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A Tale of Two Factions: Exploring the Relationship between Factional Faultlines and Conflict Management in Pension Fund Boards

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A Tale of Two Factions: Exploring the Relationship between Factional Faultlines and Conflict Management in Pension Fund Boards¹

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ABSTRACT

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We examine the effect of factional demographic faultlines between two naturally occurring factions within Dutch pension fund boards on conflict management within these boards. Data on 313 Dutch pension fund boards confirm that factional demographic faultlines are positively related to competitive conflict management and moderately negatively related to cooperative conflict management. As predicted by faultline theory, these relationships are mediated by perceived subgroup formation. A noteworthy finding with clear managerial implications is that the disruptive effects from factional demographic faultlines are attenuated by board reflexivity. Moderated mediation analyses corroborate these findings.

Keywords: Boards of directors, pension fund boards, factions, social categorization theory, demographic faultlines, perceived subgroup formation, reflexivity, conflict management.

Board members bring their individual and constituencies' interests and commitments to the board (Goodstein, Gautam, & Boeker, 1994, p. 243)

INTRODUCTION

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There are several situations in which board members do not come to a board as independent entities, but rather as representatives of specific (interest) groups. For instance, following a merger, the board of directors of the newly formed organization will usually consist of board members from the two merged organizations. Similarly, boards of joint ventures will have board members who are appointed as delegates to protect their parents' interests (Hambrick, Li, Xin, & Tsui, 2001). Executives and non-executives can also be regarded as two subgroups that represent different interests (cf. Kaczmarek, Kimino, & Pye, forthcoming). A similar case can be made for boards of family firms. Research has shown that founding families have substantial stakes in the largest companies around (Anderson & Reeb, 2004; La Porta, Lopez-de-Silanes, & Shleifer, 1999) and the boards of these firms consist of family and non-family board members who represent two different stakeholder groups. In this paper we argue that board members with different delegate affiliations can be viewed as "factional groups", i.e. "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, p. 794).

Factional affiliations among board members impose a first-order demarcation, affecting how additional elements of board member characteristics influence board decision making processes (Li & Hambrick, 2005). Accordingly, when demographic characteristics align with factional affiliations – e.g., one factional group consisting of women in their thirties and one of men in their sixties – the demographic faultline between these factions will be strong. Demographic faultlines allow predictions about board processes that are difficult to generate with customary evaluations of diversity in terms of variety (see Harrison & Klein, 2007; Lau & Murnighan, 1998; Lau & Murnighan, 2005; Li & Hambrick, 2005). Importantly, faultline theory draws attention to negative effects of group diversity that have largely been ignored by the literature on board composition. In accordance with social categorization theory, demographic faultlines are likely to be associated with in-group/out-group stereotyping (Lau & Murnighan, 1998; Li & Hambrick, 2005; Tajfel, 1978), which, in turn, can be expected to have disruptive consequences for board decision making processes.

We extend research on boards of directors and faultline theory in four distinct ways. First, we address both the question why and when diversity has detrimental effects on board processes and the issue of how to manage social categorization processes by reflecting on board functioning. In this context, although a great deal of literature on board composition interprets board diversity as a source of information that may benefit the board, few have interpreted diversity as a factor engendering subgroupings within boards, thereby negatively affecting board functioning. Admittedly, a number of recent studies acknowledge the possible disruptive effects of faultlines for boards of directors (e.g., Kaczmarek et al., forthcoming; Tuggle, Schnatterly, & Johnson, 2010), yet these studies do not consider the process through which faultlines hamper board functioning. In this context, an important contribution of our present study is that we examine the process through which faultlines affect board functioning. We do so on the basis of information on boards of Dutch pension funds. These boards are responsible for strategic investment choices. Pension fund boards provide an interesting setting, because they consist of pre-established factional groups: their members are representatives of either employers or pension fund participants.

A second important contribution of our current study is that we draw attention to the effect of faultlines on the way in which diverging interests are integrated and balanced during board deliberations. The management of such divergent interests is referred to as conflict management (De Dreu, Evers, Beersma, Kluwer, & Nauta, 2001; Somech, Desivilya, & Lidogoster, 2009), which may be considered as an important determinant of effective decision making (cf. Kaufman & Englander, 2005; Lan & Heracleous, 2010). Accordingly, we believe that an important contribution of our work is that it studies the determinants of conflict management within boards of directors. Given the importance for boards of managing divergent interests effectively, it is striking to note that conflict management has not been explicitly addressed in the literature on boards. Third, we contribute to the faultline literature by empirically investigating the mediating

role of perceived subgroup formation as implied by social categorization and faultline theory. Indeed, whereas the literature on demographic faultlines has steadily increased and although diversity researchers have stressed that studies actually assessing subgroup formation as the categorization process implied by faultline theory are necessary (e.g. Homan, Greer, Jehn, & Koning, 2010; Jehn & Bezrukova, 2010; Spell, Bezrukova, Haar, & Spell, 2011), few studies have actually assessed the in-group/outgroup categorization process that lies at the heart of faultline theory (see Thatcher & Patel, 2011, for a recent meta-analysis). We fill this research gap by including perceived subgroup formation as the mediating mechanism linking factional demographic faultlines to conflict management strategies within boards.

Fourth, we identify an important factor that attenuates the influence of factional demographic faultlines on social categorization processes, namely board reflexivity. Reflexivity is defined as the extent to which board members reflect on and adapt board functioning (cf. West, 1996; West, Garrod, & Carletta, 1997). Specifically, board reflexivity entails behavior affiliated with board evaluations, which are believed to be critical for the effective functioning of boards, because they facilitate reflection on board functioning (Kiel & Nicholson, 2005; Minichilli, Gabrielsson, & Huse, 2007; Sonnenfeld, 2002). Indeed, board evaluations are one of the principal requirements in many corporate governance codes (Minichilli et al., 2007). Notwithstanding the critical role ascribed to reflection on board functioning, however, no study that we are aware of has empirically assessed the moderating role of board reflexivity. Our empirical demonstration of the attenuating role of board reflexivity may therefore be considered as an important contribution to the extant board literature with clear implications for corporate practice.

