

Institutional Blockholder Exit Threats and Corporate Social (Ir)responsibility

Institutional blockholders, who have incentives to gather private information and sell their shares when managers underperform, exert governance through exit threats. Hence, managers align their actions with shareholders' interests to dissuade blockholders from selling. We find that as exit threats increase, firms reduce not only social irresponsibility (CSI), but also social responsibility (CSR), implying that CSI and CSR are independent actions that both reflect agency problems rather than firm value enhancement. Furthermore, consistent with exit theory, the negative impact of exit threats on CSI and CSR increase as managerial wealth is sensitive to stock price, the firm is cash-rich (more susceptible to "bad" agency problems), and following Schedule 13G filings that indicate blockholders' intent to remain passive (exert governance through exit threats only). We contribute to research on corporate social (ir)responsibility and the role of blockholders in disciplining both CSR and CSI that may not be in the shareholders' interests.

1. Introduction

Exit theory predicts that blockholders exert governance by threatening to sell a firm's stock in the presence of underperforming managers (e.g., Admati and Pfleiderer 2009; Edmans 2009; Edmans and Manso 2011). Blockholders, who own larger stakes in a firm, have greater incentives than other smaller investors to gather private information and monitor managers (Shleifer and Vishny 1986). Thus, when blockholders exit (i.e., sell the firm's stock), a credible signal of lower firm value is sent to the market, and stock price declines. As a result, firm managers are incentivized to align their actions with the interests of blockholders to prevent their exit, which results in improved performance and higher firm value. Hence, the threat of exit alone exerts governance even if no actual exit is observed.

There is not extensive empirical evidence on the effects of blockholder exit threats. Prior research finds that exit threats enhance firm value (Bharath, Jayaraman, and Nagar 2013) and financial reporting quality (Dou, Hope, Thomas, and Zou 2018), both related to corporate financial performance. Our study extends the theory of blockholder exit threats to corporate social performance by examining corporate social responsibility (CSR). More specifically, we examine whether exit threats improve a firm's CSR performance. CSR refers to the engagement in socially responsible activities in addition to economic and legal obligations of a firm (McGuire 1963). The last few decades has seen widespread adoption of CSR by firms, and has also gained much attention and scrutiny among investors, media, regulators, and academics.

While researchers have often examined firms' *net* CSR performance, the difference between CSR strengths and concerns, we examine each component separately to gain a deeper understanding behind the relation between blockholder exit threats and CSR performance. CSR concerns, or corporate social *irresponsibility* (CSI), reflect immoral decisions made by firms to create short term shareholder value at the expense of other stakeholders (Armstrong 1977). However, these decisions often lead to scandals that attract unwanted negative media attention and increase the financial and reputational risks

of a firm, ultimately hurting long term firm value.¹ Hence, it is plausible that blockholders discourage myopic CSI activities, and we predict that governance through blockholders' exit threats negatively affect CSR concerns.

However, it is rather unclear with respect to how blockholder exit threats impact CSR strengths since CSR strengths often reflect the company's forward-looking strategies or initiatives related to its social performances rather than what the company had done . An ongoing debate exists regarding the link between CSR performance and firm value for shareholders. On the one hand, there is evidence consistent with the idea of “doing well by doing good (Benabou and Tirole 2010)” – strong CSR performance allows for enhanced strategic market position of a firm, employee satisfaction, insurance against negative event risk, lower cost of capital and of debt, and higher returns and profitability (e.g., Edmans 2011; Deng, Kang, and Low 2013; Lins, Servaes, and Tamayo 2017; Hong, Kubik, Liskovich, and Scheinkman 2019).

On the other hand, some evidence in the literature that suggest the opposite – lower future returns, declines in profitability and firm value – explained largely by agency problems (e.g., Hillman and Keim 2001; Brown, Helland, and Smith 2006; Di Giuli and Kostovetsky 2014; Kruger 2015; Masulis and Reza 2015). Managers may engage in socially responsible actions because of private interests (Barnea and Rubin 2010) or because their compensation is tied to it, without creating long-term value for the firm. If this is true, prior evidence on the benefits of net CSR performance may be driven by a lack of CSR concerns rather than through CSR strengths. Thus, it is ex-ante uncertain if blockholder exit threats would increase or decrease CSR strengths. If exit threats enhance CSR strengths, this would be consistent with the “doing well by doing good” hypothesis. In contrast, if exit threats decrease CSR strengths, agency costs likely play a prominent role in explaining activities that

¹ For instance, the Barclays LIBOR, GlaxoSmithKline sales and product-related fraud, Volkswagen emission, Nike labor, and the Tesla labor scandals are all examples of scandals resulting from corporate social irresponsibility.

reflect CSR strengths, and blockholders would likely dissuade engaging in such activities through the threat of exit.

To test the effects of exit threats on CSR strengths and concerns, we incorporate a key mechanism from exit theory in our research design. Theory suggests that liquidity enhances the power of shareholder exit threats (Admati and Pfleiderer 2009; Edmans 2009). As liquidity increases, decreased trading costs enable blockholders to trade more aggressively and create greater incentives to seek private information and generate higher profits. In contrast, market illiquidity does not allow the informed blockholder to trade as easily (i.e., exit), and hence their governance power from exit threats declines. Thus, liquidity is a necessary condition for exit threats to be credible. Furthermore, liquidity encourages blocks to form in the first place, and conditional upon block formation, the blockholder is more likely to choose exit than other monitoring channels such as intervention (Edmans, Fang, and Zur 2013). Accordingly, our research design focuses on the interaction between blockholder characteristics (i.e., ownership, number of blockholders, and ownership of the largest blockholder) and stock liquidity (i.e., stock turnover and three exogenous shocks to liquidity) to capture the intensity of exit threat and isolate its effect from other blockholder monitoring channels.

Using a sample of US firms from 1993-2018 with CSR data from the KLD MSCI database and institutional blockholder data from the Thomson Reuters 13F database, we find that institutional blockholders improve net CSR performance when the firm's shares exhibit greater turnover (i.e., are more liquid).² Decomposing CSR performance into CSR strengths (CSR) and CSR concerns (CSI), we find that while CSR is not significantly impacted, CSI significantly decreases when blockholders' threat of exit increase. While CSR and CSI are defined as the sum of CSR strengths and of CSR

² Institutional blockholders are a fair representation of blockholders likely to exert governance as a disciplinary mechanism. Inside managerial and director holdings have direct conflicts of interest and are unlikely to play a disciplinary role through ownership. Furthermore, individual blockholders are often family members of insiders, and corporate blockholders tend to have customer/supplier relationships with the firm (Dou et al. 2018).

concerns, respectively, across five dimensions, we also examine a measure for high CSI, defined as having a CSR concern score of three or greater.³ This measure better reflects intentional social irresponsibility as a result of agency problems rather than unexpected and unintentional accidents that could result in a non-zero concern score (Hoi, Wu, and Zhang 2013). We find that the incidence of high CSI is significantly reduced when blockholder exit threats increase.

Stock turnover and CSR performance may be jointly determined by a number of unobservable firm-level characteristics. While our empirical analyses include firm fixed effects to control for unobservable time-invariant firm characteristics, we further employ three exogenous shocks to stock liquidity used in the literature (i.e., Bharath et al. 2013; Dou et al. 2018) – the Asian financial crisis, the Russian default crisis, and Decimalization of US stock exchanges. We find that CSR concerns and high CSR concerns both increase (decrease) significantly during (after) the foreign crises (decimalization), which increases illiquidity (liquidity) and hence weakens (strengthens) the threat of blockholder exit. Interestingly, we find that across all three shocks, exit threats also significantly and negatively impact CSR strengths, indicating that agency costs likely play a prominent role in decreasing, rather than enhancing, socially responsible activities. In turn, net CSR performance is not significantly affected, highlighting the importance of separately examining the independent behaviors of CSR strengths and CSR concerns.

Exit theory also predicts that the threat of blockholder exit is most effective when managers' wealth is more sensitive to stock price. Equity-aligned managers are more incentivized to dissuade blockholders from exiting and act in the best interest of blockholders. In contrast, the sensitivity of managerial wealth to stock price plays no direct role in blockholder intervention theories. Consistent

³ The five dimensions are community, diversity, employee relation, environment, and product quality and safety. See Section 3.1 for more discussion on the measures and dimensions of CSR/CSI.

with this prediction, we find that the effect of blockholder exit threats on both CSR strengths and concerns are stronger when managers' wealth is more sensitive to the stock price.

Another prediction is that the effectiveness of exit threats is strongest in deterring "bad" investments, and that "bad" agency problems are more severe in cash-rich firms (Admati and Pfleiderer 2009). In contrast, blockholder intervention should be equally effective for both cash-rich and cash-poor firms.⁴ We find that the interaction between blockholdings and liquidity on CSR strengths and CSR concerns are stronger in firms with high free cash flows, consistent with exit threats exerting governance on CSR performance.

Furthermore, we further address the concern of potential endogeneity between blockholder characteristics and CSR/CSI by examining whether social (ir)responsibility changes around Schedule 13G filings. Blockholders who file 13G intend to remain passive investors, while those who file Schedule 13D intend to engage in intervention. Hence, 13G filing blockholders will exert governance through only the threat of exit. Following Dou et al. (2018) and using propensity score matching to compare the change in firms' socially (ir)responsible actions between firms with 13G filers and firms without 13G filers, we find that upon the first filings of 13G at a firm, both CSR strengths and CSR concerns decrease, particularly when managerial wealth sensitivity to stock price is greater.

Our results are generally robust to alternate measures of institutional blockholder characteristics and CSR performance, and to different sample periods. Placebo tests, in which we create pseudo-shock periods in alternate years, yield insignificant results, suggesting that liquidity shocks explain the negative effect of blockholders on both CSR strengths and CSR concerns, and that our main results are not manifestations of time trends or other spurious temporal factors. Taken together, we provide what

⁴ "Bad" agency problem denotes a manager's action that is undesirable to shareholders but produces private benefits to the manager. This is in contrast to the "Good" agency problem, which denotes a manager's action that is desirable to shareholders, but requires the manager to bear private costs. Admati and Pfleiderer (2009) posit that there is no reason to assume such asymmetries in the effectiveness of blockholder intervention at curbing "good" versus "bad" agency problems.

is to our knowledge the first study examining the role of blockholder exit threats in constraining both socially responsible and irresponsible activities that compromise long term firm value.

Our study provides several contributions. First, we contribute to the literature on the effect of institutional shareholders on CSR performance. Prior literature, such as Dyck, Lins, Roth, and Wagner (2019), finds in an international setting that institutional ownership is positively associated with environmental and social (E&S) performance, two key components of CSR, but only in countries with social norms that suggest a greater demand for E&S performance. They find that US institutional shareholders do not affect E&S performance in US or non-US firms. In contrast, Chen, Dong, and Lin (2020) find that institutional ownership positively affect US firms' CSR performance. They also show that shareholder intervention is a likely channel through which CSR is affected by documenting increases in sustainability and responsible investment (SRI) shareholder proposals, but do not show whether these proposals drive improvements in CSR performance. We address this tension and extend the literature by providing evidence of a specific channel through which institutional investors influence CSR behavior – exit threats – by 1) examining large institutional investors (i.e., blockholders) who have greater incentives to monitor managers, 2) focusing on the interaction between blockholders and stock liquidity to capture the intensity of exit threats in line with theory such as Edmans (2009), and 3) incorporating cross-sectional tests based on exit theory that further distinguish exit threats from other channels such as intervention by investigating managerial wealth sensitivity. We find that institutional blockholders exert governance through exit threats on both CSR strengths and concerns.⁵

⁵ We are not claiming in our paper that shareholder intervention does not play a role in influencing firms' CSR performance. However, we show direct evidence that institutional blockholders' exit threats significantly influence changes in CSR performance by exploiting components more unique to exit theory, such as market liquidity and managerial wealth sensitivity, in our research design. Furthermore, in our analyses, we include an indicator for firms that receive any shareholder proposals specifically related to SRI issues as a control variable. Results remain the same if we control for the total number of SRI proposals received from shareholders.

Second, we contribute to the emerging literature on the role of blockholders. Most US firms contain at least one blockholder, of which the majority are outside institutions most likely to exert governance and play a disciplinary role through ownership (Holderness 2009). Despite recent empirical studies such as Bharath et al. (2013), Edmans (2014) suggests that the question of whether blockholders affect firm value remains unanswered. Given the prominence of institutional blockholders, and to the extent that CSR performance affect firm value, we offer important evidence to this point. Furthermore, we offer evidence on a key mechanism through which institutional blockholders exert governance – exit threats. Although blockholders own large stakes in a firm, the stakes rarely exceed 20 percent, giving them little control or voice (Holderness 2009; Dou et al. 2018). In addition, most US firms are held by multiple small blockholders and are subject to free-rider problems that hinder monitoring through intervention. Dyck et al. (2019) also posit that public pressure such as shareholder proposals are only used occasionally.⁶ Thus, we add to the emerging empirical exit threat literature (e.g., Bharath et al. 2013; Dou et al. 2018) by identifying an important outcome with value implications impacted by blockholder exit threats – corporate social ir(responsibility).⁷

Third, we contribute to the CSR literature in two ways. First, we provide what is to our knowledge the first evidence of institutional blockholders exerting governance through the threat of exit on firms' CSR performance. Second, we show that exit threats not only mitigate negative actions by decreasing socially irresponsible behavior, but they also reduce socially responsible behavior. These

⁶ Dyck et al. (2019) also rule out exit and selection as a channel by examining positive and negative screening (e.g., excluding firms that demonstrate E&S irresponsibility). However, the threat of exit is a different mechanism that exerts governance, as the combination of a liquid market and presence of large shareholders monitor managers in aligning their actions with the interests of blockholders. In other words, true governance comes from the *threat* of blockholder exit, not actual exit. Few exits are observed in practice, but exit theory predicts that the threat of exit exerts sufficient governance through greater manager-shareholder alignment (Dou, Hope, Thomas, and Zou 2018).

