

Board Processes, Board Strategic Involvement, and Organizational Performance in For-profit and Non-profit Organizations

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Abstract Although corporate governance researchers have devoted considerable attention to the role of boards of directors in monitoring management and providing resources, less attention has been paid to whether and how they affect the strategic actions of firms in response to changing environments. Taking a process-based perspective, we examine how several prevalent board processes (i.e., board meetings, outside-board-meeting reviews and information utilization) affect the involvement of boards in strategic decision-making and how such involvement shapes organizational performance. Moreover, we offer an initial attempt to compare the strategic role of boards in for-profit and non-profit organizations. An investigation of 217 for-profit and 156 non-profit organizations in Canada indicates that different processes lead boards to different levels of strategic involvement, and that such effects are contingent on the types of organizations concerned. Moreover, boards that are active in strategic decision-making enhance the performance of their organizations. Our findings have implications for board research and practice.

Keywords Board processes · Board strategic involvement · Organizational performance · For-profit organizations · Non-profit organizations

Do boards of directors influence the strategy of organizations? This question tends to be answered differently in scholarly research and in the business press. The different answers stem mainly from distinct views regarding how boards function and what role they typically play in strategic decision-making. The behavioral literature on boards has traditionally assumed that boards serve only to rubber-stamp strategic initiatives conceived by top management (Herman 1981). More recently, scholars have increasingly viewed boards as “independent thinkers” (Golden and Zajac 2001) who often take an active role in setting strategic directions for their organizations (Finkelstein and Hambrick 1996; Westphal and Fredrickson 2001).

The view of active boards has received considerable attention from practitioners, regulators, and scholars because of the recent global financial crises and numerous corporate scandals (e.g., the Enron scandal and WorldCom fraud). These events have stimulated strong demands for accountability and transparency (Clarke 2005; Ingley and Van Der Walt 2005; Kiel and Nicholson 2003; Pugliese et al. 2009). In non-profit service organizations as well, increasingly serious cases of resource abuse and misallocation have led to calls for boards to play a more significant role in the strategy realm. For example, managers of the Bill & Melinda Gates Foundation, the largest private foundation in the world, have been accused of inadequate oversight in deciding to offer higher salaries at AIDS clinics and failing to anticipate that this strategy would divert resources from other important local health care services (*Los Angeles Times* 2007). The National Kidney

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Foundation of Singapore was found to have made false declarations on its reserves and numbers of patients, while its CEO was allowed to install a golden water tap in a private office suite, use company cars, and travel first-class on airlines (*Straits Times* 2004). This scandal caused a massive backlash and falloff of donors to the charity, resulting in the resignation of its CEO and the board of directors.

Many people believe that the active involvement of boards in strategic decision-making may enhance the legal and ethical integrity of organizations, and therefore increase their capacities to serve the essential interests of economies and communities in which they operate (Daily et al. 2003; Weitzner and Peridis 2011; Wright and Millesen 2008). However, there has been surprisingly little scholarly research on how boards may affect the development and implementation of an organization's strategy that in turn shape its performance (Stiles and Taylor 2001). To address this gap, we examine how the processes that boards participate in affect their involvement in strategic decision-making and the enhancement of organizational performance. Specifically, we go beyond the traditional antecedents of board strategic involvement (e.g., board demographics and structures) (Golden and Zajac 2001) and offer a process-based model that specifies how boards shape the strategy and performance of their organizations through particular board processes. We consider three board processes that are prevalent in both for-profit and non-profit sectors: board meetings, outside-board-meeting reviews (whereby directors independently review initiatives from top management), and utilization of information provided by management. We first posit the probable differential influence of each process on board strategic involvement and then discuss how the resultant strategic involvement shapes organizational performance. Furthermore, we examine whether the strategic contributions and performance outcomes of these board processes vary between for-profit and non-profit organizations. We make an initial attempt to understand how boards behave in organizations with fundamentally distinct objectives, missions and operations.

Our analysis of 373 organizations (217 for-profit and 156 non-profit) in Canada indicates that different board processes affect board strategic involvement differently. Also, these effects are contingent on the types of organizations concerned. Although board meetings facilitate board strategic involvement in both for-profit and non-profit organizations, the utilization of available information enhances strategic involvement only in for-profit organizations. In addition, the involvement of boards in strategy realm contributes to financial performance, competitiveness, and innovation in both for-profit and non-profit settings.

These findings demonstrate the importance of board processes for enhancing the boards' strategic role and performance outcomes. Our findings also indicate that the effects of board processes differ according to the type of organization concerned, and that this factor is critical for understanding the strategic role of boards. Finally, our findings offer managerial implications for the adoption of effective board processes that can stimulate greater involvement of boards in developing strategy and achieving organizational goals.

A Process-Based Perspective on Board Strategic Involvement and Organizational Performance

Boards of directors are able to affect an organization's strategies by defining the business, developing a mission and vision, scanning the environment, and then selecting and implementing a choice of strategies (Gopinath et al. 1994; Hilmer 1993; Pearce and Zahra 1991). Although there is reasonable consensus on the general responsibility boards have for strategy, we know little about how boards actually fulfill this responsibility (Stiles and Taylor 2001). This omission may result from the adoption of specific theoretical and methodological approaches for studying boards, such as the almost exclusive reliance on agency theory and the extensive use of demographic and structural variables (e.g., board size, CEO duality, outsider ratio, or CEO ownership). In particular, the predominant focus on demographic and structural features prevents us from understanding the processes through which the inputs of boards are converted into outputs (Pettigrew 1992; Pye and Pettigrew 2005; Roberts et al. 2005). In other words, these demographic and structural variables fail to capture the intermediate transformation process that allows directors to convert their efforts into effective corporate governance. Over-reliance on such variables can therefore lead to biased results (Dalton et al. 1998, 2003; Forbes and Milliken 1999; Johnson et al. 1996). As noted by Phan (1998), a high-profile board of directors with a well-designed board structure needs to be fueled by proper commitment and group dynamics to produce satisfactory outcomes. Ignoring board processes causes an incomplete understanding of the dynamics within boardrooms and their consequences.

In this study, we adopt a process-based perspective to examine how specific board processes affect the strategic involvement of boards and therefore the performance of their organizations. Board process refers to the decision-making activities of boards, which usually involve group participation, critical discussion, and exchange of information (Forbes and Milliken 1999; Milliken and Vollrath 1991; Samra-Fredericks 2000a, b; Zahra and Pearce 1989). Directors are busy people who face many competing

demands for their time (Lorsch and MacIver 1989; Mace 1986). There is substantial variation in how much time and attention that different directors devote to fulfilling their tasks (Lorsch and MacIver 1989). Some directors do not meet frequently, and they limit themselves to formalized assessments (i.e., rubber stamping) of top management proposals (Mace 1986; Stiles and Taylor 2001). Other directors actively participate in discussions, apply their professional skills to perform board activities, and keep themselves available for the execution of specific tasks (Lorsch and MacIver 1989; Monks and Minow 1995; Stiles and Taylor 2001). Therefore, the processes and procedures that directors participate in may have substantial influence on how boards behave, and therefore how boards affect the development of their organizations' strategies.

