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Veltrop, Dennis; Hermes, Cornelis; Postma, Theodorus; de Haan, Jakob

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A Tale of Two Factions: Why and When Factional Demographic Faultlines Hurt Board Performance

Dennis B. Veltrop*, Niels Hermes, Theo J. B. M. Postma and Jakob de Haan

ABSTRACT

Manuscript Type: Empirical
Research Question/Issue: The authors posit that to understand the effects of board demographic diversity on board performance, it is critical to recognize that board members often do not come to a board as independent entities but rather as delegates of specific interest groups so that the board has factions. The authors propose that demographic differences between these factions are likely to negatively affect board performance through social categorization processes.
Research Findings/Insight: A study of 318 Dutch pension fund boards shows that factional demographic faultlines negatively affect board performance, measured as perceived board effectiveness, and financial return on investment, through the perception of board members that the board is split into factional subgroups (i.e., faultline activation). At the same time, the disruptive effects from factional demographic faultlines are found to be reduced by board reflexivity.
Theoretical/Academic Implications: Based on social categorization theory, this study shows that demographic faultlines between factions affect board performance to the extent that the faultlines are activated. If unnoticed by board members, demographic faultlines are unlikely to influence board behavior. The attenuating effect of board reflexivity underlines the importance of insight into the factors that drive social categorization within boards.
Practitioner/Policy Implications: Practitioners should be aware that although factional demographic faultlines can be disruptive, there are ways to reduce these negative aspects. By overtly reflecting on board processes, board members can prevent factional demographic faultlines from resulting in social categorization within boards.

Keywords: Board Composition, Board Diversity, Board Processes, Faultlines, Reflexivity

INTRODUCTION

Demographic diversity of organizational boards is becoming increasingly important. Regulators are now actively stimulating demographic diversity in the boardroom, as it is widely believed that diversity is beneficial for board decision making. Yet, despite the intuitive appeal of this view, several meta-analyses and review studies demonstrate that there is no clear relationship between board demographic composition and firm performance (Certo, Lester, Dalton, & Dalton, 2006; Daily, Dalton, & Cannella, 2003; Dalton & Dalton, 2011; Johnson, Schnatterly, & Hill, 2013). In this vein, governance scholars have long argued that to understand the potential effects of board demographic diversity on firm performance it is crucial to understand the mechanisms through which demographic board composition affects board functioning (e.g., Lawrence, 1997; Miller & Triana, 2009; Minichilli, Zattoni, Nielsen, & Huse, 2012; Van Ees, Gabrielson, & Huse, 2009). Nevertheless, despite some advances, few studies have gone beyond a simple direct relationship between board demographic diversity and firm performance. As a consequence, knowledge is limited as to why and when board demographic

*Address for correspondence: Dennis B. Veltrop, Department of Accounting, Faculty of Economics and Business, University of Groningen, Duisenberg Building, Room 824, PO Box 800, 9700 AV Groningen, The Netherlands. Tel: +31503637238; E-mail: d.veltrop@rug.nl

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diversity affects board functioning. There is need for an explanation of the process through which board demographic diversity affects firm performance and the contingencies that weaken or strengthen these potential mediating effects.

We maintain that to understand the relationship between board demographic composition and board performance, it is first necessary to acknowledge that board members often do not come to a board as independent entities, but rather as delegates of specific interest groups or as representative factions (cf. Li & Hambrick, 2005). These factions provide demarcations or schisms within boards that may affect how board members respond to demographic diversity. That is, differences between factions are interpreted differently than differences within the same faction (cf. Li & Hambrick, 2005; see also Kaczmarek, Kimino, & Pye, 2012). Second, we maintain that governance scholars need to be particularly aware that demographic board diversity may very well foster social categorization within boards that can be expected to disrupt board effectiveness (cf. Tajfel, 1978; van Knippenberg, Dawson, West, & Homan, 2010; Williams & O'Reilly, 1998). The categorization perspective holds that social categorization is likely when a group can be separated into demographically homogeneous subgroups that differ from one another (Van Knippenberg et al., 2010). Thus, when a board consists of factions that differ from one another demographically (e.g., one faction is comprised of older men and the other faction consists of younger women), there is a greater likelihood of in-group/out-group categorization, because each faction will feel like it is facing a monolithic adversary.

Drawing from Lau and Murnighan's (1998) concept of demographic faultlines, it is possible to capture this in-group/out-group distinction within boards, taking into account that boards are often comprised of factions. Specifically, demographic faultlines foster social categorization because board members rely on easily observable heuristic cues to categorize one another into similar in-groups and dissimilar out-groups (cf. Tajfel, 1978). In accordance with faultline and social categorization theory, review studies and meta-analyses indicate that demographic faultlines are often affiliated with increased conflict and process losses, which lead to decreased performance (Bell, Villado, Lukasik, Belau, & Briggs, 2011; Thatcher & Patel, 2011; van Knippenberg & Schippers, 2007). Pertaining to boards specifically, Tuggle, Schnatterly, and Johnson (2010) found that fractures within boards can inhibit communication, thereby constraining critical discussion. Similarly, recent research on top management teams suggests that demographic faultlines within top management teams can decrease firm performance (Hutzschenreuter & Horstkotte, 2013) and that faultlines between executive and non-executive directors may have a negative effect on firm performance (Kaczmarek et al., 2012).

It is important to realize, however, that not all potential faultlines within a board affect board functioning. Demographic faultlines may very well remain dormant. That is, if unnoticed by board members, demographic faultlines are unlikely to influence board behavior (cf. Lau & Murnighan, 1998). In this vein, scholars have long argued that researchers ought to assess perceptions of demographic diversity to better understand how diversity influences behavior and outcomes, rather than to assume that a relationship between board diversity and board behavior exists (cf. Lawrence, 1997; Zellmer-Bruhn, Maloney, Bhappu, & Salvador, 2008). Indeed, in their original work, Lau and Murnighan (1998) explicitly stated that the demographic faultline needs to be "activated" by features in the context in which a group operates for the faultline to affect group functioning. While not all possible demographic faultlines within boards can be expected to affect board functioning, we believe that demographic faultlines between factions (hereafter referred to as factional demographic faultlines) are likely to be affiliated with *faultline activation* (i.e., the perception of board members that the board is split into factional subgroups; cf. Jehn & Bezrukova, 2010).[1] Since factions provide a meaningful demarcation within boards (cf. Li & Hambrick, 2005), factional demographic faultlines will lead to the perception that the board is split into subgroups, which is likely to negatively affect board performance.

Because factional demographic faultlines affect board functioning to the extent that they lead to faultline activation, we believe it is particularly worthwhile to identify contingencies that may prevent the factional demographic faultline from being activated. We propose that *board reflexivity* (cf. West, 1996) – i.e., the extent to which a board actively reflects on its functioning and adapts its functioning accordingly – can be expected to provide such a contingency. As noted, factional demographic faultlines foster social categorization because board members rely on easily observable heuristic cues to categorize one another into similar in-groups and dissimilar out-groups (cf. Tajfel, 1978). Reflexive boards engage in deep-level information processing (cf. De Dreu, 2007) and are therefore less likely to rely on heuristics to inform their behavior. As a result, we expect that factional demographic faultlines are less likely to lead to faultline activation for boards that are high in reflexivity.

Using a unique dataset of 318 Dutch pension fund boards, we respond to the call for research to incorporate mediating mechanisms linking board demographic diversity to board and organizational performance (Barrick, Bradley, Kristof-Brown, & Colbert, 2007; Hambrick, 2007; Hambrick, Werder, & Zajac, 2008). We demonstrate that factional demographic faultlines affect board performance through faultline activation and that this indirect effect is contingent on board reflexivity. The attenuating effect of board reflexivity suggests that board leadership and regulators should be particularly attuned to stimulate reflexive behaviors for boards with strong factional demographic faultlines.

