Corporate Social Responsibility as a Conflict between Shareholders

Amir Barnea and Amir Rubin*

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Abstract

In recent years firms have greatly increased the amount of resources allocated to activities classified as Corporate Social Responsibility (CSR). This increase in CSR expenditure may be consistent with firm value maximization if it is solely a response to changes in stakeholders' preferences. However, we argue that insiders (managers and large blockholders) who are affiliated with the firm may want to over-invest in CSR for their private benefit since it improves their reputation as being good global citizens. We test this hypothesis by investigating the relation between firms' CSR ratings and their ownership and capital structure. We employ a unique data set that categorizes the largest 3,000 US corporations to being either socially responsible or socially irresponsible. We find that insiders' ownership and leverage are negatively related to the social rating of firms, while institutional ownership is uncorrelated with it. These results support our hypothesis that affiliated shareholders induce firms to over-invest in CSR when they don't bear much of the cost associated with it.

One of the most significant corporate trends of the last decade is the growth of Corporate Social Responsibility (CSR). Definitions of CSR vary but generally refer to serving people,

communities and the environment in a way that goes above and beyond what is legally required of a firm. The alignment of business operations with social values is by now an industry in itself, with full-time staff in corporations, hundreds of websites, newsletters, professional associations and consultants. Students can earn an MBA degree in CSR and may attend seminars on careers in CSR. Most major companies have a special annual publication dedicated to CSR; others devote a big section of their annual report to the documentation of social goals advanced and good works undertaken. The FTSE and Dow Jones have both launched indices of socially responsible companies joining similar indices around the world.

In this paper we wish to gain a better understanding for this dramatic increase in CSR expenditure. A key assumption in our analysis is that the relation between CSR expenditure and firm value is non-monotonic. When CSR expenditure is low, it has a positive contribution to firm value, for example by increasing productivity of employees or avoiding costs such as bad reputation and pollution fines. But at some point, the marginal effect of an additional dollar of CSR expenditure decreases shareholders wealth as there is no limit to the amount that a firm can donate to society. If firms decision-making were done solely by value maximizing individuals then the chosen level of CSR expenditure would have been consistent with that objective (e.g., Demsetz and Lehn (1985)).

Our hypothesis is that insiders (corporate managers and large blockholders) who are affiliated with the firm may have an interest to increase CSR expenditure to a higher level than that which maximizes firm value. They may do so because they gain unique benefits from a high CSR rating. A good social rating enhances their reputation as being decent individuals who respect their employees, communities and the environment and care about society. While insiders may benefit from CSR, other shareholders may not approve of a high CSR expenditure if it reduces firm value. Therefore, CSR may be the source of a conflict between different shareholders.

In order to test this potential conflict we analyze the relation between CSR and the ownership and capital structure of firms. If insiders gain unique benefits at the expense of other shareholders, their degree of ownership should matter in setting the amount of CSR

expenditure in the firm. The level of ownership by insiders can have two potential effects. On the one hand, as argued by Demsetz (1983) and Fama and Jensen (1983), with high ownership comes entrenchment, which may allow insiders to pursue a pro-CSR agenda more easily.[1] But on the other hand, if CSR expenditure is at a level in which it reduces firm value, insiders would bear more of the cost associated with CSR the higher their ownership level is. In other words, ceteris paribus, insiders' ownership should be negatively related to the level of CSR expenditure since insiders pay more for it as their degree of ownership rises.

If a CSR conflict indeed exists, insiders gain at the expense of other shareholders. These include institutional and small individual investors. While small individual shareholders do not have an impact on the decision-making process in the firm, there is some evidence that institutions play a role in mitigating agency conflicts (e.g., Hartzell and Starks (2003) and Bhojraj and Sengupta (2003)). Therefore, institutional ownership is one of the variables that we incorporate in the analysis.

The capital structure of the firm may also influence the CSR conflict. When firms have high interest payments, it limits the ability of insiders to over-invest in CSR. This is similar to arguments suggested by Jensen (1986) and Zweibel (1996). High debt levels also induces creditors to play a more active monitoring role (e.g., Diamond (1991), Gilson (1990)), which may help to mitigate the conflict.

We employ a unique and large data set that categorizes firms in the Russell 3000 index to being either socially responsible (SR) or socially irresponsible (SI). Controlling for industry and firm characteristics, we show that insiders' ownership is negatively and significantly correlated with CSR ratings. An increase of one standard deviation in total insiders' ownership of a firm decreases by 3.8% the probability that it will be classified as SR. The result supports our hypothesis that insiders gain personal benefits from CSR. Assuming that there is a positive monotonic relation between the level of CSR expenditure of the firm and the probability that the firm receives an SR rating, the negative correlation upholds the claim

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[1]Morck, Shleifer, and Vishny (1988) argue that entrenchment is reached at levels of ownership between 5% to 25%.

that insiders reduce CSR expenditure depending on their degree of ownership. At high levels of ownership they bear more of the cost involved in CSR and are more aligned with firm value maximization. The fact that they choose to reduce CSR expenditure shows that the marginal dollar spent on CSR reduces firm value.

In addition we find that an increase of one standard deviation in the leverage of a firm decreases the probability that it will be defined as SR by 2.2%. This result also supports the CSR conflict hypothesis since higher debt levels reduce the ability of insiders to over-invest in CSR. In contrast, we find that institutional ownership is not correlated with the social ratings. This provides supportive evidence to the claim made by Woidtke (2002) that public institutions may care about social issues more than about maximizing the value of their portfolio. The results are persistent throughout the study for different specifications and robustness checks. To rule out possible endogeneity problems we use an instrumental variable (IV) approach.

One of the contributions of the paper is the development of a relative CSR measure (RCSR). The need for such a measure comes from the fact that our raw data consist of a binary CSR rating that does not distinguish between firms within each of the two groups (i.e., SI and SR). Our methodology maps the binary CSR measure into a continuous one by taking into account firm characteristics such as industry, size, age and growth opportunities. The results are robust to this alternative approach.

The CSR conflict is somewhat different than typical agency conflicts since all insiders (and not only managers) may gain personal benefits from a high CSR rating. However, it is very common to link CSR with corporate governance. Arguably, this link is due to the perception that a high CSR expenditure and good corporate governance mechanisms are both to be found in so called ethical firms. We therefore examine whether the CSR conflict is related to the presence of standard corporate governance mechanisms. We use the governance index suggested by Gompers, Ishii and Metrick (2003) (GIM) to learn about this possible relation and find that the CSR ratings and the GIM index are uncorrelated.

Despite the enormous interest in CSR, the literature has so far concentrated on the

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relation between CSR and financial performance (see Griffin and Mahon (1997) for a survey). We focus on the decision-making process in the firm by looking at firms' ownership and capital structure. To the best of our knowledge, the only paper that bears some similarities to ours is Navarro (1988) who studies the nature of corporate giving to charity. However, his focus is on tax policies with respect to corporate donations.

The remainder of the paper proceeds as follows. In Section I we present the CSR-conflict hypothesis and the different mechanisms that can potentially affect it. In Section II we describe the data and the variables that we use in the empirical analysis. In Section III we conduct the empirical analysis. Section IV investigates the relation between CSR and the GIM index. Section V concludes.

