many society members including corporate communities, the environment, satisfaction among employees, suppliers and customers. It is not enough for companies to produce great products or provide excellent services nowadays, people may also concerned about their effects on the surroundings and willingness to contribute to the society. Over the past few decades, the field of corporate social responsibility has long attracted increasing attention, and the number of socially responsible activities that the company has been involved in promoting unrelated to the company's core business has soared. According to PricewaterhouseCoopers (2010) CSR trend report, more than 81% companies disclose the CSR information on their websites at the end of 2010. A report from Financial Times in 2014 shows that there are \$15.2 billion has spent on corporate social responsibility for American and British firms in the Fortune Global 500.

With the amount of money and attention that companies are giving to CSR, it is important to understand the rationale for CSR. However, the effects of CSR on firm's financial performance are still an ongoing debate and there are mixed empirical findings in the literatures. One view of literature supports the stakeholder theory where consider investment in CSR as strategic to maintain good relationship with company stakeholders. The theory argues that spending on CSR may be financially profitable and improve corporate reputation, enhance customers' and suppliers' satisfaction, improve employee relationships, protect human rights, and therefore improve corporate financial performance (Gelb and Strawser 2001, Chih et al. 2008; Baron, 2001; El Ghoul et al. 2011, Dhaliwal et al. 2014). In addition, socially responsible firms are inclined to keep their commitments and foster long-term relationships with stakeholders rather than maximize their short-term profit (Jensen, 2001; Jawahar and McLaughlin, 2001; Freeman, Wicks, and Parmar, 2004). On the contrary, another view of literature support shareholder expense view consider CSR as a wasteful use of firm's resources on non-productive projects which will lead to a wealth transfer from shareholders to stakeholders (Pagano and Volpin, 2005; Surroca and Tribo, 2008; Renneboog et al., 2008). This view

supports companies should simply comply with shareholder theory by law and maximize the wealth for shareholders.

Merger deal events provide a framework to examine the relation between CSR and shareholder's wealth effects¹. Aktas et al. (2011) shows the stronger socially responsible performance of targets will benefit acquirer gains more in mergers and acquisitions. The higher social responsibility investment practices and experiences of target could spill over to acquirer in the M&A transaction deals. Deng et al. (2013) examines the impact of CSR on shareholder's wealth effect by using the aggregate value of CSR². Their findings support the stakeholder theory by indicating that acquirer who has stronger aggregate CSR rating realize higher short-term abnormal returns and better long term operating performance in merger deals. In addition, they report that mergers by acquiring firms with strong CSR performance require less time to complete and are less likely to fail.

Despite Deng et al. (2013) examined the relation between aggregate CSR rating and acquirer shareholder wealth effects in mergers, the question of how market react to the component of aggregate- CSR socially responsible ratings and irresponsible ratings in mergers and which part actually drive the results remains an open question. Our interest is motivated by the following considerations. First, aggregate CSR approach may not fully reflect the balance of CSR matters rising either from CSR responsible activities or irresponsible behaviors. A company could have CSR responsible and irresponsible records at the same time. The aggregate netting CSR calculation is also based on the assumption that the CSR concern impacts can be negated by the CSR strengths. However, market react to a firm's socially responsible and irresponsible

¹ We focus on mergers on the following reasons. First, merger and acquisition (M&A) events have been one of the most crucial drivers of corporate performance in recent decades. Second, M&A deals are criticized as a tool used by insiders to benefit them from tunneling or to reduce risks by performing suboptimal investment decisions (Bae et al. 2002, Bigelli and Mengoli 2004, Ben-Amar and André 2006, Faccio and Stolin 2006). Third, the merger approval process is frequently subject to challenges and support from various stakeholders who have substantial impact on the final outcome of a merger and play a crucial role in the post-merger integration process (Deng et al. 2013). Fourth, mergers are largely unanticipated events and thus the inclusion of deal announcement returns in an analysis can potentially mitigate the reverse causality problem presented in previous studies on the relation between CSR and firm value (Teoh et al. 1999, McWilliams and Siegel 2001, Jiao 2010).

² Aggregate CSR score is calculated by the sum of seven major CSR dimension scores based on approximately 80 CSR strength and concern indicators, with a higher value indicating better social performance. Aggregate CSR rating is measured by a firm's corporate social responsible rating minus its corporate social irresponsible rating.

actions independently in efficient market and firms cannot display strengths to potential camouflage their existing concerns. Second, the scarcity of empirical work on the relation between a firm's CSR irresponsibility and financial performance in mergers. Hoi et al. (2013) suggests that firms with excessive irresponsible CSR activities have a higher likelihood of engaging in tax-sheltering activities and greater discretionary/ permanent book-tax differences. We therefore conduct an analysis to examine the impact of the market reaction to CSR responsible and irresponsible behaviors by take alternative CSR measurements.

To investigate the market reaction to CSR responsible and irresponsible actions, we exploit the variations in acquiring firms' CSR responsible and irresponsible ratings and examine their impact on the merger announcement returns. We construct the measure of corporate social responsibility using positive and negative social ratings data from Kinder, Lydenberg, and Domini (KLD) Research and Analytics Inc. In order to evaluate the impact of CSR accurately, we use two groups of CSR measurements which capture the CSR responsible and irresponsible behaviors. In particular, we first capture the intensity of firms' CSR activities by adding up the CSR positive and negative rating separately, with the higher score (strength or concern) indicates the higher socially responsible or irresponsible performance. Second we use dummy variables to capture firm's any responsible and irresponsible behaviors from any areas of community, corporate governance, diversity, employee relations, environment, human rights and product. To measure the market reaction in merger announcement, we construct acquiring firm's cumulative abnormal returns with various event windows by taking the market model and standard event study methodology. We then conduct analyses to examine the shareholder's wealth effects on acquiring firm's responsible and irresponsible behaviors by using a multivariate framework where we control for firm-level and deal-level characteristics.

Using a sample of 1,752 successful U.S. mergers made by 843 acquiring firms from various industries, we find that acquiring firms with high responsible ratings do not have significant impact on acquirer's abnormal returns in merger transaction deals in the short-term, which is consistent with Groening and Kanuri (2013). However, acquirers with more socially irresponsible activities, particularly those with excessive irresponsible CSR activities, realize significantly lower returns in mergers. The economic impact is significant: a one standard deviation change in acquirer's CSR irresponsible rating is associated with 0.22% average

decrease in acquirer's cumulative abnormal merger returns, holding all other variables constant. Besides, the significant results still remain in spite of controlling for firm and deal specific variables, year and industry effects. These results suggest that stock market do not rewards the acquiring firms for making more corporate social responsible activities in mergers in the short-term. However, the stock market may sensitive to and reacts negatively to firm's socially irresponsible behaviors. These results are not mutual exclusive with Deng et al. (2013) but as a complementary to stakeholder value maximization theory by showing the fact that acquirer with stronger aggregate CSR rating realize higher merger returns is achieved by minimizing socially irresponsible behaviors and firms cannot create shareholder value by simply investing in more socially responsible activities.

Next, we further examine whether some CSR individual dimensions (community, corporate governance, diversity, employee relations, environment, human rights and product characteristics) dominate acquirer's merger performance. We find the consistent results that all the CSR responsible components do not have significant effects on acquirer's merger returns. In contrast, acquirers perform socially irresponsible behaviors on employment relations, environment, human rights and corporate governance realize significant lower cumulative abnormal returns for acquirer in merger deals, and the rest CSR irresponsible dimensions are still remain negative.

Given the fact that the causal relation between CSR and acquirer's returns may be driven and misinterpret by omitted variables that are correlated with both CSR and merger performance. We then conduct a number of tests to address endogeneity concern using 2SLS regression analysis with instruments for the endogenous variable. Following prior studies (Rubin, 2008; El Ghoul et al., 2011; Jha& Cox, 2015; Stellner et al., 2015), we use the blue/red state dummy and average CSR rating of other firms in the same industry as instrumental variables. The results of 2SLS regressions confirm our finding that CSR strengths of acquiring firm do not affect acquirer's shareholder returns while its CSR concerns rating have significantly negative effects on stock return in mergers, is robust to controlling for endogeneity concerns.

To further ensure our findings are robust to relevant studies, we test the stakeholder value maximization theory by using aggregate CSR rating to measure the firm's social responsibility. Following Deng et al. (2013), we construct the aggregate value of CSR variable equal to the total

number of CSR strengths minus the total number of CSR concerns. We then construct adjusted total strength and concern score by dividing the dimension scores of strength and concern by their respective indicator numbers in order to the bias of any CSR dimensions. We find that consistent results with Deng et al. (2013) and support for its stakeholder value maximization theory. First, the mean of aggregate CSR rating in our sample is at the similar scale. Second, we also find a significant positive association between aggregate CSR rating and merger returns. In summary, these results show that different CSR measures are not exclusive with each other but work as extension. These results further contribute to the stakeholder value that the benefits to acquirers having higher overall CSR on shareholder returns in mergers are driven by lower CSR irresponsible activities but not from higher CSR responsible behaviors.

