

Can Shareholder Activism Improve Gender Diversity on Corporate Boards?

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April 2016

We thank participants at the 2015 European Accounting Association Annual Congress, the 2015 Canadian Academic Accounting Association, and the York University workshop for their helpful comments and suggestions. We also thank Khin Phyo Hlaing and Kai Chen for providing excellent research assistance. We are grateful for the research funding provided by the KPMG Professorship to Christine Wiedman. Finally, we thank Editor Professor Praveen Kumar, Associate Editor Professor Ruth Aguilera, and three anonymous reviewers for their comments that helped to improve the paper.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/corg.12170

ABSTRACT

Manuscript Type: Empirical

Research Question/Issue

We empirically examine the antecedents of shareholder activism related to increasing the gender diversity of corporate boards of directors and whether such activism is an effective mechanism for achieving this goal. Because campaigns for increased gender diversity may be driven by either economic efficiency or social legitimacy concerns, we condition our analysis on activists' motivations for achieving their objectives.

Research Findings/Insights

Based on a sample of U.S. S&P 1500 firms over 1997-2011, we find that female board representation and board independence are negatively associated with the likelihood of being targeted by a shareholder proposal related to gender diversity. We further document that financially-motivated activists are more likely to target firms with extremely low female board representation than are socially-motivated activists. Targeted firms significantly increase their female board representation in the two-year period following proposal initiation, relative to that of a matched sample of non-targeted firms, with no significant differences observed across activist motivations.

Theoretical/Academic Implications

Our findings provide empirical support for the effectiveness of shareholder activism in shaping corporate governance. Our work also suggests that shareholder activists' underlying motivations are an important conditioning variable in governance research, with both agency theory and institutional theory providing insight into differing motivations.

Practitioner/Policy Implications

Our findings suggest that shareholder proposals are an effective mechanism for increasing board diversity, irrespective of activist motivations. However, we note that mean female board representation for both targeted and non-targeted firms remains far below the level of representation sought by various activist groups. For policy-makers, this suggests that legislative action may be necessary to achieve these corporate board diversity goals in the U.S.

Keywords: Corporate Governance, Shareholder Activism, Gender Diversity, Board Composition

INTRODUCTION

We empirically examine the antecedents of shareholder activism related to increasing the gender diversity of corporate boards of directors (BOD) and whether such activism is an effective mechanism for achieving this goal. These questions are motivated by recent initiatives by numerous international legislative, regulatory, and advocacy organizations directed toward addressing female underrepresentation on corporate boards. Norway was the first country to introduce a quota of 40 percent for its corporate boards, and as of 2013 at least ten countries have established legal quotas requiring a minimum percentage of women directors on corporate boards, ranging from 30 percent (in Germany)¹ to 50 percent (in Israel).² The European Union (EU), Brazil, Canada (Quebec), India, and the Philippines have similar legislation proposed or pending.³ In addition, regulatory bodies in at least 20 countries have instituted “comply-or-explain” rules to encourage greater gender diversity on corporate boards. For example, firms listed on the Australian Stock Exchange (ASX) are required to establish measurable objectives for achieving BOD gender diversity and annually assess their progress in achieving them or explain why they have not done so, and in the U.S. the Securities and Exchange Commission (SEC) requires publicly traded firms to disclose whether and how its nominating committee considers diversity in identifying nominees for directors. Advocacy organizations, such as Catalyst and 2020 Women on Boards, have also pressed for voluntary improvements in board diversity.

Concurrent with the above broad-based approaches, there has also been an increase in shareholder activism devoted to greater board diversity in recent years, particularly in the U.S., where shareholders have initiated more than 250 proposals targeting individual firms to increase female representation on corporate boards since 1997 – over 30 proposals were filed in 2013 alone. In addition, diversity resolutions filed in the U.S. in 2013 received the highest average vote (35.8 percent) among environmental and social governance categories, with

shareholder campaigns driven, in part, by the work of the advocacy group Thirty Percent Coalition.⁴ Due to their non-binding nature, shareholder proposals in the U.S. have historically been viewed as a weak mechanism to drive governance reform (Bebchuk, 2005), and while firms have been more responsive to shareholder proposals in recent years, Thomas and Cotter (2007) document that even in cases where the proposal receives a majority vote by shareholders, only 25 percent of proposals in their sample are implemented by the board. In addition, the effectiveness of shareholder proposals in improving board gender diversity has not been examined in the prior literature. It thus becomes an open empirical question as to whether shareholder proposals represent an effective means of achieving desired changes in the gender diversity of corporate boards.

We address this gap in the literature using a sample of U.S. shareholder proposals related to board gender diversity drawn from the RiskMetrics database over the period 1997 to 2011. We examine the effect of shareholder activism on board gender diversity using a one-to-one matched-sample design, taking advantage of the natural experiment created when shareholder activists target a firm for increased female representation on its corporate board. We focus our analysis on U.S. firms because proposal submissions are far more frequent in the U.S. than in other countries (Cziraki, Renneboog & Szilagyi, 2010; Judge, Gaur, & Muller-Kahle, 2010). Furthermore, the U.S. has not yet taken legislative action to address corporate governance gender imbalances, creating an opportunity for shareholder activists to intervene.⁵

While prior literature examining the effectiveness of shareholder proposals has generated mixed results (Goranova & Ryan, 2014), we document that firms targeted by shareholder proposals calling for increased gender diversity on corporate boards experience significantly greater improvements in female board representation, relative to a matched control sample of non-targeted firms. The result from this natural experiment holds in both

univariate comparisons, as well as in a cross-sectional regression analysis that controls for other potential determinants of shareholder activism and board gender diversity. Therefore, our findings suggest that shareholder activism is an effective mechanism for increasing female representation on boards. We thus contribute to the corporate governance literatures on both shareholder proposals and board gender diversity by providing, to our knowledge, the first systematic evidence on the effectiveness of shareholder activism in improving female board representation. The paper also speaks to the call for research on alternative efforts to increase board diversity beyond legislative quotas, as voiced by Adams, de Haan, Terjesen, & van Ees (2015). Understanding the potential mechanisms for increasing board diversity is important as significant changes are not likely to occur quickly through organic processes.

We also examine the antecedents of shareholder activism related to board gender diversity, considering the perspectives offered by both agency and institutional theory in our analysis. We find that activists target firms with significantly lower female board representation and firms with less independent boards. We also extend Judge et al. (2010) by conditioning our analysis on shareholder activists' underlying motivations. Because campaigns for increased gender diversity may be driven by either economic efficiency or social legitimacy concerns, we characterize our sample of proposals as either financially- or socially-motivated based on activist type. We find that socially-motivated shareholder activists target firms with significantly higher levels of board female representation compared to financially-motivated activists, consistent with institutional theory predictions. These insights underscore Judge et al. (2010) recommendation that activist motivation should be taken into account in future research related to shareholder proposals. In addition, while we observe larger percentage increases in female board representation for firms targeted by financially-motivated activists, our statistical tests reveal that financially-motivated and socially-motivated shareholder proposals are equally effective in increasing board gender

diversity. We thus conclude that shareholder proposals are an effective mechanism for achieving corporate governance objectives irrespective of activists' underlying motivations. However, we note that mean female board representation for firms two years after being targeted – 6 percent (10 percent) for firms targeted with financially-motivated (socially-motivated) proposals – remains far below the level of representation sought by various activist groups, suggesting that legislative action may still be necessary to achieve current corporate board diversity goals in the U.S.

The paper is organized as follows. In the next section, we review the theoretical perspectives and prior literature related to board gender diversity and shareholder activism and develop our hypotheses regarding the antecedents of gender diversity-related shareholder activism and its effectiveness. We then describe our research methodology and present our empirical findings. Discussion and conclusions are provided in the final section.

THEORETICAL BACKGROUND AND HYPOTHESES

Our research question addressing the antecedents and ultimate effectiveness of shareholder activism directed toward increasing corporate board gender diversity brings together two disparate streams of the corporate governance literature. However, both the board diversity literature and the shareholder activism literature have shared a reliance on two central theoretical perspectives to structure their investigations – agency theory and institutional theory. We therefore draw on both theoretical perspectives in our literature review and in developing our hypotheses.

Board Composition and Diversity

Agency Theory Perspectives. Agency theory (Jensen & Meckling, 1976) is arguably the dominant theoretical framework used within corporate governance research. It stems from

the separation between ownership (shareholders) and control (managers). This separation provides an opportunity for managers (agents) to act in their own self-interest by maximizing their own utility at the expense of the owners (principals).

From an agency theory perspective, the role of corporate boards is to monitor managers on the behalf of shareholders, ensuring that shareholders' interests are pursued (Eisenhardt, 1989). Agency theory recognizes that board incentives to monitor on behalf of shareholders will vary, and board independence, in particular, is viewed as a key attribute in gauging monitoring incentives (Weisbach, 1988). Boards consisting mostly of insiders or dependent outside directors are expected to be less effective at monitoring than independent boards, whose incentives are not compromised through connection with the firm. Empirical evidence attempting to establish this supposed link through improved firm performance, however, is decidedly mixed (e.g. Aguilera, Desender, Bedar, & Lee, 2015; Dalton, Daily, Ellstrand, & Johnson, 1998; Dalton, Hitt, Certo, & Dalton, 2007).

This line of inquiry has been extended to examine the role of board gender diversity in creating an effective monitoring environment. For example, in a sample of U.S. firms, Adams and Ferreira (2009) find that female directors have better attendance records than male directors, male directors have fewer attendance problems the more gender-diverse the board is, and women are more likely to join monitoring committees. They conclude that gender-diverse boards allocate more effort to monitoring. In addition, Schwartz-Ziv (2015) finds that boards that are more-gender-balanced (that is, have at least three directors of each gender) are more active than other boards, being more likely to request additional information and take initiative, such as proposing an action be taken. Others document associations between board gender diversity and a lower likelihood of earnings restatements and securities fraud (Abbott, Parker, & Presley, 2012; Cumming, Leung, & Rui, 2015), as well as higher

stock price informativeness and earnings quality (Gul, Srinidhi, & Ng, 2011; Srinidhi, Gul, & Tsui, 2011), consistent with more effective monitoring.

While these findings suggest that board gender diversity appears to improve overall monitoring, evidence linking gender diversity to firm outcomes, especially firm performance, is more equivocal. For example, Adams and Ferreira (2009) find that CEO turnover is more sensitive to stock performance and that directors receive more equity-based compensation in firms with more gender-diverse boards, but that the average effect of gender diversity on firm performance is negative. Similarly mixed findings are reported by Carter, D'Souza, Simkins, & Simpson (2010), who report in their review of this literature that out of seven papers examining the link between gender diversity and firm performance, two find a positive relationship, three find no relationship, and two find a negative relationship.

Overall, the agency theory perspective provides consistent evidence of improved monitoring from gender diverse boards, but has not established a clear link between that improved monitoring and firm performance.

Institutional Theory Perspectives. Institutional theory considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behavior. Within this framework, firms can be regarded as consisting of cognitive, normative, and regulative structures and activities that give meaning to social behavior. An important central assumption of this theory is that concerns regarding social legitimacy take precedence over those of economic efficiency or performance (DiMaggio & Powell, 1983; Scott, 2001).