We focus on three board processes that are widely adopted by both for-profit and non-profit organizations: board meetings, outside-board-meeting reviews, and utilization of information provided by management (Forbes and Milliken 1999; Huse 2005). The ways that directors handle these processes affect how much attention they devote to strategic issues, perspectives, and approaches they adopt in strategic decision-making and their manner of interacting among themselves to reach strategic decisions (Stiles and Taylor 1996). In particular, three social-psychological mechanisms that underlie board processes—board cohesiveness, cognitive conflict, and affective conflict—may strongly influence the directors' behavior (Dalton et al. 1998, 2003; Forbes and Milliken 1999; Johnson et al. 1996) and their involvement in strategy.

Board cohesiveness refers to the degree to which board members relate to each other and feel motivated to stay on the board (Summers et al. 1988). As board membership is a part-time responsibility, the relationships between directors and their boards tend to be only partially inclusive (Weick 1979). The directors' degrees of engagement in their duties therefore depend greatly on board cohesiveness. Directors of highly cohesive boards are keen to attend meetings and spend time dealing with governance issues. They speak of "we" rather than "I" in their discussions. In contrast, less cohesive boards are characterized by absenteeism, lack of attainment, or the development of cliques and factions (Forbes and Milliken 1999; Summers et al. 1988). Therefore, board cohesiveness may affect the directors' attendance at board meetings and how much time they spend on independent reviews, collecting information and discussing issues, and eventually a board's degree of strategic involvement.

Another social-psychological mechanism critical to the strategic role of boards is conflict among directors. Conflicts arise when directors hold discrepant views or have interpersonal incompatibilities (Jehn 1995). Two types of conflict within boards—cognitive conflict and affective conflict—may affect how boards interact and how they

deal with strategic issues. Cognitive conflict pertains to task-related differences of viewpoint or opinion concerning the achievement of organizational goals. This type of conflict usually arises when the issues that boards face grow increasingly complex and ambiguous. Prior research shows that moderate cognitive conflict enhances decision-making quality (Jehn and Shah 1997; Schweiger and Sandberg 1989; Schwenk 1990), because directors are more likely to find desirable solutions among diverse opinions (Bourgeois 1985; Eisenhardt and Schoonhoven 1990; Jehn 1995). However, intense cognitive conflict is detrimental, as such divisiveness makes it difficult for decisions to be reached or supported.

Furthermore, the negative emotions (Nemeth and Staw 1989) and low levels of satisfaction (Jehn 1995) triggered by intense cognitive conflict can give rise to affective conflict. Affective conflict is more directly detrimental to board performance, board member satisfaction, and likelihood that board members will work together in the future (Jehn 1995; Shah and Jehn 1993). The anxiety arising from interpersonal animosity may inhibit cognitive functioning (Roseman et al. 1994) and can distract directors from their tasks (Wilson et al. 1986).

In essence, the levels of board cohesiveness and conflict between the directors can either enable or constrain the engagement of boards in strategic decision-making. Boards that adopt proper processes and take an active role in shaping their organizations' strategic directions are likely to substantially influence organizational performance. However, the strategic contributions of particular board processes may vary depending on organizational types. The distinct composition and dynamics of boards in for-profit and non-profit contexts may either amplify or attenuate the influence of board processes on strategic decision-making.

Organizational Types and Board Strategic Involvement

The extant literature suggests that boards operate within certain boundaries, one of which is organizational type (Nicholson and Kiel 2004). Among the variety of distinctions between for-profit and non-profit organizations, the differences in revenue sources, organizational missions, and risks assumed by board members are likely to influence the behavior and strategic involvement of directors. For-profit organizations generate their revenues by charging premiums on the products or services they supply, but non-profit organizations rely mainly on donors and other sponsors (Conrad and Glenn 1976). The primary sources of revenue for non-profit sector organizations include (1) private contributions (in the form of individual donations, corporate gifts or foundation grants); (2) public support (e.g., government grants); and (3) private sector payments

in the form of user fees, membership fees, government contracts, or the sale of products and services (Hodge and Piccolo 2005).

The revenue sources of different types of organizations bear implications for their boards' missions and responsibilities, as well as the composition of the boards. In for-profit boards, the shareholders' interest is usually the single most important concern, but non-profit boards are supposed to ensure the stewardship of resources or to manage assets on behalf of stakeholders (Bowen 1994; Callen et al. 2003). Due to their diverse revenue sources, non-profit boards are accountable to a wide range of explicit stakeholders. For example, the stakeholders of non-profit hospitals include physicians, patients, staff, donors, taxpayers, and local community (Aggarwal et al. 2011). By the same token, non-profit boards are usually larger and involve a wider range of constituents than for-profit boards (Alexander et al. 1988; O'Regan and Oster 2005).

Organizational type also affects the risks directors face if they fail to fulfill their duties. Unlike directors in for-profit organizations (who are primarily driven by compensations), non-profit directors serve on boards voluntarily, because they believe in a charitable mission and appreciate the opportunity to enable that mission by participating in board governance (O'Regan and Oster 2005). As a result, for-profit and non-profit boards are subject to different types and levels of risks. For-profit boards of directors put their time, reputation, and rewards at risk from shareholder lawsuits. The directors of non-profit boards bear few such risks, as their organizations are not subject to the market discipline of product appeal, profit/loss statements, or shareholder approval. Despite the potential for liability claims, the liabilities faced by directors of non-profit organizations are usually limited to allegations of director negligence (Juran and Loudan 1966). Therefore, for-profit board members tend to be more cautious about their behavior in the boardroom than members of non-profit boards.

Hypotheses

Board Meetings and Board Strategic Involvement

The process of conducting board meetings can direct the members' attention to salient strategic issues and promote the directors' contributions to strategic decisions. Intensive discussions in the boardroom may help directors to identify strategically important issues from among the many concerns facing their organizations. In fact, strategic issues often capture the board's attention and become the central focus of board meetings. For example, survey data from firms in New Zealand reveal that the most frequently

discussed topics at board meetings include the organization's future development and its competitive positioning (Ingle and Van Der Walt 2005). Some firms even hold special board meetings specifically to conduct strategic planning and initiate strategic changes (Cornforth and Edwards 1999; Hendry et al. 2010). This focus suggests that board meetings are an important venue for strategic decision-making. Furthermore, the attention-based view of firms (Ocasio 1997) suggests that directors usually focus their attention on a limited set of issues and the issues they attend to determine both what they do and how their organizations behave. As board meetings direct attention to critical strategic issues, those directors who attend board meetings frequently are likely to devote more attention and to play a more active role in the strategy realm. Golden and Zajac (2001) have demonstrated that boards that devote more attention (i.e., spend more time) to strategic issues are more inclined to encourage strategic change.

Compared to non-strategic issues such as internal administrative concerns or other external activities, strategic issues are generally more complicated and hence require considerable effort to resolve. Board meetings stimulate directors to use their knowledge and skills to analyze the benefits and costs of proposed strategies, to debate with each other concerning possible solutions and finally to make high-quality decisions on the basis of sufficient cognitive conflict and sharing (Cornforth and Edwards 1999; Forbes and Milliken 1999; Van den Berghe and Levrau 2004). The in-depth analysis of strategic issues that results from frequent board meetings can enable boards to influence organizational strategy substantially.

In addition, frequent board meetings may boost the board's strategic contribution by enhancing board cohesiveness. Prior research indicates that the time invested in board activities is a good proxy for the efforts that directors make (Zona and Zattoni 2007), and directors who invest sufficient time in their duties perform better (Lorsch and MacIver 1989). Attending board meetings frequently suggests that directors devote considerable time and energy to corporate governance, including the realm of organizational strategy (Preston and Brown 2004). This behavior shows that they have become committed to the organization and to the other board members (Summers et al. 1988). The high levels of board cohesiveness bred from frequent meetings may impel directors to focus on the strategically important issues, to contribute their human and social capital to problem solving and to take risks for initiating strategic change whenever necessary.

