Behavioral determinants of nonprofit board performance: the case of supervisory boards in Dutch secondary education

Heemskerk, K.; Heemskerk, E.M.; Wats, M.

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Behavioral Determinants of Nonprofit Board Performance

THE CASE OF SUPERVISORY BOARDS IN DUTCH SECONDARY EDUCATION

Klaas Heemskerk,1 Eelke M. Heemskerk,1,2 Margrietha Wats2

1University of Amsterdam, 2Galan Groep, Baarn

There is an increased awareness that the performance of boards (good governance) is not only determined by structural determinants but by behavioral determinants as well. These behavioral determinants might be particularly important for public and nonprofit governance, where the role of the board is more diffuse and heterogeneous than in corporate governance. Here we investigate how social dynamics within boards in secondary education influence their performance. We follow a concise model that includes cognitive conflict, the use of expertise, effort norms, and social cohesion as determinants of board task performance. A survey among all secondary schools in the Netherlands serves as the empirical underpinning for this process-oriented model of good governance. We show that the behavioral determinants have different effects on the control task and advice task of boards. Also, we find that cognitive conflicts in supervisory boards do not lead to less but rather to more social cohesion within boards. Building on these findings, we suggest a revised model of the behavioral determinants of nonprofit board performance.

Keywords: governance, boards, education, conflict, effort norms, use of knowledge and skills, cohesion, nonprofit boards, board performance, board behavior

What Determines Board Performance?

The lion share of research on the effectiveness of boards aims to establish a relation between structural and formal characteristics of boards, such as the size or composition on the one hand, and organizational performance, narrowly interpreted as financial results, on the other (Di Pietra et al. 2008; Hermalin and Weisbach 1991). Reviews of this literature have now come to the somewhat disappointing conclusion that the results are not encouraging (for instance, Dalton and Dalton 2011). The relation between formal characteristics and organizational performance remains uncertain at best. The reason for these discouraging results may well lay in the fact that much is going on in between board characteristics and
organizational performance. The insight gains ground that it is not so much the structural or formal characteristics but more the behavioral aspects that determine board effectiveness (Bailey and Peck 2013; Bainbridge 2002; Finkelstein and Mooney 2003; Hoye and Doherty 2011; Huse 2005; Huse et al. 2011; Kumar and Zattoni 2013; Pye and Pettigrew 2005; Van Ees, Gabrielsson, and Huse 2009).

A behavioral approach toward board effectiveness focuses on the task performance of boards rather than on the organizational performance. After all, a board can perform well in times when an organization is in dire straits because of external circumstances, and boards may invest less in the quality of their own task performance when their organization is doing well (Pugliese, Minichilli, and Zattoni 2014). It is particularly suitable for the study of board effectiveness in nonprofit organizations, where the measurement of organizational performance is typically more troublesome (Brown 2005; Forbes 1998; Herman and Renz 1999; Lindgren 2001). Yet, in spite of the increased interest in nonprofit boards and governance since the mid-1990s (Renz 2012), there remains a gap in our understanding of internal processes and dynamics of boards in general and nonprofit boards in particular (Cornforth 2012). The extensive discussion of group dynamics in nonprofit management literature has not yet found its counterpart in the governance research literature (Renz and Andersson 2014; see Hoye and Doherty 2011 for a review of some notable exceptions in sport governance).

We have built a concise model for the behavioral determinants of board performance based on some of the leading articles in the field, most notably Forbes and Milliken (1999) and Huse (2005). We have two reasons to closely stick to this literature. On a positive note, Nicholson, Newton, and McGregor-Lowndes (2012) found that the conceptualization of boards as teams holds a great deal of promise for nonprofit governance research. A more critical reading of the literature, however, suggests that it is time the behavioral process-oriented study of boards delivers on its promise of insight in the black box of board dynamics. After all, sixteen years after the groundbreaking article of Forbes and Milliken (1999) there is a need for empirical studies of board processes and internal dynamics in nonprofits. The assumptions from the behavioral approach to corporate governance need to be tested empirically and across sectors.