THEORETICAL BACKGROUND

Factional Demographic Faultlines

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Lau and Murnighan (1998) introduced the concept of the demographic faultline as a potential dividing line that divides a group's members on the basis of one or more attributes. A strong faultline exists when each subgroup is relatively homogeneous or tightly clustered around its own central tendency (e.g., all men are in their sixties) and the central tendencies of the two subgroups differ widely (e.g., all men are in their sixties and all women are in their thirties). Faultline theory has its theoretical rationale in social categorization theory (Lau & Murnighan, 1998; Rico, Molleman, Sanchez-Manzanares, & Van der Vegt, 2007; van Knippenberg & Schippers, 2007). The stronger the demographic faultline, the more group members are expected to categorize themselves and others as similar in-group members and dissimilar out-group members (Tajfel, 1978), leading to 'we-they' distinctions and subgroup formation (Homan et al., 2008; Jehn, Northcraft, & Neale, 1999; Lau & Murnighan, 1998). In this context, a recent meta-analysis by Thatcher & Patel (2011), points out that demographic faultline strength diminishes group cohesion, satisfaction, and performance outcomes.

Whereas Lau and Murnighan (1998) proposed that faultlines occur by chance (see also Barkema & Shvyrkov, 2007; Bezrukova, Jehn, Zanutto, & Thatcher, 2009; Choi & Sy, 2010; Thatcher, Jehn, & Zanutto, 2003), many groups can be viewed as having 'engineered' faultlines (Li & Hambrick, 2005). Specifically, when members of a group are representatives of outside entities, "a demarcation is established that becomes the basis on which other elements of demography need to be assessed" (Li & Hambrick, 2005, p. 797). Such groups consist of members that are aware of, and find salience in, their delegate status (adapted from Li & Hambrick, 2005, p. 794) and may be dubbed factional groups. In factional groups the faultline can be located according to the membership of the representative factions (Li & Hambrick, 2005). This first order demarcation, imposed by factional affiliations, affects how additional elements of demography affect board processes. A strong factional faultline then exists "when two factions differ in their averages and each faction is tightly clustered around its own average" (Li & Hambrick, 2005, p. 804, emphasis in original). For example, a board in which one faction consists of men in their sixties and another faction of women in their thirties would have a strong factional demographic faultline. In accordance with social categorization and faultline theory, it can be expected that the alignment of additional demographic characteristics with such factional affiliations makes each side feel it is facing a monolithic adversary, thereby keeping members psychologically located within their factional groups.

Conflict Management

The management of divergent interests is referred to as conflict management (De Dreu et al., 2001; Somech et al., 2009). Conflict management reflects interaction patterns employed when group members deal with opposing views, and can be expected to be particularly relevant for boards of directors, especially those that consist of factional groups representing diverging interests. It is important to note here that the way group members believe one anothers' goals to be related affects their expectations and actions, and thereby the consequences of interaction (De Dreu, 2007; Deutsch, 1973; Tjosvold,

1998). Accordingly, to better understand decision making processes in boards of directors it is critical to understand how board members choose between conflict management strategies. Indeed, several studies have shown the pervasive effects of conflict management within working teams (Behfar, Peterson, Mannix, & Trochim, 2008; Chen, Liu, & Tjosvold, 2005; Hempel, Zhang, & Tjosvold, 2009; Tekleab, Quigley, & Tesluk, 2009).

In line with Deutsch's (1973) theory of cooperation and competition there are two main approaches to managing conflicts, namely competitive and cooperative conflict management strategies. Competitive conflict management is characterized by low concern for the other party. Group members view their interests as incompatible with the interests of the other party; emphasizing their divergent goals, they view a conflict as a win-lose situation and do whatever is necessary to ensure that their ideas prevail. This generally leads to closed discussions and frustrated communication (Chen et al., 2005). The conflict management literature provides support for the position that competitive approaches to conflict management lead to negative outcomes (Rahim, 2000; Somech et al., 2009). Alternatively, cooperative conflict management is characterized by high levels of concern for the other party in resolving a conflict. Group members tend to work towards mutually beneficial solutions and view conflicts as a joint problem, involving exchange of information about priorities and preferences, revealing insights, and making trade-offs between important and unimportant issues (De Dreu et al., 2001). In cooperative conflict management group members handle their conflict more constructively to the benefit of team functioning (Somech et al., 2009). As noted, when the factional demographic faultline is strong, demographic differences are more likely to result in social categorization processes leading to 'we-they' distinctions and inter-subgroup animosity (Homan et al., 2008; Jehn et al., 1999; Lau & Murnighan, 1998) thereby disrupting behavioral integration (Bezrukova, Thatcher, Jehn, & Spell, forthcoming; Li & Hambrick, 2005). Accordingly, we propose that factional demographic faultlines make it more likely for the factions to manage their differences in a competitive way. Therefore, we expect that factional demographic faultlines are positively related to competitive conflict management. Conversely, when the demographic faultline is weak, polarization between the factions becomes less likely and board members can be expected to resolve their differences in a cooperative way.

H1a: Factional demographic faultline strength will be positively related to competitive conflict management.

H1b: Factional demographic faultline strength will be negatively related to cooperative conflict management.

Perceived Subgroup Formation

Diversity affects group performance to the extent that it is perceived by group members (Harrison & Klein, 2007; Homan et al., 2010; Lawrence, 1997). Pertaining to faultlines specifically, Lau & Murnighan's (1998) assert that even when faultlines appear likely, they must be made active in order to affect group processes. It is therefore important to realize that social categorization processes stemming from demographic faultlines do not always occur (van Knippenberg, Dawson, West, & Homan, 2010). The faultline must be

salient for it to increase the potential for subgrouping (Jehn & Bezrukova, 2010; Lau & Murnighan, 1998). Indeed, diversity scholars have argued that it is the perception of subgroup formation, rather than demographic faultlines per se, that has negative effects on group functioning (e.g., Homan et al., 2010; Jehn & Bezrukova, 2010; Spell et al., 2011; van Knippenberg & Schippers, 2007). Thus, in the context of our current study, we should gauge the categorization processes implied by faultline theory to assess whether the factional demographic faultline is indeed salient (see also Homan et al., 2010; Jehn & Bezrukova, 2010). Specifically, we hypothesize that factional demographic faultlines are positively related to perceived subgroup formation as the probability that group members perceive subgroups increases with the existence of stronger factional demographic faultlines.

H2: Factional demographic faultline strength will be positively related to perceived subgroup formation.

By extension, we argue that the effects of factional demographic faultlines on conflict management are carried through by perceived subgroup formation. It is the perceived formation of subgroups, rather than just factional demographic faultlines, that influences conflict management strategies within boards of directors. We therefore hypothesize that perceived subgroup formation mediates the relationship between factional demographic faultlines and conflict management strategies.