However, the positive effect of frequent board meetings is likely to be stronger in for-profit boards than in non-profit boards. Directors of for-profit boards usually possess rich industrial-or firm-specific knowledge and experience. They are also well connected to each other, because they

commonly belong to the small group of corporate elites who sit on multiple boards (Mizruchi 1996).

In contrast, non-profit boards of directors are volunteers from a wide range of stakeholder groups, and their core mission is to serve a societal interest (Alexander et al. 2008; Oster 1995). These directors tend to lack sector- or organization-specific knowledge (Brower and Shrader 2000). As they come from diverse backgrounds, they may have few connections to each other. As a result, non-profit boards may have difficulty in identifying strategically important issues or figuring out optimal solutions during board meetings. The absence of a common cognitive basis may inhibit productive discussions. Cornforth and Edwards' study (1999) on non-profit organizations found substantial variation in the strategic contributions of non-profit board meetings. The boards of schools and local voluntary organizations generally have little involvement in strategy, whereas the boards of overseas development charities are focused predominantly on strategic objectives and policies.

In the case of for-profit boards, however, their solid cognitive basis and high cohesiveness enable them to accurately identify crucial strategic issues and deal with them effectively through board meetings. This difference implies that board meetings are likely to enhance a board's strategic role to a greater extent in for-profit than in non-profit organizations. We therefore propose the following hypotheses:

Hypothesis 1a The frequency of board meetings is positively related to board strategic involvement.

Hypothesis 1b The positive relationship between the frequency of board meetings and board strategic involvement will be stronger in for-profit organizations than in non-profit organizations.

Outside-Board-Meeting Reviews and Board Strategic Involvement

Another widely adopted board process is to let the directors review information and proposals provided by management outside of board meetings, and then let the directors work independently to develop recommendations and solutions. Outside-board-meeting reviews allow the board members to fulfill their tasks with sufficient flexibility and help ensure the independence of the directors' thinking and decision-making. However, such independent reviews require a director to do considerable reading, research, and critical thinking to make wise decisions. For instance, to identify the inherent "management bias" embedded in proposals from management, directors need to be diligent in their outside reviews. They need to seek additional

unbiased information (e.g., through library/internet searches, attending industry conferences or visiting customers and suppliers) to help them in either affirming or contesting the management's recommendations. Given that most directors face many competing demands for their time and must keep carefully budgeted schedules (Lorsch and MacIver 1989; Mace 1986), they may treat outside-board-meeting reviews simply as a ceremonial form of involvement. They may fail to devote adequate cognitive effort to reviews. Moreover, such independent reviews may suffer from a lack of interaction and knowledge sharing between board members, making it difficult for directors to make high-quality assessments and decisions. The various reviews by different directors may offer a series of uncoordinated ideas, according to the limited ideas and perspectives of each director. The decreased board cohesiveness resulting from the lack of interactions among directors may further inhibit the directors from devoting themselves to outside-board-meeting reviews.

The problems with outside-board-meeting reviews tend to be particularly salient in regard to strategic decision-making. Due to the lack of knowledge sharing and discussion among directors, the board members may be unable to identify the important strategic issues within the large volume of materials provided for independent review. Moreover, as strategic decision-making requires a considerable investment of time and effort, a comprehensive understanding of the strategies under discussion, and finally an agreement among the various board members, strategic decision-making is difficult to accomplish through individual-based reviews.

The outside-board-meeting review tends to impede board involvement in strategic thinking to a greater extent in non-profit organizations than in for-profit organizations. There are three reasons for this tendency. First, the strategic options available to non-profit organizations depend largely on the stability of their external funding (Gronbjerg 1991). As the acquisition of funding hinges on the directors' connections to donors and sponsors more than on their independent thinking, outside-board-meeting reviews are likely to be regarded as less relevant to strategic decision-making for non-profit organizations. In addition, the complexity of strategic issues may require knowledge that is beyond the scope of most non-profit directors. In that case, the directors may feel that spending their time and attention on such issues is not constructive. Furthermore, because non-profit board members are volunteers, these organizations have few means of motivating directors to engage in outside-board-meeting reviews. These organizations cannot rely on the typical enticements used by for-profit firms, such as promises to provide (or threats to withdraw) economic incentives. As a result, non-profit directors are more likely than for-profit board members to treat outside-board-

meeting reviews as a formality. This leads to our next series of hypotheses:

Hypothesis 2a The time that directors devote to outside-board-meeting reviews is negatively related to their involvement in strategic decision-making.

Hypothesis 2b The negative relationship between outside-board-meeting reviews and board strategic involvement will be stronger in non-profit organizations than in for-profit organizations.

Information Utilization and Board Strategic Involvement

As directors rely on information to make decisions (Nonaka 1994), the quality and timeliness of the information available to them influences their decisions (Cornforth and Edwards 1999; Van den Berghe and Levrau 2004). The supply of such information tends to be especially significant for strategic decision-making by directors, due to their distance from day-to-day operations and the consequent information asymmetries between themselves and the operational managers (Charan 2005; Conger et al. 2001; Hendry and Kiel 2004). Therefore, it is necessary for a board to have access to pertinent information if it is to constructively participate in making strategic decisions. For example, concerning decisions on product diversification, the board needs sufficient detailed information to predict how the newly entered business and incumbent businesses will complement each other (Farjoun 1994; Sirower 1997).

However, information alone will not enable strategic decision-making unless it is analyzed and utilized by the directors. Prior research indicates that directors who process, assimilate, and integrate the information received from management are more effective in corporate governance (Ancona and Caldwell 1988; Wan and Ong 2005; Zona and Zattoni 2007). To the extent that information from diverse sources may be contradictory or biased (and thus detrimental to decision-making) (Schweiger et al. 1986), it is necessary for directors to select the most useful pieces of information, integrate that information into their previous knowledge or experience, and finally make informed judgments on strategic issues. Moreover, the sharing and application of information in board discussions may promote the non-executive directors' participation in strategic decision-making by reducing their structural disadvantages. Due to their independence from management, non-executive directors often have less structural power than executive directors. To protect their sovereignty, the executive directors may prevent non-executive directors from applying their information, knowledge, and skills to corporate governance decisions. Such disadvantages of non-executive directors can be mitigated by discussions in

the boardroom. In the boardroom setting, non-executive directors can interact with top managers and executive directors, make their voices heard, and therefore enhance their roles in the decision-making process (Zhang 2010).

Effective information processing is likely to enhance a board's strategic role to a greater extent in for-profit organizations than in non-profit organizations. The board members of for-profit organizations generally share a primary concern for the shareholders' interests (Nicholson and Kiel 2004), and these directors come from a common talent pool that shares abundant insights and experiences relevant to their particular industry. In contrast, non-profit board members represent a wide range of stakeholders characterized by diverse backgrounds and interests. Although they may bring a "broader, fresher, and different voice to the table" (Fondas and Salsalos 2000, p. 20), their different backgrounds may lead to divergent interpretations of the same pieces of information. Such divergent perspectives may cause continuous cognitive conflict over the priority of strategic issues and their optimal resolutions (Jehn et al. 1999; Wright and Millesen 2008). Intensive cognitive conflict makes it difficult for directors to reach agreement on strategic decisions. Moreover, the anxiety arising from disagreement may induce affective conflict (Jehn 1995; Shah and Jehn 1993) and impair board cohesiveness (Forbes and Milliken 1999; Summers et al. 1988), which can in turn impede board involvement in strategic thinking. In addition, the non-profit directors' lack of sector- and organization-specific knowledge may inhibit them from making good use of the available information to deal with strategic problems properly. Hence, we suggest that as for-profit boards commonly share common goals and comparable cognitive schemas, these boards are generally better able to apply available information in strategic decision-making than are non-profit boards. Accordingly, we propose the following set of hypotheses:

Hypothesis 3a The utilization of available information mediates the positive effects of information availability on board strategic involvement.

