Multiple directorships in unlisted medium-sized firms

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Abstract

During the last decade, several studies examined the benefits and detriments of multiple directorships in listed firms. Recently, governance guidelines for SME's emerged and strongly recommended the adoption of outside directors in SME's, increasing the likelihood of a director supply gap and making the discussion about multiple directorships in non listed SME's relevant as well. This study shows that a busy board has a significant positive influence on firm performance if the CEO is also busy. However, this positive effect of a busy board on performance appears to become insignificant for smaller firms. Our results also suggest that a busy CEO has a significant negative influence on firm performance. This negative effect is mitigated by a busy board and firm size. If the majority of the directors is busy, a busy CEO is no longer detrimental for firm performance. An increase in the busyness of the board seems to decrease the significance of the negative impact of busyness of the CEO on firm performance. In addition, a busy CEO seems to have a more significant negative effect on performance in larger firms. Our hypotheses were tested in the unique Belgian setting with the Belfirst database containing detailed financial and directors' information.

Key words: board of directors, medium-sized firms, multiple directorships

1. Introduction

During the last decade, the corporate governance debate received increasing attention in the academic world, driven by various scandals worldwide in well known publicly traded firms. Nevertheless, governance questions also exist in Small and Medium-Sized Enterprises (SME) (e.g. Huse, 2000; Uhlaner et al., 2007). Since the majority of firms worldwide is small or medium-sized, good governance practices for this category of firms may be very important for global economic development and growth (Gabrielsson and Huse, 2005). Although various governance mechanisms exist, it is widely acknowledged that the board of directors is the most imperative governance instrument for SME's. As managers of SME's are often inspiring entrepreneurs with excellent technical or product knowledge but unfortunately with little general management experience (Forbes and Milliken, 1999), well-functioning boards of directors in smaller privately held firms may have significant added value, particularly from a strategy and networking perspective (Johannisson and Huse, 2000; Voordeckers et al., 2007; Pugliese and Wenstop, 2007).

The development of a board of directors often starts with the introduction of outside directors (Gabrielsson and Huse, 2005). Consequently, the adoption of outside directors is one of the key recommendations found in recent SME governance guidelines (e.g. Lane et al., 2006) and codes (e.g. the Belgian Code Buysse (Uhlaner, et al., 2007)). However, even when only a small fraction of SME's worldwide would have the intention to adopt outside directors, the demand for outside directorships would increase exponential, exceeding the current supply of directors by a large extent. When the demand for outside directors increases, current directors will be main candidates for additional directorships because of their experience as director. This trend is expected to extend the phenomenon of multiple directorships in SME's.

Multiple directorships bring about both threats and opportunities. Arguments in favor of multiple directorships are the valuable experience and reputational benefits (Di Pietra et al., 2008), access to key resources and organizational legitimacy (Pfeffer and Salancik, 1978). On the other hand, the workload of directors serving on multiple boards increases significantly. Hence, the risk increases that they can no longer adequately perform their director roles, especially regarding their monitoring duties (Ferris et al., 2003; Kiel and Nicholson, 2006).

To date, both in practice as well as in the academic community, a debate is going on about these benefits and detriments of multiple directorships. However, prior studies only concentrated on publicly traded firms and provided inconclusive results (e.g. Ferris et al., 2003; Harris and Shimizu, 2004; Perry and Peyer, 2005; Kiel and Nicholson, 2006; Fich and Shivdasani, 2006; Jiraporn et al., 2007; Di Pietra et al., 2008). For example, on the one hand, Fich and Shivdasani (2006) found that boards with directors with multiple directorships are likely to have a decline in the quality of corporate governance, i.e. the effectiveness of outside directors as corporate monitor declines. On the other hand, Harris and Shimizu (2004) concentrated on the contribution of "busy" directors on key strategic decisions and found that they are sources of knowledge and enhance performance. Hence, it seems that the positive or negative contribution of multiple directorships largely depends on the role (monitoring versus service) that these directors primarily have to perform.

The expected increasing demand for directorships also brings about also opportunities to increase the abilities of firm executives to act as outside director in other firms (Conyon and Read, 2006), even if their own firm is reluctant to adopt outside directors. In addition to the debate about attracting busy directors, the debate about allowing the firm's own executives to accept additional directorships is at least as relevant. Since CEOs and senior executives have experience in decision management, they are usually main candidates for board membership. Allowing the CEO or other executives to accept external directorships potentially increases

their executive abilities and effort. However, there is also an opportunity cost of the executive's time which may lead to lost value creating opportunities (Conyon and Read, 2006). Because the CEO is often the dominant person in SME's (Feltham et al., 2005), the debate about busy executives in a SME environment seems to be especially relevant for the position of the CEO. Empirical evidence on this issue is rather scant. A recent study by Perry and Peyer (2005) found that when agency concerns exist, additional directorships by executives seem to have negative effects on firm value. When agency concerns are less significant, multiple directorships by executives seem to be value enhancing.

Although the increasing pressure for active boards in small and medium-sized firms makes the debate of the performance effects of multiple directorships very important for SME's as well, empirical evidence on this issue – as far as our knowledge is concerned - does not exist. Therefore, the purpose of this study is to examine if the theoretical advantages of multiple directorships outperform the disadvantages in a SME environment taking into account moderating effects of a busy CEO and firm size. To test our hypotheses, we use the Belgian Belfirst database of Bureau Van Dijk, containing detailed information about firm financial data and the composition of the board of directors of all incorporated Belgian firms including all SME's.