THEORETICAL BACKGROUND

To address the question of how demographic diversity affects performance, organizational and social psychological research has been largely guided by two research traditions: the information/decision-making perspective and the social categorization perspective (van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). Governance scholars and corporate practitioners mainly interpret board demographic diversity from an information/decision-making perspective, assuming that having greater demographic diversity is

beneficial to board performance, because diverse boards can draw from different pools of information or resources (Johnson et al., 2013; Miller & Triana, 2009). It is important to realize, however, that demographic diversity can also be interpreted as a source of separation that fosters social categorization within boards and that may disrupt board functioning (cf. Harrison & Klein, 2007; van Knippenberg et al., 2010; Williams & O'Reilly, 1998). Indeed, group and organizational research suggests that the social categorization perspective may be most suitable for studying the effects of demographic differences (e.g., age, gender, race) between group members (Harrison & Klein, 2007; Lau & Murnighan, 1998; Tajfel, 1978). Mannix and Neale (2005) even suggest that it may be impossible to understand the "diversity-process-performance link" without considering categorization theories.

The social categorization perspective indicates that demographic similarities and differences between group members form the basis for categorizing self and others into groups, distinguishing between similar in-group members and dissimilar out-group members. According to social categorization theory, group members rely on heuristic cues to categorize themselves and others into similar in-group members and dissimilar out-group members as a way to simplify the complex environment (Turner, 1985). Because demographic differences are easily observable, group members are likely to rely on demographic characteristics as heuristics for in-group/out-group stereotyping (Lau & Murnighan, 1998; Tajfel, 1978). Research on diversity and relational demography has consistently found that demographic characteristics (e.g., age, race, sex) are often used as the basis for self-categorization and social identity processes (Harrison, Price, & Bell, 1998) and that demographic differences create divisions within groups, which, in turn, diminish social integration and group cohesion (Mannix & Neale, 2005).

Factional Demographic Faultlines and Faultline Activation

The Concept of Demographic Faultlines. Demographic faultlines are dividing lines that can potentially divide a group into two or more subgroups based on demographic characteristics (Lau & Murnighan, 1998). The concept of faultlines recognizes that the alignment of multiple demographic characteristics such as gender and age increases the salience of demographic differences between members of a group (cf. Li & Hambrick, 2005; Mannix & Neale, 2005; Zellmer-Bruhn et al., 2008). As noted, the categorization perspective holds that a potential categorization is more likely to be salient the more it captures high within-group similarity and high between-group difference (Van Knippenberg et al., 2010). A demographic faultline then simply reflects the degree to which a board can be separated into homogeneous subgroups (i.e., within-subgroup similarity) that differ from one another (i.e., between-subgroup differences). The more the positions on different demographic dimensions are correlated, the stronger the demographic faultline and the more likely subgroupings disrupt performance as a result of social categorization (Bezrukova, Jehn, Zanutto, & Thatcher, 2009; Lau & Murnighan, 1998). For example, if a group consists of three men and three women and when age, race, and gender are strongly correlated or aligned (e.g., Caucasian younger men and older Asian women), the demographic faultline between these subgroups is strong because within-subgroup differences are low (e.g., one subgroup of all Caucasian younger men) and between-subgroup differences are high because members from different subgroups differ on every dimension (e.g., all Caucasian younger men versus all Asian older women). In this situation in-group/out-group categorization is most likely to occur.

Yet, social categorization theory stresses that in-group/out-group stereotyping depends on whether the categorization is meaningful to members within the group's context (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Turner, Oakes, Haslam, & McGarty, 1994). That is, actual subgroups only emerge when demographic faultlines are "activated" by features in the context in which a group operates (Lau & Murnighan, 1998). Whether a (potential) demographic faultline "is actually perceived by group members as the division of the group into separate subgroups" is referred to as *faultline activation* in faultline research (Jehn & Bezrukova, 2010: 24). For demographic faultlines to affect board functioning, the subgrouping needs to be perceived by board members. Laboratory studies demonstrate that it is the perception of group members that the group is split into subgroups (i.e., faultline activation), rather than the demographic faultline per se, that negatively affects group functioning (Jehn & Bezrukova, 2010; Spell, Bezrukova, Haar, & Spell, 2011). A study by Zellmer-Bruhn et al. (2008: 55), in fact, showed that the demographic composition is not necessarily related to perceived similarity and these authors stress that the "congruence between potential faultlines and activated faultlines is not a foregone conclusion." Thus, in linking demographic faultlines to board functioning, it is important to establish whether demographic faultlines actually provide a meaningful demarcation within boards to begin with.

Factional Demographic Faultlines. "Factions" within boards are "groups in which members are representatives, or delegates, from a small number of (often just two) social entities and are aware of, and find salience in, their delegate status" (Li & Hambrick, 2005: 794). Since factions consist of members that are aware of and find salience in their delegate status, factions are expected to provide a substantively meaningful demarcation within boards as a basis for in-group/out-group stereotyping (cf. Kaczmarek et al., 2012; Li & Hambrick, 2005). There are many examples of so-called "factional groups" within boards. For instance, following a merger, the board of directors of the newly formed organization will consist of members from the two merged organizations. Likewise, boards of joint ventures will have members who are appointed as delegates to protect their parents' interests (Hambrick, Li, Xin, & Tsui, 2001). Family-owned firms often have family members and non-family members appointed as board members. Similarly, executive and non-executive directors come to boards as two subgroups that arguably represent different interests (Kaczmarek et al., 2012). In the context of our current study, pension fund boards are also comprised of delegates of specific interest groups as they

consist of representatives of either employers or pension fund participants.

Boards with factional groups can be viewed as having "engineered" faultlines (cf. Li & Hambrick, 2005). That is, the *location* of the faultline is exogenously fixed between the factions. A factional faultline then reflects the degree to which a board can be separated into homogeneous factions (i.e., within-faction similarity) that differ from one another (i.e., between-faction differences). The factional demographic faultline becomes stronger when demographic characteristics align with the factional affiliations (Li & Hambrick, 2005). Thus, if, for example, pension fund board members, who are representatives of employers, are all older men, whereas board members, who represent pension fund participants, are all younger women, the resulting factional demographic faultline is strong *and* is likely to be meaningful within the board's context because factional groups within boards are a meaningful subgrouping for board members. We therefore expect that a strong factional demographic faultline is likely to result in in-group/out-group stereotyping, and we hypothesize that the strength of the factional demographic faultline is positively related to the perception of board members that the board is split into factional subgroups (i.e., faultline activation).

H1: Stronger factional demographic faultlines are positively related to faultline activation.

The Mediating Role of Faultline Activation on Board Performance

Studies of board composition and the impact on performance represent one of the most popular areas of corporate governance research (Johnson et al., 2013; Kaczmarek et al., 2012). Despite some advances, few studies have gone beyond a simple direct relationship between board composition and firm performance. There is relatively little attention for the mechanisms through which board composition affects board performance and ultimately firm performance (Daily et al., 2003; Hambrick et al., 2008; Van Ees et al., 2009). As a result, knowledge is limited as to why and how board demographic diversity affects board functioning (cf. Johnson et al., 2013). To advance governance research in understanding the link between demographic board diversity and board performance, rather than focusing on the direct link between factional demographic faultlines and board performance, we believe it is critical to specify and demonstrate through what mechanism demographic diversity affects board performance. Our focus, therefore, is not on the coarse direct relationship between board composition and board performance, but on the *mechanism* through which factional demographic faultlines negatively affect board performance.