I   CSR as a Conflict between Different Shareholders

The conflict that we analyze can be regarded as a conflict between two types of shareholders: insiders, who are affiliated with the firm, and other shareholders such as institutions or small individual investors, who are not affiliated with the firm. Affiliated owners are those investors whose either reputation, identity or heritage is related to the firm, while non-affiliated owners are the majority of investors who hold shares in the firm as part of a well diversified portfolio and have a relation with the firm that does not go beyond its affect on their portfolio value. Our hypothesis is that insiders, the affiliated shareholders, may gain private benefits from being identified with a firm that has a high CSR rating, or stated similarly, insiders bear a cost from being associated with a firm which is classified as socially irresponsible.

The group of insiders is composed of three subgroups: managers, blockholders who are not part of the daily management team, and directors who are not part of the first two groups (i.e., hold less than 5% of the firm's equity and not part of the daily management team). It is hard to hypothesize which group would gain more from being associated with a socially responsible firm. However, we argue that all three subgroups care about the firm's social rating more than a diversified shareholder. For example, consider the following three individuals: Steven Jobs, the CEO of Apple Computer, Warren Buffet a large blockholder

of The Coca-Cola Company and Roy Disney, a director of The Walt Disney Company. All three individuals are strongly affiliated with their corresponding firm. Our claim is that these individuals gain from the fact that these firms have a high CSR rating more than a diversified shareholder such as Fidelity, whose image is not affected by the social rating of one specific firm.

In what follows, we explore how this potential CSR conflict may be affected by different attributes of the firm; the most important being the ownership and capital structure. In addition, we discuss how free cash flow and the composition of the board of directors may affect the conflict.

A Insiders

As argued above, insiders are typically affiliated with the firm and may benefit from the fact that a firm is classified as SR. On the other hand, if CSR expenditure is at a level in which it reduces firm value the degree of ownership of insiders should matter. Jensen and Meckling (1976) claim that deviation from value-maximization declines as management ownership rises. Others argue that with more control comes also more entrenchment (Demsetz (1983), Fama and Jensen (1983)), which may result in management engaging in non-value-maximizing activities. Whereas the alignment hypothesis predicts that larger stakes by insiders may reduce the CSR-conflict, the prediction of the entrenchment hypothesis is less clear-cut. For example, Morck, Shleifer and Vishny (1988) claim that entrenchment is reached at levels of ownership below 25% and that an increase in ownership above that level does not result in more entrenchment but further increases alignment with shareholders.

B Institutions

Shleifer and Vishny (1986) argue that institutional shareholders, by virtue of their large stockholding, have incentives to monitor corporate decision-making. Consistent with this hypothesis, a few studies document institutional investors' voting against harmful amendments (Jarrell and Poulsen (1988), Brickly, Lease, and Smith (1988)). Other papers show that in-

stitutional investors enhance firm value as measured by Tobin's Q (McConnell and Servaes (1990, 1995)), increase pay for performance for executives (Hartzell and Starks (2003)) and reduce agency costs between shareholders and bondholders (Bhojraj and Sengupta (2003)).

On the other hand, Black (1992) points out that institutional investors are agents whose objective may differ than that of their unit holders. Woidtke (2002) finds supporting evidence for this claim by showing that public pension funds do not enhance firm value. She argues that these funds are often managed by officials that have their own personal agendas, such as campaigning for public office. Under such circumstances, these institutions may find that a pro-CSR agenda coincides with their private objectives even if it reduces firm value. Moreover, it is conceivable that even for private funds a higher priority would be given for voting against golden parachutes compared to voting against donations to the tsunami victims, for example.

When discussing the impact that institutions may have on CSR, some attention should also be given to Socially Responsible Investing (SRI), which refers to making investment decisions that consider also social criteria. A typical SRI fund would avoid holding shares of firms that have a poor CSR rating. According to the Social Investing Forum, an association dedicated to promoting SRI, the amount of funds involved in SRI reached a level of US\$ 2.2 trillion as of December 2003, accounting for about 11 percent of all managed funds in the US.[2] However, only 20 percent of this amount is invested in portfolios controlled by institutions who also advocate on various social and environmental issues within the firms. This suggests that while SRI may lead to high ownership of institutions in socially responsible firms, the direct impact of these institutions on the CSR policy of these firms is currently limited.

C Leverage

Over-investment is easier when firms have a lot of cash in place (e.g., Jensen (1986) and Zweibel (1996)). Therefore, debt servicing obligations may help to discourage possible over-investment in CSR by self serving insiders. Moreover, banks and debt holders can also be

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[2]2003 Report on Socially Responsible Investing Trends in the United States, Social Investment Forum.

active investors. They have investments in the firm, and want to see the returns on these investments materialize. While they do not have voting rights, they have other means to monitor the firm's policy. Firms occasionally have to raise additional capital from creditors which results in their ability to influence decisions. Gilson (1990) documents that U.S. banks play a major governance role by replacing managers and directors. Creditors, compared to shareholders, typically keep their debt holdings for a longer period. This has some advantages, such as the ability to influence corporate management by patient, informed investors.

D   Free Cash Flow

Jensen (1986) suggests that it is easier for managers to consume perks in firms with substantial free cash flow as these managers do not have to raise more funds from questioning investors.[3] While Jensen's theoretical argument is solid, testing it empirically is very difficult since the level of free cash flow is unobservable. Consider, for example, one of the most commonly used measures of free cash flow, proposed by Lehn and Poulsen (1989):

$$FCF = INC - TAX - INTEXP - PFDDIV - COMDIV$$

where,

FCF = free cash flow

INC = operating income before depreciation

TAX = total taxes

$INTEXP$ = gross interest expenses on short and long-term debt

$PFDDIV$ = total dividend on preferred shares

$COMDIV$ = total dividend on ordinary shares

This free cash flow measure does not represent the *availability* of cash; rather, it represents the cash *left* in the company after perks were potentially consumed. In the context of this paper, this free cash flow measure is a bad proxy for the CSR expenditure potential

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[3]Jensen (1986) also argues that the likelihood of perk consumption by managers is especially high in mature firms operating in low growth industries.

because CSR costs have already been incurred in the operating income. Hence, the observable measure is net of CSR.

Moreover, since any measure of free cash flow is a measure of net free cash flow (as oppose to the unobservable gross free cash flow), using it as an explanatory variable results in a severe endogeneity problem. For these reasons we do not use free cash flow in the analysis.

E   Board of Directors

The corporate finance literature recognizes board composition as an additional mechanism that may affect standard agency conflicts. For example, Ryan and Wiggins (2004) claim that independent directors help in aligning managers' objectives with those of other shareholders. It is important to note, however, that the CSR-conflict is not between managers and other shareholders; rather, it is between affiliated and non-affiliated shareholders. We view both inside and outside directors as affiliated shareholders since their reputation may be affected by the firm's CSR rating. Therefore, if all board members had the same ownership level, we would not expect to find a correlation between CSR and board composition. We are aware of the fact that board composition is correlated with insiders' ownership; however, employing board composition in the analysis is not helpful since we use a direct measure of insiders' ownership.

II   Data

A   Data Source

Our data are gathered from a variety of sources. The first is a unique database that we have obtained from Kinder, Lydenberg and Domini Research & Analytics, Inc. (KLD), the leading research group in providing ratings of corporate social performance to investors. The KLD database screens close to 3,000 firms and categorizes them to be either socially responsible (SR) or socially irresponsible (SI). To the best of our knowledge we are among the first to

use this comprehensive database, which was launched in 2001.[4] Our sample includes firms that account for 98% of the total market value of US public equities. Other data sources that we use are proxy statements, 13F schedules, CRSP, and Compustat. Our database is cross-sectional and it is composed of the most recent data as of the third quarter of 2003 (September 2003).[5] Table I provides a complete description of the main variables used in the study.

