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Joining forces: Top management team and board chair characteristics as antecedents of board service involvement☆

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ABSTRACT

Boards in early stage high tech firms have an important role to play through their involvement in service tasks. Building on the attention based view of the firm and self-efficacy theory, we investigate the role of top management team (TMT) and board chair characteristics as antecedents of board service involvement (BSI). Studying a sample of 117 Norwegian early stage high tech firms, we find that TMT diversity positively affects BSI, whereas CEO duality negatively affects BSI. We further find that the industry experience of the board chair positively moderates the relationship between TMT size and BSI whereas CEO duality reinforces the TMT diversity-BSI relationship.

1. Executive summary

Boards may play an important role in helping early stage high tech firms to bridge the liabilities and challenges they are faced with. Specifically, through engaging in their service role, board members could complement the entrepreneurial team, which often lacks human and social capital. Currently, we have little understanding of the circumstances under which boards engage to a lesser or larger extent in board service involvement (BSI). Drawing on the attention based view of the firm and self-efficacy theory, we assess which top management team (TMT) and board chair characteristics are related to higher levels of BSI.

In doing so, we aim at responding to calls for more research into the determinants of BSI and particularly the service involvement in small firms. Specifically, while the control function of the board has been largely studied, the service role played by the board has been largely neglected.

We first show how the attention based view and self-efficacy theory, which are both grounded in the cognitive perspective, can complement each other. Next, building on the structural distribution embedded in the attention based view, we study how TMT

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diversity and size, just as CEO duality, affect BSI, while also considering the moderation effects between TMT diversity and BSI. Subsequently, building on self-efficacy theory, we include board chair industry experience as a moderator into our conceptual model.

We test our hypotheses using a unique hand-collected dataset consisting of 117 early stage high tech firms in Norway. The firms in our sample exploit the technology originated from universities and research institutes. We find that TMT diversity positively affects BSI, whereas CEO duality has a negative impact. CEO duality further reinforces the TMT diversity-BSI relationship, i.e. the positive relationship between TMT diversity and BSI is stronger when CEO duality is present. We also find that board chair industry experience positively moderates the relationship between TMT size and BSI, i.e. the negative relationship between TMT size and BSI is stronger in case of limited board chair industry experience.

Several implications emerge from our study. First, theoretically, our study contributes to the entrepreneurship literature which has to a large extent studied the TMT in early stage ventures while neglecting the board, often acting as part of an "extended TMT" in these types of firms. We further contribute to the corporate governance literature which has focused on the monitoring role of the board, particularly in large corporations. Relevant for both of these literatures, our paper brings a contingency perspective into the role of (TMT) diversity just as CEO duality. More generally, the study contributes by pointing to self-efficacy theory as an important complement to the attention based view. Second, for entrepreneurs and their stakeholders, our study provides indications for composing boards to optimize board service involvement. Particularly, it points to the need for paying attention to the composition of the TMT when composing a board, without neglecting the central role of the board chair.

2. Introduction

While early stage high tech firms have the potential to contribute significantly to individual wealth and regional prosperity and transformation (Venkataraman, 2004), these firms are also faced with a number of liabilities and challenges. Early stage firms are subject to the liability of newness as they lack resources, slack, and the legitimacy of older firms and may struggle to develop relationships with potential business partners (Stinchcombe, 1965). Additionally, early stage high tech firms are characterized by high levels of innovation in new and rapidly changing markets (Ittner and Larcker, 1997), and are typically threshold companies moving from the start-up phase to the more professional management stage of the organization life cycle (Zahra and Filatotchev, 2004). Hence, they often have to rebuild their skills and innovative capabilities to adapt, survive, and achieve growth (Zahra and Filatotchev, 2004). The early stage nature of the technology further leads to important barriers in attracting venture capital financing (Patzelt and Shepherd, 2009). Finally and most importantly, the top management team in these ventures is often weak in terms of the human resource and knowledge base and remains largely homogeneous in terms of education, industry experience, functional expertise, and skills (Ensley and Hmieleski, 2005; Franklin et al., 2001). At the same time, the human capital of the TMT, just as the involvement by venture capital investors have been identified as important drivers of early stage high tech firm success (Barringer et al., 2005; Colombo and Grilli, 2010; Siegel et al., 1993).

In such circumstances, boards may play an important role (Bjornali and Gulbrandsen, 2010; Vanaelst et al., 2006; Zahra et al., 2009). Specifically, in addition to monitoring and control functions, which have been extensively studied, boards may engage in their service role. This service role comprises three different elements as defined by Zahra and Pearce (1989: 292), namely "enhancing company reputation", "establishing contacts with the external environment" and "giving counsel and advice to executives". Boards can further add an important strategic dimension to small and new firms (Brunninge et al., 2007; Fiegener, 2005; Machold et al., 2011; Zahra and Pearce, 1989; Zhang et al., 2011). Through relational and reputational capital, board members may help new ventures gain legitimacy (Hillman and Dalziel, 2003) and provide access to resources (Huse, 2007; Lynall et al., 2003). As these early stage high tech firms operate in industry niches characterized by high levels of growth, they may require highly skilled board members (Forbes and Milliken, 1999) and a greater involvement of the board in the firm's strategic decisions (Hambrick and Abrahamson, 1995). Outside directors with industry experience can be highly valuable through their legitimacy, advice, and industry connections (Kor and Misangyi, 2008). Finally, directors may serve as a sounding board to the entrepreneurs, and guide and defend future resource allocations (Arthurs et al., 2009; Zahra et al., 2009). As such, the board can be extremely valuable to early stage high tech firms through its engagement in the service role.

Indeed, through the service role, board members could complement the entrepreneurial team, which lacks specific human and social capital in facing a number of challenges and liabilities (Bjornali and Gulbrandsen, 2010; Clarysse et al., 2007a; Filatotchev et al., 2006; Zhang et al., 2011). As such, board members fulfilling their service roles, and team members are likely to interact and closely collaborate. Zhang et al. (2011) even suggest that boards and TMTs in entrepreneurial threshold firms can be seen as belonging to the same group and act as "collective entrepreneurs", and Vanaelst et al. (2006) refer to board members as part of "the extended TMT".

While it is clear that the board's service involvement (BSI) may be essential for young firms, little attention has so far been devoted to the board service role in early stage high tech firms (Huse, 2007). Both the entrepreneurship and corporate governance literatures provide few indications of the determinants of board service involvement in early stage or small firms (exceptions are Machold et al. (2011), studying determinants of board demographics and board leadership in small firms and Knockaert and Ucbasaran (2013) studying the impact of high tech firms' resources on the board's service role). We address this research gap by building and testing a conceptual framework for understanding the antecedents of board service involvement in early stage high tech firms drawing on the attention based view of the firm and self-efficacy theory. BSI antecedents include 1) the nature of the top management team (including size and diversity) and 2) board chair characteristics (including CEO duality and the board chair's industry experience). Whereas these elements are selected based upon our theoretical reasoning, entrepreneurship researchers have argued that these TMT and board chair characteristics are important. Indeed, the nature of the TMT has been found to be important for high tech firm performance (Franklin et al., 2001; Knockaert et al., 2011). We further focus specifically on the characteristics of the board chair, who has been considered vital to board members' engagement (Roberts et al., 2005). In doing so, we also acknowledge that TMTs and