Board Contribution to Value Creation through Innovation and Entrepreneurial Behavior

Influencing the Innovative Posture of Small and Medium-Sized Firms in Finland

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Summary

The purpose of this thesis was to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland. The research questions furthermore aimed at improving our understanding of how these boards of directors fulfill their strategy, control and service roles and how this influences the firm’s innovative posture, how the behavior of the board influences board task performance and the innovative posture of the firm, and finally if the behavioral approach to boards and governance is a better predictor of board task performance and the firm’s innovative posture than the traditionally used board demography approach. This thesis constitutes a part of a greater research project that is conducted by Hanken and Tekes, aiming at studying the role of the board and the management team in value creation and innovation within firms in Finland.

A company’s innovative posture constitutes an important concept in this study and refers to how and to what degree a company encourages those processes within the organization that will lead to innovations and entrepreneurial behavior. An innovative posture is in this thesis argued to be achieved by incorporating an innovation aspect into the overall strategy of the firm and by having an organizational infrastructure and culture that support entrepreneurial behavior and reflect the firm’s stance in innovative activities. The board of directors is expected to contribute to the firm’s innovative posture by to different degrees being involved in their strategy, control and service roles and by in addition exhibiting a certain kind of behavior with regard to their board work. Research on the behavior of the board is a comparatively new approach the study of board performance. It is based upon the idea that it is not enough to focus on demographic features of the board and its members, but that one also needs to direct attention towards the inner processes and workings within the board to be able to capture how boards actually perform their tasks and contribute to the innovative posture of the firm they govern.

This research was conducted as a quantitative, cross-sectional study from the perspective of a relativist research ideal. Data was collected with a self-completion survey questionnaire, which was sent by post to the chief managing directors of firms in Finland with up to 500 employees. The final sample consisted of 64 respondents. The data was analyzed with SPSS for Windows™ and the statistical analysis techniques available for testing the hypothesis and discovering and explaining relationships between the different variables were correlation and regression analysis.

Four out of the seven hypothesis received support. Contrary to the expectations, board involvement in financial control showed a positive influence on the innovative posture of the firm, whereas board involvement in strategy and service did not reveal any significant associations with the firm innovative posture. The findings moreover showed that board behavior seems to be an important aspect to take into consideration when studying board task performance and board contribution to the innovative posture. Two main conclusions were hence reached with this study concerning how the boards of small and medium-sized companies in Finland contribute to their firms’ innovative posture. First, this is done through involvement in financial control mechanisms of management and business operations. Second, this is done by the board being characterized by positive board behavior, implying that the members of the board should be engaged and well prepared, generously share their knowledge and experiences, have an open and constructive interaction, a good atmosphere, and a critical and creative working style.

Key Words Innovation, value creation, entrepreneurship, corporate governance, board of directors, board task performance, board behavior, SMEs, Finland
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1 Introduction

Globalization and the constantly shifting nature of the world economy intensify competition all over the world, and as the competitive landscape is shifting, the importance of entrepreneurship as strategy, as a way to renew and revitalize companies and enhance their long-term competitive performance has been recognized in the literature (Gabrielsson 2007). Becoming an innovative organization is a means of creating value for the firm itself and thereby competing and surviving in this dynamic and changing business environment. By engaging in corporate entrepreneurship firms can create a certain kind of firm behavior that encourages innovation, and achieve value creation by developing a work environment that is characterized by a corporate stance of innovativeness, risk-taking and proactivity (Gabrielsson 2007: 514). In fact, few issues are characterized by as much agreement as the role of innovation and entrepreneurial behavior for economic development and its importance for the business firm (Van de Ven 1986). Understanding how to manage innovation successfully hence becomes crucially important in a time when innovation is an almost obligatory survival strategy (Tidd, Bessant & Pavitt 1997: 14).

At the same time, the recognition of the centrality of corporate enterprises to allocate resources in the economy has sparked the recent debate among economists about the manner in which corporations should be governed to enhance economic performance (O’Sullivan 2000: 394). The value creation process has to do with the transformation of resources, and the governance system is about the exercise of control over the allocation of resources and who and what really count in this conversion process (Huse 2006; 2007). Success in innovation and venturing requires both strong and continued support from the leadership and corporate governance of the firm (Zahra, Neubaum & Huse 2000: 948) and even a firm’s very willingness to change strategically is affected by its governance (Brunninge, Nordqvist & Wiklund 2007: 304). The behavior and involvement of the different corporate governance institutions consequently become critical to successful innovation management and performance, and finding the right governance arrangements hence becomes a high priority challenge for implementing
and sustaining a successful entrepreneurially oriented business strategy (Miozzo & Dewick 2002: 989).