Our study contributes to the literature in several ways. First, we examine the empirical validity of *two opposing predictions* about multiple directorships in SME's. On the one hand, directors who are active in many boards may be too busy to effectively monitor the firm. On the other hand, as the monitoring role is often less important in these firms, the added value of outside directors is usually related to their knowledge and experience in strategic decision making (Van den Heuvel et al., 2006; Voordeckers et al., 2007; Pugliese and Wenstop, 2007). The higher the number of board seats a board member has, the more experienced the board member is (Gilson, 1990; Kaplan and Reishus, 1990). They would have more knowledge to provide for service activities (e.g. advice, networking), with consequently an enhancing effect on firm performance (Forbes and Milliken, 1999). From this point of view, directors with multiple directorships are more valuable directors.

Secondly, we incorporate several *interaction* and *moderating effects* into our econometric model. Multiple directorships have advantages and disadvantages for outside directors as well as CEOs. However, we propose that the balance between the advantages and disadvantages – and as a consequence the effects on performance - differs for a CEO compared to an outside director. We expect that the negative effects (e.g. time constraints) of a busy CEO will dominate the positive effects (e.g. increase in executive ability (Conyon and Read, 2006)) although the negative performance effects are expected to be moderated by a busy board. Furthermore, the governance needs of SME's change over the stages of the organizational life cycle (Grundei and Talaulicar, 2002; Lynall et al., 2003). Consequently, the impact of busy directors on firm performance depends largely on the governance needs of a firm. These governance needs are to a large extent related with specific firm contingencies. In this paper, we concentrate on one specific firm contingency namely firm size. Larger SME's are generally more complex and are expected to have specific needs for service activities from their boards, usually less found in smaller SME's. Hence, the effect of multiple directorships on performance is expected to be moderated by firm size. Therefore, we test several multiplicative interaction regression models (Brambor et al., 2006) in which we calculate interaction effects of our main variables under study: busy CEOs, busy directors and firm size. Finally, although the performance effects of multiple directorships have been (limited) studied before in the context of large listed firms, to our knowledge, no empirical evidence exists today for non listed SME's.

In the next section, theoretical arguments in favor or against multiple directorships are further discussed and hypotheses derived. In the subsequent section, the data and empirical methodology are discussed. Finally, our results are presented and discussed.

2. Literature review

Prior theoretical literature argued that multiple directorships may be valuable (Fama, 1980; Fama and Jensen, 1983). First, directors serving on multiple boards signal their reputation as monitoring specialists. In addition, it enlarges the director's experience, network and commercial contacts (Mace, 1986). A key role for a director serving on multiple boards can be their link to other boards. It may open new markets for the firm and provide access to vital sources e.g. bank finance. These directors would have more knowledge to provide profound advice and offer better monitoring avoiding wealth destructing decisions. Thus, boards employing directors holding multiple directorships incur lower agency costs since boards do more than monitoring the firm (Nicholson and Kiel, 2004). They perform several roles as advisors, monitors and networking specialists. To act effectively, a board needs to consist of directors with different skills, experience and contacts in terms of their functional, industrial and educational background (Kiel and Nicholson, 2006; Pugliese and Wenstop, 2007). "Busy" directors may be busy because they are good contributors (Harris and Shimizu, 2004). Hence, busy boards are assumed to have more board capital - consisting of director experience, expertise, reputation and network ties - which is argued to have a positive effect on both board monitoring and the provision of resources (Hillman and Dalziel, 2003). Empirical support in favor of multiple directorships is provided by several studies (e.g. Boyd, 1990; Ferris et al., 2003; Coles and Hoi, 2003; Yermack, 2004; Harris and Shimizu, 2004 and Di Pietra et al., 2008).

However, more recently, the positive impact of multiple directorships has been questioned. As individuals have limited cognitive abilities and time constraints, multiple board seats increase the likelihood that these directors fail to fulfill their responsibility in appropriately governing the firm. The director's time constraint may limit the director's ability to provide useful advice and may exacerbate agency conflicts due to poor managerial oversight inducing managers to take private benefits at the expense of shareholder value (Harris and Shimizu, 2004). This would destroy firm value and negatively impact firm performance (Core et al., 1999; Shivdasani and Yermack, 1999). Empirical results by Perry and Peyer (2005), Fich and Shivdasani (2006) and Jiraporn et al. (2008) suggest that busy directors have a negative impact on firm performance and firm value. Jiraporn et al. (2007) also find that directors with multiple board seats are more inclined to be absent from board meetings. In order to avoid this potential negative impact on firm performance, the US National Association of Corporate Directors (1996) and the Council of Institutional Investors (2003) have limited the number of directorships held by directors of publicly traded firms. Nonetheless, for private firms no similar rules exist.

Recently, the increasing pressure for active boards and outside directors in SME's makes the debate about the value of busy directors in a SME environment more prominent. However, the roles and contributions of outside directors in unlisted SME's may differ significantly from those in listed companies (Long et al., 2005; Gabrielsson and Huse, 2005). Agency theory posits that a board with independent outside directors may reduce agency costs through their monitoring of managerial performance (Fama and Jensen, 1983). As there often exist a large overlap between ownership and management in SME's, this agency problem is less prevalent for these firms (Forbes and Milliken, 1999). Accordingly, the monitoring role is considered to be less important than other board roles such as the service

role (Long et al., 2005; Van den Heuvel et al., 2006). From a resource based and resource dependency point of view, the board of directors is then perceived as an intellectual, reputational and networking resource which facilitates access to financial and human capital resources, provides timely advice and counsel when needed and makes the decision process less intuitive (Grundei and Talaulicar, 2002; Gabrielsson and Huse, 2005; Van den Heuvel et al., 2006). Busy directors usually will have more valuable director capabilities (e.g. advice, networking) than directors with a single directorship, and hence have a higher potential for service effectiveness. Moreover, we argue that not only outside directors but also busy directors enhance the job-related diversity of the board which is found to have a positive effect on group performance (Pelled et al., 1999; Pugliese and Wenstop, 2007). This job-related diversity is especially important when the CEO has limited experience (Zahra and Filatotchev, 2004).