H3a: Perceived subgroup formation will mediate the positive relationship between factional demographic faultline strength and competitive conflict management.

H3b: Perceived subgroup formation will mediate the negative relationship between factional demographic faultline strength and cooperative conflict management.

Moderating Effect of Board Reflexivity

Acknowledging that demographic faultlines do not always engender subgroupings and that the faultline must be salient for it to increase the potential for subgrouping, we can identify factors that attenuate the relationship between factional demographic faultlines and perceived subgroup formation. In this context, several authors stress the importance of board evaluations, because such evaluations facilitate board members to reflect on past board functioning and adapt board processes and procedures accordingly (e.g., Conger, Finegold, & Lawler, 1998; Demb & Neubauer, 1992; Kiel & Nicholson, 2005; Leblanc, 2005; Sonnenfeld, 2002; Zahra & Pearce, 1989).

From a salience of categorization perspective, reflecting on board functioning should stimulate board members to build a shared frame of reference (van Ginkel & van Knippenberg, 2009). Openly discussing dysfunctional routines and views about performance problems concerning the board as a whole fosters the reframing of cognitive representations (de Jong & Elfring, 2010; Schippers, Den Hartog, Koopman, & van Knippenberg, 2008; West, 2000). Research by Van der Vegt et al. (2010), for instance, demonstrates that group feedback promotes a collective orientation within workgroups fostering orientation towards the workgroup as a whole. Similarly, Bezrukova et al. (forthcoming) point out that without shared goals and expectations, group members are

more likely to categorize themselves and others into subgroups on the basis of differences (see also van Knippenberg et al., 2010).

Board reflexivity entails behavior associated with board evaluations. Board (or team) reflexivity is conceptualized 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 et al., 1997, p. 296). It involves behaviors such as questioning, debating, exploratory learning, analyzing, divertive exploration, making explicit use of knowledge and reviewing past events (West, 1996). Reflexivity has been identified as an important instrument for identifying and addressing disruptive processes within teams (Nederveen-Pieterse, Van Knippenberg, & Van Ginkel, 2011; Schippers, Den Hartog, & Koopman, 2007; Schippers, Den Hartog, Koopman, & Wienk, 2003; West, 2000). Recent research by Nederveen-Pieterse et al. (2011), indeed, demonstrates that reflexivity is instrumental in creating a shared understanding in workgroups and thus reduces the negative effects from diversity. We therefore hypothesize that board reflexivity attenuates the relationship between factional demographic faultlines and perceived subgroup formation, because it is likely to render demographic subgroupings less salient.

H4: Board reflexivity will moderate the relationship between factional demographic faultline strength and perceived subgroup formation, such that the relationship between factional demographic faultline strength and perceived subgroup formation will be weaker when board reflexivity is high.

Assuming that board reflexivity moderates the relationship between factional demographic faultlines and perceived subgroup formation, board reflexivity is also likely to influence the strength of the indirect relationship (i.e. through perceived subgroup formation) between factional demographic faultlines and competitive conflict management and cooperative conflict management, respectively – thereby predicting a pattern of moderated mediation (or conditional indirect effects), as depicted in Figure 1. Because we predict a weak relationship between factional demographic faultlines and perceived subgroup formation when board reflexivity is high and a strong relationship between factional demographic faultlines when board reflexivity is low, we hypothesize the following;

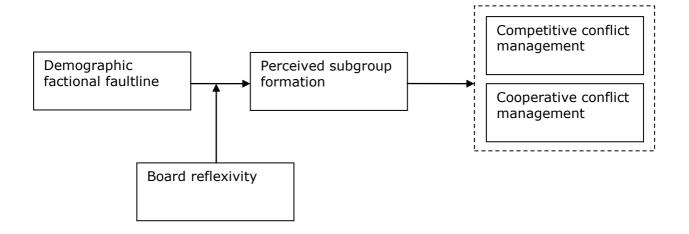
H5a: Board reflexivity will moderate the positive indirect effect of factional demographic faultline strength on competitive conflict management (through perceived subgroup formation). Specifically, perceived subgroup formation will mediate this indirect effect when board reflexivity is low but not when it is high.

H5b: Board reflexivity will moderate the negative indirect effect of factional demographic faultline strength on cooperative conflict management (through perceived subgroup formation). Specifically, perceived subgroup formation will mediate this indirect effect when board reflexivity is low but not when it is high.



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FIGURE 1 Hypothesized model





METHOD

Sample and data collection

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To empirically assess the model described in Figure 1, we use information on boards of Dutch pension funds. Pension funds in the Netherlands provide pension schemes on top of the basic old-age pension provided by the state. Although there is no statutory obligation for employers to offer a pension scheme to their employees, more than 95 per cent 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 accumulated by investment yields. Pension funds are governed by boards representing of two stakeholder groups, namely pension scheme participants on the one hand, and employers on the other. These boards are responsible for strategic decisions, such as the allocation of the fund's assets. The employers and pension scheme participants in the boards have different interests. Participants will receive pension benefits after retirement and thus have a clear interest in maximizing pensions, whereas the employers attempt to minimize their financial contributions to the pension fund. We expect that board members are aware of their status as representatives of the two groups and that they act in accordance with their sponsored status (Goodstein et al., 1994). The diverging interests between employers and participants can be expected to foster a priori suspicion towards the other party. Thus, by their very nature, pension fund boards show a clear factional demarcation.

We used data on Dutch pension fund board characteristics, processes and behavior. To test our hypotheses, we distributed a questionnaire survey to all board members of pension funds that were registered with the Dutch Central Bank (De Nederlandsche Bank, DNB) in December 2009. DNB is the supervisory authority for pension funds in the Netherlands. Under Dutch law, pension funds are legally and financially independent from the sponsoring companies. In the Netherlands there are three different 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.

To maximize the response rate for this survey, we conducted a pretest of the questionnaire with an expert panel that consisted of five practitioners with knowledge on pension funds and six academics conducting research on boards of directors and teamwork in general. We asked these experts to discuss each survey question and to provide feedback on the content and on the instructions we provided. We used this feedback to improve the clarity and design of the survey, making it more appealing for board members to complete. In selecting the scales and developing the questionnaire, moreover, we cooperated extensively with a consultancy firm primarily active within the Dutch pension sector. To further increase participation, we published several calls for participation in practitioner journals, digital newsletters for pension fund practitioners, and through the association of pension funds in The Netherlands.