1.1 Field of interest

Few business topics seem to be so urgent to explore and understand today as boards and governance (Huse 2006), and the debate about how corporations should be governed to improve economic performance has received considerable attention over the last decades. Nevertheless, research on the relationship between innovative activities and corporate governance remains limited and somewhat blurred and O’Sullivan (2000: 413) suggests that the innovative enterprise should be more incorporated into the debate about corporate governance. Innovation requires a sustained effort, the outcome of which is uncertain. Therefore, theories about corporate governance must realize this nature of innovation and explain how particular structures and other institutional preconditions can support the commitment of resources to investments in innovation and entrepreneurship (Miozzo & Dewick 2002: 991).

The board of directors is one central body of governance with considerable influence on corporate operations. Extensive research emphasizes that a strong and vigilant board can have significant positive influence on the value-creating potential of firms by favoring change and innovation in decision-making (e.g. Huse 2000; McNulty & Pettigrew 1999). Through the involvement in its strategic, controlling, and service tasks, it is expected to create value for the corporation (Stiles & Taylor 2001). It is granted the formal authority to ratify management initiatives, to evaluate managerial performance, and to allocate rewards and penalties to management based on the criteria that are supposed to reflect shareholder interests. Some theorists argue that through the possession of this power, boards set the premises of managerial decision-making (Baysinger & Hoskisson 1990: 72). Nevertheless, the literature has so far not focused on providing an explanation of ways in which the board can enhance managerial risk-taking in the pursuit of innovativeness (Miozzo & Dewick 2002: 990; Wu 2008: 142). This makes it interesting to study the potential that the board has at its disposal to influence the organizational management of innovation and entrepreneurial behavior.
However, the board’s potential is though too often not realized and boards are frequently portrayed as a formal and passive monitoring device (Forbes & Milliken 1999). A central topic of the corporate governance literature has been how boards of directors can influence the performance of organizations and this work has generated substantial recommendations for how boards may best serve and add value to their corporations (Stiles & Taylor 2001: 10). The mainstream approach has been to argue for a direct relationship between board demographics and firm performance. Recently these studies have though been criticized for not opening the ‘black box’ of actual board and management behavior in their contribution to value creation and innovation, and there is a group of scholars who argue for the need to turn to explore behavioral aspects of boards of directors, focusing on the inner workings and dynamic processes taking place within the board (e.g. Gabrielsson 2007; Huse 2006; Roberts, McNulty & Stiles 2005).

As the importance of entrepreneurship as a strategy is becoming more and more recognized, it is also being widely acknowledged that small and medium-sized enterprises face new and challenging environments in the 21st century (Gabrielsson & Winlund 2000: 511) and it is argued that a contingency perspective must be added to understand value creation. Most studies on boards and value creation though use large US corporations as samples, and although previous research has indicated that the effects of governance systems and board roles can vary across firms, boards in other national contexts and of smaller size have received far less attention (Fiegener 2005: 628; Huse 2005: 68; Van den Heuvel, Van Gils & Voordeckers 2006: 467; Zahra et al. 2000: 949). SMEs are likely to face specific challenges than larger firms concerning boards and governance in terms of for example more entwined governance issues and weaknesses in the fields of finance, information, advice, and human resources (Brunninge et al. 2007: 296; Garofoli & Musyck 2001), and the board could be a valuable resource to help overcome these deficiencies. There have also been calls for the need to develop our knowledge of how effective board governance can support smaller companies’ abilities to innovate and grow (Huse 2000; Zahra et al. 2000).