Hypothesis 3b The utilization of available information by directors is positively related to board strategic involvement.

Hypothesis 3c The positive relationship between the utilization of information and board strategic involvement will be stronger in for-profit organizations than in non-profit organizations.

Board Strategic Involvement and Organizational Performance

Prior studies indicate that boards impose a great influence on corporate strategies in areas such as the firm's scope of

activities (Jensen and Zajac 2004; Tihanyi et al. 2003), strategic changes (Filatotchev and Toms 2003; Johnson et al. 1993; Westphal and Fredrickson 2001), internationalization (Datta et al. 2003; Sanders and Carpenter 1998), entrepreneurship (Fried et al. 1998; Hoskisson et al. 2002; Zahra et al. 2000), and innovation or R&D strategies (Baysinger et al. 1991; Kor 2006). By influencing strategy in these areas, boards can shape their organization's financial performance, competitiveness, and innovation. These performance implications of board strategic involvement tend to be applicable to both for-profit and non-profit organizations, because both of them confront limited resources and increasing competition. The changing environmental conditions encountered by non-profit organizations can create pressures for strategic adaptation comparable to the pressures faced by for-profit organizations (Callen et al. 2003; Hodge and Piccolo 2005; Zajac and Kraatz 1993).

Board strategic involvement can enhance financial performance and industrial competitiveness because the directors may use their accumulated experience in particular industries to determine their organization's strategic objectives and policies (Golden and Zajac 2001; Harrison 1987; Zahra and Pearce 1989). After reviewing strategies proposed by the management, the directors may facilitate the execution of desirable strategies or oppose strategies that could undermine shareholder value (e.g., ambitious mergers and acquisitions for managerial empire-building) (Stiles and Taylor 1996; Trautwein 1990) or that could harm the stakeholders' interests (Clarke 2005). Strategic involvement also enables a board to impel strategic changes in response to changes in the external environment (Golden and Zajac 2001; Goodstein et al. 1994). Such organizational adaptations have been demonstrated to be performance enhancing in both for-profit industries (Ginsberg and Buchholz 1990) and non-profit organizations (Zajac and Kraatz 1993). Furthermore, involvement in strategic decision-making may help directors enhance their identity as "directors" (Hillman et al. 2008) and therefore motivate them to further exploit their human and social capital to improve the financial performance and competitive status of their organizations (Hillman and Dalziel 2003).

Active strategic involvement by boards may also promote innovations (Jaskyte 2012; Wu and Lee 2007). By engaging in strategy formulation, directors are able to set promising directions for innovative thinking, R&D investment, or institutional support for trials and experiments (Daft 1978; Jaskyte 2012). Being aware of the strategic importance of innovativeness, directors are likely to engage themselves in fund raising by exploiting their business and political networks (Nicholson and Kiel 2004). With enhanced access to financial capital, a continuous

investment in laboratories, equipment, and staffing may facilitate innovations. Additionally, interlocked directors, who have access to rich and reliable information from multiple organizations (Granovetter 1985; Mizruchi 1996) are better able to provide new ideas and innovative practices when they are intensively involved in strategic planning and have a good understanding of the organization's needs. Therefore, we propose a further hypothesis:

Hypothesis 4 A board's involvement in an organization's strategic decision-making is positively related to the performance of the organization.

Data and Measures

Data Collection and Sample

The population of this study consisted of directors who sat on the boards of Canadian organizations and studied at the Directors College (www.thedirectorscollege.com) in Canada between 2011 and 2012. To construct our sample, we first distributed questionnaires to all of the 2,351 directors who finished the first of three weekend learning modules at the Directors College. The questionnaires collected critical information on the directors' activities, such as their levels of involvement in strategic planning and the perceived performance of their organizations. We received 376 questionnaires with complete information, achieving a response rate of 16 %. Our final sample, therefore, included 376 directors. Of these, 220 were from 217 for-profit organizations, and 156 were from 156 non-profit organizations. The for-profit organizations included private firms, public listed firms, government-shared firms, Crown corporations, and for-profit co-ops. The non-profit organizations included hospitals, universities, and charitable organizations. Employment sizes ranged from 2 to 140,000, with 51.7 % of the organizations being small or medium enterprises (less than 500 employees) and 48.3 % having more than 500 employees. Hence, our sample represented a varied cross-section of Canadian organizations in terms of sector and size.

The respondents had served on the boards of their focal organizations for 4.28 years on average (4.42 years for the for-profit directors and 4.04 years for those on non-profit boards). These directors held an average of 2.21 board seats (2.22 for those on for-profit boards and 2.18 for directors on non-profit boards). The for-profit organizations were on average smaller than the non-profit organizations in terms of numbers of employees (1,536 vs. 1,816), but the for-profit firms had greater average total sales (US\$802 million vs. US\$327 million). We used the Kolmogorov–Smirnov (K–S) two-sample test to examine whether the

directors of for-profit organizations and their counterparts in non-profit organizations are comparable in terms of important features that may affect their behavior on boards, including their age, tenure on the board, and the size of their organizations. Our results showed that the two samples were comparable in these characteristics, which allowed us to examine the proposed differential effects of board processes on board strategic involvement in both for-profit and non-profit settings.

Variables

Frequency of Board Meetings

Following Wan and Ong (2005), we measured the frequency of board meetings in terms of two items—the number of general board meetings per year and the number of board meetings specifically focused on strategy per year. The Cronbach's alpha for these two items was 0.48, suggesting that it was not appropriate to put these two items into one parcel. Hence, we used them separately in the subsequent structural equation modeling analysis.

Outside-Board-Meeting Reviews

We measured outside-board-meeting reviews using three items—the number of hours a director spent in reviewing overall strategy independently per year, the number of hours spent reviewing specific business strategy independently per year, and the number of hours spent in reviewing strategy execution plans independently per year. The total time devoted to reviewing the three categories of strategic issues captured the degree of attention that the directors devoted to strategic decision-making outside of board meetings. The Cronbach's alpha of these three items was 0.83, confirming the reliability of the construct. An exploratory factor analysis (EFA) confirmed the existence of a single factor accounting for 87.11 % of the variance.

Information Availability

Following prior studies (Cornforth and Edwards 1999; Van den Bergh and Levräu 2004), we used four items to measure the content and quantity of information received by board members. These items were the information concerning internal resources, assumptions regarding strategic planning, degrees of financial, strategic and operational risk, and financial measures. The respondents were asked to indicate to what extent they received these four types of information as part of their board package. Their answers were given on a 5-point categorical rating scale, where 0 indicated receiving no such information; 1 indicated receiving little or barely enough information; 2

indicated receiving an average/moderate amount of information; 3 indicated receiving considerable information; and 4 indicated receiving all of the relevant information. As this variable was measured by ordinal scale items, we evaluated the reliability of our construct by calculating its reliability coefficient from the polychoric correlation matrix following McDonald's formula (1985).¹ The reliability coefficient was 0.77, confirming the reliability of the construct. An exploratory factor analysis confirmed the existence of a single factor accounting for 54.84 % of the variance.