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 per cent) from

353 boards (47 per cent) completed and returned the questionnaire. To minimize concerns of common source variance and to keep the questionnaire as short as possible in order to promote participation, we collected archival data on board member characteristics ourselves. Data on gender, age, and factional group affiliation was used to calculate factional demographic faultlines for the participating boards. In order 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 the DNB. We excluded pension funds that did not have board members appointed by both stakeholder groups - these were pension funds that no longer had employer appointed board members since the employer organization had ceased to exist - and we excluded boards that had only one board member appointed by the stakeholder groups, since a faction consisting of a single board member cannot really be considered as a subgroup (Thatcher et al. 2003). All in all, out of 353 participating boards we were able to gather complete information on 313 boards (consisting of 2,177 board members) that had multiple board members appointed to both factions. We used these 313 boards for our analyses. For these boards, we received one evaluation of board decision making processes for 107 boards and multiple responses for 206 boards.



Measures

Conflict management

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Competitive conflict management was measured with the forcing conflict management strategy measure taken from the updated version of the Dutch Test for Conflict Handling (DUTCH) (De Dreu et al., 2001). We adapted the four items to reflect competitive conflict management as a group level construct for boards (see also Somech et al., 2009). Board members were asked to indicate how often board members engaged in competitive conflict management (1 = not at all, 7 = very much). Specific items included: "Board members push their own points through"; and "Board members fight for a good outcome for themselves". Cronbach's alpha was .71.

Cooperative conflict management was measured with the problem solving conflict management strategy measure taken from the updated version of DUTCH (De Dreu et al., 2001). We adapted the four items to reflect cooperative conflict management as a group level construct. Board members were asked to indicate how often board members engaged in cooperative conflict management (1 = not at all, 7 = very much). Specific items included: "Board members examine issues until they find a solution that really satisfies all parties"; and "Board members consider ideas from both sides to find a mutually optimal solution". Cronbach's alpha was .70.

Perceived subgroup formation

We measured perceived subgroup formation with a measure developed by Jehn and Bezrukova (2010) (see also Cronin, Bezrukova, Weingart, & Tinsley, 2011; Homan et al., 2010). We adapted the three items to reflect perceived subgroup formation for boards in particular. The specific items included: "The board splits into subgroups during board meetings", "The board divides into subsets of board members" and "The board 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 with five items adapted from the team reflexivity measure of Schippers et al. (2007) that is based on the scale developed by Swift and West (1998) (see also Schippers et al., 2008). The measure of Schippers et al. (2007) focuses specifically on group interaction processes associated with reflection on actions and outcomes. We adapted the items to reflect board reflexivity 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 $7 \Box$ point scale (1 = strongly disagree, 7 = strongly agree). Cronbach's alpha was .91.

Factional demographic faultlines

Since our theoretical framework builds on social categorization theory we included board member characteristics associated with social category diversity. We measured factional demographic faultlines along two social category characteristics: age and gender. We

chose these demographic variables based on previous research on group diversity, indicating the prominence of these variables for social category diversity (Bezrukova et al., 2009; Jehn & Bezrukova, 2010; Li & Hambrick, 2005; Milliken & Martins, 1996; Pelled, Eisenhardt, & Xin, 1999) and based on the availability of data on these characteristics for board members in our sample.

As recommended by faultline scholars, our faultline measure is a combination of the strength of the faultline split (i.e. how cleanly a board splits into two factional groups) and the faultline distance or width (i.e. how far the factional groups are apart) (Bezrukova et al., 2009; Bezrukova et al., forthcoming; Zanutto, Bezrukova, & Jehn, 2011). First, the strength of the faultline splits was measured. We calculated the percentage of total variation in overall group characteristics accounted for by the two factions, by calculating, for every board, the ratio of the between-faction sum of squares to the total sum of squares. This statistic measures the degree of alignment of attributes within the factions. For example, in the context of our study, if all employer appointed board members are male and in their forties and all participant appointed board members are female and in their thirties, the two factional groups can be cleanly split into two homogeneous subgroups. This board would be characterized by a strong faultline split, since all variation in group characteristics is captured by differences between factions. We followed the procedure developed by Thatcher et al. (2003), which is consistent with Lau and Murnighan's (1998) original framework, 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 score², we calculated the demographic faultline for the two pre-existing factions, as factional affiliations already constituted a first order demarcation.

Second, we measured the distance between the factions (Bezrukova et al., 2009; Bezrukova et al., forthcoming; Spell et al., 2011; Zanutto et al., 2011), which indicates the degree of difference between the factions (Bezrukova et al., forthcoming). We applied the distance measure developed by Bezrukova et al. (2009), which can be determined by calculating the distance between the subgroup centroids (the Euclidean distance between the two sets averages of affiliation, gender and age). For example, in the context of our study, the faction distance within a board with male employer appointed board members in their sixties and female participant employer board members in their thirties is greater than it would be if the male members were in their forties.

Finally, in line with recommendations by Zanutto et al. (2011, see also Bezrukova et al., forthcoming; Homan et al., 2010; Spell et al., 2011) the strength and distance scores were standardized and subsequently multiplied to account for the joint effect of the faultline split and the distance between the factions (Zanutto et al., 2011, p. 708). The rationale for this approach is that for social categorization processes to occur, it matters whether the in-groups are homogeneous (emphasis on in-group similarities) and whether the out-groups are different (emphasis on out-group differences).

 $^{^{2}}$ A board of n individuals can be split in 2ⁿ⁻¹-1 ways. For example, a board of eight board members can be split into 127 different ways.

Indeed, faultline theory draws on the principle of comparative fit pertaining to withingroup similarities and between-group differences (Spell et al., 2011). Drawing from social categorization theory, group members are expected to categorize themselves and others as similar in-group members and dissimilar out-group members (Tajfel, 1978). Accordingly, faultlines become stronger with the alignment between the number of attributes along which two subgroups (capturing within-group similarities) and with the difference between subgroups (capturing between-group differences). A combined faultline measure incorporating faultline split and faultline distance captures both withinsubgroup similarity and between-subgroup difference, which is consistent with the notion that in-group similarities and out-group differences drive categorization salience (Homan et al., 2010; van Knippenberg et al., 2010; van Knippenberg, De Dreu, & Homan, 2004). In addition, this interpretation is line with Li and Hambrick's (2005) original interpretation of factional faultlines that strong factional faultlines exists "when two factions differ in their averages and each faction is tightly clustered around its own average" (p. 804, emphasis in original). We therefore incorporated this overall faultline index in our analyses.