⁷ To our knowledge, the only other study that examines the effect of blockholders on CSR performance is Gloßner (2019), who finds that long term blockholders moderate the positive relationship between investor horizon and CSR performance. As the main focus of his story is on the effect of investor (not just blockholder) horizon on CSR, he does not examine the channel through which institutional blockholders affect CSR performance.

results provide evidence that blockholders view what appears on the surface to be socially responsible behavior as being driven by agency problems rather than the “doing well by doing good” hypothesis. While we find that the net CSR performance is rather unaffected by exit threats in the liquidity shock tests, we highlight the importance of examining socially responsible and irresponsible behavior independently, and add to the mixed literature with regards to the implications behind CSR strengths, much of which used net CSR performance as the only measure.

Fourth, we add to the literature on the pros and cons of stock versus cash compensation. Our results suggest that blockholder exit threats are more effective in disciplining firms’ socially responsible and irresponsible behavior when the manager’s wealth is more sensitive to stock price. Thus, we provide further evidence on the desirability of equity-based compensation for executives, by enhancing the effectiveness of an important blockholder governance mechanism – exit threats.

Section 2 discusses the literature and our hypotheses. Section 3 explains our research design. Section 4 presents our empirical results. Section 5 concludes.

2. Related Literature and Hypotheses

2.1 Corporate Social Ir(responsibility)

The concept of social responsibility was developed in the 1950s, but it has taken nearly 60 years to evolve from a rather ambiguous notion into a complex dynamic used as a tool in management (Cochran 2007). Armstrong (1977) states that “social responsibility” is difficult to define, and it is easier to focus on what managers should *not* do (“social irresponsibility”) rather than what managers *should* do. He defines “social irresponsibility” as the immoral decisions made by firms to create shareholder value at the expense of other stakeholders. Nonetheless, such irresponsibility has not received much attention until the media reported many business scandals in the past couple decades.

Consequences of the revelation of a firm's corporate social irresponsibility, or CSR concerns, are often negative to an immense degree. For instance, Volkswagen was embroiled in an environmental scandal in 2015 for intentionally programming and deploying software that engaged full emission controls only in laboratory testing in 11 million cars from 2009 to 2015. This allowed Volkswagen to pass nitrogen oxide tests during regulatory testing, but its cars emitted up to 40 times more nitrogen oxide in real-world driving. When this violation became public in September 2015, Volkswagen's share price fell 37 percent in the following three trading days. As a result, nearly 300 institutional investors sued Volkswagen for \$3.67 billion in damages due to the company's sharp price drop.⁸ Thus, there is little doubt that CSR concerns have a negative, often dramatic, impact on firm value. Furthermore, Chava (2014) shows that firms with environmental concerns have higher cost of capital and higher cost of debt.

However, the effect of socially responsible behavior, or CSR strengths, is less clear. On the one hand, there is the argument that social responsibility enhances firm value, consistent with the "doing well by doing good" hypothesis (Benabou and Tirole 2010). Edmans (2011) links CSR with benefits for firm value through increased job satisfaction. Deng et al. (2013) finds that acquirers with strong CSR performance realize higher merger announcement returns and larger increases in post-merger performance. Lins et al. (2017) shows that high CSR firms have higher stock returns, profitability, growth, sales per employee, and create greater trust between firms and both stakeholders and investors through investments in social capital. Hong et al. (2019) provides evidence that being socially responsible can serve as insurance against negative event risk, as socially responsible firms receive lower sanctions from prosecutors.

⁸ <https://www.wsj.com/articles/institutional-investors-sue-volkswagen-over-fall-in-share-price-1458038261>

In contrast, other papers find the opposite – social responsibility is associated with declining profitability and firm value (e.g, Di Giuli and Kostovestky 2014). These studies posit that agency costs play a prominent role in CSR strengths. Jensen (2001) suggests that managers who are engaged in time-consuming CSR activities lose focus on core managerial responsibilities. Hillman and Keim (2001) find that social issue participation is negatively associated with shareholder value. Brown et al. (2006) identify agency costs as an important driver that explains corporate giving, while Masulis and Reza (2015) shows that corporate philanthropy is tied to personal CEO interests and CEO compensation, indicating misuse of corporate resources that reduce firm value. Krüger (2015) finds that investors respond negatively to positive CSR news, and especially when the positive event is likely to result from agency problems.

Other studies document positive effects of social responsibility, but only when certain conditions are met. For instance, Servaes and Tamayo (2013) finds that CSR and firm value are positively related for firms with high customer awareness, while firms with low customer awareness demonstrate a negative or insignificant link. Welch and Yoon (2020) document evidence of high ESG (environmental, social, and governance) performance exhibiting higher future stock returns, but only when the firm’s manager has high ratings from employees. Taken together, the literature provides mixed evidence on the implications of environmental and social strengths of a company. Thus, to analyze the governance role exerted by blockholders, it is important to independently examine CSR strengths and CSR concerns.

2.2 Institutional Investors and CSR

Prior literature documents a positive relationship between institutional ownership and CSR performance. For instance, Dyck et al. (2019) show that institutional investors positively influence E&S performance in a 41-country study. However, they find that this relation depends on a country’s

social norms towards E&S performance, and that US institutional shareholders do not affect E&S performance in US or non-US firms. In contrast, Chen et al. (2020) find in the US setting that higher institutional ownership and more concentrated shareholder attention encourage managers to adopt more socially responsible policies, mainly through reduction of CSR concerns.

In addition to conflicting results in the US, the question remains as to how institutional owners affect a firm's CSR performance. Chen et al. (2020) show that institutional ownership is associated with increases in the probability of SRI shareholder proposals. However, we do not know what the outcome of these proposals are, or if the increase in proposals are the channel through which institutional owners affect CSR performance. Furthermore, Dyck et al. (2019) posit that shareholder proposals are only used occasionally and offer private engagements between institutions and firms as the mechanism through which these investors affect CSR performance. Admittedly, data on private engagements is not readily available, but they nonetheless do not directly test this mechanism.

Dyck et al. (2019) rule out buying good E&S firms or selling bad E&S firms as the driver of E&S performance change. However, exit theory does not require actual exit to exert governance; the *threat* of exit is sufficient to align managers with shareholders. Although more directly testable, to our knowledge prior literature has not examined how exit *threats* influence social ir(responsibility). Exit threats can be used to exert governance among institutional blockholders, who (compared with smaller investors) have greater incentives to gather private information and send a credible signal to the market of lower firm value if they sell (i.e., exit). Gloßner (2019) finds that long term blockholders moderate the positive relationship between investor horizon of all institutional investors and CSR performance. However, we do not know how blockholders affect CSR performance and through what channel, independent of investor horizon. We extend this literature by directly examining the role of exit threats, a key mechanism used by blockholders to exert governance, on CSR performance.

2.3 Blockholder Exit Threats

Recent literature has begun to emphasize a specific governance mechanism of blockholders – the threat of exit. Edmans (2009) presents a model in which a manager takes action that affects firm fundamentals. If a manager underperforms, a blockholder, who own large stakes in a firm and have higher incentives to gather private information, sells its shares. This causes the firm’s stock price to decline. Hence, the threat of exit by a blockholder disciplines managers’ actions and incentivizes managers to align their actions with the interests of shareholders in order to dissuade the blockholder from exiting.

Edmans and Manso (2011) extend the Edmans (2009) model by introducing multiple blockholders in its model. This model is consistent with most US firms, as Holderness (2009) finds that blockholders’ stakes in a given firm rarely exceed 20 percent, and that most US firms are held by multiple small blockholders. Edmans and Manso (2011) show that the presence of multiple blockholders generates a free-rider problem that hinders intervention. Furthermore, it is difficult for multiple blockholders to coordinate to maximize combined trading profits. Hence, the power and threat of blockholders’ informed trading increases.

We incorporate several key features of exit theory in our research design (detailed in the next section) to provide a more direct test of exit threats. First, stock liquidity enhances the power of exit threats. In an illiquid market, blockholders have to hold and cannot easily sell to exit a firm. Hence, the firm’s stock price does not change, and managerial behavior is unaffected. In a liquid market, however, blockholders can trade on private information, and prices reflect fundamental value. This incentivizes managers to make decisions based on fundamentals, enhancing the credibility and effectiveness of the threat of exit. When blockholders sell a firm’s shares, this sends a signal to the market that an informed investor views firm value to be lower. Prior literature has also documented a significant negative impact of blockholder sales on stock prices (e.g., Kraus and Stoll 1972; Holthausen,

Leftwich, and Mayers 1990). In contrast, the intervention theory literature is largely unclear about the effect of liquidity on governance. While some argue that liquidity could have a positive effect on governance under voice theory (e.g., Maug 1998), others posit that liquidity reduces governance by allowing blockholders to simply sell their shares rather than staying to exercise their voice (Coffee 1991; Bhidé 1993; Aghion, Bolton, and Tirole 2004).

Second, under exit theory, the blockholders' threat of exit is enhanced as the manager's wealth is tied more closely to the firm's stock price. If the blockholder sells the firm's shares, stock price declines, and to the extent managers' personal wealth is sensitive to changes in stock price, the managers suffer more directly from blockholder exits. To dissuade the blockholder from exiting and hurting the managers' personal wealth, managers become more incentivized to align their actions with those of shareholders, enabling the exertion of governance through exit threats. In contrast, intervention theory does not predict how managerial wealth sensitivity to stock price influences the blockholders' governance mechanism.

Recent empirical evidence suggests that an increase in liquidity increases the likelihood of filing Schedule 13D and that 13G filings lead to a positive market reaction and improvement in future performance, and that these effects are more pronounced when liquidity is greater and managers' wealth more sensitive to stock price (Edmans et al. 2013). Bharath et al. (2013) document evidence that blockholdings increase (decrease) firm value as liquidity increases (declines), especially if the managers' wealth is sensitive to stock price. Dou et al. (2018) suggest that as exit threats increase, financial reporting quality is enhanced, particularly if the managers' wealth is tied more closely to the firm's stock price. We extend such studies by examining the relation between exit threats and corporate social ir(responsibility).

2.4 Hypotheses

The above literature review suggests that blockholders' threat of exit disciplines managerial behavior and enhances manager-shareholder alignment. In fear of declining stock prices in the face of blockholder exits in a liquid market, managers are incentivized to become aligned with long term goals of shareholders and dissuade blockholders from exiting. Irresponsible social behavior can place firms in undesirable scandals that impose large financial and reputational costs, hurting long-term firm value. Thus, it is plausible that institutional blockholders discipline managers through the threat of exit and constrain managers' tendencies to engage in CSI for short-term or private benefits.

H1: Institutional blockholders' threat of exit reduces corporate social irresponsibility (CSI).

Distinct from CSI, CSR (i.e., CSR strengths) is more complex as it is multi-faceted. On the one hand, if firms' CSR activities are value-enhancing, reduce firm-level risks, and improve reputation as a result of their socially responsible behavior, blockholders would encourage engagement in more CSR. This would be consistent with the "doing well by doing good" hypothesis (Benabou and Tirole 2010). Under this view, institutional blockholders' threat of exit would increase CSR strengths. On the other hand, if firms are engaging in socially responsible activities as a result of agency costs and are expected to lead to declines in profitability and firm value (Di Giuli and Kostovestky 2014; Kruger 2015), then institutional blockholders' threat of exit would reduce CSR strengths in addition to CSR concerns. Thus, we leave our second hypothesis in its null form:

H2: Institutional blockholders' threat of exit does not affect corporate social responsibility (CSR).

To introduce another key feature of exit theory, we then examine incorporate the role of managerial wealth sensitivity to stock price in identifying exit threats as the exertion of governance by

institutional blockholders on CSR and CSI. When managers' personal wealth is highly tied to the firm's stock price, managers are encouraged to invest in long-run growth rather than short-term benefits detrimental to long-term firm value, in order to dissuade blockholders from exiting their positions in the firm. Hence, the threat of exit is enhanced when the manager's pay-performance sensitivity is higher:

H3: The effect of institutional blockholders' threat of exit on corporate social ir(responsibility) is stronger in firms in which the managerial wealth sensitivity to stock price is greater.

3. Research Design

3.1. Measures of CSR and CSI performance

Our CSR and CSI scores are from the KLD MSCI database, which is widely used in prior and concurrent CSR studies (e.g., Chen et al. 2020; Anantharman et al. 2021). This database provides binary scores of firms' CSR and CSI in any given year across various dimensions. In this study, we use the sum of strength and the sum of concern scores across five dimensions: Community, Diversity, Employee relations, Environment, and Product Quality and Safety to compute our measures of corporate social responsibility ($CSR_STR_{i,t}$) and corporate social irresponsibility ($CSR_CON_{i,t}$), respectively.⁹ Both CSR and CSI scores are standardized by subtracting the sample mean and dividing by the sample standard deviation to address issues that can arise when social (ir)responsibility scores

⁹ Another dimension included in the KLD MSCI database, corporate governance, is omitted as it does not capture societal performance and is regarded as different from CSR (e.g., Servaes and Tamayo 2013). However, untabulated robustness tests including this dimension give similar results. We also run a robustness test (untabulated) including the governance score as a stand-alone control variable, and results also do not change inferences. We also omit the Human Rights dimension because Chen et al. (2020) suggest that most of the categories in this issue (e.g., indigenous people relations) are only applicable to a small number of sample firms that operate overseas or have overseas suppliers and thus lack variation. Untabulated robustness tests also suggest that our inferences do not change if we include Human Rights components in our CSR and CSI scores.

are only summed and left unstandardized and to enhance comparability across different years and firm compositions.¹⁰ Meanwhile, $CSR_NET_{i,t}$ is a measure of net CSR performance, computed as the difference between $CSR_STR_{i,t}$ and $CSR_CON_{i,t}$.¹¹

While CSI reflects socially irresponsible activities, unintended and unexpected cases can also result in a non-zero concern score. Such accidental events are not related to agency problems undesirable to institutional blockholders, but still indicates social irresponsibility. Therefore, to better capture intentional CSI, we create an indicator variable which equals one if a firm has a total concern score greater than or equal to three and zero otherwise ($HIGH_CON_{i,t}$), following Hoi et al. (2013).¹²

3.2. Institutional blockholder characteristics

We identify institutional blockholders as institutional investors who hold 5% or more of a firm's shares. Edmans and Manso (2011) document that multiple blockholders strengthen the threat of exit as these blockholders compete for profits by trading on private information about firm fundamentals. Therefore, both the level of blockholder ownership and the number of blockholders are important in measuring threat of exit (Bharath et al. 2013). Our main variable is the first principal component of the number of institutional blockholders and the total blockholder ownership ($BLOCK_{i,t-1}^{PCA}$).¹³ In

¹⁰ Following prior studies (Kotchen and Moon 2012; Kang, Germann, and Grewal 2016) we standardize firms' CSR performance scores to enhance comparability across different years and various firms. Some of the CSR and CSI items were added/removed to the KLD MSCI database over our sample period. Also, the number of sample firms vary across sample years as KLD MSCI started to cover Russell 3000 firms from 2003. Although we include time- and firm-fixed effects in our model, we standardized CSR and CSI scores to address potential concerns that arise from incomparability across different years and firm compositions.

