

On the Alignment of Stakeholder Orientation between the Board and Managers

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ABSTRACT

An implication of the theoretical model in Adams and Ferreira (2007) is that well-aligned stakeholder orientation between the board and managers can be beneficial for shareholders because managers are then more likely to provide information to the board, thereby allowing the board to offer better advice to managers. We test this and related implications using a panel dataset of indices that attempt to capture the degree of stakeholder orientation of the board and managers. We find that the focal firm's stakeholder orientation index (*SO Index*) is strongly associated with the *SO Index* of other firms on whose board the outside directors of the focal firm have a board seat (*Board SO Index*). In addition, the higher the *Board SO Index* relative to the focal firm's *SO Index*, the larger is the subsequent change in *SO Index* observed for the focal firm. This evidence suggests that outside directors influence the focal firm's stakeholder orientation. In the director selection process, prospective directors expected to increase the alignment of stakeholder orientation between the board and managers are more likely to be chosen, and are accompanied with a higher stock price reaction upon director appointment announcement. Finally, we find that a larger divergence in stakeholder orientation between the board and managers negatively affects firm value, and that this effect is concentrated in environments where the board's advisory role is likely to be more critical. Overall, our results suggest that greater congruence of interests between the board and managers regarding project selection can be beneficial for shareholders.

JEL classification: G31, G34, L25

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1. Introduction

[Shleifer and Vishny \(1997\)](#) define corporate governance as “the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment.” By this definition, good governance amounts to hiring competent managers who are accountable to investors. For most financial economists, good corporate governance can only be achieved if managers recognize the primacy of shareholder interests. The implicit assumption here is that the other stakeholders of the firm like debtholders, employees, suppliers, customers, etc. are protected by contracts and regulation (see, e.g., [Tirole \(2001\)](#) and [Bénabou and Tirole \(2010\)](#)). If that is indeed the case, then why do some firms take a stakeholder orientation by investing in corporate social responsibility (*CSR*)? [Bénabou and Tirole \(2010\)](#) suggest that firms may be motivated to do so either because incentive schemes and career concerns can make managers myopic and they implement a long-term outlook by investing in *CSR*, information and transactions costs create a demand for corporate philanthropy on behalf of investors, or managers desire to invest in *CSR*. The first two motivations suggest a positive relation between firm value and stakeholder orientation, while the third motivation would suggest the reverse. Regardless of the exact motivation for investing in *CSR*, the degree of stakeholder orientation of managers will influence the firm’s project choices. In a similar vein, the stakeholder orientation of board members will also have a bearing on their preferred investment choices. Thus, better stakeholder orientation alignment between the firm and the board is likely to reflect greater congruence of interests between them regarding project selection.

In this paper, our focus is on the impact of the alignment/misalignment of stakeholder orientation between the board and managers on director selection, subsequent changes in managers’ stakeholder orientation, and firm value. Specifically, we empirically address the following questions. First, is there an association between the board’s stakeholder orientation and managers’ stakeholder orientation? Second, does the board’s stakeholder orientation bias vis-à-vis the managers’ stakeholder orientation impact subsequent changes in the managers’ stakeholder orientation? Third, in the selection of new directors, does it matter whether the prospective director will likely reduce or increase the gap between the board’s and

managers' stakeholder orientation? Finally, what is the impact of the gap in stakeholder orientation between the board and managers on firm value?

The primary motivation for our study comes from the theoretical model of [Adams and Ferreira \(2007\)](#) on friendly boards. In their model, they relax the assumption that the board's preferences regarding project choice are aligned with those of shareholders. They show that when board preferences are more closely aligned with those of managers, the advice provided by the board will be of higher quality. The intuition for their result is as follows. If there is a bigger gap between the stakeholder orientation of the board and managers and, as a result, a larger gap in their bias towards certain types of projects, then the board is likely to be more intrusive, thereby creating fissures between the board and managers. Directors typically have limited access to firm-specific information and are at a relative disadvantage in assessing the reliability of this information. Thus, the more intrusive the board, the more hesitant managers will be to reveal firm-specific information to it because the board will then monitor aggressively and interfere in managerial decision making. The cost to managers from providing this information is that they will be unable to implement their favorite projects and, thus, lose some of the benefits of control. Consequently, managers will provide less firm-specific information to the board if their stakeholder orientation with the board is not well-aligned.

[Adams and Ferreira \(2007\)](#), thus, predict that when the board has an advisory role, shareholder value can be higher when the project preferences of the board and managers are more closely aligned. Closer alignment may, however, be detrimental to the board's monitoring role. As such, their model has no explicit prediction regarding whether more or less stakeholder orientation alignment is value enhancing for a unitary board structure like in the U.S. Recent work, however, has increasingly recognized the salience of the advisory role of boards. For example, [Brickley and Zimmerman \(2010\)](#) report that nominating committees and search firms are of the view that "the primary differentiating factor among prospective board members is their potential contribution to strategy – not differential abilities to monitor managers or to perform other board tasks." This view is borne out in surveys of corporate directors that find that directors place more emphasis on their role in setting firm policy rather than on their role in monitoring management

(e.g., [Demb and Neubauer \(1992\)](#) and [Adams \(2009\)](#)). In light of this survey evidence on the primacy of the advisory role of directors, we predict that firm value will be greater if there is better stakeholder orientation alignment between managers and the board, and that this effect is likely to be stronger for firms operating in environments where board advice is more crucial.

In choosing directors, managers will recognize that the stakeholder orientation of board members is likely to reflect the practices of other firms on whose boards they sit.¹ These interlocked directors will share their experiences with other board members, thereby impacting the focal firm's stakeholder orientation. Thus, in line with [Adams and Ferreira \(2007\)](#), prospective directors who upon appointment will narrow the stakeholder orientation gap between the board and managers are more likely to be selected. Consequently, at the level of the board, we predict a positive association between the board's stakeholder orientation and the firm's stakeholder orientation. Finally, if for some reason there is a gap between the stakeholder orientation of the board and the firm's managers, then this will influence future changes in the firm's stakeholder orientation in the same direction.² Specifically, we predict that a larger existing gap between the stakeholder orientation of the board and managers will result in greater future changes in the firm's stakeholder orientation, with the net result being closer alignment in stakeholder orientation between the board and managers over time.³

To test the above hypotheses, we retrieve data from the *KLD Stats* database to construct indices that capture the degree of stakeholder orientation of the board and managers. To compute the stakeholder orientation of a firm (*SO Index*), we draw upon the corporate social responsibility (*CSR*) literature and focus on *CSR* activities related to non-shareholder stakeholders of the firm. Specifically, we construct two

¹ The decision to appoint a director is the result of matching between a director's skills, expertise, and values and the firm's resource needs and culture. We, therefore, infer the stakeholder orientation of a director by his/her board memberships. In a recent paper, [Adams, Licht and Sagiv \(2011\)](#) conduct a survey of directors and CEOs in public corporations in Sweden and find that directors' personal values and roles influence their stakeholder orientation. We believe these two approaches to infer directors' stakeholder orientation are not in conflict with each other because the director selection process will also attempt to match on shared values between the firm and the prospective director.

² The gap may exist because some firms select directors who are exposed to different perspectives and practices to help change their own policies or that the match between the firm and the director on stakeholder orientation was imperfect because the firm was also looking for other skills and expertise in the selection of its directors. See [Bouwman \(2011\)](#) for similar arguments related to corporate governance practices.

³ [Bouwman \(2011\)](#) examines corporate governance practices and finds evidence consistent with the above ideas.

stakeholder orientation measures. In constructing the first measure, we account for the following dimensions: *Community*, *Diversity*, *Employee Relations*, *Environment*, and *Product*. We additionally include the *Human Rights* dimension to build the second measure.⁴ We construct these measures such that a higher value would imply that the firm has a stronger orientation towards stakeholders. We obtain information on boards of directors over the period 1990-2005 from *Compact Disclosure*. This database is the same as that used in [Dass, Kini, Nanda, Onal and Wang \(2014\)](#). We augment this board database with board information obtained from *SEC Edgar* proxy statements for the period 2006-2012. We obtain financial information from *COMPUSTAT* and *CRSP*. We restrict the sample period of our study to 2003-2012 due to *KLD*'s limited coverage prior to the beginning of that period. Our final sample consists of 3,090 unique firms, 14,255 firm-year observations, 26,427 unique directors, and 107,069 director-year observations.

Our empirical strategy to test these hypotheses unfolds as follows. First, we examine whether the one-year lagged stakeholder orientation of the outside directors on the board (*Board SO Index*) – measured as the equally-weighted average of the stakeholder orientation index level of firms that are interlocked through these outside directors with the focal firm – is associated with the stakeholder orientation index level of the focal firm.⁵ Throughout our empirical analysis we implicitly assume that a focal firm's stakeholder orientation largely reflects the preferences of its top managers. We, therefore, use managers' stakeholder orientation and the firm's stakeholder orientation interchangeably. In the estimated OLS regressions we control for year- and firm-fixed effects as well as factors that are likely to affect the stakeholder orientation of the focal firm. We find a highly significant positive relation between the stakeholder orientation of the firm and the stakeholder orientation of the board, thereby indicating that the stakeholder orientation of the firm is similar to the stakeholder orientation of the board.

⁴ We provide details regarding our stakeholder orientation measures in Section 3.2.

⁵ In our main analysis, we focus on the stakeholder orientation of the outside directors on the board because we want to make a clear distinction between the stakeholder preferences of outside directors and inside directors (managers) on the focal firm's board. We subsequently repeat our tests by including all board members (inside and outside directors) in computing the board's stakeholder orientation, and find that our inferences remain the same. These results are reported in Section 8 in the paper.

Second, we examine whether a bigger board bias towards stakeholder orientation vis-à-vis the firm results in larger subsequent changes in the firm's orientation towards stakeholders. In the estimated OLS regressions, we again control for year- and firm-fixed effects. The dependent variable in these regressions is the change in the firm's stakeholder orientation and the independent variable is the lagged difference in the stakeholder orientation between the board and the firm. In all the estimated regressions, we document a significant positive relation between them, thereby indicating that the board's stakeholder orientation bias does influence subsequent changes in the stakeholder orientation of the firm. We use two distinct approaches to correct for any bias resulting from endogeneity issues. First, we use a 2SLS regression methodology to account for the possibility that a missing latent factor like CEO power can affect both the board's stakeholder orientation bias and subsequent changes in the firm's stakeholder orientation. We find a significant positive relation between the subsequent change in the firm's stakeholder orientation and the instrumented board's stakeholder orientation bias. Second, we extract the *exogenous* change in the board's stakeholder orientation bias using a procedure similar to that detailed in [Bouwman \(2011\)](#), and find this exogenous component to be significantly positively related to the subsequent change in the firm's stakeholder orientation. Thus, consistent with our prediction, we find evidence indicating that the board's stakeholder preferences do influence the focal firm's stakeholder orientation, thereby achieving better alignment in stakeholder orientation between the board and managers over time.

Third, we use logit regression models to determine whether a prospective director will be appointed to the board of the focal firm. In the estimated director selection models, we find that a potential director has a higher probability of getting a board seat on the focal firm if the appointment of that prospective director will reduce the gap in stakeholder orientation between the board and managers. We also find that the abnormal returns upon announcement of a director's appointment are higher if the director will reduce the stakeholder orientation gap between the board and managers.

Finally, we examine the relation between firm value (proxied for by Tobin's Q) and the absolute gap in stakeholder orientation between the board and the firm (*Board SO Gap*). We conduct a series of tests to assuage concerns regarding endogeneity. Specifically, we always use lagged *Board SO Gap* in our

estimated OLS regression models, and instrument for lagged *Board SO Gap* in our estimated 2SLS regression models. Additionally, we control for firm- and year-fixed effects to account for time-invariant firm-specific factors and time trends in all our estimated regression models. We also conduct a quasi-natural experiment associated with shocks to *Board SO Gap* arising from exogenous shareholder-initiated governance proposals at firms interlocked with the focal firm through its outside directors. The results from these tests suggest that firm value is higher if there is closer alignment between the stakeholder orientation of the board and managers.

The natural question that arises then is why we do not observe stakeholder orientation alignment between the board and managers for all firms. As per [Adams and Ferreira \(2007\)](#), the answer lies in the trade-off between the need for advising and monitoring. The alignment in stakeholder orientation between the board and managers should be relatively more important in economic environments where the board's advisory role is more crucial. [Dass, Kini, Nanda, Onal and Wang \(2014\)](#) argue that the information gap between the board and the management is likely to be larger for firms that produce differentiated and innovative goods (which require specialized inputs and whose level of demand is harder to predict) and are characterized by high R&D intensity, SG&A expenditures, and advertising expenses. These types of firms will also face higher contractual frictions due to their greater reliance on relationship specific investments. Accordingly, there will be a greater need for alignment between the board and managers for these types of firms in order to induce managers to reveal firm-specific information to the board. This flow of information will allow the board to be more effective in its critical advisory role that includes advising managers about how to deal with the contracting and information problems they face in an incomplete contracts setting. We find that the negative relation between firm value and misalignment in stakeholder orientation between the board and managers for the overall sample are driven by firms operating in environments where: (i) the information gap is larger and (ii) the advisory role of boards is likely to be more important. We view these results to be broadly consistent with the predictions in [Adams and Ferreira \(2007\)](#).⁶

⁶ [Schmidt \(2015\)](#) uses social connections between the CEO and the board to proxy for board friendliness. He finds that friendly boards enhance bidder value in mergers and acquisitions when advising needs are high. We arrive at

Our paper makes the following contributions. First, it is most closely related to the work of [Adams and Ferreira \(2007\)](#) as well as [Bouwman \(2011\)](#). Consistent with the idea in [Adams and Ferreira \(2007\)](#) that friendly boards can be beneficial to shareholders' interests, we find that shareholders are better off when the board's project preferences are more closely aligned with the project preferences of managers, and that this relation is driven by sub-samples where the advisory role of the board is likely to be more critical. [Bouwman \(2011\)](#) suggests that a firm's corporate policies can be affected by the experience of its directors as board members of other firms. While [Bouwman \(2011\)](#) specifically examines corporate governance practices, our evidence suggests that the stakeholder orientation of a firm is also influenced by its connected directors. Additionally, we complement the work on the determinants of a firm's *CSR* investments by finding that they are also influenced by information transfers through director networks (see, e.g., [Bénabou and Tirole \(2010\)](#); [McWilliams and Siegel \(2001\)](#); [Krüger \(2010\)](#); and [Campbell \(2007\)](#)). The Securities and Exchange Commission recently mandated that firms provide investors with information on "...the particular experience, qualifications, attributes or skills that qualified that person to serve as a director of the company, and as a member of any committee that the person serves on or is chosen to serve on, in light of the company's business" ([SEC \(2009\)](#), p.29). The evidence presented in [Bouwman \(2011\)](#) and in our paper suggests that the involvement on the boards of other firms is an important aspect of a director's experience because of the transference of corporate policies and practices through director networks.

Our paper is also related to the growing literature on interlocking directorates (see, e.g., [Dooley \(1969\)](#); [Bouwman \(2011\)](#); [Masulis, Wang and Xie \(2012\)](#); and [Dass, Kini, Nanda, Onal and Wang \(2014\)](#)). Specifically, we add to the literature on the determinant of interlocking directorates by showing that a director is more likely to be selected if her appointment on the board of the focal firm will reduce the stakeholder orientation gap between the board and managers. Finally, there is an extensive theoretical and

similar conclusions about friendly boards by using greater congruence in project selection between the firm and the board to proxy for board friendliness and a more general experimental setting.

empirical literature on whether corporate social responsibility (CSR) investments – which we proxy for with our stakeholder orientation indices – are in the best interest of shareholders. The evidence generally points to either no correlation or a weak positive correlation between firm value and CSR investments (see, e.g., [Orlitzky, Schmidt and Rynes \(2003\)](#); [Margolis and Elfenbein \(2008\)](#); and [Margolis, Elfenbein and Walsh \(2009\)](#) for meta analyses). We augment this literature by focusing on the alignment in stakeholder orientation between the board and managers rather than the stakeholder orientation of the firm itself.

The rest of our paper is organized as follows. Section 2 presents our hypotheses. In Section 3, we detail our sample selection procedure and describe our variables. Section 4 examines the association between the board and firm stakeholder orientation while, in Section 5, we examine the relation between the board's stakeholder orientation bias and the future change in the firm's stakeholder orientation bias. In Section 6, we examine director selection models and the announcement-period wealth effects of new director appointments. Section 7 examines the relation between firm value and the absolute gap in stakeholder orientation between the board and managers. In Section 8, we repeat all our tests by computing measures of board stakeholder preferences based on all board members (inside and outside directors). The paper concludes in Section 9.

2. Hypotheses

We detail below the hypotheses that we test in this paper. These hypotheses are discussed in detail in Section 1 (Introduction). For purposes of brevity, we do not repeat the discussion in this section.

Hypothesis 1. *The stakeholder orientation of the focal firm is associated with the stakeholder orientation of its board of directors.*

Hypothesis 2. *A larger gap between the stakeholder orientation of the board and the focal firm's managers will subsequently result in bigger changes in the firm's stakeholder orientation in the same direction.*

Hypothesis 3. *A prospective director is more likely to be selected by the focal firm to serve on its board if the appointment of that prospective director will reduce the gap in stakeholder orientation between the board and managers.*

Hypothesis 4. *Firm value will be higher if there is greater stakeholder orientation alignment between the board and managers, and this effect will be stronger for firms operating in environments where board advising is more critical.*

3. Sample selection and variable description

In this section, we describe in detail our sample selection criteria. We then spell out in detail how we compute the stakeholder orientation index for the firm and the board. Finally, we provide descriptive statistics on the firm and board stakeholder orientation index, board and director characteristics, and firm-level attributes. The detailed description of variable computation is provided in the Appendix.

3.1. Sample selection criteria

We use data retrieved from the *KLD Stats* database (currently part of *MSCI*) to construct measures of the degree of stakeholder orientation of boards of directors and managers. *KLD* started tracking firms' corporate social responsibility investments since 1991. The initial coverage universe included 500 largest U.S. companies by market capitalization and about 150 firms in *MSCI KLD Social Index*. The coverage was expanded to the 1,000 largest U.S. firms in 2001. Starting from 2003, *KLD* covers 3,000 largest U.S. firms.

We obtain information on boards of directors over the period 1990-2005 from *Compact Disclosure*. This database is the same as that used in [Dass, Kini, Nanda, Onal and Wang \(2014\)](#). We augment this database with board information obtained from SEC Edgar proxy statements for the period 2006-2012 by using a Python script.⁷ Each director is assigned a unique identifier in the merged boards of directors' database. As we are interested in stakeholder orientation variations induced by director networks, we focus on *KLD* firms that share at least one common director with another firm (henceforth referred to as an interlocked firm). For interlocked firms not covered by *KLD* database, we set those firms' stakeholder orientation scores to their peer averages calculated based on firms from the same Fama-French (FF) 17 industry classification and size tercile ([Bouwman 2011](#)). To reduce the impact of these added firms, we

⁷ We double-check this information using *BoardEx* director identifiers, names, job titles, and ages.

allow at most one non-*KLD* interlocked firms for a firm-year observation. We also exclude an observation when its only interlocked firm is outside the *KLD* universe.

Due to *KLD*'s limited coverage in early periods and our sample selection criteria, we restrict the sample period of our study to 2003-2012. Specifically, the number of firms satisfying our sample selection criteria range from 64 in 1991 to 181 in 2002. In our sample period 2003-2012, the coverage is more uniform ranging from a low of 1,363 firms in 2005 to a high of 1,796 firms in 2009 and, thus, we use this period to increase the power of our tests and ensure *KLD* coverage consistency. In addition, we obtain financial information from *COMPUSTAT* and *CRSP*. Our final sample consists of 3,090 unique firms, 14,255 firm-year observations, 26,427 unique directors, and 107,069 director-year observations.

3.2. Measures of stakeholder orientation for firm and board of directors

To compute the stakeholder orientation of a firm, we draw from the corporate social responsibility (*CSR*) literature and focus on *CSR* activities related to non-shareholder stakeholders of the firm (see, e.g., [Deng, Kang and Low \(2013\)](#); [Servaes and Tamayo \(2013\)](#); and [Krüger \(2015\)](#)). Specifically, we construct two stakeholder orientation index (*Firm SO Index*) measures. In the first measure (*Firm SO Index 5*), we include the following five dimensions: *Community*, *Diversity*, *Employee Relations*, *Environment*, and *Product*. In the second measure (*Firm SO Index 6*), we additionally include *Human Rights*. Under each broad dimension, *KLD* includes sub-categories that are rated as strengths or concerns. Each strength (concern) is given a score of +1 (-1). Following [Deng, Kang and Low \(2013\)](#) and [Servaes and Tamayo \(2013\)](#), the sum of the strength and concern scores under each broad *KLD* dimension are separately scaled by the respective number of available *KLD* strength and concerns in the same year. Thus, the index for each dimension is the scaled strength minus the scaled concern measure. For example, if every available sub-category under *Community* is rated as a strength (concern) and there is no sub-category rated as a concern (strength), then the *Community* index would take on the value of +1 (-1). The value for *Firm SO Index 5* (*Firm SO Index 6*) is then the sum of the index for each of the 5 (6) broad dimensions. The range of values

that *Firm SO Index 5* and *Firm SO Index 6* can take on is (-5, +5) and (-6, +6), respectively. We use both indices to proxy for managerial stakeholder-related preferences.⁸

We compute the board stakeholder orientation index (*Board SO Index*) by generally following the approaches described in [Bouwman \(2011\)](#) to compute the governance orientation of directors. Specifically, *Board SO Index* is calculated as the average of all the outside directors' stakeholder orientation index (*Director SO Index*) of the focal firm. As mentioned earlier, we only include outside directors in computing *Board SO Index* because we want to make a clear distinction between professional directors (outside directors) and board members who are full-time employees of the firm (inside directors).⁹ We exclude firms that do not have interlocked outside directors as we are interested in the variation in board stakeholder orientation induced by director networks. For outside directors who do not sit on any other boards, we set the director's *SO Index* to the *SO Index* of the focal firm. For outside directors who sit on multiple boards, we use the average of the *SO Index* value of all the *other* firms (excluding the focal firm) on which they have directorships. For outside directors sitting on the boards of interlocked firms not covered by the *KLD* database, we set those firms' *KLD* scores to their peer averages calculated based on firms from the same Fama-French 17 industry and size tercile. To reduce the impact of these firms, we allow at most one non-*KLD* interlocked firm for a firm-year observation. We also exclude an observation when its only interlocked firm is outside the *KLD* universe. Based on whether we focus on either five or six broad *KLD* categories, our two measures of board stakeholder-related preferences are *Board SO Index 5* and *Board SO Index 6*, respectively.¹⁰

⁸ In untabulated results, we also conduct our tests based on each individual dimension separately and generally find results consistent with those reported in the paper. We do not report these results for purposes of brevity.