[**Insert Table I about here**]

B The CSR Measure

KLD launched in 2001 the Broad Market Social Index (BMSI). The BMSI, a subset of close to 3,000 firms that compose the Russell 3000 index, is generated after a CSR screening process takes place. In this process, KLD divides firms to three different categories: SR, SI due to *exclusionary* reasons and SI due to *qualitative* reasons. Only SR firms are eligible for inclusion in the BMSI.

Sorting firms into these three categories involves a two-stage social screening process. First, KLD applies an exclusionary social screening. In this stage SI firms are defined as follows: companies that derive any revenues from alcohol, tobacco, or gambling; companies that derive more than 2% of gross revenues from the production of military weapons; and electric utilities that own interests in nuclear power plants or derive electricity from nuclear power plants in which they have an interest. It is important to note that the exclusionary screening that KLD applies is a per-se criterion. As long as Philip Morris, for example, continues to produce cigarettes, it is defined as SI. Thus, even if Philip Morris' expenditure on CSR is relatively high, it would never get an SR rating from KLD. Firms that fail in this screening stage can not be reconsidered to be SR unless they shut-down the "unethical" side of their business. In some cases, as in the case of Philip Morris, this means shutting-down the

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[4]Aggarwal and Nanda (2004) use similar data to study the impact of the size of a firm's board of directors on managerial incentives.

[5]Note that corporate social performance is a long term screening measure that does not vary over a short period of time.

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firm. Out of the 2,837 firms that were considered, 187 are defined as SI due to exclusionary reasons.

In the second stage, KLD applies a qualitative social screening on the remaining firms. Qualitative screening includes areas such as community relations, workforce diversity, employee relations, environment, non-US operations, and product safety and use. In each of the areas, KLD investigates a range of sources to determine, for example, whether the company has paid fines or penalties in an area or has major strengths in the area (e.g., strong family policies for the employees' relations category). Where possible, KLD uses quantitative criteria to determine the rating (e.g., dollar amount paid in fines; percentage of employees receiving certain kinds of benefits). Some subjective judgment is necessary, of course, in the determination of the cutoff point for a negative rating, as well as in borderline cases. In our sample, 2,278 firms passed the qualitative social screening and are defined as SR firms, while 372 firms did not pass the qualitative screening and are defined as SI firms.

The dependent variable in most of our analysis is the CSR rating of each firm. Optimally, we would like to have a continuous measure of the CSR rating, but the data are not available. Our substitute is the binary variable, *CSR*, which equals one if a firm passes the screening conducted by KLD and zero if it fails. Our underlying assumption is that there is a monotonic relation between the CSR expenditure of the firm and the probability that the firm receives an SR rating from KLD. With respect to the qualitative screening we feel comfortable with this assumption since it is a comprehensive analysis that looks into many dimensions of social issues (more than 200 sections) and it is reasonable to assume that firms with higher CSR expenditure tend to receive an SR rating. On the other hand, SI firms due to exclusionary screening receive their rating due to a failure in one "unethical" dimension, which is controversial at best. These firms can not be employed in the analysis because they can not be considered as firms with low (nor high) CSR expenditure. Thus, we omit these firms from the sample and left with 2650 firms in the analysis.

[Insert Table II about here]

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Table II reports the number of SR and SI firms, sorted by 2-digit SIC codes to sixty-four industries. The ratio of $\frac{SR}{SI}$ over the whole sample is approximately 6. There are, of course, large variations across industries. Some industries, such as the high-tech industry are dominated by SR firms, while other industries, such as basic materials, have a higher proportion of SI firms.

C Conflict Variables

As mentioned above, when considering the ownership structure we focus on two groups of investors: insiders and institutions. We use two measures for ownership by insiders. The first is *Insiders' ownership,* the percent of common stock held by all officers and directors of the company plus beneficial owners who own more than 5 percent of the subject company's stock as disclosed in the most recent proxy statement. Our second measure is *Insiders' control,* a dummy variable which equals one if the combined ownership of insiders is more than 50% of the shares outstanding, and zero otherwise. This allows us to isolate cases in which insiders (jointly) have control over of the firm.

For institutional ownership we also use two measures. *Institutional ownership* is the aggregate holdings of common stocks held by all reporting institutions as a group. It is calculated as a percent of the total number of shares outstanding. The second measure is *Institutional HHI,* which is the Herfindahl-Hirschman Index (HHI) of concentration of the top 15 institutional owners for every single firm. It is defined as $\sum_{i=1}^{15} h_i^2$, where h_i is the percentage of ownership of institution i. We are using a measure of the concentration of institutional ownership in addition to a measure of the total ownership since previous work showed that institutions influence more when they are large shareholders (Shleifer and Vishney (1986)) and when they can form a coalition (Black (1992)). The concentration measure can capture this ability better than the total ownership measure.

The monitoring ability of debtholders and availability of cash flow are captured by firms' leverage. The variable *Leverage* is defined as long-term debt divided by the total book value of assets.

D   Control Variables

We include several control variables in the analysis to control for industry and firm characteristics. To capture industry effects, we include sixty-four dummy variables for each 2-digit SIC code. Firm size is measured by the natural log of the book value of total assets. We proxy for growth opportunities using the market to book ratio, calculated as the market value of assets divided by the book value of assets. The 60 months return volatility of the firm's share is our proxy for firm's risk. Firm's age is measured by the number of years since the firm's share price appeared on the CRSP tape.

E   Summary Statistics

Table III presents difference of means tests between SR and SI firms. SI firms represent 14% of our sample. The table provides the t-statistics and the Industry Adjusted t-statistics, where each observation is adjusted by subtracting the 2-digit SIC code industry mean of the relevant variable. The later provides a cleaner way to test the significance of the variable once industry effects are accounted for.

We find that SR firms have an insiders' ownership level which is lower by 4% than that of SI firms. Moreover, 17% of SI firms are controlled by insiders (i.e., insiders' ownership of more than 50%) while this is the case in only 9% of the SR firms. While there is a distinct difference in the holdings of insiders between SR and SI firms, there is no significant difference in the institutional ownership measures. Consistent with our hypothesis, SR firms tend to have lower leverage than SI firms. With respect to age and size, SR firms are younger and smaller than SI firms. The univariate analysis also suggests that SR firms tend to have a higher market to book ratio and that their shares are more volatile than those of SI firms. Concerning firms' classification, 51.6% of SR firms are listed on the Nasdaq stock exchange compared to 28% of SI firms. There is also some evidence that west coast firms are more socially responsible; 27.5% of SR firms' headquarters are in the west cost, compared to only 18.3% of SI firms. Firms which are part of the S&P 500 represent 18.9% of our sample. However, included in the S&P 500 are 14.6% of the SR firms and 27.9% of the SI firms. This

again suggests that size is an important factor determining the classification of a firm to be either SR or SI.

[**Insert Table III about here**]

III   Multivariate Analysis

A   Multivariate Analysis of CSR

In this section we investigate the relation between CSR and the conflict variables. Our measure of the social performance of firms, is *CSR,* a dummy variable which equals one if a firm has passed the qualitative screening conducted by KLD and zero if it failed. The model that we test is the following:

$$
\begin{aligned}
CSR \;=\; & \gamma_0 + \gamma_1 \left(Insider\ ownership\right) + \gamma_2 \left(Institutional\ ownership\right) + \gamma_3 \left(Leverage\right) \\
& + \gamma_{4-7}(Control\ variables) + \gamma_{8-71}(Two-digit\ SIC\ code) + \varepsilon
\end{aligned} \tag{1}
$$

On the right hand side we interchangeably use the variables *Insiders' ownership* and *Insiders' control* as measures of ownership by insiders. Our measures of ownership by institutions are the variables *Institutional ownership* and *Institutional HHI*; we use these variables interchangeably as well. *Leverage* captures potential capital structure effects. The control variables are *Ln total assets*, *Market to book*, *Return volatility* and *Firm's age* as well as sixty four *2-digit SIC code* dummy variables to control for industry effects.