The main obstacle for the behavioral study of boards is gaining access to the black box of actual board behavior. Yet it is crucial, as Leblanc (2004, 437) aptly points out: “Trying to distill a relationship between governance and performance—from outside of a boardroom—is analogous to trying to find out what makes a sports team effective by sitting in a cafeteria reading the sports pages.” Here we open up the black box through a survey designed to map behavioral dynamics within a board. Our study examines the relationship between effective board task performance and actual board behavior in supervisory boards in Dutch secondary education. Our findings are based on data collected from 148 responding out of the 342 secondary educational organizations, using hierarchical multiple regression to test our hypotheses.

The Netherlands has, by and large, a privatized yet publicly funded system for secondary education. Educational reforms and deregulation in the 1980s led to a further increase in autonomy but also in the scale of secondary educational institutions (Karsten 1999). In the 1990s it became clear that the traditional one-tier governance model in which a voluntary school board with parents and local notables delegates executive power to the principal was no longer appropriate for the large and autonomous schools. This led to a transition to a two-tier governance system in which a supervisory board with non-executive directors supervises the
executive board of the school. The supervisory board is composed of five or seven persons with different expertise (such as financial, legal, and educational expertise). The executive board often consists of just one person: the executive director (comparable to the chief executive officer in firms). The supervisory board has the duty to control and advise the executive board: they decide on the yearly budgets, the overall policy of the school, and act as employer for the executive director. Supervisory boards typically meet about six times a year (Blokdijk and Goodijk 2012). Such a two-tier governance system is typical in the Netherlands and common in many continental European countries (see also Heemskerk 2007, 50–53).

This change in governance structure provides a good opportunity to study behavioral dynamics. First, because the boards have to “reinvent” their role and tasks, they will be more able to reflect on the behavioral elements that may affect their performance. Second, it provides an opportunity to analyze the effectiveness of the often newly formed supervisory boards from a behavioral perspective and complement the research that only considers the formal and structural aspects of the supervisory boards (Blokdijk and Goodijk 2012).

**A Behavioral Model of Board Performance**

Here we follow the common classification of two key tasks of non-executive directors: a control task and an advisory task (Adams, Hermalin, and Weisbach 2010; Huse 2005; Nicholson and Newton 2006; Petrovic 2008). But what determines this task performance? We use the four behavioral factors Forbes and Milliken (1999) distinguish as building blocks of our model: effort norms, the use of knowledge and skills, cognitive conflicts, and the social cohesion within a board. Effort norms are socially constructed expectations of the amount of time and energy individual group members will invest in their duties (Bailey and Peck 2011; Forbes and Milliken 1999; see Doherty, Patterson, Van Bussel 2004 for norms at nonprofit boards). If board members implicitly agree to invest limited time only in analyzing and collecting the necessary information, they run the risk of becoming a passive audience that rubber-stamps decisions taken by the executive management (Minichilli, Zattoni, Nielsen, and Huse 2012; Stiles and Taylor 2001). A board that holds demanding norms that are shared by all members about the effort expected of its members will fulfill both its control and its advisory task more effectively (Minichilli et al. 2012). We thus expect that:

**Hypothesis 1.** Clear and demanding effort norms will be positively associated with effective board task performance.

Knowledge and experience are important assets for a board. But the presence of knowledge alone does not necessarily make a board effective. The use of knowledge and skills designates the extent to which a board is able to put these to use in the fulfillment of its tasks. This requires respect for and knowledge of each other’s expertise within a board (see also Minichilli et al. 2012). This leads to the expectation that:

**Hypothesis 2.** The transparent use of each other’s knowledge and skills will be positively associated with effective board task performance.

Conflict is often considered as a negative aspect of group dynamics. Yet, conflict can be very important for effective groups as well. Jehn (1995) distinguishes two types of conflict within groups: cognitive conflict and relational conflict. Relational conflict arises through
interpersonal incompatibilities among group members and is expressed in tensions and hostility among group members. A cognitive conflict in contrast arises from disagreement between group members about the content of the tasks to be performed because of differences in viewpoints, ideas, and opinions (Jehn 1995). Although relational conflicts have a negative impact on group performance, cognitive conflicts are ingredients for effective group task performance. They positively influence group performance because they increase understanding and critical evaluation of task and ideas and overcome confirmatory biases in group decision making (Jehn 1995). They also can positively influence task commitment and member satisfaction because they facilitate group members to voice their own perspectives on the task at hand (Simons and Peterson 2000).