⁹ We repeat all our tests using board stakeholder orientation measures that include all board members (inside and outside directors). The results from these robustness tests are discussed in Section 8 and reported in Internet Appendix Tables 6 – 10.

¹⁰ We also attempt the following two alternative weighting schemes. First, to compute each director's *SO Index*, we weight the *SO Index* of the firms on whose board he/she has a seat by firm size (assets). The justification for this weighting scheme is based on the presumption that getting a board seat on a larger firm is likely be more prestigious. Second, we weight each director's *SO Index* across all outside directors by the director's number of outside directorship to obtain the *Board SO Index*. The reasoning for this weighting scheme is that more effective directors are likely to be rewarded with additional directorships in a well-functioning market for outside directors. In untabulated results, we find that none of our inferences in the paper change using these alternative approaches to

The descriptive statistics for the firm and board stakeholder-related preferences are reported in Panel A of Table 1. The mean (median) values for *Firm SO Index 5* and *Firm SO Index 6* are -0.040 (0.000) and -0.052 (0.000), respectively. In comparison, the mean (median) values for *Board SO Index 5* and *Board SO Index 6* are -0.039 (-0.026) and -0.050 (-0.033), respectively. In our detailed examination of the distribution of *Firm SO Index* for our sample of firms, we find that 35% (34%) of firm-year observations have a zero value for *Firm SO Index 5* (*Firm SO Index 6*). Further investigation shows that 34% (33%) of firm-year observations have *no KLD* coverage, i.e., neither strengths nor concerns are listed for any of the sub-categories within the broad categories.¹¹ Thus, it appears that almost always when *Firm SO Index 5* (*Firm SO Index 6*) has a zero value, *KLD* does not list either strengths or concerns for any of the sub-categories that go into its computation. When we examine the characteristics of firms that have non-zero versus zero scores, we find the firms with zero scores tend to be smaller, younger, and have lower analyst following. While it is entirely possible that *KLD* did not list strengths and concerns for these firms after detailed analysis, it also raises the possibility that these firms did not receive the same degree of due diligence that larger and more visible firms did. To account for this possibility, in all our tests, we also report the results for a subsample that excludes firms that have *Firm SO Index 5* (*Firm SO Index 6*) equal to zero.

3.3. Board and director characteristics

Descriptive statistics on board and director characteristics are provided in Panel B of Table 1. We find that the mean (median) age of the CEO (*CEO Age*) is around 55 years, and around 54% of CEOs in our sample also hold the position of Chairman of the board (*CEO Duality*). The mean (median) board size (*Board Size*) is about 9 board members. The mean (median) proportion of outside directors (*Outside Directors*) on the board is 76.7% (80.0%). Further, about 41% of board members have board seats on other firms (*Interlocked Directors*), and about 50% of outside directors serve on two or more of the principal

computing the *Board SO Index*. Regardless of the weighting scheme, our measures of board stakeholder orientation reflect the stakeholder orientation of firms directly connected to the focal firm through the director network.

¹¹ The distribution is very similar when we examine firms covered in the entire *KLD* universe.

monitoring committees – Audit, Compensation, and Nominating (*Proportion Monitoring Directors*). Finally, the mean (median) number of directorships held by a director (*Number of Directorships*) is 1.39 (1), and mean (median) director age is 59.94 years (60 years).

3.4. Firm characteristics

Finally, descriptive statistics on firm characteristics are provided in Panel C of Table 1. All dollar-denominated variables are adjusted for inflation to year 2009 dollars. Additionally, all variables are winsorized at their 1% and 99% levels. The mean (median) *Tobin's Q* and return on assets (*ROA*) are 1.87 (1.47) and 11.2% (11.4%), respectively. Further, we find that the mean (median) firm size (*Firm Size*) is approximately \$8.80 billion (\$1.47 billion) and the mean (median) industry market share (*Market share*) is 0.40% (0.10%). The mean (median) levels of R&D intensity (*R&D*), number of patents (*Patent Counts*), selling, general, and administrative expenses (*SG&A*), and advertising intensity (*Advertising*) are 3.1% (0.0%), 16.1 (0.0), 20.1% (14.8%), and 1.1% (0.0%), respectively. The mean (median) leverage (*Leverage*) and cash as a proportion of total assets (*Cash*) are 21.4% (18.4%) and 17.4% (9.5%), respectively. Finally, the mean (median) firm age (*Firm Age*) is 22.80 years (17 years) and the mean (median) industry unionization rate (*Unionization*) is 8.4% (4.2%).

4. The association between board and firm stakeholder orientations

In this section, we examine whether there is an association between the stakeholder orientation of the firm and the stakeholder orientation of the board. Specifically, we estimate the following OLS regression models:

$$\begin{aligned}
 \text{Firm SO Index}_{i,t} = & \beta_0 + \beta_1 \text{Board SO Index}_{i,t-1} + \beta_2 \text{Peer SO Index}_{i,t} & (1) \\
 & + \beta_3 \text{Firm Size}_{i,t-1} + \beta_4 \text{Leverage}_{i,t-1} + \beta_5 \text{Advertising}_{i,t-1} + \beta_6 \text{R\&D}_{i,t-1} + \beta_7 \text{ROA}_{i,t-1} \\
 & + \beta_8 \text{CEO Age}_{i,t-1} + \beta_9 \text{CEO Duality}_{i,t-1} + \beta_{10} \text{Unionization}_{i,t-1} \\
 & + \beta_{11} \text{Market Share}_{i,t-1} + \text{Year FE} + \text{Firm FE} + \varepsilon_{i,t}
 \end{aligned}$$

The results from this analysis are reported in Table 2. In this table, we report three sets of regressions. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the *Firm SO Index* is zero for reasons that were given earlier in Section 3.2. Finally, in

the third set, we only include firm-year observations if the number of board interlocks is at least 50%.¹² The reason for doing so is because we want to make sure that the estimated relation is not due to our substitution of *Firm SO Index* for directors who only sit on the board of the focal firm. In each set, the dependent variable in the first (second) regression model is *Firm SO Index* $5_{i,t}$ (*Firm SO Index* $6_{i,t}$). Accordingly, the main independent variable is *Board SO Index* $5_{i,t-1}$ (*Board SO Index* $6_{i,t-1}$) in the first (second) regression model. Also, to be consistent, we use *Peer SO Index* $5_{i,t}$ (*Peer SO Index* $6_{i,t}$) in the first (second) regression model in each set. Note that we are examining whether there is an incremental effect of the board's stakeholder preferences after accounting for peer effects. We also include firm and CEO characteristics as control variables. These control variables are similar in spirit to those used in the corporate social responsibility literature (see, e.g., Bénabou and Tirole (2010); McWilliams and Siegel (2001); Campbell (2007); and Di Giuli and Kostovetsky (2014)). We include year- and firm-fixed effects to control for time trends and time-invariant firm characteristics. Finally, we report robust standard errors that are clustered by firm.

In all the six reported regressions in Table 2, we find that the coefficient associated with *Board SO Index* is significantly positive at the 1% level of significance. The coefficient magnitude suggests significant alignment between directors' stakeholder orientation and the firm's stakeholder orientation. These results are also economically meaningful. For example, the coefficient associated with *Board SO Index 5* in Model 1 suggests that a one standard deviation increase in the *Board SO Index 5* is associated with about 0.16 increase in *Firm SO Index 5* (about 36% of *Firm SO Index 5* standard deviation). Notice that the coefficients associated with the *Peer SO Index* are also significantly positive at the 1% level. Thus, we find that even after controlling for the influence of peer firms, the stakeholder orientation of a firm is strongly associated with the stakeholder orientation of its directors that is derived from their board affiliations with other firms. In additional robustness tests, we substitute the *Peer SO Index* instead of the *Firm SO Index* for directors

¹² Note that this restriction significantly reduces the sample size used in the estimated regressions from 13,342 to 5,051. We arrive at the same inference if we restrict the sample to firm-years where at least 66.7% of the directors are interlocked with other firms. The sample size drops even more dramatically and is approximately 10% of that employed in the baseline regression models.

who only sit on the board of the focal firm in computing the *Board SO Index*. The logic here is that their attitude towards stakeholders will be influenced by what is happening at peer firms. In other robustness test, we assign a value of zero instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. The assumption here is that these directors have a neutral outlook towards stakeholders. The results for these alternative *Board SO Index* measures are reported in Internet Appendix Table 1. Here too we find that the coefficients associated with *Board SO Index 5 (Board SO Index 6)* are significantly positive in all reported regressions at the 1% level. We, thus, find support for the hypothesis that the focal firm's stakeholder orientation is associated with its board's stakeholder orientation.

5. Board's stakeholder orientation bias and changes in the firm's stakeholder orientation

In this section, we examine whether a higher board bias towards stakeholder orientation than the firm influences larger subsequent changes in the firm's orientation towards stakeholders. To examine the influence of the board's stakeholder orientation bias on changes in the firm's stakeholder orientation, we estimate the following OLS regressions:

$$\begin{aligned} \Delta Firm\ SO\ Index_{i,t} = & \beta_0 + \beta_1 Board\ SO\ Bias_{i,t-1} + \beta_2 \Delta Peer\ SO\ Index_{i,t} \\ & + \beta_3 Firm\ Size_{i,t-1} + \beta_4 Leverage_{i,t-1} + \beta_5 Advertising_{i,t-1} + \beta_6 R\&D_{i,t-1} + \beta_7 ROA_{i,t-1} \\ & + \beta_8 CEO\ Age_{i,t-1} + \beta_9 CEO\ Duality_{i,t-1} + \beta_{10} Unionization_{i,t-1} \\ & + \beta_{11} Market\ Share_{i,t-1} + Year\ FE + Firm\ FE + \varepsilon_{i,t} \end{aligned} \quad (2)$$

where $\Delta Firm\ SO\ Index_{i,t} = Firm\ SO\ Index_{i,t} - Firm\ SO\ Index_{i,t-1}$; $Board\ SO\ Bias_{i,t-1} = Board\ SO\ Index_{i,t-1} - Firm\ SO\ Index_{i,t-1}$; and $\Delta Peer\ SO\ Index_{i,t} = Peer\ SO\ Index_{i,t} - Peer\ SO\ Index_{i,t-1}$. In these estimated regressions, we include year- and firm-fixed effects, thereby controlling for time trends and time-invariant firm characteristics. Further, we employ robust standard errors clustered by firm.

The results from these regressions are reported in Table 3. The structure of this table is similar to Table 2 with odd (even) numbered regression models using the *SO Index* that includes the five (six) *KLD* categories specified earlier. In all six reported regressions, we find a significantly positive coefficient (at the 1% level) associated with *Board SO Bias_{i,t-1}*. These results suggest that the larger the board's bias (relative to the firm) towards stakeholders, the greater is the subsequent change in the firm's orientation

towards stakeholders. In addition to being statistically significant, these results are also quite economically significant. For example, the coefficient on *Board SO Bias 5* in Model 1 suggests that a one standard deviation change in *Board SO Bias 5* is associated with a subsequent change of 0.16 in the *Firm SO Index 5* (which is about 50% of the standard deviation of $\Delta Firm SO Index 5$). We also document a significantly positive relation between $\Delta Firm SO Index_{i,t}$ and $\Delta Peer SO Index_{i,t}$, thereby suggesting that changes in the firm's orientation towards stakeholders are also influenced by contemporaneous changes in peer firms' orientation towards stakeholders. Thus, the influence of the board appears to be incremental to the guidance obtained by the focal firm from peer firms.

While our primary independent variable is lagged and we include both year- and firm-fixed effects in our estimated models, it is still possible that a missing latent variable can influence *Board SO Bias_{i,t-1}* and $\Delta Firm SO Index_{i,t}$. For example, a powerful CEO can appoint board members who are more oriented towards stakeholders and, with their blessings, subsequently increase the firm's investments in corporate social responsibility purely for agency-motivated reasons. We partially address this concern by: (i) controlling for CEO attributes like *CEO Age* and *CEO Duality* and (ii) including year- and firm-fixed effects in our regressions. In addition, we also estimate 2SLS regression models to account for the possibility that there is some missing latent factor like CEO power that can impact both *Board SO Bias_{i,t-1}* and $\Delta Firm SO Index_{i,t}$.

In our 2SLS regression framework, we instrument for *Board SO Bias_{i,t-1}* by the pool of local directors (*Local Director Pool (Bias)*) who have a *Director SO Index* lower than the *Board SO Index* of the focal firm and, thus, whose membership on the focal firm's board can potentially reduce the *Board SO Bias*. In computing the pool of local directors, we exclude firms in the same Fama-French 17 industry and the focal firm. To define the local area, we use a radius of 100 km from the focal firm's corporate headquarter using historical headquarter information obtained from *S&P Capital IQ*.¹³ The larger the number of potential directors who can reduce the stakeholder orientation alignment between the board and the firm

¹³ We obtain qualitatively similar results if local area is defined using a radius of 250 km from the corporate headquarter.

(*Board SO Bias*), the more likely it is for the firm to have such directors and, therefore, the lower will be the *Board SO Bias*. There is, however, no reason to believe that a larger pool of such directors will directly influence changes in the firm's own stakeholder orientation. We, therefore, believe that this instrument meets the exclusion restriction. All our 2SLS regression specifications are exactly-identified because it is difficult to find good instruments and that the benefits of instrument validity tests using over-identified specifications are not easily apparent (Roberts and Whited 2013).

The results from our 2SLS regression analysis are reported in Table 4. We report six sets of 2SLS regression specifications. In each set, the first column contains results from the first-stage regression, while the second column contains results from the second-stage regression. In the odd (even) sets, the dependent variable is $\Delta Firm SO Index_{i,t}$ ($\Delta Firm SO Index_{6,i,t}$). The first two sets use the baseline sample, the second two sets use the sample without the firm-year observations with zero *Firm SO Index* values, and the third two sets only include firm-year observations if the board contains at least 50% interlocked directors. Our first-stage regression results (Models 1, 3, 5, 7, 9, and 11) indicate that the relationship between *Board SO Bias* and *Local Director Pool (Bias)* is significantly negative as predicted (significant at the 1% level). Further, the Difference-in-Sargan statistic indicates that the 2SLS regression methodology is appropriate given our chosen instrument. In the second-stage regressions (Models 2, 4, 6, 8, 10, and 12), we find that the coefficient on the predicted value of *Board SO Bias* is significantly positive at the 1% level. Thus, these tests suggest that board stakeholder preferences vis-à-vis the focal firm does influence future changes in the focal firm's stakeholder orientation in the same direction.¹⁴

Another potential endogeneity problem that we can encounter in this analysis is that the firm may already have decided to change its stakeholder direction in a given direction and it then appoints directors whose stakeholder orientation is in the same direction. If that is the case, then we cannot make a causal argument that directors' attitudes influence subsequent changes in the firm's stakeholder orientation. We

¹⁴ In additional tests, we find that the results are qualitatively similar if in the computation of *Board SO index* we replace *Firm SO index* by either: (i) the *Peer SO index* or (ii) a value of zero for directors who only sit on the board of the focal firm. These robustness results are reported in Internet Appendix Table 2.

follow the approach specified in [Bouwman \(2011\)](#) to address this issue. Specifically, we first limit the sample to firm-year observations for which there was no change in directors in year $t - 1$. We then decompose the change in *Board SO Bias* from year $t - 2$ to $t - 1$ into the following two parts:

$$\begin{aligned} \Delta Board SO Bias_{i,t-2 \text{ to } t-1} &= (Board SO Bias_{i,t-1} - Board SO Bias_{i,t-2}) \\ &= [Board SO Bias_{i,t-1} - Board SO Bias_{\text{ongoing directorships},i,t-1}] \\ &+ [Board SO Bias_{\text{ongoing directorships},i,t-1} - Board SO Bias_{i,t-2}] \end{aligned} \quad (3)$$

The first component captures the change in board bias due to existing directors adding new outside directorships, while the second component captures the change in board bias from ongoing outside directorships. As such, the first component is wholly attributable to the fact that other firms invited the focal firm's existing directors to join their boards and not because the focal firm chose new directors to serve on its board. Since the decision by other firms to appoint new directors is likely to be exogenous to the focal firm, the first component represents exogenous changes in board bias in year $t - 1$ (*Exogenous $\Delta Board SO Bias$*). On the other hand, the second component is the change in board bias due to ongoing outside directorships (*Endogenous $\Delta Board SO Bias$*). Finally, we estimate regressions similar to that specified in Equation (2), but with the exception that we replace $Board SO Bias_{i,t-1}$ with the above two components. If directors influence the focal firm's stakeholder orientation, then we should observe a significant positive relation between the exogenous change in $Board SO Bias_{i,t-1}$ and $\Delta Firm SO Index_t$.

The results from this analysis are reported in Table 5. We report results for three sets of models with each set containing two estimated regression models. The independent variable is $\Delta Firm SO Index 5_{i,t}$ ($\Delta Firm SO Index 6_{i,t}$) in the first (second) regression model. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the *Firm SO Index* is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. As before, we include year- and firm-fixed effects. Notice that the sample size drops dramatically in all these reported regressions because we restrict this analysis to firms that do not have a change in board membership in year $t - 1$. In all reported regressions, we find that the coefficient associated with *Endogenous $\Delta Board Bias$* is significantly positive at the 1% level. More importantly, we find that the

coefficient associated with *Exogenous Δ Board Bias* is significantly positive at the 5% level in all three regression models (Models 2, 4, and 6) with *Δ Firm SO Index 6* as the dependent variable and at the 10% level in two out of the three regression models (Model 1 and 5) with *Δ Firm SO Index 5* as the dependent variable. The generally significantly positive coefficient on *Exogenous Δ Board Bias* indicates that directors' stakeholder preferences do influence the focal firm's stakeholder orientation.¹⁵

6. Director selection models and announcement effects

In this section, we first examine whether a prospective outside director who is more likely to align the stakeholder orientation of the board and the firm has a higher probability of being selected by the firm to serve on its board of directors. We then examine whether there is a differential market reaction to announcements of outside director appointments depending on whether the director is likely to increase or decrease the stakeholder orientation alignment between the board and the firm.

6.1. Director selection and stakeholder orientation alignment between board and the firm

In this section, we examine the determinants of the selection of "new" outside directors by firms. We had earlier shown that the focal firm's stakeholder preferences are associated with their board members' stakeholder orientation. Additionally, we had shown that the gap in the stakeholder orientation between the board and the firm impacts the subsequent changes in the focal firm's stakeholder orientation. Our focus now turns to the selection of new outside directors by the firm. Specifically, we predict that there is a higher probability that firms will select directors who upon appointment to the board are likely to reduce the absolute gap in stakeholder orientation between the board and the firm. To conduct this analysis, we define a dummy variable, *Board SO Gap Decrease*, which takes the value one if the selection of the prospective director will reduce the absolute gap between the stakeholder orientation of the board and the firm ($|Board SO Index - Firm SO Index|$), and takes the value zero otherwise. We predict that there is a higher probability

¹⁵ In robustness tests, we find that the coefficients associated with *Exogenous Δ Board Bias* remains positive if in the computation of *Board SO index* we replace *Firm SO index* by either: (i) the *Peer SO index* or (ii) a value of zero for directors who only sit on the board of the focal firm. These coefficients are, however, only significantly different from zero at least at the 10% level for *Exogenous Δ Board Bias 6*. These results from these robustness tests are reported in Internet Appendix Table 2.

that a director ($Director\ Selection_{i,k,t}$) will be selected by the firm if *Board SO Gap Decrease* takes the value one instead of zero.