From an institutional theory perspective, firms' pursuit of social legitimacy rather than shareholder wealth ultimately leads to organizational homogenization (or isomorphism) with regard to their most visible attributes, such as board composition. Board composition will thus be determined through the prevailing organizational norms in the field; i.e., boards

of organizations in the same institutional set will tend to be more similar to each other than to the boards of organizations outside of their set (Lynall, Golden, & Hillman, 2003). One such example of cross-country institutional isomorphism is the policy diffusion process that has taken place in Scandinavia and Europe with regard to mandating corporate board gender quotas, following Norway's legal adoption of 40 percent quotas in 2004. A similar process occurred in the New Zealand Stock Exchange after the ASX changed its corporate governance guidelines in 2010, requiring listed companies to adopt and disclose their diversity policies (Payne & Phillips, 2014).

At the firm level, the quest for social legitimacy yields predictions for board composition. For example, prior research on organizational legitimacy implies that larger and more visible firms experience more pressure to conform to societal expectations and that elaborate relational networks among organizations and their members increase the need for greater social legitimacy (DiMaggio & Powell, 1983). In addition, because having females on a corporate board can provide legitimacy in the eyes of firms' potential and current employees, industries with a large female employment base are expected to have higher levels of female representation on boards of directors. Consistent with these predictions, Hillman, Shropshire, & Cannella (2007) provide empirical evidence that larger firms and firms operating in industries with large female employment bases are significantly more likely to have at least one female board member. They also find that firms with female directors are more organizationally complex and have more directors who sit on other boards with female directors, consistent with predictions from institutional theory.

There is also evidence that greater gender diversity of corporate boards yields positive social legitimacy outcomes. For example, Bear, Rahman, & Post (2010) document that board gender diversity is positively associated with firms' corporate social responsibility rankings and firm reputation as measured using Fortune Magazine's "Most Admired Companies" list.

Further, Bernardi, Bosco, & Columb (2009) find that the board gender diversity of Fortune 500 companies is positively associated with the firm being listed on *Ethisphere Magazine's* 'World's Most Ethical Companies' list.

Shareholder Activism

Shareholder activism is defined by Sjostrom (2008) as “the use of ownership position to actively influence company policy and practice.” Although activism encompasses activities such as letter writing, proxy battles, litigation, publicity campaigns, discussions with corporate managers, and participating in shareholder meetings (Aguilera, Desender, Bedar, & Lee, 2015), most corporate governance research related to shareholder activism focuses on the filing of shareholder proposals, a written recommendation that a shareholder formally submits to a publicly traded company, advocating that the company take a particular course of action. Under SEC rules, any shareholder holding shares worth at least \$2,000 (or one percent of the market value of equity) for a year or more is allowed to submit a proposal for inclusion in a company's proxy statement distributed for its annual shareholder meeting. Gillan and Starks (2007) provide a summary of the history of shareholder activism and document the increasing prevalence and importance of shareholder proposals as a means of shaping corporate governance.

While in the past shareholders had typically targeted firms that were underperforming or poorly governed (Karpoff, Malatesta, & Walking, 1996), shareholder activism more recently addresses perceived deficiencies in corporate social responsibilities, including issues related to the environment, corporate political activities, or human rights violations. Increasing the gender diversity of corporate boards is one such social issue that activists have pursued with increasing frequency, with over 75 shareholder proposals calling for greater diversity filed since 2013.

As mentioned above, both agency theory and institutional theory have been brought to bear on questions related to shareholder activism. A prime example is Judge et al. (2010), who demonstrate in a multi-country study that the antecedents of shareholder activism vary with the motivation of the activist, with agency theory providing valid predictions for financially-motivated activism and institutional theory providing stronger explanations for socially-motivated activism. We thus draw upon both theoretical perspectives in developing our hypotheses.

The Antecedents of Shareholder Activism Related to Gender Diversity

Prior research has examined the firm characteristics of female board representation. For example, Hillman et al. (2007) find that firms with female directors are larger and more organizationally complex, have more directors who sit on other boards with female directors, and are in industries with a higher proportion of women in the workforce, and Adams and Ferreira (2009) report that firms with female directors are larger, have more business segments, have larger boards, have worse performance in terms of Tobin's Q (market value of assets over book value of assets) but better performance in terms of return on assets (ROA). However, we are the first, to our knowledge, to examine the antecedents of shareholder activism directed toward increasing female board representation. We therefore start with the most fundamental question of whether the existing level of female representation on the BOD plays a role in activists' decisions to formally submit proposals calling for increased gender diversity.

It would seem self-evident that shareholder activists concerned with gender diversity will tend to target firms with low existing levels of female board representation, as activists target firms where problems are perceived as greatest and where the potential benefits of change are perceived as being high (Ertimur, Ferri, & Muslu, 2011). Because firms with low

female presentation would stand out relative to their peers, we expect them to be more likely to be targeted by shareholder activists than firms with high female representation. However, shareholder activists driven by ideological concerns may be less discriminating in their choice of target firms. In the extreme, such activists might target all firms where there is any gender imbalance on the board, which would constitute virtually all firms in the S&P 1500. Financially-motivated activists may only be pursuing gender diversity goals merely to satisfy demands from clients rather than from a sincere desire to impact board composition, in which case the existing level of representation may not be the primary factor in choosing a target. To the extent that these alternative possibilities hold, this will attenuate the expected relation between existing female representation and shareholder activism, potentially resulting in no association between the two. We nonetheless offer a directional hypothesis related to existing female representation:

Hypothesis 1a. Higher existing levels of female board representation reduce the likelihood of being targeted by shareholder activists concerned with gender diversity.

We further consider how activist motivations might affect the relation between the level of female representation and the likelihood of being targeted. Within the institutional theory framework, increasing the gender diversity of corporate boards would increase the firm's social legitimacy and is thus typically viewed as a socially-motivated shareholder activist objective. However, the agency theory perspective on board diversity suggests that financially-motivated activists would also have an interest in improving gender diversity, as there is empirical evidence (cited above) that suggests that the presence of female directors improves the board's ability to effectively monitor the firm's managers. These findings are also consistent with Cohen, Pant, & Sharp (1998), who provide evidence that women display a higher ethical sensitivity – i.e., they are more likely to identify a questionable action as unethical, and less likely to engage in that action. In addition, Hillman (2015) argues that innate differences between men and women can improve board functioning, and Lee and

Farh (2004) find that diverse groups are more innovative and identify a broader set of alternatives for consideration, improving decision-making efficacy. Hence we expect both financially- and socially-motivated activists to campaign for increased gender diversity.

However, we expect that socially-motivated activists would have a higher benchmark for what they view as an “acceptable” level of female representation, as achievement of their social legitimacy goals would presumably require more than the token presence of a female director. To illustrate, consider a board with, say, 14 percent female directors, which is the average level of representation for S&P 1500 firms in 2013. This level of representation may be deemed as adequate by financially-motivated activists, but would fall short of the more ambitious goals of 20 percent or 30 percent female representation that have been set by advocacy organizations such as 2020 Women on Board, Catalyst of the Thirty Percent Coalition. In this instance, we would expect socially-motivated activists to still target firms for improvement if that firm had a level of “only” 14 percent representation, but financially-motivated activists may not bother because this level may be adequate in terms of achieving the monitoring benefits that gender diversity provides to firms. In other words, we expect *higher* existing levels of female representation for socially-motivated than for financially-motivated activists. If this is the case, then the predicted inverse relation posited in H1a will be weakened for socially-motivated activists and strengthened for financially-motivated activists. Stated formally:

Hypothesis 1b. The effect of existing levels of female board representation on reducing the likelihood of being targeted by shareholder activists concerned with gender diversity is moderated (strengthened) for socially-motivated (financially-motivated) shareholder activists.

Our second hypothesis considers whether the existing degree of board independence influences the likelihood that a firm will be targeted by a shareholder proposal related to gender diversity. Sonnenfeld (2002) argues that board members should be able challenge other’s assumptions and beliefs to resist the often-strong pressure to conform with

management and other board members, but concludes that “groupthink” is relatively common in boardrooms. Janis (1972) argues that a group is especially vulnerable to “groupthink” when its members are similar, and that increased diversity improves the problem. Similarly, Milliken & Martins (1996) find that diversity reduces “groupthink”, status quo bias, and other group-based decision biases, and Schwartz-Ziv (2015) finds that CEOs are more likely to be held accountable if the board includes a critical mass of women directors. Carter et al. (2003) find that the percentage of women directors is negatively associated with the number of company insiders; similarly, Kang, Chang, & Grav (2007) report that gender diversity is positively associated with board independence in Australian firms. Because women are more likely to be independent directors – outsiders to the firm but also less similar to male board members – shareholder activists concerned about a lack of board independence may encourage greater gender diversity as an indirect means of improving independence. An alternative view is that shareholders concerned about increasing board independence could pursue that goal directly without resorting to an indirect route involving gender diversity. Also, Ertimur et al. (2011) find that activists target firms with *more* independent boards with compensation-related proposals. We nonetheless predict a negative relation between board independence and the likelihood of being the target of a shareholder proposal related to gender diversity. Stated formally:

Hypothesis 2a. Higher existing levels of board independence reduce the likelihood of being targeted by shareholder activists concerned with gender diversity.

We again consider how activist motivation might affect this relation. Under the agency theory perspective, it is assumed that independent boards are more effective at monitoring managers and aligning their interests with those of shareholders. For example, Carleton, Nelson, & Weisbach (1998) find that TIAA-CREF views board diversity as a corporate governance issue because they believe that a diverse board is less likely to be beholden to management, hence alleviating potential agency problems within the firm. Klein

(2002) finds that board independence is negatively associated with earnings management, which suggests that independent boards are more effective in monitoring the corporate financial reporting process, and Carter et al. (2003) document a positive relation with board independence and firm value as measured using Tobin's Q. We therefore expect that financially-motivated activists, who are typically governed by agency concerns, to have a strong preference board independence. From an institutional theory perspective, however, board independence is not typically a matter of social legitimacy; thus socially-motivated activists would be less driven by this concern. We thus predict that the association between board independence and the likelihood of being targeted by a shareholder proposal related to gender diversity is intensified for financially-motivated activists than socially-motivated activists. Stated formally:

Hypothesis 2b. The effect of existing levels of board independence on reducing the likelihood of being targeted by shareholder activists concerned with gender diversity is moderated (strengthened) for socially-motivated (financially-motivated) shareholder activists.

The Effectiveness of Shareholder Activism

The effectiveness of shareholder activism has received considerable attention in the literature, and findings regarding their effectiveness are mixed. A shareholder proposal can either be withdrawn by the activist if a concession is made by management, or can go to a shareholder vote if no concession is made. For proposals that are withdrawn, there is the risk that management has merely made a symbolic offer or paid "lip service" to temporarily placate the activist (Landier & Nair, 2009). For proposals that go to a vote by shareholders at the annual general meeting, the resulting vote is nonbinding, and therefore proposals resulting in a majority vote do not necessarily result in action by management. Therefore, the effectiveness of activists is by no means a foregone conclusion. On the other hand, a majority vote can send a strong signal to management, spurring them to action.