Forbes and Milliken (1999) suggested that the effectiveness of boards is likely to depend heavily on social-psychological processes, particularly pertaining to cohesion, the exchange of information and critical discussion. Indeed, one of the most compelling insights of research on demographic faultlines for board functioning is that board demographic faultlines may negatively affect board performance through faultline activation. If a board consists of factions characterized by strong within-faction demographic similarity and between-faction demographic differences, this is likely to bias perceptions of members from the other faction, leading to "we-they" distinctions, in-group favoritism, and inter-subgroup prejudice between factions (Homan, Hollenbeck, Humphrey, Van Knippenberg et al. 2008; Jehn, Northcraft, & Neale, 1999). The ability to operate effectively as a board becomes more difficult because the board is separated into salient factional subgroups (cf. Harrison et al., 1998; Pelled, Eisenhardt, & Xin, 1999). In such a strong faultline setting, feelings of mistrust and animosity between factions are more likely to develop (Li & Hambrick, 2005), which are likely to hamper the board's ability to effectively perform its tasks as a unified group (Carton & Cummings, 2012; Li & Hambrick, 2005; Van Knippenberg et al., 2010). Factional demographic faultlines are then expected to negatively affect board performance *because* they separate the board into salient subgroups (cf. Lau & Murnighan, 1998; Li & Hambrick, 2005; Tajfel, 1978). We hypothesize that factional demographic faultlines will be negatively related to board performance through faultline activation (the perception of board members that the board is split into factional subgroups).

H2: Faultline activation will mediate the relationship between factional demographic faultlines and board performance.

The Ameliorating Effect of Board Reflexivity

In the previous section we have explained that factional demographic faultlines may negatively affect board performance through faultline activation. This implies that the substantive effects of factional demographic faultlines on board performance depend on the extent to which demographic faultlines between the factions are actually perceived. An important implication of this insight is that a practice that would render the subgrouping between factions less subjectively meaningful would counteract the adverse impact of factional demographic faultlines on board performance. We argue that board reflexivity may be such a board practice.

While the concept of reflexivity was not developed to address factional subgroupings within boards, it aligns very well with the notion of rendering subgroupings less subjectively meaningful. According to dual-process theory, people can choose between two models of information processing. On the one hand, they can opt for heuristic information processing, characterized by shallow, less critical information processing and a reliance on well-learned associations. On the other hand, they can use more systemic, effortful methods of processing that lead to deeper and more elaborate, argument-based evaluations of information (De Dreu, 2007). The concept of reflexivity captures such a deep and deliberate processing of information within groups (De Dreu, 2007; Schippers, West, & Dawson, 2014). It can be defined as "the extent to which group members overtly reflect upon, and communicate about the group's objectives, strategies and processes, and adapt them to current or anticipated circumstances" (West, Garrod, & Carletta, 1997: 296). In particular, reflexivity involves behaviors such as questioning, debate, exploratory learning, analysis, divertive exploration, the explicit use of knowledge and reviewing

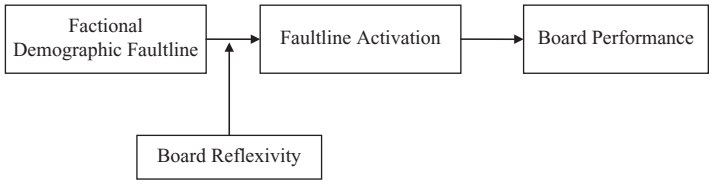
past events (West, 1996). Groups that engage in reflexive behavior are driven by the epistemic motivation for deep-level information processing (De Dreu, 2007; van Ginkel, Tindale, & van Knippenberg, 2009).

Given that the basic notion of social categorization theory is that members rely on easily observable heuristic cues to cognitively place themselves and others into salient subgroups (cf. Tajfel, 1978), board reflexivity would stimulate board members to "look beyond" the sub-group to which each board member belongs (van Knippenberg et al., 2010) and stimulate board members to identify and overcome information-sampling biases (De Dreu, 2007; Fay, Borrill, Amir, Haward, & West, 2006). Research by Nederveen-Pieterse, van Knippenberg and van Ginkel (2011) confirms that reflexivity is instrumental in creating a shared understanding, thereby reducing the salience of categorization within groups. Accordingly, we propose that board reflexivity entails a reduced reliance on heuristic cues and is likely to foster a reframing of cognitive representations toward a shared frame of reference among board members (cf. Schippers, Den Hartog, Koopman, & van Knippenberg, 2008; van Ginkel et al., 2009; West, 2000). This cognitive reframing is expected to render the factional demographic faultlines less subjectively meaningful. Consequently, we expect that board reflexivity attenuates the relationship between factional demographic faultlines and faultline activation.

H3: Board reflexivity will moderate the relationship between factional demographic faultlines and faultline activation, such that the relationship between factional demographic faultlines and faultline activation will be weaker when board reflexivity is high.

Furthermore, because the substantive effects of factional demographic faultlines on board performance depend on the extent to which demographic faultlines between the factions are actually perceived by board members, the indirect effect of factional demographic faultlines (through faultline activation) on board performance will also vary with different levels of board reflexivity – thereby predicting a pattern of moderated mediation (or conditional indirect effects). These relationships are depicted in Figure 1. More specifically, we expect that factional demographic faultlines will indirectly affect board performance through faultline activation more strongly when board reflexivity is low. In contrast, when board reflexivity is high, we expect a small or nonexistent indirect effect through faultline activation.

FIGURE 1
Hypothesized Model



H4: Board reflexivity will moderate the indirect effect of factional demographic faultlines on board performance. Specifically, factional demographic faultlines will have a negative effect on board performance through faultline activation when board reflexivity is low but not when board reflexivity is high.

METHOD

Sample and Data Collection

To empirically assess the model described in Figure 1, we use information on the boards of Dutch pension funds. Pension fund boards provide an interesting setting because they consist of pre-established factional groups: by law their members are representatives of either employers or pension fund participants. Pension funds in the Netherlands provide pension schemes in addition to the basic old-age pension provided by the state. In the Netherlands, there are three types of pension funds: industry-wide pension funds (for a specific industry or sector), corporate pension funds (for a single firm), and pension funds for independent professionals, such as dentists. Although there is no statutory obligation for employers to offer a pension scheme to their employees, more than 95 percent of all Dutch employees are covered. Both employers and employees contribute to the pension fund. Pension benefits are financed by pension contributions paid in the past and the returns on accumulated investments. Under Dutch law, pension funds are legally and financially independent of the sponsoring companies. Although our results are based on Dutch pension fund boards, other countries (e.g., the United Kingdom, Switzerland, and Canada) have similar pension arrangements (OECD, 2011), and the processes we study are generic for boards in general.

Pension fund boards are responsible for strategic decisions, such as the allocation of the fund's assets. The employers and pension scheme participants in the boards clearly have different interests. Participants will receive pension benefits after retirement and thus have an interest in maximizing pensions, whereas employers attempt to minimize their financial contributions to the pension fund. To ensure that a pension fund has sufficient assets to cover the pensions that have to be paid now and in the future, the Dutch Central Bank (De Nederlandsche Bank, DNB) – the supervising institution of pension funds – monitors the coverage ratio, i.e. the ratio of the fund's assets and pension liabilities (the pensions to be paid in the future). The minimum coverage ratio is 105 percent. In case of a funding shortfall (i.e., the coverage ratio is less than 105 percent), the fund must submit a recovery plan to DNB that aims to regain the required minimum coverage ratio within 3 years by increasing pension contributions and/or cutting pension benefits. In exceptional circumstances the 3-year recovery period may be extended. This occurred recently (extension to 5 years) as a result of problems related to the financial crisis.