To test these predictions, we estimate the following logit regression models:

$$\log\left(\frac{Prob(Director\ Selection_{i,k,t} = 1)}{1 - Prob(Director\ Selection_{i,k,t} = 1)}\right) = \beta_0 + \beta_1 Board\ SO\ Gap\ Decrease_{i,k,t-1} \quad (4)$$

$$+ \beta_2 Governance\ Gap_{i,k,t-1} + \beta_3 Same\ Size_{i,k,t-1} + \beta_4 Same\ Industry_{i,k,t-1}$$

$$+ \beta_5 Same\ Location_{i,k,t-1} + \beta_6 ROA_{i,t-1} + \beta_7 Director\ Age_{k,t-1}$$

$$+ \beta_8 Directorships_{k,t-1} + Year\ dummy + Industry\ dummy + \varepsilon_{i,k,t}$$

The control variables are similar to those used by [Bouwman \(2011\)](#). For purposes of brevity, we do not justify the choice of these control variables in our director selection regression models because [Bouwman \(2011\)](#) provides a detailed justification for their inclusion in these models. These variables are defined in the Appendix. We also include *Governance Gap* as a control variable. This is a variant of the main variable of interest used by [Bouwman \(2011\)](#) in her director selection model, and is measured as the absolute gap between the director's governance preferences derived from her other directorships and the focal firm's governance preferences based on board size, percentage of outside directors on the board, and CEO duality.¹⁶

Our director selection models consist of 3,974 newly appointed outside directors. To estimate the logit regression models, we not only need to include the directors actually selected by the firm to serve on its board, but also those directors who could potentially have been selected. The selection models are restricted to potential directors who already sit on the board of at least one other firm. We need this restriction to infer the stakeholder orientation of directors. Further, we only include firms that appoint new outside directors. Finally, to make the computation tractable, we randomly select 5,000 directors as potential matches (instead of all directors as potential matches) for each firm-director pair. The results from our logit regressions are presented in Table 6. The main independent variable of interest is *Board SO Gap Decrease*. Specifically, as in Tables 2 and 3, we report three sets of regressions. In the first set, we report

¹⁶ The results reported in Table 6 are robust to controlling for the initial level of *Board SO Gap*, thereby alleviating the concern that we are picking up a spurious association between director selection and *Board SO Gap Decrease*.

our baseline regression models. In the second set, we exclude all firm-year observations where the *Firm SO Index* is zero for reasons that were given earlier. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, *Board SO Gap Decrease* is based on *Firm SO Index* $5_{i,t}$ and *Director SO Index* $5_{i,t}$ (*Firm SO Index* $6_{i,t}$ and *Director SO Index* $6_{i,t}$) in the first (second) regression model.

In Table 6, we find that the coefficient associated with *Board SO Gap Decrease* is significantly positive at least at the 10% level in all six reported regressions and at least at the 5% level in five out of the six reported regressions. These results are consistent with the notion that a potential director has a greater likelihood of being selected on the focal firm's board if she will reduce the stakeholder orientation gap between the board and the firm.¹⁷ Notably, in all six reported regressions in both tables, we find a significantly negative relation between the probability of selecting a director and *Governance Gap*. Thus, consistent with Bouwman (2011), we find that the higher the governance gap between the focal firm and the director, the lower is the propensity to select the director.

6.2. Market reaction to director appointments and stakeholder alignment between board and the firm

We had shown earlier that a potential outside director is more likely to be chosen by the focal firm to serve on its board if the director will reduce the stakeholder orientation gap between the board and the firm. We now examine whether the market reacts more strongly to announcements of the appointment of these directors. We obtain director appointment announcement dates from BoardEx. We are able to locate 1,896 outside director appointment announcements from our initial sample of 3,974 newly appointed outside directors. We compute the cumulative abnormal returns (CARs) over the (-1, 0) event day announcement period using the market model.¹⁸ We use returns on the CRSP value-weighted index portfolio to proxy for market returns. Our market model parameters are estimated over the (-235, -6) event day window, and require a minimum of 100 daily returns. We then estimate the following weighted least

¹⁷ We find qualitatively similar director selection results to those reported in Table 6 if in the computation of *Board SO index* we replace the *Firm SO index* with either: (i) the *Peer SO index* or (ii) a value of zero for directors who only sit on the board of the focal firm. These results are reported in Internet Appendix Table 3.

¹⁸ Our results are qualitatively similar if we compute CARs over the (-1, +1) event day announcement period.

squares regression model (where the weights are the residual standard deviations from the market model regressions):

$$CAR_{i,k} = \beta_0 + \beta_1 Board\ SO\ Gap\ Decrease_{i,k} + \beta_2 Firm\ Size_i + \beta_3 Board\ Size_i + \beta_4 Director\ Age_k + \beta_5 Directorships_k + Year\ dummy + \varepsilon_{i,k,t} \quad (5)$$

The results from this analysis are presented in Table 7. The structure of the table is similar to Table 6. We find that the coefficient associated with *Board SO Gap Decrease* is significantly positive at least at the 10% level in all six reported regressions and at least at the 5% level in four out of the six reported regressions. Thus, our examination of the market reaction to new director announcements provides evidence to suggest that the appointment of a new outside director whose stakeholder preference will reduce the stakeholder orientation gap between the board and the firm is perceived by the market to be more value creating. These results are broadly consistent with the predictions in [Adams and Ferreira \(2007\)](#).

7. Firm value and stakeholder orientation alignment between the board and the firm

7.1. The relation between Tobin's Q and Board SO Gap

In this section, we examine the relation between *Tobin's Q*, $Q_{i,t}$ and *Board SO Gap*, $Gap_{i,t-1}$. Consistent with the literature, we use Tobin's Q as a proxy for firm value. Further, recall that *Board SO Gap* is measured as the absolute value of the difference between *Board SO Index* and *Firm SO Index*. Thus, a smaller value for *Board SO Gap* is consistent with closer alignment between the board and the firm's managers in regards to stakeholder orientation and, consequently greater congruence between them on project selection. [Adams and Ferreira \(2007\)](#) conclude that, "When boards have an advisory role, we show that shareholders may be better off if the board's preferences are aligned with those of managers." Closer alignment, however, may also be detrimental to the board's monitoring role. Since their model is based on the trade-off between monitoring and advising, it has no explicit prediction about whether more or less alignment is value enhancing for unitary board structures. Although directors have important monitoring and advisory functions to play on the board, various practitioner constituencies believe that the primary role of a director is to give guidance on firm strategy (see, e.g., [Demb and Neubauer \(1992\)](#); [Adams \(2009\)](#); and [Brickley and Zimmerman \(2010\)](#)). Thus, under the assumption that the role of the board is predominantly advisory

in nature, firm value will be higher if there is greater stakeholder orientation alignment between the board and managers. We, therefore, predict a negative relation between *Tobin's Q* and *Board SO Gap*.¹⁹

We estimate the following regression to test the above prediction:

$$\begin{aligned} \text{Tobin's } Q_{i,t} = & \beta_0 + \beta_1 \text{Board SO Gap}_{i,t-1} + \beta_2 \text{Firm Size}_{i,t-1} \\ & + \beta_3 \text{R\&D}_{i,t-1} + \beta_4 \text{Cash}_{i,t-1} + \beta_5 \text{ROA}_{i,t-1} + \beta_6 \text{CEO Duality}_{i,t-1} \\ & + \beta_7 \text{Firm Age}_{i,t-1} + \beta_8 \text{Board Size}_{i,t-1} + \text{Year FE} + \text{Firm FE} + \varepsilon_{i,t} \end{aligned} \quad (6)$$

The results from this analysis are reported in Table 8.²⁰ In this table, we report results from three pairs of estimated regression specifications in each panel. The first estimated specification in each pair is an OLS regression model (Models 1, 4, and 7). In Panel A (Panel B), *Board SO Gap* is measured using *SO Index 5* (*SO Index 6*). To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. In these specifications, we include year- and firm-fixed effects to account for unobservable time-invariant firm characteristics and time trends. We report robust standard errors clustered by firm. In all three estimated OLS regressions specifications in each panel (six regressions in total), we find that the coefficient associated with *Board SO Gap* is significantly negative at least at the 10% level in all six models and at the 5% level in four out of the six models, thereby suggesting that firm value is lower if there is less stakeholder orientation alignment between the board and the firm's managers.

There could, however, be some legitimate residual concerns regarding the potential for endogeneity arising from missing latent factors. To address these concerns, we also estimate 2SLS regression models. Our instrument, *Local Director Pool (Gap)*, is the number of directors in the local area (within a 100 km radius from the focal firm's headquarter) who have the potential to decrease the *Board SO Gap* if they were on the focal firm's board.²¹ In computing this number, we exclude directors who are serving as directors on the boards of firms operating in the same Fama-French 17 industry as the focal firm. The larger the number of this pool of directors, the more likely it is for the firm to be able to draw from this pool, thereby resulting

¹⁹ Ideally, we would have liked to have used state-level non-shareholder constituency statutes as a natural experiment to test their proposition, but all of these statutes were implemented prior to the beginning of our sample period.

²⁰ The results reported in this table are robust to the inclusion of *Firm SO Index* as an additional control variable.

²¹ The results are similar if local area is defined using a radius of 250 km from the corporate headquarter.

in a lower *Board SO Gap*. Further, the supply of these directors should only have an effect on firm value through its influence on *Board SO Gap*.

In all the estimated 2SLS regressions, we find that the coefficients on our chosen instrument in the first-stage regressions are negative as predicted and highly significant (p -value less than 1%) (Models 2, 5, and 8 in each panel). The problem that we encounter in the second-stage regressions under the 2SLS regression methodology is that the Difference-in-Sargan statistic shows scores insignificantly different from zero in Models 3 and 9 in both panels, thereby indicating that given the chosen instrument the use of 2SLS methodology is not appropriate in these models. Notably, in all the estimated 2SLS specifications where we pass the test for endogeneity, i.e., obtain significant Difference-in-Sargan statistic, we find a significantly negative relation between *Tobin's Q* and *Board SO Gap* in the second-stage regression (Model 6 in each panel). Note that these are the cases where we exclude firms with zero CSR scores from our regression sample and, arguably, the cleanest sample to use in our study. Thus, we get a significant negative relation between *Tobin's Q* and *Board SO Gap* in all our estimated OLS regression models with year- and firm-fixed effects as well as in our 2SLS regression specifications with year- and firm-fixed effects where we pass the endogeneity test.

We also attempt to address endogeneity concerns by examining the effect of exogenous shocks to *Board SO Gap* arising from shareholder-initiated governance proposals at firms interlocked with the focal firm through its outside directors. The idea behind this test is that if an interlocked firm is the target of a shareholder-initiated governance proposal, it is subsequently likely to become relatively more shareholder oriented and, thus, relatively less oriented towards stakeholders.²² This will, in turn, influence the interlocked outside director in becoming relatively more shareholder oriented and, therefore, less stakeholder oriented than she was before the shareholder proposal. The change in stakeholder orientation of the outside board member will have the effect of either exacerbating or reducing the gap in stakeholder

²² Consistent with this notion, [Cheng, Hong and Shue \(2016\)](#) use a regression discontinuity design to find that firms in which these shareholder proposals narrowly pass subsequently experience a slower growth in corporate social responsibility (CSR) scores than firms in which these shareholder proposals narrowly fail.

orientation between outside directors and the managers of the focal firm (*Board SO Gap*). If it is expected to increase (decrease) *Board SO Gap*, then the relation between *Tobin's Q* and *Board SO Gap* will become more (less) negative in the face of this exogenous shock to the focal firm.²³

We operationalize this natural experiment as follows. We obtain shareholder-initiated governance proposals from *Institutional Shareholder Services (ISS) Voting Analytics* dataset. *ISS* covers shareholder proposals for firms in the Russell 3000 index from 2003 onwards. We exclude all management-sponsored proposals to focus on exogenous governance issues raised by shareholders. For each outside director of the focal firm who sits on the board of other firms, we note whether the interlocked firm has received a shareholder-initiated governance proposal.²⁴ We then count the number of outside directors of the focal firm who sit of the board of interlocked firms receiving these proposals. Suppose, for example, this number is four (4). We then compare the *SO Index* of the focal firm and its *Board SO Index* to determine whether the greater shareholder orientation of these 4 outside directors is likely to subsequently increase or decrease *Board SO Gap*. Specifically, if the focal firm's *SO Index* is greater (lesser) than its *Board SO Index*, i.e., the firm is more stakeholder oriented than the board, then the greater shareholder orientation of these 4 outside directors will exacerbate (reduce) the gap between the focal firm and its board. If it is likely to have the effect of increasing (reducing) *Board SO Gap*, we give the shock variable – which we call *SH Proposal Shock* – a value of +4 (-4). If all the outside directors on the focal firm sit on the boards of other firms that do not have any shareholder proposal during that year, we assign a value of zero to the shock variable.²⁵

We estimate the following OLS regression model to test the predictions from our natural experiment:

²³ The likely effect on *Board SO Gap* is an exogenous shock to the focal firm because it emanated from shareholder proposals to its interlocked firms.

²⁴ We do not give the outside director a higher weight if she sits on the board of more than one interlocked firm receiving shareholder-initiated governance proposals.

²⁵ We also use a shock variable expressed as a percentage rather than as a number. Specifically, if in the above example, the total number of outside directors is 8. Then the shock variable will either take on a value of +0.5 (= +4/8) if the shareholder proposals are likely to have the effect of increasing *Board SO Gap* or -0.5 (= -4/8) if the shareholder proposals are likely to have the effect of decreasing *Board SO Gap*. Our results with this percentage shock variable are qualitatively similar to the results we report in Table 9.

$$\begin{aligned}
\text{Tobin's } Q_{i,t} = & \beta_0 + \beta_1 \text{Board SO Gap}_{i,t-1} + \beta_2 \text{SH Proposal Shock}_{i,t-1} \\
& + \beta_3 \text{Board SO Gap}_{i,t-1} * \text{SH Proposal Shock}_{i,t-1} + \beta_4 \text{Firm SH Proposal}_{i,t-1} \\
& + \text{Control Variables} + \text{Year FE} + \text{Firm FE} + \epsilon_{i,t}
\end{aligned} \tag{7}$$

We expect the impact of *Board SO Gap* on *Tobin's Q* to be more negative for higher values of the exogenous shareholder proposal shock (i.e., $\beta_3 < 0$).

The results from this analysis are reported in Table 9. We report three pairs of OLS regression models. In each pair, the first (second) regression model uses *SO Index 5* (*SO Index 6*) to construct the governance orientation of the firm and the board. In the first pair, we use all available firm-year observation, in the second pair we drop all firm-year observations for which the focal firm has a *SO Index* value equal to 0, and in the third pair we drop firm-year observations if less than 50% of outside directors are not interlocked with another firm. We find that the relation between *Tobin's Q* and *Board SO Gap* is significantly negative in all six reported regression models at least at the 5% level.²⁶ More importantly, as predicted by our natural experiment, the coefficient associated with the interaction variable, *Board SO Gap* * *SH Proposal Shock* is significantly negative at the 5% level in five out of the six reported regression models (Models 1 – 5) and at the 10% level in Model 6. Based on our tests, we conclude that a plausible case can be made for a causal relation between *Tobin's Q* and *Board SO Gap*.

7.2. The impact on information environment on the relation between *Tobin's Q* and *Board SO Gap*

Clearly, the importance of alignment in stakeholder orientation between the board and managers should be greater in economic settings where the board's advisory role is more vital. As [Dass, Kini, Nanda, Onal and Wang \(2014\)](#) argue, "...we expect the information gap between a firm and its related upstream and downstream industries, and consequently between the board and the management, to be larger for firms that produce differentiated and innovative goods—which require specialized inputs and whose level of demand is harder to predict. These firms are likely to be characterized by high R&D intensity, SG&A expenditures, and advertising expenses." As per [Adams and Ferreira \(2007\)](#), there is greater need for

²⁶ We also find that the coefficient associated with *Firm SH Proposal* is significantly positive at least at the 10% level in 4 out of the 6 estimated regressions, thereby suggesting that shareholder-initiated governance proposals at focal firms tend to have a positive impact on their firm values.

alignment between the board and managers for these types of firms in order to induce managers to provide the board with the necessary information for it to play a more effective advisory role. It is also likely that relationship-specific investments are likely to be more important and the resultant contractual frictions more severe for these types of firm. Again, better stakeholder orientation alignment will result in better information flows between the board and the managers, thereby allowing the board to be more effective in helping managers navigate through the contracting and information problems they face in an incomplete contracts setting. To investigate this issue, we form subsamples based on whether a firm in a given year has high or low R&D intensity (*R&D*), high or low patent counts (*Patent Counts*), high or low SG&A expenditures (*SG&A*), and high or low advertising expenses (*Advertising*).²⁷

The results from this analysis are reported in Table 10. In Panel A (Panel B) *Board SO Gap* is based on *SO Index 5* (*SO Index 6*). For each of these variables, the odd column includes OLS regression estimates for the “high” group, while the even column includes OLS regression estimates for the “low” group. As we did with the full sample tests, we include year- and firm-fixed effects in all the estimated regressions. In both panels, we find that the coefficient associated with *Board SO Gap* is significantly negative (insignificantly different from zero) for the high (low) *R&D*, high (low) *Patent Counts*, high (low) *SG&A*, and high (low) *Advertising* subsamples. These results are consistent with the notion that the stakeholder orientation alignment between the board and managers is most important for firms in which the advisory role of the board is critical. The above results also make it less likely that the significant negative relation that we had documented between *Tobin’s Q* and *Board SO Gap* in Tables 8 and 9 are spurious in nature.

7.3. The impact on board type (advisory vs. monitoring) on the relation between *Tobin’s Q* and *Board SO Gap*

In this section, we form subsamples based on whether outside directors on the board are either more oriented towards advising or monitoring. We follow [Faleye, Hoitash and Hoitash \(2011\)](#) and classify an outside director as a monitoring intensive director if she serves as a member of at least two principal

²⁷ We form the subsamples based on median values of *R&D*, *Patent Counts*, *SG&A*, and *Advertising*. Note that the sample size is not the same for the high vs. low *R&D* subsamples, the high vs. low *Patent Counts* subsamples, and the high vs. low *Advertising* subsamples because of the large number of “zero” values for these variables.

monitoring committees – Audit, Compensation, and Nominating. We compute the monitoring intensity of the board as the percentage of monitoring intensive outside directors (*Proportion Monitoring Directors*). We then classify the board (*Board Type*) as *Advisory (Monitoring)* if *Proportion Monitoring Directors* is less than (greater than or equal to) 50%. We choose 50% as the cutoff because it is the median value of *Proportion Monitoring Directors*. We expect that greater congruence of interests between the board and managers regarding project selection is likely to be more important for firms where the board plays a greater advisory role (or at least where the board has a less important monitoring role).

We test the above proposition by forming subsamples based on whether the board is classified either as *Advisory* or *Monitoring*.²⁸ We expect the previously documented significant negative relation between *Tobin's Q* and *Board SO Gap* for the full sample to be largely driven by the *Advisory* subsample. The results from this analysis are provided in Table 11. In the first two (second two) reported regression models, the *Board SO Gap* measure is based on *SO Index 5* (*SO Index 6*). In each pair of regression models, the first (second) model is for the *Advisory (Monitoring)* subsample. We find that the coefficient associated with *Board SO Gap* is significantly negative (at the 5% level) only for the *Advisory* subsamples (Models 1 and 3) and insignificantly different from zero for the *Monitoring* subsamples (Models 2 and 4). Thus, stakeholder orientation alignment between the board and managers seems to have value consequences only when the advisory role of the board is relatively more important.²⁹

8. Board stakeholder preferences based on all directors (inside and outside directors)

In all the tests reported so far in the paper, we compute the board's stakeholder preferences based only on outside directors. We repeat all the tests using measures of board stakeholder preferences based on

²⁸ Interestingly, we find a positive association between either *Proportion Advisory Directors* computed as $(1 - \text{Proportion Monitoring Directors})$ or a dummy variable that takes a value of one if the board is classified as *Advisory* with variables whose higher values suggest firm environments that are likely to warrant a stronger board advisory role (*R&D*, *Patent Counts*, *SG&A*, and *Advertising*).

²⁹ We replicate all the analysis reported in Section 7 by replacing *Firm SO index* with either: (i) the *Peer SO index* or (ii) a value of zero for directors who only sit on the board of the focal firm in the computation of the *Board SO Index*. The results from these tests are reported in Internet Appendix Tables 4 and 5, and are qualitatively similar to those reported in Tables 8 – 11 and discussed in this section.

the attitudes of all board members (inside and outside directors). First, we find that the *SO Index* of the focal firm (*Firm SO Index*) is strongly associated with the *Board SO Index*. Second, the higher the *Board SO Index* relative to the focal firm's *SO Index* (*Board SO Bias*), the larger is the subsequent change in *SO Index* (Δ *Firm SO Index*) observed for the focal firm. As before, this positive relation is highly significant regardless of whether we estimate OLS regression models or 2SLS regression models, or use the exogenous component of *Board SO Bias* as the main independent variable in our regression models. Third, in the director selection process, we continue to find that prospective directors who are expected to increase the alignment of stakeholder orientation between the board and managers are more likely to be chosen, and are accompanied with a higher stock price reaction upon director appointment announcement. Finally, we find that a larger absolute gap in stakeholder orientation between the board and managers (*Board SO Gap*) has a significantly higher adverse impact on firm value (*Tobin's Q*), and that this effect is only apparent in environments where the advisory role of the board is likely to be more important. Thus, all our inferences remain unchanged with measures of board stakeholder preference based on all members of the board of directors. All these results are reported in Internet Appendix Tables 6 – 10.

9. Conclusion

[Adams and Ferreira \(2007\)](#) suggest that well-aligned stakeholder orientation between the board and managers can be optimal because managers are then more likely to provide information to the board, thereby allowing the board to provide better advice to managers. We test implications arising from insights we obtain from their model by using a panel dataset of stakeholder orientation of boards and managers based on indices that capture their respective degree of stakeholder orientation. We find that the focal firm's stakeholder orientation is strongly associated with the stakeholder orientation of other firms that board members have a board affiliation. In addition, the higher the boards' stakeholder orientation bias vis-à-vis the focal firm, the larger is the subsequent change in stakeholder orientation for the focal firm. This evidence suggests that board members influence the focal firm's stakeholder orientation. In the director selection process, directors are more likely to be appointed to the focal firm's board if the prospective director is

expected to increase the alignment of stakeholder orientation between the board and managers. Further, the abnormal returns are higher upon announcement of appointment of directors who are expected to reduce the gap in stakeholder orientation between the board and managers. Finally, we find evidence suggesting that a larger absolute gap in the stakeholder orientation between the board and managers negatively affects firm value and that this effect is driven by economic environments where the advisory role of the board is likely to be more important.