In conclusion, one of the main detriments of overboarded directors is usually the time constraint to effectively monitor management whereas the benefits have to be situated in the spheres of the service role of the board such as advising management, networking and providing legitimation. Because the service needs of boards in SME's are perceived to be more important than the monitoring needs (Grundei and Talaulicar, 2002; Long et al., 2005; Van den Heuvel et al., 2006), we propose that the benefits of busy directors outweigh the detriments. Therefore, we postulate that:

H1: A busy board of directors is expected to be positively related to firm performance in SME's

CEOs and senior executives are usually valuable candidates for board membership since they have experience in decision management. Firms that allow their CEO to accept outside directorships will experience both advantages and disadvantages from it (Conyon and Read, 2006). On the one hand, the CEO's firm may benefit from the networking, broadened insights and exposure to innovation when serving on multiple boards (Perry and Peyer, 2005). On the other hand, when the CEO overinvests in this form of human capital, the available time at the executive's own firm diminishes and negative performance effects could be expected (Conyon and Read, 2006). Taking into account also the private costs and pecuniary as well as non pecuniary benefits for the CEO due to accepting outside directorships, Conyon and Read (2006) predict in their theoretical model that CEOs will spend more time on multiple directorships than is value-maximizing for the own company.

In small and medium-sized firms, the management team is rather small and the CEO (entrepreneur) is often the dominant person (Feltham et al., 2005). These dominant CEOs are usually inspiring entrepreneurs with valuable technical knowledge but few general managerial abilities (Forbes and Milliken, 1999). A highly committed and available CEO is than crucial for the success of the venture. Furthermore, the input of the CEO in the strategy process of the SME is invaluable. Since CEOs play an important role in the decision management (initiating and executing strategy) part of this strategy process (Fama and Jensen, 1983), the quality of the decision management may decline if the CEO has multiple directorships in terms of putting less effort in initiating new strategic ideas and less time commitment for the execution of the chosen strategy. Therefore, the heavy reliance of SME's on one or a few key executives decreases the likelihood that the executives will have extra time available for outside directorships without causing negative efficiency effects for the own company.

Although a CEO with multiple directorships may also increase his decision management abilities in terms of the exploitation of valuable social networks and the exposure to different management styles (Conyon and Read, 2006), the net effect of busy CEOs on performance is

expected to be negative, especially when the SME has significant growth opportunities (Booth and Deli, 1996).

In conclusion, although additional directorships are expected to increase the CEOs' managerial abilities, we expect that the detriments (less time available, less commitment to the own company) will outweigh these benefits. If the firm's CEO is overboarded, this may negatively impact the performance of the firm that he manages. So, we hypothesize that:

H2: A busy CEO is expected to be negatively related to firm performance in SME's

In the previous section, we propose that busy boards are expected to have a positive effect on performance whereas busy CEOs have a negative effect on performance. Until now, we discussed these two effects separately. However, both effects can be expected to interact with each other.

The negative performance effects of a busy CEO may be mitigated when the board has sufficient board capital available (Hillman and Dalziel, 2003). As argued before, CEOs with multiple directorships will experience (time) constraints in effectively performing decision management. However, a board with sufficient board capital may compensate for this effect. Directors with valuable experience and expertise may contribute to the initiation of the firm strategy whereas directors with valuable relational capital (e.g. networks ties with other firms) may provide valuable input to the execution phase of the strategy.

As governance needs largely depend on the organizational context and firm contingencies (Huse, 2005; Uhlaner et al., 2007) such as the organizational life cycle, ownership structure, industry and firm size (Grundei and Talaulicar, 2002; Lynall et al., 2003; Uhlaner et al., 2007) we expect that this mitigating effect of a busy board is larger when firm complexity (and as such the governance needs) increases. In this paper, we concentrate on firm size as firm contingency. Therefore, we postulate

H3a: A busy board will mitigate the negative performance effect of a busy CEO *H3b:* The mitigating effect of a busy board is stronger when the firm is larger

3. Methodology

3.1. Data set

Our analysis is based on the Belgian 'Belfirst' database of Bureau Van Dijk. Belfirst is a database containing detailed financial information on 320,000 Belgian companies and 4,000 companies in Luxembourg. The detailed information includes financial reports and ratios but also information on directors, ownership and subsidiaries. For this study, we construct a sample consisting of financial as well as corporate governance data on medium-sized private Belgian firms being active in the manufacturing industry. We only focus on incorporated firms as they are required to establish a board of directors consisting of minimum three directors. Of the 858 medium-sized firms obtained, we were compelled to remove all firms having a foreign director from our sample as 'Belfirst' does not provide us with any information on the total number of directorships of foreign directors. After eliminating those firms with foreign directors serving on their board, we retain a sample of 647 firms. Finally,

¹ For defining 'medium-sized firms', we use the definition adopted by the European Commission in 2005. The current definition categorizes companies with more than 50 but fewer than 250 employees as 'medium-sized'. In addition, medium-sized firms have a turnover between 10 million and 50 million euros or a balance sheet total varying between 10 million and 42 million euros.

we remove the cases with missing values and outliers and obtain a final sample of 624 firms. For each of these 624 firms, we collect the necessary data in order to test our hypotheses. Data on the busyness of the board and busyness of the CEO (when he is a member of the board of directors) can only be accurately collected for the most recent year provided by Belfirst, being 2006. Because the number of directorships in the Belfirst database may contain double counted directorships, we screened the number of directorships for each director and corrected for these double counted directorships.