Control Variables

Pension fund controls

We controlled for the difference between company pension funds, independent professional pension funds and sector pension funds by including a sector fund dummy and an independent professional fund dummy. Another consideration relevant for our sample of pension fund boards is that large organizations are more visible to the public and are likely to be under close scrutiny, affecting how the board will operate (Hillman, Shropshire, & Cannella, 2007). Research shows that the size of the organization influences board decision making. Organization size is generally included through logarithmic transformation (Boivie, Lange, McDonald, & Westphal, Forthcoming; Datta, Musteen, & Herrmann, 2009; Hillman, Shropshire, Certo, Dalton, & Dalton, 2011; Kroll, Walters, & Le, 2007; Westphal & Stern, 2006). Accordingly, we controlled for pension fund size measured as the natural log of the number of participants. The average number of pension fund participants was 44,979.

Board controls

In line with research on diversity and boards of directors, we also controlled for board size, because group size is known to influence group dynamics (Hillman et al., 2007; Kroll et al., 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 shown 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. (2007) and Lau and Murnighan (2005) to control for heterogeneity effects (see also Bezrukova et al., 2009; 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 specifically (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 appear to be diversity effects may actually be the effect of the mean.

Discriminant and convergent validity

We used confirmatory factor analysis to assess the discriminant and convergent validity of the scales used in the hypothesized model. We computed parameter estimates using the LISREL 8.80 software package with the maximum likelihood method. We first tested a model with the four intended constructs (perceived subgroup formation, board

reflexivity, competitive conflict management and cooperative conflict management). The overall fit of the model was adequate (χ 2=335.12, df=98, p<.001), the goodness-of-fit index (GFI) was .90, the comparative fit index (CFI) was .95, and the root mean square error of approximation (RMSEA) was .079. In addition, the factor loadings were all significant at p<.001. To evaluate the discriminant validity of our measures, we tested four alternative models. For the first alternative model, competitive conflict management and cooperative conflict management loaded on one latent conflict management construct, while the other factors remained unchanged ($\Delta \chi$ 2=241.59³, df=3, p<.001, GFI=.84, CFI=.91, RMSEA=.110). For the second alternative model, perceived subgroup formation and competitive conflict management loaded on a single latent factor ($\Delta \chi$ 2=109.18, df=3, p<.001, GFI=.88, CFI=.93, RMSEA=.093). In the third alternative model board reflexivity and cooperative conflict management loaded on a single latent

factor ($\Delta \chi 2=429.25$, df=3, p<.001, GFI=.80, CFI=.88, RMSEA=.129). The fourth alternative model contained one latent construct for all items ($\Delta \chi 2=1488.61$, df=7, p<.001, GFI=.63, CFI=.72, RMSEA=.204). The fit for all of these alternative models was significantly worse than the hypothesized measurement model.

Level of analysis

The unit of theory in the present study was the board. Perceived subgroup formation, board reflexivity, competitive conflict management and cooperative conflict management were represented by an aggregate of individual board member responses. As noted above, multiple ratings were received for 206 of the 313 boards. 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 followed 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). Thus, it was critical to demonstrate within-board agreement and to evaluate the measurement assumption that responses by members of the same board converged (Kozlowski & Klein, 2000) We calculated the rwg(j) inter-agreement coefficient for multi-item indices (James et al., 1984; James, Demaree, & Wolf, 1993). The median values were .86, .93, .87 and .92, respectively, for perceived subgroup formation, board reflexivity, competitive conflict management and cooperative conflict management. These values indicate, first, that it makes sense to average evaluations by multiple raters and, second, that single-rater evaluations provide reliable information where multiple ratings cannot be obtained (see also Bunderson, 2003).

In addition, we may also expect the variation between ratings by members of the same board to be more similar than ratings by members of other boards (Bliese, 2000). This was investigated by calculating the intra-class correlation coefficients (ICC1 and ICC2;

 $^{^3}$ All $\Delta~\chi^2$ are in comparison to the hypothesized model.

Bliese, 2000). One-way analysis of variance suggested that ratings differed significantly between boards. All ICC1 values were highly significant (p<.001). The ICC1 and ICC2 for perceived subgroup formation were .24 and .47, for board reflexivity .19 and .40, for competitive conflict management .21 and .43, and for cooperative conflict management 0.18 and 0.38. As indicated by James (1982) ICC1 generally ranges from 0 to .50 with a median of .12 while ICC2 is a simple function of ICC1 and the average number of respondents (Bliese, 2000). However, there are no definitive guidelines for determining acceptable values (see also Somech et al., 2009). In our present study all scales exceed the .12 median ICC₁ score .12 and are highly significant, indicating that aggregation is justified (Klein & Kozlowski, 2000). All in all, these numbers indicate that board members agreed sufficiently in their ratings to justify aggregation.

Analytical methodology

We used hierarchical multiple regression analyses to test our hypotheses. To test Hypotheses 1a and 1b, we regressed factional demographic faultlines on competitive and cooperative conflict management, respectively (Models 5 and 8 in Table 2). Similarly, we regressed factional demographic faultlines on perceived subgroup formation to test hypothesis 2 (model 2 in Table 2).

In Hypothesis 3 we posited that perceived subgroup formation will mediate the relationship between factional demographic faultlines and conflict management. The Sobel test assumes that the indirect effect is normally distributed. However, recent research shows that the indirect effect may not be normally distributed, even if the independent and the mediating variable are (Edwards & Lambert, 2007). Therefore, bootstrapping is recommended. In order to investigate the hypothesized indirect effect (or mediation) we utilized the macro developed by Preacher and Hayes (2008). This macro facilitates bootstrapping methods that are more powerful than stepwise procedures and generates the recommended bias-corrected confidence intervals. By applying bootstrap procedures, it is possible to gauge the significance of the indirect effect, while avoiding power problems from non-normal sampling distributions of the indirect effect (see Table 3). Additionally, we also regressed perceived subgroup formation on competitive and cooperative conflict management (Model 6 and Model 9 in Table 2) to assess whether the relationship between factional demographic faultlines and conflict management decreases when we include perceived subgroup formation. According to Hypothesis 4, board reflexivity moderates the relationship between factional demographic faultlines and perceived subgroup formation. Following the recommendations of Aiken and West (1991), we mean-centered the variables involved in calculating the interaction terms and calculated interaction effects by taking the product of these mean-centered variables. To test Hypothesis 4 we regressed this interaction term on perceived subgroup formation (Model 3, Table 2). If Hypothesis 4 receives support, it is plausible that the indirect effect of factional demographic faultlines on competitive and cooperative conflict management through perceived subgroup formation is conditional on board reflexivity. This is also known as moderated mediation (Preacher, Rucker, & Hayes, 2007). In order to investigate these hypothesized conditional indirect effects as proposed by Hypotheses 5a and 5b, we utilized the bootstrapping macro developed by Preacher et al. (2007), which was specifically designed for moderated mediation analyses (see Table 4).