Over the last couple of decades, Finland has changed dramatically in terms of its national innovation environment, now being a forerunner within innovation and research activities (Antola & Pohjola 2006). According to the World Economic Forum, Finland is one the world's top countries in innovation, ranked the world's number one in
terms of higher education and availability of scientists and engineers (Tekes 2009). There is moreover a considerable amount of small firms in Finland. However, one of the weaknesses of the Finnish innovation system is that the number of innovative SMEs is small (Georghiou, Smith, Toivanen & Ylä-Anttila 2003: 56), which makes it relevant to study these firms in the light of possibilities to enhance their innovative performance. Innovation management and board involvement in Finnish firms moreover still remains a fairly unexplored field, and the greatest part of the literature on Finnish boards involves research on board structures and compositions (e.g. Liljeblom 2006; Maury 2006). Hence, to maintain and develop this strong national competitive position as one of the leading knowledge-based economies, efficient innovation management practices and governance arrangements would seem to be utmost important.

1.2 Purpose and research questions

This study aims at improving our understanding of how boards of directors influence value creation through innovation management and entrepreneurial behavior in Finnish small and medium-sized companies. The field of interest is innovation and entrepreneurship in general, and board contribution to innovation in particular. The purpose of this research is to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland. In order to gain sufficient information for the research process, the following research questions have been raised:

1. How do these boards fulfill their strategy, control and service roles and how does this influence the firm’s innovative posture?
2. How does the behavior of the board influence board task performance and the innovative posture of the firm?
3. Is the behavioral approach to boards and governance a better predictor of board task performance and the firm’s innovative posture than the traditionally used board demography approach?

This thesis takes a firm definition of corporate governance, implying that the role of corporate governance is not only to create value to various stakeholders but also to create value for the firm itself (Huse 2007: 22-23). This research holds several
important contributions. First, it will produce a portrayal of the current situation of how boards contribute to the innovation and entrepreneurial activities among SMEs in Finland, along with a framework for how boards can contribute to the innovative posture of their firm. Second, it will develop a framework for board behavior in relation to innovation and thereby respond to the recent calls for a better understanding of the inner workings of boards and their actual behavior and conduct (e.g. Gabrielsson 2007; Huse 2005, 2007; Roberts et al. 2005). Third, this study will contribute to the purpose of the TEKES-research project within which this thesis is conducted. The project studies boards and value creation in Finnish enterprises and is initiated because of the recognition of weak research about the role of the management team and the board of directors in value creation within a firm (Hanken 2009).

1.3 Demarcations and extent of study

The innovation process will not be subdivided into its different stages, since the focus for this study is on a more general level, aiming at developing an understanding the board and management issues of creating organizational support for the processes and features that encourage innovation. This thesis will moreover not focus on the chairman of the board, but instead and in line with the approach of Gabrielsson & Winlund (2000) takes a collective approach, looking at the board as a group of individuals and decision-makers.

1.4 Basic assumptions and definition of terms

Before conducting the research there are some basic assumptions to be explained in order to make clear the research approach. The most central terms and their meanings throughout this study are thus clarified here.

This study focuses exclusively on small and medium-sized firms in Finland. The size of companies is defined according to their number of employees, and in accordance with measures used by both Huse (2007) and Tidd et al. (1997), companies with 500 or less employees are in this context considered to be of small or medium size.

An innovative posture is in this thesis seen as a stance that encourages the processes leading to innovation and which is expressed throughout the whole organization (Huse
It can be defined as one of innovativeness, risk-taking and proactivity, where the management of the company is characterized by being willing to take on high-risk projects with chances of very high returns, and to boldly and aggressively pursue opportunities (Gabrielsson 2007: 515), and that is oriented towards both internal and external innovation.

*Corporate governance* is here defined as the system by which a company is directed and controlled (Huse 2007: 15). Moreover when writing about *boards of directors, directors,* or simply just *boards,* all refer to the same organizational body that is a part of the corporate governance and usually is expected to hire, fire, and compensate the chief executive officer or top management, to set objectives, and to exercise its monitoring function by asking discerning questions.

*Board task performance* or *board role involvement* is in this study conceptualized as the board of directors being actively involved in monitoring and influencing strategy, maintaining control of management and the operations of the firm, and providing executives with advice, counsel and access to critical resources (Stiles & Taylor 2001).

When writing about *board behavior, working style, or decision-making culture,* all refer to the same concept that views the board as a decision-making group and focuses on the inner workings and dynamic processes that take place within the board (e.g. Fiegener 2005; Huse 2007; Roberts *et al.* 2005).