To test our hypotheses, we used data on Dutch pension fund board characteristics, return on investments, and, board processes. We distributed a questionnaire to all members of pension fund boards that were registered with DNB in December 2009. We sent questionnaires to 2,917

board members of 541 pension fund boards for whom we had access to individual mailing addresses; 754 board members (26 percent) of 353 boards (47 percent) completed and returned the questionnaire. To minimize concerns regarding common source variance and to keep the questionnaire as short as possible to promote participation, we collected archival data on board member characteristics ourselves. Data on gender, age, and factional group affiliation were used to calculate factional demographic faultlines for the participating boards. To calculate these measures, we needed complete information on gender, age, and factional group affiliation for all board members. Missing data for any of these characteristics for a single board member would prevent us from calculating the factional demographic faultline for the board as a whole. We collected data using annual reports of the pension funds, the Dutch Chamber of Commerce and additional information from DNB. We excluded pension funds for which there were no board members appointed by both stakeholder groups – these were pension funds that no longer had employer-appointed board members because the employer organization had ceased to exist – and we excluded boards including only one board member appointed by the stakeholder groups because a faction consisting of a single board member cannot be considered a subgroup (Thatcher, Jehn, & Zanutto, 2003). All in all, of the 353 participating boards, we were able to gather complete information on 318 boards (consisting of 2,177 board members) with multiple board members appointed to both factions. We used these 318 boards for our analyses. We received one evaluation of board decision-making processes for 121 of the 318 boards, and for 197 boards we received multiple responses.[2] We collected information on investment decisions for three consecutive years for 271 of the 318 boards. We conducted analyses for return on investment for these 271 boards.

Using an independent sample t-test, we checked for sample inclusion bias by comparing the characteristics of the pension fund boards that participated in this study and pension fund boards that did not. The participating boards did not differ significantly from non-participating boards with respect to archival data on board member characteristics that we collected. However, on average, participating boards were larger than non-participating boards. This latter result could be expected, because we distributed questionnaires to all individual pension fund board members, making it more likely that one or more members of larger boards would respond to the survey. We also performed Heckman's two-stage procedure to account for selection bias for all hypotheses (Heckman, 1979). The Heckman approach is a two-stage procedure that first estimates the likelihood of respondents answering the questionnaire and then applies a correction for sample selection by incorporating estimates of parameters from the first-stage model in a second-stage regression model. We find that the correction term ('inverse Mill's ratio') is statistically significant in the models for faultline activation and perceived board effectiveness, which suggests that a model without this term would suffer from sample selection bias. However, we find that all our results are robust to the inclusion of the selection term. The estimated coefficients only change marginally. Hence, sample selection bias does not appear to affect our results.

Dependent Variables

We use two measures of pension board performance. Our first variable of interest is a measure of perceived board effectiveness based upon data obtained through our survey. In addition, we test our hypotheses by using the return on investments generated by the pension fund, which is a financial measure of performance. Demonstrating consistency across two methodologically distinct measures corroborates and validates the results.

Perceived Board Effectiveness. Perceived board effectiveness was measured using four items adopted from Payne, Benson, and Finegold (2009). These authors measure how boards run an organization in a day-to-day manner. We retained the items relevant to the decisions of pension fund boards and adapted the items to accurately reflect the institutional setting of pension fund boards. The specific items included the following: how effective is your board in shaping the long-term investment strategy?; how effective is your board in monitoring the execution of the long-term investment strategy?; how effective is your board in anticipating threats with which the pension fund is confronted?; and how effective is your board in managing during a crisis? Board members were asked to rate the effectiveness of their board on a seven-point scale (1 = very ineffective; 7 = very effective). Cronbach's alpha was .86.

Return on Investments. In addition to board effectiveness, we use return on investments (ROI) for a given pension fund in a given year as a dependent variable. Return on investment is defined as a pension fund's investment revenues divided by the pension fund's investments in a given year. Pension fund boards actively decide on the pension fund's investment strategy. Return on investment is an important performance measure, as in conjunction with the composition of the pension fund's participants, it affects the coverage ratio and thereby determines how high pensions and pension fund contributions will be. Return on investment can therefore be regarded as an important and proximate indicator of board performance. We specifically investigated return on investments that are under the direct discretion of pension fund boards. In particular, we collected information on investments in stocks, bonds, and real estate, as well as the revenues on these investments for three separate years. To account for spurious fluctuations in performance, we calculated the average return on investment over the last two years (i.e., $t = 1$ and $t = 2$). For ease of interpretation, we multiplied this by 100 to convert it to a percentage score.

Independent Variables

Faultline Activation. We measured faultline activation using a measure developed by Jehn and Bezrukova (2010) (see also Cronin, Bezrukova, Weingart, & Tinsley, 2011; Homan, Greer, & Jehn, 2010). We adapted the items used by Jehn and Bezrukova (2010) to reflect that they refer to pension boards. Specifically, we replaced the word "workgroup" with "board." To measure faultline activation, board members were asked to indicate whether the board splits

into subgroups, considering that the board is comprised of delegates from different interest groups. Specifically, board members indicated whether the board: splits into subgroups during board meetings; divides into subsets of board members; and breaks into groups during board meetings. These items were rated on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Cronbach's alpha was .76.

Board Reflexivity. Board reflexivity was measured using five items adapted from the team reflexivity measure created by Schippers, Den Hartog, and Koopman (2007), which is based on the scale developed by Swift and West (1998) (see also Schippers et al., 2008). The measure proposed by Schippers et al. (2007) focuses specifically on group interaction processes associated with reflection on actions and outcomes. We adapted the items to reflect reflexivity for boards in particular. Specific items include "We regularly discuss whether the board is working effectively" and "We regularly reflect on the way in which we communicate." These items were rated on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Cronbach's alpha was .91.

Factional Demographic Faultlines. We measured factional demographic faultlines along two social category characteristics: age and gender. We focus on these demographic variables because these variables are easily cognitively accessible and are more relevant for studying social categorization processes than more functional characteristics, such as education and functional background (Bezrukova et al., 2009; Jehn & Bezrukova, 2010; Li & Hambrick, 2005; Pelled et al., 1999). We could not include other demographic characteristics, such as race or ethnicity, because these data are not reported in pension funds' annual accounts nor recorded by the Dutch Chamber of Commerce. We gathered data on factional affiliations from the pension funds' annual accounts and we gathered data on board members' age and gender from the Dutch Chamber of Commerce. We calculate to what extent board members' age and gender align with board members' factional affiliations and to what extent factions differ in their demographic makeup. As recommended by faultline scholars, our faultline measure is a combination of faultline split strength (i.e., how cleanly a board splits into two factional groups) and faultline distance or width (i.e., how far the factional groups are apart) (Bezrukova et al., 2009; Bezrukova, Thatcher, Jehn, & Spell, 2012; Zanutto, Bezrukova, & Jehn, 2011). The rationale for this approach is that the likelihood that social categorization processes occur depends on whether the in-groups are homogeneous (emphasis on in-group similarities) and whether the out-groups are different (emphasis on out-group differences). A faultline measure incorporating faultline split and faultline distance captures both within-subgroup similarity and between-subgroup difference.