Our paper makes the following contributions. Consistent with basic premise in [Adams and Ferreira \(2007\)](#) that friendly boards can be beneficial to shareholders' interests, we find that shareholders are better off when the board's project preferences are more closely aligned with the project preferences of managers, and that this relation is driven by firms for whom the advisory role of the board is likely to be more critical. Our paper complements the work in [Bouwman \(2011\)](#) who finds that a firm's corporate governance practices can be affected by the experience of its directors as board members of other firms. Additionally, we add to the work on the determinants of a firm's *CSR* investments by finding that they are also influenced by information transfers through director networks (see, e.g., [Bénabou and Tirole \(2010\)](#); [McWilliams and Siegel \(2001\)](#); and [Campbell \(2007\)](#)). The Securities and Exchange Commission recently mandated that firms provide investors with information about the experience, qualifications, attributes, or skills of individuals who serve or are chosen to serve on its board. Our paper suggests that the involvement on the boards of other firms is an important aspect of a director's experience because of the transference of corporate policies and practices through director networks.

Our paper is also related to the growing literature on interlocking directorates (see, e.g., [Dooley \(1969\)](#); [Bouwman \(2011\)](#); [Masulis, Wang and Xie \(2012\)](#); and [Dass, Kini, Nanda, Onal and Wang \(2014\)](#)). Specifically, we contribute to the literature on the determinant of interlocking directorates by showing that an interlock is more likely to be formed if an individual has a board seat(s) on another firm with similar stakeholder orientation. Finally, there is an extensive theoretical and empirical literature on whether corporate social responsibility (*CSR*) investments – which we proxy for with our stakeholder orientation indices – are in the best interest of shareholders. We complement this literature by concentrating on the

alignment in stakeholder orientation between the board and managers rather than the stakeholder orientation of the firm itself.

Appendix: Definitions of variables

Variables	Description
<i>SO Index 5</i>	Index consists of five dimensions: Community, Diversity, Employee Relations, Environment, and Product. Following Deng, Kang and Low (2013) and Servaes and Tamayo (2013) , the strength and concern scores of each KLD dimension are scaled by the respective number of available KLD strengths and concerns in the same year. An index for each dimension is the scaled strength minus the scaled concern. <i>SO Index 5</i> is the sum of the five indices.
<i>SO Index 6</i>	Index consists of six dimensions: Community, Diversity, Employee Relations, Environment, Product, and Human Rights. Following Deng, Kang and Low (2013) and Servaes and Tamayo (2013) , the strength and concern scores of each KLD dimension are scaled by the respective number of available KLD strengths and concerns in the same year. An index for each dimension is the scaled strength minus the scaled concern. <i>SO Index 6</i> is the sum of six indices.
<i>Director SO Index</i>	<i>SO Index</i> of interlocking directors is the average <i>SO Index</i> of all outside boards where they have a seat. <i>SO Index</i> of directors without any outside directorships is set to the firm's <i>SO Index</i> .
<i>Board SO Index</i>	Average <i>SO Index</i> of all directors in the board
<i>Peer SO Index</i>	Average <i>SO Index</i> of all KLD firms that belong to the same Fama–French 17 industry and the same asset tercile within the industry. <i>SO Index</i> of the focal firm is excluded from the calculation of <i>Peer SO Index</i> .
<i>Board SO Bias</i>	$Board\ SO\ Index - Firm\ SO\ Index$
<i>Exogenous Δ Board SO Bias</i>	Following the method in Bouwman (2011) , we compute it as $Board\ SO\ Bias_{i,t-1} - Board\ SO\ Bias_{ongoing\ directorships, i, t-1}$
<i>Endogenous Δ Board SO Bias</i>	Following the method in Bouwman (2011) , we compute it as $Board\ SO\ Bias_{ongoing\ directorships, i, t-1} - Board\ SO\ Bias_{i,t-2}$
<i>Board SO Gap</i>	$ Board\ SO\ Index - Firm\ SO\ Index $
<i>Board SO Gap Decrease</i>	An indicator variable that equals 1 if a director candidate will decrease the gap when she joins the board, and is 0 otherwise. The calculation assumes that current board members will remain on the board.
<i>Same Size</i>	An indicator variable that equals 1 if a director candidate is serving on the board of at least one firm that belongs to the same size tercile as the firm selecting a director to serve on its board.
<i>Same Industry</i>	An indicator variable that equals 1 if a director candidate is serving on the board of at least one firm that belongs to the same industry as the firm selecting a director to serve on its board. Industry classification is based on Fama-French 17 industries.
<i>Same Location</i>	An indicator variable that equals 1 if a director candidate is serving on the board of at least one firm located in the same geographic area with director-hiring firms. Local geographic area is defined as a circle with a radius of 100km.
<i>Firm Size</i>	A natural logarithm of <i>Total Assets</i> (at), deflated to December 2009 dollars using U.S. Consumer Price Index (CPI) from Bureau of Labor Statistics
<i>Firm Age</i>	Natural logarithm of firm age defined as 1 plus the number of years appearing in Compustat
<i>Leverage</i>	$[Short\text{-}term\ Debt\ (dlc) + Long\text{-}term\ Debt\ (dltt)] / Total\ Assets\ (at)$
<i>Tobin's Q</i>	$[Total\ Assets\ (at) - Common\ Equity\ (ceq) + (Common\ Share\ Price\ (prcc_f) * Common\ Shares\ Outstanding\ (csho))] / Total\ Assets\ (at)$.
<i>Cash</i>	$Cash\ and\ Short\text{-}term\ Investments\ (che) / Total\ Assets\ (at)$
<i>ROA</i>	$Operating\ Income\ Before\ Depreciation\ and\ Amortization\ (oibdp) / Total\ Assets\ (at)$
<i>R&D</i>	$Research\ and\ Development\ Expenditure\ (xrd) / Total\ Assets\ (at)$
<i>SG&A</i>	$Sales,\ General\ and\ Administrative\ Costs\ (xsaga) / Total\ Assets\ (at)$
<i>Advertising</i>	$Advertising\ Expense\ (xad) / Sales\ (sale)$
<i>Unionization</i>	Industry-level unionization rates: available at http://unionstats.com
<i>Market Share</i>	$Sales\ (sale)\ over\ Fama\text{-}French\ 17\ industry\ sales$
<i>Director Age</i>	Age of director

<i>Directorships</i>	Number of directorships held by director
<i>Board Size</i>	Number of directors on the board
<i>CEO Age</i>	Age of CEO
<i>CEO Duality</i>	An indicator variable that equals 1 if the CEO is also the chairman, and is 0 otherwise
<i>Governance Gap</i>	Constructed using an approach similar to Bouwman (2011) . It is the sum of “ <i>Board Size Gap</i> ”, “ <i>Independence Gap</i> ”, and “ <i>CEO Duality Gap</i> ”. <i>Board Size Gap</i> is the absolute difference between director-hiring firms’ board size and the average board size of firms that director candidates currently have a board seat. <i>Independence Gap</i> is the absolute difference in percentage of outside directors between director-hiring firms and the average of firms that director candidates currently have a board seat. <i>CEO Duality Gap</i> is the absolute difference in CEO Duality (see above) between director-hiring firms and the average of firms that director candidates have a board seat. All gap measures are standardized to have a mean of 0 and a standard deviation of 1.
<i>Local Director Pool (Bias)</i>	Number of directors in the local area who have a lower <i>Director SO Index</i> than <i>Board SO Index</i> of the focal firms. Directors are excluded if they are serving on the boards of firms in the same Fama-French 17 industry. These directors will decrease <i>Board SO Bias</i> once they are hired, assuming that current board members will stay on the board. Local area is defined as a circle with a radius of 100km.
<i>Local Director Pool (Gap)</i>	Number of directors in the local area who will decrease <i>Board SO Gap</i> if they are hired to serve on the board of the focal firm. Directors are excluded if they are serving on the boards of firms in the same Fama-French 17 industry. The calculation assumes that current board members of the focal firm will remain on the board. Local area is defined as a circle with a radius of 100km.
<i>SH Proposal Shock</i>	The signed number of outside directors who have a seat on other firms experiencing shareholder-initiated governance proposals. It has a positive (negative) sign if these shareholder proposals are likely to subsequently increase (decrease) <i>Board SO Gap</i> .
<i>Firm SH Proposal</i>	An indicator variable that equals 1 if the focal firm is itself a target of a shareholder-initiated governance proposals, and is 0 otherwise.
<i>Patent Counts</i>	Number of patents issued to a firm in each calendar year. We use a patent dataset constructed by Kogan, Papanikolaou, Seru and Stoffman (2016) . Database is available at https://iu.app.box.com/v/patents .
<i>Proportion Monitoring Directors</i>	Faleye, Hoitash and Hoitash (2011) : The percentage of outside directors serving on two or more of the principal monitoring committees – Audit, Compensation, and Nominating

References

- Adams, Renée B., 2009, Asking directors about their dual roles, *Finance and Corporate Governance Conference 2010 Paper*. Available at SSRN: <https://ssrn.com/abstract=1362339>.
- Adams, Renée B., and Daniel Ferreira, 2007, A theory of friendly boards, *The Journal of Finance* 62, 217-250.
- Adams, Renée B., Amir N. Licht, and Lilach Sagiv, 2011, Shareholders and stakeholders: How do directors decide?, *Strategic Management Journal* 32, 1331-1355.
- Bénabou, Roland, and Jean Tirole, 2010, Individual and corporate social responsibility, *Economica* 77, 1-19.
- Bouwman, Christa H. S., 2011, Corporate governance propagation through overlapping directors, *Review of Financial Studies* 24, 2358-2394.
- Brickley, James A., and Jerold L. Zimmerman, 2010, Corporate governance myths: Comments on armstrong, guay, and weber, *Journal of Accounting and Economics* 50, 235-245.
- Campbell, John L., 2007, Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility, *Academy of Management Review* 32, 946-967.
- Cheng, Ing-Haw, Harrison Hong, and Kelly Shue, 2016, Do managers do good with other peoples' money?, *AFA 2013 San Diego Meetings Paper; UCD & CalPERS Sustainability & Finance Symposium 2013; Fama-Miller Working Paper; Chicago Booth Research Paper No. 12-47*. Available at SSRN: <https://ssrn.com/abstract=1962120>.
- Dass, Nishant, Omesh Kini, Vikram Nanda, Bunyamin Onal, and Jun Wang, 2014, Board expertise: Do directors from related industries help bridge the information gap?, *Review of Financial Studies* 27, 1533-1592.
- Demb, Ada, and F. Friedrich Neubauer, 1992, The corporate board: Confronting the paradoxes, *Long Range Planning* 25, 9-20.
- Deng, Xin, Jun-Koo Kang, and Buen Sin Low, 2013, Corporate social responsibility and stakeholder value maximization: Evidence from mergers, *Journal of Financial Economics* 110, 87-109.
- Di Giuli, Alberta, and Leonard Kostovetsky, 2014, Are red or blue companies more likely to go green? Politics and corporate social responsibility, *Journal of Financial Economics* 111, 158-180.
- Dooley, Peter C., 1969, The interlocking directorate, *The American Economic Review* 59, 314-323.
- Faleye, Olubunmi, Rani Hoitash, and Udi Hoitash, 2011, The costs of intense board monitoring, *Journal of Financial Economics* 101, 160-181.
- Kogan, Leonid, Dimitris Papanikolaou, Amit Seru, and Noah Stoffman, 2016, Technological innovation, resource allocation, and growth, *Forthcoming, Quarterly Journal of Economics*, Available at SSRN: <http://ssrn.com/abstract=2193068>.

- Krüger, Philipp, 2010, Social responsibility and the board of directors, *Working Paper*.
- Krüger, Philipp, 2015, Corporate goodness and shareholder wealth, *Journal of Financial Economics* 115, 304-329.
- Margolis, Joshua D., and Hillary Anger Elfenbein, 2008, Do well by doing good? Don't count on it, *Harvard Business Review* 86.
- Margolis, Joshua D., Hillary Anger Elfenbein, and James P. Walsh, 2009, Does it pay to be good... And does it matter? A meta-analysis of the relationship between corporate social and financial performance, Available at SSRN: <http://ssrn.com/abstract=1866371>.
- Masulis, Ronald W., Cong Wang, and Fei Xie, 2012, Globalizing the boardroom—the effects of foreign directors on corporate governance and firm performance, *Journal of Accounting and Economics* 53, 527-554.
- McWilliams, Abigail, and Donald Siegel, 2001, Corporate social responsibility: A theory of the firm perspective, *Academy of Management Review* 26, 117-127.
- Orlitzky, Marc, Frank L. Schmidt, and Sara L. Rynes, 2003, Corporate social and financial performance: A meta-analysis, *Organization Studies* 24, 403-441.
- Roberts, Michael R., and Toni M. Whited, 2013, Chapter 7 - endogeneity in empirical corporate finance, in Milton Harris George M. Constantinides, and M. Stulz Rene, eds.: *Handbook of the economics of finance* (Elsevier).
- Schmidt, Breno, 2015, Costs and benefits of friendly boards during mergers and acquisitions, *Journal of Financial Economics* 117, 424-447.
- SEC, 2009, Proxy disclosure enhancements, (Available at: www.sec.gov/rules/final/2009/33-9089.pdf).
- Servaes, Henri, and Ane Tamayo, 2013, The impact of corporate social responsibility on firm value: The role of customer awareness, *Management Science* 59, 1045-1061.
- Shleifer, Andrei, and Robert W. Vishny, 1997, A survey of corporate governance, *The Journal of Finance* 52, 737-783.
- Tirole, Jean, 2001, Corporate governance, *Econometrica* 69, 1-35.

Table 1. Descriptive statistics

This table provides descriptive statistics on board and firm stakeholder orientation, board and director characteristics, and firm characteristics for a sample of 3,090 unique firms, 14,255 firm-year observations, 26,427 unique directors, and 107,069 director-year observations over the period 2003–2012. All variables are described in the Appendix.

	Mean	Std. Dev.	P25	Median	P75	Obs.
<i>Panel A: Firm and Board SO Indices</i>						
<i>Firm SO Index 5</i>	-0.040	0.435	-0.200	0.000	0.133	14,255
<i>Firm SO Index 6</i>	-0.052	0.452	-0.200	0.000	0.105	14,255
<i>Board SO Index 5</i>	-0.039	0.265	-0.165	-0.026	0.070	14,255
<i>Board SO Index 6</i>	-0.050	0.275	-0.181	-0.033	0.063	14,255
<i>Board SO Bias 5</i>	0.001	0.262	-0.080	0.000	0.080	14,255
<i>Board SO Bias 6</i>	0.001	0.273	-0.082	0.000	0.081	14,255
<i>Board SO Gap 5</i>	0.151	0.214	0.027	0.080	0.190	14,255
<i>Board SO Gap 6</i>	0.157	0.224	0.028	0.082	0.196	14,255
<i>Panel B: Board and Director Characteristics</i>						
<i>CEO Duality</i>	0.537	0.499	0	1	1	14,255
<i>CEO Age</i>	54.957	7.267	50	55	60	13,880
<i>Board Size</i>	9.208	2.466	7	9	11	14,255
<i>Outside Directors</i>	0.767	0.127	0.700	0.800	0.875	14,255
<i>Interlocking Directors</i>	0.409	0.214	0.250	0.400	0.571	14,255
<i>Proportion Monitoring Directors</i>	0.488	0.271	0.286	0.500	0.667	13,855
<i>Directorships</i>	1.392	0.732	1	1	2	107,069
<i>Director Age</i>	59.943	9.070	54	60	66	106,210
<i>Panel C: Firm characteristics</i>						
<i>Tobin's Q</i>	1.871	1.155	1.130	1.472	2.142	14,255
<i>ROA</i>	0.112	0.118	0.060	0.114	0.172	14,255
<i>Firm Size (in \$M)</i>	8,798.00	25,959.92	495.26	1,469.02	4,975.11	14,255
<i>Market Share</i>	0.004	0.013	0.000	0.001	0.002	14,009
<i>R&D</i>	0.031	0.066	0.000	0.000	0.029	14,255
<i>Patent Counts</i>	16.086	128.866	0	0	1	14,255
<i>SG&A</i>	0.201	0.202	0.031	0.148	0.302	14,255
<i>Advertising</i>	0.011	0.024	0.000	0.000	0.010	14,255
<i>Leverage</i>	0.214	0.198	0.036	0.184	0.326	14,255
<i>Cash</i>	0.174	0.196	0.032	0.095	0.246	14,255
<i>Firm Age (in years)</i>	22.804	16.828	9	17	36	14,255
<i>Unionization</i>	0.084	0.097	0.018	0.042	0.111	13,917

Table 2. The association between board stakeholder orientation and firm stakeholder orientation – OLS regression models

This table provides results from estimated OLS regressions in which the dependent is *Firm SO Index* $_{i,t}$ and the main independent variable is *Board SO Index* $_{i,t-1}$, where “*i*” indicates firm *i*. We report three sets of regressions. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the *Firm SO Index* $_{i,t}$ is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, the dependent variable in the first (second) regression model is *Firm SO Index* 5 $_{i,t}$ (*Firm SO Index* 6 $_{i,t}$). Accordingly, the main independent variable is *Board SO Index* 5 $_{i,t-1}$ (*Board SO Index* 6 $_{i,t-1}$) in the first (second) regression model. Also, to be consistent, we use *Peer SO Index* 5 $_{i,t}$ (*Peer SO Index* 6 $_{i,t}$) in the first (second) regression model in each set. We include firm and CEO characteristics as well as *Peer SO Index* as control variables. All independent variables except *Peer SO Index* are lagged by one year and are defined in the Appendix. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dep. Variable	Baseline		Exclude Zero-CSR Firms		Interlock \geq 50%	
	<i>Firm SO Index</i> 5 (1)	<i>Firm SO Index</i> 6 (2)	<i>Firm SO Index</i> 5 (3)	<i>Firm SO Index</i> 6 (4)	<i>Firm SO Index</i> 5 (5)	<i>Firm SO Index</i> 6 (6)
<i>Board SO Index</i>	0.595*** (20.17)	0.635*** (21.22)	0.603*** (17.30)	0.637*** (18.44)	0.689*** (12.83)	0.735*** (13.45)
<i>Peer SO Index</i>	0.678*** (14.49)	0.542*** (10.76)	0.660*** (10.70)	0.432*** (6.38)	0.797*** (10.53)	0.604*** (6.95)
<i>Firm Size</i>	-0.032** (-2.36)	-0.024* (-1.75)	-0.048** (-2.29)	-0.041* (-1.91)	-0.071** (-2.20)	-0.063* (-1.87)
<i>Leverage</i>	-0.007 (-0.16)	-0.015 (-0.35)	-0.010 (-0.16)	-0.020 (-0.29)	0.028 (0.35)	0.048 (0.55)
<i>Advertising</i>	-0.196 (-0.50)	-0.186 (-0.46)	-0.334 (-0.51)	-0.409 (-0.60)	0.644 (0.70)	0.701 (0.72)
<i>R&D</i>	-0.108 (-0.80)	-0.127 (-0.92)	-0.124 (-0.53)	-0.141 (-0.59)	-0.328 (-0.93)	-0.327 (-0.88)
<i>ROA</i>	0.072 (1.49)	0.086* (1.73)	0.091 (1.09)	0.098 (1.13)	-0.070 (-0.57)	-0.029 (-0.22)
<i>CEO Age</i>	-0.069 (-1.41)	-0.072 (-1.39)	-0.028 (-0.38)	-0.030 (-0.39)	-0.023 (-0.20)	-0.017 (-0.14)
<i>CEO Duality</i>	0.027** (2.09)	0.028** (2.02)	0.024 (1.36)	0.023 (1.22)	0.012 (0.42)	0.015 (0.51)
<i>Unionization</i>	-0.000 (-0.14)	-0.001 (-0.49)	0.000 (0.20)	-0.000 (-0.05)	0.000 (0.03)	-0.000 (-0.13)
<i>Market Share</i>	1.194 (0.51)	-0.685 (-0.25)	1.208 (0.52)	-0.975 (-0.37)	1.191 (0.38)	0.147 (0.04)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.311	0.301	0.374	0.371	0.379	0.360
Observations	13,342	13,342	8,917	8,977	5,051	5,051

Table 3. The impact of board stakeholder bias on subsequent changes in firm's stakeholder orientation – OLS regression models