### 1.5 Overview of the study

Here, a model of board contribution to innovation in Finnish small and medium-sized companies is proposed that bridges some of the gaps that currently characterize much theorizing about boards. It begins by considering the factors that make up an innovative posture in order to make clear what the aim of board contribution to innovation is. Drawing on the literature on the role corporate governance and boards of directors with regards to firm performance, it is discussed how boards can contribute to this posture by engaging in the tasks and responsibilities that they have at their disposal. Then, the factors that characterize boards as decision-making groups are reviewed and by discussing some criteria that distinguish effective boards from ineffective ones, two
critical board processes to the innovative posture are defined and developed, namely board task performance and board behavior.

A quantitative research strategy is then applied and the collection of empirical data is done through a questionnaire that is distributed among CEOs of firms in Finland with up to 500 employees. The analysis focuses on board task performance and board behavior, which, in order to influence the innovative posture of the firm, require that boards are actively engaged in strategy and service but not as much in financial control, and moreover that directors express strong commitment to their tasks, have open, in-depth discussions and interaction, a good atmosphere, and a critical and creative attitude towards the tasks and challenges they are confronted with. The processes discussed are hence those that enable boards of directors to achieve their full potential as strategic and innovative decision-making groups. In the course of the discussion, ways of operationalizing the constructs identified by the research model are suggested and the board processes that are identified to be likely to influence the innovative posture of the SMEs in a Finnish context are explained. Finally, the behavioral approach to studying boards and governance is compared with the demographic approach in an effort to try to build on the new stream of research that focuses on the inner dynamics of boards as decision-making groups. The research process with its different stages is illustrated in Figure 1.
2 Frame of Reference

In order for the research to remain coherent throughout its entire process, previous research and empirical evidence on innovation and entrepreneurship, corporate governance and boards of directors are presented here. This chapter aims at forming an overview of the subject field with the purpose of creating a valuable frame of reference, which later on will be used as the basis for analyzing and discussing the empirical results. Firstly, value creation, innovation and the concept of an innovative posture will be presented, the latter of which is in this study seen as the ultimate goal for a company. Thereafter the chapter will enter upon explaining how a board of directors can reach this goal and hence further their company’s innovative posture, which here is argued to be through active board involvement in terms of engaging in the roles and tasks that boards have at their disposal and by exhibiting positive board behavior.

2.1 Value creation through innovation

Innovation is an important outcome of firm processes that is critical to firm performance (Huse 2007: 282). Whilst a competitive advantage can come from size, possession of assets, or the like, the pattern is increasingly coming to favor those organizations which can mobilize knowledge and technological skills and experiences to create new products, processes and services. Innovation is increasingly seen as a powerful way of gaining competitive advantages and a secure way of defending one’s strategic positions. It allows a company to compete vigorously, renew its operations, create new revenue streams and improve shareholder’s value (Birkinshaw, Hamel & Mol 2008: 829; Zahra et al. 2000: 948).

Nevertheless, despite its attractive outcomes, innovation is not easy. It is by nature a risky business that involves a great degree of uncertainty and complexity, and success is by no means guaranteed (Tidd et al. 1997: 11; Zona, Minichilli & Zattoni 2008: 497). The newest report of the Boston Consulting Group (2008: 10) on innovation in fact manifests that most companies are dissatisfied with their return on innovation investments and feel that the expected gains have not been materialized, showing a falling trend for the third year in a row. However, despite this rising frustration with
investments, the majority of companies continues to attach considerable importance to it and still plans to raise their innovation spending (2008: 7). The problem with cutting back on innovation namely is that it remains one of the few or even the only consistent source of long-term competitive advantage (Tidd et al. 1997: 12; Zona et al. 2008: 497). When many other traditional sources of advantage are no longer viable, its value is multiplied severalfold. So the question is not whether to innovate but rather how to do it successfully and Tidd et al. (1997) suggest innovation as a core process of the business that is continually concerned with renewing what the organization offers and the way in which it generates and delivers these.