3.2. Measures

This study intends to determine whether directors or CEO's serving on multiple boards have a negative impact on firm performance under the consideration of firm size as moderator. In the following paragraphs, we provide the operationalisation of the key elements of the study: 'firm performance', 'busy board', 'busy CEO' and 'firm size'. We also discuss the control variables, included in the study.

Firm performance

The predominantly used accounting based performance measure 'net return on assets' is used as dependent variable. Net return on assets (ROA) is defined as net income of total assets before taxes and financial charges. Our year of analysis is 2006. In order to correct for industry differences, we use the industry adjusted ROA. These ratios were calculated based on the industry medians of the return on assets of all firms active in the same industry i.e. two digit NACE-BEL code.

Busyness of the board

As indicated by Harris and Shimizu (2004), the 'busyness of the board' is concerned with directors that sit on too many boards. The concept of 'overboarded directors' has been loosely discussed in the business press and unstudied in the academic literature. There is no clear definition of when to consider a director or a board as being too busy. Based on empirical studies by Jiraporn et al. (2008), Fich and Shivdasani (2006), Harris and Shimizu (2004) and Ferris et al. (2003), we select several measures to capture the busyness of the board of directors. First, we calculate the average number of board seats held by the directors of the board which is the sum of all board seats of all directors divided by board size. A second measure has been inspired by the guidelines of the US National Association of Corporate Directors (NACD)², stating that having more than 3 directorships compromises the ability to govern (Harris and Shimizu, 2004). So, we calculate the proportion of busy directors i.e. summing the total number of directors with more than 3 directorships and dividing by the board size multiplied by 100. A third measure is a dummy variable with a value '1' if the board is busy i.e. if more than 50% of the board members have more than three board seats.

However, each of these three measures does not take into account that although some directors may be sitting on multiple boards, they are catering to the needs of one corporate group. Their presence on the board of several related entities will require less workload compared to a director who sits on boards of distinct and unrelated entities (Kiel and Nicholson, 2006). By eliminating each of the board seats on related entities, we recalculate

² The NACD is a not-for-profit trade group that offers guidance to boards and directors.

each of the three measures discussed above: the average number of board seats held by the directors, the proportion of busy directors and the busy directors dummy.

Busyness of the CEO

In line with the definition of 'the busyness of the board', we consider a CEO as busy if he serves on more than three boards. This 'busy CEO' dummy obtains a value '1' if the CEO is seated on more than three boards; 0 otherwise. A second measure for the busyness of the CEO is the natural logarithm of the CEO's number of board seats.

As argued above, these measures do not take into account that a CEO being active on the boards of related entities has a lower workload compared to CEO's serving on boards of non-related entities. In order to construct two alternative measures, we eliminate the CEO's board seats on related entities and recalculate the busy CEO dummy and the natural logarithm of the CEO's number of unrelated board seats. The busy CEO dummy obtains a value '1' if the CEO serves on more than three boards of non-related firms.

Firm size

In the interaction models of our study, we will consider firm size as a moderating variable. Firm size will be estimated by the natural logarithm of total assets. In the robustness section, an alternative measure, being sales, will be used to capture firm size.

Control variables

We added three control variables to our interaction models. Firm age is measured as the natural logarithm of the number of years that the firm exists. Leverage effects on performance are captured with the equity ratio, measured as equity divided by total assets. Board size is measured by the natural logarithm of the number of board members.

3.3. Estimation method

Even though multiplicative interaction models are quite common in different disciplines of research, the interpretation of these models is often flawed and inferential errors are common as these models differ in an important way from linear-additive regression models (Brambor et al., 2006; Kam and Franzese, 2007). In an interactive model, the effect of any independent variable x on the dependent variable y is not any single constant. The effects depend on the *coefficients* of x and xz, the interaction term as well as on the *value* of z. In order to interpret the results, substantively meaningful marginal effects and standard errors have to be calculated. The calculation of these marginal effects is of great importance as it is perfectly possible that these effects are significant for relevant values of the moderating variable, even if the coefficient on the interaction term is insignificant (Brambor et al., 2006). All regression models are estimated with Ordinary Least Squares (OLS) and robust standard errors are calculated.

In this study, we estimate two interaction models. In the first model, 'busyness of the board of directors' is pair-wise interacted with two other variables of interest 'firm size' and 'busyness of the CEO' (model A). In the second model, 'busyness of the CEO' is pair-wise interacted with 'firm size' and 'busyness of the board' (model B).

Interaction Model A:

Firm performance = $\beta_0 + \beta_1$ busyness of the board + β_2 Ln(assets) + β_3 busyness of the CEO + β_{12} (busyness of the board x Ln(assets)) + β_{13} (busyness of the board x busyness of CEO) + β_4 LnFirmage + β_5 equity ratio + u

Interaction Model B:

Firm performance = $\beta_0 + \beta_1$ busyness of the CEO + β_2 Ln(assets) + β_3 busyness of the board + β_{12} (busyness of the CEO x Ln(assets)) + β_{13} (busyness of the CEO x busyness of the board) + β_4 Lnfirmage + β_5 equity ratio + u

4. Results

The descriptive statistics for the entire sample of medium-sized manufacturing firms are shown in table I.