Important moderating effects for the relationship between cognitive conflicts and group performance are the type of task to be performed. Cognitive conflicts are found to be more positive in decision making and more negative in routine tasks (O’Neill, Allen, and Hastings 2013). The effect of cognitive conflicts also depends on the organizational level; the higher in the organizational hierarchy, the more positive the effect of cognitive conflicts becomes (De Wit, Greer, and Jehn 2012). Boards are typically involved in nonroutine, strategic decision making in which the exchange of different perspectives is eminently important, and they act at the apex of organizational hierarchy. It, therefore, seems legitimate to propose that cognitive conflict will have a positive impact on the control and advisory task of a board. Therefore, we expect that:

\[Hypothesis\ 3.\ \text{Cognitive conflicts will be positively associated with effective board task performance.}\]

The fourth behavioral factor is the social cohesion within a board. Social cohesion is commonly defined as the tendency of a group to be one and united in the pursuit of its goals (Mach, Dolan, and Tzafrir 2010), and several researchers show a positive relationship between social cohesion and performance. Social cohesion improves participation and communication within a group and also increases the acceptance of the goals, tasks, and roles among group members (Casy-Campbell and Martens 2009; Doherty and Carron 2003). However, Forbes and Milliken (1999) argue that there is an optimum to social cohesion. Insufficient cohesion is negative to task performance, but too much cohesion causes groupthink within a board. Groupthink develops when members feel so deeply involved with a group that in their wish for unanimity, they lose their ability to reasonably view alternative decisions (Hogg and Hains 1998). Social cohesion within a group is a main factor for the emergence of groupthink (Park 2000). Following this line of reasoning, we expect that:

\[Hypothesis\ 4.\ \text{Social cohesion will have an inverted U-shaped relation with effective board task performance.}\]

A closer look at the literature, however, suggests that the role of social cohesion as a determinant of board effectiveness might be thornier. Forbes and Milliken (1999), for instance, suggest that social cohesion is also an important intermediate variable that influences the effect of cognitive conflict on board task performance. Relational conflict has a negative impact on social cohesion within a board and hence on the board task performance (Forbes and Milliken 1999; Jehn 1995). And a number of studies suggest that cognitive conflict can stir relational conflict (De Dreu and Weingart 2003; Eisenhardt, Kahwajy, and Bourgeois
Minichilli et al. (2012), for instance, found a negative relationship between cognitive conflict and board task performance at Scandinavian companies but a positive relationship at Italian firms. They attribute the negative impact of cognitive conflict on board performance to a combination with, or even production of, relational conflict (see also Mooney et al. 2007). This makes the relationship among social cohesion, cognitive conflict, and task performance complicated and context dependent. To avoid these issues, some empirical studies choose to leave out social cohesion as a variable in their model of board behavior (Bailey and Peck 2011; Minichilli et al. 2012; Zona and Zattoni 2007). But perhaps this omission contributes to the contradiction in research findings, because the effect of cognitive conflict on board task performance is sometimes not significant (Zona and Zattoni 2007), negative (Minichilli et al. 2012), or positive (Bailey and Peck 2011). Here we do include the relation between cognitive conflict and social cohesion in our model of board behavior and expect that:

**Hypothesis 5.** Cognitive conflicts will be negatively associated with social cohesion.

Figure 1 provides a schematic representation of the model of board behavior. Note that we do not expect a priori that the four factors will have a different effect on either the control or advisory task performance. Empirical studies of corporate governance already provide support for the building blocks of this model. Effort norms and the use of knowledge and skills have a positive effect on board task performance (Minichilli et al. 2012; Zona and Zattoni 2007). A positive effect of effort norms and cognitive conflict on board task performance was found in Bailey and Peck (2011), while Minichilli, Zattoni, and Zona (2009) also report a positive effect of cognitive conflict on task performance. And Huse, Minichilli, and Schøning (2005) find an effect of social cohesion on task performance. Although in previous studies the behavioral model was mostly applied to corporate firms, we believe that it will prove even more useful in nonprofit organizations such as educational institutions.