Finally, we further conduct other additional robustness and sensitivity tests. First, one concern in relation to our finding of CSR on acquirer's merger returns may be not driven by acquirer's CSR irresponsible behaviors but by acquirers who being "sin" (Alcohol, Gambling, Firearms, Nuclear Power, and Tobacco) stocks. We then include additional CSR controversial controls from KLD to further mitigate concerns from societal norm. Our results continue to hold when we include additional control variables. These results reinforce our earlier evidence that acquirers' CSR responsible activities not affect the merger returns but market react negatively to acquirers' CSR irresponsible behaviors. Second, our findings are robust to measure bidder abnormal announcement returns using alternative event windows. Third, our findings are robust when expanding the merger sample to include the acquirers own more than 50% of the target shares instead of 100% after merger transactions. Fourth, our evidence is robust when including acquirers in the utilities and financial industries.

In sum, this study documents the effects of acquiring firm's socially responsible and irresponsible activities on shareholder wealth in mergers. Our findings show evidences that the stock market do not rewards socially-responsible acquirers but the market judges investments by socially irresponsible firms more negatively. As such, the analysis and results in this paper contributes to several strands of research:

First, it is related and contributes to the extensive literature studying the link between CSR and corporate performance. While previous studies investigate the effects of CSR on "sin stocks"

returns (Hong and Kacperczyk, 2009), bank debt (Goss & Roberts, 2011), cost of equity capital (El Ghoul et al., 2011), credit risk (Stellner et al., 2015), media favorability and firm's equity valuation (Cahan et al., 2015), this is the first study to our knowledge to examine the effects of CSR responsibility and irresponsibility on shareholder's wealth effects respectively. Our results make contribute to the literatures by indicating that the market reaction to CSR responsibility and irresponsibility differently and firms should care more about their irresponsible CSR behaviors as they are more sensitive to investors.

Second, the present paper also complements to the growing literature dealing with the shareholder value implications of CSR in merger and acquisition transactions. We extend Deng et al. (2013) stakeholder value maximization view by showing the fact that higher aggregate CSR benefit merger returns in the short-term is result from the lower socially irresponsible behaviors of acquiring firms rather than their higher CSR responsibility. Additionally, we take a comprehensive approach that examines the effects of qualitative issues of seven individual CSR dimensions (community, corporate governance, diversity, employee relations, environment, human rights and product characteristics), as well as controversial business issues (alcohol, gambling, tobacco, firearms, the military and nuclear power). Our study contributes to the relation between acquirer's CSR performance and market reaction which extends to Aktas et al. (2011) who examine the relationship between the target's CSR performance and acquirer's abnormal merger returns.

Third, we extend prior research on the relation between CSR irresponsibility and firm's activities performance. Although Goss & Roberts (2011) find that firms with social responsibility concerns pay between 7 and 18 basis points more than firms that are more responsible and Hoi et al. (2013) shows firms with excessive irresponsible CSR activities have a higher likelihood of engaging in tax-sheltering activities and greater discretionary/permanent book-tax differences. Hong and Kacperczyk (2009) find evidence firms operating in "sin" industries are less coverage from analysts, and have higher expected returns. To our knowledge, no study to date has investigated how firm's socially irresponsible ratings affects the wealth of their shareholder and other stakeholders in the short-term. Lastly, this paper also contributes to the literature by showing that irresponsible CSR activities also work as a determinant of merger performance.

The rest of paper is organized as follows: Section 2 describes the research question of the study; Section 3 discusses the data construction and summary statistics; Section 4 describes the key variables construction and empirical framework; Section 5 describes empirical results; Section 6 presents the results of robustness checks and sensitivity tests; Section 7 presents summary and conclusion.

2. Research Question and Hypotheses

Growing literatures dealing with the shareholder value implications of CSR in merger and acquisition transactions. One stream of literature supports the stakeholder value maximization view suggest that there is a positive association between aggregate CSR ratings and shareholder returns. However, to our knowledge, no study to date has investigated how these results are driven by the two components of aggregate CSR- CSR strengths and concerns.

One potential explanation is *Responsible CSR appreciation hypothesis*, which suggest this positive relation between announcement returns and the overall CSR rating is result from the market reward for acquirers doing socially responsible activities and therefore increase cumulative abnormal returns in mergers. Several arguments support the value creation stemming from social responsible activities. Some authors argue that increased social and environmental performance can enhance a firm's input-output efficiency, improve employee and customer satisfaction, generate new market opportunities, or signal management quality (Fombrun and Shanley, 1990). Socially and environmentally responsible activities may also enhance a firm's standing with financial market participants (such as bankers, financial intermediaries and investors) and governments. This reputation effect may improve a firm's access to financing sources (McGuire et al., 1988).

However, there are other literatures argue that CSR concerns detriment the firm's performance (Goss& Roberts, 2011) and thus harm the shareholder's merger transaction returns. In this case, the higher aggregate CSR benefit merger returns in the short-term is achieved from the lower socially irresponsible behaviors of acquiring firms rather than their higher CSR responsibility. The disciplinary view leads us to formulate our alternative *Irresponsible CSR depreciation hypothesis*: positive announcement returns imply that the acquirer may result from the reduction of socially irresponsible behaviors.

The remainder of the paper aim to disentangle these two alternative explanations.

3. Data construction and summary statistics

In order to examine the effect of corporate social responsibility on merger deals performance, we merge the data from following different databases. The Thomson Securities Data Company (SDC) Mergers and Acquisitions database provide the merger deal data; Kinder. Lydenberg, and Domini (KLD) database provides corporate social responsibility scores of various dimensions; Research in Security Prices (CRSP) daily return files provide the stock return information; Compustat North America provides the financial data. The data extraction period is from January 1, 1995 to December 31, 2013. We follow Deng et al. (2013) and impose the following sample selection criteria: (1) the status of M&A transaction deal is completed, (2) exclude the effects from small deals and ensure the merger deal value is greater than \$1 million, (3) the acquirer fully charge of the target shares after the merger transaction, (4) the acquirer is US publicly listed firms where stock returns data available from CRSP to compute the abnormal returns, (5) firm's financial data are available from Compustat, (6) the acquirer is covered by the KLD database and with corporate social responsibility scores for various CSR strength and concern dimensions prior to merger³ deal announcement; (7) we also exclude those acquirers in the utilities (SIC 4900-4999) and financial (SIC 6000-6999) industries. These selection criteria lead to a final sample of 1,752 successful mergers made by 843 acquiring firms from various industries.

<Insert Table 1 here>

Panel A of Table 1 presents the sample distribution by announcement year and their according CSR strength and concern scores⁴. The number of merger deals increase gradually and

³ Acquisition deals are not considered in this study similar with Deng et al. (2013). The combination of acquirer and target firm together after merger deals will agree on the contracts in the newly combined firms. However, an acquisition of target shares may not change the target firms' independent legal entity and target firm's supporting willingness, therefore there is not clear in acquisition cases how the effects of acquirer corporate social performance on shareholder's wealth will be.

⁴ The CSR strength and concern variables construction in the table will be discussed later.

reach the peak before the occurrence of 2008 financial crisis. The numbers then stay constant in the following recent periods. In addition, acquiring firms' CSR strengths and concerns varies in different years. The largest number of acquirers' sum number of CSR strengths is 4.052 in year 1999 while the smallest number is 1.320 in year 2003. The same year 2003 also experienced a relatively low sum score of CSR concerns for acquirers but the lowest (1.030) average number was in more recent year 2012.

Panel B of Table 1 reports the sample composition based on acquiring firms' industry. The manufacturing (58.1%) and service industry (24.3%) dominate the sample with agriculture, forestry and fisheries only account for 0.034%. In spite of the lowest merger numbers in agriculture, forestry and fisheries, acquirers in those industries have the highest score of CSR strengths (3.000). Mineral and construction industries have low level CSR strength scores while their CSR concerns are the highest (3.141) among all the industries.

4. Key variables construction and empirical framework

4.1 Measuring CSR strength and concern

We use data from Kinder, Lydenberg, and Domini (KLD) Research and Analytics Inc. for our measure of corporate social responsibility. The independent research KLD firm has been providing consulting and research services to customers for different purposes including socially responsible investment decision and academic researches. KLD ranks companies' involvement of various activities from different resources level including government, media, annual financial reports and journals. KLD database covers S&P 500 companies since 1991 and expended more than 3000 companies from Russell 3000 index since 2003.

KLD STATS score firms based on thirteen CSR dimensions which contains two main categories: qualitative issue areas and controversial business issues. The CSR dimensions of qualitative issue areas include community, corporate governance, diversity, employee relations, environment, human rights and product characteristics. KLD STATS presents a binary (either 0 or 1) rating of strength (positive) and concern (negative) ratings for each qualitative issue dimensions⁵. In each dimension, there mark with one in the according area if a rating in either

⁵ Details see appendix B.

assigned as (strength) positive or (concern) negative, while the mark will be filled with zero if there is not any strength or concern rating in particular issues. For example, in the community area, KLD assigns 1 for the “Charitable Giving” if a company a generous giving strength and 0 otherwise. In the employee relation dimension, KLD assigns 1 for “workforce reductions concern” if a company has made significant reductions in its workforce in recent years, and 0 otherwise. By contrast, companies are only assigns concern ratings in controversial business issues (alcohol, gambling, tobacco, firearms, the military and nuclear power).

Aggregate CSR score is calculated as the total number of strengths minus the total number of concerns, which have been used as a measure of CSR in previous studies (El et al., 2011; Deng et al., 2013; Di et al., 2014). The higher value of aggregate CSR value indicates a better social performance. For example, the KLD employee relation score is equal to the number of employee relation strength number minus the number of employee relation concern number. We then calculate the sum number of KLD scores across the seven qualitative CSR dimensions to get the aggregate score.