INSERT TABLE I

The median firm has a board of directors consisting of three board members. Looking at the firm-level average number of directorships per director, table I shows that the median of this average is 3.25. When eliminating directorships in related entities, the median of this average decreases to 1.75. Looking at the number of independent directorships of the CEO, the median amounts to 2. The median firm in our sample has total assets of 13,600,000 euro and is 26 years old. It has an equity ratio of 32% and a slightly negative industry adjusted return on assets of -0.2%.

INSERT TABLE II
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Table II and table III exhibit the regression results for the main effects of busy boards and overboarded CEO's. Looking at both tables, makes us eager to conclude that busyness of the board or busyness of the CEO does not have a significant impact on firm performance.³ Only model 3 (table III) reveals a significant negative impact of a busy CEO on firm performance.

However, we expect that the influence of busyness of the board on firm performance will be moderated by 'firm size' and 'busyness of the CEO' while 'firm size' and 'busyness of the board' would moderate the effect of busyness of the CEO on firm performance. This necessitates the estimation of an OLS regression model including interaction effects.

INSERT TABLE IV

³ Also using other performance variables such gross return on assets or net return on equity did not yield more significant results on the impact of the busyness of the board or CEO.

Table IV exhibits the regression results for the models that test for the moderating effects of firm size and busyness of the CEO (interaction model A) and firm size and busyness of the board (interaction model B). In order to estimate these interaction models, we choose the proportion of busy directors i.e. directors having more than three board seats in unrelated entities as a measure for the busyness of the board, as indicated by the NACD. Consistent with the measure for busyness of the board, the busyness of the CEO is measured by a dummy variable with a value '1' if the CEO has more than three board seats in unrelated entities. Firm size is measured by the natural logarithm of total assets. Besides the control variable 'firmage', only few of the variables related to our hypotheses appear, at first sight, to be significant. The only significant effect we found is the negative impact of the busyness of the CEO on firm performance in interaction model A. However, these results do not allow us to draw conclusions on the effect of busyness of the board and busyness of the CEO on firm performance.

As discussed before, the interpretation of multiplicative interaction models differs in an important way from linear-additive regression models. Therefore, we calculated the marginal effects using derivatives to describe the effects of the variable of interest at various meaningful levels of the other variables (Kam and Franzese, 2007). So, the standard deviations are recalculated, based on the variance-covariance matrix of the coefficient estimates in order to verify whether the variables in our study, incorporating the interactions that might occur, show significant results. Results of these calculations are reported in table V and table VI. Each of these tables report the results of interaction model A and interaction model B, using the industry adjusted return on assets as the dependent variable.

INSERT TABLE V
INSERT TABLE VI

Table V reports the effect of a busy board on firm performance while table VI reports the effect of a busy CEO on firm performance. The results in table V suggest that a busy board has a significant positive impact on firm performance if the CEO is also busy i.e. has more than three board seats in unrelated firms (panel b). However panel a adds a second condition, a busy board is valuable for a firm if the CEO is busy and if the firm's total assets are larger than 9,000,000 euro which accounts for the majority i.e. 76% of the sample. So, hypothesis 1 seems to be confirmed by our results, however, under certain conditions of busyness of the CEO and firm size. It seems that for most firms except the small firms, the board capital created by busy directors, including the busy CEO, is extremely valuable.

Table VI reveals that a busy CEO has a significant negative impact on firm performance (panel a). This seems to support hypothesis 2. However, the relationship between busyness of the CEO and firm performance seems to be mediated by firm size and busyness of the board as argued in hypothesis 3a and 3b. Panel a of table VI shows that the significance of the negative impact of a busy CEO on firm performance increases if a smaller proportion of the board is busy. However, if more than 65% of the directors is busy, a busy CEO is no longer detrimental for firm performance. An increase in the busyness of the board seems to decrease the significance of the negative impact of busyness of the CEO on firm

⁴ In order to verify the robustness of the results, we also used other measures for 'busyness of the board' and 'busyness of the CEO' discussed in section 3.2. The robustness checks we performed on these variables confirm our findings presented in this section.

performance. This seems to confirm our hypothesis 3a that a busy board will mitigate the negative performance effect of a busy CEO.

In addition, panel b of table VI shows that, besides the busyness of the board, firm size also seems to have a moderating effect on the relationship between busyness of the CEO and firm performance. Contrary to what we expected in hypothesis 3b, a busy CEO seems to have a more significant negative effect on performance in larger firms. The significance level of this effect increases with firm size, independent of the busyness of the board. However, the busyness of the board seems to mitigate this negative impact of a busy CEO on firm performance. For firms of each given firm size category, we notice a decreasing significance of the negative impact of a busy CEO on firm performance if the busyness of the board increases. For example, for the median firm with 15,000,000 euro of total assets, a busy CEO has a significant negative impact on performance if 50% of the board is busy. However, for these firms with 15,000,000 euro of total assets, a busy CEO no longer has a significant negative impact on performance if 75% of the directors are busy.