2.1.1 What is innovation?

Innovation is the entire process of growing ideas into practical use, attention also being paid to project management, market development, financial management, organizational behavior, and etcetera. This bridge from idea to innovation can be seen as the result of interplay between creativity, enthusiasm, systematics, and the ability to take risks (Antola & Pohjola 2006). Although definitions of the term innovation vary in their formulation, they all stress the need to complete the development and exploitation aspects of new knowledge (e.g. FitzRoy, Acs & Gerlowski 1998: 573; Tidd et al. 1997: 24). In this study, innovation is in compliance with the definition by Garcia & Calantone (2002: 112) recognized as ‘a multidimensional concept that consists of a full range of organizational activities that promote long-term value creation’. Zahra et al. (2000) use the catchall term corporate entrepreneurship for a company’s combined innovation and venturing activities, which is also occasionally used in this thesis.

2.1.1.1 Corporate internal innovation

Huse (2007) emphasizes the distinction between internal and external innovation when talking about value creation. Internal innovation is related to a company’s commitment to creating and introducing new products, processes, and organizational systems, whereas external innovation refers to the strategic content, internationalization, mergers, and divestments (2007: 278). Innovation involves deployment of knowledge and is most commonly associated with physical change. Nevertheless, it does not always have to be embodied in a product or service, but much change can be of a less tangible kind, for
example in the development of new methods or techniques (Tidd et al. 1997: 9). Corporate innovation can be defined as a company’s commitment to creating and introducing new products, production processes and organizational systems (Huse 2007: 282). It includes both product innovation, which refers to a company’s ability to be able to deliver new products, and process innovation, which implies changes in the way in which the organization produces its outputs or carries out the tasks (Tidd et al. 1997: 250-261; Van de Ven 1986: 592). Organizational innovation, or management innovation, is concerned with the invention and implementation of new management practices, processes, structures, or techniques that are intended to further organizational goals (Birkinshaw et al. 2008: 825).

Innovation can comprise everything from the formation of entirely new industries to relatively minor adjustments to existing products and services (Garcia & Calantone 2002: 112). Whilst emphasis is often placed upon the radical innovations, it is important to also realize the long-term potential of sustained incremental change. Tidd et al. (1997: 7) moreover point out that it is the perceived degree of novelty that matters. Consequently, innovation does not have to be entirely new. It can be a recombination of old ideas, a new approach to something already existing, or simply an imitation of something that exists elsewhere (Garcia & Calantone 2002: 113; Van de Ven 1986: 591-292).

2.1.1.2 External innovation

The external aspect of innovation has received considerable attention over the last years and rests upon the recognition that in most industries, innovation does not only have to be developed internally but it can also be achieved through exploitation of external sources of innovation (Chesbrough 2003; Hagedoorn & Duysters 2002). Bringing about a new idea requires many competencies and resources that a company can hardly develop by itself (Miozzo & Dewick 2002: 992), and this can be especially true for small and medium-sized firms. This approach calls for interdependences between firms and requires organizations, universities, individuals, and governments to interact with speed, flexibility and creativity to fully capitalize on their core competencies (Acs & Preston 1997: 2; Adams, Bessant & Phelps 2007: 29). Strategic alliances, joint ventures, licensing, and outsourcing are examples of forms of collaboration. Restructuring,
including downsizing and divestments, is also often seen as a form of external innovation (Huse 2007: 278), and mergers and acquisition have in recent years also become popular ways of acquiring new knowledge (Tidd et al. 1997: 220).

2.1.1.3 Firm-internal economic value creation

There are different types of value creation. One can distinguish between firm-external and firm-internal value creation, and between economic and social value creation. This thesis concentrates on internal economic value creation, which implies that it is intended to create value for the firm itself in terms of internationalization, mergers, restructuring, entrepreneurial behavior, innovation, and venturing (Huse 2007: 274). It is about implanting corporate entrepreneurship, which contributes to value creation by developing a work environment that supports corporate and individual growth, creating opportunities for employees to use their creative skills and fostering a culture of cross-functional collaboration. These kinds of activities usually have a long-term perspective, which is important when evaluating value creation, which diminishes risk aversion and careerism among management (2007: 280-281).