Information Utilization

Following Zona and Zattoni (2007), we measured information utilization using four items, namely the extent of discussion about each of the four types of information provided. The respondents were asked to indicate the extent to which they discussed the information provided in their board package using a 5-point categorical rating scale, where 0 indicated that they did not discuss the information at all; 1 indicated that they discussed it only a little; 2 indicated that they discussed the information to an average/moderate degree; 3 indicated that they discussed it to a considerable degree; and 4 indicated that they discussed the information a great deal. The reliability coefficient from the polychoric correlation matrix was 0.74, confirming the reliability of this construct. An exploratory factor analysis confirmed the existence of a single factor accounting for 53.63 % of the variance.

Board Strategic Involvement

Following prior studies (Blake 1999; Wan and Ong 2005; Zahra 1990), we measured this construct using two items: the extent to which a board was involved in the formulation, development or change in its organization's objectives, and extent to which the board influenced the choice of major businesses. Each item was measured using a 5-point categorical rating scale, where 0 indicated that the board was not involved in the above-mentioned activities at all; 1 indicated that board was slightly involved; 2 indicated occasional/moderate involvement; 3 indicated that the board was substantially involved; and 4 indicated that the board was involved in these activities to the greatest extent. The reliability coefficient from the polychoric correlation matrix was 0.76, confirming the reliability of this construct. An exploratory factor analysis confirmed the

¹ As the classical Cronbach's alpha assumes that the item responses are continuous, this formula can lead to biased reliability estimates for items in an ordinal scale (Liu et al. 2010). Hence, we used McDonald's formula (1985) to overcome this problem.

existence of a single factor accounting for 73.05 % of the variance.

The high reliability of the four constructs measured by multi-item scales (i.e., outside-board-meeting reviews, information availability, information utilization, and board strategic involvement) confirmed their convergent validity. Therefore, we conducted a confirmatory factor analysis (CFA) to further examine their discriminant validity. The results of CFAs (shown in Table 1) suggested that the four-factor measurement model (Model 1) fits the data well (IFI = 0.996, TLI = 0.994, CFI = 0.980 and RMSEA = 0.022), and that this model fits significantly better than alternative models in which two or more variables were assumed to be indistinguishable. This result confirmed that the four constructs were discriminant from each other.

Organizational Performance

We used three survey items adapted from prior research (Gupta and Govindarajan 1986) to measure organizational performance. The first item was financial performance, measured as the organization's current financial performance as perceived by the respondents on a 10-point scale (i.e., 1 = not at all satisfactory to 10 = extremely satisfactory). The second item was relative standing in the

industry, measured by rating the relative "performance standing" of the organization in its industry on a 10-point scale (i.e., 1 = significantly below average to 10 = significantly above average). The third item was commitment to innovation, measured as the organization's current commitment to innovation on a 10-point scale (i.e., 1 = not at all committed to 10 = committed to the greatest extent). The reliability coefficient from the polychoric correlation matrix of these three items was 0.72, confirming the reliability of the construct. An exploratory factor analysis further confirmed the existence of a single factor accounting for 60.95 % of the variance.

In addition, we included *number of employees* (in natural logarithm) in the structural equation modeling estimation to control for the possible influence of organization size on the level of board strategic involvement. The boards of large organizations may need to be highly engaged in strategic decision-making to resolve problems arising from organizational complexity. However, the ability of board members to take an effective role may be constrained by their difficulties in understanding the complex operations of large organizations.

Table 2 displays the comparison between for-profit and non-profit organizations across their organizational attributes, board processes, board strategic involvement, and organizational performance as indicated by a *t*-test.

Table 1 Goodness-of-fit summary for confirmatory factor analyses

Model	χ^2	df	$\Delta\chi^2$	IFI	TLI	CFI	RMSEA
Model 1 Hypothesized four-factor model	61.815	52		0.996	0.994	0.980	0.022
Model 2 Alternative three-factor model (combining information utilization and board strategic involvement)	161.082	55	99.267***	0.956	0.936	0.955	0.070
Model 3 Alternative three-factor model (combining information availability and information utilization)	171.588	54	109.637***	0.951	0.928	0.950	0.075
Model 4 Alternative three-factor model (combining information utilization and outside-board-meeting review)	334.246	54	272.431***	0.883	0.829	0.882	0.115
Model 5 Alternative three-factor model (combining information availability and outside-board-meeting review)	689.818	54	628.003***	0.734	0.612	0.732	0.174
Model 6 Alternative two-factor model (combining information utilization, board strategic involvement, and outside-board-meeting review)	434.239	56	372.424***	0.842	0.778	0.840	0.132
Model 7 Alternative one-factor model (combining all variables)	894.809	57	832.994***	0.649	0.516	0.646	0.194

N = 391

IFI incremental fit index, TLI Tucker-Lewis index, CFI comparative fit index, RMSEA root-mean-square error of approximation

*** *p* < 0.001

Table 2 Comparison of for-profit and non-profit organizations in organizational attributes, board processes, board strategic involvement, and organizational performance

Variables	For-profit organizations (A)	Non-profit organizations (B)	(A)-(B)
Mean of number of employees	1,536	1,816	-280
Mean of sales (million USD)	802	327	476**
Mean of number of board seats held at once	2.22	2.19	0.03
Board meeting frequency			
Item 1: General board meetings	7.14	7.19	-0.05
Item 2: Strategic board meetings	3.03	3.09	-0.07
Outside-board-meeting reviews			
Item 1: Reviews of overall strategy	17.91	12.69	5.22*
Item 2: Reviews of specific business strategy	20.36	12.00	8.36**
Item 3: Reviews of strategy execution plans	22.67	12.74	9.93*
Information availability			
Item 1: Information on internal resources	2.07	2.15	-0.07
Item 2: Information on degrees of risk	2.51	2.58	-0.07
Item 3: Information on strategic planning assumptions	2.28	2.21	0.07
Item 4: Information on financial measures	3.02	2.89	0.12 ⁺
Information utilization			
Item 1: Information on internal resources	2.06	2.16	-0.10
Item 2: Information on degrees of risk	2.49	2.65	-0.16 ⁺
Item 3: Information on strategic planning assumptions	2.20	2.19	0.01
Item 4: Information on financial measures	3.02	2.87	0.15*
Board strategic involvement			
Item 1: Formulation, development, or change in organizational objectives	2.55	2.71	-0.16 ⁺
Item 2: Influence the choice of major businesses	2.33	2.43	-0.10
Organizational performance			
Item 1: Financial performance	6.80	7.17	0.36*
Item 2: Relative standing in the industry	7.09	7.44	0.35*
Item 3: Commitment to innovation	7.09	7.29	0.20

** Significant at 1 % level; * significant at 5 % level; ⁺ significant at 10 % level; all two-tailed tests

Empirical Analyses

Statistical Procedures

We adopted structural equation modeling (SEM) to estimate the proposed effects of board processes on board strategic involvement and organizational performance. SEM is a large-sample technique, and the proper sample size required depends on model complexity, the estimation method used, and the distributional characteristics of the observed variables. A general rule of thumb is that the minimum sample size should be no less than 5–20 times the number of parameters to be estimated (Kline 2005). Given our relatively small sample size, we adopted single-indicator structural equation modeling with measurement error terms specified by a reliability correction model

(Allen and Griffeth 2001; Coffman and MacCallum 2005; Hofmann and Morgeson 1999). Following prior research (Allen and Griffeth 2001; Hofmann and Morgeson 1999), we specify the factor loading of a latent construct to be the square root of the reliability and the measurement error in its observed measure to be $(1 - \text{reliability})$ multiplied by the variance of the observed measure (i.e., $(1 - \text{reliability}) \times \text{variance}$).