This table presents results from estimated OLS regressions in which the dependent variable is $\Delta Firm SO Index_{i,t}$ and the main independent variable is $Board SO Bias_{i,t-1}$, where “ i ” indicates firm i . $\Delta Firm SO Index_{i,t}$ is computed as $Firm SO Index_{i,t} - Firm SO Index_{i,t-1}$, whereas $Board SO Bias_{i,t-1}$ is computed as $Board SO Index_{i,t-1} - Firm SO Index_{i,t-1}$. We report three sets of regressions. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the $Firm SO Index_{i,t}$ is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, the dependent variable in the first (second) regression model is $\Delta Firm SO Index 5_{i,t}$ ($\Delta Firm SO Index 6_{i,t}$). Accordingly, the main independent variable is $Board SO Bias 5_{i,t-1}$ ($Board SO Bias 6_{i,t-1}$) in the first (second) regression model. Also, to be consistent, we use $\Delta Peer SO Index 5_{i,t}$ ($\Delta Peer SO Index 6_{i,t}$) in the first (second) regression model in each set. We include firm and CEO characteristics as well as $\Delta Peer SO Index$ as control variables. All independent variables except $\Delta Peer SO Index$ are lagged by one year and are defined in the Appendix. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dep. Variable	Baseline		Exclude Zero-CSR Firms		Interlock \geq 50%	
	$\Delta Firm SO$ <i>Index 5</i>	$\Delta Firm SO$ <i>Index 6</i>	$\Delta Firm SO$ <i>Index 5</i>	$\Delta Firm SO$ <i>Index 6</i>	$\Delta Firm SO$ <i>Index 5</i>	$\Delta Firm SO$ <i>Index 6</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Board SO Bias</i>	0.623*** (20.29)	0.615*** (19.66)	0.655*** (19.36)	0.653*** (19.19)	0.599*** (15.89)	0.597*** (15.43)
<i>Peer SO Index</i>	0.521*** (9.68)	0.324*** (5.71)	0.471*** (6.57)	0.194** (2.56)	0.555*** (6.17)	0.303*** (3.16)
<i>Firm Size</i>	-0.029** (-2.40)	-0.018 (-1.43)	-0.046** (-2.38)	-0.032* (-1.68)	-0.045 (-1.55)	-0.031 (-1.03)
<i>Leverage</i>	-0.021 (-0.56)	-0.029 (-0.76)	-0.033 (-0.53)	-0.046 (-0.72)	0.012 (0.16)	0.036 (0.43)
<i>Advertising</i>	-0.187 (-0.47)	-0.173 (-0.41)	-0.270 (-0.39)	-0.384 (-0.54)	0.808 (0.89)	0.773 (0.81)
<i>R&D</i>	-0.145 (-1.12)	-0.132 (-1.01)	-0.095 (-0.43)	-0.045 (-0.20)	-0.314 (-0.88)	-0.229 (-0.62)
<i>ROA</i>	0.032 (0.72)	0.048 (1.06)	0.038 (0.49)	0.050 (0.64)	-0.077 (-0.69)	-0.037 (-0.32)
<i>CEO Age</i>	-0.037 (-0.83)	-0.033 (-0.71)	0.006 (0.09)	0.012 (0.17)	-0.029 (-0.27)	-0.003 (-0.03)
<i>CEO Duality</i>	0.024* (1.95)	0.022* (1.78)	0.018 (1.10)	0.015 (0.90)	0.013 (0.53)	0.009 (0.37)
<i>Unionization</i>	-0.000 (-0.15)	-0.001 (-0.73)	0.001 (0.29)	-0.000 (-0.13)	0.001 (0.51)	0.000 (0.15)
<i>Market Share</i>	1.155 (0.44)	-0.501 (-0.18)	1.100 (0.42)	-0.710 (-0.26)	1.831 (0.51)	0.994 (0.28)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.169	0.154	0.211	0.205	0.216	0.199
Observations	13,342	13,342	8,917	8,977	5,051	5,051

Table 4. The impact of board stakeholder bias on subsequent changes in firm's stakeholder orientation: 2SLS regression results

This table presents results from estimated 2SLS regression specifications in which the dependent variable is $\Delta Firm\ SO\ Index_{i,t}$ and the main independent variable is $Board\ SO\ Bias_{i,t-1}$ in the second-stage regression, where “ i ” indicates firm i . $\Delta Firm\ SO\ Index_{i,t}$ is computed as $Firm\ SO\ Index_{i,t} - Firm\ SO\ Index_{i,t-1}$, whereas $Board\ SO\ Bias_{i,t-1}$ is computed as $Board\ SO\ Index_{i,t-1} - Firm\ SO\ Index_{i,t-1}$. We report three sets of 2SLS regression specifications. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the $Firm\ SO\ Index_{i,t}$ is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, the second-stage dependent variable in the first (second) regression model is $\Delta Firm\ SO\ Index\ 5_{i,t}$ ($\Delta Firm\ SO\ Index\ 6_{i,t}$). Accordingly, the main independent variable is $Board\ SO\ Bias\ 5_{i,t-1}$ ($Board\ SO\ Bias\ 6_{i,t-1}$) in the first (second) regression model. Also, to be consistent, we use $\Delta Peer\ SO\ Index\ 5_{i,t}$ ($\Delta Peer\ SO\ Index\ 6_{i,t}$) in the first (second) regression model in each set. We include firm and CEO characteristics as well as $\Delta Peer\ SO\ Index$ as control variables. All independent variables are lagged by one year. We instrument for $Board\ SO\ Bias_{i,t-1}$ by the pool of local directors ($Local\ Director\ Pool\ (Bias)_{i,t-1}$) who have a $Director\ SO\ Index_{i,k,t-1}$ lower than the $Board\ SO\ Index_{i,t-1}$ of the focal firm and, thus, whose membership on the focal firm's board can potentially reduce the $Board\ SO\ Bias_{i,t-1}$. In computing the pool of local directors, we exclude firms in the same Fama-French 17 industry and the focal firm. To define the local area, we use a radius of 100 km from the focal firm's corporate headquarter using historical headquarter information obtained from *S&P Capital IQ*. All independent variables except $\Delta Peer\ SO\ Index$ are lagged by one year and are defined in the Appendix. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	Baseline				Excluding Zero-CSR Firms				Interlock \geq 50%			
	<i>Board SO Bias</i>	$\Delta Firm\ SO\ Index\ 5$	<i>Board SO Bias</i>	$\Delta Firm\ SO\ Index\ 6$	<i>Board SO Bias</i>	$\Delta Firm\ SO\ Index\ 5$	<i>Board So Bias</i>	$\Delta Firm\ SO\ Index\ 6$	<i>Board So Bias</i>	$\Delta Firm\ SO\ Index\ 5$	<i>Board So Bias</i>	$\Delta Firm\ SO\ Index\ 6$
IV Stage	1 st Stage (1)	2 nd Stage (2)	1 st Stage (3)	2 nd Stage (4)	1 st Stage (5)	2 nd Stage (6)	1 st Stage (7)	2 nd Stage (8)	1 st Stage (9)	2 nd Stage (10)	1 st Stage (11)	2 nd Stage (12)
<i>Local Director Pool (Bias)</i>	-0.086*** (-15.91)		-0.091*** (-16.20)		-0.114*** (-17.92)		-0.118*** (-18.27)		-0.164*** (-14.62)		-0.171*** (-15.40)	
<i>Board SO Bias</i>		1.363*** (16.02)		1.390*** (16.48)		1.213*** (15.67)		1.253*** (16.33)		0.914*** (12.07)		0.962*** (12.51)
$\Delta Peer\ SO\ Index$	-0.032 (-1.33)	0.550*** (9.25)	-0.069*** (-2.90)	0.390*** (6.20)	-0.031 (-1.04)	0.501*** (6.78)	-0.070** (-2.47)	0.253*** (3.17)	-0.040 (-0.94)	0.593*** (6.45)	-0.089** (-2.13)	0.369*** (3.67)
<i>Firm Size</i>	0.002 (0.25)	-0.028* (-1.86)	0.003 (0.33)	-0.018 (-1.16)	0.012 (1.09)	-0.049** (-2.22)	0.012 (1.04)	-0.037 (-1.63)	0.038* (1.92)	-0.064* (-1.96)	0.038* (1.87)	-0.053 (-1.56)
<i>Leverage</i>	0.025 (0.96)	-0.032 (-0.70)	0.026 (0.95)	-0.037 (-0.76)	0.019 (0.50)	-0.041 (-0.59)	0.012 (0.33)	-0.043 (-0.59)	0.034 (0.67)	-0.008 (-0.10)	0.035 (0.67)	0.020 (0.22)
<i>Advertising</i>	0.175 (0.65)	-0.401 (-0.92)	0.128 (0.47)	-0.365 (-0.81)	0.087 (0.20)	-0.514 (-0.74)	0.052 (0.12)	-0.594 (-0.83)	-0.122 (-0.16)	0.668 (0.75)	-0.155 (-0.20)	0.656 (0.70)
<i>R&D</i>	0.002 (0.02)	-0.235 (-1.60)	-0.003 (-0.03)	-0.224 (-1.49)	0.090 (0.49)	-0.300 (-1.33)	0.064 (0.34)	-0.251 (-1.09)	0.196 (0.89)	-0.624* (-1.80)	0.183 (0.82)	-0.575 (-1.62)
<i>ROA</i>	-0.036 (-1.10)	0.078 (1.40)	-0.035 (-1.04)	0.095* (1.65)	-0.016 (-0.33)	0.064 (0.71)	-0.019 (-0.37)	0.077 (0.82)	-0.022 (-0.25)	-0.080 (-0.67)	-0.044 (-0.48)	-0.043 (-0.34)
<i>CEO Age</i>	0.048 (1.51)	-0.087 (-1.58)	0.044 (1.33)	-0.085 (-1.45)	0.039 (0.90)	-0.037 (-0.48)	0.027 (0.60)	-0.029 (-0.36)	0.092 (1.16)	-0.121 (-1.04)	0.112 (1.34)	-0.097 (-0.78)

Continued...

Table 4 (Continued)

<i>CEO Duality</i>	-0.012 (-1.45)	0.026* (1.73)	-0.014 (-1.57)	0.027* (1.70)	-0.014 (-1.25)	0.018 (0.95)	-0.015 (-1.28)	0.017 (0.86)	-0.033* (-1.79)	0.011 (0.40)	-0.038* (-1.95)	0.011 (0.40)
<i>Unionization</i>	0.001 (1.54)	-0.000 (-0.08)	0.001 (1.02)	-0.001 (-0.42)	0.001 (1.34)	0.001 (0.58)	0.001 (1.14)	0.000 (0.23)	0.002* (1.65)	0.001 (0.54)	0.002 (1.10)	0.001 (0.35)
<i>Market Share</i>	0.604 (0.32)	0.842 (0.23)	0.719 (0.38)	-1.557 (-0.38)	0.656 (0.34)	0.728 (0.20)	0.709 (0.37)	-1.880 (-0.49)	-0.038 (-0.01)	2.852 (0.50)	1.006 (0.35)	0.916 (0.16)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic	253.235***		262.573***		321.158***		333.933***		213.618***		237.130***	
Difference-in-Sargan Statistic	126.720***		128.349***		71.455***		77.267***		22.473***		27.774***	
Observations	12,726	12,726	12,726	12,726	8,425	8,425	8,481	8,481	4,747	4,747	4,747	4,747

Table 5. The impact of the exogenous and endogenous change in board stakeholder bias on subsequent changes in firm's stakeholder orientation – OLS regression models

This table presents results from two estimated OLS regressions in which the dependent variable is $\Delta Firm\ SO\ Index_{i,t}$ and the main independent variable is $Exogenous\ \Delta Board\ SO\ Bias_{i,t-1}$, where “ i ” indicates firm i . Specifically, $\Delta Firm\ SO\ Index_{i,t}$ is computed as $Firm\ SO\ Index_{i,t} - Firm\ SO\ Index_{i,t-1}$. $Exogenous\ \Delta Board\ SO\ Bias_{i,t-1}$ is computed as $Board\ SO\ Bias_{i,t-1} - Board\ SO\ Bias_{Songoing\ directorships,i,t-1}$ and $Endogenous\ \Delta Board\ SO\ Bias_{i,t-1}$ is computed as $Board\ SO\ Bias_{Songoing\ directorships,t-1} - Board\ SO\ Bias_{t-2}$. The dependent variable in the first (second) regression model is $\Delta Firm\ SO\ Index\ 5_{i,t}$ ($\Delta Firm\ SO\ Index\ 6_{i,t}$). Accordingly, the main independent variable is $Exogenous\ \Delta Board\ SO\ Bias\ 5_{i,t-1}$ ($Exogenous\ \Delta Board\ SO\ Bias\ 6_{i,t-1}$) in the first (second) regression model. Also, to be consistent, we use $\Delta Peer\ SO\ Index\ 5_{i,t}$ ($\Delta Peer\ SO\ Index\ 6_{i,t}$) in the first (second) regression model. We include firm and CEO characteristics as well as $\Delta Peer\ SO\ Index$ as control variables. All independent variables except $\Delta Peer\ SO\ Index$ are lagged by one year and are defined in the Appendix. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	Baseline		Exclude Zero-CSR Firms		Interlock \geq 50%	
	$\Delta Firm\ SO\ Index\ 5$ (1)	$\Delta Firm\ SO\ Index\ 6$ (2)	$\Delta Firm\ SO\ Index\ 5$ (3)	$\Delta Firm\ SO\ Index\ 6$ (4)	$\Delta Firm\ SO\ Index\ 5$ (5)	$\Delta Firm\ SO\ Index\ 6$ (6)
<i>Exog. $\Delta Board\ SO\ Bias$</i>	0.424* (1.70)	0.586** (2.19)	0.474 (1.56)	0.698** (2.18)	0.543* (1.75)	0.710** (2.14)
<i>Endo. $\Delta Board\ SO\ Bias$</i>	0.380*** (4.30)	0.337*** (3.85)	0.438*** (4.45)	0.388*** (3.88)	0.442*** (4.24)	0.400*** (3.87)
<i>$\Delta Peer\ SO\ Index$</i>	0.558*** (4.10)	0.391*** (2.64)	0.633*** (3.82)	0.413** (2.10)	0.718*** (4.56)	0.550*** (3.18)
<i>Firm Size</i>	-0.090* (-1.66)	-0.053 (-0.99)	-0.114 (-1.41)	-0.040 (-0.51)	-0.114 (-1.11)	-0.048 (-0.48)
<i>Leverage</i>	-0.162 (-1.28)	-0.191 (-1.42)	-0.206 (-0.90)	-0.266 (-1.08)	-0.210 (-0.99)	-0.240 (-1.08)
<i>Advertising</i>	-0.459 (-0.32)	-0.032 (-0.02)	0.851 (0.57)	1.083 (0.71)	0.798 (0.38)	0.242 (0.11)
<i>R&D</i>	-0.268 (-0.46)	-0.012 (-0.02)	-1.020* (-1.77)	-0.561 (-0.91)	-0.651 (-0.72)	-0.338 (-0.35)
<i>ROA</i>	0.167 (0.75)	0.156 (0.68)	-0.115 (-0.32)	-0.173 (-0.48)	-0.098 (-0.36)	-0.069 (-0.24)
<i>CEO Age</i>	-0.355 (-1.64)	-0.337 (-1.50)	-0.375 (-1.36)	-0.343 (-1.20)	-0.627* (-1.92)	-0.584* (-1.69)
<i>CEO Duality</i>	0.061 (1.11)	0.048 (0.82)	0.056 (0.75)	0.036 (0.46)	0.025 (0.29)	0.022 (0.25)
<i>Unionization</i>	-0.001 (-0.44)	-0.002 (-0.46)	-0.004 (-0.91)	-0.004 (-0.93)	-0.006 (-1.03)	-0.006 (-1.07)
<i>Market Share</i>	13.324* (1.69)	9.200 (1.10)	13.764 (1.64)	7.968 (0.92)	26.359*** (3.71)	20.881*** (2.74)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.167	0.147	0.237	0.209	0.260	0.220
Observations	2,047	2,047	1,488	1,503	1,140	1,140

Table 6. The potential for board and firm stakeholder orientation gap decrease and director selection – Logit regression models

In this table, we estimate director selection logit regression models. The dependent variable is a dummy variable, $Director\ Selection_{i,k,t}$ that takes the value one if firm i selects director k in time-period t , and is zero otherwise. The independent variable of interest is $Board\ SO\ Gap\ Decrease_{i,k,t-1}$. It is a dummy variable that takes the value one if the selection of the prospective director will reduce the absolute gap between the stakeholder orientation of the board and the firm ($|Board\ SO\ Index - Firm\ SO\ Index|$), and takes the value zero otherwise. For this analysis, we not only need to include the directors actually selected by the firm to serve on its board, but also those directors who could potentially have been selected. To make the computation tractable, we randomly select 5,000 directors as potential matches (instead of all directors as potential matches) for each firm-director pair. We report three sets of regressions in the table. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the $Firm\ SO\ Index$ is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, $Board\ SO\ Gap\ Decrease$ is based on $Firm\ SO\ Index\ 5_{i,t-1}$ and $Director\ SO\ Index\ 5_{i,k,t-1}$ ($Firm\ SO\ Index\ 6_{i,k,t-1}$ and $Director\ SO\ Index\ 6_{i,k,t-1}$) in the first (second) regression model. The control variables are similar to those employed in [Bouwman \(2011\)](#). All independent variables are lagged by one year and are defined in the Appendix. The regressions include year and industry dummy variables. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

<i>SO Index measure</i>	Baseline		Exclude Zero-CSR Firms		Interlock \geq 50%	
	<i>SO Index 5</i> (1)	<i>SO Index 6</i> (2)	<i>SO Index 5</i> (3)	<i>SO Index 6</i> (4)	<i>SO Index 5</i> (5)	<i>SO Index 6</i> (6)
<i>Board SO Gap Decrease</i>	0.079** (2.26)	0.064* (1.78)	0.113*** (2.61)	0.104** (2.34)	0.137*** (2.77)	0.113** (2.23)
<i>Governance Gap</i>	-0.475*** (-14.67)	-0.475*** (-14.68)	-0.523*** (-13.90)	-0.524*** (-13.95)	-0.610*** (-13.16)	-0.610*** (-13.16)
<i>Same Size</i>	0.613*** (16.44)	0.613*** (16.45)	0.796*** (17.73)	0.796*** (17.81)	0.837*** (14.61)	0.837*** (14.62)
<i>Same Industry</i>	0.779*** (16.35)	0.779*** (16.36)	0.664*** (12.26)	0.670*** (12.41)	0.676*** (10.15)	0.676*** (10.15)
<i>Same Location</i>	1.123*** (26.13)	1.123*** (26.09)	1.086*** (22.25)	1.089*** (22.32)	1.055*** (17.98)	1.054*** (17.93)
<i>ROA</i>	0.134 (1.00)	0.134 (1.00)	0.143 (0.92)	0.126 (0.81)	0.202 (0.97)	0.202 (0.97)
<i>Director Age</i>	-0.033*** (-23.59)	-0.033*** (-23.59)	-0.035*** (-22.47)	-0.035*** (-22.54)	-0.035*** (-18.48)	-0.035*** (-18.48)
<i>Directorship</i>	0.248*** (17.12)	0.247*** (17.10)	0.260*** (16.46)	0.258*** (16.32)	0.283*** (15.25)	0.282*** (15.23)
Year dummy	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.041	0.041	0.044	0.044	0.047	0.047
Observations	16,558,974	16,558,974	12,573,051	12,648,066	8,212,036	8,212,036

Table 7. Announcement-period abnormal returns (CARs) and the potential for board and firm stakeholder orientation gap decrease upon announcement of director appointment

In this table, we estimate WLS regressions to estimate the effect of potential for board and firm stakeholder orientation gap decrease (*Board SO Gap Decrease*) on announcement-period abnormal returns (CARs) upon announcements of director appointments. CARs are estimated over a (-1, 0) day event-period using the market model (CRSP value-weighted index). *Board SO Gap Decrease* is a dummy variable that takes the value one if the selection of the prospective director will reduce the absolute gap between the stakeholder orientation of the board and the firm ($|Board\ SO\ Index - Firm\ SO\ Index|$), and takes the value zero otherwise. We report three sets of regressions in the table. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the *Firm SO Index* is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, *Board SO Gap Decrease* is based on *Firm SO Index* $5_{i,t-1}$, *Board SO Index* $5_{i,t-1}$, and *Director SO Index* $5_{i,k,t-1}$ (*Firm SO Index* $6_{i,t-1}$, *Board SO Index* $6_{i,t-1}$, and *Director SO Index* $6_{i,k,t-1}$) in the first (second) regression model. All independent variables are lagged by one year and are defined in the Appendix. The regressions include year-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

<i>SO Index measure</i>	Baseline		Exclude Zero-CSR Firms		Interlock $\geq 50\%$	
	<i>SO Index 5</i> (1)	<i>SO Index 6</i> (2)	<i>SO Index 5</i> (3)	<i>SO Index 6</i> (4)	<i>SO Index 5</i> (5)	<i>SO Index 6</i> (6)
<i>Board SO Gap Decrease</i>	0.256** (2.18)	0.208* (1.80)	0.348*** (2.69)	0.291** (2.30)	0.338** (2.14)	0.269* (1.74)
<i>Firm Size</i>	-0.018 (-0.43)	-0.018 (-0.43)	-0.045 (-0.99)	-0.044 (-0.96)	0.000 (0.01)	0.000 (0.00)
<i>Board Size</i>	-0.112 (-0.41)	-0.111 (-0.41)	0.068 (0.23)	0.060 (0.20)	-0.051 (-0.13)	-0.058 (-0.14)
<i>Director Age</i>	-0.009 (-1.00)	-0.008 (-0.94)	-0.017* (-1.85)	-0.015* (-1.66)	-0.005 (-0.39)	-0.004 (-0.31)
<i>Directorship</i>	-0.082 (-1.29)	-0.087 (-1.36)	-0.086 (-1.27)	-0.090 (-1.34)	-0.132 (-1.63)	-0.136* (-1.68)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R ²	0.008	0.007	0.012	0.011	0.015	0.013
Observations	1,896	1,896	1,498	1,501	1,013	1,013

Table 8. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*)
 In this table, we report results from three pairs of regression specifications (Baseline, Exclude Zero-CSR Firms, and Interlock \geq 50%). In each pair, we report results from an OLS regressions model and a 2SLS regression model. In the 2SLS regression model, we report results from both the first- and second-stage regressions. The dependent variable is *Tobin's Q*_{*i,t*} in the OLS regression model and in the second-stage estimated regression in the 2SLS regression specification. The main independent variable is *Board SO Gap*_{*i,t-1*}. It is defined as the absolute value of the difference between *Board SO Index*_{*i,t-1*} and *Firm SO Index*_{*i,t-1*}. In Panel A (Panel B), *Board SO Gap* is measured using *SO Index 5* (*SO Index 6*). To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. All other independent variables are also lagged by one year and are defined in the Appendix. We use the number of directors in the local area (within a radius of 100 km from the focal firm's headquarter) who have the potential to decrease the *Board SO Gap* if they were on the focal firm's board. In computing this number, we exclude all directors who are serving as directors on the boards of firms operating in the same Fama-French 17 industry as the focal firm (*Local Director Pool (Gap)*). We include year- and firm-fixed effects in both regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Panel A: <i>Board SO Gap</i> is measured using <i>SO Index 5</i>									
Model	Baseline			Exclude Zero-CSR Firms			Interlock \geq 50%		
	OLS	2SLS		OLS	2SLS		OLS	2SLS	
	(1)	1 st Stage	2 nd Stage	(4)	1 st Stage	2 nd Stage	(7)	1 st Stage	2 nd Stage
<i>Local Director Pool (Gap)</i>		-0.005*** (-2.99)			-0.019*** (-7.24)			-0.053*** (-8.51)	
<i>Board SO Gap</i>	-0.069* (-1.65)		-1.587 (-1.46)	-0.087** (-2.18)		-0.699** (-2.20)	-0.071* (-1.74)		-0.116 (-0.61)
<i>Firm Size</i>	-0.411*** (-12.12)	0.007 (1.15)	-0.404*** (-10.64)	-0.417*** (-10.39)	0.008 (0.84)	-0.421*** (-9.93)	-0.481*** (-7.76)	0.028* (1.95)	-0.480*** (-7.47)
<i>R&D</i>	2.132*** (3.10)	-0.050 (-0.54)	2.115*** (2.99)	1.758* (1.91)	0.105 (0.65)	1.909** (2.03)	2.077** (2.04)	0.086 (0.46)	2.306** (2.21)
<i>Cash</i>	0.648*** (5.22)	0.029 (1.57)	0.692*** (5.28)	0.776*** (4.83)	0.034 (1.21)	0.800*** (4.88)	0.928*** (4.45)	0.010 (0.23)	0.961*** (4.47)
<i>ROA</i>	0.782*** (4.49)	0.004 (0.19)	0.790*** (4.36)	0.728*** (3.22)	0.036 (1.02)	0.737*** (3.21)	0.568* (1.83)	0.054 (0.97)	0.528* (1.69)
<i>CEO Duality</i>	0.044* (1.92)	0.005 (0.92)	0.054** (2.15)	0.040 (1.46)	0.006 (0.81)	0.049* (1.71)	0.035 (0.95)	0.010 (0.87)	0.040 (1.00)
<i>Firm Age</i>	-0.478*** (-6.13)	-0.075*** (-4.00)	-0.620*** (-5.42)	-0.418*** (-3.87)	-0.071** (-2.55)	-0.496*** (-4.43)	-0.340** (-2.31)	-0.131*** (-3.14)	-0.396*** (-2.65)
<i>Board Size</i>	-0.156** (-2.20)	-0.012 (-0.76)	-0.184** (-2.30)	-0.198** (-2.44)	0.003 (0.15)	-0.207** (-2.45)	-0.076 (-0.73)	-0.002 (-0.05)	-0.077 (-0.72)

Continued...