If only 10% of the board is busy i.e. has more than three directorships, many firms (except the smallest) suffer from a busy CEO. However, if more than the majority of directors of the board is busy, only larger firms suffer from a busy CEO. If even all directors are busy, a busy CEO no longer has a significant impact on performance for firms of any size. So, the positive effect of the creation of board capital on performance and the negative effect of a busy CEO seems to balance each other if a large majority of directors is busy. As the firm increases in size, a larger majority of the board has to be busy to create enough board capital and experience to compensate for the negative effects of a busy CEO.

5. Robustness checks

In order to check the robustness of our results, several alternative models were tested. First, we experimented with alternative measures for the 'busyness of the board' and the 'busyness of the CEO'. We ran several models using different definitions of 'busyness'. In a first model, we decided not to eliminate any board seats in related firms: we did not make any distinction between board seats in related firms vs. board seats in unrelated firms. As put forward in section 3.2., we used the proportion of busy directors with more than 3 directorships in related as well as unrelated entities in order to measure the busyness of the board. For the busyness of the CEO, we used a dummy variable with a value '1' if the CEO serves on more than three boards of related or unrelated firms. In a second model, inspired by Harris and Shimizu (2004), we used more strict criteria of when to consider a board or a CEO as 'busy'. We used the proportion of busy directors with more than 4 directorships to operationalize the 'busyness of the board'. Analogously, if the CEO has more than 4 board seats, the dummy variable to measure 'busyness of the CEO' obtains a value '1'. No one of these alternative models lead to a significant change in results⁵.

Besides alternative measures for 'busyness', we also checked the robustness of the firm size variable and performance variable. For firm size, we used firm sales instead of firm's total assets. Again, no significant change in results was found. For firm performance, we used the industry adjusted gross return on assets and net return on equity to check the robustness of our results. The robustness test confirmed the results put forward in section 4.

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⁵ Results not reported.

6. Conclusion

During the last decade, the corporate governance debate has shown an exponential mounting trend in practice (e.g. governance codes) as well as in the academic community although the debate mainly concentrated on large publicly traded firms. However, corporate governance questions also exist in small and medium-sized firms. An active board of directors is about the most important governance mechanism in these firms and even more important in the value creating process than in large incorporated firms (Forbes and Milliken, 1999; Johannisson and Huse, 2000). The added value of outside directors in SME's cannot be overestimated (Gabrielsson and Huse, 2005). Therefore, recent governance guidelines (e.g. Lane et al., 2006) strongly recommend the adoption of outside directors in SME's, thereby pushing the demand for outside directorship beyond the current supply of directors. The question where these SME's would find outside directors becomes a very relevant one. Main candidates for outside directorships are persons that already take up current outside director positions in SME's and CEOs. This trend would extend the phenomenon of "multiple directorships" or "busy directors" to the population of SME's. Empirical literature in the context of large publicly traded firms (e.g. Ferris et al., 2003; Harris and Shimizu, 2004; Kiel and Nicholson, 2006; Fich and Shivdasani, 2006; Jiraporn et al., 2007; Di Pietra et al., 2008) discussed and investigated several advantages (e.g. additional experience, reputational benefits, organizational legitimacy) and disadvantages of busy directors (e.g. lack of time and absence of board meetings, reduction in oversight of management) but provided inconclusive results so far. Also the question whether firms would benefit from their CEO's taking up multiple directorships in other firms became more relevant (Perry and Peyer, 2005; Conyon and Read, 2006). Our study contributes to this debate by investigating whether the advantages of a busy board and a busy CEO outweigh the detriments. To test our propositions, we used the unique Belgian circumstances. Since 2005, Belgium has a real governance code for private SME's and family firms and the Belfirst database which contains the financial statements including director information of all Belgian corporations.

Our results suggest that a busy board has a significant positive influence on firm performance when the CEO is also busy. This result is consistent with the thesis that busy directors contribute to the formation of additional board capital in SME's. It is also in line with the findings of prior studies (e.g. Van den Heuvel et al., 2006; Voordeckers et al., 2007) that the service role of the board in SME's is extremely important in enhancing firm performance. This does not mean that the monitoring role is not important. Outside directors in SME's are usually adopted for their possible contributions to the service role. But once they are on board, they also take care of their legal monitoring duties (Bammens et al., 2008). Busy directors usually have more experience in monitoring executives and as such, add also from this perspective to the board capital of the firm with a likely positive influence on performance. The fact that the positive performance effect of a busy board is especially significant when the CEO is also busy could be explained by the possible existence of director interlocks. Such interlocks point to the existence of social ties between outside directors and the CEO which seem to enhance the provision of advice and counsel from the outside directors (Westphal, 1999). Social ties between CEO and outside directors also stimulate the disclosure of more information from management to the board. Hence, the management team will receive better advice from the board (Adams and Ferreira, 2007) which may explain the better performance. Because we have no detailed director information for making the distinction between inside and outside directors, these possible explanations should be further scrutinized in future research.

The positive effect of a busy board on performance appears to become insignificant for smaller firms. A possible explanation is that smaller firms experience less governance needs.

Busy directors would also contribute to board capital of these smaller firms. But because governance needs are less significant, higher board capital not necessarily leads to better performance in these firms.

As expected, our results also suggest that a busy CEO has a significant negative influence on firm performance. This negative effect is mitigated by a busy board and firm size. These results indicate that CEOs that spend a part of their valuable time on other boards may hamper the performance of their own firms. The detriment of the time constraint then outweighs the advantages such as an increase in management abilities. However, if the majority of the directors is busy, a busy CEO is no longer detrimental for firm performance. An increase in the busyness of the board seems to decrease the significance of the negative impact of busyness of the CEO on firm performance. This could also be explained by the existence of director interlocks. In addition, a busy CEO seems to have a more significant negative effect on performance in larger firms. Contrary to what we expected, the value of a committed CEO seems to be much more important in larger firms instead of smaller firms. Larger firms with a busy CEO seem to be more likely to experience a decrease in quality of the decision management and strategy development leading to a more significant decrease in firm performance.