The model presented in Fig. 1 was tested using AMOS 20 with maximum likelihood estimation. The sample size of 220 for-profit and 156 non-profit directors was sufficiently large, with 20 parameters being estimated, including the structural weights, variances, and covariances. We took natural logarithms of the number of general board meetings, the number of strategic board meetings, the number of outside-board-meeting reviews, and the number

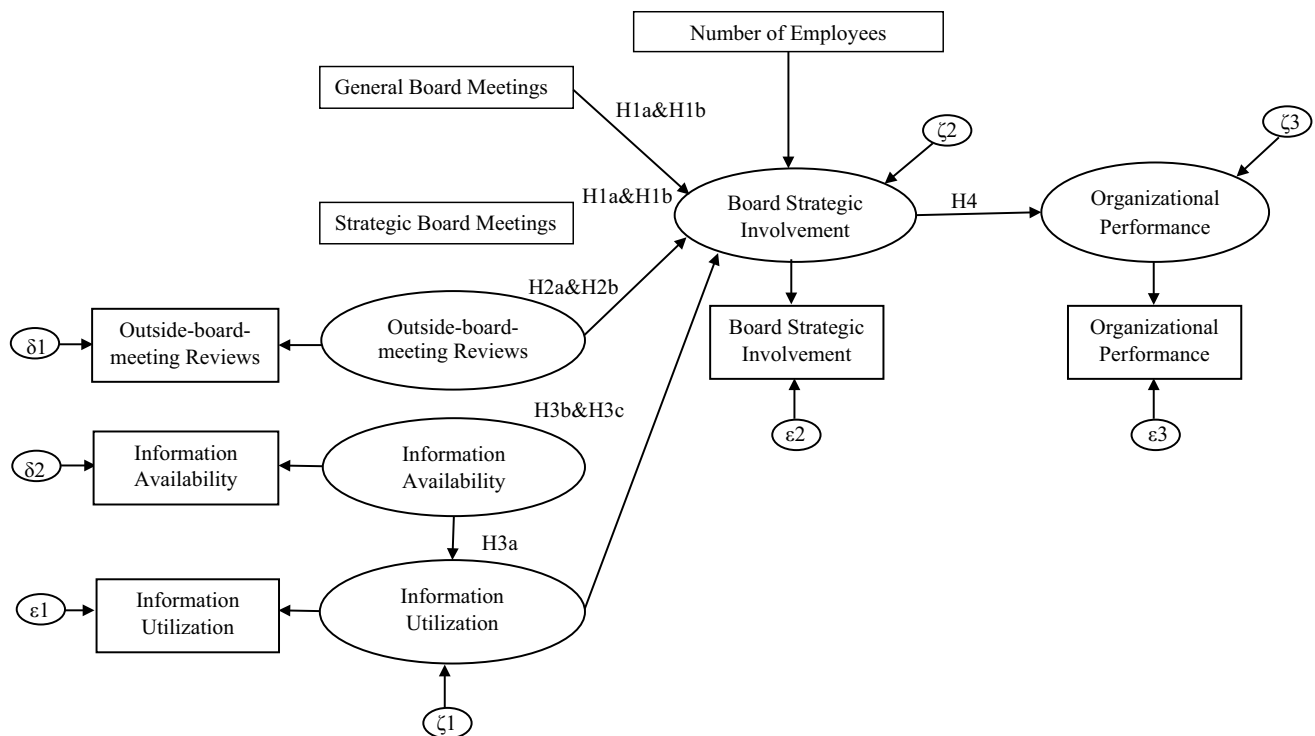


Fig. 1 Structural equation model. 1. $\delta 1$ and $\delta 2$ are measurement errors of exogenous latent variables measured using single parcel indicators. $\epsilon 1$, $\epsilon 2$, and $\epsilon 3$ are measurement errors of endogenous latent variables measured using single parcel indicators. Measurement errors are specified as fixed values using reliability correction model (Allen and Griffeth 2001; Hofmann and Morgeson 1999). $\zeta 1$, $\zeta 2$, and

$\zeta 3$ are structural errors reflecting unspecified causes of variability in the outcome. 2. The exogenous constructs, including “General Board Meetings”, “Strategic Board Meetings”, “Outside-board-meeting Reviews”, “Information Availability” and “Number of Employees”, were allowed to be freely correlated.

of employees to reduce the non-normality of these variables. After transformation, both the for-profit sample (Mardia’s coefficient = 2.378; critical ratio = 1.394) and the non-profit sample (Mardia’s coefficient = 3.655; critical ratio = 1.804) met the multivariate normality assumption, because the critical ratios of their Mardia’s coefficients (1985) were below 1.96 (the critical value of multivariate normality test), with statistical significance at 5 %.

Summary Statistics

Table 3 displays the descriptive statistics and Pearson product moment correlations of the summated subscales. All of the scales were within the accepted level (i.e., above 0.70), which allowed us to parcel items into single indicators in the SEM analysis.

SEM Estimation Results

To test the model in Fig. 1, we first ran a multi-group analysis and found that at least one path parameter differed between the for-profit and non-profit samples. Hence, we adopted the unconstrained models, which allowed path

parameters to be estimated separately for the two samples. Table 4 shows the results of the unconstrained structural equation models. As the minimum fit Chi-square was insignificant ($p > 0.1$), TLI, CFI, NFI, and IFI were above 0.9, and RMSEA was below 0.05, the models had good fit in both the for-profit and non-profit samples.

H1a predicts that frequent board meetings lead to greater board strategic involvement, and H1b proposes that this effect is stronger in for-profit organizations than in non-profit organizations. The results in Table 4 show that general board meetings had positive and significant effects on board strategic involvement in for-profit organizations ($\beta_{FP} = 1.689$, $p < 0.01$), but not in non-profit organizations ($\beta_{NFP} = 0.803$, $p > 0.1$). The z -statistic of -1.004 suggests that the effects of general board meetings did not differ significantly between the two types of organizations.² With regard to strategic board meetings, these special meetings had positive and significant effects on the

² Multi-group analysis reported the matrix of critical ratios for path parameter differences between the unconstrained for-profit and non-profit models. The critical value was a z -test. The critical value greater than |1.96| (absolute value of 1.96) in a two-tailed test indicated that the difference of the path parameters between the two groups was statistically significant at 5 %.