A survey allowed us to include all secondary schools in our initial sample and provide us with quantifiable data on the board dynamics. For our deductive-oriented research, we judged it to be a more appropriate approach than interviews or direct observations, which would limit the scope and generalizability considerably. We distributed the survey in 2012 among all 342 Dutch institutions for secondary education. The response rate was 43 percent (148 schools).
This is relatively high compared with the 15–30 percent common in survey research on board behavior in corporate governance (Huse 2009b) and the 24 percent in recent survey research within the same sector (Blokdijk and Goodijk 2012). We sent the survey to the chief executive, typically the chair and sole member of the executive board. We are aware that one respondent per organization, how well informed as he or she may be, might pose a potential threat to the reliability of the data (see Useem 1995). In our context of Dutch secondary education, it is customary for the chief executive to attend all meetings of the supervisory board. The chief executive thus is the one person who both knows the organization well and knows how the supervisory boards contributed to the organizational performance. The executive is, therefore, more than the non-executive board members in the position to make statements on the functioning of the supervisory board (Minichilli et al. 2012). Therefore, it is common to rely on the chief executive as the single respondent (Daily, Dalton, and Canal 2003; Huse 2009a; Minichilli et al. 2009).

All variables were measured on a seven-point Likert scale. The dependent variable of board task performance falls apart in the control task performance and advisory task performance. Both were measured by questions on the controlling or advising participation of the supervisory board on sector-relevant issues. Effort norms were measured by questioning the active involvement of supervisors. We formulated the questions following the suggestions of Forbes and Milliken (1999) and the examples provided by Bailey and Peck (2011) and Sellevol, Huse, and Hansen (2007). For the use of knowledge and skills, we asked the executive whether the members of his or her supervisory board knew each other’s skills and expertise well, whether the tasks within the board are distributed in accordance with these skills, and whether the most knowledgeable board members also have the most influence. For cognitive conflict, we asked the director to scale the diversity in opinions, perspectives, and reasoning within the internal supervisory organ, using the “value-creating boards” surveys as inspiration for the formulation (Huse 2009b; Sellevol et al. 2007). Finally, we measured social cohesion following the suggestions of Forbes and Milliken (1999) and the survey items in Sellevol et al. (2007).

In addition we included five simple control variables. First, we controlled for the administrative complexity of an organization, counted by the number of schools governed by the executive board. Second, we included the experience of the respondent as measured by the number of her or his years of service within the organization. Third, we followed Blokdijk and Goodijk (2012), who argue that the functional separation of executive and supervisory directors needs time to start functioning optimally, and therefore we control for the number of years since this separation was implemented. Finally, we include the frequency of board meetings and the frequency of consultation between the chief executive and the chair of the supervisory board as possible intervening variables in the board task performance (Blokdijk and Goodijk 2012).

To test the consistency of the variables, we determined Cronbach’s alpha, after removal of outliers. One of the three items for the use of knowledge and skills seemed to measure a different concept (α of .4 when included) and was therefore excluded from further analyses. Table 1 provides an overview of our variables, their operationalization, and, when relevant, the value of α and the number of items. The values of α confirm the internal consistency of the items. Because both dependent and independent variables were measured by the same survey instrument, we used Harman’s single-factor test to account for common method bias and control for systematic errors of measurement (Chang, Witteloostuijn, and Eden 2010). This analysis showed that less than 50 percent of the variance could be attributed to one
factor. The use of the same measuring instrument thus appeared not to have led to a severe distortion of our data.

Table 2 shows the means, standard deviations, and the bivariate correlations of all variables. It is striking that the frequency of the consultation between the chief executive and the chair of the supervisory board correlates with the control and advisory task performance. This may suggest that close contact between the chief executive and the chairman of the supervisory board is somehow related to effective task performance.