First, the strength of the faultline split was measured. We calculated the percentage of total variation in overall group characteristics accounted for by the two factions by calculating the ratio of the between-faction sum of squares to the total sum of squares for every board. This statistic measures the degree of attribute alignment within the factions. We followed the procedure developed by Thatcher et al. (2003), in estimating how the alignment of multiple attributes divides a group into subgroups (Bezrukova et al., 2009; Bezrukova, Spell, & Perry, 2010; Lau & Murnighan, 2005; Molleman, 2005). Rather than calculating demographic faultlines for all possible combinations of subgroups and retaining the single maximum faultline score, we calculated the demographic faultline for the two pre-existing factions, as factional affiliations already constituted a first-order demarcation. The exact functional form is specified in equation (1) below, where *Fau* is the strength of the faultline split, x_{ijk} is the value of the jth characteristic of the ith member of faction k, $\bar{x}_{.j.}$ is the overall group mean of characteristic j, $\bar{x}_{.jk}$ is the mean of characteristic j in faction k and finally n_k is the number of members of the kth faction ($k = 1, 2$).

$$Fau = \left(\frac{\sum_{j=1}^{p} \sum_{k=1}^{2} n_k \left(\bar{x}_{.jk} - \bar{x}_{.j.} \right)^2}{\sum_{j=1}^{p} \sum_{k=1}^{2} n_k \left(\bar{x}_{ijk} - \bar{x}_{.j.} \right)^2} \right) \quad (1)$$

Second, we measured the distance between the factions (Bezrukova et al., 2009, 2012; Spell et al., 2011; Zanutto et al., 2011), which indicates the degree of difference between the factions. We constructed the distance measure developed by Bezrukova et al. (2009) by calculating the distance between the subgroup centroids (the Euclidean distance between the two sets' averages of affiliation, gender, and age). The exact functional form is presented in equation (2), where D is the faultline distance, $\bar{x}_{.j1}$ is the mean of characteristic j in faction 1 and $\bar{x}_{.j2}$ is the mean of faction 2 on this characteristic.

$$D = \sum_{j=1}^{J} \left| \bar{x}_{.j1} - \bar{x}_{.j2} \right| \quad (2)$$

Finally, consistent with recommendations of Zanutto et al. (2011: 708) the split and distance scores were standardized and subsequently multiplied to account for the joint effect of the faultline split and the distance between the factions (see also Bezrukova et al., 2012; Homan et al., 2010; Spell et al., 2011). We include this overall faultline index in our analyses.

Control Variables

Consistent with research on diversity and boards of directors, we controlled for board size in all of our analyses, because group size is known to influence group dynamics (Hillman, Shropshire, & Cannella, 2007; Kroll, Walters, & Le, 2007; Tuggle et al., 2010). Moreover, larger groups have more potential for diversity (Bantel & Jackson, 1989; Li & Hambrick, 2005). In selecting our control variables with respect to board member characteristics, we included the variables that were available in our dataset and that have been demonstrated to influence group processes and interaction between group members. We took several steps to isolate the unique effects of faultlines.

First, we closely followed the procedures of Bezrukova et al. (2009) and Lau and Murnighan (2005) to control for heterogeneity effects (see also Li & Hambrick, 2005). Blau's (1977) heterogeneity index was used to measure heterogeneity for categorical variables (e.g., gender). In addition, to measure age diversity, we calculated the standard deviation

(cf. Bezrukova et al., 2010; Harrison & Klein, 2007; Li & Hambrick, 2005). Following procedures suggested by Jehn et al. (1999) – and used in recent diversity research (Polzer, Milton, & Swann, 2002), as well as in faultline research in particular (Bezrukova et al., 2009; Li & Hambrick, 2005) – we averaged these heterogeneity variables to arrive at a demographic heterogeneity control variable. Second, we controlled for the mean demographic profiles by including mean board member age and the percentage of female board members. The mean itself acts as an important confound and should therefore be included in diversity tests (Harrison & Klein, 2007; Jackson, Joshi, & Erhardt, 2003; Li & Hambrick, 2005) because what appears to be diversity effects may actually be the effects of the mean.

As pointed out before, there are three types of pension funds in the Netherlands. To control for differences between these three types, we included a sector fund dummy and an independent professional fund dummy, designating corporate pension funds the reference category. In the analysis in which we used ROI as our pension fund performance measure, we included the one period lagged value of ROI (i.e., ROI t = 0) as a control variable. This variable controls for the financial performance persistence of funds over time and serves as a method of capturing unobserved heterogeneity among individual pension funds in our sample.

Level of Analysis

Our theory and measurement refer to the board level of analysis. We anticipated that it would not be possible to collect all responses from board members of a particular board, making it necessary to rely on a subsample of board members reporting on the constructs of interest. We therefore used a referent shift informant sampling approach in which we framed all items at the board level, asking board members to evaluate their board rather than their own personal behaviors or attitudes (cf. Simons, Pelled, & Smith, 1999; Van der Vegt & Bunderson, 2005). An informant sampling approach recognizes that many members of a particular board are qualified to provide ratings on board properties. If convergence between different raters is demonstrated, a balanced perspective can be obtained by averaging individual board member responses to represent board-level constructs (James, Demaree, & Wolf, 1984). We calculated the $r_{wg(j)}$ inter-agreement coefficient for multi-item indices (James et al., 1984; James, Demaree, & Wolf, 1993) and intra-class correlation coefficient (ICC_1) to determine whether aggregation to the group level was accurate. The median $r_{wg(j)}$ values were .86, .93, and .94 for faultline activation, board reflexivity, and board effectiveness, respectively. These values indicate first that it is reasonable to average evaluations by multiple raters and, second, that single-rater evaluations provide reliable information when multiple ratings cannot be obtained. The ICC_1 is typically interpreted as a measure of effect size, indicating the extent to which individual ratings are attributable to group membership. When interpreting values for ICC_1, researchers are encouraged to adopt traditional conventions used when interpreting effect size (Bliese, 2000; LeBreton & Senter, 2008). Specifically, a value of .01 is considered a small effect, a value of .10 is considered a medium effect, and a value of .25 can be considered a large effect. One-way analysis of variance suggested that ratings differed significantly between boards ($p < .001$). The ICC_1 was .24 for faultline activation, .19 for board reflexivity, and .25 for board effectiveness. These values can be considered as large effect sizes and demonstrate that variation between ratings by members of the same board are more similar than ratings by members of other boards, indicating that aggregation is appropriate (Klein & Kozlowski, 2000).

Common Method Bias

To deal with common method bias, board composition and ROI were collected from archives (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). While some of our variables are based on self-reported subjective measures (faultline activation, board reflexivity, and perceived board effectiveness) none of our hypotheses is tested using only single source data.

To assess the degree to which common method bias may influence the reported relationships between the self-reported measures, we conducted several statistical analyses as suggested by Podsakoff et al. (2003). Specifically, we conducted the Harman's single-factor test in combination with confirmatory factor analysis. The logic behind Harman's single-factor test is that if common method variance is problematic, either one factor will emerge from an exploratory factor analysis or a single common method factor would account for the majority of the variance in the data (Podsakoff et al., 2003). The results clearly exhibited three factors, while a single factor did not account for the majority of the variance. As a second test, we used a common method latent factor approach with structural equation modeling. We ran a measurement model including an additional latent common method factor to our proposed measurement model and found that this factor accounted for only 13 percent of the variance, which is less than the average amount of method variance in organizational research as observed by Williams, Coté, and Buckley (1989) or by Podsakoff et al. (2003). Furthermore, our hypothesized measurement model provided a better fit of the data than any of the simpler models. Thus, while the results of these analyses do not preclude the possibility of common method variance among the scaled variables, they suggest that common method variance does not pose a severe problem in this study.