¹¹ See Appendix 2 for detailed information with respect to items of CSR/CSI activities included in the KLD MSCI database.

¹² Untabulated analyses suggest that about 55% of firms that are identified as engaging in a high level of irresponsible activities do so for the next three years, and more than 76% of firms engage in high social irresponsibility for at least two consecutive years. As such, highly irresponsible actions persist for at least two years and that such irresponsible firms are distinct from other firms that do not intentionally engage in high levels of social irresponsibility.

¹³ The first principal component of the number of institutional blockholders and the total ownership explain about 95% of the common variation, on average, for each given year.

robustness tests, we use the total institutional blockholder ownership percentage ($BLOCK_{i,t-1}^{OWN}$) and the number of institutional blockholders ($BLOCK_{i,t-1}^N$) separately as the institutional blockholder characteristics variable. See Section 6 for details.

3.3. Liquidity

To measure firm-level liquidity, we first compute stock turnover, the yearly average of total daily number of shares sold scaled by total shares outstanding. Prior studies document that stock turnover has an advantage in measuring liquidity as it implicitly controls for firm size and enables comparison across firms and over time (Jayaraman and Milbourn 2012). Following Dou et al. (2018), we create an indicator variable ($D_Turnover_{i,t-1}$), which equals one if turnover is greater than the sample median, and zero otherwise.¹⁴

Using the stock turnover measure contains endogeneity issues, as liquidity and CSR/CSI can be jointly determined by omitted correlated variables. We include firm fixed effects in all specifications to control for unobservable time-invariant firm-level characteristics, and we also estimate CSR/CSI on lagged measures of liquidity to mitigate the reverse causality concern. Furthermore, following prior studies such as Bharath et al. (2013) and Dou et al. (2018), we exploit three plausibly exogenous liquidity shocks that significantly affect stock liquidity. First, we focus on two foreign crises that decreased liquidity: the 1997 Asian financial crisis and the 1998 Russian default crisis.¹⁵ These international crises led investors to flee the capital markets and significantly decreased liquidity in US

¹⁴ In untabulated robustness tests, we also use the inverse of the Amihud (2002) illiquidity measure, calculated as the sum of daily returns scaled by the respective daily trading volumes and divided by the number of total trading days.

¹⁵ The Asian financial crisis started in Thailand in July 1997 with the financial collapse of the Thai baht. A rapid devaluation spread out to Asian economies, and resulted in ongoing worries about the Asian economies. The Russian default crisis started in August 1998 as the Central Bank of Russia was forced to default on short-term sovereign debt, devalue the ruble, and declare a suspension of payments by commercial banks to foreign creditors. This led to an erosion in investor confidence and investors fled the financial markets. Acharya and Pedersen (2005) and Chordia et al. (2005) provide evidence of a sizeable decrease in stock liquidity in the US from July to December 1997 (Asian crisis) and from August to December 1998 (Russian crisis).

markets (Acharya and Pedersen 2005; Chordia, Sarkar, and Subrahmanyam 2005).¹⁶ In addition, these shocks were largely unexpected and unknown for how long they would last. We denote fiscal year-ends between July 1997 and December 1997 as the Asian financial crisis period and between August 1998 and December 1998 as the Russian financial crisis period. Since each of the crises consists less than 2% of total sample, we merge those two financial crises as one liquidity shock that decreased stock liquidity. An indicator variable *CRISES* equals one for the period during crises (either than Asian financial or Russian default crisis), and zero otherwise.

We also examine the 2001 decimalization events in which U.S. stock and option markets began quoting prices in decimal increments. The NYSE and AMEX decimalization events on January 29, 2001 and the NASDAQ decimalization on April 9, 2001 provide exogenous increases to stock liquidity and thus to exit threats (e.g., Bharath et al. 2013). An indicator variable *DEC* equals one for the post-decimalization period, and zero otherwise.

3.4. Empirical model

We estimate the following OLS equation. Standard errors are clustered by firm.

$$\begin{aligned}
 CSR(CSI)_{i,t} = & \beta_0 + \beta_1 BH_{i,t-1} + \beta_2 D_Liquidity_{i,t-1} + \beta_3 BLOCK_{i,t-1}^{PCA} \times D_Liquidity_{i,t-1} \\
 & + \gamma X_{i,t-1} + \mu_i + d_t + \varepsilon_{i,t}
 \end{aligned} \tag{1}$$

$CSR(CSI)_{i,t}$ refers to the CSR and CSI performance measures described in Section 3.1. $BLOCK_{i,t-1}^{PCA}$ is our main institutional blockholder characteristics measure of firm i as described in Section 3.2.

¹⁶ Although the 2008 US financial crisis is another candidate as a shock to liquidity, it was also a direct economic shock to the value of our sample US firms (Bharath et al. 2013). This is the same reason that we cannot use firm-specific shocks to liquidity as such shocks are likely to be driven by events that do not randomly occur outside of the U.S. but can also be triggered by changes in firm fundamentals, such as changes to investor recognition, analyst following, and index inclusions.

$D_Liquidity_{i,t-1}$ represents either the firm-level liquidity measure or the liquidity shocks described in Section 3.3. These measures, along with all other independent variables, are measured at year $t-1$ to address potential reverse causality concerns (Bharath et al. 2013).

Exit theory predicts that greater blockholdings and greater liquidity exert governance in conjunction. Therefore, our main explanatory variable of interest is the *interaction* between institutional blockholder characteristics and liquidity ($BLOCK_{i,t-1}^{PCA} \times D_Liquidity_{i,t-1}$) to measure the impact of institutional blockholder exit threats on firms' CSR and CSI performance (Bharath et al. 2013; Dou et al. 2018). H1 predicts that $\beta_3 < 0$, while either $\beta_3 < 0$ or $\beta_3 > 0$ is possible for H2.

Firm-level control variables that also influence $CSR(CSI)_{i,t}$ are identified following prior literature, including log of total assets (*SIZE*), leverage ratio (*Leverage*), financial performance (*ROA*), book-to-market ratio (*BTM*), cash holdings relative to total assets (*Cash Asset ratio*), sales growth (*Salesgrowth*), R&D expenditures (*RND*), capital expenditures (*CAPX*), dividend payout indicator (*Dividend*), advertising expenses (*Advertising*), SG&A expenditures (*SG&A*), and total institutional ownership percentage (*IO*). *RND* and *CAPX* are scaled by lagged total assets, while *Advertising* and *SG&A* are scaled by lagged total sales. We also include an indicator variable that equals one if the firm received any shareholder proposals related to SRIs (*D_SRI*) to control for shareholder intervention. Firm- and year-fixed effects are also included in the model to control for time-invariant firm characteristics and time trends, respectively. All continuous variables are winsorized at 1 and 99%. Detailed variable definitions are presented in Appendix 1.

4. Sample and Descriptive Statistics

4.1 Sample construction

Our sample comes from the intersection of the KLDS MSCI database, which contains annual firm CSR (CSI) scores, the Thomson Reuters 13F database for institutional blockholder data, Compustat North America for firm-level financial data, and CRSP for firm-level liquidity data. The sample period is 1993-2018. The final sample, after removing observations with missing necessary variables in our main analyses, consists of 3,306 firms and 21,208 firm-year observations.

4.2 Descriptive Statistics

Table 1, Panel A presents descriptive statistics. Our CSR and CSI scores all have a mean of 0, as they are all standardized relative to the sample mean. Meanwhile, the median $CSR_STR_{i,t}$ is -0.30 while the median $CSR_CON_{i,t}$ is -0.35, indicating that firms generally have higher CSR strength scores than CSR concerns scores. Institutional blockholders hold an average of around 20% of the firm's shares (mean of 20.82% and median of 19.21%). In addition, untabulated analyses suggest that about 12% of firms have zero institutional blockholders, while about 18% of firms have a single institutional investor, indicating that nearly three-fourths of sample firms have multiple blockholders.

Table 1, Panel B presents the year-wise distribution of the mean institutional blockholder characteristics. Both the ownership and the number of institutional blockholders have increased over time. Total percentage of shares held by institutional blockholders was below 10% on average until 1994, more than doubled by 2004, and more than tripled from 1993 to 2015. The average number of institutional blockholders also more than tripled from less than 1 blockholder in 1994 to nearly 3 blockholders in 2013. These results indicate the increasing importance of institutional blockholders for the average firm in recent years.

Table 2 presents a correlation matrix. $CSR_STR_{i,t}$ and $CSR_CON_{i,t}$ are positively and significantly correlated. Meanwhile, both $CSR_STR_{i,t}$ and $CSR_CON_{i,t}$ are significantly and negatively

correlated with all institutional blockholder characteristic measures. These correlations indicate that CSR strength and CSR concerns move in the same direction, hence suggesting the possibility that both CSR and CSI could be the result of agency problems. If CSR strengths were consistent with the “doing well by doing good” hypothesis, we would expect a negative correlation between $CSR_STR_{i,t}$ and $CSR_CON_{i,t}$

Table 3 breaks down the sample by year (Panel A) and 2-digit SIC industry code (Panel B) and the average raw CSR, CSI, and high CSI scores. In Panel A, we find that across all years, the average CSR strength score ($rCSR_STR_{i,t}$) is greater than the average CSI score ($rCSR_CON_{i,t}$). There are no noticeable trends in strength or concerns scores from year to year, but there is a sharp drop in 2012 that persists thereafter. This is also reflected in the pattern of $rHigh_CON_{i,t}$, as the percentage of firms with high CSR concerns (i.e., a CSI score of 3 or greater) is about 22% in 2008-2010, but drops to 5.3% in 2012. Accordingly, we standardize the CSR and CSI scores each year in our regression analyses. Panel B indicates that our sample is widely dispersed across the industries as well, although there is some concentration in Chemicals, Industrial Machinery, Electronic Equipment, Instruments, and Business Services. Interestingly, firms in the General Merchandise Store industry (SIC code 53) conduct both highly responsible and highly irresponsible social behavior, with about 38% of firms in this industry engaged in at least three socially irresponsible behaviors. Nonetheless, there is great variation in firms’ societal performance across industries. Consumer-base industries tend to have high CSR scores, which is consistent with consumers paying close attention to the social responsibility behavior of the brands they support.¹⁷ Meanwhile, oil,

¹⁷ <https://www.forbes.com/sites/csr/2010/12/15/new-study-consumers-demand-companies-implement-csr-programs/?sh=182908d365c7>
<https://www.businesswire.com/news/home/20191002005697/en/Consumers-Expect-the-Brands-they-Support-to-be-Socially-Responsible>

metal, and transportation industries tend to have high CSI scores, which may reflect the high environmental and labor-related risks inherent in these industries.

5. Results

5.1 Threats of exit on corporate social (ir)responsibility

Table 4 presents results using $D_Turnover_{i,-1}$ as the liquidity measure. As discussed above, our focus is on the *interaction* between our blockholdings measure and liquidity ($BLOCK_{i,t-1}^{PCA} \times D_Turnover_{i,-1}$). Results in Column 1 suggest that the impact of blockholdings on net CSR performance is increasing in firm-level liquidity. Meanwhile, results in Column 2 indicate no significant effect of blockholdings on CSR strengths as liquidity improves. However, Columns 3 and 4 provide evidence that the effect of blockholdings on CSR concerns (high CSR concerns) is decreasing in firm-level liquidity, and is statistically significant at the 5% (1%) level. Hence, these results are consistent with H1 of a negative relation between exit threats and CSI. As exit threats increase, managers are less likely to engage in socially irresponsible activities.

To address endogeneity concerns from using a firm-level liquidity measure that can be jointly determined with CSR and CSI by omitted correlated variables, we present results for the plausibly exogenous liquidity shocks in Table 5. Panel A presents results from employing the Asian and Russian financial crises as our liquidity shocks. In Columns 3 and 4, we find that the coefficient of the interaction term $BLOCK_{i,t-1}^{PCA} \times CRISES$ is significantly positive, suggesting that during the foreign crises, which decreased liquidity, weakened the effectiveness institutional blockholders' threat of exit on CSR concerns. These results remain consistent with the prediction in H1. Furthermore, we find that the interaction is also positive for CSR strengths in Column 2, suggesting that for institutional blockholders, CSR strengths are more likely to be associated with agency problems rather than with

the “doing well by doing good” hypothesis. Meanwhile, we find that the interaction is insignificant for net CSR in Column 1, highlighting the importance of independently analyzing CSR strengths and CSR concerns.

Panel B reports the results for the U.S. stock exchange Decimalization liquidity shock. We find similar results to Panel A in that the coefficient of the interaction term $BLOCK_{i,t-1}^{PCA} \times DEC$ is insignificant for net CSR, significantly negative for CSR strengths at the 10% level, and significantly negative for CSR concerns and high CSR concerns at the 1% level. Hence, decimalization increased liquidity, which enhanced the ability of exit threats to constrain not only CSR concerns, but also, albeit to a lesser extent, CSR strengths.

Taken together, we present evidence that supports the governance role exerted by institutional blockholders through the threat of exit on firms’ social activities in a way that reduces socially irresponsible activities. Blockholders incentivize managers to act in the best interest of shareholders and reduce engagements in CSI through the threat of exit, which is enhanced after decimalization and reduced during foreign crises. Moreover, while the firm-level liquidity results do not find that exit threats influence CSR strengths, examination of the two liquidity shocks indicate that blockholders also dissuade managers from engaging in what appears to be socially responsible activities. This supports the hypothesis that CSR strengths are the result of agency problems and are not consistent with the “doing well by doing good” hypothesis. Furthermore, the results highlight the importance of examining CSR and CSI separately as two distinct and independent behaviors, as the effect of blockholders on net CSR performance does not change during the foreign financial crises or after decimalization.