[**Insert Table IV about here**]

The results with robust standard deviations are presented in table IV. The most striking result in our analysis is that the coefficients of insiders' ownership and leverage are negative and significant at the 1% level across all specifications. On the other hand, the coefficients of institutional ownership are insignificant with inconsistent signs. The economic interpretation of the probit results is that *ceteris paribus*, at the sample means, an increase of one standard deviation in total insiders' ownership of firm i, decreases the probability that KLD would

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define firm i as socially responsible by 3.8%. Similarly, an increase of one standard deviation in the leverage of firm i, decreases the probability that KLD would define firm i as socially responsible by 2.2%. In contrast, an increase in the total institutional ownership or in the institutional concentration of firm i, does not change the probability that KLD would define firm i as socially responsible.

Some additional information regarding the prospects of SR firms can be learned from the coefficients of the control variables. We find that SR firms tend to be smaller in size as measured by book value of assets. On the other hand, the multivariate analysis suggests that the growth prospects of firms, their risk and their age do not add significant contribution in explaining the variance of CSR.

Our results show that insiders' holdings are negatively correlated with CSR ratings. According to our hypothesis, insiders who are affiliated with the firm are those who gain private benefits from a high CSR rating. The interpretation of this negative correlation in light of our hypothesis is that at high ownership levels, insiders' cost from increasing CSR expenditure (which yields a higher CSR rating) is larger than their benefits. In other words, insiders downplay the importance of their private benefits compared to firm value simply because they own more of the firm. Thus, the negative relation suggests that the cost incorporated in CSR is significant.[6]

The negative correlation between leverage and CSR also supports the CSR-conflict hypothesis. If leverage plays a conflict mitigating role as suggested by the literature (e.g., Harvey, Lins and Roper (2004)), a higher leverage makes firms spend less on CSR. Lastly, the results reveal that institutional holdings are not correlated with CSR. This may be attributed to the reasons discussed above.

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[6]Throughout the paper we assume for presentation simplicity that *all* insiders gain private benefits from CSR expenditure. However, the interpretation of the empirical results remains the same even if only a *portion* of insiders benefit from CSR. Under such circumstances, an increase in the ownership of insiders who do not benefit from CSR should mitigate the CSR-conflict due to better monitoring, and even strengthen our results.

B A Relative CSR Measure (RCSR)

One of the limitations of the study is that we do not observe a continuous measure for CSR ratings and are constrained to use a binary one. The problem with this measure is that it does not provide a cardinal CSR rating that distinguishes between different SR and SI firms. For example, it imposes the assumption that all SR firms (and similarly all SI firms) have the same rating across different firm industries.

To illustrate the problem, consider for example a firm in a high-tech industry and a firm in an oil industry. By the nature of these two industries it is easier for a high-tech company to achieve a higher social rating as its operations do not pollute the environment. In fact, an oil company that has the same CSR rating as a high-tech company probably needs a much higher CSR expenditure in order to achieve this rating. In other words, the importance of the conflict variables should be larger in firms which defy their characteristics. Other firm characteristics such as size, age and growth opportunities may also be important in defining the relation between the conflict variables and the CSR ratings.

In order to overcome this problem, we develop a methodology that maps the binary dependent variable into a continuous one. We are doing so by decomposing the explained component of CSR that is due to firm characteristics and giving a higher weight to firms that defy their characteristics. This allows us to investigate the relation between the conflict variables and the CSR rating in a way that emphasizes the importance of firm characteristics in setting CSR ratings.

The methodology is composed of three steps. First, we run a probit regression where the dependent variable CSR is regressed on firm characteristics.

$$
\begin{aligned}
CSR \ = \ & \gamma_0 + \gamma_1(Ln\ total\ assets) + \gamma_2(Market\ to\ book) + \gamma_3(Return\ volatility) \\
& + \gamma_4(Firm's\ age) + \gamma_{5-68}(Two - digit\ SIC\ code) + \varepsilon
\end{aligned} \tag{2}
$$

From this regression we obtain the predicted probability, $\widehat{CSR}$, that a firm receives an SR rating ($CSR = 1$) solely due to its characteristics.

In the second step we define a relative corporate social responsibility measure, $RCSR$.

$$RCSR \;=\; [sign\,(\hat{\varepsilon})]\,(\hat{\varepsilon})^2 \tag{3}$$
$$\text{where } \hat{\varepsilon} \;=\; CSR \;-\; \widehat{CSR}$$

A higher $RCSR$ value represents a more socially responsible firm. $RCSR$ is technically capped in the interval $[-1,1]$ since $\widehat{CSR}$ is a probability measure. The $RCSR$ measure conserves the sign and squares the magnitude of the error.[7] Since a high $\hat{\varepsilon}$ denotes a high divergence from the predicted probability as defined by the firm's characteristics, the $RCSR$ measure rewards SR firms with a high $\hat{\varepsilon}$ and punishes SI firms with a high $\hat{\varepsilon}$. It emphasizes firms that do not confirm to their characteristics.

In the final step, we study the conflict variables' impact on ratings by running different specifications of the following relation:

$$RCSR = \delta_0 + \delta_1\,(Insider\ ownership) + \delta_2\,(Institutional\ ownership) + \delta_3\,(Leverage) + \epsilon \tag{4}$$

This regression allows us to study whether the conflict variables' explanatory power changes once the observations are rescaled to reflect the degree of conformity with the firm's peers.

By way of construction, the $RCSR$ measure is not normally distributed. It is capped in the range $[-1,1]$ and because some industries have more observations than others, there are many clusters of observations in certain ranges of the variable. The common way of estimating a regression under such circumstances is to employ a bootstrap methodology. We randomly draw, with replacement, N observations (where N is the original sample size) from the data set. Using each sample, we calculate the coefficients. We do this repeatedly 10,000 times to build a dataset of estimated coefficients. This allows us to calculate the standard deviations of the coefficients and compute their t-statistics accurately.

[Insert Table V about here]

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[7]Note that without squaring the errors this methodology simply splits the one step probit regression (table IV) into two steps.

Table V reports OLS regressions where $RCSR$ is regressed on the conflict variables. Similar to our previous findings, we find that ownership by insiders and debt have a significant negative effect on $RCSR$. We also find that ownership by institutions has no significant effect on $RCSR$.

We view the $RCSR$ measure as an important addition to our analysis. Therefore, throughout the rest of the study we provide the regression results for both CSR and $RCSR$.

C   Piece-wise Regression

So far, our analysis allowed only for a linear relation between ownership by insiders and CSR. In order to analyze whether a possible non-linearity is present in the data, we follow Morck, Shleifer and Vishny (1988) and perform piece-wise regressions which allow the coefficients of *Insiders' ownership* to vary over three different segments of ownership.

This procedure allows us to investigate the trade-off between the alignment and entrenchment of insiders. At low levels of ownership, an increase in insiders' holdings not only makes them bear more of the cost of CSR expenditure, but also gives them more control to pursue a pro-CSR agenda. Therefore, it is not clear which is the dominant force and how the CSR rating should be affected. However, once insiders are entrenched, a further increase in their ownership should only result in bearing more of the cost associated with CSR.