2.1.2 Corporate innovative posture

A great difficulty in innovation is that it is not enough to have knowledge about what needs to be done, but one also needs to know how to translate this into specific organizational actions and plans (Ahmed 1998: 47). Innovation is complex, risky, and uncertain, and luck as part of the innovation process is sometimes inevitable. But in accordance with Tidd et al. (1997: 13), real success comes by being able to repeat the trick, and to make success more likely. A wide range of common guidelines for how to manage the innovation process has been developed over time. Every firm should though find its own particular solution and develop it in its own context, because what seems to be a success in one occasion may well be a failure in another occasion. Theorists have also pointed out that there are unlikely to be ‘best practices’ in innovation because of its very context and industry specific nature (O'Sullivan 2000: 412).

Innovation requires a strong emphasis on the constant exploration of new possibilities, and managers may in this respect make decisions that do not maximize the long-term value of the firm and instead divert resources to projects with shorter payback periods
The concept of organizational innovation management is concerned with providing an organization with an underlying momentum for innovation, encouraging and facilitating the development of innovative ideas in a company (Wong & Chin 2007: 1292). It incorporates all the tools and frameworks that facilitate and encourage the recognition, coordination, and gathering of ideas and initiatives in a way that supports the overall strategy of the firm. It is concerned with the people involved and focuses on removing the physical and intellectual obstacles to renewal and on applying the innovations in the organization (Antola & Pohjola 2006: 21).

2.1.2.1 Entrepreneurship and innovative posture

The importance of entrepreneurship as strategy, as a way to renew and revitalize companies and enhance their long-term competitive position has long been recognized in the literature (Gabrielsson 2007). Entrepreneurship refers to a certain kind of firm action and behavior that encourages innovation, and is generally conceptualized as a matter of degree, where the strategic behavior of a firm can range from either highly conservative to highly entrepreneurial (2007: 514). An entrepreneurial and innovative company can be described as ‘one that is engaged in product-market innovation, understanding somewhat risky ventures, and is first with proactive innovations, beating competitors to the punch’ (Miller 1983 in Gabrielsson 2007: 514).

An innovative posture is in this study oriented towards both internal and external innovation, and may be seen as a stance that encourages the processes leading to innovation. It can be defined as one of innovativeness, risk-taking and proactivity, and may also include strategic renewal, which means building or acquiring new capabilities and then creatively leveraging them to create value. Companies having a high innovative posture are hence expected to have a management characterized by being willing to take on high-risk projects with chances of very high returns, and to boldly and aggressively pursue opportunities (Gabrielsson 2007: 515; Huse 2007: 515). A high innovative posture should be the ultimate goal of the firm, which promotes, accommodates and utilizes new knowledge and innovation to bring about change in the core competencies of the organization or in its products or markets. An organizational innovative posture is in this study seen to be encouraged and created by implementing
strategies that emphasize and guide the firm’s innovative activities, by creating an
organizational infrastructure where procedures and processes support innovation, and by
creating an innovation-oriented mindset, where the company culture, climate and
atmosphere reflect the company’s stance in entrepreneurial behavior.

2.1.2.2 Innovation strategies

In order to create and sustain a high corporate innovative posture, it is first and foremost
necessary that some selection is made between the various opportunities for innovation,
and moreover that the choices made are reflected by the overall business strategy of the
firm so that they can build upon established areas of expertise. Strategic planning is
hence an important stage of the innovation process (Tang 1998: 299) and the strategy of
a company should form a framework within which innovations are developed. This
implies that management must take conscious decisions regarding innovation goals and
ensure that these strategies are followed (Sundbo 1997: 442; Tidd et al. 1997: 42). A fit
between the changes a firm wants to implement and the resources and competences it
already holds is thus essential and this also raises a need for an explicit innovation
strategy to show the development and direction of a firm’s innovation activities (Tidd et
al. 1997: 42). The firm’s emphasis on corporate innovation strategies can even be seen
as an important driver of the firm’s competitive advantage in the long term and of its
financial success (Miozzo & Dewick 2002: 991; Zona et al. 2008: 495), and more and
more companies are adopting different strategies to guide their innovative activities

2.1.2.3 Organizational support for innovation

Success in creating an innovative posture also necessitates the creation of an
organizational setting where corporate innovative activities can flourish (Zahra et al.
2000: 948). Innovation management has a lot to do with creating supporting
preconditions for innovative behavior throughout the organization on a day-to-day
basis, so that innovations can come about when people are motivated and engaged in
creative and improvisational behavior (Wood 2007: 28). It is about communicating
urgency and management’s willingness to commit resources to innovative initiatives,
and about getting employees at all levels of an organization involved through the creation of learning cycles and behavioral routines (O’Sullivan 2000: 408).