5.3 Managerial Wealth Sensitivity to Stock Price

In the previous section, we provide initial evidence of institutional blockholder exit threats exerting governance by dissuading managers from engaging in CSI and CSR that result from agency problems. We are able to distinguish the role of blockholder exit threats rather than that of a different channel, such as intervention, by incorporating a key element of exit theory – that liquidity is a positive contributor to governance. We also include SRI-related shareholder proposals as a control variable in all of our estimations. To further distinguish exit threats from intervention, we incorporate another important prediction of exit theory that blockholders’ threat of exit increases as the manager’s wealth is tied more closely to the firm’s stock price.

We separate the sample into two subsamples based on the median scaled wealth-performance sensitivity from Edmans, Gabaix, and Landier (2009) (*Scaled WPS*), defined as the dollar change in CEO wealth for a 100 percentage point change in firm value, divided by annual flow compensation.¹⁸ We predict that the impact of liquidity shocks on the relation between institutional blockholders and firms’ CSR/CSI to be driven by the high *Scaled WPS* group, consistent with the predictions in H3. Results for $CSR_STR_{i,t}$ and $CSR_CON_{i,t}$ are presented in Table 6, Panel A and Table 6, Panel B, respectively.

In Panel A, we find that $BLOCK_{i,t-1}^{PCA} \times CRISES$ is positive and significant only in the high *Scaled WPS* subsample. However, we find that $BLOCK_{i,t-1}^{PCA} \times DEC$ is not significant in both high and low *Scaled WPS* subsamples. As a result, we find modest evidence that support H3 for CSR strengths. Meanwhile, in Panel B, we find that $BLOCK_{i,t-1}^{PCA} \times CRISES$ is positive and significant at the 1% level, while $BLOCK_{i,t-1}^{PCA} \times DEC$ is negative and significant at the 1% level, only in the high *Scaled WPS* subsample. The interactions are insignificant in the low *Scaled WPS* subsample. Thus, we find strong

¹⁸ The advantage of this variable is that the measure is independent of firm size and is thus comparable across firms and over time (Edmans et al. 2009). This data is available at <https://alexedmans.com/data/>.

evidence that supports exit theory prediction that threats of exit are more effective in reducing CSI when managers' wealth is tied more closely to the stock price (H3).¹⁹

5.4 Free cash flow agency problems

Admati and Pfleiderer (2009) demonstrate that the effectiveness of exit threats depend on the nature of the agency problem and the type of private information that motivate largeshareholders' trades. They state that exit threats are more feasible as a disciplining device for "bad actions", as such actions are publicly observable, and large shareholders have private information with respect to the consequences of such actions. Based on these predictions, we conjecture that CSI actions are publicly observable 'bad actions' and that institutional blockholders have private information about their consequences. If so, institutional blockholders would discourage managers from engaging in CSI as it would negatively impact the firm's financial performance as well as its reputation. Furthermore, if socially responsible activities also reflect an agency problem, institutional blockholders would also want to dissuade such actions. Admati and Pfleiderer (2009) suggest that exit threats are more effective in cash-rich firms more prone to the "bad" agency problem of wasteful investment. Accordingly, we test whether the effectiveness of exit threats by institutional blockholders on firms' CSR or CSI is stronger in cash-rich firms. Following Bharath et al. (2013), we separate the sample into two subgroups based on the median free cash flow in each fiscal year, where free cash flow is defined as the net operating cash flows minus cash dividends on common stock scaled by lagged total assets ($FCF_{i,t-1}$).

Results are presented in Table 7. As in Table 5, Panel A presents results for CSR strengths, while Panel B presents results for CSR concerns. In Panel A, we find that the interactions between institutional blockholdings and liquidity shocks significantly impact CSR strengths only in the high

¹⁹ Our inferences are unchanged when we use an alternate measure of managerial wealth sensitivity, *Delta*, the sensitivity of a dollar value of CEO's stock and option holdings to a dollar change in the stock price, from Core and Guay (2002).

free cash flow subsample. More specifically, during the foreign crises when liquidity decreases and the effectiveness of exit threats reduced, CSR strengths increase only in the high free cash flow subsample. Similarly, after decimalization when liquidity increases and the threat of exit enhanced, CSR strengths decrease only in the high free cash flow subsample.

We present similar findings in Panel B. During foreign crises, CSR concerns significantly increase when the threat of exit is reduced. Following decimalization, when exit threats are enhanced, CSR concerns significantly decrease. Taken together, Table 7 presents evidence in support of exit theory, as our results are consistent with Admati and Pfleiderer (2009)'s theory that the effectiveness of exit threats is strongest in deterring "bad" investments that are more severe in cash-rich firms.

6. Additional Analyses

6.1 13G filings

To further address endogenous relation between blockholder formation and liquidity, we explore the change in CSR/CSI performance around Schedule 13G filings. All blockholders who obtain at least 5 percent of total ownership in a public firm should file either Schedule 13D or 13G. While 13D is for blockholders who intend to engage in intervention, blockholders who intend to remain passive investors file 13G. As in Edmans et al (2013), one of the challenges when examining the governance effect through exit threat is that no explicit exit or voice does not necessarily mean that the firm has poor governance, but rather the threat of exit may be sufficiently strong that such incidents are not needed. Following prior studies, we also use the unexpected governance event (a Schedule 13G filings) rather to address possibly unresolved endogeneity issues between liquidity and block formation (Edmans et al. 2013; Dou et al. 2018).

We obtain all 13G filings of our sample firms during the sample period from the SEC EDGAR website. For each firm, we focus on the first 13G filing because subsequent filings could be influenced

by the initial filing, not because of liquidity, following prior studies. The first 13G filing years identified are set as the event year t . We identify firms with first 13G filings during the sample period as treatment firms, and the rest as potential control firms. We then use propensity score matching to compare the change in CSR/CSI performance of 13G filing firms with a matched control group. Following Dou et al. (2018), we further require that no 13D filings are filed in any fiscal year directly before or after the event year t (years $t-1$ and $t+1$) for both treatment and control firms. We use the greedy search method to match a treatment firm with a control firm in the same year and the same two-digit SIC industry that has the closest predicted value from the logit model for the probability of firms having a first 13G filings within a 10 percent distance.²⁰ All control variables included in our Table 4 estimations are used in the logit model. Furthermore, each firm is required to have one observation in year $t-1$, the pre-13G filing period, and at least one observation in either year t or $t+1$, the post-13G filing period. This procedure yields 536 firm-year observations from 129 matched firm-pairs.

Results are presented in Table 8. In Panel A, for the full sample, the coefficient on $13GFirm * POST$ is negative and significant at the 10% level. This indicates that CSR strengths decrease when blockholders file a 13G, relative to a matched control group of non-filers. Furthermore, when we split the sample on *Scaled WPS*, the coefficient on $13GFirm * POST$ is negative and significant at the 5% level in the high *Scaled WPS* subsample, but insignificant in the low *Scaled WPS* subsample. In Panel B, for the full sample, the coefficient on $13GFirm * POST$ is insignificant. However, when we split the sample on managerial wealth sensitivity, we find that the coefficient on $13GFirm * POST$ is negative and significant in the high *Scaled WPS* subsample, but positive and insignificant in the low *Scaled WPS* subsample.

²⁰ We use a greedy search method, also known as the nearest neighbor method, because firms having CSR/CSI scores are not as frequent as other firm variables, such as financial reporting quality in Dou et al. (2018).

Taken together, the results presented in Table 8 are consistent with the increase in the intensity of blockholder exit threats reducing CSR strengths and CSR concerns by exploiting 13G filings of institutional blockholders who intend to remain passive, particularly if the manager's personal wealth is sensitive to the firm's stock price. Thus, we provide evidence that further supports our hypotheses that exit threats dissuade managers from engaging in CSR and CSI.

6.2 CSR and CSI by dimensions

Our results presented in prior sections imply that the exit threats of institutional blockholders exert governance on firms' corporate social behavior. However, we do not know which specific dimension(s) of CSR or CSI that exit threats are most effective in governing. Prior studies find that specific dimensions of CSR have more positive effects on returns, such as eco-efficiency (Derwall, Guenster, Bauer, and Koedijk 2005), employee satisfaction (Edmans 2011), and labor productivity (Flammer 2015). We test the exit threat model on each dimension of either CSR or CSI using the liquidity shock measures, *CRISES* and *DEC*. The CSR and CSI scores for each dimensions are summed and standardized in any given year similar to $CSR_STR_{i,t}$ and $CSR_CON_{i,t}$ but within each of the dimensions.

Table 9 presents the results. Panel A suggests that during the foreign crises marked by decreased liquidity and weakened blockholders' threats of exit, CSR strengths in diversity ($DIV_STR_{i,t}$), employee relations ($EMP_STR_{i,t}$), and environment ($ENV_STR_{i,t}$) significantly increased at the 10% level. During the US Decimlization period, in which liquidity was high and blockholders' exit threats more effective, CSR strengths across the same three dimensions – diversity, environment, and employee relations – significantly decreased at the 5% level or greater. Meanwhile, results in Panel B suggest that in terms of CSI, only environment-related socially irresponsible activities ($ENV_CON_{i,t}$) significantly increased (at the 1% level) during crises periods, while irresponsible activities related to

community relations ($COM_CON_{i,t}$), diversity ($DIV_CON_{i,t}$), employee relations ($EMP_CON_{i,t}$), and product quality and safety ($PRO_CON_{i,t}$) all significantly decreased at the 5% level or greater after decimalization. Taken together, the governance effect of institutional blockholders' threats of exit on firms' social (ir)responsible actions have varying impacts across different dimensions. Our results suggest that CSR strengths in the diversity, employee relations, and environmental dimensions appear to be more driven by agency problems, as these were the only dimensions impacted by exit threats during both liquidity shocks. Furthermore, the liquidity shocks, taken together, impact all five dimensions of CSR concerns, indicating that to a certain extent, institutional blockholders care about dissuading engagements across all dimensions of CSI.

6.3 Alternative Measures

Throughout the study, our primary measure of institutional blockholdings was the first principal component of the number of institutional blockholders and the total blockholder ownership ($BLOCK_{i,t-1}^{PCA}$). In robustness tests, we use the total institutional blockholder ownership percentage ($BLOCK_{i,t-1}^{OWN}$) and the number of institutional blockholders ($BLOCK_{i,t-1}^N$) separately as the institutional blockholder characteristics variable and rerun the Table 4 and Table 5 analyses. Results are presented in Table 10, Panels A and B. All of our results are robust to using alternate measures of institutional blockholdings.

We also run a robustness test using alternate raw measures of CSR and CSI. These measures are the summed strength (CSR) and concern (CSI) scores across all five dimensions for a given firm in a given year, but are left unstandardized. Results are presented in Table 10, Panel C. Again, all of our results are robust to using the raw, unstandardized measures of CSR and CSI.

6.4 Sample composition

Our sample period is from 1993 to 2018, and this might involve the possibility of testing across different sets of firms around each liquidity shock. For instance, if firms exist in the 2000s but not during the foreign financial crises, or if firms are newly listed (delisted) after (prior to) decimalization, then we may be making inferences about the role of exit threats on CSR and CSI for firms that were not existent to be impacted by the liquidity shocks. Therefore, we restrict firms to have at least one firm-year observations both during and outside the foreign financial crises, or before and after decimalization, depending on the liquidity shock being used in our analyses. Results using the restricted samples are largely consistent with prior findings with the exception of CSR strengths in the *Scaled WPS* subsamples, and are presented in Table 11, Panel A.

In addition, although we include year fixed effects in all of our analyses, we also narrow the sample period around each event to ensure that unrelated factors long before or after the liquidity shocks are not driving our results. For foreign crises (decimalization), we restrict the sample periods from 1993 to 2003 (1996 to 2006), five years before and after each liquidity shock. Results are robust for the restricted sample periods except for CSR concerns in the full sample analysis using the foreign crises as the liquidity shock. Results are presented in presented in Table 11, Panel B.

6.5 Falsification Tests (time-trend effects)

The results presented could be the continuation of a pre-existing trend that is not fully captured by year-fixed effects, rather than the joint effect of liquidity and blockholders around liquidity shocks. To mitigate the possibility that results are the artifact of a time trend, we conduct ‘pseudo’ shock analyses during the 2002-2007 period. We choose this window because it is subsequent to all of our liquidity shocks but before the 2008 financial crisis. Following Dou et al. (2018), we define the liquidity event period as 2004-2005 (*Pseudo*) and regard 2002-2003 as the pre-event and 2006-2007 as the post-

event periods. As pseudo shocks, we would not expect to find any significant results, and results presented in Table 11 Panel C suggest that this is the case. Overall, the placebo tests provide assurance that our prior findings do not represent any continuous time trend effects but the effects of blockholder exit threats around liquidity shocks.

7. Conclusion

An emerging literature suggests that large shareholders exert governance by threatening to sell the firm's shares when managers perform against the best interests of shareholders. However, there is little evidence documenting how institutional blockholders discipline societal actions of a company using exit threat as a governance channel. As CSI reflects irresponsible behavior of managers driven by short-termism or private benefits, which eventually reduces firm value that is undesirable to shareholders, CSI can be regarded as a "bad" agency problem. Furthermore, whether CSR reflects actions consistent with "doing well" by "doing good" or agency problems remains up for debate. In this paper, we examine the effect of institutional blockholder exit threats on CSR strengths (CSR) and CSR concerns (CSI).

While blockholders can also govern firms through intervention or voice, we take several approaches to distinguish the two channels. First, exit threats are more effective in times of liquid markets, while there is mixed evidence on the relation between liquidity and intervention. We find that in times of high liquidity, when exit threats are enhanced, institutional blockholders reduce the level of not only CSI, but also that of CSR. Although we find no result for CSR when using turnover as a proxy for firm-level liquidity, such a measure may be vulnerable to endogeneity concerns. Thus, we use three liquidity shocks commonly used in the literature and show that during times of high stock liquidity, blockholders effectively constrain both CSI and CSR when exit threats are more effective.