However, there are disadvantage of aggregate approach to measure the CSR. First of all, the aggregate CSR measurement may not fully reflect the balance of CSR matters rising either from CSR strengths or concerns. The netting CSR calculation is also based on the assumption that the CSR concern impacts can be negated by the CSR strengths. However, many firms usually may just display strengths to potentially camouflage their existing concerns. Secondly, the uneven number of CSR strengths and concerns make it difficult to accurately measure the CSR net value. Seven dimensions of qualitative issue areas are available for both CSR strength and concern rating while six CSR dimensions of controversial business issues are only available for CSR concerns.

In order to evaluate the impact of CSR on firms accurately, we use two groups of CSR measurements. First group is to add up the total number of CSR strengths to calculate a *Strength_Sum* and add up the total number of CSR concerns to calculate a *Concern_Sum* score in seven CSR dimensions (community, corporate governance, diversity, employee relations, environment, human rights and product). The CSR strength score represents the firm’s socially responsible behaviors rating while CSR concern score represents the firm’s socially irresponsible behaviors rating. This group of CSR sum number could better measure the intensity of CSR strength or concern. The higher score (strength or concern) indicates the higher socially

responsible or irresponsible performance⁶. Second group of measurement is strengths (or concerns) dummy variables which takes the value 1 for the presence of any CSR strengths (or concerns) and zero otherwise. *Strength_dummy* takes a value of one if the firm has any areas of community, corporate governance, diversity, employee relations, environment, human rights and product marked as strength and zero otherwise. *Concern_dummy* takes a value of one if the firm has any areas of community, corporate governance, diversity, employee relations, environment, human rights and product marked as strength and zero otherwise. These dummy variable indicators could capture firm's performance on any socially responsible or irresponsible behaviors regardless of the effects from unequal number of CSR strengths or concerns⁷.

<Insert Table 2 here>

Panel B of table 2 presents descriptive statistics on two groups of CSR strength and concern measurements. The mean value of Strength_Sum is 2.399 in the whole sample, suggesting that the sample firm on average has 2.399 responsible CSR activities throughout the years. Similarly, the mean value of Concern_Sum is 2.133, suggesting that the average number of firm's irresponsible CSR activities are slightly lower compared with their responsible activities. However, Strength_dummy is 0.612 which is lower than Concern_dummy (0.828). This indicates that 82.8% of firms in sample at least have one activity marked as socially irresponsible behavior which is higher than those 61.2% of firms who have done any socially responsible activities recorded in KLD.

4.2 Abnormal stock performance

In order to examine the impact of corporate socially responsible activities on acquiring firm's merger announcement return, we take the standard event study methodology which could isolate the impact of a particular event on market valuations. We take the market model to estimate the market normal performance as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (1)$$

⁶ Detailed variable definition is in appendix A

⁷ Adjusted CSR variable is for the robustness check use later.

where R_{it} is the stock return for period t ; R_{mt} is the market return of the US stock market on day t , which is proxy by value-weighted return in CRSP; α_j and β_j are the parameters of ordinary least squares (OLS) regression; and ε_{it} is the regression residual. The estimated window is over the period from event day -210 to event day -10, where event day 0 is the merger date of announcement. Therefore we estimate the abnormal return (AR) of acquirer on day t as the value of observed stock return values on day t minus the stock return examined using the market model:

$$AR_{it} = R_{it} - (\alpha_i + \beta_i R_{mt}) \quad (2)$$

We then calculate cumulative abnormal return (CAR) using the three days (one day before and after merger announcement date) event window CAR(-1,1), which is chosen as the key dependent variable in this study to be compared with those in most previous studies. We also estimate the cumulative abnormal return using the CAR(-2,2) five (two days before and after merger announcement date) and CAR(-5,5) eleven (five days before and after merger announcement date) day's event windows for robustness tests.

Panel A of Table 2 reports a summary of acquiring firm's cumulative abnormal returns (CARs) for several event windows. The results in all the possible event windows report that both the mean and median CARs are positive. Our results are consistent with prior studies. For example, the result of our average five-day CAR(-2,2) is 2.79% which is consistent with Masulis et al. (2007) CAR(-2,2) for U.S deals between 1990 and 2003 is 0.215%.

4.3 Empirical framework

To examine market investor reactions to acquiring firm's socially responsible performance in merger deals, we conduct a regression analysis summarized by the equation below:

$$CAR_{i,t} = \alpha_0 + \alpha_{i,t} + \beta_1 CSR_Strengths^{i,j} + \beta_2 CSR_Concerns^{i,j} + Controls_t^i + \varepsilon_t^{ij}$$

where, $CAR_{i,t}$ is acquirer's cumulative abnormal returns in different event windows; $\alpha_{i,t}$ is the vector of year, industry fixed effects. $CSR_Strengths^{i,j}$ and $CSR_Concerns^{i,j}$ are CSR strength and concern measurements (One group is the total number of CSR qualitative issues dimensions on strengths and concerns and the other group is strengths and concerns dummy indicators.),

respectively; $Controls_t^i$ is a vector of firm and deal level control variables that has been shown have impact the relationship between stock abnormal return and CSR performance in M&A events⁸.

The firm specific control variables (firm size, leverage, free cash flow, Tobin's Q, Market to Book ratio) are selected based on Masulis et al. (2007) which investigate determinates of merger and acquisition performance. First of all, Moeller et al. (2004) explains how firm size have impact on merger performance as managers in large firms may overestimate the potential merger synergy therefore induce a lower or negative abnormal returns. In addition, McWilliams& Siegel (2001) also reports that large firms are more inclined to involve in corporate social responsible events than smaller firms so that to arise attention and meet stakeholder's pressure. The second firm attribute we control for is the firm's financing structure (leverage). Goss & Roberts (2011) shows responsible firms are much easier to access the debt financing compare with irresponsible firms. Thirdly, corporate socially responsible investments are a kind of discretionary decisions which largely rely on the availability of excess funds. Firm's performance may also depend on how managers manage a large amount of free cash flow on projects investment (Jensen, 1986; Baker and Gompers, 2003). Therefore, we also control for the potential CSR effects caused by free cash flow. Lastly, Jiao (2010) shows that firms with a better management quality are more likely to be active in CSR events. We therefore also control for the effects from Tobin's Q.

The merger deal transaction characteristics also need to control for determinates of M&A success (Erel et al., 2012). We control for industry diversification based on whether acquirer and target firm share a common industrial classification codes; target status based on whether target firms are public or private firms; we also control for merger deal relative size, a ratio of deal value over acquiring firm's market value of equity at the fiscal year end before the deal announcement year; we also control for the deal transaction attitude depend on whether they are tender offer or have hostile attitude.

The models also include year and industry fixed effects to capture the macroeconomic differences. The standard errors are adjusted with White's (1980) heteroscedasticity.

⁸ Detailed variable definition is in Appendix A.

Panel C of table 2 presents summary statistics for control variables in empirical framework. In order to remove the effect of outliers, we winsorize all of the continuous variables of the sample at 5th and 95th percentile. All the mean and median value of firm and deal characteristics is consistent with prior study (Deng et al., 2013)⁹.

5. Empirical Results

As we discussed in the introduction, in spite of the increasing academic studies on corporate social responsibility, we still know little about how the degree of firm's socially responsible and irresponsible activity affects market reaction in merger transaction deals, respectively. The following empirical analysis is purposed to address this gap in the literature and empirically examine the relation between acquiring firm's cumulative abnormal returns and its socially responsible and irresponsible behavior ratings. Section 5.1 will conduct univariate tests comparing acquirer's abnormal returns between different levels of CSR concerns. Next section 5.2 will perform cross-sectional regression analysis where we regress the models with firm and deal level controls. In section 5.3 we report the results of endogeneity tests.

5.1 Univariate results

The univariate results in Table 3 reports the cumulative abnormal returns (CARs) statistics for several possible event windows. The results reveal that both the mean and median CARs are statistically positive for all the event windows. This indicates that investors generally express optimistic attitudes towards US acquiring firms involved in CSR activities in merger transaction deals during the sample period. The table further separates the full samples into two subgroups (low CSR concerns and high CSR concerns) based on the median of the total CSR concerns of acquiring firms. Both subsample and difference tests results show that acquirer who have low CSR concerns have significantly higher cumulative abnormal returns compared with those have high CSR concerns scores in different event windows. For example, the mean (median) of CAR(-1,1) for those acquirer have lower total number of CSR concern score is 0.744% (0.5%),

⁹ The mean value of firm size is 7.893, the mean value of free cash flow is 0.054, the average value of leverage is 0.125, the mean value of Tobin's Q is 2.510, the average market to book ratio is 4.090, the mean Diversifying is 0.400, the mean value of target public is 0.475, mean value of private target is 0.410, the mean value of relative size is 0.164, the mean value of cash only is 0.404, the average value of partial stock payment is 0.371, the average number of hostile attitude is 0.007 and tender offer average number is 0.128).

while it is 0.064% (-0.15%) for acquirers who have higher total number of CSR concern score. These results suggest that the mean (median) CAR(-1,1) for acquirers with lower total CSR concern score is 0.68 (0.65) basis points higher than that acquirers with higher total CSR concern score. These differences are significant at the 1% level. We also find similar significant differences evidences in means and medians between high and low total CSR concern groups in both five and eleven days event windows. Overall, these preliminary findings suggest that acquirers with lower level of socially irresponsible performance have significantly higher cumulative abnormal returns in merger deals¹⁰.