Table 3 Descriptive statistics and correlation ($N = 376$)

	No. of items	Mean	SD	Reliability coefficient	1	2	3	4	5	6	7	8	9	10
1. Financial performance	1	6.95	2.03	-	1.00									
2. Relative standing in the industry	1	7.23	1.69	-	0.55*	1.00								
3. Commitment to innovation	1	7.17	1.77	-	0.24*	0.43*	1.00							
4. Board strategic involvement	2	2.50	0.99	0.76	0.16*	0.14*	0.24*	1.00						
5. Number of general board meetings	1	7.18	3.00	-	0.11*	0.10*	0.05	0.14*	1.00					
6. Number of strategic board meetings	1	3.05	2.39	-	0.07	0.19*	0.16*	0.21*	0.33*	1.00				
7. Outside-board-meeting reviews (logged)	3	3.94	0.94	0.83	-0.04	-0.01	0.04	0.08*	0.11*	0.12*	1.00			
8. Information availability	4	2.50	0.67	0.77	-0.07	-0.09*	0.02	0.02	-0.01	-0.01	-0.06	1.00		
9. Information utilization	4	2.32	0.67	0.74	-0.04	-0.08	0.06	0.04	-0.04	-0.01	-0.04	0.78*	1.00	
10. Number of employees (logged)	1	5.78	2.05	-	0.12	0.17*	0.05	-0.10*	0.22*	0.02	0.04	-0.06	-0.06	1.00

We report Cronbach's α as the reliability coefficient for scales of outside-board-meeting reviews

We report reliability coefficients from the polychoric correlation matrix following McDonald's formula (1985) for ordinal scales, including information availability, information utilization, and board strategic involvement

* $p < 0.01$

strategic involvement of both for-profit and non-profit boards ($\beta_{FP} = 0.661, p < 0.1$; $\beta_{NFP} = 1.365, p < 0.001$). The z -statistic is 1.357, implying that there was no significant difference in the coefficients of strategic board meetings between the two samples. Hence, H1a is largely supported, but H1b is not supported.

H2a suggests that outside-board-meeting reviews are negatively related to board strategic involvement, and H2b predicts that this effect is more salient in non-profit organizations than in for-profit ones. As indicated in Table 4, the coefficient of outside-board-reviews was not statistically significant in any sample ($\beta_{FP} = 1.198, p > 0.1$; $\beta_{NFP} = 2.454, p > 0.1$), suggesting that outside-board-meeting reviews did not help board directors to become involved in strategic decision-making in either for-profit or non-profit organizations. The z -statistic of 0.387 suggests that the effects of out-board-meetings reviews did not differ significantly between the two types of organizations. Therefore, H2a and H2b are not supported.

H3a predicts that information utilization mediates the positive effects of information availability on board strategic involvement. H3b predicts that the utilization of available information facilitates board strategic involvement, and H3c predicts that this positive effect is stronger in for-profit than in non-profit organizations. Our results show that information utilization did have positive and significant effects on board strategic involvement in for-profit organizations ($\beta_{FP} = 0.818, p < 0.1$), but it did not have any effect in non-profit organizations ($\beta_{NFP} = -1.286, p > 0.1$). The z -statistic of -1.999 indicates a significant difference in such effects ($p < 0.05$) between the two samples. Hence, H3b and H3c are partially supported. Moreover, the coefficients of information availability took on positive signs and were significant in both samples ($\beta_{FP} = 0.843, p < 0.001$; $\beta_{NFP} = 0.765, p < 0.001$), suggesting that making information available to directors facilitated their utilization of it. However, information availability did not have any effect on board strategic involvement in either for-profit or non-profit organizations ($\beta_{FP} = -0.603, p > 0.1$; $\beta_{NFP} = 0.923, p > 0.1$). These results, together with those showing positive effects of information utilization on board strategic involvement in for-profit organizations, suggest that information has to be utilized by directors before it can influence strategic decision-making. In other words, information utilization acts as the mediator between information availability and board strategic involvement in for-profit organizations but not in non-profit ones. Hence, H3a is partially supported.

H4 predicts that board strategic involvement contributes to organizational performance. The positive and significant coefficients of board strategic involvement found for both for-profit and non-profit samples ($\beta_{FP} = 0.492, p < 0.001$; $\beta_{NFP} = 0.450, p < 0.01$) strongly support H4.

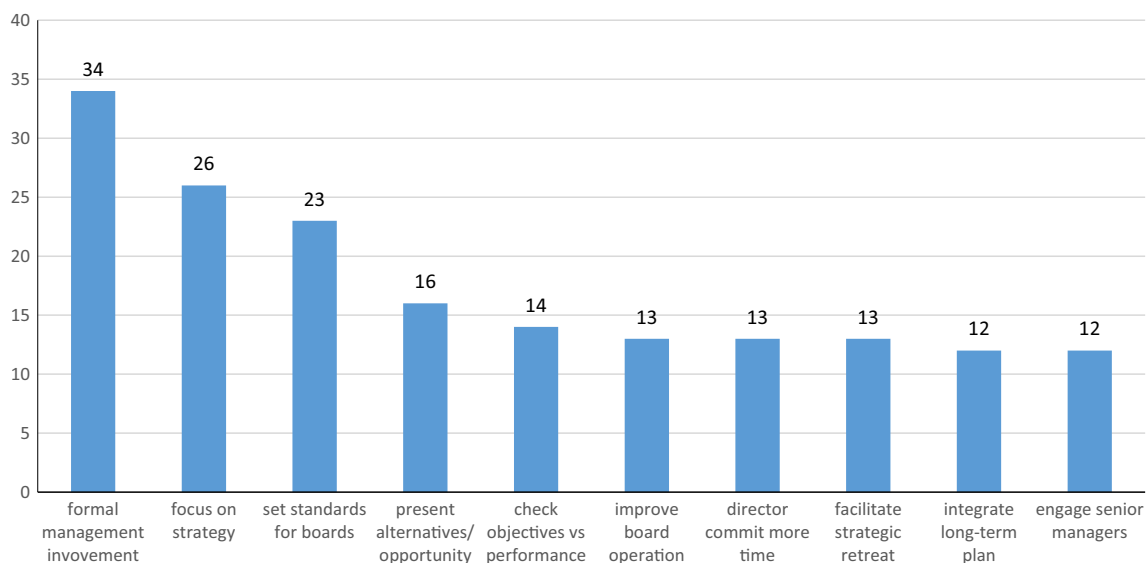
Table 4 Model coefficients and goodness-of-fit of structural equation modeling estimation

Predictors	For-profit sample	Non-profit sample	Z-stat. of difference in coefficients between the two samples
Board strategic involvement			
General board meetings (H1a & H1b)	1.689** (0.625)	0.803 (0.624)	-1.004
Strategic board meetings (H1a & H1b)	0.661 ⁺ (0.353)	1.365*** (0.380)	1.357
Outside-board-meeting reviews (H2a & H2b)	1.198 (1.791)	2.454 (2.703)	0.387
Information utilization (H3b & H3c)	0.818 ⁺ (0.477)	-1.286 (0.938)	-1.999
Information availability	-0.603 (0.426)	0.923 (0.968)	1.435
Number of employees (logged)	-0.165 ⁺ (0.098)	-0.244* (0.100)	-0.564
Information utilization			
Information availability (H3a)	0.843*** (0.046)	0.765*** (0.053)	-1.112
Organizational performance			
Board strategic involvement (H4)	0.492*** (0.128)	0.450** (0.147)	-0.216
Goodness-of-fit index			
Chi-square (<i>df</i>), <i>p</i> -value	20.628 (16), 0.193	10.566 (16), 0.835	
TLI	0.972	1.053	
IFI	0.985	1.028	
NFI	0.935	0.949	
GFI	0.976	0.983	
AGFI	0.946	0.962	
CFI	0.984	1.000	
RMSEA	0.036	0.000	
CMIN/DF	1.289	0.660	
Number of observations	220	156	

Unstandardized coefficients are reported with standard errors in parentheses

A z-stat. greater than 1.96 indicates that the difference in coefficients between the two samples was significant at 5 %

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$

**Fig. 2** Top 10 improvement areas identified by non-profit boards: by number of directors reporting each improvement area

Additional Analysis of Board Processes in Non-profit Organizations

Our results showed that among the three board processes we examined, only strategic board meetings facilitated board strategic involvement in non-profit organizations. To better understand these results, we analyzed the qualitative data obtained from our survey. In the survey, the respondents were asked to identify the three most important improvements that could aid their strategic decision-making process. We summarize the ten most frequently mentioned areas for improvement by non-profit boards in Fig. 2.