The results of the piece-wise regressions are shown in table VI. The analysis suggests that at low levels of ownership by insiders (up to 25%) there is no relation between insiders' ownership and CSR, while at levels above 25% the relation is negative and highly significant. This is somewhat consistent with Morck Shleifer and Vishny (1988) who document a positive relation with Tobin's Q at small holdings of 0%-5%, a negative relation at holdings of 5%-25% and a positive relation again, at holdings greater than 25%.

[Insert Table VI about here]

18

D Instrumental Variable (IV) Approach

One may argue that our analysis potentially suffers from an endogeneity problem. Specifically, one could claim that insider and institutional ownership are determined by the CSR rating and not vice versa. For example, it may be the case that socially responsible investing (SRI) plays an important role in setting the holdings of institutional investors. Since most socially responsible investors implement their investing strategy using institutions such as mutual funds and pension funds, one could expect to see higher ownership by institutions at SR firms relatively to SI firms. In order to disproof this potential problem we use an instrumental variable approach.

There are three variables that potentially suffer from endogeneity: *Insiders' ownership*, *Insiders' control*, and *Institutional ownership*. We follow Bennett, Sias and Starks (2003) and use *Turnover* as an instrument for the insider ownership variables.[8] In regression (1) and (2) we replace *Insiders' ownership* and *Insiders' control* with the predicted value of these variables regressed on *Turnover*, *Ln total asset*, *Market to book*, *Firm's age*, *Return volatility* and *2-digit SIC* dummy variables. In regression (3) and (4) we replace *Insiders' ownership* and *Insiders' control* with the predicted value of these variables regressed on *Turnover* alone. The reason for omitting the other control variables is that these are already part of the *RCSR* measure.

In order to avoid a potential endogeneity problem with the variable *Institutional ownership*, we perform the regressions with *Institutional HHI*. We view *Institutional HHI* as a purely exogenous variable (consistent with Hartzell and Starks (2003)) as there is no theoretical reason to believe that the concentration of institutional ownership is the result of the CSR policy of the firm.

Table VII presents the results of the instrumental variable regression analysis. Consistent with our earlier results, we find that ownership by insiders and debt are significant and negatively related to firms' CSR ratings and that ownership by institutions is uncorrelated

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[8] *Turnover* is defined as a three months average of the monthly volume divided by the number of shares outstanding.

with the ratings.

E   Robustness Analysis

In this section we perform robustness checks. We start with a robustness analysis with respect to size. While we do control for size in our analysis, one may still wonder whether the results hold for subsets of the sample. For example it may be the case that small firms attract less attention from private investors and institutions and therefore it is easier for insiders to affect the CSR policy in these firms compared to large firms. We perform the first robustness check by splitting our sample to two based on the book value of assets. The results of this analysis are reported in Panel A of Table VIII. In all four specifications ownership by insiders and leverage are negatively significant while institutional ownership is marginally significant in only one specification. While the results of the table reconfirm the CSR-conflict hypothesis, the significance levels and size of insiders' ownership coefficients are larger in small firms. This suggests that the presence of the CSR-conflict is larger in these firms.

In a second robustness analysis we split the sample based on industries' average CSR ratings, where industries are defined by 2-digit SIC codes. Firms are partitioned to two groups according to the percentage of SR firms in their industry; 86.5% is the overall industries median value. Arguably, industry classification is the most important factor in defining the ability of the firm to be classified as SR. Therefore, using this criterion in order to split the sample is a good robustness check. Panel B of table VIII reports the results of these regressions. We find some differences between the two subsamples. While insiders' ownership coefficients are negative and significant in both subsamples, they are more significant in SI Industries (industries that have less than 86.5% SR firms). With respect to debt, while it is always negatively correlated with the CSR and $RCSR$ measures, it is significant only in

SR Industries. Put together, these results show that insiders' ownership is the dominant conflict-mitigating mechanism in SI Industries, while leverage is the dominant mechanism in SR Industries.

IV   CSR and Corporate Governance

We argue that the CSR-conflict is different than traditional agency conflicts on two dimensions. First, the traditional conflict is between the manager and the shareholders, while the CSR-conflict is between insiders and the other shareholders. Second, corporate social responsibility has a positive public appeal, while traditional agency conflicts have a negative appeal. In fact, in contrary to the theme of this paper, which claims that CSR activity may decrease firm value, there is a perceived link that good corporate governance and good corporate social responsibility go together. Perhaps this is because both are regarded as an ethical behavior on part of the firm. It is interesting, therefore, to examine whether this link has some empirical evidence that supports it.

We use the index proposed by Gompers, Ishii and Metrick (2003) (GIM) as our measure of the corporate governance level of the firm. The index is constructed by analyzing 24 distinct corporate governance provisions. It adds one point for every provision that reduces shareholder rights; that is, a high score represents bad corporate governance. The univariate correlation between the GIM index and CSR is marginally negative $(-.04)$ and it is marginally positive with $RCSR$ (0.01). Furthermore, in a multivariate analysis that we do not report here, we find that the GIM index is not significant in explaining either CSR nor $RCSR$. We conclude that there is no empirical evidence that supports the relation between CSR and corporate governance as measured by the GIM index.

Throughout the paper the results indicate that insiders' ownership and debt are negatively related to firms' CSR ratings, while institutional ownership does not affect them. While there are reasons why institutions may choose not to affect CSR (see our discussion above), the question is still left open. We use the GIM index to get a better understanding of this phenomenon.

Similarly to the CSR ratings, the GIM index should be related to the ownership structure of the firm as the shareholders are those who set the conflict-mitigating mechanisms in place. Table IX reports the results of regressing the GIM index on the ownership structure, the capital structure and the control variables of our analysis. We find that ownership by insiders is significant in improving corporate governance. Similarly, there is strong evidence that institutional ownership concentration positively affects corporate governance. These results support the idea that institutions tend to be active at least on some standard corporate governance issues such as poison pills and golden parachutes provisions. On the other hand, the fact that institutions do not affect CSR hints that they find it hard to oppose it or that they do not consider CSR at the same token as other types of conflicts.

[**Insert Table IX about here**]

V   Conclusion

In this paper we find strong supportive evidence to the hypothesis that CSR is a source of a conflict between different shareholders. In this conflict insiders personally benefit from the fact that they are associated with firms that have a high CSR rating. The conflict is mitigated if insiders hold a large fraction of the firm. Similarly, debt serves as a conflict-mitigating mechanism. Lastly, we find no evidence that institutions have a monitoring role on CSR policies.

The CSR-conflict can be viewed from two different normative perspectives. On the one hand, we find supportive evidence to the claim that the chosen level of CSR expenditure is greater than that which maximizes firm value. This typically has a negative connotation as it decreases value for shareholders. On the other hand, the CSR-conflict leads to the promotion of a social agenda, which can be viewed in a positive way. Given that most agency conflicts are perceived as self-serving behavior of managers at the expense of other shareholders, it is somewhat ironic to show that the CSR-conflict results in greater alignment of corporate and social goals. From a social welfare perspective, whether this conflict increases total

welfare depends on the question whether firms have a relative advantage in contributing to the society.