<Insert Table 3 here>

5.2 Cross-sectional regression analysis

5.2.1 Overall CSR strengths and concerns ratings

To investigate the market reaction to acquirer's CSR performance, we conduct cross-sectional multivariate regressions and regress the cumulative abnormal returns on two group of corporate socially responsible and irresponsible (CSR strength and CSR concern) proxies, and the firm and deal specific control variables discussed in section 4.3. All models also control for year and industry fixed effects. We take three-day CAR(-1,1) as the key dependent variable. The CARs of other event windows are for further sensitivity and robustness tests.

<Insert Table 4 here>

Panel A of Table 4 reports the effects of overall corporate socially responsible and irresponsible rating on acquirer's CAR. The results are estimated using ordinary least squares (OLS) with standard error adjusted for heteroscedasticity. In model 1, we examine the impact of total value of CSR strengths and CSR concerns on acquirer's CAR. We find the coefficient on

¹⁰ In untabulated tests, we did univariate tests by separating the full sample based on the median value of total CSR strength. Acquirer's cumulative abnormal returns do not have significant difference between different CSR strength subgroups.

CSR strength_sum is insignificant while CSR concern_sum is significantly negative at the 1% level. These results imply that acquirer's abnormal returns in merger transaction deals not increase with the increasing of firm's socially responsible ratings. However, acquirers showing higher socially irresponsibility realizes significantly lower returns in mergers. The estimated coefficient suggests that one-standard deviation increase in total value of CSR concerns leads to acquirer's CAR(-1,1) to decrease 0.22% on average. Besides, the significant results still remain in spite of controlling for firm and deal specific variables.

Model 2 reports the results by using alternative CSR strength and concern dummy proxies. Different with CSR sum measures, the CSR strength (concern) dummy variable could capture firm's any responsible (irresponsible) activities in areas of community, corporate governance, diversity, employee relations, environment, human rights and product characteristics. Consistent with the finding in Model 1, we find that Strength_dummy is statistically indistinguishable from zero but Concern_dummy is negative and significant at the 5% level. These also suggest that acquirers who have better social responsibility cannot realize higher abnormal returns while the market are sensitive to CSR concerns and react negatively with their socially irresponsible behaviors. Model 3-6 we re-estimate the model 1-2 using alternative five and seven day's event windows of acquirer's abnormal returns as dependent variables. Results from model 3-6 show CSR strength is still insignificant while CSR concern have significantly negative relation with acquiring firms' CARs. These results suggest that the effects of CSR strengths and concerns on acquirer's shareholder returns are robust and following alternative event days.

Overall, the cross-sectional regression results reported in Table 4 confirm the univariate results reported in Table 3. These results suggest that stock market do not rewards the acquiring firms for making more corporate social responsible activities in mergers. However, the stock market may punish acquirers who show socially irresponsible behaviors.

5.2.2 Individual dimensions of CSR strengths and concerns

Next, we further examine the relation between acquirer CAR in mergers and CSR individual dimensions (community, corporate governance, diversity, employee relations, environment, human rights and product characteristics) to empirically determine whether some CSR components dominate acquirer's merger performance. Similar with the overall CSR

measures, we also generate two groups of CSR individual measurements both from the total number of scores in each dimension and dummy variables to capture firms that are engaging in any of CSR areas¹¹. Table 5 shows the effects of CSR dimensions value on merger abnormal returns. We use stock CAR(-1,1) as key dependent variable and include acquirer- and deal-specific control variables, and year and industry fixed effects in all the models. We do not report estimated coefficient of controls in the table as the results are similar with that of Table 4. Panel A of Table 5 we find consistent results that all the dimensions of CSR strengths do not have significant effects on acquirer's CAR. However, the aspects of CSR concerns on employment relations, environment and human rights do have negative and significant effects on acquirer's merger returns. Although the CSR concerns dimensions of corporate governance, community, diversity and product characteristics not statistically indistinguishable from zero, they remain negative relation with acquirer's CAR.

<Insert Table 5 here>

Panel B of Table 5 shows the effects of CSR individual component dummies on mergers' abnormal returns. We find a negative and statistically significant relation (at 5% level) between acquirer's CAR and corporate governance concern. Similarly, the employment relation concern proxy emp_Con_dummy is negative and significant in Model 4 suggesting that the market react negatively with CAR if acquirers have bad employment relations. Model 6 also shows a negative and statistically significant relation between acquirer's CAR and human rights. By contrast, all the CSR strength dimensions continue do not affect firm's merger deal returns.

In summary, acquirers perform socially irresponsible behaviors on employment relations, environment, human rights and corporate governance realize lower cumulative abnormal returns for acquirer in merger deals. In contrast, acquirer's socially responsible activities do not have significant effects on acquirers' returns.

¹¹ Detailed variable definition is in Appendix A.

6. Robustness checks and sensitivity tests

This section we conduct several additional checks to investigate the robustness of our evidence that acquirer's socially responsible rating not benefit merger returns while its socially irresponsible behaviors affect acquirer CAR negatively. The robustness checks include endogeneity, alternative CSR measurement, model specifications and other sensitivity checks. The results of robustness tests are summarized below.

6.1 Endogeneity tests

This section we will examine the endogeneity issues using an instrumental variable technique. Although several acquirer- and deal- specific factors that may affect the merger returns have been controlled in the models, we still need to consider the potential endogeneity and omitted variable bias problem. The causal relation between CSR and acquirer's returns may be driven and misinterpreted by omitted variables that are correlated with both CSR and merger performance. For example, a company who pollute the environment can be the same company who has bad firm's management. In this case, a reduction of acquirer's return in mergers may not because of socially irresponsible behaviors but inferior managerial strength on mergers.

We therefore to address the potential endogeneity problems by using 2SLS regression analysis with instruments for the endogenous variable, CSR strength_sum and concerns_sum. The first instrument we use is a blue state dummy with a value of one if a firm's headquarter is located in a blue or Democratic state and zero otherwise. Rubin (2008) shows that firms with high CSR ratings are more likely headquartered in blue or Democratic states. This instrumental variable has highly correlation with a firm's CSR but it is unlikely that the preference of a firm's headquarter at blue or red state have a direct effect on merger performance. In addition, following prior studies (El Ghoul et al., 2011; Jha & Cox, 2015; Stellner et al., 2015), we use the average total number of acquirer's CSR concerns in seven qualitative dimensions of other firms in the same industry based on the two-digit SIC codes as the second instrument. Prior studies show that industries are more likely to cluster in certain geographic locations (Baptista and Swann, 1998; Krugman, 1991), which suggest firms in an industry might be similar. A CSR strength (concern)'s rating of specific industry is highly correlated with acquirers' CSR strengths (concerns) which meet the instrumental variable relevance requirement. However, the

instruments are built on the other firms in the entire industry, there is no reason to believe that these instruments have significant effect on the acquirer's merger performance, thus also meet the instrumental variable exclusion requirement.

<Insert Table 6 here>

Table 6 reports the results of the instrumental variable analysis to test the association between acquiring firm's CSR strength and concern on merger returns. Model 1-2 reports the first stage regression results with BlueState and Concern_Industry instruments. The dependent variables are Strength_Sum and Concern_Sum in model 1 and model 2, respectively. All models include acquirer and deal specific characteristics control variables, as well as year and industry fixed effects. As expected, both two instruments (BlueState and Concern_Industry) are both strongly and statistically significant. These results confirm the relevance of our instrumental variables.

Model 3-5 reports the second stage regression results for two endogenous variables CSR strengths and CSR concerns using BlueState and Concern_Industry as instruments. We use acquirer's cumulative abnormal returns with possible event windows as the dependent variables. Models take acquirer and deal level characteristics and year and industry fixed effects as controls. We find that the estimated coefficients on Concern_Sum are significant and negative across all models, sensitive and robust across different event windows. In contrast, CSR strength variables continue do not have significant effect on merger stock returns. These results further confirm our finding that acquirers with more irresponsible CSR activities realize significant negative abnormal returns in merger transactions even control for two endogenous variables.

Overall, the results of 2SLS regressions confirm our finding that CSR strengths of acquiring firm do not affect acquirer's shareholder returns while its CSR concerns rating have significantly negative effects on stock return in mergers, is robust to controlling for endogeneity concerns.

6.2 Aggregated CSR measurement

Despite the growing body of literature (Goss& Roberts, 2011; Hoi et al., 2013) using CSR strength and concern to measure CSR responsible and irresponsible rating separately, some studies measure the firm's social responsibility use the CSR aggregate measurement. Taking Deng et al. (2013) as an example, this section aims to ensure our findings are robust to relevant studies and to test different CSR measures are not exclusive with each other.

We construct the aggregate value of CSR following Deng et al. (2013). Using dimensions (corporate governance, community, diversity, employee relation, the environment, human rights and product characteristics) of CSR qualitative issue areas discussed in section 4.1, the variable *RawCSR* is equal to the total number of CSR strengths minus the total number of CSR concerns. In order to the bias of any CSR dimensions, we then construct adjusted total strength and concern score by dividing the dimension scores of strength and concern by their respective indicator numbers (The detailed CSR dimension indicator are in Appendix B). The variable *AdjustedCSR* is calculated by the difference between adjusted total strength score and adjusted total concern score. Panel B of Table 2 reports the statistics of *RawCSR* and *AdjCSR*. We find that the mean of *RawCSR* in our sample is 0.217 which is similar with that of 0.266 in Deng et al. (2013); the mean of *AdjCSR* in our sample is -0.124 which is also similar with that of -0.112 in Deng et al. (2013).