Table 8 (Continued)

Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic		8.936***			52.411***			72.503***	
Difference-in-Sargan Statistic		2.648			4.254**			0.143	
Difference-in-Sargan Statistic P-value		0.104			0.039			0.705	
Within R ²	0.234		0.124	0.239		0.215	0.228		0.230
Observations	14,255	13,600	13,600	9,522	8,992	8,992	5,372	5,051	5,051
Panel B: <i>Board SO Gap</i> is measured using <i>SO Index 6</i>									
Model	Baseline			Exclude Zero-CSR Firms			Interlock \geq 50%		
	<u>OLS</u>	<u>2SLS</u>		<u>OLS</u>	<u>2SLS</u>		<u>OLS</u>	<u>2SLS</u>	
		<u>1st Stage</u>	<u>2nd Stage</u>		<u>1st Stage</u>	<u>2nd Stage</u>		<u>1st Stage</u>	<u>2nd Stage</u>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Local Director Pool (Gap)</i>		-0.005*** (-2.86)			-0.019*** (-6.76)			-0.054*** (-8.52)	
<i>Board SO Gap</i>	-0.076* (-1.84)		-1.513 (-1.35)	-0.095** (-2.42)		-0.629* (-1.92)	-0.086** (-2.08)		-0.098 (-0.54)
<i>Firm Size</i>	-0.411*** (-12.12)	0.010 (1.50)	-0.401*** (-10.33)	-0.417*** (-10.40)	0.013 (1.42)	-0.417*** (-9.82)	-0.479*** (-7.74)	0.037** (2.43)	-0.479*** (-7.46)
<i>R&D</i>	2.131*** (3.10)	-0.068 (-0.73)	2.092*** (2.96)	1.755* (1.92)	0.053 (0.32)	1.883** (2.02)	2.074** (2.03)	0.031 (0.17)	2.301** (2.20)
<i>Cash</i>	0.648*** (5.22)	0.026 (1.34)	0.685*** (5.23)	0.769*** (4.83)	0.029 (0.96)	0.788*** (4.84)	0.927*** (4.44)	0.006 (0.11)	0.959*** (4.46)
<i>ROA</i>	0.782*** (4.49)	-0.005 (-0.21)	0.777*** (4.29)	0.724*** (3.22)	0.018 (0.50)	0.727*** (3.18)	0.568* (1.83)	0.041 (0.70)	0.526* (1.69)
<i>CEO Duality</i>	0.044* (1.92)	0.002 (0.41)	0.050** (1.99)	0.039 (1.46)	0.003 (0.33)	0.047* (1.65)	0.035 (0.94)	0.007 (0.50)	0.039 (0.99)
<i>Firm Age</i>	-0.479*** (-6.14)	-0.078*** (-3.91)	-0.618*** (-5.24)	-0.412*** (-3.84)	-0.075** (-2.57)	-0.485*** (-4.33)	-0.344** (-2.33)	-0.140*** (-3.17)	-0.394*** (-2.63)
<i>Board Size</i>	-0.156** (-2.20)	-0.010 (-0.58)	-0.180** (-2.26)	-0.192** (-2.38)	0.001 (0.02)	-0.202** (-2.42)	-0.075 (-0.73)	0.000 (0.01)	-0.077 (-0.72)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic		8.198***			45.746***			72.515***	
Difference-in-Sargan Statistic		2.230			3.108*			0.055	
Difference-in-Sargan Statistic P-value		0.135			0.078			0.815	
Within R ²	0.235		0.127	0.239		0.218	0.228		0.231
Observations	14,255	13,600	13,600	9,522	9,055	9,055	5,372	5,051	5,051

Table 9. The impact of shareholder proposal shock (*SH Proposal Shock*) on the relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*)

This table presents results from estimated OLS regressions in which the dependent variable is *Tobin's Q*_{*i,t*}. The main independent variable is the interaction term of *Board SO Gap*_{*i,t-1*} and *SH Proposal Shock*_{*i,t-1*}. *Board SO Gap*_{*i,t-1*} is defined as the absolute value of the difference between *Board SO Index*_{*i,t-1*} and *Firm SO Index*_{*i,t-1*}. *SH Proposal Shock*_{*i,t-1*} is the signed number of outside directors who have a seat on other firms experiencing shareholder-initiated governance proposals in year *t-1*. It has a positive (negative) sign if these shareholder proposals are likely to subsequently increase (decrease) *Board SO Gap*. To control for the effect of governance-related proposals at the focal firm, we include an indicator variable *Firm SH Proposal* that equals 1 if the focal firm is itself a target of a shareholder-initiated governance proposals in year *t-1*, and is 0 otherwise. We report three sets of regressions in the table. In the first set, we report our baseline regression models. In the second set, we exclude all firm-year observations where the *Firm SO Index* is zero. Finally, in the third set, we only include firm-year observations if the number of board interlocks is at least 50%. In each set, *Board SO Gap* is measured using *SO Index 5* (*SO Index 6*) in the first (second) regression model. To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in both regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

<i>SO Index measure</i>	Baseline		Exclude Zero-CSR Firms		Interlock ≥ 50%	
	<i>SO Index 5</i> (1)	<i>SO Index 6</i> (2)	<i>SO Index 5</i> (3)	<i>SO Index 6</i> (4)	<i>SO Index 5</i> (5)	<i>SO Index 6</i> (6)
<i>Board SO Gap</i>	-0.089** (-2.13)	-0.091** (-2.19)	-0.098** (-2.51)	-0.104*** (-2.68)	-0.091** (-2.26)	-0.097** (-2.43)
<i>SH Proposal Shock</i>	0.002 (0.53)	0.002 (0.44)	0.004 (0.84)	0.003 (0.86)	0.002 (0.42)	0.001 (0.24)
<i>Board SO Gap * SH Proposal Shock</i>	-0.016** (-2.47)	-0.014** (-2.20)	-0.016** (-2.42)	-0.014** (-2.13)	-0.013** (-1.98)	-0.011* (-1.72)
<i>Firm SH Proposal</i>	0.039* (1.79)	0.038* (1.77)	0.041** (2.12)	0.043** (2.23)	0.018 (0.66)	0.017 (0.63)
<i>Firm Size</i>	-0.416*** (-11.17)	-0.415*** (-11.17)	-0.423*** (-10.65)	-0.423*** (-10.69)	-0.477*** (-7.16)	-0.476*** (-7.14)
<i>R&D</i>	1.906*** (2.68)	1.904*** (2.68)	2.016** (1.97)	2.035** (2.00)	1.367 (1.12)	1.362 (1.11)
<i>Cash</i>	0.638*** (4.87)	0.637*** (4.86)	0.739*** (4.40)	0.726*** (4.33)	0.785*** (3.46)	0.782*** (3.44)
<i>ROA</i>	0.802*** (4.44)	0.801*** (4.44)	0.672*** (3.07)	0.667*** (3.07)	0.502 (1.50)	0.500 (1.49)
<i>CEO Duality</i>	0.018 (0.78)	0.018 (0.77)	0.008 (0.29)	0.006 (0.22)	0.008 (0.20)	0.008 (0.19)
<i>Firm Age</i>	-0.495*** (-4.88)	-0.496*** (-4.89)	-0.499*** (-3.51)	-0.487*** (-3.47)	-0.349* (-1.81)	-0.352* (-1.83)
<i>Board Size</i>	-0.083 (-1.07)	-0.084 (-1.07)	-0.125 (-1.40)	-0.119 (-1.34)	-0.015 (-0.13)	-0.016 (-0.14)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.233	0.233	0.252	0.252	0.227	0.228
Observations	11,798	11,798	7,950	7,996	4,551	4,551

Table 10. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) for sub-samples formed based on R&D intensity, patent counts, SG&A expenditures, and advertising expenses

In this table, we report results from two estimated OLS regressions for sub-samples formed based on R&D intensity (*R&D*), the number of patents (*Patent Counts*), SG&A expenditures (*SG&A*), and advertising expenses (*Advertising*). The sub-samples are formed based on median values of *R&D*, *Patent Counts*, *SG&A*, and *Advertising*. The dependent variable is *Tobin's Q*_{*i,t*} in all the reported regressions. The main independent variable is *Board SO Gap*_{*i,t-1*}. It is defined as the absolute value of the difference between *Board SO Index*_{*i,t-1*} and *Firm SO Index*_{*i,t-1*}. In the estimated regressions in Panel A (Panel B), *Board SO Gap* is measured using *SO Index 5* (*SO Index 6*). To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in all regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Panel A: <i>Board SO Gap</i> is measured using <i>SO Index 5</i>								
<i>Sub-sample</i>	<i>R&D</i>		<i>Patent Counts</i>		<i>SG&A</i>		<i>Advertising</i>	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)
<i>Board SO Gap</i>	-0.197*** (-3.31)	0.042 (0.80)	-0.152** (-2.40)	-0.015 (-0.30)	-0.150** (-2.15)	0.026 (0.65)	-0.113* (-1.75)	-0.009 (-0.18)
<i>Firm Size</i>	-0.585*** (-9.21)	-0.308*** (-8.51)	-0.461*** (-5.65)	-0.397*** (-11.02)	-0.557*** (-9.04)	-0.335*** (-7.67)	-0.454*** (-7.79)	-0.411*** (-10.13)
<i>R&D</i>	1.447** (2.02)	0.000 (.)	2.350*** (2.78)	2.059 (1.43)	2.587*** (3.08)	0.643 (0.55)	3.821*** (3.39)	0.939 (1.19)
<i>Cash</i>	0.502*** (2.83)	0.741*** (4.77)	0.462** (2.08)	0.720*** (4.69)	0.663*** (4.14)	0.495*** (2.69)	0.591*** (3.06)	0.649*** (3.81)
<i>ROA</i>	0.688*** (2.58)	1.109*** (5.15)	1.097*** (3.40)	0.727*** (3.77)	1.118*** (3.85)	0.558*** (2.61)	1.242*** (3.74)	0.486** (2.46)
<i>CEO Duality</i>	0.083* (1.83)	0.016 (0.80)	0.029 (0.59)	0.044** (2.07)	0.039 (1.07)	0.025 (1.05)	0.022 (0.60)	0.046 (1.60)
<i>Firm Age</i>	-0.591*** (-4.14)	-0.407*** (-4.87)	-0.515** (-2.49)	-0.495*** (-5.94)	-0.633*** (-5.21)	-0.155* (-1.82)	-0.611*** (-4.91)	-0.357*** (-3.53)
<i>Board Size</i>	-0.327*** (-2.69)	-0.017 (-0.22)	-0.353** (-2.13)	-0.038 (-0.55)	-0.228* (-1.79)	-0.038 (-0.56)	-0.212** (-1.96)	-0.075 (-0.85)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.235	0.254	0.288	0.186	0.286	0.206
Observations	5,941	8,314	4,601	9,654	7,188	7,067	5,879	8,376

Continued...

Table 10 (Continued)

Panel B: <i>Board SO Gap</i> is measured using <i>SO Index 6</i>								
<i>Sub-sample</i>	<i>R&D</i>		<i>Patent Counts</i>		<i>SG&A</i>		<i>Advertising</i>	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)
<i>Board SO Gap</i>	-0.215*** (-3.62)	0.044 (0.87)	-0.166*** (-2.61)	-0.013 (-0.26)	-0.151** (-2.24)	0.015 (0.37)	-0.123* (-1.90)	-0.021 (-0.42)
<i>Firm Size</i>	-0.584*** (-9.19)	-0.308*** (-8.52)	-0.460*** (-5.64)	-0.397*** (-11.02)	-0.557*** (-9.04)	-0.335*** (-7.66)	-0.454*** (-7.78)	-0.411*** (-10.13)
<i>R&D</i>	1.445** (2.02)	0.000 (.)	2.349*** (2.78)	2.059 (1.43)	2.586*** (3.08)	0.642 (0.55)	3.815*** (3.38)	0.938 (1.19)
<i>Cash</i>	0.501*** (2.82)	0.741*** (4.76)	0.461** (2.08)	0.720*** (4.69)	0.662*** (4.14)	0.496*** (2.69)	0.591*** (3.06)	0.649*** (3.82)
<i>ROA</i>	0.688*** (2.58)	1.110*** (5.15)	1.097*** (3.40)	0.727*** (3.77)	1.117*** (3.84)	0.558*** (2.61)	1.243*** (3.74)	0.486** (2.46)
<i>CEO Duality</i>	0.083* (1.83)	0.016 (0.80)	0.029 (0.58)	0.044** (2.07)	0.039 (1.06)	0.025 (1.06)	0.022 (0.59)	0.046 (1.60)
<i>Firm Age</i>	-0.597*** (-4.19)	-0.407*** (-4.88)	-0.523** (-2.52)	-0.494*** (-5.94)	-0.633*** (-5.21)	-0.156* (-1.83)	-0.613*** (-4.94)	-0.357*** (-3.53)
<i>Board Size</i>	-0.326*** (-2.68)	-0.017 (-0.22)	-0.353** (-2.13)	-0.038 (-0.55)	-0.228* (-1.79)	-0.038 (-0.56)	-0.212** (-1.97)	-0.074 (-0.85)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.235	0.254	0.288	0.186	0.286	0.207
Observations	5,941	8,314	4,601	9,654	7,188	7,067	5,879	8,376

Table 11. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) for sub-samples formed based on board type (*Advisory vs. Monitoring*)

In this table, we report results from two estimated OLS regressions for sub-samples formed based on the monitoring intensity of outside directors. We follow [Faleye, Hoitash and Hoitash \(2011\)](#) and compute board monitoring intensity as the percentage of outside directors serving in two or more principal monitoring committees – Audit, Compensation, and Nominating (*Proportion Monitoring Directors*). We classify *Board Type* as *Advisory* if *Proportion Monitoring Directors* < 50% and *Monitoring* if *Proportion Monitoring Directors* ≥ 50%. The sub-samples are formed based on whether *Board Type* is *Advisory* or *Monitoring*. The dependent variable is *Tobin's Q_{i,t}* in all the reported regressions. The main independent variable is *Board SO Gap_{i,t-1}*. It is defined as the absolute value of the difference between *Board SO Index_{i,t-1}* and *Firm SO Index_{i,t-1}*. In the first (second) set of regressions, *Board SO Gap* is measured using *SO Index 5* (*SO Index 6*). To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in all regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

<i>SO Index measure</i>	<i>SO Index 5</i>		<i>SO Index 6</i>	
	<i>Board Type</i>		<i>Board Type</i>	
<i>Sub-sample</i>	<i>Advisory</i>	<i>Monitoring</i>	<i>Advisory</i>	<i>Monitoring</i>
	(1)	(2)	(3)	(4)
<i>Board SO Gap</i>	-0.084** (-2.01)	-0.046 (-0.58)	-0.084** (-2.08)	-0.066 (-0.83)
<i>Firm Size</i>	-0.367*** (-8.04)	-0.475*** (-9.20)	-0.367*** (-8.04)	-0.475*** (-9.20)
<i>R&D</i>	1.802 (1.50)	1.462 (1.59)	1.801 (1.50)	1.458 (1.58)
<i>Cash</i>	0.634*** (2.93)	0.623*** (3.44)	0.633*** (2.93)	0.624*** (3.44)
<i>ROA</i>	0.762*** (2.73)	0.776*** (3.76)	0.761*** (2.73)	0.775*** (3.75)
<i>CEO Duality</i>	0.052* (1.65)	0.062** (1.97)	0.052 (1.64)	0.062** (1.97)
<i>Firm Age</i>	-0.355*** (-3.17)	-0.587*** (-4.84)	-0.356*** (-3.19)	-0.588*** (-4.86)
<i>Board Size</i>	-0.033 (-0.40)	-0.096 (-0.97)	-0.032 (-0.39)	-0.097 (-0.97)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Within R ²	0.208	0.254	0.208	0.254
Observations	6,753	7,102	6,753	7,102

On the Alignment of Stakeholder Orientation between the Board and Managers

Omesh Kini, Sangho Lee, and Mo Shen

Internet Appendix Tables

Internet Appendix Table 1. The association between board stakeholder orientation and firm stakeholder orientation using alternative board stakeholder orientation index measures

Internet Appendix Table 2. The impact of board stakeholder orientation bias on subsequent changes in firm's stakeholder orientation using alternative board stakeholder orientation index measures

Internet Appendix Table 3. The potential for board and firm stakeholder orientation gap decrease and director selection – Logit regression models using alternative board stakeholder orientation index measures

Internet Appendix Table 4. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) using alternative board stakeholder orientation index measures

Internet Appendix Table 5. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) for sub-samples formed based on R&D intensity, patent counts, SG&A expenditures, advertising expenses, and board type using alternative board stakeholder orientation index measures

Internet Appendix Table 6. The association between board stakeholder orientation and firm stakeholder orientation using all board members' (inside and outside directors) stakeholder preferences

Internet Appendix Table 7. The impact of board stakeholder orientation bias on subsequent changes in firm's stakeholder orientation: OLS and 2SLS regression results using all board members' (inside and outside directors) stakeholder preferences

Internet Appendix Table 8. The potential for board and firm stakeholder orientation gap decrease and director selection – Logit regression models using all board members' (inside and outside directors) stakeholder preferences

Internet Appendix Table 9. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) using all board members' (inside and outside directors) stakeholder preferences

Internet Appendix Table 10. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) for sub-samples formed based on R&D intensity, patent counts, SG&A expenditures, advertising expenses, and board type using all board members' (inside and outside directors) stakeholder preferences

Internet Appendix Table 1. The association between board stakeholder orientation and firm stakeholder orientation using alternative board stakeholder orientation index measures