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Table I
Definition and Source of Major Variables

	Description	Source
Conflict variables		
Insiders' ownership	Percent of common stock held by all the officers and directors of the company plus beneficial owners who own more than 5 percent of the subject company's stock as disclosed in the most recent proxy statement.	Proxy statement
Insiders' control	A dummy variable that equals 1 if insiders' ownership is greater than 50%.	Proxy statement
Institutional ownership	Percent of common stock held by all the reporting institutions as a group. It is calculated as total shares owned by institutions divided by total shares outstanding.	13F schedule
Institutional HHI	The Herfindahl-Hirschman Index (HHI) of concentration of the top 15 institutional owners (as reported on 13f). It is defined as $\sum_{i=1}^{15} h_i^2$, where h_i is the percentage ownership of institution i.	13F schedule
Leverage	The book value of long term debt (data item #9) divided by the book value of assets (data item #6)	Compustat
Control variables		
Ln (total assets)	Natural log of book value of total assets (data item #6)	Compustat
Market to book	The ratio of the market value of assets (book value of assets (data item #6) plus the difference between the market value of equity (data item #24 ×data item #25) and the book value of equity (data item #60)) to the book value of assets (data item #6).	Compustat
Return volatility	The standard deviation of share returns during the previous 60 months.	CRSP
Firm's age	The year in which the firm's share price (data item PRC) first appeared on CRSP.	CRSP
2-digit SIC code	The 2-digit Standard Industry Classification code	CRSP
Other		
Turnover	The three months average of the monthly volume (data item VOL) divided by the number of shares outstanding (data item SHROUT)	CRSP

Table II
The Distribution of SR (Socially Responsible) and SI (Socially Irresponsible) Firms by Two-Digit SIC Code (N = 2,649 firms)

SR Firms and *SI Firms* correspond to the number of SR and SI firms classified by two-digit standard industry classification (SIC) code. *Total Number of Firms* corresponds to the total number of firms in each industry. *Percent of SI Firms* is *SI Firms* divided by *Total Number of Firms*.

SIC Code	Industry Description	SR Firms	SI Firms	Total Number of Firms	Percent of SI Firms
10	Metal mining	4	6	10	60%
12	Coal mining	0	3	3	100%
13	Oil and gas extraction	54	12	66	18%
14	Nonmetallic minerals, except fuels	3	1	4	25%
15	General building contractors	16	3	19	16%
16	Heavy construction, except buildings	5	1	6	17%
17	Special trade contractors	5	0	5	0%
20	Food and kindred products	38	8	46	17%
21	Tobacco products	0	0	0	----
22	Textile mill products	8	0	8	0%
23	Apparel and other textile products	15	1	16	6%
24	Lumber and wood products	10	4	14	29%
25	Furniture and fixtures	14	2	16	13%
26	Paper and allied products	25	3	28	11%
27	Printing and publishing	30	9	39	23%
28	Chemical and allied products	163	48	211	23%
29	Petroleum and coal products	4	10	14	71%
30	Rubber and miscellaneous plastic products	15	3	18	17%
31	Leather and leather products	9	1	10	10%
32	Stone, clay, and glass products	7	4	11	36%
33	Primary metal industries	26	7	33	21%
34	Fabricated metal products	22	4	26	15%
35	Industrial machinery and equipment	129	12	141	9%
36	Electronic and other electrical equipment	165	11	176	6%
37	Transportation equipment	30	7	37	19%
38	Instruments and related products	125	5	130	4%
39	Miscellaneous manufacturing products	15	1	16	6%
40	Railroad transportation	4	4	8	50%
42	Trucking and warehousing	15	2	17	12%
44	Water transportation	7	0	7	0%
45	Transportation by air	17	1	18	6%

Table II - *continued*

SIC Code	Industry Description	SR Firms	SI Firms	Total Number of Firms	Percent of SI Firms
46	Pipelines, except natural gas	1	0	1	0%
47	Transportation services	7	2	9	22%
48	Communications	70	9	79	11%
49	Electric, gas, and sanitary services	56	16	72	22%
50	Wholesale trade - durable goods	44	2	46	4%
51	Wholesale trade- nondurable goods	17	4	21	19%
52	Building materials and gardening	5	1	6	17%
53	General merchandise stores	19	2	21	10%
54	Food stores	11	2	13	15%
55	Auto dealers and service stations	14	2	16	13%
56	Apparel and accessory stores	36	6	42	14%
57	Furniture and home furnishings	17	1	18	6%
58	Eating and drinking places	29	3	32	9%
59	Miscellaneous retail	48	7	55	13%
60	Depository institutions	253	42	295	14%
61	Nondepository institutions	21	4	25	16%
62	Security and commodity brokers	29	5	34	15%
63	Insurance carriers	79	17	96	18%
64	Insurance agents, brokers, services	15	1	16	6%
65	Real estate	4	4	8	50%
67	Holding and other investment offices	137	11	148	7%
70	Hotels and other lodging places	7	2	9	22%
72	Personal services	5	4	9	44%
73	Business services	269	19	288	7%
75	Auto repair, services, and parking	5	0	5	0%
78	Motion pictures	8	3	11	27%
79	Amusement and recreation services	2	5	7	71%
80	Health services	30	14	44	32%
81	Legal services	1	0	1	0%
82	Educational services	11	0	11	0%
83	Social services	2	1	3	33%
87	Engineering and management services	42	8	50	16%
99	Conglomerates	4	1	5	20%
Total		2278	371	2649	14%

Table III
Difference of Means Tests

Insiders' ownership is the percent of common stock held by all the officers and directors of the company plus beneficial owners who own more than 5 percent of the stock. *Insiders' control* is a dummy variable that equals 1 if insiders as a group have more than 50% of the shares outstanding. *Institutional ownership* is the percent of common stock held by all the reporting institutions as a group. *Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. *Ln total assets* is the natural log of the book value of assets. *Market to book* is defined as the ratio of the book value of assets plus the difference between the market value of equity and the book value of equity to the book value of assets. *Return volatility* is the standard deviation of share returns during the previous 60 months. *Firm's age* is measured based on the date in which the firm's share price first appeared on the CRSP tape. The classification dummy variables *Nasdaq*, *West coast* and *S&P 500* equal 1 if the firm is traded on Nasdaq, if the firm's headquarter is in the west coast and if the firm is part of the S&P 500 index, respectively. The table provides the *t*-statistics and the Industry Adjusted *t*-statistics, where each observation is adjusted by subtracting the 2-digit SIC code industry mean of the relevant variable. The table provides significance at the five percent (*) level.

	N	SR Firms	SI Firms	*t* - statistic	Industry Adjusted t-statistic
Number of firms	2650	2278	372		
Conflict variables					
Insiders' ownership (%)	2650	18.29	22.37	3.61*	3.58*
Insiders' control (%)	2650	9.00	17.20	4.88*	4.28*
Institutional ownership (%)	2641	60.22	60.00	-0.16	-0.29
Institutional HHI (%)	2650	2.26	2.32	0.34	0.13
Leverage (%)	2589	17.79	24.37	5.85*	4.91*
Control variables					
Ln total assets ($000,000)	2597	6.81	7.74	9.93*	9.15*
Market to book	2594	1.70	1.51	-2.72*	-2.59*
Return volatility (%)	2648	17.11	14.84	-4.35*	-2.52*
Firm's age (years)	2649	15.57	20.22	5.52*	3.13*
Classification					
Nasdaq (%)	2650	51.62	27.96	-8.58*	-6.54*
West coast (%)	2650	27.48	18.28	-3.75*	-1.90
S&P 500 (%)	2650	14.62	23.66	4.44*	3.55*

Table IV
The Relation between CSR and the Conflict Variables - Probit Regressions

Insiders' ownership is the percent of common stock held by all the officers and directors of the company plus beneficial owners who own more than 5 percent of the stock. *Insiders' control* is a dummy variable that equals 1 if insiders as a group have more than 50% of the shares outstanding. *Institutional ownership* is percent of common stock held by all the reporting institutions as a group. *Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. *Ln total assets* is the natural log of the book value of assets. *Market to book* is defined as the ratio of the book value of assets plus the difference between the market value of equity and the book value of equity to the book value of assets. *Return volatility* is the standard deviation of share returns during the previous 60 months. *Firm's age* is measured based on the date in which the firm's share price first appeared on the CRSP tape. All specifications include *2-digit SIC code* indicators. The table provides *z*-statistics calculated with robust standard deviations.