<Insert Table 7 here>

Similarly, we use three-day acquirer cumulative abnormal return $CAR(-1,1)$ as key dependent variable and take the *AdjustedCSR* and *RawCSR* as the main explanatory variables. The models are including acquirer- and deal- specific characteristics, as well as year and industry fixed effects as controls. Table 7 shows the regression results of acquirer's CARs on adjusted CSR values by using the same merger sample with Table 4 of our study. We find the coefficient estimates on an acquirer's adjusted CSR and raw CSR are positive and significant. These results are consistent with the Deng et al. (2013) and support their evidences that firm's CSR

performance increase stakeholders' satisfaction which will benefit shareholders and high CSR acquirers realize higher stock returns in mergers than those low CSR acquirers.

In summary, these results show that our sample also support the findings using alternative aggregate CSR measures. These results also suggest that our finding that CSR strengths of acquiring firm do not have significant impacts on acquirer's shareholder returns while its CSR concerns affect negatively on stock return in mergers is not exclusion of stakeholder value maximization theory but extension of Deng et al. (2013). The benefits to acquirers having higher overall CSR on shareholder returns in mergers are driven by lower CSR concerns but not from higher CSR strengths. These results also verify the correction of our longer period merger sample construction.

6.3 Additional CSR controversial business issues controls

Expect for the approximately indicators for CSR qualitative issues, KLD also provide information controversial business issues for companies in the following "sin" industries: Alcohol, Gambling, Firearms, Nuclear Power, and Tobacco. Different from CSR qualitative ratings, KLD's controversial business issues only report for their concern ratings. Hong and Kacperczyk (2009) shows that institutional investors who restrict by societal norm pay a financial cost to avoid from "sin" stocks. One concern in relation to our finding of CSR on acquirer's merger returns may be not driven by acquirer's CSR irresponsible behaviors but by acquirers who being "sin" stocks. To mitigate concerns from societal norm, we modify our models by including additional CSR controversial controls.

<Insert Table 8 here>

Similar with variables in CSR qualitative issues, we use two groups of CSR controversial measurements both from total controversial concern rating and total concern for each dimension; a dummy for any concern in any dimensions and a dummy for any concern for each separate dimension. The detailed variable definition is in the appendix A. We use acquirer's CAR(-1,1)

as key dependent variable. We re-estimate the models 1-2 of Table 4 with additional controversial variables. The results in Table 8 show that the coefficient on both Concern_sum and Concern_dummy are significant and negative across all the models when additional CSR controversial variables are used to control the effects from norm concerns. The CSR strength groups continue to be insignificant. These results reinforce our earlier evidence that acquirers' CSR responsible activities not affect the merger returns but market react negatively to acquirers' CSR irresponsible behaviors.

6.4 Other sensitivity tests

We further conduct other additional sensitivity and robustness tests. We not report the some results to save the limited space. First, our finding are robust to measure bidder abnormal announcement returns using alternative event windows over (-2,2) and (-5,5) as reported in Panel A of Table 4. Second, our findings are robust when expanding the merger sample to include the acquirers own more than 50% of the target shares instead of 100% after merger transactions. Third, our evidence are robust when including acquirers in the utilities (SIC 4900-4999) and financial (SIC 6000-6999) industries.

7. Summary and Conclusion

This paper provides a comprehensive empirical examination on the ongoing debate about the effects of corporate social responsibility on corporate performance (market reaction) from a new perspective. We generate two groups of CSR strengths and concerns measurements to examine how firm's responsible and irresponsible CSR activities affect differently on shareholder wealth in mergers. Our finding extend the stakeholder value maximization theory by documenting that CSR strengths of acquiring firm do not have significant effects on acquirer's shareholder returns while CSR concerns of acquiring firm have significantly negative effects on merger returns in the short-term. These results suggest that stock market do not rewards those good corporate social responsible activities made by acquiring firms in the short-term and their higher CSR strengths not necessarily will lead to higher shareholder returns. However, stock market is sensitive to acquirer's CSR concerns and reacts negatively with the acquiring firm's irresponsible CSR activities. In addition, acquirers perform socially irresponsible behaviors realize lower cumulative abnormal returns for acquirer in merger deals are more pronounced on

employment relations, environment, human rights and corporate governance CSR dimensions. Overall, our study suggests that CSR concerns drive the stakeholder value maximization view and acquiring firms should pay attention on their socially irresponsible behaviors in order to increase the potential shareholder returns in mergers deals. Our findings are robust to alternative event windows, hold over endogeneity tests, and remain after additional CSR controversial concerns controls. An important research question, one that is beyond the scope of this study, is how a firm's CSR strengths and concerns rating affect the shareholders' wealth and firm performance in the long-term. We leave this research question for future studies to explore.

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Table 1: Sample distribution by year and industry

Panel A presents the mean values of CSR strength and concern ratings by years and the frequency distribution of sample firms by years. Panel B presents the number of observations and the mean values of CSR measures by selected two-digit SIC industries. The sample consists of 1752 completed domestic mergers between years 1995-2013.

Panel A: Mean values and frequency distribution by year					
Year	Number	Strength_Sum Mean	Concern_Sum Mean	Strength_dummy Mean	Concern_dummy Mean
1995	35	2.171	1.800	0.857	0.800
1996	56	2.482	1.446	0.732	0.750
1997	45	2.689	2.489	0.844	0.933
1998	64	2.594	2.000	0.750	0.906
1999	96	4.052	2.219	0.844	0.813
2000	87	2.920	2.218	0.828	0.874
2001	82	2.305	1.841	0.634	0.732
2002	54	2.722	2.481	0.630	0.778
2003	97	1.320	1.443	0.495	0.619
2004	135	1.400	1.919	0.548	0.881
2005	147	2.197	2.347	0.537	0.857
2006	121	2.421	2.545	0.620	0.893
2007	145	2.076	2.152	0.614	0.883
2008	105	2.305	2.457	0.629	0.895
2009	94	3.351	2.755	0.660	0.904
2010	96	3.000	2.760	0.479	0.896
2011	106	1.991	2.821	0.349	0.981
2012	99	2.404	1.030	0.556	0.505
2013	88	2.205	1.307	0.511	0.727

Panel B: Mean values and frequency distribution by acquirer industry					
Industry (Two-Digit SIC)	Number	Strength_Sum Mean	Concern_Sum Mean	Strength_dummy Mean	Concern_dummy Mean
Agriculture, Forestry, and Fisheries (01-09)	6	3.000	2.333	0.333	1.000
Mineral industries and construction (10-17)	92	1.304	3.141	0.663	0.870
Manufacturing (20-39)	1018	2.996	2.336	0.665	0.840
Transportation and communications (40-48)	101	2.386	2.079	0.495	0.832
Wholesale trade and retail trade (50-59)	109	2.193	1.835	0.606	0.743
Service industries (70-89)	426	1.256	1.516	0.507	0.808

Table 2: Summary Statistics

This table reports the descriptive statistics of variables. The sample consists of 1752 completed domestic mergers between years 1995-2013 subject to the following selection criteria: (1) the status of M&A transaction deal is completed, (2) exclude the effects from small deals and ensure the merger deal value is greater than \$1 million, (3) the acquirer fully charge of the target shares after the merger transaction, (4) the acquirer is US publicly listed firms where stock returns data available from CRSP to compute the abnormal returns, (5) firm's financial data are available from Compustat, (6) the acquirer is covered by the KLD database and with corporate social responsibility scores for various CSR strength and concern dimensions prior to merger deal announcement; (7) exclude those acquirers in the utilities (SIC 4900-4999) and financial (SIC 6000-6999) industries. All continuous variables are winsorized at 5% and 95% level. See Appendix A for variable definitions.

	Number	Mean	Std.Dev.	P25	Median	P75
<u>Panel A: Cumulative abnormal returns</u>						
CAR(-1,1)	1752	0.00377	0.05277	-0.02502	0.00089	0.02969
CAR(-2,2)	1752	0.00279	0.06245	-0.03205	-0.00088	0.03604
CAR(-5,5)	1752	0.00338	0.08410	-0.04521	-0.00119	0.04935
<u>Panel B: CSR measures</u>						
Strength_Sum	1752	2.399	3.467	0.000	1.000	3.000
Concern_Sum	1752	2.133	2.173	1.000	2.000	3.000
Strength_dummy	1752	0.612	0.487	0.000	1.000	1.000
Concern_dummy	1752	0.828	0.378	1.000	1.000	1.000
RawCSR	1752	0.217	2.959	-1.000	0.000	1.000
AdjCSR	1752	-0.124	0.486	-0.417	-0.149	0.125
<u>Panel C: Control Variables</u>						
firmsize	1752	7.893	1.618	6.639	7.850	9.253
freecashflow	1752	0.054	0.068	0.028	0.059	0.094
Leverage	1752	0.125	0.116	0.023	0.098	0.195
TobinQ	1752	2.510	1.651	1.412	1.946	2.960
MB	1752	4.090	3.296	1.878	3.043	5.039
Diversifying	1752	0.400	0.490	0.000	0.000	1.000
targetpublic	1752	0.475	0.500	0.000	0.000	1.000
targetprivate	1752	0.410	0.492	0.000	0.000	1.000
Relsize	1752	0.164	0.292	0.016	0.056	0.183
Cashonly	1752	0.404	0.491	0.000	0.000	1.000
stockdeal	1752	0.371	0.483	0.000	0.000	1.000
Hostile	1752	0.007	0.086	0.000	0.000	0.000
Tender	1752	0.128	0.334	0.000	0.000	0.000

Table 3: Univariate tests

This table reports the mean and median cumulative abnormal returns (in percentage) of US acquirers in domestic takeovers during different event windows over 1995-2013. The sample consists of 1752 completed domestic mergers between years 1995-2013. Firms are divided into low and high CSR concerns according to the sample median of CSR concerns sum scores. Significance of difference in means are determined using a standard t-tests. Significance of difference in medians is based on a Mann-Whitney-Wilcoxon tests. *, **, and *** denote significance at the 10%, 5% and 1%, respectively.