Early studies conclude that there is little evidence that shareholder proposals create value and that they have only a limited impact on firm governance structures (Karpoff, 2001), but some of the more recent studies document that shareholder proposals are having an impact (Goranova & Ryan, 2014; Aguilera et al., 2015). Thomas and Cotter (2007) find that seven percent of shareholder proposals filed between 2002 and 2004 on governance issues such as executive compensation and corporate control are adopted by the board. Ertimur, Ferri, and Stubben (2010) find that proposals that receive a majority vote are more likely to be adopted, especially in more recent years. They report that 22.4 percent of majority-vote proposals are adopted in 1997-2001, but that this frequency increases to 36.9 percent over 2002-2004. However, this still represents a small fraction of proposals filed, as only 18.0 percent and 31.7 percent of proposals receive majority-votes during those respective time periods. Ertimur et al. (2010) also report that proposals related to board composition have the lowest rates of implementation, following shareholder rights and executive pay.

With particular regard to proposals related to environmental/social issues, Reid and Toffel (2009) find that firms are more likely to participate in the Carbon Disclosure Project if they are targeted by environmental shareholder proposals. In contrast, David, Bloom, & Hillman (2007) find that corporate social performance proposals are *negatively* related to subsequent corporate social performance.

However, given the more recent evidence on the growing effectiveness of shareholder activism and the increased attention on gender diversity issues, we expect proposals to have some measurable impact on female board representation. Stated formally:

Hypothesis 3a. There is a significant increase in female board representation after a firm has been targeted by a shareholder proposal related to gender diversity.

As with H1 and H2, we again consider how activist motivations might affect our prediction. Gillan and Starks (2000) find that proposals sponsored by institutional investors received significantly more favorable votes than those sponsored by independent individuals

or religious organizations. Similarly, Renneboog and Szilagyi (2009) find that proposals submitted by public pension funds and investment firms garner the most votes compared to unions, religious groups and individual investors. Ertimur et al. (2010) report that proposals initiated by religious organizations have the lowest majority-vote and implementation rates relative to other activist types.

As we discuss below, we categorize public pension funds and investment firms as financially-motivated, and religious groups and individuals as socially-motivated. To the extent that weak voting support represents a misalignment of activist interest to the interests of the average firm shareholder (Gillan & Starks, 2007), we would expect proposals by the socially-motivated investor groups to be less effective in changing management behavior. Further, if financially-motivated activists do target firms with lower female representation, as predicted in Hypothesis 1b, management may feel greater pressure to improve performance on this dimension. We therefore predict the following:

Hypothesis 3b. The increase in female board representation after a firm has been targeted by a shareholder proposal related to gender diversity is lower (higher) for socially-motivated (financially-motivated) shareholder activists.

RESEARCH METHOD

Details of our sample selection process are reported in Table 1. We obtain 182 shareholder proposals related to board diversity for S&P 1500 firms over the 1997-2011 period from RiskMetrics.⁶ Ending our sample period in 2011 allows us to analyze subsequent board appointments for two years following the target year. We consider both proposals that went to vote (64) and those that did not (118). Proposals may be withdrawn for two primary reasons: they may be omitted or withdrawn. Omitted proposals result when the SEC grants exclusion of the proposal because of ineligibility (typically if the proposal is vague, false or misleading, the proposal relates to the company's ordinary business operations, the proposal

is contrary to applicable law, a duplicate proposal exists, or on procedural grounds such as the defects in the shareholder's proof of ownership). A proposal is withdrawn by the submitting shareholder when the firm and submitting shareholder have reached some form of agreement prior to the proposal going to vote (Carleton et al., 1998). Because withdrawn proposals often result in concessions by companies to activists, we include them in our analysis. In addition, Ferri (2012) encourages including withdrawn proposals in activism research, as excluding them potentially understates the success of activism efforts. However, in Table 2 we analyze voting patterns for the 64 proposals that went to vote to assess investor views for the different types of proposals and proponents.

Insert Table 1 about here

For our target analysis, we lose 16 proposals because board gender data is not available from RiskMetrics for the year prior to the target. We also lose 26 proposals due to missing Compustat data or where a match could not be found. The resulting sample for our target analysis is 140 proposals. In Panel B of Table 1, we identify five activist groups among the 182 proposals submitted: public pension funds (14), institutional investors (60), individuals (14), religious organizations (90) and other (4). The public pension funds include Connecticut Retirement Plans & Trust Funds and California State Teacher's Retirement; institutional investors include Calvert Asset Management and Citizen Funds; religious organizations include the Interfaith Center on Corporate Responsibility (ICCR) and the Episcopal Church; and individuals include Thomas Gniewek, Jr. and Charles and Lois Edwards.

Activist Type

To consider how incentives might differ across activists, we categorize our proponents into two categories following Tkac (2006), and confirm this characterization by

our own examination of the stated objectives of different activist groups, where available. We define *financially-motivated activists* as those whose primary goal is to pursue financial returns, and include public pension funds and institutional investors in this category. Socially responsible mutual funds, such as Calvert, also fall in this category. While these funds screen investments according to ethical guidelines, their primary goal is still financial performance (Tkac 2006). In our (target analysis) sample, 78 (68) proposals are from financially-motivated proponents.

We categorize individuals and religious organizations *as socially-motivated activists*. Individuals are more likely to pursue shareholder activism that stems from personal preferences, while religious organizations tend to focus on issues of social and economic justice and utilize their investments and other resources “to change unjust or harmful corporate policies, working for peace, economic justice and stewardship of the Earth” (Tkac, 2006, p. 6). Louche, Arenas, & van Cranenburgh (2012) report that religious organizations are highly driven by the impact they can have on company behavior and society and therefore do not limit the purpose of investing to financial returns. In our (target analysis) sample, 104 (72) are from socially-motivated proponents.

While our classification is inherently subjective, we consider two alternative ways to validate our approach. First we consider whether share ownership varies across activist groups. Activists with significant share holdings are more likely to place primary emphasis on financial performance of the firm. In our sample, activists only occasionally disclose within the proposal how many shares they own, and we compute mean holdings where at least five activists of a given group provide the disclosure. The average number of shares held by public pension funds is 380,230; the average number of shares held by investment funds is 12,185; virtually no individuals or religious organizations in our sample disclosed their share holdings. However, Zhou (2013) finds that individual activists hold significantly fewer shares

than institutions, including investments funds and public pension plans. These findings suggest that we can assume that at least the public pension funds and institutional investors have more at stake financially and are therefore more likely to be driven by financial concerns.

Second, we observe how the arguments made by activists in their proposals vary by activist type to provide evidence of construct validity (see below). Our characterization is supported if the arguments made by each activist type align with our characterization of those types, and if the arguments also differ statistically across activist types.

Shareholder Sentiment - Voting Patterns

In Table 2, we report voting patterns for the 64 proposals that went to vote by proposal type and proponent identity. The mean shareholder vote for the proposal is 17.4 percent, with votes for any given proposal ranging from 2.3 percent to 47.5 percent. It is notable that not one proposal in our sample received a majority vote. We also report voting patterns over three separate time periods: prior to Sarbanes-Oxley (Pre-SOX), 1997-2001; following SOX (Post-Sox), 2002-2008; and following Regulation S-K (Post-Disclose), 2009-2011. SOX required increased independence of boards, which potentially created new opportunities for women to serve on boards. In 2009, the SEC introduced Regulation S-K, which enhanced proxy statement disclosures, including those pertaining to board diversity. Specifically, the “comply-or-explain” provision 407(c)(2)(vi) of this rule requires firms to disclose whether and how nominating committees consider diversity in identifying nominees for directors. As reported in Table 2, we find that shareholder support appears to be increasing over time and highest following Regulation S-K, although we have few proposals that were voted on after Regulation S-K was introduced.

Insert Table 2 about here

We observe two key types of proposals: proposals that call for the company to *increase* diversity, either by making an explicit commitment to do so, to make greater efforts to locate qualified candidates, or to adopt a formal process of inclusiveness; or, proposals that call for the company to *report* on diversity, either on its efforts to diversify the board, the criteria for selecting board candidates, or on the selection process. Shareholder support does not vary significantly across these two types of proposals. We also report voting across proponent identity, with the highest support for proposals presented by institutional investors and lowest for those from individual investors.

Why Diversity Matters - Proponent Arguments

To better understand proponent motivations and to validate our classification scheme, we compare the arguments put forth by the two types of proponents – financially- versus socially-motivated. We obtain these arguments from the text of the proposals included in the firm’s proxy statement. Results are reported in Table 3. After reviewing all of the proposal texts, we identify seven primary themes: current status on diversity, decision-making, governance, talent pool, firm value, risk, and representativeness.

Insert Table 3 about here

Almost all proposals, including 90.9 percent of financially-motivated and 92.9 percent of social-motivated proposals, argue that increasing diversity leads to better decision-making by considering more perspectives, resulting in more nuanced and comprehensive solutions, or being less prone to “groupthink”. The next most common argument is that diversity increases firm value, through higher accounting and stock price performance, increased competitiveness, and by making the company more attractive to the investment community.

This argument is significantly more prevalent for financially-motivated proposals than for socially-motivated ones (90.9 percent versus 64.3 percent, $p = 0.05$), consistent with expectations. Also prevalent is the argument that diversity enhances the company's talent pool and helps companies recruit, retain and promote the best people. Again, this argument is more prevalent for financial than social proposals (81.8 percent versus 50.0 percent, $p = 0.05$). In contrast, more social proposals argue that diversity is needed for greater representativeness, i.e. the board should reflect the shareholder base, customers, employees and the general population. A majority (61.9 percent) of social proposals include this argument, compared to 27.3 percent of financial proposals ($p = 0.01$). Arguments related to improved governance from increased diversity and to low existing levels of diversity are offered equally by both proponent types, and risk is only mentioned in three proposals.

The differences documented in Table 3 suggest that our classification of proposals as primarily either socially- or financially-motivated has reasonable construct validity, which is important in our formal hypothesis tests.

RESULTS

The Antecedents of Shareholder Activism

To examine the antecedents of shareholder activism related to gender diversity, we compare firms targeted by a gender diversity proposal to a control sample of non-targeted S&P 1500 firms. As in Judge et al. (2010), we identify one-to-one matches for our sample of shareholder proposal firms based on industry, firm size, and fiscal year using the following procedure: (1) Within the same year and 2-digit SIC, we obtain matches that are within 10 percent of firm size (total assets); (2) If no match is found, we look within the same 1-digit SIC for a size match within 10 percent; (3) If no match is found, we look within the same 1-digit SIC for a size match with 50 percent. We are able to find matched controls for 140

target firm-years. Total assets are not significantly different across the target and control groups, indicating that we have successfully matched on firm size.