RESULTS

Descriptive statistics

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Table 1 presents the means, standard deviations, and Pearson zero-order correlations between variables. The average age of board members was 54 years, an average board has approximately seven members and nine percent of the board members were female. As can be seen from 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. Not surprisingly, we see that the number of participants is significantly positively related with board size, indicating that bigger pension funds have bigger boards. There is a strong relationship between the percentage of female board members and board heterogeneity, signifying that board heterogeneity is to a large extent driven by the presence of female board members. Board size and perceived subgroup formation are positively related, which is in line with the contention that there is more potential for subgroup formation in larger groups. Moreover, although not hypothesized, board reflexivity is negatively related to competitive conflict management and perceived subgroup formation and positively related to cooperative conflict management. In interpreting this relationship, one should keep in mind that conflict management and board reflexivity are rated by the same source. All in all, the correlations do not warrant concerns over 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).

	Means, Standard Deviations, and Correlations													
	Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1	Natural log number of participants	8.26	1.93											
2	Sector fund dummy	0.20	0.40	.61**										
3	Independent professional fund dummy	0.01	0.11	.01	06									
4	Board size	6.96	2.28	.58**	.23**	.06								
5	Average age	54.27	4.34	.09	.07	.05	.09							
6	Percentage female	0.09	0.12	.15**	.11	.33**	.03	22**						
7	Board heterogeneity	0.00	1.49	.09	.00	.11	.09	24**	.65**					
8	Competitive conflict management	3.12	0.88	.02	.11	.00	.01	02	11*	08				
9	Cooperative conflict management	5.26	0.72	09	06	.06	10	.01	.12*	.10	26**			
10	Factional demographic faultlines	0.53	1.54	09	08	06	15**	.01	03	.22**	.15**	05		
11	Perceived subgroup formation	2.37	1.00	.21**	.10	.08	.29**	.07	.04	.11	.47**	37**	.12*	
12	Board reflexivity	4.82	0.98	.13*	.09	18**	.04	.06	.01	.05	29**	.35**	.07	34**

TABLE 1

n = 313. *p < .05. **p < .01.

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Hypothesis tests⁴

Table 2 presents the results of the regression analyses, while Tables 3 and 4 show the results for the indirect effects and conditional indirect effect, respectively. According to Hypothesis 1a the factional demographic faultline is positively related to competitive conflict management. Table 2 (Model 5) shows a significant positive coefficient ($\beta = .18$, p < .001), supporting hypothesis 1a. Similarly, under Hypothesis 1b, there is a negative relationship between factional demographic faultlines and cooperative conflict management. Table 2 (Model 8) provides moderate support, as the negative coefficient is only marginally significant ($\beta = -.09$, p < .10).

Hypothesis 2 posits that factional demographic faultlines are positively related to perceived subgroup formation. As shown in Table 2 (Model 2) the coefficient for factional demographic faultline is positive and significant ($\beta = .18$, p < .001), a result consistent with Hypothesis 2. Furthermore, according to hypotheses 3a and 3b, perceived subgroup formation mediates the relationship between factional demographic faultlines and, respectively, competitive and cooperative conflict management. Table 3 reports the indirect effects of factional demographic faultlines on competitive and cooperative conflict management through perceived subgroup formation. The 95 per cent bootstrapped confidence interval excludes zero for both competitive conflict management (.01, .10) and cooperative conflict management (-.07, -.01). Thus we find, as anticipated, a positive indirect effect for competitive conflict management and a negative indirect effect for cooperative conflict management supporting Hypothesis 3a and Hypothesis 3b. Hypothesis 4 predicts that board reflexivity moderates the relationship between factional demographic faultlines and perceived subgroup formation. We tested this hypothesis by adding the interaction term between factional demographic faultlines and board reflexivity to Model 2 in Table 2, to arrive at Model 3. The coefficient for the interaction term is negative and significant ($\beta = -.17$, p < .001). Model 3 also demonstrates that in addition to its moderating effect, board reflexivity is negatively related to perceived subgroup formation. Thus, although not hypothesized, board reflexivity has a significant negative direct effect on perceived subgroup formation, in addition to its moderating effect. This indicates that in addition to attenuating the disruptive effects of factional demographic faultlines, board reflexivity also has beneficial effects on board functioning itself. In interpreting this direct relationship one should keep in mind, however, that this direct relationship may result from a common source, because subgroup formation and conflict management are rated by the same board members.

To gain further insight into the nature of the interaction effect, we plotted the relationship between factional demographic faultlines and perceived subgroup formation 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

⁴ We excluded five cases from our regression analyses since these cases deviated more than three standardized residuals from their predicted values. The results did not change when we included these cases.

analyses indeed confirm that the slope of the relationship between factional demographic faultlines and perceived subgroup formation is significant when board reflexivity is high ($\beta = .42$, p < .001), but not when it is low ($\beta = .03$, p > .10). Although these results show that factional demographic faultlines interact with board reflexivity, they do not directly assess the conditional indirect effects proposed in Hypotheses 5a and 5b. We therefore examined the conditional indirect effect of factional demographic faultlines on conflict management (through perceived subgroup formation) at different levels of board reflexivity.

Table 4 presents the indirect effects for competitive conflict management (Panel A) and cooperative conflict management (Panel B) at three different values of board reflexivity: low or one standard deviation below the mean (-0.98), the mean (0.00), and high or one standard deviation above the mean (0.98). The results in Table 4, Panel A indicate that where board reflexivity is low or at the mean, the indirect effect is significant. The 95 per cent bootstrapped bias-corrected confidence interval excludes zero for both low board reflexivity (.05, .20) and mean board reflexivity (.02, .11), but it does not exclude zero when board reflexivity is high $(\Box.02, .07)$. This signifies that there is a positive conditional indirect effect when board reflexivity is low or at the mean, but not when board reflexivity is high, supporting Hypothesis 5a. Similarly, Panel B reports a negative indirect effect when board reflexivity is low or at the mean. The 95 per cent bootstrapped bias-corrected confidence interval excludes zero for both low (-.09, -.02) and mean board reflexivity (-.05, -.01), but it does not exclude zero when board reflexivity is high $(\Box.04, .01)$. Thus, as anticipated, we find a negative indirect effect when board reflexivity is low, but not when board reflexivity is high. We already noted for Hypotheses 3a and 3b that the confidence interval barely excludes zero for both competitive and cooperative conflict management, corroborating our finding that the indirect effect is moderated by board reflexivity. The indirect effect for both competitive and cooperative conflict management is particularly strong when board reflexivity is low.