This study has some limitations that provide challenges for future research. The available data did not allow us to make a distinction between inside and outside directors. This distinction may be important as inside directors seem to fulfill different board tasks than outside directors (Voordeckers et al., 2007). Moreover, we could not include all firms of our sample due to a lack of data on the total board seats of the foreign board members. Nevertheless, foreign busy outside directors (and especially those with directorships in many different countries) may be extremely valuable for SME's that want to internationalize their activities. Therefore, an interesting avenue for future research may be an examination of the value of foreign busy directors for SME's. In addition, we also do not know if Belgian directors have directorships in foreign companies. Finally, our study is based on cross-sectional data as the database did not provide us with detailed information on board composition throughout time. A longitudinal database should reveal more information on the causal links between busy directors, busy CEOs and firm performance.

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Table I. Descriptive statistics

Variables	Mean	Median	Std.dev.	Min.	Max.
Board size	3.84	3	1.52	1	14
Average number of directorships per director	4.43	3.25	4.03	1	29.28
Average number of independent directorships per director	2.62	1.75	2.93	1	26.14
Number of directorships of the CEO	4.57	3.50	4.13	1	25
Number of independent directorships of the CEO	2.54	2	2.84	1	23
Total assets in euro	17,000,000	13,600,000	12,700,000	2,575,000	118,000,000
Firm age in years	30.21	26	17.43	3	96
Equity ratio	36.02	32.35	22.35	-91.73	91.89
Industry adjusted return on assets	1.54	-0.22	9.45	-29.91	39.81

Notes: N=624

Table II. OLS estimation of the effects of 'busy boards' on firm performance (industry adjusted ROA) at private medium-sized manufacturing firms

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Board characteristics Taking into account all board seats: Average number of directorships by board	0.1914 (0.1386)					
Busy directors (1,0)		-0.3143 (0.8987)				
Percentage of busy directors (defined as sitting on more than 3 boards) Taking into account only independent board seats: Average number of independent directorships by board		(0.0707)	0.0045 (0.0138)	0.2264 (0.1852)		
Busy directors (1,0)					-0.2119	
Percentage of busy directors (defined as sitting on more than 3 independent boards)					(0.9108)	0.0116 (0.0129)
Log of board size	-0.6104 (0.9943)	-0.5676 (0.9950)	-0.5356 (0.9980)	-0.8764 (0.9908)	-0.7948 (1.0041)	-0.8241 (1.0018)
Log of directorships held by the CEO	-1.0716 (0.5993)*	-0.4109 (0.5738)	-0.6532 (0.6355)	-0.7678 (0.4572)*	-0.4129 (0.4540)	-0.6310 (0.4526)
Control variables						
Ln (assets)	0.8471 (0.5870)	0.8999 (0.5836)	0.8817 (0.5830)	0.5690 (0.5784)	0.5973 (0.9108)	0.5342 (0.5789)
Ln (firmage)	-0.4333	-0.4893	-0.4804	-0.1905	-0.2240	-0.2032
Equity ratio	(0.6252) 0.1729 (0.0204)***	(0.6255) 0.1713 (0.0205)***	(0.6258) 0.1722 (0.0204)***	(0.6244) 0.1713 (0.0207)***	(0.6251) 0.1704 (0.0206)***	(0.6259) 0.1717 (0.0206)***
Constant	-15.7759 (9.8668)	-16.2968 (9.8205)	-16.1302 (9.8207)	-12.1099 (9.8106)	-12.1294 (9.8385)	-11.3601 (9.8326)
F value R ²	12.79*** 0.1697	(9.8203) 11.88*** 0.1666	12.00*** 0.1666	12.28*** 0.1688	(9.8383) 11.80*** 0.1656	12.11*** 0.1666

Notes:

a Regression coefficients are reported as betas; robust asymptotic standard errors reported in parentheses.

N= 624, *p<0.1; ** p<0.05. *** p<0.01 (two-tailed test).

Table III. OLS estimation of the effect of 'busy CEO's' on firm performance (industry adjusted ROA) at private medium-sized manufacturing firms

Independent variables	Model 1	Model 2	Model 3	Model 4
Board characteristics				
Taking into account all board seats:				
Busy CEO (1,0) (defined as sitting on more	-1.0579			
than 3 boards)	(0.7204)			
Log of directorships held by the CEO		-0.5223		
Log of directorships held by the CEO		(0.4762)		
Taking into account only independent board seats:				
Busy CEO (1,0) (defined as sitting on more			-1.6154	
than 3 independent boards)			$(0.7674)^{**}$	
Log of directorships held by the CEO				-0.4514
Log of directorships held by the CLO				(0.4566)
Log of board size	-0.5918	-0.5416	-0.5972	-0.7851
Log of bourd size	(0.8705)	(0.9987)	(0.8631)	(1.001)
Control variables				
Ln (assets)	0.2433	0.8885	0.2843	0.5855
Lii (dissets)	(0.5526)	(0.5835)	(0.5459)	(0.5799)
Ln (firmage)	0.1056	-0.4832	0.0768	-0.2219
	(0.5793)	(0.6256)	(0.5801)	(0.6245)
Equity ratio	0.1562	0.1718	0.1564	0.1707
	$(0.019)^{***}$	$(0.0205)^{***}$	(0.0192)	$(0.020)^{***}$
Constant	-7.0519	-16.1872	-7.8103	-11.9882
	(9.3008)	$(9.8148)^*$	(9.2128)	(9.8406)
F value	13.72***	14.29***	14.34***	14.04***
R ²	0.1431	0.1664	0.1459	0.1655