Formal and informal structures, procedures and processes that describe ‘the way we do things around here’, and stories and symbols that reflect and characterize the underlying routines should reflect the company’s stance in innovation. An organizational culture, climate, and atmosphere that encourage people to innovate should be shaped (Adams et al. 2006: 32; Tang 1998: 301; Wong & Chin 2007: 1296). Wood (2007) moreover suggests that innovation should be initiated without too clear principles, rules and guidelines; central is only, that leaders succeed in creating an atmosphere that promotes innovative behavior (2007: 25). In addition, high acceptance of ambiguity and failure should be communicated to the employees (Adams et al. 2006: 34), otherwise many opportunities might get lost in the process.

It is hence important to realize that the full benefits from innovation cannot be brought about without the appropriate combination of hard and soft dimensions of innovation (Ahmed 1998). Hard innovation is primarily concerned with structures for innovation such as reward systems, organizational systems and procedures for interaction, physical infrastructure and resources to enhance collaboration. Soft innovation on the other hand has to do with managing the organizational culture and climate in order to create innovation oriented behaviors among the employees. Companies who continuously want to adapt, develop and innovate are thus required to excel along both of these two key dimensions (1998: 57).

2.2 Corporate governance and value creation

The purpose of the organization is expected to be value creation that is sustainable in the long term and, as we have seen, value creation through innovation and entrepreneurial behavior is crucial in today’s competitive markets. As can be concluded from the previous section, the overall goal for a company is in this study seen to be a corporate stance that encourages the processes leading to innovation. This is referred to an innovative posture, and companies with a high innovative posture are characterized by management willing to take risks and boldly pursuing opportunities, features that are crucial for success in innovation and entrepreneurship. This section will focus on the
roles of corporate governance and the board of directors and how they can contribute to creating and furthering an innovative posture in the firm they govern.

Success in innovation requires both strong and continued support from the leadership and corporate governance of the firm (Zahra et al. 2000: 948). Corporate governance can be seen as the exercise of power over corporate entities (Brunninge et al. 2007: 295). In this thesis, a firm definition of corporate governance is taken, where the underlying assumption is that corporate governance is not only about distributing value to various stakeholders but also to create value for the firm itself. For board members this implies that they do what is best for the corporation, instead of partially representing different groups of stakeholders (Huse 2007: 22-23). Boards are thus expected to act independently and balance the interests of all stakeholders, and thereby create value for the corporation, their duty hence not being only to minimize agency problems but also to create value in the long-term.

Entrepreneurs, members of boards, and professional managers may have different perceptions, motives, and interests, and the use of early and well-structured governance may therefore help alleviate several agency hazards (Markman, Balkin & Schjoedt 2001: 279). As is the case with innovation management practices, there is no best way in organizing corporate governance or boards of directors either, but it is argued that various designs are not equally good (Huse 2005; Zahra et al. 2000). Firms will thus also have to develop their own governance system according to the context and the actors involved (O’Sullivan 2000: 412).

2.2.1 Boards and management

The implementation of innovation may be very complex, and will therefore be highly dependent on managerial involvement, demanding strong political and organizational support from the executives (Zahra et al. 2000: 949). Top management with an effective leadership style creates an environment for entrepreneurial initiatives within the company by inspiring and motivating the work force and encouraging involvement, development and learning (Wong & Chin 2007: 1293). One central aspect in this respect is management’s willingness to take risks (Wu 2008: 142). Managerial support for innovative and entrepreneurial behavior is though likely to be limited unless managers have the appropriate incentives to promote these long-term, costly and risky
projects and therefore, there must be a strong and independent board that monitors, evaluates, and challenges these executives (Zahra et al. 2000: 950).

Boards of directors are by law entitled to conduct the direction of the company they govern – in other words, to govern the actions and performance of managers. They are granted the formal authority to ratify management initiatives, to evaluate managerial performance, to allocate rewards and penalties to management based on different criteria, and supposed to support and guide the decisions of professional management (Van den Berghe & Levrau 2004: 470). Some theorists reason that through the possession of this power, boards set the premises of managerial decision-making (Baysinger & Hoskisson 1990: 72).