Figure 2 shows that the highest-ranked area for improvement was “having more formal and structured involvement with management in strategic decision-making.” As indicated in their comments, some directors felt that their fellow board members were either entrenched in past practices or were simply unsure to what extent they should be involved in strategic decision-making. Directors who did not understand which particular issues they should focus on opted for taking a hands-off or “rubber-stamp” approach toward the CEO. This anecdotal evidence suggests that directors on non-profit boards do not attend to strategic issues at general board meetings, because the strategic role of boards is not formalized in the organizational rules and regulations.

The second-highest-ranked area for improvement was “board meetings should be more focused on strategy.” The directors felt that they were “getting dragged into tactical issues” by the managers or their fellow directors. Some said that the managers tended to overwhelm board members with information and presentations, or that egocentric directors sometimes dominated the meetings. These comments imply that general board meetings and the utilization of information from management do not contribute to strategic decision-making, because the directors are not able to concentrate on strategic issues in the boardroom.

The third area to be improved was “setting standards of board educational levels to ensure that board members are able to make strategic decisions.” Some directors pointed out that an individual’s ability to contribute to strategy formation should be a critical criterion in selecting board members. These comments imply that the substantial variation in the directors’ levels of experience and expertise makes the boards unable to deal with strategic issues through holding general board meetings, conducting outside-board-meeting reviews, or by utilizing information from management.

Discussion and Conclusion

This study was motivated by the need for better understanding on how boards influence organizational strategy

through board processes and how board involvement in strategy shapes organizational performance. Our results indicate that board meetings, access to information and adequate information utilization, are all helpful for enabling the boards of for-profit organizations to take an active role in shaping strategy for their organizations. However, in non-profit organizations, only holding board meetings specifically focused on strategy is effective for enhancing board strategic involvement. Moreover, our results show that the active involvement of boards in strategy formation enhances financial performance, industrial competitiveness, and innovation for both non-profit and for-profit organizations. By offering a theoretical and empirical analysis of how particular board processes influence the strategic role of boards and therefore organizational performance, we see our integrative study as having implications for board research and practices.

Although scholars have devoted considerable attention to the role of boards in managerial monitoring and resource provision (Hillman and Dalziel 2003), less attention has been paid to whether and how boards affect their organizations’ strategies in response to changing environments (Daily et al. 2003; Golden and Zajac 2001; Zahra and Pearce 1989). This study explored the strategic role of boards, and the results demonstrate that in addition to the demographic and structural characteristics of boards, the specific processes that boards participate in are also critical to their strategic role. We show that board meetings promote board strategic involvement. Strategic board meetings are especially effective in this regard for both non-profit and for-profit organizations, but general board meetings are effective only in for-profit organizations. Our findings suggest that non-profit boards do not pay adequate attention to strategic issues in general board meetings. This observation is consistent with that of Cornforth and Edwards (1999) who found that the unstructured agendas of general board meetings in non-profit organizations cause strategically important items to be either inadequately addressed or squeezed out by routine agenda items and reports. Hence, holding board meetings specifically on strategy is particularly important for enabling non-profit boards to engage in strategic issues. With regard to the strategic contribution of information, we find that when for-profit boards make good use of the information provided by management, they play an active strategic role. As the information available to them increases, they play such a role more actively. In non-profit organizations, the utilization of information also increases as the information sharing between managers and boards intensifies. However, this increased information sharing has no effect on the boards’ strategic involvement. This might be caused by the non-profit directors’ diverse backgrounds and goals, which make it difficult or impossible for them to figure out

or attend to strategically important issues. Contrary to our predictions, outside-board-meeting reviews do not influence the levels of board strategic involvement in either for-profit or non-profit organizations. A possible explanation is that many directors treat outside-board-meeting reviews as simply a ceremonial form of involvement. As these reviews are conducted in isolation and on the directors' own time, the directors often fail to devote adequate effort in dealing with the strategic issues encountered in the review process.

Our finding that board strategic involvement enhances organizational performance (in terms of profitability, competitiveness, and innovation for both non-profit and for-profit sectors) highlights a neglected means by which boards can better contribute to their organizations. Prior research on the effectiveness of boards has focused predominantly on the performance outcomes of managerial monitoring and resource provision, and the findings of these studies have been inconclusive (Hillman et al. 2008). These divergent findings might be explained by the neglect of the boards' strategic role in shaping organizational performance. In the case of non-profit organizations, our findings also shed light on long-lasting debates over whether non-profit boards are able to take an active role in the strategy realm (Cornforth and Edwards 1999; Daily et al. 2003). Although resource dependence theorists regard non-profit boards as boundary spanners between their organizations and critical community resources (Shrader et al. 1991), the staff of non-profit organizations are rarely satisfied with the performance of their boards. These staff commonly advocate that their boards should rely on top management for strategic decision-making (Harris 1999; Middleton 1987). Our study, however, shows that non-profit boards are performance enhancing once they engage in dealing with strategic issues. This finding indicates that it is important for non-profit organizations to enhance the strategic role of their boards.

This study advances our understanding of how non-profit boards behave and how they affect the strategy and performance of their organizations. Prior research on boards has focused primarily on the for-profit sector, with less attention to the non-profit sector despite the importance of non-profit organizations in the economy (Herman and Van Til 1989; Middleton 1987; Ostrower and Stone 2005). There have been only a few studies on non-profit boards, and they have provided mainly normative description rather than contextualized empirical evidence on non-profit board behavior (Cornforth and Edwards 1999; Miller-Millesen 2003). We aimed to fill this gap by investigating how the composition and objectives of non-profit boards affect their behavior in the strategic decision-making process. Our findings show that among the various board practices examined, only strategic board meetings impel non-profit boards to engage in strategic issues. As

boards that are active in the strategy realm are performance enhancing, non-profit organizations should develop more effective board processes by taking the unique characteristics of their boards into consideration.

This study has several limitations. First, in most cases, only one respondent from each organization evaluated board behavior and performance. These evaluations might have been biased due to the respondents' personal experience, knowledge, or position in the organization. Second, given that directors were reluctant to disclose objective data of organizational performance, we used subjective indicators to measure organizational performance. If archival data on organizational performance are available, we would be able to use it to check the robustness of our results. Third, our data were collected from directors who were studying at the Directors College. Although these directors came from a wide range of organizations throughout Canada and had only taken the first of three weekend learning modules when they completed the survey, their opinions could have been influenced by the educational context at Directors College. Future studies may select directors from multiple sources to avoid such potential bias.

Despite the foregoing limitations, we see this study as advancing our understanding of the relationship between board processes, board strategic involvement, and organizational performance in both for-profit and non-profit settings. Based on both quantitative and qualitative analyses, our study offers important implications for policy makers and practitioners. These implications concern the selection of appropriate board processes to enhance board strategic involvement and organizational performance. Also, as the board processes that we investigated are widely adopted by organizations worldwide, our arguments and findings provide insights applicable for boards in other economies as well.

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