To formally test our hypotheses, we estimate the following binary logistic regression:

$$\Pr (Target_{i,t}) = \alpha_0 + \alpha_1 Female Representation_{i,t-1} + \alpha_2 Board Independence_{i,t-1} + \beta CONTROLS_{t-1} + \varepsilon_{i,t} \quad (1)$$

The dependent variable, *Target*, equals one if the firm receives a gender diversity-related shareholder proposal in year *t*, and zero otherwise. H1a and H2a predict that female board representation and board independence, respectively, are negatively associated with target likelihood. We measure female board representation (*Female Representation*) as the percentage of females on the board at year *t-1*. The independence of the board of directors (*Board Independence*) is measured as the percentage of board members who are classified as independent, defined as a person neither affiliated nor currently an employee of the company, at year *t-1*.

Following Judge et al. (2010) and Ertimur et al. (2011), we control for *Firm Size*, defined as the log of total assets, and *Profitability*, defined as return-on-assets or income before extraordinary items divided by total assets. Judge et al. (2010) note that prior profitability is higher for firms targeted with social proposals. Therefore, we expect a positive coefficient for both *Firm Size* and *Profitability*, although the coefficient for *Firm Size* is expected to be significantly lower than it would otherwise be if we had not already matched on size. We also control for board structure in equation (1) as this constitutes an internal governance mechanism that may affect shareholder activism (Judge et al. 2010). For example, Wu (2004) and Ertimur et al. (2011) find that smaller boards are more likely to be targeted by shareholder activists, while Carter et al. (2003) document a positive association between female board representation and board size. We therefore control for *Board Size*, measured as the number of board members, but make no prediction regarding its effect on the

likelihood of being targeted by a shareholder proposal relating to board gender diversity. Adding a female board member may be more feasible for larger boards, but attaining higher female representation is also more difficult for them. As indicated in equation (1), all independent variables are measured at year $t-1$.

Ertimur et al. (2011) also report a marginally positive association between shareholder activism and CEO duality; i.e., shareholders are more likely to target firms with CEOs who also serve as the board chairman. We therefore include a variable for duality to control for this effect. *CEO Duality* is defined as an indicator variable that equals one if the CEO also serves as the chair of the board, and zero otherwise. Shivdasani and Yermack (1999) find that when the CEO is a member of the nominating committee, the board tends to be less independent, which may attract activism. We thus include the indicator variable *CEO on the Nominating Committee* to control for this possible effect, where *CEO on the Nominating Committee* equals one if the CEO serves on the nominating committee, and zero otherwise. Board characteristics are obtained from RiskMetrics, and financial data are obtained from Compustat. Both variables are measured at year $t-1$.

Descriptive statistics for the variables of interest are reported in Table 4, Panel A. Female board representation is generally very low. The mean (median) *Female Representation* is only 2.9 percent (0.0 percent) for firm-years targeted with diversity proposals during 1997 – 2011, compared with 10.2 percent (11.1 percent) for the sample of matched control firms over the same period. This percentage is even lower for firms targeted by financially-motivated activists: here the mean (median) *Female Representation* is only 1.0 percent (0.0 percent). Targeted firms also have lower board independence, with mean (median) *Board Independence* of 61.1 percent (62.5 percent) compared with 70.4 percent (73.9 percent) for the matched controls. Targeted firms also tend to be more profitable (mean *Profitability* of 6.4 percent versus 3.4 percent), have smaller boards (mean of 8.89 versus

9.79), and are less likely to have CEOs in dual chairman roles (0.64 versus 0.70) than the non-targeted controls. Regarding differences between firms targeted by financially- versus socially-motivated activists, the former tend to be smaller, more profitable, have smaller boards, are more likely to have CEO/COB duality, and are less likely to have their CEO on the nominating committee relative to the latter.

In Panel B of Table 4, we present Pearson correlation coefficients for the target analysis variables. The highest correlation coefficient is between *Firm Size* and *Board Size* ($\rho = 0.59$). In addition, both firm size and board size are highly correlated with female representation ($\rho = 0.35$ and $\rho = 0.34$, respectively). To assess collinearity, we compute the condition numbers of the matrices of explanatory variables. According to Judge, Griffiths, Hill, Luetkepohl et al. (1985), condition numbers between 30 and 100 indicate moderate to strong dependencies. The highest condition number for our models is 21, indicating that collinearity is not a serious problem.

Insert Table 4 about here

In Table 5, we present results from our logistic binary regression of target firm antecedents. To control for the influence of outliers, we winsorize the continuous variables *Firm Size* and *Profitability* at 1 percent and 99 percent. In Model 1, we estimate a baseline model using just the control variables and find that *Firm Size* and *Profitability* are significantly positively associated with shareholder activism, while *Board Size* and *CEO Duality* are negatively associated. In Model 2, the variables of interest are added. Consistent with H1a and H2a, we find that firms with high existing levels of female board representation and high levels of board independence are significantly less likely to be targeted by gender diversity proposals. The estimated α coefficients on *Female Representation* and *Board Independence* are -16.67 and -2.18, both significant at the 0.01 level. Notably, the R^2

increases dramatically when the two variables of interest are added, from 5.7 percent in the baseline model to 29.1 percent in Model 2.

In Model 3, we report results from a multinomial logit that allows for contrasts among three groups: financially-motivated, socially-motivated, and control firms. Our results are quite similar to those in Model 2. In Model 3A, where we compare firms targeted by socially-motivated activists with non-targeted firms, we find that targeted firms have significantly lower *Female Representation* and *Board Independence* than non-targeted firms. In Model 3B, where we compare firms targeted by financially-motivated activists with non-targeted firms, we find similar results. Of primary interest, however, is Model 3C where we compare firms targeted by socially-motivated activists with those targeted by financially-motivated ones. Here we find that none of the control variables is significant in distinguishing between activist type, but we do report significant differences for one of our main test variables. Firms targeted by financially-motivated activists have significantly lower *Female Representation* ($\alpha = -14.67$, $p = 0.01$), consistent with H1b. This suggests that these proponents believe that they are likely to be most successful when targeting firms with few or no females on the board, that greater potential gains will accrue to these firms, or both. We do not find significant differences across the two groups for the variable *Board Independence*, and therefore H2b is not supported.⁷

Sensitivity Tests

In (untabulated) sensitivity tests, we repeat the analysis in Table 5 using a one-to-one random match to identify non-targeted control firms. The explanatory power is much higher in the random match model because of the higher significance of the variable *Firm Size*, which we use in Table 5 to identify matched controls but do not use in the random match model. Other notable differences are that *Board Size* is significantly negative in Models 2,

3A, and 3B and that *CEO Duality* is not significant in any of the specifications. Most importantly, the results are very similar for our main variables of interest, *Female Representation* and *Board Independence*, compared to those based on the size-industry match, i.e., they are significant in all specifications, and our inferences remain unchanged.

As an alternative specification, we also estimate Model 2 using a sample of all firm-years with the requisite data. Because we have only 143 target firm-years and 21,664 non-target firm-years in this analysis, we employ the penalized likelihood estimation, or Firth Method, as an approach for reducing small-sample bias in maximum likelihood estimation (King & Zeng, 2001). The results are very similar to those reported above in Table 5. The coefficients for *Female Representation* and *Board Independence* are negative and significant at the 0.0001 level.

Collectively, these results suggest that activists target firms with low female representation and lower board independence with gender diversity proposals. Further, we find that firms targeted by financially-motivated activists have even lower levels of female representation compared to those targeted by socially-motivated activists.

Insert Table 5 about here

The Effectiveness of Shareholder Activism

To assess whether shareholder proposals related to increasing gender diversity are effective, we examine female board representation from year -1 through year +2, where year 0 represents the year the sample firm was targeted. We define the variable *Change in Female Representation* as the change in the percentage of female members on the board from year -1 through year +2. We obtain data on female representation from RiskMetrics. For this analysis, we require sample firms/years to have all four years of data, resulting in a drop in sample size from 143 to 120. In order to attribute observed changes to shareholder activism,

we employ a one-to-one-matched pair design to control for other changes to board composition that might have occurred during our period of interest. We select control firms based on propensity score matching, which allows us to identify control firms that are most similar to our sample firms in terms of the likelihood of being targeted. The target model used to generate propensity scores is based on the most important variables in Table 5, namely *Female Representation*, *Board Independence*, *Firm Size*, *Profitability*, and *Board Size*. We also match by year and require the control firm to be in the same industry, defined by 2-digit SICs, as the sample firm.⁸

Univariate results are reported in Table 6. In Panel A we report the proportion of boards that have at least one female board member for both the 120 target and 120 non-target firms. In the year prior to be targeted, only 21.7 percent of target firms have at least one female board member; by year +2 this percentage increases to 57.5 percent. Therefore, 35.8 percent of target firms increased their female board representation from zero to at least one female board member from year -1 to year +2, an increase that is significant at the $p = 0.01$ level. Control firms that had similar characteristics to targeted firms but were not targeted also show significant increases over the sample period, increasing from 35.8 percent to 52.5 percent. However, when comparing differences in differences, we find that the target firms' increase of 35.8 percent is significantly higher than the control firms' increase of 16.7 percent ($p = 0.01$).

Insert Table 6 about here

In Panels B and C, we report the proportions of boards that have at least one female board member separately for financially-motivated and socially-motivated activists, respectively. In Panel B we observe that only 6.5 percent of firms targeted by financially-motivated activists had any female board representation in year -1, while 27.4 percent of non-

targeted firms had at least one female board member at this time, a highly significant difference at $p = 0.01$. While both targeted and non-targeted firms increase their female representation such that 50 percent of both samples have at least one female on their board of directors by year +2, a comparison of difference in differences show that the increase in frequency is significantly greater for the targeted firms ($p = 0.01$). As shown in Panel C, 37.9 percent of firms targeted by socially-motivated activists have at least one female board member in year -1, versus 44.8 percent of non-targeted firms, a difference that is not statistically significant. The proportion of firms with any female board representation increases over the sample period for both groups; however, the increase for the targeted firms from 37.9 percent to 65.5 percent is significantly greater than the increase from 44.8 percent to 55.2 percent for the non-targeted firms ($p = 0.01$). These findings suggest that both financially- and socially-motivated activists are successful in achieving goals related to increasing gender diversity.

In Panels D through F, we report the mean percent of female board representation for targeted and non-targeted firms. Results are similar to those reported in Panels A through C. In Panel D we report changes for the full sample. As previously noted, both groups have markedly low female representation in year -1: 3.0 percent for sample firms and 4.4 percent for control firms. Again, both groups show significant improvements: target firms increase by 5.1 percent to 8.1 percent ($p = 0.01$) and non-target firms increase by 2.9 percent to 7.3 percent ($p = 0.01$), with the increase for target firms being significantly higher ($p = 0.01$). However, it is striking that female board representation remains relatively low at 8.1 percent for target firms in year +2.