This table provides results from estimated OLS regressions in which the dependent is *Firm SO Index*_{*i,t*} and the main independent variable is *Board SO Index*_{*i,t-1*}. We report two sets of regressions. In the first set, we substitute the *Peer SO Index* instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In the second set, we assign a value of zero instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In each set, the dependent variable in the first (second) regression model is *Firm SO Index* 5_{*i,t*} (*Firm SO Index* 6_{*i,t*}). Accordingly, the main independent variable is *Board SO Index* 5_{*i,t-1*} (*Board SO Index* 6_{*i,t-1*}) in the first (second) regression model. Also, to be consistent, we use *Peer SO Index* 5_{*i,t*} (*Peer SO Index* 6_{*i,t*}) in the first (second) regression model in each set. We include firm and CEO characteristics as well as *Peer SO Index* as control variables. All independent variables except *Peer SO Index* are lagged by one year. See Appendix for the definitions of all variables. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Non-interlocked director's SO Index Dependent Variable	Set to Peer Average		Set to Zero	
	<i>Firm SO Index</i> 5 (1)	<i>Firm SO Index</i> 6 (2)	<i>Firm SO Index</i> 5 (3)	<i>Firm SO Index</i> 6 (4)
<i>Board SO Index</i>	0.303*** (5.49)	0.392*** (6.83)	0.377*** (5.93)	0.421*** (6.41)
<i>Peer SO Index</i>	0.761*** (13.88)	0.601*** (10.08)	0.821*** (15.49)	0.687*** (11.97)
<i>Firm Size</i>	-0.035** (-2.28)	-0.028* (-1.76)	-0.036** (-2.30)	-0.030* (-1.89)
<i>Leverage</i>	0.015 (0.32)	0.006 (0.13)	0.012 (0.25)	0.003 (0.07)
<i>Advertising</i>	-0.168 (-0.41)	-0.168 (-0.40)	-0.202 (-0.49)	-0.215 (-0.51)
<i>R&D</i>	-0.182 (-1.16)	-0.202 (-1.27)	-0.201 (-1.28)	-0.232 (-1.44)
<i>ROA</i>	0.110** (2.08)	0.125** (2.25)	0.111** (2.07)	0.124** (2.21)
<i>CEO Age</i>	-0.096* (-1.70)	-0.104* (-1.75)	-0.100* (-1.77)	-0.108* (-1.82)
<i>CEO Duality</i>	0.029** (2.00)	0.029* (1.90)	0.029** (2.00)	0.030* (1.91)
<i>Unionization</i>	0.000 (0.03)	-0.000 (-0.20)	0.000 (0.13)	-0.000 (-0.06)
<i>Market Share</i>	1.317 (0.54)	-0.583 (-0.20)	1.182 (0.49)	-0.760 (-0.26)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Within R ²	0.245	0.230	0.247	0.229
Observations	13,342	13,342	13,342	13,342

Internet Appendix Table 2. The impact of board stakeholder orientation bias on subsequent changes in firm's stakeholder orientation using alternative board stakeholder orientation index measures

In Panel A, we substitute the *Peer SO Index* instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In Panel B, we assign a value of zero instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In each panel, we report results from three pairs of regression models. In each pair, the dependent variable in the first (second) regression model is $\Delta Firm SO Index 5_{i,t}$ ($\Delta Firm SO Index 6_{i,t}$) where “*i*” indicates firm *i*. In the first two pairs, the main independent variable is *Board SO Bias* $5_{i,t-1}$ (*Board SO Bias* $6_{i,t-1}$) in the first (second) regression model. In the third pair, the main independent variable is *Exogenous $\Delta Board SO Bias$* $5_{i,t-1}$ (*Exogenous $\Delta Board SO Bias$* $6_{i,t-1}$) in the first (second) regression model. The $\Delta Firm SO Index_{i,t}$ is computed as *Firm SO Index* $_{i,t}$ – *Firm SO Index* $_{i,t-1}$. The *Board SO Bias* $_{i,t-1}$ computed as *Board SO Index* $_{i,t-1}$ – *Firm SO Index* $_{i,t-1}$. The *Exogenous $\Delta Board SO Bias$* $_{i,t-1}$ is computed as *Board SO Bias* $_{i,t-1}$ – *Board SO Bias* $_{ongoing directorships,i,t-1}$. We report results from an OLS regression model in the first and third pair and results from a 2SLS regression model in the second pair (only the second-stage regression). In the 2SLS regression model, we instrument for *Board SO Bias* $_{i,t-1}$ by the pool of local directors (*Local Director Pool (Bias)* $_{i,t-1}$) who have a *Director SO Index* $_{i,k,t-1}$ lower than the *Board SO Index* $_{i,t-1}$ of the focal firm and, thus, whose membership on the focal firm's board can potentially reduce the *Board SO Bias* $_{i,t-1}$. In computing the pool of local directors, we exclude firms in the same Fama-French 17 industry and the focal firm. To define the local area, we use a radius of 100 km from the focal firm's corporate headquarter using historical headquarter information obtained from *S&P Capital IQ*. To be consistent, we use $\Delta Peer SO Index 5_{i,t}$ ($\Delta Peer SO Index 6_{i,t}$) in the first (second) regression model in each pair. We include firm and CEO characteristics as well as $\Delta Peer SO Index$ as control variables. All independent variables except $\Delta Peer SO Index$ are lagged by one year and are defined in the Appendix. In the third pair of regressions, we also control for *Endogenous $\Delta Board SO Bias$* $_{i,t-1}$ computed as [*Board SO Bias* $_{ongoing directorships,t-1}$ – *Board SO Bias* $_{t-2}$]. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Panel A: Non-interlocked director's SO Index "Set to Peer Average"						
Model	OLS		2SLS (2 nd Stage)		Exogenous vs. Endogenous $\Delta Board SO Bias$	
Dependent Variable	$\Delta Firm SO Index 5$	$\Delta Firm SO Index 6$	$\Delta Firm SO Index 5$	$\Delta Firm SO Index 6$	$\Delta Firm SO Index 5$	$\Delta Firm SO Index 6$
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Board SO Bias</i>	0.506*** (27.62)	0.498*** (27.00)	0.550*** (7.69)	0.597*** (7.99)		
<i>Exog. $\Delta Board SO Bias$</i>					0.317 (1.15)	0.500* (1.73)
<i>Endo. $\Delta Board SO Bias$</i>					0.244*** (3.73)	0.214*** (3.37)
$\Delta Peer SO Index$	0.574*** (10.94)	0.390*** (7.00)	0.571*** (10.72)	0.404*** (7.05)	0.564*** (4.04)	0.392** (2.56)
<i>Firm Size</i>	-0.028** (-2.34)	-0.017 (-1.36)	-0.024* (-1.94)	-0.013 (-0.96)	-0.091* (-1.71)	-0.054 (-1.00)
<i>Leverage</i>	-0.008 (-0.21)	-0.015 (-0.38)	-0.009 (-0.24)	-0.011 (-0.29)	-0.119 (-0.96)	-0.151 (-1.14)
<i>Advertising</i>	-0.166 (-0.43)	-0.154 (-0.38)	-0.332 (-0.89)	-0.313 (-0.81)	-0.405 (-0.28)	0.063 (0.04)
<i>R&D</i>	-0.171 (-1.29)	-0.154 (-1.15)	-0.215* (-1.70)	-0.200 (-1.55)	-0.224 (-0.39)	0.027 (0.04)
<i>ROA</i>	0.057 (1.30)	0.071 (1.58)	0.058 (1.27)	0.081* (1.71)	0.207 (0.91)	0.195 (0.84)
<i>CEO Age</i>	-0.050 (-1.12)	-0.049 (-1.04)	-0.055 (-1.19)	-0.056 (-1.14)	-0.382* (-1.76)	-0.364 (-1.61)
<i>CEO Duality</i>	0.023* (1.93)	0.021* (1.71)	0.016 (1.31)	0.015 (1.17)	0.069 (1.28)	0.058 (0.98)
<i>Unionization</i>	0.000 (0.03)	-0.001 (-0.50)	0.000 (0.19)	-0.000 (-0.35)	-0.001 (-0.24)	-0.001 (-0.30)
<i>Market Share</i>	1.487 (0.60)	-0.174 (-0.06)	1.620 (0.48)	-0.567 (-0.15)	15.004* (1.88)	10.727 (1.27)

Continued...

Internet Appendix Table 2 (Continued)

Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic			98.800***	98.799***		
Difference-in-Sargan Statistic			0.282	1.655		
Within R ²	0.224	0.206			0.156	0.136
Observations	13,342	13,342	12,726	12,726	2,047	2,047

Panel B: Non-interlocked director's SO Index "Set to Zero"

Model	OLS		2SLS (2 nd Stage)		Exogenous vs. Endogenous <i>ΔBoard SO Bias</i>	
	<i>ΔFirm SO Index 5</i> (1)	<i>ΔFirm SO Index 6</i> (2)	<i>ΔFirm SO Index 5</i> (3)	<i>ΔFirm SO Index 6</i> (4)	<i>ΔFirm SO Index 5</i> (5)	<i>ΔFirm SO Index 6</i> (6)
<i>Board SO Bias</i>	0.477*** (26.02)	0.472*** (25.81)	0.654*** (12.54)	0.657*** (12.12)		
<i>Exog. ΔBoard SO Bias</i>					0.274 (0.98)	0.467 (1.58)
<i>Endo. ΔBoard SO Bias</i>					0.224*** (3.45)	0.194*** (3.08)
<i>ΔPeer SO Index</i>	0.539*** (10.06)	0.351*** (6.23)	0.544*** (9.77)	0.373*** (6.35)	0.559*** (4.01)	0.387** (2.52)
<i>Firm Size</i>	-0.029** (-2.40)	-0.019 (-1.54)	-0.025* (-1.92)	-0.016 (-1.15)	-0.090* (-1.68)	-0.054 (-0.99)
<i>Leverage</i>	-0.010 (-0.28)	-0.019 (-0.49)	-0.011 (-0.29)	-0.016 (-0.41)	-0.131 (-1.04)	-0.161 (-1.21)
<i>Advertising</i>	-0.208 (-0.53)	-0.210 (-0.51)	-0.404 (-1.05)	-0.397 (-0.99)	-0.396 (-0.28)	0.072 (0.05)
<i>R&D</i>	-0.226 (-1.64)	-0.214 (-1.53)	-0.313** (-2.27)	-0.299** (-2.15)	-0.273 (-0.45)	-0.013 (-0.02)
<i>ROA</i>	0.056 (1.27)	0.069 (1.53)	0.077 (1.60)	0.090* (1.83)	0.213 (0.93)	0.200 (0.84)
<i>CEO Age</i>	-0.054 (-1.20)	-0.052 (-1.10)	-0.076 (-1.58)	-0.073 (-1.44)	-0.387* (-1.78)	-0.366 (-1.61)
<i>CEO Duality</i>	0.024* (1.94)	0.022* (1.73)	0.019 (1.44)	0.017 (1.28)	0.071 (1.30)	0.059 (0.99)
<i>Unionization</i>	0.000 (0.09)	-0.001 (-0.44)	0.000 (0.16)	-0.000 (-0.31)	-0.000 (-0.14)	-0.001 (-0.21)
<i>Market Share</i>	1.265 (0.48)	-0.385 (-0.13)	1.100 (0.31)	-1.107 (-0.28)	14.862* (1.84)	10.475 (1.22)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic			217.69***	216.03***		
Difference-in-Sargan Statistic			14.25***	13.51***		
Within R ²	0.213	0.198			0.151	0.131
Observations	13,342	13,342	12,726	12,726	2,047	2,047

Internet Appendix Table 3. The potential for board and firm stakeholder orientation gap decrease and director selection – Logit regression models using alternative board stakeholder orientation index measures

In this table, we estimate director selection logit regression models. The dependent variable is a dummy variable, $Director\ Selection_{i,k,t}$ that takes the value one if firm i selects director k in time-period t , and is zero otherwise. The independent variable of interest is $Board\ SO\ Gap\ Decrease_{i,k,t-1}$. It is a dummy variable that takes the value one if the selection of the prospective director will reduce the absolute gap between the stakeholder orientation of the board and the firm ($|Board\ SO\ Index - Firm\ SO\ Index|$), and takes the value zero otherwise. For this analysis, we not only need to include the directors actually selected by the firm to serve on its board, but also those directors who could potentially have been selected. To make the computation tractable, we randomly select 5,000 directors as potential matches (instead of all directors as potential matches) for each firm-director pair. We report two sets of regressions. In the first set, we substitute the $Peer\ SO\ Index$ instead of the $Firm\ SO\ Index$ for directors who only sit on the board of the focal firm in computing the $Board\ SO\ Index$. In the second set, we assign a value of zero instead of the $Firm\ SO\ Index$ for directors who only sit on the board of the focal firm in computing the $Board\ SO\ Index$. In each set, $Board\ SO\ Gap\ Decrease$ is based on $Firm\ SO\ Index\ 5_{i,t-1}$ and $Director\ SO\ Index\ 5_{i,k,t-1}$ ($Firm\ SO\ Index\ 6_{i,t-1}$ and $Director\ SO\ Index\ 6_{i,k,t-1}$) in the first (second) regression model. The control variables are similar to those employed in [Bouwman \(2011\)](#). All independent variables are lagged by one year. The regressions include year and industry dummy variables. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Non-interlock SO Index	Set to Peer Average		Set to Zero	
<i>SO Index measure</i>	<i>SO Index 5</i>	<i>SO Index 6</i>	<i>SO Index 5</i>	<i>SO Index 6</i>
	(1)	(2)	(3)	(4)
<i>Board SO Gap Decrease</i>	0.115*** (3.51)	0.105*** (3.19)	0.183*** (5.73)	0.143*** (4.50)
<i>Same Size</i>	0.612*** (16.43)	0.612*** (16.43)	0.609*** (16.36)	0.610*** (16.39)
<i>Same Industry</i>	0.779*** (16.35)	0.778*** (16.34)	0.777*** (16.32)	0.777*** (16.33)
<i>Same Location</i>	1.126*** (26.28)	1.126*** (26.26)	1.125*** (26.28)	1.124*** (26.19)
<i>ROA</i>	0.136 (1.01)	0.136 (1.01)	0.133 (0.99)	0.133 (0.99)
<i>Director Age</i>	-0.033*** (-23.59)	-0.033*** (-23.59)	-0.033*** (-23.60)	-0.033*** (-23.60)
<i>Directorship</i>	0.248*** (17.15)	0.248*** (17.14)	0.248*** (17.14)	0.247*** (17.13)
<i>Governance Gap</i>	-0.475*** (-14.68)	-0.475*** (-14.69)	-0.473*** (-14.63)	-0.474*** (-14.64)
<i>Year Dummy</i>	Yes	Yes	Yes	Yes
<i>Industry Dummy</i>	Yes	Yes	Yes	Yes
<i>Pseudo R²</i>	0.041	0.041	0.041	0.041
<i>Observations</i>	16,558,974	16,558,974	16,558,974	16,558,974

Internet Appendix Table 4. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) using alternative board stakeholder orientation index measures

In Panel A, we substitute the *Peer SO Index* instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In Panel B, we assign a value of zero instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In each panel, we report results from three pairs of regression models. In each pair, the dependent variable is *Tobin's Q*_{*i,t*} where “*i*” indicates firm *i*. In the first two pairs, the main independent variable is *Board SO Gap* 5_{*i,t-1*} (*Board SO Gap* 6_{*i,t-1*}) in the first (second) regression model. In the third pair, the main independent variable is the interaction term of *Board SO Gap*_{*i,t-1*} and *SH Proposal Shock*_{*t-1*}. *Board SO Gap*_{*i,t-1*} is defined as the absolute value of the difference between *Board SO Index*_{*i,t-1*} and *Firm SO Index*_{*i,t-1*}. *SH Proposal Shock*_{*i,t-1*} is the signed number of outside directors who have a seat on other firms experiencing shareholder-initiated governance proposals in year *t-1*. It has a positive (negative) sign if these shareholder proposals are likely to subsequently increase (decrease) *Board SO Gap*. We report results from an OLS regression model in the first and third pair and results from a 2SLS regression model in the second pair (only the second-stage regression). In the 2SLS regression model, we instrument for *Board SO Gap*_{*i,t-1*} by the pool of local directors (*Local Director Pool (Gap)*_{*i,t-1*}) the potential to decrease the *Board SO Gap* if they were on the focal firm's board. In computing the pool of local directors, we exclude firms in the same Fama-French 17 industry and the focal firm. To define the local area, we use a radius of 100 km from the focal firm's corporate headquarter using historical headquarter information obtained from *S&P Capital IQ*. To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. In the third pair of regressions, to control for the effect of governance-related proposals at the focal firm, we include an indicator variable *Firm SH Proposal* that equals 1 if the focal firm is itself a target of a shareholder-initiated governance proposals in year *t-1*, and is 0 otherwise. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in both regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Panel A: Non-interlocked director's SO Index “Set to Peer Average”

Model	OLS		2SLS (2 nd Stage)		Shareholder Proposal Shock	
	$\Delta Firm SO$ <i>Index 5</i>	$\Delta Firm SO$ <i>Index 6</i>	$\Delta Firm SO$ <i>Index 5</i>	$\Delta Firm SO$ <i>Index 6</i>	$\Delta Firm SO$ <i>Index 5</i>	$\Delta Firm SO$ <i>Index 6</i>
Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)
<i>Board SO Gap</i>	-0.044 (-1.48)	-0.048 (-1.62)	-0.341* (-1.85)	-0.378** (-2.05)	-0.058* (-1.91)	-0.059** (-1.99)
<i>SH Proposal Shock</i>					0.003 (0.68)	0.001 (0.13)
<i>Board SO Gap</i> * <i>SH Proposal Shock</i>					-0.017*** (-3.04)	-0.012** (-2.21)
<i>Firm SH Proposal</i>					0.039* (1.82)	0.039* (1.79)
<i>Firm Size</i>	-0.411*** (-12.12)	-0.411*** (-12.12)	-0.410*** (-11.47)	-0.408*** (-11.32)	-0.415*** (-11.17)	-0.415*** (-11.16)
<i>R&D</i>	2.122** (3.09)	2.122** (3.09)	2.133*** (3.08)	2.129** (3.08)	1.893*** (2.67)	1.895*** (2.67)
<i>Cash</i>	0.649*** (5.23)	0.649*** (5.23)	0.659*** (5.25)	0.657*** (5.23)	0.636*** (4.86)	0.636*** (4.85)
<i>ROA</i>	0.782*** (4.48)	0.782*** (4.48)	0.779*** (4.40)	0.778*** (4.38)	0.802*** (4.43)	0.802*** (4.43)
<i>CEO Duality</i>	0.044* (1.92)	0.043* (1.91)	0.050** (2.12)	0.049** (2.07)	0.018 (0.77)	0.018 (0.77)
<i>Firm Age</i>	-0.480*** (-6.15)	-0.481*** (-6.17)	-0.551*** (-6.53)	-0.559*** (-6.58)	-0.497*** (-4.89)	-0.498*** (-4.91)
<i>Board Size</i>	-0.152** (-2.13)	-0.151** (-2.13)	-0.153** (-2.08)	-0.152** (-2.06)	-0.078 (-1.01)	-0.078 (-0.99)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic			60.394***	64.844***		
Difference-in-Sargan Statistic			2.958*	3.730*		
Difference-in-Sargan Statistic P-value			0.085	0.053		
Within R ²	0.235	0.235			0.233	0.233
Observations	14,235	14,235	13,580	13,580	11,777	11,777

Continued...

Internet Appendix Table 4 (Continued)

Panel B: Non-interlocked director's SO Index "Set to Zero"						
Model	OLS		2SLS (2 nd Stage)		Shareholder Proposal Shock	
Dep. Variable	$\Delta Firm SO$ Index 5 (1)	$\Delta Firm SO$ Index 6 (2)	$\Delta Firm SO$ Index 5 (3)	$\Delta Firm SO$ Index 6 (4)	$\Delta Firm SO$ Index 5 (5)	$\Delta Firm SO$ Index 6 (6)
<i>Board SO Gap</i>	-0.048*	-0.051*	-0.413	-0.414	-0.061**	-0.062**
	(-1.73)	(-1.86)	(-1.30)	(-1.32)	(-2.21)	(-2.29)
<i>SH Proposal Shock</i>					0.002	-0.000
					(0.44)	(-0.03)
<i>Board SO Gap * SH Proposal Shock</i>					-0.016***	-0.011**
					(-3.03)	(-2.16)
<i>Firm SH Proposal</i>					0.040*	0.039*
					(1.84)	(1.82)
<i>Firm Size</i>	-0.411***	-0.410***	-0.408***	-0.406***	-0.415***	-0.415***
	(-12.12)	(-12.12)	(-11.18)	(-11.01)	(-11.19)	(-11.16)
<i>R&D</i>	2.129**	2.128**	2.121***	2.118**	1.894**	1.893**
	(3.10)	(3.10)	(3.07)	(3.07)	(2.67)	(2.67)
<i>Cash</i>	0.647**	0.647**	0.660**	0.657**	0.635**	0.636**
	(5.22)	(5.22)	(5.25)	(5.22)	(4.85)	(4.86)
<i>ROA</i>	0.780**	0.780**	0.770**	0.767**	0.800**	0.802**
	(4.48)	(4.47)	(4.35)	(4.34)	(4.43)	(4.44)
<i>CEO Duality</i>	0.044*	0.044*	0.050**	0.049**	0.019	0.018
	(1.93)	(1.92)	(2.12)	(2.08)	(0.78)	(0.76)
<i>Firm Age</i>	-0.480***	-0.480***	-0.563***	-0.564***	-0.500***	-0.497***
	(-6.17)	(-6.18)	(-6.17)	(-6.21)	(-4.95)	(-4.90)
<i>Board Size</i>	-0.155**	-0.154**	-0.153**	-0.152**	-0.082	-0.078
	(-2.18)	(-2.17)	(-2.08)	(-2.05)	(-1.05)	(-1.00)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic			39.914***	37.872***		
Difference-in-Sargan Statistic			1.456	1.497		
Difference-in-Sargan Statistic P-value			0.228	0.221		
Within R ²	0.235	0.235			0.233	0.233
Observations	14,255	14,255	13,600	13,600	11,798	11,798

Internet Appendix Table 5. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) for sub-samples formed based on R&D intensity, patent counts, SG&A expenditures, advertising expenses, and board type using alternative board stakeholder orientation index measures

In this table, we report results from two estimated OLS regressions for sub-samples formed based on R&D intensity (*R&D*), the number of patents (*Patent Counts*), SG&A expenditures (*SG&A*), advertising expenses (*Advertising*), and board type (*Advisory vs. Monitoring*). The sub-samples are formed based on median values of *R&D*, *Patent Counts*, *SG&A*, *Advertising*, and *Proportion Monitoring Directors*. In Panel A, we substitute the *Peer SO Index* instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. In Panel B, we assign a value of zero instead of the *Firm SO Index* for directors who only sit on the board of the focal firm in computing the *Board SO Index*. The dependent variable is *Tobin's Q_{i,t}* in all the reported regressions. The main independent variable is *Board SO Gap_{i,t-1}* defined as the absolute value of the difference between *Board SO Index_{i,t-1}* and *Firm SO Index_{i,t-1}*. *Board SO Gap* is measured using *SO Index 5* or *SO Index 6*. To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in all regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Panel A: Non-interlocked director's SO Index "Set to Peer Average" / <i>Board SO Gap</i> is measured using <i>SO Index 5</i>										
<i>Sub-sample</i>	<i>R&D</i>		<i>Patent Counts</i>		<i>SG&A</i>		<i>Advertising</i>		<i>Board Type</i>	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)	<i>Advisory</i> (9)	<i>Monitoring</i> (10)
<i>Board SO Gap</i>	-0.146*** (-3.14)	0.022 (0.58)	-0.140*** (-2.87)	-0.004 (-0.11)	-0.093* (-1.74)	0.019 (0.76)	-0.090** (-1.98)	0.005 (0.12)	-0.065** (-2.16)	-0.009 (-0.17)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year / Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.236	0.254	0.288	0.186	0.287	0.206	0.210	0.257
Observations	5,936	8,299	4,599	9,636	7,172	7,063	5,868	8,367	6,747	7,089

Panel B: Non-interlocked director's SO Index "Set to Peer Average" / <i>Board SO Gap</i> is measured using <i>SO Index 6</i>										
<i>Sub-sample</i>	<i>R&D</i>		<i>Patent Counts</i>		<i>SG&A</i>		<i>Advertising</i>		<i>Board Type</i>	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)	<i>Advisory</i> (9)	<i>Monitoring</i> (10)
<i>Board SO Gap</i>	-0.151*** (-3.35)	0.023 (0.62)	-0.148*** (-3.11)	0.000 (0.00)	-0.095* (-1.85)	0.015 (0.60)	-0.099** (-2.18)	0.002 (0.04)	-0.066** (-2.23)	-0.020 (-0.36)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year / Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.236	0.254	0.288	0.186	0.287	0.206	0.210	0.257
Observations	5,936	8,299	4,599	9,636	7,172	7,063	5,868	8,367	6,747	7,089

Continued...