Finally, in addition to the results for the indirect effects presented in Table 3 and Table 4, Model 6 and Model 9 in Table 2 allow examination of the mediated effects by adding perceived subgroup formation to the regression model. This results in a significant increase in explained variance in Model 6 (.22) and Model 9 (.13). Furthermore, the relationship between factional demographic faultlines and conflict management becomes insignificant when perceived subgroup formation is added to the model. These results corroborate the finding that perceived subgroup formation mediates the effects of factional demographic faultlines on competitive and cooperative conflict management.



TABLE 2Results of Hierarchical Regression Analysis

	Perceive formation		subgroup	Competit managen		conflict	Cooperat managen		conflict
Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Natural log number of participants	.05	.11	.12	05	05	08	05	05	03
Sector fund dummy	.01	.01	.00	.17*	.17*	.16**	02	02	02
Independent professional fund dummy	.07	.00	.05	.06	.07	.03	.02	.02	.04
Board size	.24***	.26***	.26***	.00	.03	11†	08	10	.01
Average age	.06	.08	.08	07	08	11*	.06	.07	.08
Percentage female	07	00	02	16†	11	10	.11	.08	.07
Board heterogeneity	.13†	.08	.10	.00	08	11	.05	.09	.12
Factional demographic faultline		.18***	.22***		.18**	.10†		09†	02
Board reflexivity		38***	42***						
Demographic faultline x Reflexivity			17***						
Perceived subgroup formation						.51***			39***
R2	.10***	.26***	.29***	.04	.07***	.29***	.03	.04	.17***
Delta R2		.16***	.03**		.03**	.22***		.01	.13***

N=313. 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 for simple mediation through Perceived Subgroup Formation								
	Boot indirect effect	SE	Bootstrap 95%	confidence interval				
Indirect effect on competitive conflict management lower bound upper bound								
Effect	0.04	0.02	.01	.10				
Indirect effect on cooperative conflict management								
Effect	-0.03	0.01	07	01				

n = 313. Unstandardized regression coefficients are reported. Bootstrap sample size is 5,000.

Bootstrap 95% bias-corrected and accelerated confidence interval

TABLE 4

Results for Conditional Indirect Effects

Panel A Competitive conflict management

Conditional Indirect Effect through Perceived Subgroup Formation							
			Bootstrap	95% confidence			
Board reflexivity	Boot indirect effect	Boot SE	interval				
Conditional indirect effect at board reflexivity = $M \pm 1$							
SD			lower bound	d upper bound			
-1 SD (-0.98)	0.10	0.04	.05	.20			
M (0.00)	0.06	0.02	.02	.11			
+1 SD (0.98)	0.01	0.02	02	.07			

Panel B Cooperative Conflict Management

Conditional	Indirect Effect	through I	Perceived	Subaroup	Formation
contantional		unougni		Subgroup	1 01111011011

			Bootstrap	95% confidence
Board reflexiv	vity Boot indirect eff	ect Boot SE	interval	
Conditional in	direct effect at board re	eflexivity = $M \pm 1$	L	
SD			lower bound	upper bound
-1 SD (-0.98)	-0.04	0.02	09	02
M (0.00)	-0.02	0.01	05	01
+1 SD (0.98)	0.00	0.01	04	.01

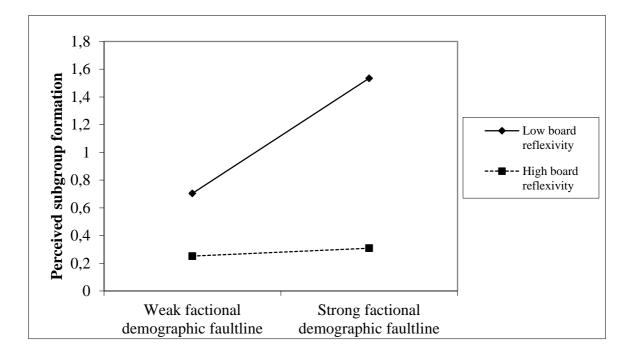
n = 313. Unstandardized regression coefficients are reported. Bootstrap sample size is 5,000.

Bootstrap 95% bias-corrected and accelerated confidence interval

FIGURE 2

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Perceived subgroup Formation at Different Values of Factional Demographic Faultlines and Board Reflexivity



DISCUSSION

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The results reported in this article suggest that demographic faultlines between stakeholder factions have ramifications for boards of directors. Our results demonstrate that factional demographic faultlines are positively related to competitive conflict management and moderately negatively related to cooperative conflict management. Moreover, perceived subgroup formation – as suggested by social categorization theory – mediates the relationship between factional demographic faultlines and conflict management strategies. Finally, our results corroborate the notion that board reflexivity – overt reflection on the board's objectives, strategies and processes – attenuates the relationship between factional demographic faultlines and perceived subgroup formation within boards.

Theoretical implications and contributions

The present study has several implications. First, building from the upper echelon tradition (Hambrick & Mason, 1984), for decades board researchers have devoted substantial attention to understanding the effects of board composition on board decision making processes (Dalton, Daily, Ellstrand, & Johnson, 1998; Forbes & Milliken, 1999). However, as noted, very few of these 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 among board members impose a first-order demarcation, affecting how other elements of board member characteristics influence board decision making processes (see also Li & Hambrick, 2005). Related to this, whereas most board scholars have interpreted board diversity as a source of information benefiting the board, there are alsonegative aspects affiliated with board diversity in the sense that diversity is related to subgroup formation (see Harrison & Klein, 2007, for different interpretations of diversity). This latter view, which is in line with faultline theory, has been recognized in the literature on group composition, but has been scantly acknowledged in upper echelon research and research on boards of directors (for notable exceptions see Kaczmarek et al., forthcoming; Tuggle et al., 2010).