Our main results offer two interesting insights. First, the relation among institutional

blockholdings, stock liquidity, and social (ir)responsibility that we document suggest effective governance exerted by institutional blockholders' threat of exit. Second, our findings that both CSI and CSR are affected by exit threats in the same direction suggest that the two are independent actions. Blockholders reducing CSR through the threat of exit indicates that CSR likely reflect agency problems.

Another approach to distinguishing exit threats from intervention is examining managers' wealth sensitivity to stock price. While exit threats are more effective for managers whose wealth is sensitive to movements in stock price, there is no theory behind the relation between intervention and pay-performance sensitivity. We find that the effect of blockholders on CSI and CSR are stronger when managerial wealth sensitivity to the stock price is higher, consistent with exit theory.

Furthermore, theory suggests that exit threats are more effective in cash-rich firms that are more prone to "bad" agency problems, in contrast to intervention or voice. Consistent with theory, we find that exit threats are more effective in constraining CSI and CSR in cash-rich firms. We also find that following 13G filings, when blockholders form to remain passive rather than engage in active intervention, CSR and CSI are both reduced, particularly when managerial wealth sensitivity to stock price is greater.

This paper contributes to the emerging CSR and blockholder exit threat literatures. In light of the governance provided by institutional blockholders on CSR and CSI, further extensions can investigate whether CSI of one firm has a spillover effect on cross-industry peer firms who share common institutional blockholder ownership. Moreover, based on our findings that firms' societal behaviors reflect agency issues, one can examine whether firms having high scores in both CSR and CSI have any differences in their reporting behavior or corporate policy from other firms. We suggest these are interesting avenues for future research.

References

- Acharya, V.V. and Pedersen, L.H., 2005. Asset pricing with liquidity risk. *Journal of financial Economics*, 77(2), pp.375-410.
- Admati, A.R. and Pfleiderer, P., 2009. The “Wall Street Walk” and shareholder activism: Exit as a form of voice. *The Review of Financial Studies*, 22(7), pp.2645-2685.
- Aghion, P., Bolton, P. and Tirole, J., 2004. Exit options in corporate finance: Liquidity versus incentives. *Review of finance*, 8(3), pp.327-353.
- Anantharaman, D., Huang, D. and Zhao, K., 2021. The Mix of Soft and Hard Information in ESG Reports and Impression Management. *Working Paper*.
- Armstrong, J.S., 1977. Social irresponsibility in management. *Journal of Business Research*, 5(3), pp.185-213.
- Barnea, A. and Rubin, A., 2010. Corporate Social Responsibility as a Conflict Between Shareholders, *Journal of Business Ethics*, 97, pp.71-86
- Bénabou, R. and Tirole, J., 2010. Individual and corporate social responsibility. *Economica*, 77(305), pp.1-19.
- Bharath, S.T., Jayaraman, S. and Nagar, V., 2013. Exit as governance: An empirical analysis. *The Journal of Finance*, 68(6), pp.2515-2547.
- Bhide, A., 1993. The hidden costs of stock market liquidity. *Journal of financial economics*, 34(1), pp.31-51.
- Brown, W.O., Helland, E. and Smith, J.K., 2006. Corporate philanthropic practices. *Journal of corporate finance*, 12(5), pp.855-877.
- Chava, S. (2014). Environmental externalities and cost of capital. *Management science*, 60(9), 2223-2247.
- Chen, T., Dong, H. and Lin, C., 2020. Institutional shareholders and corporate social responsibility. *Journal of Financial Economics*, 135(2), pp.483-504.
- Chordia, T., Sarkar, A. and Subrahmanyam, A., 2005. An empirical analysis of stock and bond market liquidity. *The Review of Financial Studies*, 18(1), pp.85-129.
- Cochran, P.L., 2007. The evolution of corporate social responsibility. *Business horizons*, 50(6), pp.449-454.
- Coffee Jr, J.C., 1991. Liquidity versus control: The institutional investor as corporate monitor. *Colum. L. Rev.*, 91, p.1277.
- Deng, X., Kang, J.K. and Low, B.S., 2013. Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of financial Economics*, 110(1), pp.87-109.

- Derwall, J., Guenster, N., Bauer, R. and Koedijk, K., 2005. The eco-efficiency premium puzzle. *Financial Analysts Journal*, 61(2), pp.51-63.
- Di Giuli, A. and Kostovetsky, L., 2014. Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Financial Economics*, 111(1), pp.158-180.
- Dou, Y., Hope, O.K., Thomas, W.B. and Zou, Y., 2018. Blockholder exit threats and financial reporting quality. *Contemporary Accounting Research*, 35(2), pp.1004-1028.
- Dyck, A., Lins, K.V., Roth, L. and Wagner, H.F., 2019. Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics*, 131(3), pp.693-714.
- Edmans, A., 2009. Blockholder trading, market efficiency, and managerial myopia. *The Journal of Finance*, 64(6), pp.2481-2513.
- Edmans, A., 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), pp.621-640.
- Edmans, A., Fang, V.W. and Zur, E., 2013. The effect of liquidity on governance. *The Review of Financial Studies*, 26(6), pp.1443-1482.
- Edmans, A. and Manso, G., 2011. Governance through trading and intervention: A theory of multiple blockholders. *The Review of Financial Studies*, 24(7), pp.2395-2428.
- Flammer, C., 2015. Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61(11), pp.2549-2568.
- Gloßner, S., 2019. Investor horizons, long-term blockholders, and corporate social responsibility. *Journal of Banking & Finance*, 103, pp.78-97.
- Hillman, A.J. and Keim, G.D., 2001. Shareholder value, stakeholder management, and social issues: what's the bottom line?. *Strategic management journal*, 22(2), pp.125-139.
- Hoi, C.K., Wu, Q. and Zhang, H., 2013. Is corporate social responsibility (CSR) associated with tax avoidance? Evidence from irresponsible CSR activities. *The Accounting Review*, 88(6), pp.2025-2059.
- Holderness, C.G., 2009. The myth of diffuse ownership in the United States. *The Review of Financial Studies*, 22(4), pp.1377-1408.
- Holthausen, R.W., Leftwich, R.W. and Mayers, D., 1987. The effect of large block transactions on security prices: A cross-sectional analysis. *Journal of Financial Economics*, 19(2), pp.237-267.
- Hong, H.G., Kubik, J.D., Liskovich, I. and Scheinkman, J., 2019. Crime, punishment and the value of corporate social responsibility. *Available at SSRN 2492202*.
- Jayaraman, S. and Milbourn, T.T., 2012. The role of stock liquidity in executive compensation. *The Accounting Review*, 87(2), pp.537-563.
- Jensen, M.C., 2001. Value maximization, stakeholder theory, and the corporate objective function. *Journal of applied corporate finance*, 14(3), pp.8-21.

Kang, C., Germann, F., & Grewal, R. (2016). Washing Away Your Sins? Corporate Social Responsibility, Corporate Social Irresponsibility, and Firm Performance. *Journal of Marketing*, 80(2), 59-79.

Kotchen, M., & Moon, J.J. (2012). Corporate Social Responsibility for Irresponsibility. *The B.E. Journal of Economic Analysis & Policy*, 12(1), Article 55.

Kraus, A. and Stoll, H.R., 1972. Price impacts of block trading on the New York Stock Exchange. *The Journal of Finance*, 27(3), pp.569-588.

Krüger, P., 2015. Corporate goodness and shareholder wealth. *Journal of financial economics*, 115(2), pp.304-329.

Lins, K.V., Servaes, H. and Tamayo, A., 2017. Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *the Journal of Finance*, 72(4), pp.1785-1824.

Masulis, R.W. and Reza, S.W., 2015. Agency problems of corporate philanthropy. *The Review of Financial Studies*, 28(2), pp.592-636.

Maug, E., 1998. Large shareholders as monitors: Is there a trade-off between liquidity and control?. *The journal of finance*, 53(1), pp.65-98.

McGuire, J.W., 1963. *Business and Society*. McGraw-Hill. New York.

Shleifer, A. and Vishny, R.W., 1986. Large shareholders and corporate control. *Journal of political economy*, 94(3, Part 1), pp.461-488.

Servaes, H. and Tamayo, A., 2013. The impact of corporate social responsibility on firm value: The role of customer awareness. *Management science*, 59(5), pp.1045-1061.

Welch, K. and Yoon, A., 2020. Do High Ability Managers Choose ESG Projects that Create Shareholder Value? Evidence from Employee Opinions. *Evidence from Employee Opinions (June 2, 2020)*.

Appendix 1. Variable Description

Variables	Description
CSR Performance	
$CSR_NET_{i,t}$	Net CSR score: $CSR_STR_{i,t} - CSR_CON_{i,t}$ (defined below)
$CSR_STR_{i,t}$	Sum of Firm performance scores of Socially Responsible activities standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year
$CSR_CON_{i,t}$	Sum of Firm performance scores of Socially Irresponsible activities standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year
$HIGH_CON_{i,t}$	Indicator variable that equals one if $CSR_CON_{i,t}$ is greater than or equal to three, and zero otherwise, standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year
$COM_STR(CON)_{i,t}$	Sum of total socially responsible (irresponsible) activities in a community related dimension in each fiscal year, standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year. See Appendix 2. for detailed description of community scores.
$DIV_STR(CON)_{i,t}$	Sum of total socially responsible (irresponsible) activities in a diversity related dimension in each fiscal year, standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year. See Appendix 2. for detailed description of diversity scores.
$EMP_STR(CON)_{i,t}$	Sum of total socially responsible (irresponsible) activities in an employment related dimension in each fiscal year, standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year. See Appendix 2. for detailed description of employee relations scores.
$ENV_STR(CON)_{i,t}$	Sum of total socially responsible (irresponsible) activities in an environment related dimension in each fiscal year, standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year. See Appendix 2. for detailed description of environment scores.
$PRO_STR(CON)_{i,t}$	Sum of total socially responsible (irresponsible) activities in a product quality and safety related dimension in each fiscal year, standardized by subtracting the sample mean and dividing by the sample standard deviation in each fiscal year. See Appendix 2. for detailed description of product quality and safety related scores.
Institutional Blockholders	
$BLOCK^{PCA}_{i,t-1}$	First principal component of the common variation of institutional blockholder ownership and the number of institutional blockholders in each fiscal year
$BLOCK^{OWN}_{i,t-1}$	The percentage of total institutional blockholder ownership in each fiscal year
$BLOCK^N_{i,t-1}$	The number of institutional blockholders in each fiscal year
$BLOCK^{LARGE}_{i,t-1}$	The percentage of the largest institutional blockholder ownership in each fiscal year
Liquidity	
$Turnover_{i,t-1}$	Turnover ratio denoting firm-level liquidity in each fiscal year calculated as the annual average of daily turnover ratio. Daily turnover ratio is calculated as total number of shares sold on the day scaled by total shares outstanding.
$D_Turnover_{i,t-1}$	Indicator variable equals one if a firm-year has annual turnover ratio above the overall sample median in any given year, and zero otherwise.

<i>CRISES</i>	Indicator variable equals one for firm-years with fiscal year-ends between July 1997 and December 1997 for Asian financial crisis or between August 1998 and December 1998 for Russian financial crisis, and zero otherwise.
<i>DEC</i>	Indicator variable equals one if a firm-year is after the decimalization period. One for firm-years with fiscal year-ends after January 31, 2001 if traded on NYSE/AMEX, and one for firm-years with fiscal year-ends after April 9, 2001 if traded on NASDAQ.

Manager Compensation Characteristics

<i>Scaled WPS</i>	Dollar change in CEO wealth for a 100 percentage point change in firm value, divided by annual flow compensation (Edmans et al. 2009)
<i>Delta</i>	Dollar value of CEO's stock and option holdings to a dollar change in the stock price (Core and Guay 2002)

Other Firm Characteristics

<i>Size_{i,t-1}</i>	Natural log of total assets
<i>Leverage_{i,t-1}</i>	Long-term debt scaled by the sum of long-term debt and book value of equity
<i>ROA_{i,t-1}</i>	Income before extraordinary items divided by lagged total assets
<i>BTM_{i,t-1}</i>	Book to market ratio
<i>Cash Asset ratio_{i,t-1}</i>	Cash holdings scaled by lagged total assets
<i>Salesgrowth_{i,t-1}</i>	Difference in sales scaled by lagged total sales
<i>RND_{i,t-1}</i>	R&D expenditure scaled by lagged total assets
<i>CAPX_{i,t-1}</i>	Capital expenditure scaled by lagged total assets
<i>Dividend_{i,t-1}</i>	Indicator variable that equals one if a firm paid out dividends, and zero otherwise
<i>Advertising_{i,t-1}</i>	Advertising expense scaled by lagged total sales
<i>SG&A_{i,t-1}</i>	SG&A expenditure scaled by lagged total sales
<i>FCF_{i,t-1}</i>	Free cash flow measured as the net operating cash flows minus cash dividends on common stock scaled by lagged total assets
<i>IO_{i,t-1}</i>	Total percentage of institutional ownership
<i>D_SRI_{i,t-1}</i>	Indicator variable that equals one for firms having shareholder proposals related to SRI