	(1)	(2)	(3)	(4)
Intercept	1.8623	1.5431	1.9173	1.6810
	(2.34)	(1.99)	(2.44)	(2.19)
Insiders' ownership	-0.0098		-0.0102	
	(-5.09)		(-6.10)	
Insiders' control		-0.5341		-0.5943
		(-4.76)		(-5.79)
Institutional ownership	0.0006	0.0019		
	(0.35)	(1.07)		
Institutional HHI			0.0683	-0.0438
			(0.08)	(-0.05)
Leverage	-0.5884	-0.6073	-0.5786	-0.5880
	(-3.06)	(-3.18)	(-3.01)	(-3.09)
Ln (total assets)	-0.2067	-0.1960	-0.2060	-0.1910
	(-7.69)	(-7.37)	(-7.91)	(-7.53)
Market to book	0.0548	0.0582	0.0550	0.0613
	(1.42)	(1.51)	(1.42)	(1.56)
Return volatility	0.3011	0.3686	0.2849	0.3062
	(0.57)	(0.70)	(0.54)	(0.58)
Firm's age	-0.0008	-0.0002	-0.0008	-0.0003
	(-0.33)	(-0.07)	(-0.34)	(-0.13)
N	2537	2537	2546	2546
"Pseudo R^2"	0.143	0.141	0.143	0.141

Table V
The Relation between RCSR and the Conflict Variables - OLS Regressions

Insiders' ownership is the percent of common stock held by all the officers and directors of the company plus beneficial owners who own more than 5 percent of the stock. *Insiders' control* is a dummy variable that equals 1 if insiders as a group have more than 50% of the shares outstanding. *Institutional ownership* is percent of common stock held by all the reporting institutions as a group. *Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. The standard deviations used to compute *t*-statistics are calculated using the bootstrap methodology.

	(1)	(2)	(3)	(4)
Intercept	-0.0256	-0.0505	-0.0244	-0.0411
	(-1.60)	(-3.75)	(-2.86)	(-5.53)
Insiders' ownership	-0.0013		-0.0013	
	(-4.39)		(-4.80)	
Insiders' control		-0.0804		-0.0852
		(-3.93)		(-4.26)
Institutional ownership	0.0000	0.0001		
	(0.08)	(0.76)		
Institutional HHI			0.0031	0.0018
			(0.02)	(0.01)
Leverage	-0.0825	-0.0808	-0.0818	-0.0789
	(-3.07)	(-3.02)	(-3.08)	(-3.01)
N	2537	2537	2546	2546
R^2	0.017	0.016	0.016	0.015

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Table VI
Piecewise Regressions of Insiders' Ownership: The Relation between CSR (RCSR) and the Conflict Variables

Insiders' ownership is divided to three different segments of ownership. Following Morck, Shleifer and Vishney (1988), *Insiders 0 to 5* equals *Insiders' ownership* if *Insiders' ownership* < 5% and equals 5% if *Insiders' ownership* ≥ 5%; *Insiders 5 to 25* equals 0% if *Insiders' ownership* < 5%, equals *Insiders' ownership* - 5% if 5% < *Insiders' ownership* < 25% and equals 20% if *Insiders' ownership* ≥ 25%; *Insiders over 25* equals 0% if *Insiders' ownership* < 25% and equals *Insiders' ownership* - 25% if *Insiders' ownership* ≥ 25%. *Institutional ownership* is percent of common stock held by all the reporting institutions as a group. *Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. *Ln total assets* is the natural log of the book value of assets. *Market to book* is defined as the ratio of the book value of assets plus the difference between the market value of equity and the book value of equity to the book value of assets. *Return volatility* is the standard deviation of share returns during the previous 60 months. *Firm's age* is measured based on the date in which the firm's share price first appeared on the CRSP tape. Specifications (1) and (2) include *2-digit SIC code* indicators. The table provides *z*-statistics with robust standard deviations (specifications (1) and (2)) and *t*-statistics that were calculated using the bootstrap methodology (specifications (3) and (4)).

Dependent Variable	CSR (Probit)		RCSR (OLS)	
	(1)	(2)	(3)	(4)
Intercept	1.8949	1.9411	-0.0291	-0.0280
	(2.36)	(2.45)	(-1.43)	(-2.09)
Insiders 0 to 5	-0.0264	-0.0268	-0.0022	-0.0023
	(-0.92)	(-0.94)	(-0.61)	(-0.64)
Insiders 5 to 25	-0.0035	-0.0036	-0.0001	-0.0001
	(-0.55)	(-0.59)	(-0.12)	(-0.12)
Insiders over 25	-0.0122	-0.0127	-0.0020	-0.0020
	(-3.99)	(-4.32)	(-3.52)	(-3.58)
Institutional ownership	0.0006		0.0000	
	(0.33)		(0.08)	
Institutional HHI		0.1113		0.0169
		(0.12)		(0.09)
Leverage	-0.5834	-0.5741	-0.0805	-0.0798
	(-3.02)	(-2.98)	(-3.00)	(-3.02)
Ln (total assets)	-0.2072	-0.2063		
	(-7.48)	(-7.70)		
Market to book	0.0557	0.0560		
	(1.44)	(1.44)		
Return volatility	0.3008	0.2874		
	(0.57)	(0.55)		
Firm's age	-0.0008	-0.0008		
	(-0.31)	(-0.32)		
N	2537	2546	2537	2546
R^2 / "Pseudo R^2"	0.144	0.144	0.019	0.018

Table VII
Instrumental Variable Regressions: CSR (RCSR) and the Conflict Variables

Instrumental-variable, two-stage probit / OLS regressions of CSR and RCSR, where *Turnover* is used as an instrument for *insiders' ownership*. The *Predicted value of insiders' ownership (insiders' control)* in regressions (1) and (2) is the predicted value obtained by regressing *Insiders' ownership* (*Insiders' control*) on *Turnover, Ln total asset, Market to book, Return volatility, Firm's age* and *2 digit SIC codes*. The *Predicted value of insiders' ownership (insiders' control)* in regressions (3) and (4) is the predicted value obtained by regressing *Insiders' ownership* (*Insiders' control*) on *Turnover. Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. *Ln total assets* is the natural log of the book value of assets. *Market to book* is defined as the ratio of the book value of assets plus the difference between the market value of equity and the book value of equity to the book value of assets. *Return volatility* is the standard deviation of share returns during the previous 60 months. *Firm's age* is measured based on the date in which the firm's share price first appeared on the CRSP tape. Specifications (1) and (2) include *2-digit SIC code* indicators. The table provides *z*-statistics with robust standard deviations (specifications (1) and (2)) and *t*-statistics that were calculated using the bootstrap methodology (specifications (3) and (4)).