We report changes in female representation for financially-motivated proposals and in Panel E and for socially-motivated proposals in Panel F. Here the results confirm the earlier findings in Tables 4 and 5 – financially-motivated activists target firms with almost no female

board representation and with significantly lower female board representation than non-target firms. Female board representation for target firms increases by 5.5 percent, from a mere 0.9 percent to 6.4 percent, compared to an increase of 3.5 percent for non-target firms. For socially-motivated firms, target and non-target firms are similar in year -1 (5.3 percent versus 5.7 percent), but once again target firms increase more significantly than non-target firms – by 4.7 percent to 10.0 percent compared to an increase of 2.3 percent to 8.0 percent for non-target firms. The differences in differences in Panels E and F are significant at the $p = 0.10$ and $p = 0.05$ levels, respectively.

These findings speak to the effectiveness of shareholder activism in this setting. While not one proposal that went to vote received a majority vote, many firms took action following the proposal, with almost 36 percent of firms increasing their female representation from zero to at least one for the period surrounding the proposal.

In addition to the univariate comparisons in Table 6, we perform a cross-sectional regression analysis of changes in female representation. Although we select the comparison group for the effectiveness analysis in Table 6 to include only those S&P 1500 firms that have the most similar propensity to be targeted as our sample firms, this additional cross-sectional analysis provides further assurance that other differences across the two groups are not driving our results. We define the dependent variable as the change in the percentage of female representation (*Change in Female Representation*) from year -1 to year +2 and regress is on the indicator variable *Target* and the set of independent variables used in the target antecedent analysis in Table 5.

$$\text{Change in Female Representation}_{t+2} = \alpha_0 + \alpha_1 \text{Target}_{i,t} + \beta \text{CONTROLS}_{t-1} + \varepsilon_{i,t} \quad (2)$$

All variables are as defined earlier and are measured in the year prior to being targeted by activists. A significantly positive coefficient on *Target* would indicate that shareholder

proposals are an effective means of increasing female board representation, after controlling for the effects of other potential determinants of increased representation.

The results are presented in Table 7. To control for outliers, we winsorize the continuous variables at 1 percent and 99 percent. We present five model specifications. In Model 1, we include all the control variables and report a significantly positive coefficient on *Target* ($\alpha = 0.02$, $p = 0.05$), consistent with H3a. Only two control variables, *Board Size* ($\beta = 0.01$, $p = 0.01$) and existing levels of *Female Representation* (-0.34 , $p = 0.01$), are significant determinants of increased representation. These findings are consistent in Model 2, where we drop *Firm Size* and *Profitability* control variables due to concerns about collinearity. (When we drop these variables, the highest condition index drops from 34 to 21.) These results confirm the findings in Table 6 that demonstrate the effectiveness of shareholder activism in increasing female representation.

We perform additional tests in Models 3 – 5. In Model 3, we add indicator variables for the time period following SOX (*Post Sox*), 2002-2008, when requirements for board independence increased; and following Regulation S-K (*Post Disclose*), 2009-2011, when enhanced proxy statement disclosures requirements, including those pertaining to board diversity, were introduced. In contrast to the descriptive evidence reported in Table 2 of increased shareholder support over time, we find no evidence of higher firm responsiveness over time. In particular, we do not see increased responsiveness leading up to or following the enhanced disclosure requirements of Regulation S-K. In Model 4, we add an interaction term *Target*Social Proponent* to test whether activist type affects the effectiveness of the proposal in increasing female board representation, as prior research has shown that social activism tends to be less effective than financial activism (Goranova & Ryan, 2014). In this model, the coefficient on the interaction term is insignificant, and the coefficient on *Target* remains significantly positive. It thus appears that socially-motivated and financially-

motivated activists are equally effective in improving gender diversity, contrary to Hypothesis H3b.

In the foregoing analysis, we included shareholder proposals both that went to vote and those that did not, in accordance with Ferri (2012), who recommends consideration of both outcomes in activism research. He argues that excluding withdrawn proposals from the analyses potentially understates the success of activism efforts. In Model 5 we add an interaction term *Target*Vote*, to determine whether the proposal outcome (vote versus withdrawn) affects proposal effectiveness. *Vote* is defined as an indicator variable equal to one if the proposal went to vote, and zero otherwise. Here the coefficient on the interaction term is insignificant, and the coefficient on *Target* remains positive.

For these additional analyses in Model 3 to 5, we acknowledge that low statistical power may contribute to our lack of results due to the relatively small sample size. However, the consistent results for our main variable of interest, *Target*, gives us confidence that shareholder proposals are indeed an effective means of increasing gender diversity on corporate boards, despite the fact that none of the proposals in our sample received a majority vote.

DISCUSSION AND CONCLUSION

In this study, we examine the antecedents of shareholder activism related to increasing the gender diversity of corporate boards of directors and whether such activism is an effective mechanism for achieving this goal. Prior research on the antecedents and outcomes of shareholder activism has not specifically addressed the issue of board gender diversity, despite its growing importance internationally. Goranova and Ryan's (2014) recent review of the shareholder activism literature reveals that while there are numerous prior studies that examine the antecedents of corporate governance shareholder proposals at a

broad level, there is not a single paper that focuses directly on gender diversity issues. Similarly, activist researchers have explored outcomes as varied as market reactions to shareholder proposals, firm operating performance, CEO turnover, managerial entrenchment, executive pay, and corporate social performance, yet no extant study, to our knowledge, has examined board gender diversity as an outcome of shareholder activism. We contribute to the activism literature by filling this void.

We find that the existing levels of female board representation and board independence are significant antecedents of activism and that female board representation is a stronger antecedent for financially-motivated activists than for socially-motivated activists. In addition, our evidence shows that shareholder proposals are effective in increasing board gender diversity – the female board representation of targeted firms increases significantly more in the two-year period following initiation of the proposal related to a sample of matched, non-targeted firms. This finding holds in univariate tests, as well as in a multivariate regression that controls for the level of female board representation prior to the target year and other potential determinants of female representation. We also find that both financially- and socially-motivated activism are equally effective in improving board gender diversity. These latter results contrast with findings in the prior literature that report that activism related to social issues such as gender diversity generally tend to be unsuccessful. They further challenge the seemingly accepted notion that financial activists tend to be more effective in achieving their goals than social activists.

While these findings extend the academic literature on shareholder activism, they also have potential implications for managers, activists, and policy-makers. For managers, the knowledge that low female board representation attracts activists and that both financially-motivated and socially-motivated activists are successful in improving gender diversity may lead them to improve board gender diversity without the impetus of a formal shareholder

proposal. For activists, the knowledge that prior activists have been successful in improving gender diversity may inspire new initiatives, particularly for socially-motivated activists. However, we note that while our results indicate that shareholder activism is an effective means of improving corporate board gender diversity, mean female board representation for both targeted and non-targeted firms remains far below the 20 percent or 30 percent thresholds that are sought by various activist groups, even in the post-proposal period. For policy-makers, this suggests that legislative action may be necessary to achieve these more ambitious goals. To best inform policy-makers, more research is needed to understand the consequences of alternative regulatory responses, from mandated quotas to “softer” initiatives including “comply-or-explain” disclosure requirements that have been introduced in recent years (Adams et al., 2015).

Future research can also help us better understand the antecedents and consequences of female board representation. Hillman (2015) asks whether the different outcomes of increased female board representation depend on how the increase was achieved. For example, does the role that women play on the board, such as committee membership or board tenure differ depending on whether the female appointment is voluntary, through the introduction of a legal quota, or as a result of activism? Does the method of appointment affect other outcomes, such as subsequent firm performance and board monitoring? That is, is the method of appointment a moderating variable between female representation and outcomes? Also, does female board representation increase female representation at other levels within the firm (Ferreira, 2015) and does this depend on how the increase is achieved? Further, is shareholder activism an effective mechanism for addressing broader gender inequities such as equal employment opportunity reporting for all levels within a firm? Future work is needed to address these important questions.

Several areas for future work also arise from the inherent limitations of our study. We have relied on two theoretical perspectives in framing our analysis – that of agency theory and institutional theory – but acknowledge that other theoretical perspectives might also afford insight into gender diversity questions. For example, resource dependency theory or social network theory might also provide equally useful perspectives in this line of inquiry. Future research might consider related questions from these alternative vantage points.

A second limitation is that we dichotomize our sample of shareholder proposals into two groups based on the motivation of the activist (i.e., either financially- or socially-motivated). However, motivations cannot be observed directly, and we must infer motivation from stated objectives of activist groups. While we conduct two tests to gain confidence that our classification scheme has reasonable construct validity, there may be some measurement error in determining activist motivation. Alternative research methods for exploring the motivations of activists, including field-based studies, could be useful here.

Also, our findings likely understate the effectiveness of shareholder activism in this setting. The proposals we examine call for both gender and racial diversity, but restrictions in the RiskMetrics database preclude us from evaluating outcomes regarding race over our period of interest. Therefore, we are unable to tabulate improvements to board diversity related to racial diversity. Future research might address the question of racial diversity and shareholder activism.

As a last point, while we focus on shareholder activism, Aguilera et al. (2015) propose that internal mechanisms, like board structure and ownership structure, and external mechanisms, like shareholder activism or media, can work together to improve governance effectiveness. An example would be the confluence of an active board, activist shareholders, and high levels of media scrutiny working together to influence strategic decisions and firm

outcomes. Therefore, future research could identify different configurations of internal and external mechanisms to better understand the drivers of effective corporate governance.

ENDNOTES

1. In March 2015 Germany passed a bill that will require publicly traded companies with more than 2,000 employees to award at least 30 percent of board seats to women by January 2016, and for another 3,500 medium-sized companies to determine their own quota for boards and executive positions.
2. See Terjesen, Aguilera, & Lorenz (2015) for a comprehensive listing of the countries that have passed corporate governance gender quota legislation or adopted “comply or explain” policies.
3. See <http://www.catalyst.org/legislative-board-diversity>.
4. ISS Environmental and Social Governance 2014 Proxy Season Review. The Thirty Percent Coalition is an organization of institutional investors, members of the business community, and women’s organizations whose goal is to reach 30 percent female representation on public company boards by the end of 2015. Female board representation for S&P 1500 firms was 14 percent in 2013, compared to 7 percent in 1997 (RiskMetrics).
5. Cziraki, Renneboog, & Szilagyi (2010) report that the frequency of proposals is just over 4 percent of publicly-listed companies in the U.S. over 1996-2005 but only around 1 percent in the UK and Continental Europe. Similarly, Judge et al. (2010) find that in a sample of over 9,000 shareholder activism incidents in over 10 countries, 52 percent occur in the U.S.
6. While the focus of our paper is on gender diversity, the shareholder proposals in our sample typically call for increased representation from “women” and “minorities” / “persons of color”. Because we are not able to identify board members from minority groups through RiskMetrics of the majority of our time frame, we are not able to compare our sample to S&P 1500 firms on this dimension.
7. We do not include time period controls in Table 5 since we match on year, in effect controlling for time effects in Models 1 and 2. However, in sensitivity tests, we add indicator variables for the time period following SOX (*Post Sox*), 2002-2008, when requirements for board independence increased; and following Regulation S-K (*Post Disclose*), 2009-2011, when enhanced proxy statement disclosures requirements, including those pertaining to board diversity, were introduced. *Post Sox* and *Post Disclose* are not significant in Models 1 or 2, as expected. However, we find both variables to be positive and significant in Models 3B and 3C, suggesting that financial activists are more likely to target firms in later years. Further, when we control for these time periods, *Board Independence* approaches significance in Model 3C ($p = 0.12$ in two-tailed tests) providing weak support for Hypothesis 2b.
8. Mean values (p-values for difference) for target and non-target firms for the independent variables are: *Female Representation* of 3.0 percent versus 4.4 percent ($p = 0.01$); *Board Independence* of 61.1 percent versus 61.8 percent ($p = 0.70$); *SIZE* of

8.186 versus 7.923 ($p = 0.12$); *Profitability* of 0.070 versus 0.078 ($p = 0.31$); and *Board Size* of 8.783 versus 8.858 ($p = 0.81$). Therefore, target firms are equivalent on all dimensions except female representation. Although we always select a match with the closest propensity score in absolute value terms, our target firms have significantly higher scores than our control firms ($p = 0.01$) and are higher in 2/3 of the 120 cases. We attribute this to the fact that our sample firms often have the highest propensity to be targeted among all the firms in industry. These statistics underscore our finding in Table 5 that activists target firms with unusually low female board representation. Also, while non-target firms have significantly lower female representation than S&P 1500 firms on average, they are still not as low as our sample firms. We conduct additional tests in Table 7 to control for *Female Representation*.