Appendix 2. Items of CSR (CSI) Activities included in the KLD MSCI database

Category	Responsible Activities (CSR)	Irresponsible Activities (CSI)
Community	<ul style="list-style-type: none"> Generous Giving Innovative Giving Support for Housing Support for Education Non-US Charitable Giving Volunteer Programs Community Engagement Other Community Strengths 	<ul style="list-style-type: none"> Investment Controversies Community Impact Tax Disputes Other Community Concerns
Diversity	<ul style="list-style-type: none"> CEO Representation Board of Directors - Gender Work/Life Benefits Women and Minority Contracting Promotion Employment of the Disabled Gay and Lesbian Policies Employment of Underrepresented Groups Other Diversity Strengths 	<ul style="list-style-type: none"> Discrimination & Workforce Diversity Representation Board Diversity – Gender and Minorities Other Diversity Concerns
Employee Relations	<ul style="list-style-type: none"> No-Layoff Policy Retirement Benefits Strength Compensation & Benefits Employee Relations Professional Development Human capital Development Labor Management Controversial Sourcing Other Employee Relations Strengths 	<ul style="list-style-type: none"> Collective Bargaining & Unions Health & Safety Workforce Reductions Retirement Benefits Concern Supply Chain Labor Standards Child Labor Labor-Management Relations Other Employee Relations Concerns
Environment	<ul style="list-style-type: none"> Environmental Opportunities Pollution & Waste Climate Change Communications Property, Plant, Equipment Environmental Management Systems Natural Capital Environmental Opportunities Other Environment Strengths 	<ul style="list-style-type: none"> Hazardous Waste Regulatory Compliance Ozone Depleting Chemicals Toxic Spills & Releases Agriculture Chemicals Climate Change Impact of Products & Services Biodiversity & Land Use Operational Waste Supply Chain Management Water Management Other Environment Concerns
Product Quality and Safety	<ul style="list-style-type: none"> Product Safety and Quality R&D /Innovation Social Opportunities Other Product Quality and Safety Strengths 	<ul style="list-style-type: none"> Product Quality & Safety Marketing & Advertising Customer Relations Anticompetitive Practices Privacy & Data Security Other Product Quality and Safety Concerns

Table 1. Descriptive Statistics

Panel A. Sample statistics								
	N	Mean	Median	SD	P25	P75	Min	Max
<i>CSR Performance</i>								
CSR_NET _{i,t}	21,208	0.00	-0.17	1.00	-0.59	0.46	-3.60	5.18
CSR_STR _{i,t}	21,208	0.00	-0.30	1.00	-0.64	0.29	-1.15	4.65
CSR_CON _{i,t}	21,208	0.00	-0.35	1.00	-0.59	0.37	-1.32	5.19
High_CON _{i,t}	21,208	0.00	-0.40	1.00	-0.48	-0.17	-0.57	6.26
rCSR_NET _{i,t}	21,208	0.48	0.00	2.37	-1.00	1.00	-8.00	14.00
rCSR_STR _{i,t}	21,208	1.65	1.00	2.30	0.00	2.00	0.00	14.00
rCSR_CON _{i,t}	21,208	1.17	1.00	1.46	0.00	2.00	0.00	9.00
rHIGH_CON _{i,t}	21,208	0.13	0.00	0.34	0.00	0.00	0.00	1.00
<i>Institutional Blockholders</i>								
BLOCK ^{PCA} _{i,t-1}	21,208	-0.69	-0.80	1.65	-2.15	0.45	-3.21	5.51
BLOCK ^{OWN} _{i,t-1}	21,208	20.82	19.21	14.11	9.76	29.71	0.00	79.17
BLOCK ^N _{i,t-1}	21,208	2.53	2.00	1.69	1.00	4.00	0.00	8.00
<i>Liquidity</i>								
Turnover _{i,t-1}	21,208	8.39	6.49	6.69	3.90	10.75	0.08	50.47
D_Turnover _{i,t-1}	21,208	0.61	1.00	0.49	0.00	1.00	0.00	1.00
CRISES	21,208	0.03	0.00	0.16	0.00	0.00	0.00	1.00
DEC	21,208	0.88	1.00	0.33	1.00	1.00	0.00	1.00
Manager Compensation Characteristics								
Scaled WPS	17,257	27.21	6.03	92.58	2.90	13.21	0.11	751.77
Delta	15,321	725.89	253.58	1564.16	98.30	658.17	6.58	11487.40
Firm Characteristics								
Size _{i,t-1}	21,208	7.81	7.72	1.63	6.62	8.82	3.76	12.99
Leverage _{i,t-1}	21,208	0.35	0.34	0.27	0.13	0.53	0.00	1.57
ROA _{i,t-1}	21,208	0.06	0.05	0.08	0.02	0.10	-1.18	0.46
BTMi,t-1	21,208	0.50	0.44	0.33	0.27	0.66	-0.22	2.49
Cash Asset ratio _{i,t-1}	21,208	0.16	0.08	0.20	0.03	0.21	0.00	2.12
Salesgrowth _{i,t-1}	21,208	0.10	0.07	0.23	0.00	0.16	-0.69	3.67
RND _{i,t-1}	21,208	0.03	0.00	0.05	0.00	0.03	0.00	0.78
CAPX _{i,t-1}	21,208	0.05	0.03	0.06	0.01	0.07	0.00	0.46
Dividend _{i,t-1}	21,208	0.66	1.00	0.47	0.00	1.00	0.00	1.00
Advertising _{i,t-1}	21,208	0.01	0.00	0.03	0.00	0.01	0.00	0.22
SG&A _{i,t-1}	21,208	0.23	0.19	0.21	0.07	0.33	0.00	1.97
FCF _{i,t-1}	21,208	0.11	0.10	0.10	0.05	0.15	-1.09	2.78
IO _{i,t-1}	21,208	73.91	76.82	22.43	60.05	90.39	0.97	130.55
D_SRI _{i,t-1}	21,208	0.07	0.00	0.25	0.00	0.00	0.00	1.00

Panel B. Yearly Mean Institutional Blockholder Characteristics

YEAR	N	$BLOCK_{i,t-1}^{PCA}$	$BLOCK_{i,t-1}^{OWN}$	$BLOCK_{i,t-1}^N$
1993	55	-2.23	8.56	0.95
1994	362	-2.15	9.62	0.97
1995	350	-2.04	10.27	1.11
1996	356	-1.95	10.91	1.21
1997	349	-1.85	11.70	1.33
1998	352	-1.82	11.87	1.37
1999	355	-1.63	13.17	1.58
2000	351	-1.58	13.76	1.61
2001	362	-1.45	14.99	1.72
2002	526	-1.42	15.62	1.71
2003	590	-1.42	15.38	1.73
2004	1245	-1.22	17.31	1.90
2005	1460	-0.99	18.67	2.20
2006	1426	-0.88	19.63	2.31
2007	1367	-0.61	21.64	2.59
2008	1239	-0.49	22.86	2.70
2009	1202	-0.57	22.03	2.64
2010	1177	-0.30	23.56	2.99
2011	1134	-0.68	20.63	2.57
2012	1132	-0.35	22.95	2.95
2013	1025	-0.17	24.02	3.18
2014	1044	-0.16	24.25	3.17
2015	1005	0.09	26.28	3.43
2016	966	0.17	27.40	3.45
2017	870	0.13	27.57	3.36
2018	908	0.00	27.09	3.17

Table 1 presents the descriptive statistics of the full sample from 1993 to 2018. Panel A shows the distribution of CSR (CSI) performance scores, institutional blockholder characteristics, liquidity measures, manager compensation characteristics, and firm-level control variables. Panel B presents the yearly statistics of the mean institutional blockholder characteristics measured by four different variables. See Appendix 1 for variable definitions.

Table 2. Correlation Matrix

Variables	CSR_NET _{i,t}	CSR_STR _{i,t}	CSR_CON _{i,t}	High_CON _{i,t}	BLOCK ^{PCA} _{i,t-1}	BLOCK ^{OWN} _{i,t-1}	BLOCK ^N _{i,t-1}	D_Turnover _{i,t-1}
CSR_NET _{i,t}	1.000							
CSR_STR _{i,t}	0.808*	1.000						
CSR_CON _{i,t}	-0.260*	0.323*	1.000					
High_CON _{i,t}	-0.165*	0.297*	0.779*	1.000				
BLOCK ^{PCA} _{i,t-1}	-0.109*	-0.171*	-0.116*	-0.110*	1.000			
BLOCK ^{OWN} _{i,t-1}	-0.112*	-0.170*	-0.111*	-0.107*	0.973*	1.000		
BLOCK ^N _{i,t-1}	-0.102*	-0.164*	-0.114*	-0.107*	0.978*	0.902*	1.000	
D_Turnover _{i,t-1}	0.029*	0.036*	0.019*	0.017*	0.132*	0.119*	0.138*	1.000

Table 2 presents the correlation between firm's social behaviors, institutional blockholder characteristics, firm-level liquidity measured by turnover ratio, and an indicator variable of firm-level shareholder proposal. The sample period is from 1993 to 2018. See Appendix 1 for variable definitions. * denotes statistical significance at the 5% level.

Table 3. CSR and CSI Scores by Year and by Industry

Panel A. Mean Values and Frequency of CSR and CSI								
YEAR	N	rCSR_STR _{i,t}	rCSR_CON _{i,t}	Level of rCSR_CON _{i,t}				rHigh_CON _{i,t}
		Mean	Mean	0	1	2	≥3	Mean
1993	55	1.564	0.636	33	13	6	3	0.055
1994	362	1.923	1.472	109	125	57	71	0.196
1995	350	2.126	1.360	113	120	58	59	0.169
1996	356	2.087	1.278	117	129	56	54	0.152
1997	349	2.203	1.327	121	125	49	54	0.155
1998	352	2.247	1.261	135	121	40	56	0.159
1999	355	2.324	1.448	126	109	53	67	0.189
2000	351	2.419	1.442	128	100	57	66	0.188
2001	362	2.403	1.655	122	88	63	89	0.246
2002	526	1.812	1.365	213	141	75	97	0.184
2003	590	1.773	1.542	188	179	103	120	0.203
2004	1245	1.077	1.244	397	477	198	173	0.139
2005	1460	1.195	1.365	400	577	276	207	0.142
2006	1426	1.269	1.457	365	544	295	222	0.156
2007	1367	1.405	1.573	335	504	272	256	0.187
2008	1239	1.493	1.661	315	421	226	277	0.224
2009	1202	1.451	1.681	287	418	231	266	0.221
2010	1177	1.781	1.940	194	280	441	262	0.223
2011	1134	1.753	1.714	206	258	477	193	0.170
2012	1132	1.583	0.666	618	375	79	60	0.053
2013	1025	2.024	0.527	625	308	61	31	0.030
2014	1044	1.242	0.387	795	160	46	43	0.041
2015	1005	1.604	0.518	649	261	47	48	0.048
2016	966	1.717	0.363	696	213	33	24	0.025
2017	870	1.638	0.343	659	161	25	25	0.029
2018	908	2.452	0.289	735	121	28	24	0.026
Total	21,208	1.648	1.172	8,681	6,328	3,352	2,847	0.134

Panel B. Mean Values of CSR and CSI by Two-Digits SIC Industries

Two-Digit SIC	Industry	N	$rCSR_STR_{i,t}$	$rCSR_CON_{i,t}$	$rHigh_CON_{i,t}$
13	Oil and Gas	592	1.25	1.94	0.26
20	Food, Beverage	589	2.81	1.55	0.23
23	Apparel and Other Textile Products	172	1.04	0.60	0.01
26	Paper and Allied Products	304	2.40	1.63	0.24
27	Printing and Publishing	343	1.60	0.68	0.06
28	Chemicals and Allied Products	1,513	2.60	1.62	0.24
30	Rubber	236	1.94	1.20	0.14
33	Primary Metal Industries	335	1.43	1.77	0.28
34	Fabricated Metal Products	347	1.16	1.09	0.16
35	Industrial Machinery and Computer Equipment	1,255	1.56	1.06	0.10
36	Electronic and Other Electric Equipment	1,332	1.96	0.98	0.06
37	Transportation Equipment	716	1.88	1.73	0.24
38	Instruments and Related Products	1,267	1.39	0.86	0.06
39	Miscellaneous Manufacturing	188	2.22	0.93	0.09
42	Trucking and Warehousing	155	1.06	1.21	0.14
48	Communication	415	1.65	1.14	0.11
50	Wholesale: Durable Goods	448	0.99	0.69	0.02
51	Wholesale: Non-Durable Goods	264	1.03	1.19	0.11
53	General Merchandise Store	219	2.83	2.23	0.38
55	Auto Dealers, Gas Stations	130	0.73	1.35	0.19
56	Apparel and Accessory Stores	343	1.70	0.73	0.04
58	Eating and Drinking	264	2.29	1.36	0.16
59	Miscellaneous Retail	305	1.41	0.98	0.10
73	Business Services	1,547	1.58	0.74	0.05
79	Amusement and Recreation Services	158	0.86	1.17	0.09
80	Health Services	159	0.50	1.25	0.12
87	Engineering and Management Services	269	0.71	0.86	0.06

Table 3 presents the mean values and frequencies of the raw summed, unstandardized scores of CSR ($rCSR_STR_{i,t}$), CSI ($rCSR_CON_{i,t}$), and High CSI ($rHIGH_CON_{i,t}$). The raw CSR scores are reported rather than the standardized CSR scores for ease of interpretation. Panel A presents the yearly means and frequencies of firms' social (ir)responsibility scores over the sample period. Panel B presents the mean values and frequencies of firms' social (ir)responsibility scores by two-digit SIC industry. See Appendix 1 for variable definitions.