Notes:

Table IV. OLS estimation with moderating effects

Independent variables	Interaction model A	Interaction model B
Busyness of the board	-0.1416 (0.2917)	0.0124 (0.0157)
Busyness of CEO (1,0)	-2.8952 (1.1691)**	26.0380 (19.4021)
Ln(assets)	-0.0068 (0.6697)	0.7441 (0.6539)
Interaction effects:		
Busyness of the board $x \ln(assets)$	0.0094 (0.0176)	
Busyness of the board x busyness of CEO	0.0207 (0.0262)	0.0242 (0.0262)
Ln (assets) x busyness of CEO		-1.7587 (1.1698)
Control variables		
Ln (firmage)	0.0660 (0.5795)	0.0372 (0.5792)
Equity ratio	0.1587 (0.0193)***	0.1594 (0.0194)***
Ln (boardsize)	-0.6597 (0.8693)	-0.6105 (0.8664)
Constant	-3.2418 (11.4270)	-15.5252 (10.9238)
F value	10.12***	10.06***
R ²	0.1511	0.1535

Notes.

^a Regression coefficients are reported as betas; robust asymptotic standard errors reported in parentheses. N=624, *p<0.1; *** p<0.05. **** p<0.01 (two-tailed test).

^a Regression coefficients are reported as betas; robust asymptotic standard errors reported in parentheses. N=624, *p<0.1; *** p<0.05. **** p<0.01 (two-tailed test)

Table V: Effect of a busy board on firm performance

Panel a: interaction model A

	∂y/∂busyness of board¹	Std. dev.	t-stat.
Moderating effects: Busyness of CEO = 0 & total assets =			
2,000,000	-0.0045	0.0385	-0.119
8,000,000	0.0085	0.0190	0.447
15,000,000	0.0144	0.0157	0.918
40,000,000	0.02371	0.0236	1.001
Busyness of CEO = 1 & total assets =			
2,000,000	0.4344	0.358	0.385
8,000,000	0.4316	0.3290	1.217
9,000,000	0.0303	0.0230	1,317*
15,000,000	0.4229	0.276	1.689**
40,000,000	0.415	0.275	1.678**

 $1 \frac{1}{\partial y} / \partial Busyness \text{ of board} = -0.1416 + 0.009*ln(assets) + 0.020*Busyness \text{ of the CEO}}{N=624, *p<0.1; *** p<0.05. **** p<0.01 (one tailed)}$

Panel b: interaction model B

	$\partial y/\partial$ busyness of board ¹	Std. dev.	t-statistic	
Moderating effect: Busyness of the CEO=				
1	0.0367	0.020	1.754**	
0	0.0124	0.015	0.788	

 $^{1}\partial y/\partial B$ usyness of board = 0.0124+0.024*busyness of the CEO N= 624, *p<0.1; **p<0.05. ***p<0.01 (one tailed)

Table VI. Effect of a busy CEO on firm performance

Panel a: interaction model A ^a

	$\partial y/\partial$ busyness of CEO ¹	Std. dev.	t-statistic
Moderating effect: Busyness of the board=			
10%	-2.687	1.000	-2.687***
50%	-1.856	0.955	-1.942 ***
65%	-1.545	1.204	- 1.282 [*]
75%	-1.337	1.407	-0.950
100%	-0.818	1.978	-0.413

 $^{1}\partial y/\partial Busyness$ of CEO=-2.895+0.0207*busyness of board N= 624, $^{*}p<0.1;$ $^{**}p<0.05.$ $^{****}p<0.01$ (one tailed)

Panel b: interaction model B b

	$\partial y/\partial busyness CEO^1$	Std. dev.	t-statistic
Moderating effect: Busyness of board = 10% & Total assets=			
2,000,000	0.7638	2.605	0.2931
8,000,000	-1.674	1.266	-1.321*
15,000,000	-2.779	0.993	-2.797***
40,000,000	-4.504	1.478	-3.047***
Moderating effect: Busyness of board = 50% & Total assets=			
2,000,000	1.734	2.642	0.656
8,000,000	-0.703	1.270	-0.554
12,000,000	-1.416	1.018	-1.391 *
15,000,000	-1.809	0.955	-1.894**
40,000,000	-3.534	1.406	-2.512***
Moderating effect: Busyness of board = 75% & Total assets=			
2,000,000	2.340	2.868	0.816
8,000,000	-0.097	1.655	-0.058
15,000,000	-1.202	1.410	-0.852
23,000,000	-1.954	1.447	-1.350 [*]
40,000,000	-2.927	1.724	-1.697 **
Moderating effect:			11071

Busyness of board = 100% &

 $Total\ assets =$

2,000,000	2.947	3.214	0.916
8,000,000	0.509	2.175	0.233
15,000,000	-0.596	1.982	-0.300
40,000,000	-2.321	2.198	-1.056

¹∂y/∂Busyness of CEO=26.038-1.758Ln(assets)+0.024*busyness of board N= 624, *p<0.1; *** p<0.05. **** p<0.01 (one tailed)