REFERENCES

- Abbott, L.J., Parker, S., & Presley, T.J. Female board presence and the likelihood of financial restatement. *Accounting Horizons*, 26(4): 607-629.
- Adams, R. B., de Haan, J., Terjesen, S. & van Ees, H. 2015. Board diversity: Moving the field forward. *Corporate Governance: An International Review*, 23(2): 77-82.
- Adams, R. B. & Ferreira, D. 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94: 291-309.
- Aguilera, R.V., Desender, K., Bedar, M. K., & Lee, J. H. 2015. Connecting the dots – Bringing external corporate governance to the corporate governance puzzle. *The Academy of Management Annals*, 9(1): 483-573.
- Bebchuk, L. A. 2005. The case for increasing shareholder power. *Harvard Law Review*, 118: 833-917.
- Bear, S., Rahman, N., & Post, C. 2010. The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, 97(2): 207-221.
- Bernardi, R. A., Bosco, S. M., & Columb, V. L. 2009. Does female representation on board of directors associate with the “Most Ethical Companies” list? *Corporate Reputation Review*, 12(3): 270-280.
- Carelton, W. T., Nelson, J. M., & Weisbach, M. S. 1998. The influence of institutions on corporate governance through private negotiations: Evidence from TIAA-CREF. *Journal of Finance*, 53: 1335-1362.
- Carter, D.A., Simkins, B.J., & Simpson, W.G. 2003. Corporate governance, board diversity, and firm value. *The Financial Review*, 38(1): 33-53.
- Carter, D.A., D’Souza, F., Simkins, B.J., & Simpson, W.G. 2010. The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, 18 (5): 396-414.

Cohen, J., Pant, L. & Sharp, D. 1998. The effect of gender and academic discipline diversity on the ethical evaluations, ethical intentions, and ethical orientation of potential public accounting recruits. *Accounting Horizons*, 12(3): 250-270.

Cumming, D., Leung, T.Y., & Rui, O. 2015. Gender diversity and securities fraud. *Academy of Management Journal*, forthcoming.

Cziraki, P., Renneboog, L., & Szilagyi, P. 2010. Shareholder activism through proxy proposals: The European perspective. *European Financial Management*, 16 (5): 738-777.

Dalton, D.R., Daily, C.M., Ellstrand, A.E., & Johnson, J.L. 1998. Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19(3): 269-290.

Dalton, D.R., Hitt, M.A., Certo, S.T., & Dalton, C.M. 2007. The fundamental agency problem and its mitigation: Independence, equity, and the market for corporate control. *The Academy of Management Annals*, 1: 1-64.

David, P., Bloom, M., & Hillman, A. 2007. Investor activism, managerial responsiveness and corporate social performance. *Strategic Management Journal*, 28: 91-100.

DiMaggio, P.J. & Powell, W.W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(20): 147-160.

Eisenhardt, K.M. 1989. Agency theory: An assessment and review. *Academy of Management Review*, 14(1): 57-74.

Ertimur, Y., F. Ferri, & Muslu, V. 2011. Shareholder activism and CEO pay. *Review of Financial Studies*, 23: 535-92.

Ertimur, Y., F. Ferri & Stubben, S. 2010. Board of directors' responsiveness to shareholders: Evidence from shareholder proposals. *Journal of Corporate Finance*, 16: 53-72.

Ferreira, D. 2015. Board diversity: Should we trust research to inform policy? *Corporate Governance: An International Review*, 23(2): 108-111.

Ferri, F. 2012. 'Low-cost' shareholder activism: A review of the evidence. In *Research Handbook on the Economics of Corporate Law*. Cheltenham, UK: Edward Elgar Publishing.

Gillan, S. L., & Starks, L. T. 2007. The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance*, 19: 55-73.

Goranova, M. & Ryan, L. V. 2014. Shareholder activism: A multidisciplinary review. *Journal of Management*, 40 (5): 1230-1268.

Gul, F. A., Srinidhi, B., & Ng, A. C. 2011. Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting and Economics*, 51: 314-338.

Hillman, A.J., Shropshire, C., & Cannella, A.A. 2007. Organizational predictors of women on corporate boards. *Academy of Management Journal*, 50(4): 941-952.

Hillman, A. 2015. Board diversity: Beginning to unpeel the onion. *Corporate Governance: An International Review*, 23(2): 104-107.

Janis, I. 1972. *Victims of groupthink: Psychological studies of foreign-policy decisions and fiascoes*. Boston: Houghton Mifflin.

Jensen, M.C. & Meckling, W.H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305-360.

Judge, W. Q, Gaur, A., & Muller-Kahle, M. I. 2010. Antecedents of shareholder activism in target firms: Evidence from a multi-county study. *Corporate Governance: An International Review*, 18(4): 258-773.

Judge, G.G., Griffiths, W.E., Hill, C. R., Luetkepohl, H., & Lee, T. 1985. *Regression Diagnostics*, New York: Wiley.

Kang, H., Chang, M. & Gray, S.J. 2007. Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15 (2):

Karpoff, J., 2001. The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings. Working Paper. University of Washington.

Karpoff, J., P. Malatesta, & Walkling, R. 1996. Corporate Governance and Shareholder Initiatives: Empirical Evidence, *Journal of Financial Economics*, 42: 365-95.

King, G. & Zeng, L. 2001. Logistic regression in rare events data. *Political Analysis*, 9: 137-163.

Klein, A. 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33 (3): 375-400.

Landier, A. and W. B. Nair. 2009. *Investing for Change. Profit from Responsible Investment*. Oxford, United Kingdom: Oxford University Press.

Lee, C., & Farh, J. 2004. Joint effects of group efficacy and gender diversity on group cohesion and performance. *Applied Psychology: An International Review*, 53 (1): 136–154.

Louche, C., Arenas, D. & van Cranenburgh, K. C. 2012. From preaching to investing: Attitudes of religious organizations towards responsible investment. *Journal of Business Ethics*, 110: 301-320.

Lynall, M.D., Golden, B.R., & Hillman, A.J. 2003. Board composition from adolescence to maturity: a multi-theoretic view. *Academy of Management Review*, 28(3): 416-431.

Milliken, F. & Martins, L. 1996. Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Journal*, 21: 402-433.

Payne, A. & Phillips, N. 2014. *Handbook of International Political Economy of Corporate Governance*. Sheffield, UK: Edward Elgar.

Reid, E. M., & Toffel, M. W. 2009. Responding to public and private politics: Corporate disclosure of climate change strategies. *Strategic Management Journal*, 30: 1157-1178.

Renneboog, L. and Szilagyi, P.G. 2009. Shareholder activism through the proxy process. Working paper, Tilburg University and the University of Cambridge.

Schwartz-Ziv, M. 2015. Gender and board activeness: The role of a critical mass. Forthcoming in *Journal of Financial and Quantitative Analysis*.

Scott, W.R. 2001. *Institutions and organizations*, 2nd ed. Thousands Oaks, CA: Sage.

Shivdasani, A., & Yermack, D. 1999. CEO involvement in the selection of new board members: An empirical analysis. *Journal of Finance*, 54(5): 1829-1853.

Sjostrom, E. 2008. Shareholder activism for corporate social responsibility: What do we know? *Sustainable Development*, 3: 141-154.

Sonnenfeld, J.A. 2002. What makes great boards great. *Harvard Business Review*, 80(9): 106-113.

Srinidhi, B., Gul, F.A., Tsui, J. 2011. Female directors and earnings quality. *Contemporary Accounting Research*, 28(5): 1610-1644.

Terjesen, S., Aguilera, R.V., & Lorenz, R. 2015. Legislating a woman's seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*, 128 (2): 233-251.

Thomas, R. S. & Cotter, J. F. 2007. Shareholder proposals in the new millennium: Shareholder support, board response and market reaction. *Journal of Corporate Finance*, 13: 368-391.

Tkac, P. 2006. One proxy at a time: Pursuing social change through shareholder proposals. *Economic Review*, Third Quarter 2006, Federal Reserve Bank of Atlanta.

Weisbach, M.S. 1988. Outside directors and CEO turnover. *Journal of Financial Economics*, 20: 431-460.

Wu, Y. 2004. The impact of public opinion on board structure changes, director career progression, and CEO turnover: evidence from CalPERS' corporate governance program. *Journal of Corporate Finance*, 10: 199-227

Zhou, X. 2013. *Investigating shareholder social activism from an issue-selling perspective—Issues, strategies, and success*. Doctoral Dissertation, Virginia Tech.

TABLE 1
Sample Selection

Panel A: Sample Criteria

| | Total Proposals | Proposals Voted On | % that went to vote |
|--|--------------------|--------------------------|---------------------------|
| Proposals submitted, 1997-2011 | 182 | 64 | 35.2% |
| less: 1997 proposals | (16) | | |
| less: companies with missing data, year -1 or where no match could be found | (26) | | |
| Sample for target analysis | 140 | | |
| Less: firms with missing data, year -1 to year +2 | (20) | | |
| Sample for appointments analysis | 120 | | |
| Target Analysis | | | |
| Financially-motivated proponent | 68 | | |
| Socially-motivated proponent | 72 | | |
| | 140 | | |
| Appointments Analysis | | | |
| Financially-motivated proponent | 62 | | |
| Socially-motivated proponent | 58 | | |
| | 120 | | |

Panel B: Proposals submitted by proponent type

| | N | % |
|-------------------------------|-----|--------|
| Financially-motivated: | | |
| Public Pension Fund | 14 | 7.7% |
| Institutional Investor | 60 | 33.0% |
| Other | 4 | 2.2% |
| Socially-motivated: | | |
| Individual | 14 | 7.7% |
| Religious Organizations | 90 | 49.5% |
| | 182 | 100.0% |

Note: Gender diversity proposals for S&P 1500 firms are obtained from RiskMetrics. We obtained proposals voted on from firms' proxy statements.