Table 4. Threat of Exit on CSR and CSI activities: Firm-level liquidity

Dependent Variable:	CSR_NET _{i,t}	CSR_STR _{i,t}	CSR_CON _{i,t}	High_CON _{i,t}
	(1)	(2)	(3)	(4)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>}	-0.022** (-2.08)	-0.013 (-1.42)	0.005 (0.58)	0.020* (1.92)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>D_Turnover</i> _{<i>i,t-1</i>}	0.026*** (2.60)	0.007 (0.80)	-0.022** (-2.44)	-0.040*** (-4.12)
<i>D_Turnover</i> _{<i>i,t-1</i>}	0.076*** (3.05)	0.031 (1.54)	-0.049** (-2.29)	-0.052** (-2.42)
<i>D_SRI</i> _{<i>i,t-1</i>}	0.142*** (3.21)	0.096*** (2.70)	0.154*** (3.19)	0.131** (2.21)
<i>Turnover</i> _{<i>i,t-1</i>}	-0.004* (-1.74)	-0.002 (-1.07)	0.004* (1.71)	0.002 (0.78)
<i>Size</i> _{<i>i,t-1</i>}	-0.006 (-0.17)	0.141*** (5.08)	0.210*** (5.28)	0.239*** (5.18)
<i>Leverage</i> _{<i>i,t-1</i>}	0.085 (1.21)	0.016 (0.27)	-0.046 (-0.64)	-0.079 (-1.06)
<i>ROA</i> _{<i>i,t-1</i>}	0.278** (2.21)	0.100 (1.02)	-0.311** (-2.45)	-0.105 (-0.76)
<i>BTM</i> _{<i>i,t-1</i>}	-0.101** (-2.51)	-0.103*** (-3.19)	-0.008 (-0.19)	-0.003 (-0.06)
<i>Cash Asset ratio</i> _{<i>i,t-1</i>}	0.046 (0.68)	-0.032 (-0.51)	-0.042 (-0.58)	-0.077 (-0.97)
<i>Salesgrowth</i> _{<i>i,t-1</i>}	-0.008 (-0.27)	-0.048** (-2.03)	-0.025 (-0.82)	-0.053 (-1.61)
<i>RND</i> _{<i>i,t-1</i>}	-0.848** (-2.14)	-0.076 (-0.23)	1.107*** (2.91)	0.904** (2.08)
<i>CAPX</i> _{<i>i,t-1</i>}	-0.115 (-0.50)	0.007 (0.04)	0.259 (1.12)	-0.007 (-0.03)
<i>Dividend</i> _{<i>i,t-1</i>}	0.102** (2.41)	0.137*** (3.83)	0.051 (1.36)	-0.006 (-0.16)
<i>Advertising</i> _{<i>i,t-1</i>}	-1.026 (-1.09)	-1.077 (-1.38)	-0.938 (-1.26)	-0.509 (-0.62)
<i>SG&A</i> _{<i>i,t-1</i>}	0.125 (1.26)	0.091 (1.15)	-0.154 (-1.53)	-0.028 (-0.30)
<i>IO</i> _{<i>i,t-1</i>}	-0.332*** (-3.36)	-0.271*** (-3.47)	-0.161 (-1.43)	-0.127 (-1.08)
Year and Firm F.E.	Yes	Yes	Yes	Yes
<i>N</i>	21208	21208	21208	21208
Adjusted R ²	0.077	0.215	0.080	0.053

Table 4 presents the effects of institutional blockholder characteristics and liquidity on CSR and CSI. Dependent variables are net CSR (CSR_NET_{*i,t*}), CSR (CSR_STR_{*i,t*}), CSI (CSR_CON_{*i,t*}), and High CSI (High_CON_{*i,t*}), measured in year *t*. The main explanatory variable is an interaction between the first principal component of institutional blockholder ownership and total number of institutional blockholders (*BLOCK*^{PCA}_{*i,t-1*}) and firm liquidity, all measured in year *t-1*. The liquidity measure is *D_Turnover*_{*i,t-1*}, an indicator variable that equals one for above median share turnover in each fiscal year, indicating high liquidity, and zero otherwise. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 5. Threat of Exit on CSR and CSI: Exogenous liquidity shocks**Panel A. Two Financial Crises: Asian and Russian Financial Crisis**

Dependent variable:	CSR_NET _{i,t}	CSR_STR _{i,t}	CSR_CON _{i,t}	High_CON _{i,t}
	(1)	(2)	(3)	(4)
<i>BLOCK</i> ^{PCA} _{i,t-1}	-0.005 (-0.68)	-0.010 (-1.53)	-0.011 (-1.51)	-0.010 (-1.27)
<i>BLOCK</i> ^{PCA} _{i,t-1} * <i>CRISES</i>	0.031 (0.95)	0.052* (1.82)	0.063** (2.07)	0.092*** (2.94)
<i>CRISES</i>	-0.033 (-0.34)	-0.032 (-0.37)	0.092 (0.94)	0.104 (1.09)
Controls	Yes	Yes	Yes	Yes
Year and Firm F.E.	Yes	Yes	Yes	Yes
<i>N</i>	21208	21208	21208	21208
Adjusted R ²	0.076	0.215	0.080	0.053

Panel B. US Decimalization

Dependent variable:	CSR_NET _{i,t}	CSR_STR _{i,t}	CSR_CON _{i,t}	High_CON _{i,t}
	(1)	(2)	(3)	(4)
<i>BLOCK</i> ^{PCA} _{i,t-1}	0.024 (0.96)	0.033 (1.46)	0.057*** (2.63)	0.064*** (2.71)
<i>BLOCK</i> ^{PCA} _{i,t-1} * <i>DEC</i>	-0.030 (-1.17)	-0.045* (-1.89)	-0.072*** (-3.23)	-0.078*** (-3.26)
<i>DEC</i>	-0.035 (-0.28)	0.063 (0.53)	0.001 (0.02)	0.010 (0.10)
Controls	Yes	Yes	Yes	Yes
Year and Firm F.E.	Yes	Yes	Yes	Yes
<i>N</i>	21208	21208	21208	21208
Adjusted R ²	0.076	0.215	0.081	0.053

Table 4 presents the effect of an exogenous change in the threat of exit on CSR and CSI around liquidity shocks. In Panel A, *CRISES* is an indicator variable that equals one if the observation is during either the 1997 Asian Financial Crisis or the 1998 Russian Default Crisis, and zero otherwise. In Panel B, *DEC* is an indicator variable that equals one if the observation is from after Decimalization, and zero otherwise. The dependent variables are net CSR (CSR_NET_{i,t}), CSR (CSR_STR_{i,t}), CSI (CSR_CON_{i,t}), and High CSI (High_CON_{i,t}), measured in year *t*. The main explanatory variable is an interaction between the first principal component of institutional blockholder ownership and total number of institutional blockholders (*BLOCK*^{PCA}_{i,t-1}) and liquidity shocks. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 6. Threat of Exit: Managerial Wealth Sensitivity to Stock Price

Panel A. Dependent Variable: CSR (CSR_STR _{i,t})				
	Scaled WPS			
	High (1)	Low (2)	High (3)	Low (4)
$BLOCK^{PCA}_{i,t-1}$	-0.010 (-1.26)	-0.015* (-1.78)	0.018 (0.64)	0.004 (0.17)
$BLOCK^{PCA}_{i,t-1} * CRISES$	0.073* (1.86)	0.001 (0.03)		
$CRISES$	0.049 (0.37)	-0.159 (-1.33)		
$BLOCK^{PCA}_{i,t-1} * DEC$			-0.029 (-0.96)	-0.020 (-0.88)
DEC			0.114 (0.67)	-0.003 (-0.02)
Controls	Yes	Yes	Yes	Yes
Year and Firm F.E.	Yes	Yes	Yes	Yes
N	8624	8633	8624	8633
Adj.R ²	0.219	0.155	0.219	0.155

Panel B. Dependent Variable: CSI (CSR_CON _{i,t})				
	Scaled WPS			
	High (1)	Low (2)	High (3)	Low (4)
$BLOCK^{PCA}_{i,t-1}$	-0.012 (-1.25)	-0.012 (-1.36)	0.084*** (3.21)	0.020 (0.79)
$BLOCK^{PCA}_{i,t-1} * CRISES$	0.117*** (3.39)	0.022 (0.64)		
$CRISES$	0.313** (2.47)	0.000 (0.00)		
$BLOCK^{PCA}_{i,t-1} * DEC$			-0.102*** (-3.76)	-0.034 (-1.29)
DEC			-0.108 (-0.83)	0.181 (1.15)
Controls	Yes	Yes	Yes	Yes
Year and Firm F.E.	Yes	Yes	Yes	Yes
N	8624	8633	8624	8633
Adj.R ²	0.092	0.062	0.094	0.063

Table 6 presents the effect of an exogenous change in the threat of exit ($CRISES$ or DEC) on CSR and CSI around liquidity shocks. In Panel A, the dependent variable is CSR (CSR_STR_{i,t}). In Panel B, the dependent variable is CSI (CSR_CON_{i,t}). The main explanatory variable is an interaction between $BLOCK^{PCA}_{i,t-1}$ and liquidity shocks. The sample is split based on a measure of managerial wealth sensitivity to stock price, *Scaled WPS*, from Edmans et al. (2009). *High* refers to firms with above median *Scaled WPS*, while *Low* refers to firms with below median *Scaled WPS*. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 7. Threat of Exit: Free Cash Flow Agency Problems

Panel A. Dependent variable: CSR ($CSR_STR_{i,t}$)				
	Free Cash Flow			
	High (1)	Low (2)	High (3)	Low (4)
$BLOCK^{PCA}_{i,t-1}$	-0.012 (-1.46)	-0.010 (-1.08)	0.053 (1.57)	0.020 (0.71)
$BLOCK^{PCA}_{i,t-1} * CRISES$	0.095** (2.18)	0.038 (0.99)		
$CRISES$	0.011 (0.08)	-0.054 (-0.56)		
$BLOCK^{PCA}_{i,t-1} * DEC$			-0.068* (-1.94)	-0.033 (-1.07)
DEC			0.098 (0.72)	0.114 (0.64)
Controls	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes
N	10603	10605	10603	10605
Adj.R ²	0.237	0.174	0.237	0.174
Panel B. Dependent Variable: CSI ($CSR_CON_{i,t}$)				
	Free Cash Flow			
	High (1)	Low (2)	High (3)	Low (4)
$BLOCK^{PCA}_{i,t-1}$	-0.003 (-0.32)	-0.025*** (-2.62)	0.096*** (3.05)	-0.005 (-0.20)
$BLOCK^{PCA}_{i,t-1} * CRISES$	0.080* (1.90)	0.035 (0.78)		
$CRISES$	0.100 (0.65)	0.033 (0.25)		
$BLOCK^{PCA}_{i,t-1} * DEC$			-0.105*** (-3.32)	-0.021 (-0.78)
DEC			0.002 (0.02)	0.192 (1.25)
Controls	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes
N	10603	10605	10603	10605
Adj.R ²	0.113	0.057	0.115	0.057

Table 6 presents the effect of an exogenous change in the threat of exit ($CRISES$ or DEC) on CSR and CSI around liquidity shocks. In Panel A, the dependent variable is CSR ($CSR_STR_{i,t}$). In Panel B, the dependent variable is CSI ($CSR_CON_{i,t}$). The main explanatory variable is an interaction between $BLOCK^{PCA}_{i,t-1}$ and liquidity shocks. *High* refers to firms with above median FCF , while *Low* refers to firms with below median FCF , where FCF is free cash flows measured as the net operating cash flows minus cash dividends on common stock, scaled by lagged total assets. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 8. Threat of Exit: 13G Filings

Panel A. Dependent variable: CSR ($CSR_STR_{i,t}$)			
	Scaled WPS		
	Full Sample	High (1)	Low (2)
<i>POST</i>	0.083 (1.49)	-0.029 (-0.37)	0.209* (1.71)
<i>13GFirm * POST</i>	-0.108* (-1.89)	-0.167** (-2.08)	-0.120 (-1.40)
Controls	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes
N	536	264	272
Adj.R ²	0.201	0.456	0.208

Panel B. Dependent variable: CSI ($CSR_CON_{i,t}$)			
	Scaled WPS		
	Full Sample	High (1)	Low (2)
<i>POST</i>	-0.025 (-0.30)	0.216* (1.88)	-0.121 (-0.64)
<i>13GFirm * POST</i>	0.014 (0.19)	-0.204** (-1.99)	0.125 (1.04)
Controls	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes
N	536	264	272
Adj.R ²	0.039	0.099	0.134

Table 7 presents the effect of an exogenous change in the threat of exit on CSR and CSI around firms' first Schedule 13G filings. In Panel A, the dependent variable is CSR ($CSR_STR_{i,t}$). In Panel B, the dependent variable is CSI ($CSR_CON_{i,t}$). *13GFirm* is an indicator variable that equals one if the firm is identified as the treatment firms that filed the first 13G filings during the sample period, and zero otherwise. First 13G filing years of the treatment firms are denoted as the event year t . We then match treatment firms using propensity-score matching to find eligible control firms that have the same year and two-digit SIC industry code with the treatment firms. *POST* equals one for the post-13Gfiling years (t or $t+1$), and zero for the pre-13G filing year ($t-1$). *High* refers to firms with above median *Scaled WPS*, while *Low* refers to firms with below median *Scaled WPS*. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1994 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 9. Threat of Exit on CSR and CSI activities: by dimensions

Panel A. Dependent Variables: CSR by dimensions

	<i>COM_STR_{i,t}</i>		<i>DIV_STR_{i,t}</i>		<i>EMP_STR_{i,t}</i>		<i>ENV_STR_{i,t}</i>		<i>PRO_STR_{i,t}</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>}	-0.015*	0.020	-0.018**	0.035	-0.011	0.053**	-0.018**	0.040	0.002	-0.015
	(-1.81)	(0.78)	(-2.32)	(1.64)	(-1.42)	(2.20)	(-2.42)	(1.45)	(0.29)	(-0.56)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>CRISES</i>	0.048		0.062*		0.055*		0.058*		-0.018	
	(1.51)		(1.94)		(1.81)		(1.73)		(-0.57)	
<i>CRISES</i>	-0.056		0.176*		-0.166		-0.053		-0.076	
	(-0.66)		(1.93)		(-1.61)		(-0.57)		(-0.73)	
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>DEC</i>		-0.037		-0.056**		-0.068***		-0.062**		0.018
		(-1.41)		(-2.41)		(-2.63)		(-2.12)		(0.64)
<i>DEC</i>		0.004		-0.036		0.183		-0.149		-0.009
		(0.05)		(-0.32)		(1.47)		(-1.19)		(-0.07)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	21208	21208	20164	20164	21208	21208	21208	21208	21208	21208
Adjusted R ²	0.042	0.042	0.098	0.099	0.065	0.065	0.125	0.125	0.025	0.025