CARs	Full sample (N=1752)		Subsample of acquirer with low CSR Concerns: A (N=807)		Subsample of acquirer with high CSR Concerns: B (N=945)		Test of difference (A-B)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
CAR(-1,1)	0.00377*** (2.990)	0.00090* (1.741)	0.00744*** (3.725)	0.00500*** (2.971)	0.00064 (0.399)	-0.00150 (-0.522)	0.00680*** (2.695)	0.00650*** (2.583)
CAR(-2,2)	0.00279* (1.870)	-0.00090 (-0.480)	0.00647*** (2.728)	0.00131* (1.863)	-0.00035 (-0.188)	-0.00196 (-1.213)	0.00682** (2.282)	0.00327** (2.010)
CAR(-5,5)	0.00338* (1.683)	-0.00119 (-0.559)	0.00719** (2.251)	0.00410* (1.829)	0.00013 (0.050)	-0.00280 (-1.105)	0.00706* (1.755)	0.00690** (1.982)

Table 4: Regressions of cumulative abnormal returns against CSR strengths and concerns

This table shows the coefficients from regressions of the cumulative abnormal returns of acquiring firms against CSR strengths and concerns in different event windows. Panel A shows the regression results by acquirer's over two groups of CSR strength and concern measures. Panel B shows the regression results use acquirer's CSR strength and concern rating measurement for CSR individual dimensions. Panel C shows the regression results use acquirer's CSR strength and concern dummy measurement for CSR individual dimensions. Descriptions of the explanatory variables are provided in Appendix A. All models include year and industry fixed effects. *, ** and *** denote significance at the 10%, 5%, and 1% level, respectively.

	CAR(-1,1)		CAR(-2,2)		CAR(-5,5)	
	(1)	(2)	(3)	(4)	(5)	(6)
Strength_Sum	0.00026 (0.467)		0.00012 (0.184)		-0.00055 (-0.637)	
Concern_Sum	-0.00220*** (-2.743)		-0.00215** (-2.300)		-0.00236* (-1.879)	
Strength_dummy		0.00053 (0.138)		-0.00041 (-0.089)		-0.00524 (-0.856)
Concern_dummy		-0.00857** (-2.062)		-0.01002** (-1.987)		-0.01180* (-1.690)
firmsize	-0.00151 (-1.037)	-0.00222* (-1.654)	-0.00100 (-0.586)	-0.00163 (-1.053)	-0.00166 (-0.735)	-0.00250 (-1.203)
freecashflow	0.02183 (0.777)	0.02273 (0.807)	0.03144 (0.893)	0.03213 (0.910)	0.04431 (0.930)	0.04309 (0.902)
Leverage	0.04696** (2.444)	0.04744** (2.475)	0.05360** (2.298)	0.05414** (2.333)	0.01141 (0.357)	0.01344 (0.421)
TobinQ	0.00306 (1.413)	0.00319 (1.481)	0.00400 (1.556)	0.00420 (1.642)	-0.00212 (-0.627)	-0.00168 (-0.497)
MB	-0.00014 (-0.158)	-0.00012 (-0.129)	-0.00049 (-0.452)	-0.00048 (-0.443)	0.00132 (0.943)	0.00129 (0.916)
Diversifying	-0.00089 (-0.275)	-0.00101 (-0.313)	-0.00089 (-0.226)	-0.00093 (-0.236)	0.00199 (0.371)	0.00187 (0.349)
targetpublic	-0.01682*** (-3.156)	-0.01705*** (-3.207)	-0.01167* (-1.858)	-0.01202* (-1.913)	-0.01671* (-1.910)	-0.01718** (-1.963)
targetprivate	-0.00248 (-0.483)	-0.00245 (-0.478)	-0.00186 (-0.304)	-0.00191 (-0.312)	-0.00590 (-0.692)	-0.00614 (-0.720)
Relsize	-0.00967 (-1.241)	-0.00911 (-1.186)	-0.01651* (-1.894)	-0.01592* (-1.852)	-0.01329 (-1.171)	-0.01249 (-1.113)
Cashonly	0.00253 (0.649)	0.00254 (0.650)	-0.00132 (-0.286)	-0.00124 (-0.268)	-0.00495 (-0.787)	-0.00466 (-0.741)
stockdeal	-0.00373 (-0.855)	-0.00395 (-0.904)	-0.00967* (-1.848)	-0.00978* (-1.868)	-0.01402** (-2.006)	-0.01399** (-2.002)
Hostile	-0.00494 (-0.296)	-0.00263 (-0.153)	-0.00254 (-0.146)	-0.00017 (-0.009)	-0.01717 (-0.802)	-0.01446 (-0.672)
Tender	0.00710 (1.481)	0.00694 (1.448)	0.00490 (0.891)	0.00485 (0.882)	0.00327 (0.440)	0.00338 (0.455)
Constant	0.01307 (0.871)	0.02135 (1.500)	0.00722 (0.414)	0.01646 (0.995)	0.04450* (1.790)	0.05845** (2.477)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N	1752	1752	1752	1752	1752	1752
adj. R-sq	0.083	0.082	0.065	0.065	0.039	0.039

Table 5: Regression results for CSR individual dimensions

This table shows the coefficients from regressions of the cumulative abnormal returns of acquiring firms against CSR strengths and concerns individual dimensions. Panel A shows the regression results use acquirer's CSR strength and concern rating measurement. Panel B shows the regression results use acquirer's CSR strength and concern dummy measurement. Descriptions of the explanatory variables are provided in Appendix A. All models include year and industry fixed effects. *, ** and *** denote significance at the 10%, 5%, and 1% level, respectively.

Panel A: Overall CSR strength and concern ratings							
	Dependent variable: CAR(-1,1)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
cgov_Strength	0.00316 (0.924)						
cgov_Concern	-0.00372 (-1.411)						
com_Strength		-0.00038 (-0.164)					
com_Concern		-0.00709 (-1.525)					
div_Strength			-0.00073 (-0.535)				
div_Concern			-0.00103 (-0.347)				
emp_Strength				-0.00007 (-0.035)			
emp_Concern				-0.00466* (-1.879)			
env_Strength					-0.00037 (-0.194)		
env_Concern					-0.00438* (-1.951)		
hum_Strength						0.00179 (0.280)	
hum_Concern						-0.01207*** (-2.615)	
pro_Strength							0.00430 (1.275)
pro_Concern							-0.00118 (-0.490)
Constant	0.01535 (1.052)	0.01621 (1.108)	0.01767 (1.136)	0.01504 (1.032)	0.01561 (1.071)	0.01559 (1.092)	0.01917 (1.299)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1752	1752	1752	1752	1752	1752	1752
adj. R-sq	0.081	0.080	0.079	0.081	0.081	0.082	0.080

Panel B: CSR individual dimensions dummies							
	Dependent variable: CAR(-1,1)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
cgov_Str_dummy	0.00328 (0.747)						
cgov_Con_dummy	-0.00734** (-1.987)						
com_Str_dummy		-0.00292 (-0.663)					
com_Con_dummy		-0.00687 (-1.143)					
div_Str_dummy			-0.00101 (-0.258)				
div_Con_dummy			-0.00039 (-0.116)				
emp_Str_dummy				0.00075 (0.188)			
emp_Con_dummy				-0.00586* (-1.764)			
env_Str_dummy					-0.00240 (-0.584)		
env_Con_dummy					0.00066 (0.142)		
hum_Str_dummy						0.00168 (0.264)	
hum_Con_dummy						-0.01571*** (-2.973)	
pro_Str_dummy							0.00421 (0.985)
pro_Con_dummy							-0.00336 (-0.810)
Constant	0.01282 (0.879)	0.01529 (1.041)	0.01825 (1.200)	0.01666 (1.153)	0.01789 (1.239)	0.01479 (1.036)	0.01767 (1.185)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1752	1752	1752	1752	1752	1752	1752
adj. R-sq	0.082	0.080	0.079	0.081	0.079	0.083	0.080

Table 6: Robustness to Endogeneity

This table reports the results of the instrumental variables analysis to test the association between acquiring firms' CSR strength and concern on merger returns. The instrument *BlueState* is a dummy variable value equal to one if a firm's headquarters is located in blue or Democratic state and zero otherwise. The instrument *Concern_Industry* is the average total number of acquirer's CSR concerns in seven qualitative dimensions of other firms in the same industry. Model 1 and model 2 show the first stage regressions results. Model 3-5 show the second stage regressions with two instruments results. Descriptions of the explanatory variables are provided in Appendix A. All models include year and industry fixed effects. *, ** and *** denote significance at the 10%, 5%, and 1% level, respectively.