TABLE 2
Voting Patterns by Shareholder Proposal Type

| | Entire sample period | | Pre-SOX (1997-2001) | | Post-SOX (2002-2008) | | Post-Disclose (2009-2011) | |
|--|----------------------|-------------|---------------------|-------------|----------------------|-------------|---------------------------|-------------|
| | N | % Votes for | N | % Votes for | N | % Votes for | N | % Votes for |
| All Proposals | 64 | 17.4% | 30 | 16.2% | 29 | 17.7% | 5 | 23.0% |
| By Proposal Type | | | | | | | | |
| <i>Increase Diversity</i> | | | | | | | | |
| Commit to increasing diversity | 50 | 16.8% | 25 | 15.0% | 20 | 17.6% | 5 | 23.0% |
| Make greater efforts to locate qualified candidates | 48 | 17.9% | 18 | 17.4% | 25 | 17.2% | 5 | 23.0% |
| Adopt a formal process of inclusiveness | 39 | 17.0% | 19 | 15.8% | 15 | 16.6% | 5 | 23.0% |
| <i>Report on Diversity</i> | | | | | | | | |
| Report on efforts to diversify the board | 58 | 17.6% | 27 | 16.0% | 26 | 18.2% | 5 | 23.0% |
| Describe the criteria for selecting board candidates | 32 | 19.5% | 22 | 17.9% | 10 | 23.2% | 0 | - |
| Report on the selection process | 45 | 18.4% | 22 | 17.9% | 22 | 18.1% | 1 | 38.6% |
| By Proponent Identity | | | | | | | | |
| Individual | 7 | 11.0% | 5 | 9.4% | 2 | 15.0% | 0 | - |
| Public Pension Fund | 6 | 19.8% | 0 | - | 4 | 22.9% | 2 | 13.5% |
| Religious Organizations and Pension Funds | 35 | 16.7% | 20 | 16.0% | 14 | 16.3% | 1 | 38.6% |
| Institutional Investor | 16 | 20.8% | 5 | 24.1% | 9 | 18.1% | 2 | 24.7% |

Note: This table reports voting patterns for the 64 proposals that went to vote over three time periods: prior to Sarbanes-Oxley (Pre-SOX), 1997-2001; following SOX (Post-SOX), 2002-2008; and following Regulation S-K (Post-Disclose), 2009-2011. Regulation S-K enhanced proxy statement disclosures

including those pertaining to board diversity. Specifically, the “comply or explain” provision 407(c)(2)(vi) of this rule requires firms to disclose whether and how nominating committees consider diversity in identifying nominees for directors. *% Votes For* is computed as the number of votes in favor divided by the number of votes in favor and against.

TABLE 3
Arguments made by Proposal Proponents

| | Financial | Social | Diff. |
|--|--|--------|-------|
| | <i>Percentage of proposals including this argument</i> | | |
| N | 22 | 42 | |
| Proponent Arguments | | | |
| <u><i>Current Status on Diversity:</i></u> There is currently no diversity reflected in the board of directors | 36.4% | 26.2% | |
| <u><i>Decision-making:</i></u> Diversity leads to better decision-making (consideration of more perspectives; solutions are more nuanced and comprehensive, less "groupthink") | 90.9% | 92.9% | |
| <u><i>Governance:</i></u> Diversity is necessary for sound governance (independence, accountability and responsiveness of board) | 45.5% | 33.3% | |
| <u><i>Talent Pool:</i></u> Board nominees come from a broader talent pool when diversity is included in search criteria; board diversity helps recruit, retain and promote the best people | 81.8% | 50.0% | * |
| <u><i>Firm Value:</i></u> Board diversity increases firm value (higher accounting and stock price performance, increased competitiveness, more attractive to investment community) | 90.9% | 64.3% | * |
| <u><i>Risk:</i></u> Diversity mitigates the risk of lawsuits and discrimination settlements | 0.0% | 7.1% | |
| <u><i>Representativeness:</i></u> The composition of the board of directors should reflect: the shareholder base, customers, employees, the population | 27.3% | 61.9% | ** |

Note: This table reports voting patterns for the 64 proposals that went to vote. Financial proposals are those with financially-motivated proponents, including pension funds, institutional investors and other; social proposals are those with socially-motivated proponents, including individuals and religious organizations. Proponent arguments are obtained from the text of the proposals, included in a firm's proxy statement.

†, *, **, *** indicate significance levels of the difference at the 0.10, 0.05, 0.01, and 0.0001 levels, respectively, using two-tailed tests.

TABLE 4
Panel A: Descriptive Statistics

| Variable name | n | Mean | s.d. | Median | Min. | Max. |
|--|----------|-------------|-------------|---------------|-------------|-------------|
| Target Firm-Years | 140 | | | | | |
| <i>Firm size</i> | | 8.276 | 1.600 | 7.905 | 5.071 | 13.510 |
| <i>Profitability</i> | | 0.064 | 0.091 | 0.066 | -0.269 | 0.525 |
| <i>Board Size</i> | | 8.893 | 2.792 | 8.0 | 5.0 | 19.0 |
| <i>CEO Duality</i> | | 0.636 | 0.483 | 1.0 | 0.0 | 1.0 |
| <i>CEO on the Nominating Committee</i> | | 0.093 | 0.291 | 0.0 | 0.0 | 1.0 |
| <i>Female Representation</i> | | 2.9% | 6.2% | 0.0% | 0.0% | 33.3% |
| <i>Board Independence</i> | | 61.1% | 21.0% | 62.5% | 11.1% | 91.7% |
| Non-target S&P 1500 Firm-Years | 140 | | | | | |
| <i>Firm size</i> | | 8.270 | 1.583 | 7.885 | 5.027 | 13.555 |
| <i>Profitability</i> | | 0.034 | 0.118 | 0.040 | -0.721 | 0.385 |
| <i>Board Size</i> | | 9.793 | 3.392 | 9.0 | 4.0 | 22.0 |
| <i>CEO Duality</i> | | 0.700 | 0.460 | 1.0 | 0.0 | 1.0 |
| <i>CEO on the Nominating Committee</i> | | 0.100 | 0.301 | 0.0 | 0.0 | 1.0 |
| <i>Female Representation</i> | | 10.2% | 8.5% | 11.1% | 0.0% | 50.0% |
| <i>Board Independence</i> | | 70.4% | 15.2% | 73.9% | 20.0% | 100.0% |
| Financial Target Firm-Years | 68 | | | | | |
| <i>Firm size</i> | | 7.992 | 1.534 | 7.609 | 5.071 | 13.014 |
| <i>Profitability</i> | | 0.070 | 0.103 | 0.079 | -0.269 | 0.525 |
| <i>Board Size</i> | | 8.206 | 1.928 | 8.0 | 5.0 | 12.0 |
| <i>CEO Duality</i> | | 0.662 | 0.477 | 1.0 | 1.0 | 1.0 |
| <i>CEO on the Nominating Committee</i> | | 0.074 | 0.263 | 0.0 | 0.0 | 1.0 |
| <i>Female Representation</i> | | 1.0% | 4.0% | 0.0% | 0.0% | 27.3% |
| <i>Board Independence</i> | | 60.1% | 22.2% | 64.6% | 11.1% | 88.9% |
| Social Target Firm-Years | 72 | | | | | |
| <i>Firm size</i> | | 8.544 | 1.626 | 8.151 | 5.071 | 13.510 |
| <i>Profitability</i> | | 0.058 | 0.078 | 0.052 | -0.257 | 0.218 |
| <i>Board Size</i> | | 9.542 | 3.297 | 9.0 | 5.0 | 19.0 |
| <i>CEO Duality</i> | | 0.611 | 0.491 | 1.0 | 0.0 | 1.0 |
| <i>CEO on the Nominating Committee</i> | | 0.111 | 0.316 | 0.0 | 0.0 | 1.0 |
| <i>Female Representation</i> | | 4.7% | 7.3% | 0.0% | 0.0% | 33.3% |
| <i>Board Independence</i> | | 62.1% | 19.9% | 62.5% | 16.7% | 91.7% |

Variables are defined in Panel B of this Table.

TABLE 4
Panel B: Correlations among Independent Variables

| Pearson correlation coefficients | | | | | | |
|---|---------------------|----------------------|--------------------|--------------------|--|------------------------------|
| | <i>Firm Size</i> | <i>Profitability</i> | <i>Board Size</i> | <i>Ceo Duality</i> | <i>CEO on the Nominating Committee</i> | <i>Female Representation</i> |
| <i>Profitability</i> | -0.1481 (0.0131) | | | | | |
| <i>Board Size</i> | 0.5940 (0.0000) | -0.0928 (0.1215) | | | | |
| <i>Ceo Duality</i> | 0.1706 (0.0042) | -0.0786 (0.1900) | 0.0846 (0.1581) | | | |
| <i>CEO on the Nominating Committee</i> | 0.1088 (0.0691) | -0.0413 (0.4913) | 0.1731 (0.0037) | 0.1790 (0.0026) | | |
| <i>Female Representation</i> | 0.3499 (0.0001) | 0.0011 (0.9860) | 0.3418 (0.0001) | 0.0168 (0.7796) | 0.0010 (0.9865) | |
| <i>Board Independence</i> | 0.0761 (0.2044) | -0.0459 (0.4442) | 0.0212 (0.7238) | 0.0932 (0.1197) | -0.1598 (0.0074) | 0.2364 (0.0001) |

Note: *Firm Size* is measured as the log of total assets; *Profitability* is defined as the return-on-assets, and is measured as income before extraordinary items divided by total assets. *Board size* is the total number of board members. *CEO Duality* is an indicator variable that equals one if the CEO also serves as the chair of the board, and zero otherwise. *CEO on the Nominating Committee* is an indicator variable that equals one if the CEO serves on the nominating committee, and zero otherwise. We measure female board representation (*Female Representation*) as the percentage of females on the board. The independence of the board of directors (*Board Independence*) is measured as the percentage of board members who are classified as independent. Board characteristics are obtained from RiskMetrics and financial data are obtained from Compustat. All independent variables are measured in the year prior to the target. Pearson correlation coefficients are reported, with significance levels in parentheses.