Panel B. Dependent Variables: CSI by dimensions										
	<i>COM_CON</i> _{<i>i,t</i>}		<i>DIV_CON</i> _{<i>i,t</i>}		<i>EMP_CON</i> _{<i>i,t</i>}		<i>ENV_CON</i> _{<i>i,t</i>}		<i>PRO_CON</i> _{<i>i,t</i>}	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>}	-0.009	0.054*	0.012	0.089***	-0.016*	0.043	-0.024***	-0.007	0.002	0.060**
	(-1.28)	(1.76)	(1.46)	(3.70)	(-1.88)	(1.46)	(-4.10)	(-0.32)	(0.26)	(2.38)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>CRISES</i>	0.035		0.005		0.014		0.081***		0.043	
	(0.95)		(0.15)		(0.34)		(2.61)		(1.56)	
<i>CRISES</i>	-0.051		-0.029		0.099		0.086		0.043	
	(-0.54)		(-0.25)		(0.69)		(1.11)		(0.41)	
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>DEC</i>		-0.068**		-0.083***		-0.063**		-0.017		-0.062**
		(-2.20)		(-3.34)		(-2.04)		(-0.80)		(-2.47)
<i>DEC</i>		-0.086		0.186		0.075		-0.068		-0.011
		(-0.63)		(1.45)		(0.50)		(-1.10)		(-0.12)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	21208	21208	21208	21208	21208	21208	21208	21208	21208	21208
Adjusted R ²	0.020	0.021	0.016	0.018	0.054	0.054	0.065	0.065	0.055	0.056

Table 8 presents the effect of an exogenous change in the threat of exit (*CRISES* or *DEC*) on individual CSR and CSI dimensions around liquidity shocks. Panel A presents results for strength scores (CSR) of the dimensions, while Panel B presents results for concerns scores (CSI) of the dimensions. The different dimensions, from left to right in either panel, are Community, Diversity, Employee Relations, Environment, and Product Quality and Safety. More details on the dimensions are included in Appendix 2. The main explanatory variable is an interaction between *BLOCK*^{PCA}_{*i,t-1*} and liquidity shocks. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 10. Threat of Exit: Alternative measures

Panel A. Blockholder Ownership ($BLOCK^{OWN}_{i,t-1}$)												
	CSR (CSR_STR _{i,t})						CSI (CSR_CON _{i,t})					
	Full Sample (1)		Scaled WPS				Full Sample (6)		Scaled WPS			
			High (2)	Low (3)	High (4)	Low (5)			High (7)	Low (8)	High (9)	Low (10)
$BLOCK^{OWN}_{i,t-1}$	-0.001 (-0.80)	0.005 (1.64)	-0.001 (-1.16)	-0.001 (-1.31)	0.003 (0.71)	0.001 (0.46)	-0.001 (-0.78)	0.007*** (2.61)	-0.001 (-1.07)	-0.001 (-0.92)	0.011*** (3.18)	0.004 (1.05)
$BLOCK^{OWN}_{i,t-1}$ * <i>CRISES</i>	0.006* (1.78)		0.009* (1.71)		0.000 (0.04)		0.008** (2.26)		0.015*** (3.43)		0.005 (1.03)	
<i>CRISES</i>	-0.201** (-2.31)		-0.221* (-1.68)		-0.162 (-1.41)		-0.114 (-1.21)		-0.131 (-1.12)		-0.103 (-0.73)	
$BLOCK^{OWN}_{i,t-1}$ * <i>DEC</i>	-0.005* (-1.91)				-0.004 (-1.01)		-0.003 (-1.01)		-0.008*** (-2.99)		-0.013*** (-3.63)	
<i>DEC</i>	0.217 (1.63)				0.230 (1.20)		0.086 (0.42)		0.230** (2.31)		0.275** (1.99)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Y&F F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	21208	21208	8624	8633	8624	8633	21208	21208	8624	8633	8624	8633
Adj.R ²	0.215	0.215	0.219	0.155	0.219	0.155	0.080	0.081	0.092	0.062	0.094	0.063

Panel B. Number of Blockholders ($BLOCK^N_{i,t-1}$)												
	CSR (CSR_STR _{i,t})						CSI (CSR_CON _{i,t})					
	Full Sample (1)		Scaled WPS				Full Sample (6)		Scaled WPS			
			High (2)	Low (3)	High (4)	Low (5)			High (7)	Low (8)	High (9)	Low (10)
$BLOCK^N_{i,t-1}$	-0.012** (-2.03)	0.025 (1.23)	-0.010 (-1.27)	-0.017** (-2.07)	0.016 (0.59)	-0.001 (-0.06)	-0.013** (-2.02)	0.052** (2.57)	-0.012 (-1.33)	-0.015 (-1.57)	0.087*** (3.16)	0.013 (0.54)
$BLOCK^N_{i,t-1}$ * <i>CRISES</i>	0.047* (1.75)		0.080* (1.94)		0.001 (0.03)		0.053* (1.83)		0.120*** (3.22)		0.011 (0.29)	
<i>CRISES</i>	-0.192** (-2.24)		-0.223* (-1.74)		-0.163 (-1.45)		-0.094 (-1.02)		-0.113 (-0.99)		-0.065 (-0.47)	
$BLOCK^N_{i,t-1}$ * <i>DEC</i>	-0.038* (-1.91)				-0.027 (-1.01)		-0.017 (-1.01)		-0.069*** (-2.99)		-0.106*** (-3.63)	

		(-1.78)			(-0.89)	(-0.74)		(-3.31)			(-3.74)	(-1.15)
<i>DEC</i>		0.186			0.210	0.059		0.215**			0.254*	0.286*
		(1.45)			(1.13)	(0.29)		(2.32)			(1.90)	(1.72)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Y&F F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	21208	21208	8624	8633	8624	8633	21208	21208	8624	8633	8624	8633
Adj.R ²	0.215	0.215	0.219	0.156	0.219	0.155	0.080	0.081	0.092	0.063	0.094	0.063

Panel C. Raw CSR performance scores: CSR(CSI)

	CSR (rCSR_STR _{i,t})						CSI (rCSR_CON _{i,t})					
	Full Sample (1)	Scaled WPS				Full Sample (6)	Scaled WPS					
		High (2)	Low (3)	High (4)	Low (5)		High (7)	Low (8)	High (9)	Low (10)		
<i>BLOCK</i> ^{PCA} _{i,t-1}	-0.012**	0.025	-0.010	-0.017**	0.016	-0.001	-0.013**	0.052**	-0.012	-0.015	0.087***	0.013
	(-2.03)	(1.23)	(-1.27)	(-2.07)	(0.59)	(-0.06)	(-2.02)	(2.57)	(-1.33)	(-1.57)	(3.16)	(0.54)
<i>BLOCK</i> ^{PCA} _{i,t-1} * <i>CRISES</i>	0.047*	0.080*	0.001				0.053*	0.120***	0.011			
	(1.75)	(1.94)	(0.03)				(1.83)	(3.22)	(0.29)			
<i>CRISES</i>	-0.192**	-0.223*	-0.163				-0.094	-0.113	-0.065			
	(-2.24)	(-1.74)	(-1.45)				(-1.02)	(-0.99)	(-0.47)			
<i>BLOCK</i> ^{PCA} _{i,t-1} * <i>DEC</i>		-0.038*			-0.027	-0.017		-0.069***			-0.106***	-0.031
		(-1.78)			(-0.89)	(-0.74)		(-3.31)			(-3.74)	(-1.15)
<i>DEC</i>		0.186			0.210	0.059		0.215**			0.254*	0.286*
		(1.45)			(1.13)	(0.29)		(2.32)			(1.90)	(1.72)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Y&F F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	21208	21208	8624	8633	8624	8633	21208	21208	8624	8633	8624	8633
Adj.R ²	0.215	0.215	0.219	0.156	0.219	0.155	0.080	0.081	0.092	0.063	0.094	0.063

Table 9 presents the effect of an exogenous change in the threat of exit (*CRISES* or *DEC*) on CSR and CSI around liquidity shocks. In Panels A and B, the dependent variables are CSR ($CSR_STR_{i,t}$) and CSI ($CSR_CON_{i,t}$). In Panel C, the dependent variables are the raw summed and unstandardized measures of CSR ($rCSR_STR_{i,t}$) and CSI ($rCSR_CON_{i,t}$). The main explanatory variable in Panel A is an interaction between total institutional blockholder ownership percentage ($BLOCK^{OWN}_{i,t-1}$) and liquidity shocks. The main explanatory variable in Panel B is an interaction between total number of institutional blockholders ($BLOCK^N_{i,t-1}$) and liquidity shocks. *High* refers to firms with above median *Scaled WPS*, while *Low* refers to firms with below median *Scaled WPS*. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 11. Threat of Exit: Sample Composition and Time-trend effects

Panel A. Sample composition: Firm must exist during and outside the liquidity shock

Dependent Variables:	CSR (CSR_STR _{i,t})						CSI (CSR_CON _{i,t})					
	Full Sample (1)	Scaled WPS				Full Sample (6)	Scaled WPS					
		High (2)	Low (3)	High (4)	Low (5)		High (7)	Low (8)	High (9)	Low (10)		
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>}	-0.029 (-1.65)	0.019 (0.92)	-0.022 (-0.93)	-0.026 (-1.21)	0.024 (0.84)	0.009 (0.39)	-0.024 (-1.48)	0.046** (2.05)	-0.023 (-0.96)	-0.020 (-1.04)	0.078*** (2.60)	0.011 (0.39)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>CRISES</i>	0.052* (1.85)		0.067 (1.57)	0.004 (0.13)			0.068** (2.43)		0.126*** (3.51)	0.022 (0.60)		
<i>CRISES</i>	-0.025 (-0.25)		0.004 (0.03)	-0.143 (-1.10)			0.133 (1.23)		0.329** (2.46)	0.006 (0.04)		
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>DEC</i>		-0.041* (-1.71)			-0.032 (-0.86)	-0.037 (-1.38)		-0.077*** (-3.27)			-0.116*** (-3.63)	-0.031 (-1.02)
<i>DEC</i>		0.039 (0.30)			0.116 (0.63)	-0.025 (-0.13)		0.024 (0.27)			-0.070 (-0.56)	0.135 (0.84)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Y&F F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	5110	6189	2504	2606	3026	3163	5110	6189	2504	2606	3026	3163
Adj.R ²	0.289	0.281	0.297	0.252	0.301	0.230	0.147	0.142	0.161	0.121	0.160	0.118

Panel B. Sample composition: Sample window restricted to five years before and after liquidity shock

Dependent Variables:	CSR (CSR_STR _{i,t})						CSI (CSR_CON _{i,t})					
	Full Sample (1)	Scaled WPS				Full Sample (6)	Scaled WPS					
		High (2)	Low (3)	High (4)	Low (5)		High (7)	Low (8)	High (9)	Low (10)		
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>}	-0.005 (-0.44)	0.028 (1.48)	0.002 (0.15)	-0.005 (-0.29)	0.030 (1.36)	-0.006 (-0.27)	-0.004 (-0.22)	0.041** (2.20)	-0.009 (-0.51)	-0.002 (-0.08)	0.037* (1.67)	0.005 (0.21)
<i>BLOCK</i> ^{PCA} _{<i>i,t-1</i>} * <i>CRISES</i>	0.040** (1.98)		0.060** (2.20)	0.003 (0.11)			0.018 (0.95)		0.057** (2.12)	-0.001 (-0.03)		
<i>CRISES</i>	0.004 (0.07)		0.061 (0.70)	-0.088 (-1.00)			-0.026 (-0.44)		0.077 (0.90)	-0.114 (-1.11)		

$BLOCK^{PCA}_{i,t-1}$													
* <i>DEC</i>													
		-0.036*											
		(-1.74)											
<i>DEC</i>		0.039											
		(0.45)											
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Y&F F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	4008	7372	1896	1899	2965	2968	4008	7372	1896	1899	2965	2968	
Adj.R ²	0.143	0.404	0.158	0.120	0.375	0.279	0.074	0.198	0.061	0.073	0.145	0.182	

Panel C. Sample composition: pseudo shock (2004-2005)

Dependent Variable:	CSR (CSR_STR _{i,t})			CSI (CSR_CON _{i,t})		
	Full Sample	Scaled WPS		Full Sample	Scaled WPS	
		High (1)	Low (2)		High (3)	Low (4)
$BLOCK^{PCA}_{i,t-1}$	-0.008 (-0.96)	-0.018 (-1.63)	-0.011 (-0.99)	-0.001 (-0.14)	-0.009 (-0.66)	0.013 (0.91)
$BLOCK^{PCA}_{i,t-1} * Pseudo$	0.005 (0.75)	0.007 (0.77)	0.010 (1.09)	0.009 (1.11)	0.010 (0.71)	0.007 (0.56)
<i>Pseudo</i>	0.442*** (12.73)	0.492*** (8.96)	0.402*** (7.59)	0.323*** (7.77)	0.356*** (5.92)	0.339*** (5.39)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Y&F F.E.	Yes	Yes	Yes	Yes	Yes	Yes
N	4967	2482	2485	4967	2482	2485
Adj.R ²	0.225	0.262	0.193	0.084	0.073	0.111

Table 5 presents the effect of an exogenous change in the threat of exit (*CRISES* or *DEC*) on CSR and CSI around liquidity shocks in Panels A and B, and the effect of a pseudo-shock on CSR and CSI estimated as a falsification test. The dependent variables are CSR (CSR_STR_{i,t}) and CSI (CSR_CON_{i,t}). Panel A restricts the sample to observations that exist in both during and outside the foreign crises (for *CRISES* tests) and to observations that exist both before and after the decimalization shock (for *DEC* tests). Panel B restricts the sample to a window five years before and five years after the foreign crises or decimalization shock. In Panel A and B, the main explanatory variable is an interaction between $BLOCK^{PCA}_{i,t-1}$ and liquidity shocks. In Panel C, the main explanatory variable is an interaction between $BLOCK^{PCA}_{i,t-1}$ and *Pseudo*, which equals one for observations during the pseudo shock in year 2004 and 2005, and zero otherwise. The sample is split based on a measure of managerial wealth sensitivity to stock price, *Scaled WPS*, from Edmans et al. (2009). *High* refers to firms with above median *Scaled WPS*, while *Low* refers to firms with below median *Scaled WPS*. Control variables included in Table 4 are also included in the regressions, but coefficients are not reported for brevity. All regressions contain firm- and year-fixed effects, and standard errors are clustered by firm. See Appendix 1 for all variable definitions. The sample period is from 1993 to 2018. Using two-tailed t-tests and t-statistics in parentheses: ***, **, * denote statistical significance at the 1%, 5%, and 10% levels, respectively.