	OLS		2SLS		
	Dependent Variable: Strength_Sum	Dependent Variable: Concern_Sum	CAR(-1,1)	CAR(-2,2)	CAR(-5,5)
	(1)	(2)	(3)	(4)	(5)
Strength_Sum			0.00311 (0.339)	0.00517 (0.492)	-0.00211 (-0.146)
Concern_Sum			-0.00390* (-1.704)	-0.00511** (-2.037)	-0.00591* (-1.841)
BlueState	0.47539** (2.54)	0.3033** (2.41)			
Concern_Industry	-0.85482** (-2.13)	-5.94081*** (-6.74)			
firmsize	1.2596*** (22.38)	0.57809*** (15.43)	-0.00399 (-0.367)	-0.00542 (-0.435)	0.00275 (0.160)
freecashflow	2.73017*** (2.77)	0.84558 (1.25)	0.01550 (0.468)	0.02024 (0.507)	0.04949 (0.916)
Leverage	-3.05751*** (-4.08)	-1.01868** (-2.09)	0.05392* (1.660)	0.06593* (1.735)	0.00233 (0.045)
TobinQ	-0.14395* (-1.67)	-0.00743 (-0.14)	0.00351 (1.434)	0.00479* (1.649)	-0.00242 (-0.649)
MB	0.02884 (0.72)	-0.03416 (-1.36)	-0.00030 (-0.326)	-0.00077 (-0.697)	0.00128 (0.927)
Diversifying	0.09921 (0.68)	0.25417 (2.85)	-0.00266 (-0.825)	-0.00406 (-1.027)	-0.00004 (-0.007)
targetpublic	-0.04991 (-0.24)	-0.20102 (-1.33)	-0.01723*** (-3.492)	-0.01239** (-2.113)	-0.01769** (-2.218)
targetprivate	0.07105 (0.37)	-0.05998 (-0.45)	-0.00293 (-0.607)	-0.00265 (-0.460)	-0.00637 (-0.803)
Relsize	-0.55639 (-2.56)	-0.17127 (-1.19)	-0.00874 (-1.011)	-0.01481 (-1.495)	-0.01544 (-1.167)
Cashonly	-0.11053 (-0.64)	0.14683 (1.31)	0.00318 (0.847)	-0.00021 (-0.048)	-0.00475 (-0.800)
stockdeal	-0.01711 (-0.1)	0.34257*** (2.82)	-0.00317 (-0.787)	-0.00868* (-1.790)	-0.01302** (-2.021)
Hostile	-1.87594*** (-4.17)	-1.38448** (-2.28)	-0.00137 (-0.066)	0.00390 (0.175)	-0.02254 (-0.745)
Tender	-0.07335 (-0.3)	0.16409 (1.06)	0.00773* (1.693)	0.00601 (1.127)	0.00414 (0.588)
Constant	-7.7188*** (-6.54)	8.71495*** (4.36)	0.02289 (0.287)	0.03585 (0.391)	0.01456 (0.115)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
N	1747	1747	1747	1747	1747
adj. R-sq	0.5825	0.5562	0.066	0.031	0.029

Table 7: The positive association between aggregate CSR and merger returns

This table shows the robustness tests results by using alternative aggregate CSR following Deng et al. (2013). The dependent variable is the cumulative abnormal returns of event window (-1,1). Model (1) shows coefficients from a regression of the cumulative abnormal returns of acquiring firms on adjusted CSR. Model (2) shows coefficients from a regression of the cumulative abnormal returns of acquiring firms on raw CSR. Descriptions of the explanatory variables are provided in Appendix A. All models include year and industry fixed effects. All models include the firm and deal level control variables but results are not reported in the table. *, ** and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1)	(2)
AdjCSR	0.00593** (1.984)	
rawCSR		0.00087* (1.693)
firmsize	-0.00300** (-2.457)	-0.00314** (-2.527)
freecashflow	0.02063 (0.740)	0.01995 (0.716)
Leverage	0.04993*** (2.609)	0.05030*** (2.623)
TobinQ	0.00312 (1.444)	0.00315 (1.457)
MB	-0.00014 (-0.159)	-0.00013 (-0.143)
Diversifying	-0.00134 (-0.417)	-0.00149 (-0.465)
targetpublic	-0.01667*** (-3.123)	-0.01659*** (-3.103)
targetprivate	-0.00245 (-0.478)	-0.00245 (-0.476)
Relsize	-0.00912 (-1.176)	-0.00899 (-1.158)
Cashonly	0.00258 (0.659)	0.00258 (0.658)
stockdeal	-0.00405 (-0.928)	-0.00413 (-0.946)
Hostile	-0.00293 (-0.176)	-0.00281 (-0.168)
Tender	0.00680 (1.415)	0.00672 (1.394)
Constant	0.02175 (1.523)	0.02216 (1.544)
Year FE	Yes	Yes
Industry FE	Yes	Yes
N	1752	1752
adj. R-sq	0.082	0.081

Table 8: Robustness test with additional CSR controversial control variables

This table shows the robustness tests results by adding additional CSR controversial concern variables. The dependent variable is the cumulative abnormal returns of event window (-1,1). Model (1)-(4) show coefficients from a regression of the cumulative abnormal returns of acquiring firms' CSR strength and concern ratings. Model (5)-(8) show coefficients from a regression of the cumulative abnormal returns of acquiring firms' CSR strength and concern dummies. Descriptions of the explanatory variable are provided in Appendix A. All models include year and industry fixed effects. All models include the firm and deal level control variables but results are not reported in this table. *, ** and *** denote significance at the 10%, 5%, and 1% level, respectively.

	CSR_Sum				CSR_dummy			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Strength_Sum	0.00013 (0.242)	0.00021 (0.377)	0.00018 (0.320)	0.00019 (0.351)				
Concern_Sum	-0.00206** (-2.534)	-0.00206** (-2.539)	-0.00198** (-2.409)	-0.00198** (-2.414)				
Strength_dummy					0.00036 (0.094)	0.00046 (0.119)	0.00047 (0.122)	0.00047 (0.123)
Concern_dummy					-0.00867** (-2.089)	-0.00851** (-2.050)	-0.00848** (-2.049)	-0.00847** (-2.046)
Cont_Concern	0.01106** (2.482)				0.01176*** (2.649)			
Cont_dummy		0.01002* (1.957)				0.01100** (2.156)		
alc_Concern			0.01251 (1.255)				0.00932 (0.898)	
gam_Concern			0.00221 (0.187)				0.00368 (0.306)	
tob_Concern			0.04397** (2.228)				0.04622** (2.369)	
mil_Concern			0.00933* (1.758)				0.00995* (1.883)	
nuc_Concern			0.00460 (0.218)				0.00373 (0.173)	
fir_Concern			0.03918** (2.236)				0.03992** (2.438)	
acl_dummy				0.01234 (1.240)				0.00913 (0.882)
gam_dummy				0.00225 (0.191)				0.00372 (0.308)
tob_dummy				0.04400** (2.230)				0.04627** (2.372)
mil_dummy				0.00902 (1.569)				0.00976* (1.702)
nuc_dummy				0.00461 (0.218)				0.00375 (0.174)
fir_dummy				0.03925** (2.241)				0.03994** (2.441)
Constant	0.01170 (0.779)	0.01269 (0.846)	0.01346 (0.898)	0.01363 (0.909)	0.02034 (1.430)	0.02075 (1.458)	0.02155 (1.518)	0.02158 (1.519)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1752	1752	1752	1752	1752	1752	1752	1752
adj. R-sq	0.086	0.085	0.086	0.086	0.086	0.084	0.086	0.085

Appendix A: Variable description and sources

Variable name	Variable description	Source
<i>Panel A: Abnormal returns</i>		
CAR(-1, 1)	Three-day cumulative abnormal return (in percentage points) calculated using the market model. The market model parameters are estimated over the period (-210, -11) with the CRSP value-weighted return as the market index.	CRSP
CAR(-2, 2)	Five-day cumulative abnormal return (in percentage points) calculated using the market model. The market model parameters are estimated over the period (-210, -11) with the CRSP value-weighted return as the market index.	CRSP
CAR(-5, 5)	Eleven-day cumulative abnormal return (in percentage points) calculated using the market model. The market model parameters are estimated over the period (-210, -11) with the CRSP value-weighted return as the market index.	CRSP
<i>Panel B: Corporate social responsibility</i>		
Strength_Sum	The total score of seven CSR strength measures in areas of community, corporate governance, diversity, employee relations, environment, human rights and product.	KLD
Concern_Sum	The total score of seven CSR concern measures in areas of community, corporate governance, diversity, employee relations, environment, human rights and product.	KLD
Strength_dummy	Dummy variable equal to one if the firm has any areas of community, corporate governance, diversity, employee relations, environment, human rights and product marked as strength and zero	KLD
Concern_dummy	Dummy variable equal to one if the firm has any areas of community, corporate governance, diversity, employee relations, environment, human rights and product marked as concern and zero	KLD
RawCSR	The difference between the total CSR strength scores and total CSR concern scores of community activities, corporate governance, diversity, employee relations, environmental record, human rights,	KLD
AdjCSR	The sum of yearly adjusted community activities, corporate governance, diversity, employee relations, environmental record, human rights, and product quality and safety KLD STATS	KLD
cgov_Strength	The score of corporate governance strength for the firm-year.	KLD
cgov_Concern	The score of corporate governance concern for the firm-year.	KLD
com_Strength	The score of community strength for the firm-year.	KLD
com_Concern	The score of community concern for the firm-year.	KLD
div_Strength	The score of diversity strength for the firm-year.	KLD
div_Concern	The score of diversity concern for the firm-year.	KLD
emp_Strength	The score of employee relations strength for the firm-year.	KLD
emp_Concern	The score of employee relations concern for the firm-year.	KLD
env_Strength	The score of environment strength for the firm-year.	KLD
env_Concern	The score of environment concern for the firm-year.	KLD
hum_Strength	The score of human rights strength for the firm-year.	KLD
hum_Concern	The score of human rights concern for the firm-year.	KLD