TABLE 5
Logistic Regression of Target Firm Antecedents
(Dependent Variable = *Target*)

| | <u>Model 1</u> | | | <u>Model 2</u> | | | <u>Model 3A</u> | | | <u>Model 3B</u> | | | <u>Model 3C</u> | | |
|--|-----------------------|----|-------|-----------------------|----|-------|-----------------------|----|-------|--------------------------|----|-------|----------------------|----|-------|
| | Target vs. Non-target | | | Target vs. Non-Target | | | Social vs. Non-Target | | | Financial vs. Non-Target | | | Financial vs. Social | | |
| | <i>Binomial</i> | | | <i>Binomial</i> | | | | | | <i>Multinomial</i> | | | | | |
| | Coeff. | | S.E. | Coeff. | | S.E. | Coeff. | | S.E. | Coeff. | | S.E. | Coeff. | | S.E. |
| Controls: | | | | | | | | | | | | | | | |
| <i>Firm Size</i> | 0.229 | * | 0.101 | 0.512 | ** | 0.123 | 0.505 | ** | 0.134 | 0.509 | ** | 0.156 | 0.005 | | 0.148 |
| <i>Profitability</i> | 3.245 | * | 1.436 | 4.602 | ** | 1.647 | 4.428 | * | 1.967 | 4.673 | * | 2.015 | 0.245 | | 2.234 |
| <i>Board Size</i> | -0.154 | ** | 0.052 | -0.096 | | 0.059 | -0.070 | | 0.063 | -0.116 | | 0.080 | -0.046 | | 0.079 |
| <i>CEO Duality</i> | -0.335 | | 0.270 | -0.489 | | 0.320 | -0.612 | † | 0.354 | -0.275 | | 0.399 | 0.338 | | 0.387 |
| <i>CEO on the Nominating Committee</i> | 0.207 | | 0.431 | -0.280 | | 0.521 | -0.087 | | 0.566 | -0.602 | | 0.676 | -0.515 | | 0.662 |
| Direct Effects: | | | | | | | | | | | | | | | |
| <i>Female Representation</i> | | | | -16.669 | ** | 2.515 | -12.310 | ** | 2.885 | -26.978 | ** | 4.766 | -14.668 | ** | 4.831 |
| <i>Board Independence</i> | | | | -2.180 | ** | 0.835 | -2.067 | * | 0.923 | -2.280 | * | 0.983 | -0.213 | | 0.904 |
| Target firm/years | 140 | | | 140 | | | | | | | | | | | |
| Non-target firm/years | 140 | | | 140 | | | 140 | | | 140 | | | | | |
| Financially motivated firm/years | | | | | | | | | | 68 | | | 68 | | |
| Socially motivated firm/years | | | | | | | 72 | | | | | | 72 | | |
| R ² | 0.0574 | | | 0.2907 | | | | | | 0.3409 | | | | | |
| Likelihood Ratio | 16.54 | | ** | 96.19 | | *** | | | | 116.73 | | *** | | | |

Note: In the first two columns, we estimate a binomial logistic regression where the dependent variable, *Target*, equals 1 if the firm receives a gender diversity-related shareholder proposal in year t , and 0 otherwise. In the next three columns, we estimate a multinomial logistic regression where *Target* is a multinomial variable with three categories: 1 if the firm receives a financially-motivated proposal, 2 if the firm receives a socially-motivated proposal, and 0 otherwise. *Firm Size* is measured as the log of total assets; *Profitability* is defined as the return-on-assets, and is measured as income before extraordinary items divided by total assets. *Board size* is the total number of board members. *CEO Duality* is an indicator variable that equals one if the CEO also serves as the chair of the board, and zero otherwise. *CEO on the Nominating Committee* is an indicator variable that equals one if the CEO serves on the nominating committee, and zero otherwise. We measure female board representation (*Female Representation*) as the percentage of females on the board. The independence of the board of directors (*Board Independence*) is measured as the percentage of board members who are classified as independent. Board characteristics are obtained from RiskMetrics and financial data are obtained from Compustat. All independent variables are measured in the year prior to the target.

†, *, **, *** indicate significance levels of the difference at the 0.10, 0.05, 0.01, and 0.0001 levels, respectively, using two-tailed tests.

TABLE 6
Change in Female Representation Following Shareholder Activism

| Panel A: Proportion of Boards with at least One Female Board Member (-1 to +2); Full Sample | | | | | | | | | |
|---|-----|---------|--------|--------|---------|---------|-------------------------|-------|----|
| | N | Year -1 | Year 0 | | Year +1 | Year +2 | Change Year -1 to +2 | | |
| Target | 120 | 21.7% | 30.0% | | 47.5% | 57.5% | 35.8% | ** | |
| Non-Target | 120 | 35.8% | 45.8% | | 46.7% | 52.5% | 16.7% | ** | |
| Difference | | -14.1% | ** | -15.8% | ** | 0.8% | 5.0% | 19.1% | ** |
| Panel B: Proportion of Boards with at least One Female Board Member (-1 to +2); Financial Proposals | | | | | | | | | |
| | N | Year -1 | Year 0 | | Year +1 | Year +2 | Change Year -1 to +2 | | |
| Target | 62 | 6.5% | 14.5% | | 37.1% | 50.0% | 43.5% | ** | |
| Non-Target | 62 | 27.4% | 41.9% | | 41.9% | 50.0% | 22.6% | ** | |
| Difference | | -20.9% | ** | -27.4% | ** | -4.8% | 0.0% | 20.9% | ** |
| Panel C: Proportion of Boards with at least One Female Board Member (-1 to +2); Social Proposals | | | | | | | | | |
| | N | Year -1 | Year 0 | | Year +1 | Year +2 | Change Year -1 to +2 | | |
| Target | 58 | 37.9% | 46.6% | | 58.6% | 65.5% | 27.6% | ** | |
| Non-Target | 58 | 44.8% | 50.0% | | 51.7% | 55.2% | 10.4% | * | |
| Difference | | -6.9% | -3.4% | | 6.9% | 10.3% | 17.2% | ** | |
| Panel D: Mean Percentage of Females on the Board (-1 to +2); Full Sample | | | | | | | | | |
| | N | -1 | 0 | | +1 | +2 | Change Year -1 to +2 | | |
| Target | 120 | 3.0% | 4.3% | | 6.7% | 8.1% | 5.1% | ** | |
| Non-Target | 120 | 4.4% | 5.4% | | 6.1% | 7.3% | 2.9% | ** | |
| Difference | | -1.4% | ** | -1.1% | † | 0.6% | 0.8% | 2.2% | ** |
| Panel E: Mean Percentage of Females on the Board (-1 to +2); Financial Proposals | | | | | | | | | |
| | N | -1 | 0 | | +1 | +2 | Change Year -1 to +2 | | |
| Target | 62 | 0.9% | 1.9% | | 4.6% | 6.4% | 5.5% | ** | |
| Non-Target | 62 | 3.2% | 4.6% | | 5.3% | 6.7% | 3.5% | ** | |
| Difference | | -2.3% | ** | -2.7% | ** | -0.7% | -0.3% | 2.0% | † |
| Panel F: Mean Percentage of Females on the Board (-1 to +2); Social Proposals | | | | | | | | | |
| | N | -1 | 0 | | +1 | +2 | Change Year -1 to +2 | | |
| Target | 58 | 5.3% | 6.8% | | 9.0% | 10.0% | 4.7% | ** | |
| Non-Target | 58 | 5.7% | 6.3% | | 6.9% | 8.0% | 2.3% | ** | |
| Difference | | -0.4% | 0.5% | | 2.1% | † | 2.0% | 2.4% | * |

Note: In Panels A – C of this Table, we report the proportion of boards with at least one female board member. In Panels D – F, we report the percentage of females on the board. We obtain data on female representation from Risk Metrics.

†, *, **, *** indicate significance levels of the difference at the 0.10, 0.05, 0.01, and 0.0001 levels, respectively, using two-tailed tests.

TABLE 7
Regression Analysis for Changes in Female Board Representation from Years -1 to +2
(Dependent Variable = *Change in Female Representation*)

| | <u>Model 1</u> | | <u>Model 2</u> | | <u>Model 3</u> | | <u>Model 4</u> | | <u>Model 5</u> | |
|------------------------------|----------------|-------|----------------|-------|--|-------|----------------|-------|----------------|-------|
| | | | | | <i>Target Firm versus PSM Control Firm</i> | | | | | |
| | Coeff. | S.E | Coeff. | S.E | Coeff. | S.E | Coeff. | S.E | Coeff. | S.E |
| <i>Intercept</i> | -0.037 | 0.032 | -0.021 | 0.022 | -0.018 | 0.019 | -0.021 | 0.022 | -0.021 | 0.022 |
| Controls: | | | | | | | | | | |
| <i>Firm Size</i> | 0.001 | 0.004 | | | | | | | | |
| <i>Profitability</i> | 0.056 | 0.058 | | | | | | | | |
| <i>Board Size</i> | 0.005 ** | 0.002 | 0.005 ** | 0.002 | 0.006 ** | 0.002 | 0.006 ** | 0.002 | 0.005 ** | 0.002 |
| <i>Female Representation</i> | -0.352 ** | 0.085 | -0.340 ** | 0.079 | -0.366 ** | 0.077 | -0.337 ** | 0.080 | -0.340 ** | 0.080 |
| <i>Board Independence</i> | 0.007 | 0.025 | | | | | | | | |
| <i>CEO Duality</i> | 0.005 | 0.009 | 0.005 | 0.008 | 0.003 | 0.008 | 0.005 | 0.008 | 0.005 | 0.008 |
| <i>CEO on the</i> | | | | | | | | | | |
| <i>Nominating Committee</i> | 0.010 | 0.015 | 0.008 | 0.015 | 0.004 | 0.014 | 0.008 | 0.015 | 0.008 | 0.015 |
| <i>Post SOX</i> | | | | | 0.002 | 0.009 | | | | |
| <i>Post Disclose</i> | | | | | 0.002 | 0.011 | | | | |
| <i>Year Dummies</i> | Included | | Included | | Not Included | | Included | | Included | |
| <i>Industry Dummies</i> | Included | | Included | | Included | | Included | | Included | |
| Direct Effects: | | | | | | | | | | |
| <i>Target</i> | 0.017 * | 0.008 | 0.017 * | 0.008 | 0.017 * | 0.008 | 0.020 * | 0.010 | 0.017 † | 0.009 |
| Interaction: | | | | | | | | | | |
| <i>Target * Social Prop.</i> | | | | | | | -0.004 | 0.012 | | |
| <i>Target * Vote</i> | | | | | | | | | 0.000 | 0.012 |
| Target firm/years | 120 | | 120 | | 120 | | 120 | | 120 | |
| Non-target firm/years | 120 | | 120 | | 120 | | 120 | | 120 | |
| Adjusted R ² | 11.5% | | 12.3% | | 12.9% | | 12.0% | | 11.9% | |

Note: We define the dependent variable *Change in Female Representation* as the change in the percentage of female representation from year -1 through year +2. We obtain data on female representation from Risk Metrics. Our main variable of interest, *Target*, equals 1 if the firm receives a gender diversity-related shareholder proposal in year t , and 0 otherwise. *Firm Size* is measured as the log of total assets; *Profitability* is defined as the return-on-assets, and is measured as income before extraordinary items divided by total assets. *Board size* is the total number of board members. *CEO Duality* is an indicator variable that equals one if the CEO also serves as the chair of the board, and zero otherwise. *CEO on the Nominating Committee* is an indicator variable that equals one if the CEO serves on the nominating committee, and zero otherwise. We measure female board representation (*Female Representation*) as the percentage of females on the board. The independence of the board of directors (*Board Independence*) is measured as the percentage of board members who are classified as independent. We include 1-digit SIC code dummy variables for industry membership and also dummy variables to control for the year. Board characteristics are obtained from RiskMetrics and financial data are obtained from Compustat.

†, *, **, *** indicate significance levels of the difference at the 0.10, 0.05, 0.01, and 0.0001 levels, respectively, using two-tailed tests.