Analytical Methodology

To test Hypothesis 1, we regressed factional demographic faultlines on faultline activation (Model 2 in Table 2). Furthermore, in Hypothesis 2, we proposed that faultline activation mediates the relationship between factional demographic faultlines and board performance. Research indicates that the indirect effect may not be normally distributed even if the independent and the mediating variable are (Edwards & Lambert, 2007). We therefore used bootstrapping procedures to investigate the (conditional) indirect effect (Preacher, Rucker, & Hayes, 2007). Bootstrapping methods are more powerful than stepwise procedures and generate the recommended bias-corrected confidence intervals. By applying bootstrap procedures, it is possible to

gauge the significance of the indirect effect (see Table 4) while avoiding power problems stemming from non-normal sampling distributions of the indirect effect (Edwards & Lambert, 2007).

According to Hypothesis 3, board reflexivity moderates the relationship between factional demographic faultlines and faultline activation. Consistent with the recommendations of Aiken and West (1991), we mean-centered the variables involved in calculating the interaction terms and calculated interaction effects by calculating the product of these mean-centered variables. To test Hypothesis 3, we regressed this interaction term on faultline activation (Model 3, Table 2). If Hypotheses 2 and 3 receive support, it is plausible that the indirect effect of factional demographic faultlines on perceived board effectiveness and return on investment through faultline activation is conditional on board reflexivity. This is also known as moderated mediation (Edwards & Lambert, 2007; Preacher et al., 2007). To investigate these hypothesized conditional indirect effects, we utilized bootstrapping procedures that are specifically designed for testing conditional indirect effects (see Table 5).

RESULTS

Descriptive Statistics

Table 1 presents the means, standard deviations, and Pearson zero-order correlations between variables. The average age of board members is 54 years, an average board has approximately seven members, and nine percent of the board members are female. As shown in Table 1, the percentage of female board members and the age of board members are significantly negatively related, indicating that boards with a higher percentage of female board members are, on average, also younger. There is a strong relationship between the percentage of female board members and board heterogeneity, signifying that board heterogeneity is driven by the presence of female board members to a large extent. Board size and faultline activation are positively related, which is consistent with the contention that there is more potential for subgroup formation in larger groups. Moreover, although not specifically hypothesized, board reflexivity is positively related to board effectiveness. In interpreting this relationship, one should keep in mind that board reflexivity and perceived board effectiveness are rated by the same source. Furthermore, we observe that return on investment has a strong positive relationship with previous return on investment. All in all, the correlations do not indicate multicollinearity issues. In addition, none of the variance inflation factors (VIFs) in the regression analyses approached 10, the commonly accepted threshold indicating a potential problem; all were well below 3 (the maximum value was 2.27). In our analyses for return on investment, we excluded one case that deviated more than ten standardized residuals from its predicted value. This extreme case severely influenced the outcomes.

TABLE 1
Means, Standard Deviations, and Correlations

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1 Sector fund dummy	0.20	0.40											
2 Independent professional fund dummy	0.01	0.11	−.06										
3 Board size	6.93	2.28	.30**	.07									
4 Average age	54.23	4.47	.06	.05	.09+								
5 Percentage female	0.09	0.12	.10†	.32**	.03	−.23**							
6 Board heterogeneity	0.00	0.74	−.01	.10†	.09	−.23**	.65**						
7 Demographic factional faultline	0.52	1.53	−.08	−.06	−.15**	.02	−.03	.22**					
8 Board reflexivity	4.81	0.98	.09†	−.17**	.04	.03	.01	.05	.07				
9 Faultline activation	2.42	1.06	.10†	.07	.27**	.02	.05	.10†	.10†	−.28**			
10 Board effectiveness	5.06	0.72	.03	−.09†	.06	.06	.04	.04	−.02	.41**	−.26**		
11 Return on investment in %	2.45	2.58	.00	.02	.07	.04	−.02	−.01	−.08	−.02	−.08	.16*	
12 Return on investment in % (t-1)	2.73	5.71	−.01	.01	−.01	.02	−.05	−.01	−.02	−.01	−.03	.10	.84**

n = 318. n = 270 for return on investment variables.
†p < .10
*p < .05
**p < .01

Hypotheses Tests

Tables 2 and 3 present the results of the regression analyses for perceived board effectiveness and return on investment, respectively, whereas Tables 4 and 5 provides the results for the (conditional) indirect effects. According to Hypothesis 1, the factional demographic faultline is positively related to faultline activation. As shown in Table 2 (Model 2), the coefficient of factional demographic faultline is positive and significant ($\beta = .16$, $p < .001$), a result that is consistent with Hypothesis 1. To test whether factional demographic faultlines affect board performance through faultline activation, as predicted in Hypothesis 2, we present the indirect effects estimated through bootstrapping. Table 4 demonstrates that the 95 percent bias-corrected confidence interval does not include zero for perceived board effectiveness (–.039, –.002) and return on investment (–.092, –.002), respectively. Hypothesis 2 therefore receives support.

TABLE 2
Results of Hierarchical Regression Analysis

Variables	Faultline activation			Perceived board effectiveness		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Sector fund dummy	.04	.06	.05	–.01	–.04	–.03
Independent professional fund dummy	.06	.00	.05	–.14*	–.06	–.10†
Board size	.25**	.28**	.28**	.06	.04	.04
Average age	.00	.01	.01	.09	.07	.08
Percentage female	–.05	.01	–.00	.10	.06	.08
Board heterogeneity	.10	.05	.07	.03	.03	.02
Factional demographic faultline		.16**	.19**		–.06	–.09†
Board reflexivity		–.31**	–.35**		.39**	.42**
Factional demographic faultline x board reflexivity			–.16**			.15**
R^2	.08	.19	.21	.03	.17	.19
ΔR^2	.08**	.11**	.02**	.03	.14**	.02**

N = 318. Standardized regression coefficients are reported. One-tailed tests for hypothesized effects and two-tailed for controls.
†p < .10
*p < .05
**p < .01
***p < .001

TABLE 3
Results of Hierarchical Regression Analysis Return on Investment

Variables	Model 1	Model 2	Model 3
Return on investment (t = 0)	.84**	.84**	.84**
Sector fund dummy	–.02	–.02	–.02
Independent professional fund dummy	–.01	–.02	–.04
Board size	.09*	.08*	.08*
Average age	.02	.03	.03
Percentage female	.05	.04	.05
Board heterogeneity	–.03	–.01	–.02
Factional demographic faultline		–.04	–.07*
Board reflexivity		–.02	.01
Factional demographic faultline x board reflexivity			.10**
R^2	.71	.71	.72
ΔR^2	.71**	.01	.01**

N = 270. Standardized regression coefficients are reported. One-tailed tests for hypothesized effects and two-tailed for controls.
*p < .05
**p < .01

TABLE 4
Results for Indirect Effects on Board Performance Through Faultline Activation

	Boot indirect effect	Bootstrap 95% confidence interval	
		Lower bound	Upper bound
Perceived board effectiveness[a]	−.014	−.039	−.002
Return on investment[b]	−.027	−.092	−.002

[a]n = 318, [b]n = 270. Unstandardized coefficients are reported. Bootstrap sample size is 5,000. Bootstrap 95% bias corrected and accelerated confidence interval.