pro_Strength	The score of product quality and safety strength for the firm-year.	KLD
pro_Concern	The score of product quality and safety concern for the firm-year.	KLD
cgov_Str_dummy	Dummy equal to one if the firm's corporate governance area marked as strength, zero otherwise.	KLD
cgov_Con_dummy	Dummy equal to one if the firm's corporate governance area marked as concern, zero otherwise.	KLD
com_Str_dummy	Dummy equal to one if the firm's community area marked as strength, zero otherwise.	KLD
com_Con_dummy	Dummy equal to one if the firm's community area marked as concern, zero otherwise.	KLD
div_Str_dummy	Dummy equal to one if the firm's diversity area marked as strength, zero otherwise.	KLD
div_Con_dummy	Dummy equal to one if the firm's diversity area marked as concern, zero otherwise.	KLD
emp_Str_dummy	Dummy equal to one if the firm's employee relations area marked as strength, zero otherwise.	KLD
emp_Con_dummy	Dummy equal to one if the firm's employee relations area marked as concern, zero otherwise.	KLD
env_Str_dummy	Dummy equal to one if the firm's environment area marked as strength, zero otherwise.	KLD
env_Con_dummy	Dummy equal to one if the firm's environment area marked as concern, zero otherwise.	KLD
hum_Str_dummy	Dummy equal to one if the firm's human rights area marked as strength, zero otherwise.	KLD
hum_Con_dummy	Dummy equal to one if the firm's human rights area marked as concern, zero otherwise.	KLD
pro_Str_dummy	Dummy equal to one if the firm's product area marked as strength, zero otherwise.	KLD
pro_Con_dummy	Dummy equal to one if the firm's product area marked as concern, zero otherwise.	KLD
Cont_Concern	The total score of CSR controversial dimensions for the firm-year.	KLD
Cont_dummy	Dummy equal to one if the firm has any areas of controversial (alcohol, gambling, tobacco, firearms, military and nuclear power) rating marked as concern and zero otherwise.	KLD
alc_Concern	The score in CSR alcohol dimension for the firm-year.	KLD
alc_dummy	Dummy equal to one if the firm in alcohol dimension marked as concern and zero otherwise.	KLD
gam_Concern	The score in CSR gambling dimension for the firm-year.	KLD
gam_dummy	Dummy equal to one if the firm in gambling dimension marked as concern and zero otherwise.	KLD
tob_Concern	The score in CSR tobacco dimension for the firm-year.	KLD
tob_dummy	Dummy equal to one if the firm in tobacco dimension marked as concern and zero otherwise.	KLD
mil_Concern	The score in CSR military dimension for the firm-year.	KLD
mil_dummy	Dummy equal to one if the firm in military dimension marked as concern and zero otherwise.	KLD
nuc_Concern	The score in CSR nuclear power dimension for the firm-year.	KLD
nuc_dummy	Dummy equal to one if the firm in nuclear power dimension marked as concern and zero otherwise.	KLD
fir_Concern	The score in CSR firearms dimension for the firm-year.	KLD
fir_dummy	Dummy equal to one if the firm in firearms dimension marked as concern and zero otherwise.	KLD

Panel C: Bidder characteristics

firmsize	Log of book value of total assets.	
freecashflow	Operating income before depreciation – interest expenses – income taxes – capital expenditures, scaled by book value of total assets.	Compustat
Leverage	Book value of debts (sum of current liabilities and long term debt) divided by market value of assets (total book value of assets minus book value of equity plus market value of equity).	Compustat
TobinQ	Market value of assets (total book value of assets minus book value of equity plus market value of equity) over book value of assets.	Compustat
MB	Market value of equity over book value of equity.	Compustat

Panel D: Deal characteristics

Diversifying	Dummy variable equal to one if acquirer and target have the different SIC code and zero otherwise.	SDC
targetpublic	Dummy variable equal to one if the target is a publicly traded firm and zero otherwise.	SDC
targetprivate	Dummy variable equal to one if the target is a private firm and zero otherwise.	SDC
Relsize	Deal value reported in SDC over market value of acquirer equity.	SDC
Cashonly	Dummy variable equal to one if the merger is made entirely with cash payment and zero otherwise.	SDC
stockdeal	Dummy variable equal to one if the deal is at least partially financed by stocks and zero otherwise.	SDC
Hostile	Dummy value equal to one if a merger attitude is classified as hostile and zero otherwise.	SDC
Tender	Dummy variable equal to one if the deal is reported as tender offer in SDC and zero otherwise.	SDC

Appendix B: KLD strength and concern indicators

KLD category	Strength items	Concern items
Community	(1) Charitable Giving; (2) Innovating Giving; (3) Non-US Charitable Giving; (4) Support for Housing; (5) Support for Education; (6) Indigenous Peoples Relations; (7) Volunteer Programs; (9) Other Strength.	(1) Investments Controversies; (2) Negative Economic Impact; (3) Indigenous Peoples Relations; (4) Tax Disputed; (5) Other Concern.
Corporate Governance	(1) Limited Compensation; (2) Ownership Strength; (3) Transparency Strength; (4) Political Accountability Strength; (5) Other Strength.	(1) High Compensation; (2) Ownership Concern; (3) Accounting Concern; (4) Transparency Concern; (5) Political Accountability Concern; (6) Other Concern.
Diversity	(1) CEO; (2) Promotion; (3) Board of Directors; (4) Work/ Life Benefits; (5) Women& Minority Contracting; (6) Employment of the Disabled; (7) Gay& Lesbian Policies; (8) Other Strength.	(1) Controversies; (2) Non-Representation; (3) Other Concern.
Employee Relations	(1) Union Relations; (2) No-Layoff Policy; (3) Cash Profit Sharing; (4) Employee Involvement; (5) Retirement Benefits Strength; (6) Health and Safety Strength; (7) Other Strength.	(1) Union Relations; (2) Health and Safety Concern; (3) Workforce Reductions; (4) Retirement Benefits Concern; (5) Other Concern.
Environment	(1) Beneficial Products and Services; (2) Pollution Prevention; (3) Recycling; (4) Clean Energy; (5) Communications; (6) Property, Plant, and Equipment; (7) Management Systems; (8) Other Strength.	(1) Hazardous Waste; (2) Regulatory Problems; (3) Ozone Depleting Chemicals; (4) Substantial Emissions; (5) Agricultural Chemicals; (6) Climate Change; (7) Other Concern.
Human Rights	(1) Positive Record in South Africa; (2) Indigenous Peoples Relations Strength; (3) Labor Rights Strength; (4) Other Strength.	(1) South Africa; (2) Northern Ireland; (3) Burma Concern; (4) Mexico; (5) Labor Rights Concern; (5) Indigenous Peoples Relations Concern; (6) Other Concern.
Product	(1) Quality; (2) R&D/ Innovation; (3) Benefits to Economically Disadvantaged; (4) Other Strength.	(1) Product Safety; (2) Marketing/ Contracting Concern; (3) Antitrust; (4) Other Concern.
Alcohol	N/A	(1) Licensing; (2) Manufacturers; (3) Manufacturers of Products Necessary for Production of Alcoholic Beverages; (4) Retailers; (5) Ownership by an Alcohol Company; (6) Ownership of an Alcohol Company; (7) Alcohol Other Concern.
Gambling	N/A	(1) Licensing; (2) Manufacturers; (3) Owners and Operators; (4) Supporting Products or Services (5) Ownership by an Gambling Company; (6) Ownership of an Gambling Company; (7) Gambling Other Concern.
Tobacco	N/A	(1) Licensing; (2) Manufacturers; (3) Manufacturers of Products Necessary for Production of Tobacco products; (4) Retailers; (5) Ownership by an Tobacco Company; (6) Ownership of an Tobacco Company; (7) Tobacco Other Concern.
Firearms	N/A	(1) Manufacturers; (2) Retailers; (3) Ownership by an Firearms Company; (4) Ownership of an Firearms Company
Military	N/A	(1) Manufacturers for Weapons for Weapons Systems (2) Manufacturers of components for Weapons for Weapons Systems (3) Ownership by a Military Company; (4) Ownership of a Military Company; (5) Minor Weapons Contracting Involvement; (6) Major Weapons-related Supplier; (7) Military Other Concern.
Nuclear Power	N/A	(1) Construction& Design of Nuclear Power Plants; (2) Nuclear Power Fuel and Key Parts; (3) Nuclear Power Service Provider; (4) Ownership of a Nuclear Power Company; (5) Ownership by a Nuclear Power Company; (6) Design; (7) Fuel Cycle/Key parts; (8) Nuclear Power Other Concern.