Dependent Variable	CSR (Probit)		RCSR (OLS)	
	(1)	(2)	(3)	(4)
Intercept	3.1515	2.2492	0.0090	-0.0166
	(3.35)	(3.18)	(0.35)	(-1.09)
Predicted value of insiders' ownership	-0.0286		-0.0031	
	(-2.05)		(-2.26)	
Predicted value of insiders' control		-2.7226		-0.3199
		(-2.05)		(-2.29)
Institutional HHI	-0.1381	-0.1381	-0.0181	-0.0181
	(-0.13)	(-0.13)	(-0.09)	(-0.09)
Leverage	-0.6071	-0.6071	-0.0797	-0.0797
	(-3.29)	(-3.29)	(-2.98)	(-2.99)
Ln (total assets)	-0.2413	-0.2165		
	(-5.70)	(-6.50)		
Market to book	0.0560	0.0708		
	(1.50)	(1.86)		
Return volatility	0.2158	0.2603		
	(0.41)	(0.50)		
Firm's age	-0.0045	-0.0046		
	(-1.26)	(-1.28)		
N	2546	2546	2546	2546
R^2 / "Pseudo R^2"	0.128	0.128	0.006	0.006

Table VIII
Robustness Analysis by Size and Industry: CSR (RCSR) and the Conflict Variables

In Panel A, the sample of firms is partitioned according to size (book value of total asset). *Large Firms* refer to large cap firms and *Small Firms* refer to small cap firms respectively. In Panel B, the sample of firms is partitioned according to the percentage of SR firms in the industry, where industry is defined according to the 2-digit SIC code. Firms that belong to an industry where the percentage of SR firms is higher than 86.5% (overall industry median value) are part of the first sub sample, and firms that belong to an industry where the percentage of SR firms is lower than 86.5% are part of the second sub sample. *Insiders' ownership* is the percent of common stock held by all the officers and directors of the company plus beneficial owners who own more than 5 percent of the stock. *Insiders' control* is a dummy variable that equals 1 if insiders as a group have more than 50% of the shares outstanding. *Institutional ownership* is percent of common stock held by all the reporting institutions as a group. *Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. *Ln total assets* is the natural log of the book value of assets. *Market to book* is defined as the ratio of the book value of assets plus the difference between the market value of equity and the book value of equity to the book value of assets. *Return volatility* is the standard deviation of share returns during the previous 60 months. *Firm's age* is measured based on the date in which the firm's share price first appeared on the CRSP tape. Specifications (1) and (2) include *2-digit SIC code* indicators. The table provides *z*-statistics with robust standard deviations (specifications (1) and (2)) and *t*-statistics that were calculated using the bootstrap methodology (specifications (3) and (4)).

	Panel A: Size Partitioning			
Dependent Variable	CSR (Probit)		RCSR (OLS)	
	Large Firms	Small Firms	Large Firms	Small Firms
	(1)	(2)	(3)	(4)
Intercept	1.0200	2.2609	-0.0712	0.0274
	(1.05)	(2.23)	(-2.93)	(1.32)
Insiders' ownership	-0.0049	-0.0149	-0.0007	-0.0020
	(-1.81)	(-5.15)	(-1.67)	(-4.89)
Institutional ownership	0.0039	-0.0026	0.0005	-0.0005
	(1.53)	(-0.96)	(1.44)	(-1.78)
Leverage	-0.5704	-0.5371	-0.0763	-0.0864
	(-1.73)	(-1.95)	(-1.83)	(-2.31)
Ln (total assets)	-0.2182	-0.2837		
	(-5.72)	(-3.29)		
Market to book	0.2917	-0.0258		
	(3.49)	(-0.70)		
Return volatility	0.3854	0.1209		
	(0.39)	(0.19)		
Firm's age	-0.0003	-0.0028		
	(-0.10)	(-0.51)		
N	1216	1175	1268	1269
R^2 / "Pseudo R^2"	0.152	0.135	0.011	0.032

Table VIII – *continued*

Panel B: Industry Partitioning

Dependent Variable	CSR (Probit)		RCSR (OLS)	
	SR Industries	SI Industries	SR Industries	SI Industries
	(1)	(2)	(3)	(4)
Intercept	1.9831	1.9985	0.0024	-0.0399
	(3.48)	(2.39)	(0.10)	(-1.82)
Insiders' ownership	-0.0060	-0.0119	-0.0008	-0.0018
	(-1.82)	(-4.93)	(-2.07)	(-4.20)
Institutional ownership	-0.0007	0.0014	-0.0003	0.0001
	(-0.24)	(0.59)	(-1.09)	(0.45)
Leverage	-1.0272	-0.2108	-0.1116	-0.0482
	(-3.80)	(-0.84)	(-3.12)	(-1.23)
Ln (total assets)	-0.0997	-0.2560		
	(-2.11)	(-7.56)		
Market to book	0.0124	0.0800		
	(0.29)	(1.32)		
Return volatility	0.5783	0.1621		
	(0.73)	(0.22)		
Firm's age	0.0032	-0.0024		
	(0.68)	(-0.79)		
N	1244	1293	1292	1293
R^2 / "Pseudo R^2"	0.057	0.134	0.017	0.024

Table IX
The Relation between GIM and the Conflict Variables - OLS Regressions

The GIM index is regressed on the conflict and control variables used in this paper. *GIM* is the "Governance Index" proposed by Gompers, Ishii and Metrick (2003). *Insiders' ownership* is the percent of common stock held by all the officers and directors of the company plus beneficial owners who own more than 5 percent of the stock. *Insiders' control* is a dummy variable that equals 1 if insiders as a group have more than 50% of the shares outstanding. *Institutional ownership* is percent of common stock held by all the reporting institutions as a group. *Institutional HHI* is the Herfindahl-Hirschman Index calculated based on the holdings of the 15 largest institutional investors. *Leverage* is the book value of long-term debt divided by the book value of total assets. *Ln total assets* is the natural log of the book value of assets. *Market to book* is defined as the ratio of the book value of assets plus the difference between market value of equity and the book value of equity to the book value of assets. *Return volatility* is the standard deviation of share returns during the previous 60 months. *Firm's age* is measured based on the date in which the firm's share price first appeared on the CRSP tape. All specifications include *2-digit SIC code* indicators.

	(1)	(2)	(3)	(4)
Intercept	10.1588	11.4096	10.9211	10.2011
	(17.51)	(17.05)	(22.79)	(21.59)
Insiders' ownership	-0.0334		-0.0290	
	(-7.21)		(-7.53)	
Insiders' control		-1.3245		-1.2602
		(-4.10)		(-4.79)
Institutional ownership	-0.0049	0.0032		
	(-1.16)	(0.76)		
Institutional HHI			-4.8082	-5.5401
			(-3.09)	(-3.50)
Leverage	0.4865	0.3773	0.4991	0.4490
	(1.34)	(1.02)	(1.38)	(1.20)
Ln (total assets)	0.0296	0.0747	0.0171	0.0621
	(0.51)	(1.31)	(0.30)	(1.08)
Market to book	-0.1075	-0.1160	-0.1257	-0.1313
	(-1.65)	(-1.76)	(-1.93)	(-2.00)
Return volatility	-5.0147	-4.4515	-4.9951	-4.9231
	(-4.92)	(-4.35)	(-5.07)	(-5.00)
Firm's age	0.0306	0.0336	0.0316	0.0332
	(6.58)	(7.16)	(6.82)	(7.11)
N	1417	1417	1422	1422
R^2	0.203	0.182	0.207	0.188