Internet Appendix Table 5 (Continued)

Panel C: Non-interlocked director's SO Index "Set to Zero" / Board SO Gap is measured using SO Index 5										
Sub-sample	R&D		Patent Counts		SG&A		Advertising		Board Type	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)	Advisory (9)	Monitoring (10)
Board SO Gap	-0.152*** (-3.32)	0.023 (0.71)	-0.142*** (-2.99)	-0.000 (-0.01)	-0.097** (-2.01)	0.015 (0.62)	-0.092** (-2.16)	0.005 (0.12)	-0.072** (-2.43)	-0.009 (-0.18)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year / Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.236	0.254	0.288	0.186	0.287	0.206	0.210	0.256
Observations	5,941	8,314	4,601	9,654	7,188	7,067	5,879	8,376	6,753	7,102

Panel D: Non-interlocked director's SO Index "Set to Zero" / Board SO Gap is measured using SO Index 5										
Sub-sample	R&D		Patent Counts		SG&A		Advertising		Board Type	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)	Advisory (9)	Monitoring (10)
Board SO Gap	-0.156*** (-3.56)	0.025 (0.78)	-0.147*** (-3.21)	0.002 (0.07)	-0.098** (-2.12)	0.013 (0.52)	-0.099** (-2.34)	0.000 (0.01)	-0.072** (-2.49)	-0.015 (-0.30)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year / Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.236	0.254	0.288	0.186	0.287	0.206	0.210	0.256
Observations	5,941	8,314	4,601	9,654	7,188	7,067	5,879	8,376	6,753	7,102

Internet Appendix Table 6. The association between board stakeholder orientation and firm stakeholder orientation using all board members' (inside and outside directors) stakeholder preferences

This table provides results from estimated OLS regressions in which the dependent is *Firm SO Index*_{*i,t*} and the main independent variable is *Board SO Index*_{*i,t-1*}. In this table, we measure the board stakeholder preferences based on the attitudes of all board members (inside and outside directors). The dependent variable in the first (second) regression model is *Firm SO Index* 5_{*i,t*} (*Firm SO Index* 6_{*i,t*}). Accordingly, the main independent variable is *Board SO Index* 5_{*i,t-1*} (*Board SO Index* 6_{*i,t-1*}) in the first (second) regression model. We include firm and CEO characteristics as well as *Peer SO Index* 5_{*i,t*} (*Peer SO Index* 6_{*i,t*}) as control variables in the first (second) regression model. All independent variables except *Peer SO Index* are lagged by one year. See Appendix for the definitions of all variables. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Firm SO Index</i> 5 (1)	<i>Firm SO Index</i> 6 (2)
<i>Board SO Index</i>	0.638*** (21.56)	0.682*** (22.94)
<i>Peer SO Index</i>	0.659*** (14.29)	0.521*** (10.54)
<i>Firm Size</i>	-0.031** (-2.35)	-0.023* (-1.68)
<i>Leverage</i>	-0.005 (-0.13)	-0.013 (-0.32)
<i>Advertising</i>	-0.173 (-0.44)	-0.158 (-0.39)
<i>R&D</i>	-0.125 (-0.93)	-0.144 (-1.06)
<i>ROA</i>	0.056 (1.21)	0.072 (1.49)
<i>CEO Age</i>	-0.062 (-1.29)	-0.063 (-1.25)
<i>CEO Duality</i>	0.026** (2.01)	0.026* (1.94)
<i>Unionization</i>	-0.000 (-0.09)	-0.001 (-0.44)
<i>Market Share</i>	1.355 (0.60)	-0.565 (-0.21)
Year FE	Yes	Yes
Firm FE	Yes	Yes
Within R ²	0.321	0.313
Observations	13,342	13,342

Internet Appendix Table 7. The impact of board stakeholder orientation bias on subsequent changes in firm's stakeholder orientation using all board members' (inside and outside directors) stakeholder preferences

In this table, we measure the board stakeholder preferences based on the attitudes of all board members (inside and outside directors). We report results from three pairs of regression models. In each pair, the dependent variable in the first (second) regression model is $\Delta Firm\ SO\ Index\ 5_{i,t}$ ($\Delta Firm\ SO\ Index\ 6_{i,t}$) where “ i ” indicates firm i . In the first two pairs, the main independent variable is *Board SO Bias* $5_{i,t-1}$ (*Board SO Bias* $6_{i,t-1}$) in the first (second) regression model. In the third pair, the main independent variable is *Exogenous Δ Board SO Bias* $5_{i,t-1}$ (*Exogenous Δ Board SO Bias* $6_{i,t-1}$) in the first (second) regression model. The $\Delta Firm\ SO\ Index_{i,t}$ is computed as $Firm\ SO\ Index_{i,t} - Firm\ SO\ Index_{i,t-1}$. The *Board SO Bias* $_{i,t-1}$ is computed as $Board\ SO\ Index_{i,t-1} - Firm\ SO\ Index_{i,t-1}$. The *Exogenous Δ Board SO Bias* $_{i,t-1}$ is computed as $Board\ SO\ Bias_{i,t-1} - Board\ SO\ Bias_{ongoing\ directorships,i,t-1}$. We report results from an OLS regression model in the first and third pair and results from a 2SLS regression model in the second pair (only the second-stage regression). In the 2SLS regression model, we instrument for *Board SO Bias* $_{i,t-1}$ by the pool of local directors (*Local Director Pool (Bias)* $_{i,t-1}$) who have a *Director SO Index* $_{i,k,t-1}$ lower than the *Board SO Index* $_{i,t-1}$ of the focal firm and, thus, whose membership on the focal firm's board can potentially reduce the *Board SO Bias* $_{i,t-1}$. In computing the pool of local directors, we exclude firms in the same Fama-French 17 industry and the focal firm. To define the local area, we use a radius of 100 km from the focal firm's corporate headquarter using historical headquarter information obtained from *S&P Capital IQ*. We include firm and CEO characteristics as well as $\Delta Peer\ SO\ Index\ 5_{i,t}$ ($\Delta Peer\ SO\ Index\ 6_{i,t}$) as control variables in the first (second) regression model in each pair. In the third pair of regressions, we also control for *Endogenous Δ Board SO Bias* $_{i,t-1}$ computed as $Board\ SO\ Bias_{ongoing\ directorships,i,t-1} - Board\ SO\ Bias_{i,t-2}$. All independent variables except $\Delta Peer\ SO\ Index$ are lagged by one year and are defined in the Appendix. All regressions include year- and firm-fixed effects. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Model	OLS		2SLS (2 nd Stage)		Exogenous vs. Endogenous Δ Board SO Bias	
	$\Delta Firm\ SO\ Index\ 5$	$\Delta Firm\ SO\ Index\ 6$	$\Delta Firm\ SO\ Index\ 5$	$\Delta Firm\ SO\ Index\ 6$	$\Delta Firm\ SO\ Index\ 5$	$\Delta Firm\ SO\ Index\ 6$
Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)
<i>Board SO Bias</i>	0.691*** (19.74)	0.686*** (19.41)	1.405*** (16.86)	1.400*** (17.40)		
<i>Exog. ΔBoard SO Bias</i>					0.543* (1.78)	0.726** (2.31)
<i>Endo. ΔBoard SO Bias</i>					0.421*** (4.45)	0.376*** (4.06)
$\Delta Peer\ SO\ Index$	0.527*** (9.84)	0.331*** (5.87)	0.555*** (9.50)	0.388*** (6.34)	0.562*** (4.17)	0.393*** (2.68)
<i>Firm Size</i>	-0.029** (-2.40)	-0.017 (-1.43)	-0.028* (-1.94)	-0.017 (-1.18)	-0.085 (-1.58)	-0.052 (-0.96)
<i>Leverage</i>	-0.018 (-0.48)	-0.025 (-0.68)	-0.026 (-0.62)	-0.030 (-0.68)	-0.165 (-1.29)	-0.194 (-1.43)
<i>Advertising</i>	-0.164 (-0.40)	-0.147 (-0.35)	-0.341 (-0.80)	-0.299 (-0.68)	-0.249 (-0.17)	0.267 (0.18)
<i>R&D</i>	-0.175 (-1.33)	-0.162 (-1.22)	-0.287** (-2.03)	-0.275* (-1.93)	-0.256 (-0.44)	0.001 (0.00)
<i>ROA</i>	0.023 (0.54)	0.041 (0.93)	0.056 (1.08)	0.075 (1.42)	0.160 (0.74)	0.135 (0.60)
<i>CEO Age</i>	-0.035 (-0.80)	-0.031 (-0.67)	-0.079 (-1.47)	-0.073 (-1.31)	-0.354 (-1.62)	-0.331 (-1.46)
<i>CEO Duality</i>	0.023* (1.90)	0.022* (1.73)	0.023 (1.55)	0.023 (1.52)	0.056 (1.04)	0.043 (0.73)
<i>Unionization</i>	-0.000 (-0.08)	-0.001 (-0.64)	0.000 (0.03)	-0.000 (-0.32)	-0.001 (-0.44)	-0.001 (-0.43)
<i>Market Share</i>	1.257 (0.49)	-0.491 (-0.18)	0.986 (0.28)	-1.576 (-0.41)	13.529* (1.72)	9.110 (1.11)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic			312.925***	327.946***		
Difference-in-Sargan Statistic			107.029***	109.86***		
Within R ²	0.174	0.160			0.174	0.155
Observations	13,342	13,342	12,726	12,726	2,053	2,053

Internet Appendix Table 8. The potential for board and firm stakeholder orientation gap decrease and director selection – Logit regression models using all board members’ (inside and outside directors) stakeholder preferences

In this table, we estimate director selection logit regression models. We measure the board stakeholder preferences based on the attitudes of all board members (inside and outside directors). The dependent variable is a dummy variable, $Director\ Selection_{i,k,t}$ that takes the value one if firm i selects director k in time-period t , and is zero otherwise. The independent variable of interest is $Board\ SO\ Gap\ Decrease_{i,k,t-1}$. It is a dummy variable that takes the value one if the selection of the prospective director will reduce the absolute gap between the stakeholder orientation of the board and the firm ($|Board\ SO\ Index - Firm\ SO\ Index|$), and takes the value zero otherwise. For this analysis, we not only need to include the directors actually selected by the firm to serve on its board, but also those directors who could potentially have been selected. To make the computation tractable, we randomly select 5,000 directors as potential matches (instead of all directors as potential matches) for each firm-director pair. $Board\ SO\ Gap\ Decrease$ is based on $Firm\ SO\ Index\ 5_{i,t-1}$ and $Director\ SO\ Index\ 5_{i,k,t-1}$ ($Firm\ SO\ Index\ 6_{i,t-1}$ and $Director\ SO\ Index\ 6_{i,k,t-1}$) in the first (second) regression model. The control variables are similar to those employed in [Bouwman \(2011\)](#). All independent variables are lagged by one year. The regressions include year and industry dummy variables. Finally, we report robust standard errors that are clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

<i>SO Index measure</i>	<i>SO Index 5</i> (1)	<i>SO Index 6</i> (2)
<i>Board SO Gap Decrease</i>	0.055* (1.66)	0.058* (1.75)
<i>Same Size</i>	0.616*** (17.15)	0.616*** (17.14)
<i>Same Industry</i>	0.842*** (18.79)	0.842*** (18.79)
<i>Same Location</i>	1.095*** (26.51)	1.095*** (26.51)
<i>ROA</i>	0.170 (1.38)	0.170 (1.38)
<i>Director Age</i>	-0.036*** (-27.04)	-0.036*** (-27.04)
<i>Directorship</i>	0.251*** (17.65)	0.251*** (17.66)
<i>Governance Gap</i>	-0.472*** (-14.80)	-0.472*** (-14.81)
Year Dummy	Yes	Yes
Industry Dummy	Yes	Yes
Pseudo R ²	0.042	0.042
Observations	18,734,674	18,734,674

Internet Appendix Table 9. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) using all board members' (inside and outside directors) stakeholder preferences

In this table, we measure the board stakeholder preferences based on the attitudes of all board members (inside and outside directors). We report results from three pairs of regression models. In each pair, the dependent variable is *Tobin's Q*, where “*i*” indicates firm *i*. In the first two pairs, the main independent variable is *Board SO Gap* $5_{i,t-1}$ (*Board SO Gap* $6_{i,t-1}$) in the first (second) regression model. In the third pair, the main independent variable is the interaction term of *Board SO Gap* $5_{i,t-1}$ and *SH Proposal Shock* $_{i,t-1}$. *Board SO Gap* $5_{i,t-1}$ is defined as the absolute value of the difference between *Board SO Index* $_{i,t-1}$ and *Firm SO Index* $_{i,t-1}$. *SH Proposal Shock* $_{i,t-1}$ is the signed number of outside directors who have a seat on other firms experiencing shareholder-initiated governance proposals in year *t*–1. It has a positive (negative) sign if these shareholder proposals are likely to subsequently increase (decrease) *Board SO Gap*. We report results from an OLS regression model in the first and third pair and results from a 2SLS regression model in the second pair (only the second-stage regression). In the 2SLS regression model, we instrument for *Board SO Gap* $5_{i,t-1}$ by the pool of local directors (*Local Director Pool (Gap)* $_{i,t-1}$) the potential to decrease the *Board SO Gap* if they were on the focal firm's board. In computing the pool of local directors, we exclude firms in the same Fama-French 17 industry and the focal firm. To define the local area, we use a radius of 100 km from the focal firm's corporate headquarter using historical headquarter information obtained from *S&P Capital IQ*. To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. In the third pair of regressions, to control for the effect of governance-related proposals at the focal firm, we include an indicator variable *Firm SH Proposal* that equals 1 if the focal firm is itself a target of a shareholder-initiated governance proposals in year *t*–1, and is 0 otherwise. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in both regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Model	OLS		2SLS (2 nd Stage)		Shareholder Proposal Shock	
	<i>SO Index</i> 5 (1)	<i>SO Index</i> 6 (2)	<i>SO Index</i> 5 (3)	<i>SO Index</i> 6 (4)	<i>SO Index</i> 5 (5)	<i>SO Index</i> 6 (6)
<i>Board SO Gap</i>	-0.091** (-2.14)	-0.097** (-2.29)	-0.872** (-2.06)	-0.715* (-1.83)	-0.119*** (-2.87)	-0.120*** (-2.92)
<i>SH Proposal Shock</i>					0.002 (0.46)	0.000 (0.06)
<i>Board SO Gap</i> * <i>SH Proposal Shock</i>					-0.014** (-2.42)	-0.012** (-2.09)
<i>Firm SH Proposal</i>					0.038* (1.79)	0.038* (1.77)
<i>Firm Size</i>	-0.411*** (-12.11)	-0.410*** (-12.10)	-0.408*** (-11.40)	-0.408*** (-11.40)	-0.414*** (-11.19)	-0.414*** (-11.18)
<i>R&D</i>	2.130** (3.10)	2.129** (3.10)	2.134** (3.07)	2.136** (3.08)	1.893*** (2.67)	1.891** (2.66)
<i>Cash</i>	0.648** (5.23)	0.648** (5.23)	0.671** (5.33)	0.663** (5.26)	0.640** (4.90)	0.638** (4.89)
<i>ROA</i>	0.783** (4.49)	0.782** (4.49)	0.791** (4.46)	0.786** (4.43)	0.797** (4.45)	0.796** (4.44)
<i>CEO Duality</i>	0.044* (1.95)	0.044* (1.94)	0.054** (2.25)	0.050** (2.12)	0.019 (0.81)	0.019 (0.80)
<i>Firm Age</i>	-0.480*** (-6.16)	-0.480*** (-6.18)	-0.564*** (-6.61)	-0.554*** (-6.58)	-0.505*** (-5.00)	-0.505*** (-5.01)
<i>Board Size</i>	-0.156** (-2.20)	-0.156** (-2.20)	-0.170** (-2.27)	-0.169** (-2.27)	-0.086 (-1.11)	-0.086 (-1.11)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Angrist-Pischke F Statistic			51.757***	55.296***		
Difference-in-Sargan Statistic			4.033**	2.947*		
Difference-in-Sargan Statistic P-value			0.045	0.086		
Within R ²	0.235	0.235			0.233	0.233
Observations	14,255	14,255	13,600	13,600	11,851	11,851

Internet Appendix Table 10. The relation between firm value (*Tobin's Q*) and the stakeholder orientation gap between the board and the firm (*Board SO Gap*) for sub-samples formed based on R&D intensity, patent counts, SG&A expenditures, advertising expenses, and board type using all board members' (inside and outside directors) stakeholder preferences

In this table, we report results from two estimated OLS regressions for sub-samples formed based on R&D intensity (*R&D*), the number of patents (*Patent Counts*), SG&A expenditures (*SG&A*), advertising expenses (*Advertising*), and board type (*Advisory* vs. *Monitoring*). The sub-samples are formed based on median values of *R&D*, *Patent Counts*, *SG&A*, *Advertising*, and *Proportion Monitoring Directors*. We measure the board stakeholder preferences based on the attitudes of all board members (inside and outside directors). The dependent variable is *Tobin's Q_{i,t}* in all the reported regressions. The main independent variable is *Board SO Gap_{i,t-1}* defined as the absolute value of the difference between *Board SO Index_{i,t-1}* and *Firm SO Index_{i,t-1}*. In the estimated regressions in Panel A (Panel B), *Board SO Gap* is measured using *SO Index 5* (*SO Index 6*). To make sure that the causality runs from *Board SO Gap* to *Tobin's Q*, we lag *Board SO Gap* by one-year relative to the time of measurement of *Tobin's Q*. All other independent variables are also lagged by one year and are defined in the Appendix. We include year- and firm-fixed effects in all regression specifications. We report robust standard errors clustered by firm. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Panel A: <i>Board SO Gap</i> is measured using all board members' <i>SO Index 5</i>										
<i>Sub-sample</i>	<i>R&D</i>		<i>Patent Counts</i>		<i>SG&A</i>		<i>Advertising</i>		<i>Board Type</i>	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)	<i>Advisory</i> (9)	<i>Monitoring</i> (10)
<i>Board SO Gap</i>	-0.229*** (-3.65)	0.044 (0.92)	-0.184*** (-2.89)	-0.016 (-0.32)	-0.183*** (-2.66)	0.015 (0.37)	-0.150** (-2.25)	-0.021 (-0.40)	-0.105** (-2.28)	-0.064 (-0.78)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year / Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.235	0.254	0.288	0.186	0.287	0.206	0.210	0.256
Observations	5,941	8,314	4,601	9,654	7,188	7,067	5,879	8,376	6,753	7,102

Panel B: <i>Board SO Gap</i> is measured using all board members' <i>SO Index 6</i>										
<i>Sub-sample</i>	<i>R&D</i>		<i>Patent Counts</i>		<i>SG&A</i>		<i>Advertising</i>		<i>Board Type</i>	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)	High (7)	Low (8)	<i>Advisory</i> (9)	<i>Monitoring</i> (10)
<i>Board SO Gap</i>	-0.241*** (-3.79)	0.048 (1.00)	-0.198*** (-3.06)	-0.011 (-0.22)	-0.183*** (-2.69)	0.007 (0.17)	-0.159** (-2.31)	-0.032 (-0.64)	-0.103** (-2.30)	-0.083 (-1.02)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year / Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Within R ²	0.267	0.241	0.236	0.254	0.288	0.186	0.287	0.207	0.210	0.256
Observations	5,941	8,314	4,601	9,654	7,188	7,067	5,879	8,376	6,753	7,102