Second, we focused particularly on how the existence of factions influenced conflict management strategies, i.e. how boards manage internal conflicts. Particularly, in the context of conflict-laden exchanges between factions, the management of disagreements can be considered an important determinant of effective board decision making (cf. Kaufman & Englander, 2005; Lan & Heracleous, 2010). Consequently, the management of such divergent interests is critical for effective board decision making. Individuals choose, whether or not consciously, a pattern of principles to guide them through episodes of conflict (Somech et al., 2009). We found support for our hypothesis that factional faultlines are related to conflict management. A recent study by Tuggle, Schnatterly and Johnson (2010) pertaining to the discussion of entrepreneurial issues within boards comes to a similar conclusion, indicating that demographic faultlines within boards may impede discussion among board members. Our results add to the extant

literature by corroborating the notion that demographic faultlines affect decision making processes within boards.

A third contribution of our study is that it underlines the importance of explicitly studying the mediating mechanisms that link board demography to board decision making processes. Although the importance of perceptions of diversity as a mechanism linking objective diversity to group processes has been recognized in theory (Ashforth & Mael, 1989; Choi & Sy, 2010; Harrison, Price, Gavin, & Florey, 2002; van Knippenberg et al., 2004; Williams & O'Reilly, 1998), few studies have actually included measures of such perceptions. Specifically in the context of this present study, inferring board processes from publicly available data obtained outside the boardroom may introduce empirical fallacies in the analysis of board processes (Lawrence, 1997; Priem, Lyon, & Dess, 1999). Indeed, Kaczmarek et al. (forthcoming) inferred board processes from publicly available data to examine the relationship between faultlines and firm performance. Although they do find the anticipated negative relationship and their study provides valuable insights, such an analysis based on publicly available data may lead to erroneous inferences. Our study therefore adds to current research endeavours by explicitly demonstrating the mechanisms through which demographic faultlines affect board functioning. In accordance with social categorization theory, we have included perceived subgroup formation as the mediating mechanism linking factional demographic faultlines to conflict management strategies. Our study thus adds to the literature on diversity and on demographic faultlines in particular.

Fourth, we have demonstrated the attenuating role of board reflexivity in the relationship between factional demographic faultlines and perceived subgroup formation. In the same vein, a great deal of governance scholars argues that board evaluations are critical for the effective functioning of boards, because they facilitate reflection on board functioning within boards. Sonnenfeld (2002), for instance, notes that "no matter how good a board is, it's bound to get better if it's reviewed intelligently" (p. 113). In addition, board evaluations are required by many corporate governance codes (Minichilli et al., 2007). One of the main principles of the UK corporate governance code, for instance, states that "(t)he board should undertake a formal and rigorous annual evaluation of its own performance" (UK Corporate Governance Code, 2010). Similar arrangements can be found for other countries around the world (e.g., the Netherlands, Germany, Australia, the United States). However, board scholars rarely address the effects of reflection on board functioning by the board members themselves. In this respect, the present study is one of the first academic studies that empirically assesses the attenuating role of reflexivity for boards of directors. Specifically, our results indicate that reflecting on board processes ameliorates social categorization processes fostered by factional demographic faultlines (see also van Ginkel & van Knippenberg, 2009). Thus, whether demographic differences between factions hurt board functioning depends in large part on whether boards reflect on their internal processes.

Managerial Implications

Effective board functioning is generally associated with board members cooperating to exchange information, to evaluating the merits of competing alternatives, and reaching

well-reasoned decisions (Forbes & Milliken, 1999). Group processes facilitating or hampering the effective functioning of boards should therefore be considered as a particularly relevant topic for practitioners. However, practitioners and regulatory bodies generally build on the assumption that board diversity is beneficial for board decision making. Our results suggest that practitioners, including board members, should be attuned to the possible disruptive effects from diversity. These disruptive effects from diversity are most pervasive when boards consist of factional groups and when multiple characteristics align with factional affiliations, resulting in so-called demographic faultlines.

In any case, practitioners should be aware that while factional demographic faultlines can be disruptive, there are ways to leverage and curb these negative aspects. Our results show that board reflexivity may counter the potential detrimental effects of diversity. By overtly reflecting on board processes, board members can attenuate the negative influence of social categorization processes fostered by factional demographic faultlines. This may be achieved through instigation by the chairperson or by fostering board members' reflexivity through training. In this context, as was noted above regulatory bodies in various countries are increasingly stressing the necessity of board evaluations as an important instrument for board members to reflect on their board's effectiveness. Additionally, in order to reduce the disruptive effects from factional demographic faultlines, it may be wise for boards to appoint board members from different factions who do not simultaneously differ from one another on multiple characteristics to begin with. That is, boards may curb the emergence of factional demographic faultlines by managing the board's composition.

Limitations and future directions

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There are a number of limitations that warrant attention. These limitations also provide fertile ground for future research. This study adds to a growing body of research on the inner working of boards of directors (e.g., Tuggle et al., 2010; Westphal & Khanna, 2003; Westphal & Stern, 2007). There is, however, only limited research available on the impact of factions and demographic faultlines on processes within boards of directors (e.g., Kaczmarek et al., forthcoming; Tuggle et al., 2010). This is in part due to difficulties in garnering access to boards and collecting data on decision making processes within boards, especially on a longitudinal basis. Notwithstanding the difficulties in acquiring access to boards, an important limitation is that although our theoretical model implies a specific causal order, our cross-sectional data only allows testing whether relationships are in line with our hypotheses. Future research on boards of directors should therefore 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. Rather than interpreting boards of directors as monolithic entities, researchers might engage in careful examination of board members as individuals and processes operating between board members at the dyadic level of analysis (Hillman, Nicholson, & Shropshire, 2008; Hillman et al., 2011). Thus future inquiries may benefit from a fine-grained analysis

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studying the determinants of board decision processes and outcomes at multiple levels of analysis.

A further limitation of our study pertains to the specificity of the sampled boards of directors, namely pension fund boards. Future studies may further contribute to our understanding of factional demographic faultlines in boards of directors of different types of organizations. Finally, future research may also examine to what extent the issues analysed in the present study are related to organizational performance. Arguably board functioning will impact performance, further research in this direction is warranted, however.

Although a great deal of literature on boards has studied the effects of board composition on board effectiveness, these studies generally interpret board diversity as a source of information (diversity as variety, see Harrison & Klein, 2007) that may benefit the board. Fewer studies have addressed diversity as a factor engendering subgroupings within boards (diversity as separation, see Harrison & Klein, 2007). The present study shows that board diversity negatively affects board functioning through subgroup formation. However, our study also demonstrates that the negative effects from diversity may be curbed through reflection on board functioning. This is an important message for both board scholars and practitioners.

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