TABLE 5
Results for Conditional Indirect Effect on Board Performance

Conditional indirect effect exerted on board effectiveness through faultline activation[a]

Board reflexivity	Boot indirect effect	Bootstrap 95% confidence interval	
		Lower bound	Upper bound
Conditional indirect effect at board reflexivity = M ± 1 SD			
−1 SD	−.03	−.08	−.01
M	−.02	−.04	−.01
+1 SD	0.00	−.03	.01

Conditional indirect effect exerted on return on investment through faultline activation[b]

Board reflexivity	Boot indirect effect	Bootstrap 95% confidence interval	
		Lower bound	Upper bound
Conditional indirect effect at board reflexivity = M ± 1 SD			
−1 SD	−.05	−.13	−.01
M	−.03	−.08	−.00
+1 SD	−.01	−.05	.01

[a]n = 318, [b]n = 270. Unstandardized coefficients are reported. Bootstrap sample size is 5,000. Bootstrap 95% bias corrected and accelerated confidence interval.

Hypothesis 3 predicts that board reflexivity moderates the relationship between factional demographic faultlines and faultline activation. We tested this hypothesis by adding the interaction term between factional demographic faultlines and board reflexivity to Model 3 in Table 2. The coefficient of the interaction term is negative and significant ($\beta = -.16$, $p < .001$). Model 3 also demonstrates that in addition to its moderating effect, board reflexivity is negatively related to faultline activation. Thus, although not hypothesized, board reflexivity has a significant negative direct effect on faultline activation, in addition to its moderating effect. As mentioned in the previous section, in interpreting this direct relationship, one should keep in mind that board reflexivity and faultline activation are rated by the same source. It is important to note that we do not observe this relationship between board reflexivity and return on investment in Table 3.[3]

To gain further insight into the nature of the interaction effect, we plotted the relationship between factional demographic faultlines and faultline activation at high and low values of board reflexivity (one standard deviation above and below the mean, respectively) (cf. Aiken & West, 1991). Figure 2 presents the resulting graph and confirms that factional demographic faultlines are positively related to perceived subgroup formation when board reflexivity is low but not when it is high. Simple slope analyses confirm that the slope of the relationship between factional demographic faultlines and faultline activation is significant and positive when board reflexivity is low ($\beta = .39$, $p < .001$) but not when board reflexivity is high ($\beta = .04$, $p > .10$).

Hypothesis 4 suggests that board reflexivity moderates the indirect effect of factional demographics faultlines on board performance through faultline activation. The results

FIGURE 2
Factional Demographic Faultlines and Faultline Activation at Different Values of Board Reflexivity

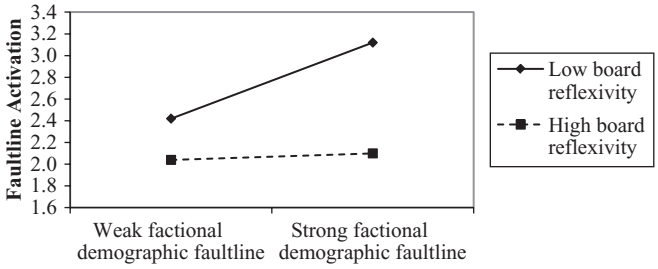
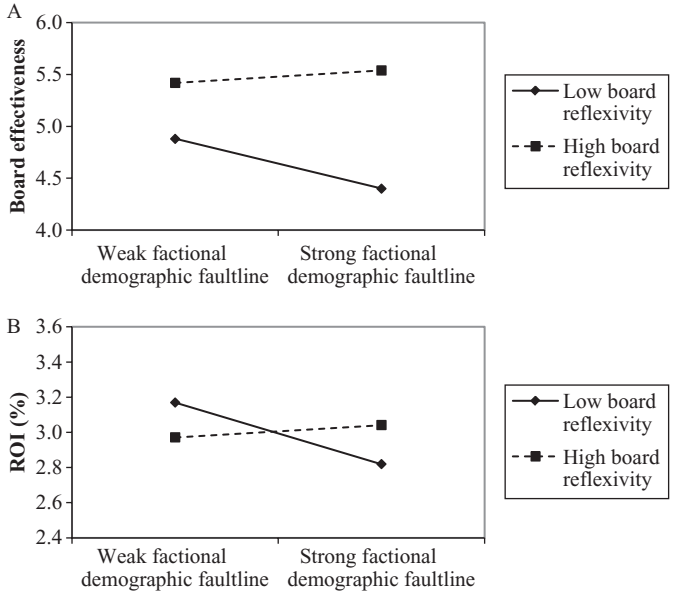


FIGURE 3
A. Factional Demographic Faultlines and Perceived Board Effectiveness at Different Values of Board Reflexivity
B. Factional Demographic Faultlines and Return on Investment at Different Values of Board Reflexivity



provided in Table 2 (Model 6) pertaining to perceived board effectiveness demonstrate that the interaction between factional demographic faultline and board reflexivity is significant ($\beta = .15$, $p < .01$). Similarly, Table 3 (Model 3) also indicates that the interaction term between factional demographic faultlines and board reflexivity is significant (Model 3, $\beta = .10$, $p < .01$). To facilitate interpretation, we have plotted the relationship between factional demographic faultlines with perceived board effectiveness and return on investment for different values of board reflexivity. Figures 3A and 3B present the resulting graphs and indicate that factional demographic faultlines are negatively related to both perceived board effectiveness (Figure 3A) and return on investment (Figure 3B) when board reflexivity is low. Although the results in Tables 2 and 3 demonstrate that factional demographic faultlines interact with board reflexivity, they do not directly assess the conditional indirect effect proposed in Hypothesis 4. We therefore examined the conditional indirect effect of factional demographic faultlines on perceived board effectiveness and return on investment (through faultline activation) at different levels of board reflexivity. Table 5 presents the conditional indirect effects for perceived board effectiveness and return on investment at three values of board reflexivity: low or one standard deviation below the mean (–.98), the mean (.00), and high or one standard deviation above the mean (.98). For perceived board effectiveness, the 95 percent bootstrapped bias-corrected confidence interval excludes zero for both low (–.08, –.01) and mean board reflexivity (–.04, –.01), but it does not exclude zero when board reflexivity is high (–.03, .01).

Similarly, for return on investment, the 95 percent bootstrapped bias-corrected confidence interval excludes zero for both low (–.13, –.01) and mean board reflexivity (–.08, –.00), but it does not exclude zero when board reflexivity is high (–.05, .01). These results indicate that when board reflexivity is low or at the mean, the indirect effect is significant for both perceived board effectiveness and return on investment. Thus, for perceived board effectiveness and return on investment, we observe a negative indirect effect of demographic factional faultlines through faultline activation when board reflexivity is low or at the mean, but not when board reflexivity is high. These results support Hypothesis 4.

DISCUSSION AND CONCLUSION

In this study, we have explored the role of factional demographic faultlines on board functioning. Recent research on demographic faultlines within boards (e.g., Tuggle et al., 2010) suggests that demographic faultlines within boards impede discussion among board members (see also Kaczmarek et al., 2012). We add to this literature by emphasizing that demographic faultlines do not occur by chance, but can be located between factional groups within boards. Specifically, this study illustrates that factional demographic faultlines negatively affect board performance through the perception of board members that the board is split into subgroups. In addition, the results also demonstrate that these negative effects can be curbed through reflection on board functioning. This is an important message for both board scholars and practitioners.

This study makes several contributions to research on boards of directors and corporate practice. First, board researchers have put substantial effort into trying to understand the effects of board composition on board decision-making processes (Dalton, Daily, Ellstrand, & Johnson, 1998; Forbes & Milliken, 1999). However, as noted, very few studies have taken into account that in many instances board members can be viewed as representatives of specific (interest) groups, leading to the existence of so-called factions within boards. Our results demonstrate that factional affiliations impose a first-order demarcation within boards (cf. Li & Hambrick, 2005) and we believe our results contribute to the extant corporate governance literature by demonstrating

that demographic differences between factions may disrupt board functioning. These results also shed light on the difference between formal governance arrangements and the reality of board practice. That is, while board members have a fiduciary responsibility to act in the best interest of the organization as a whole, our results indicate that stakeholder-appointed board members find salience in their delegate status.