Results

Contrary to our expectations (hypothesis 5), we find a significant positive correlation between cognitive conflict and social cohesion (see Table 2). Furthermore, a significant correlation between cohesion and the advisory task performance is absent. This might be due to our assumption of a nonlinear, inverted U-shaped relation, whereas linearity is an assumption in the determination of Pearson's correlation coefficient. However, an analysis of the scatter plot of cohesion and both control and advisory task performance did not show a clear inverted U-shaped relationship. It is noteworthy that the cohesion within boards in our research appears to be extremely high (mean 6.38 on a seven-point scale) and varies little (standard deviation of .564).

We tested four models using hierarchical multiple regression analysis (see Table 3). First, in model 0 we included only the control variables. Next, in model 1 we also included effort norms, the use of knowledge and skills, and cognitive conflict; model 2 subsequently adds cohesion to the analysis. Because we expected that the relation between cohesion and task performance to be inverted U-shaped, we included the cohesion squared in model 3.
Model 0, with only control variables, has little explanatory value. In fact, only the first model seems to have sufficient explanatory power. The addition of cohesion and cohesion squared in the analysis (model 3) leads to a decrease of the adjusted determination coefficient, both for the control and advisory task performance. Model 1, therefore, best explains the variance in task performance.

These results confirm our first hypothesis of a positive effect of effort norms on task performance, both for the control and advisory task performance. For our second hypothesis, however, we find a different outcome for the control and the advisory task performance. There is a positive effect of the use of knowledge and skills on the control task performance, but not on the advisory task performance. For the third hypothesis it is the other way around: cognitive conflicts have a positive effect on the advisory task performance, but we find no significant effect on control task performance.
The fourth hypothesis, expecting an inverted U-shaped relationship between cohesion and task performance, was already rejected on the basis of the linear pattern in the correlation scatter plots. The results for model 2 in the hierarchical regression analysis also show no significant linear relationship between cohesion and control or advisory task performance. Moreover, the results for model 3 with squared cohesion reveals there indeed exists no significant nonlinear or U-shaped relation with task performance. For the fifth hypothesis we conducted a separate single-regression analysis. As expected from the correlation analysis, there is no negative but a positive effect of cognitive conflict on social cohesion ($\beta_{st} = .299$, $p <0.001$). Table 4 provides a summary of the results.

### Discussion and Conclusions

This study provides from a nonprofit context further empirical support for process-oriented models of board governance. The effectiveness of supervisory boards in Dutch secondary education is influenced by the behavioral dynamics within the board. The results warrant four main conclusions. First, effort norms affect both the control and the advisory task performance of the supervisory board. The higher the expectations of the investment of time and attention are, the more effective a board is in both its advisory and its control task. And though frequency of board meetings is often seen as a proxy for the activity and effort norms, we do not find any effect of this item on task performance nor on effort norms. This underscores the need to go beyond the easily accessible “usual suspects” in the study of board behavior (see also Nordqvist and Minichilli 2009).
Second, it is meaningful that the use of knowledge and skills has an effect on the control task performance but no effect on the advisory task performance. This result underscores that control and advice are indeed different tasks and require different social behavior within a board to be effective. In many sectors there is increasing attention for the expertise non-executive directors bring to the table. Our findings suggest that, if a board manages to put its expertise to the use, this might indeed be helpful for the control task but not for the advisory task. The distinction Forbes and Milliken (1999) make between the use of knowledge and skills as more about the process of coordination, and cognitive conflict as related to the content of members’ contribution, provides a possible explanation.

Third, for cognitive conflict we indeed find a difference between the control task and the advisory task performance. Cognitive conflict has a positive effect on the advisory task performance but no significant effect on the control task performance. The advisory task requires that various conflicting viewpoints are brought to the table. This makes sense if we consider that, while the control task is typically tied to the annual recurring budget cycle, the advisory task is less routine than the control task, and cognitive conflict is known to be more positive in less routine tasks (O’Neill et al. 2013). Boards that want to be effective in their advisory task do well to make sure that different viewpoints and perspectives are thoroughly discussed within the boardroom.

Fourth, and contrary to our hypothesis, we find that cognitive conflict has a positive effect on the cohesion within a board. A possible explanation for this unexpected positive effect is the high level of cohesion within supervisory boards in Dutch secondary education. Cognitive conflict might draw a cohesive group much closer, while conflicts in a less cohesive group might have a negative impact on the cohesion. Ensley, Pearson, and Amason (2002),

<table>
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<th>Table 4. Tested Hypotheses</th>
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<tr>
<td>Hypothesis</td>
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<tr>
<td>H1a Effort norms will be positively associated with effective control task performance.</td>
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<tr>
<td>H1b Effort norms will be positively associated with effective advisory task performance.</td>
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<tr>
<td>H2a The use of knowledge and skills will be positively associated with effective control task performance.</td>
</tr>
<tr>
<td>H2b The use of knowledge and skills will be positively associated with effective advisory task performance.</td>
</tr>
<tr>
<td>H3a Cognitive conflicts will be positively associated with effective control task performance.</td>
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<tr>
<td>H3b Cognitive conflicts will be positively associated with effective advisory task performance.</td>
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<tr>
<td>H4a Social cohesion will have an inverted U-shaped relation with effective control task performance.</td>
</tr>
<tr>
<td>H4b Social cohesion will have an inverted U-shaped relation with effective advisory task performance.</td>
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<tr>
<td>H5 Cognitive conflicts will be negatively associated with social cohesion.</td>
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for example, suggested that groups with a high degree of cohesion are better able to prevent cognitive conflicts turning into relational conflicts. The triggering of relational conflict is considered to be the main reason for the negative effect of cognitive conflict in other contexts (Mooney et al. 2007; Simons and Peterson 2000). We must, therefore, agree with Tekleab, Quigley, and Tesluk (2009) and criticize the isolated conceptualization of the impact of conflict and cohesion on the performance of groups.

Forbes and Milliken (1999) already problematized the relationship between cohesion and task performance. They state that cohesion also affects the efforts norms within a board: a cohesive group will be more likely to make greater efforts than a loose, disjointed group (see also Nadler 2004). Similarly, the use of knowledge and skills might also have a positive dependence on the cohesion within a group (Petrovic 2008). It seems that cohesion is more of a prerequisite for the social dynamics within a group. After all, without a group, no group dynamics. Future research should bring more sophistication here, for example, by including concepts such as relational conflict and trust in the model of the social dynamics within a board.

The outcomes of our study can be used to further specify the initial model (see Figure 2). We suggest that social cohesion is best considered as an input variable. In addition, we include that the use of knowledge and skills has a positive effect on cognitive conflict, because different expertise and perspectives contribute to critical discussion within a board. Figure 2 shows the results of a simple regression on the effects of social cohesion and effort norms on cognitive conflict (arrows on the left and middle part). The arrows on the right show the values of the standardized $\beta$'s presented in Table 3. Additional research can further investigate the merits of this adjusted model, through surveys, interviews, and participative observations.

For board members (both executive and supervisory), this study generates a number of suggestions. Perhaps most important is the observation that the control task and the advisory task are markedly different. This is particularly important at times when boards are increasingly expected to be involved in the key strategic decisions that shape the future of their organizations. The control task is typically ex ante, looking back and judging the performance and the choices made by senior executives. But in many fields and sectors, boards are now expected to combine both the control and advice task in what we may call anticipating governance: looking forward and advising executives on strategic issues.

**Figure 2.** Adjusted Model Behavioral Determinants of Board Task Performance
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References


KLAAS HEEMSKERK is a PhD candidate at the Amsterdam Institute for Social Science Research at the University of Amsterdam, Amsterdam, Netherlands.

EELKE M. HEEMSKERK is associate professor in the Department of Political Science at the University of Amsterdam, Amsterdam, The Netherlands, and governance specialist at the Galan Groep, Baarn, The Netherlands.

MARGRIETHA WATS is partner at the Galan Groep, Baarn, Netherlands.