Second, we respond to the call for research incorporating micro-level processes to explicate the effects of board diversity on organizational performance (Barrick et al., 2007; Dalton & Dalton, 2011; Hambrick, 2007; Hambrick et al., 2008). In their recent review of the board composition literature, Johnson et al. (2013) stress that the relationships between board composition and organizational outcomes are hard to assess without studying the mediating mechanisms that link board composition to performance. Importantly, because demographic faultlines may very well remain dormant, we believe it is critical to demonstrate whether factional demographic faultlines are indeed "activated." Although several authors recognize the importance of perceptions of diversity as a mechanism linking objective diversity to group processes, to the best of our knowledge this is the first study that actually investigates faultline activation within boards. By including proximal measures of board performance and by explicitly demonstrating the mediating effect of factional demographic faultlines through faultline activation, we believe our study advances corporate governance research in this respect.

Third, our results indicate that actively reflecting on board processes keeps the factional demographic faultline from being activated. Specifically, factional demographic faultlines disrupt performance because they render subgroupings salient (cf. Turner et al., 1987, 1994). Faultline activation is not just a matter of the demographic makeup of the board, but also depends on whether the categorization is in line with an individual's subjective frame of reference (Turner et al., 1987). Given that boards high in reflexivity are driven by the epistemic motivation for deep-level information processing, board members are less likely to rely on heuristic cues to categorize themselves and others as similar in-group members and dissimilar out-group members. As a result, the factional demographic faultline is less likely to result in activated faultlines for boards high in reflexivity. Thus, whether demographic diversity between factions hurt board functioning depends to a large extent on board members' epistemic motivation to engage in deep-level information processing.

Practical Implications

Our results are relevant for practitioners as they suggest that even though factional demographic faultlines can be disruptive, there are ways to leverage and curb these negative aspects. Our results demonstrate that board reflexivity counters the potential detrimental effects of factional demographic faultlines. Although the merits of board reflexivity seem plausible, no one (to our knowledge) has yet conducted research to study the effects of board reflexivity on board functioning. Particularly relevant is that board reflexivity entails behavior associated with board evaluations, in the sense that board evaluations can be expected to stimulate a reflection on the board's functioning. A board evaluation without reflexive behaviors would do little to identify and alleviate potential disruptive board processes. As Sonnenfeld (2002: 113) argues: "no matter how good a board is, it's bound to get better if it's reviewed intelligently." Indeed, board evaluations are required by many corporate governance codes and several corporate governance scholars have stressed the importance of board evaluations (e.g., Conger, Finegold, & Lawler, 1998; Demb & Neubauer, 1992; Kiel & Nicholson, 2005; Leblanc, 2005). To the extent that board evaluations foster reflexivity within boards, we can expect that these boards are less susceptible to social categorization processes that are detrimental for board performance. We believe that this may be considered as a relevant contribution for corporate practice. By overtly reflecting on board processes, board members can attenuate the negative influence of social categorization processes fostered by factional demographic faultlines. This objective may be achieved through chairperson instigation or the fostering of board member reflexivity through training.

LIMITATIONS AND FUTURE RESEARCH

This study has a number of limitations that warrant attention and provide fertile ground for future research. Notwithstanding the difficulty in acquiring access to boards, an important limitation of our study is that, although our theoretical model implies a specific causal order, our cross-sectional data only allow for testing whether relationships are consistent with our hypotheses. Although we do control for previous performance in our analyses for return on investment, future research on boards of directors should aim to incorporate a longitudinal design and field experiments to test for causal relationships.

Our analysis focuses on the board level. Our data did not permit us to assess social relationships among individual board members in view of our data. We note that examining board members as individuals and the processes operating between board members at the dyadic level of analysis may be particularly fruitful in disentangling determinants and consequences of board processes (Hillman, Nicholson, & Shropshire, 2008; Hillman, Shropshire, Certo, Dalton, & Dalton, 2011). Thus, future inquiries may benefit from a fine-grained analysis of the determinants of board decision processes and outcomes at multiple levels of analysis.

Furthermore, our sample is comprised of pension fund boards. Pension fund boards have a clear factional demarcation and, as such, provide a suitable setting for our study. However, an important limitation in this respect is generalizability to other boards within other sectors. We believe, however, that although pension fund boards are a specific type of sampled boards, factional affiliations occur within a multitude of boards, and that the processes of social categorization fostered by factional faultlines are a fundamental part of board functioning. Thus, although the specific types of factional affiliations may differ, we expect our findings to carry beyond the pension fund board setting. Further research and extensions of the proposed model – in both theoretical and empirical directions – will further advance

our understanding of the linkage between board composition and board performance.

Finally, although we consider faultline activation and board reflexivity as important variables for the relationship between factional demographic faultlines and board performance, other process variables may very well connect board demographic diversity and board performance. An important limitation of our study is therefore that there may be several other mediating and moderating variables for the relationship between board demographic diversity and board performance. Research demonstrates, for instance, that the elaboration of task-relevant information and collective team identification can influence the relationship between diversity and performance for workgroups in general (Kearny, Gebert, & Voelpel, 2009) and that feelings of inclusion among board members may improve the relationship between board diversity and performance (Bernstein & Bilimoria, 2013). Because few studies have gone beyond a simple direct relationship between board demographic diversity and firm performance, we believe more work is needed on the process through which board demographic diversity affects board performance.

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NOTES

1. Cronin et al. (2011) use the term subgroup formation when building on Jehn and Bezrukova's (2010) measure of faultline activation. The perception of board members concerning subgroups within boards is a crucial ingredient in our theoretical reasoning.
2. As a robustness check we randomly selected a single board member from boards with multiple respondents and we performed analyses for all single respondent and multiple respondent boards based on a single board member's response. We were able to replicate our results for these "single respondent" boards.
3. Pension fund board members are appointed by factional constituents. It is unlikely that board members self-select in reflexive boards and that this may inadvertently drive the relationships reported.

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Dennis Veltrop is an assistant professor at the Faculty of Economics and Business at the University of Groningen and holds a position as an economist at the research department at De Nederlandsche Bank. He is also co-founder of BoardResearch.org. He obtained his PhD degree in Economics and Business at the University of Groningen. His research focuses on corporate governance and board behavior in particular.

Niels Hermes is Professor of International Finance at the Faculty of Economics and Business of the University of Groningen. He also holds a position as visiting professor at the Solvay Business School of Université Libre de Bruxelles. His research focuses on international finance, corporate governance and microfinance. His work has been published in journals such as *Economic Journal*, *World Development*, *Journal of International Money and Finance*, and *Corporate Governance: An International Review*.

Theo Postma holds a PhD in business administration from the Faculty of Economics and Business at the University of Groningen; he was associate professor in strategy until 2011 (early retirement) and is currently affiliated to the University of Groningen as a freelance researcher. He has published about corporate governance, strategy, technology assessment, and innovation.

Jakob de Haan is Professor of Political Economy, University of Groningen, the Netherlands and Head of Research of De Nederlandsche Bank (DNB). Before joining DNB, he was Scientific Director of SOM, the graduate school and research institute of the Faculty of Economics and Business of the University of Groningen. He graduated at this university, where he also got his PhD. He has published extensively on issues like public debt, monetary policy, central bank independence, political and economic freedom, and European integration. He is member of the editorial board of *Public Choice*, *European Union Politics*, and the *Journal of Common Market Studies*.