Consequently, boards have considerable influence on corporate operations and can guide the decision-making of managers in any strategic direction. An important difference between the board of directors and the top management team hence exists in that boards are only responsible for monitoring and influencing strategy, whereas management is concerned with implementing strategy and day-to-day administration. The challenge therefore lies in finding governance arrangements that effectively drive managers to act in more entrepreneurial ways (Wu 2006: 142). Moreover, because boards are not involved in implementation, the outputs that boards produce are entirely cognitive in nature (Forbes & Milliken 1999: 492) and firms need to recognize the board’s value as a cognitive resource (Rindova 1999: 968).

Entrepreneurial efforts aim at long-term value creation and require a strong emphasis on the exploration of new possibilities and alternatives, and the CEO also plays a significant role in these activities (Gabrielsson 2007). Particularly in smaller firms, it is often the CEO who is responsible for determining the competitive orientation of the company, and the preferred business philosophy of the CEO can hence be expected to be a main determinant of the manner in which the company’s strategy is manifested (Merz, Weber & Laetz 1994 in Gabrielsson 2007: 515). However, many owners and managers are not always proponents of long-termism and especially in SMEs, managerial commitment to an entrepreneurial posture is usually weak and CEOs often fail to favor such behavior. Entrepreneurial projects may be time-demanding, while these CEOs generally are time-constrained individuals, preoccupied with day-to-day
activities where exhibiting results is more certain. As a result, there is an utter need to ensure that CEOs and managers in SMEs are willing and able to sustain support for entrepreneurial initiatives over periods of time to realize the full benefits of innovation (2007: 516-517).

2.2.2 The value-creating board

Accordingly, extensive research emphasizes that a strong and vigilant board can have significant positive influence on the value-creating potential of SMEs by favoring change and innovation in managerial decision-making (e.g. Gabrielsson 2007; Huse 2000; McNulty & Pettigrew 1999; Zahra et al. 2000). The board is an important resource for the corporation, and, although just one of several governance mechanisms, it is arguably the central role of governance (Gabrielsson & Winlund 2000: 311). The board’s full potential is though too often not realized and boards act only as a control mechanism to reduce the potential divergence of interests between management and share- or stakeholders (Huse 2007: 281; Stiles & Taylor 2001). Roberts et al. (2005: 9) distinguish between a minimalist board culture, where a set of conditions limits the involvement and influence of the directors on the affairs of the firm, and a maximalist culture, where the board actively contributes to dialogue within the board and builds its organizational awareness and influence through contacts with other parties.

Definitions of a board of directors and what it does vary depending on which theoretical approach one takes, but in general terms the board of directors can be seen as the formal link between the owners and the managers responsible for the day-to-day operations of the firm (Brunninge et al. 2007: 297). Firms need both the capacity to interpret competitive forces in their environment and the competence to mobilize and manage the resources necessary to respond to the identified competitive challenges, and the board can play an active role in providing different strategic and service functions to management (Huse & Landström 2001: 53-54).

2.3 Contextual board contribution to innovation

As we have seen, the board can play a major role in determining the strategic and innovative direction of a firm. The previous chapter highlighted the role of corporate governance and the board of directors in contributing to the innovative posture of the
firm, establishing that the role of the board primarily is to keep managers glued around an agenda of innovative undertakings by favouring change and innovation in managerial decision-making. The board of directors can hence be seen as a cognitive resource responsible for ensuring that management and the operations of the firm are oriented towards entrepreneurial efforts, and boards must be actively engaged in their various tasks and responsibilities so as to be able to influence the innovative posture of the firm. However, innovation and governance issues are also largely dependent on contextual factors such as firm size and national context, and challenges present themselves in different ways for different companies (Huse 2007). This chapter therefore presents the specific challenges for innovation and governance arrangements in small and medium-sized companies in Finland, which must be taken into consideration before in more detail considering how the board can influence the firm innovative posture.

2.3.1 Boards and innovation in SMEs

The field of innovation in SMEs is characterized by weak research and empirical evidence (Tidd et al. 1997: 125). However, compared to large innovative firms, smaller firms are usually characterized by organizational strengths such as faster decision-making, ease of communication, degree of employee commitment and receptiveness to novelty. Tidd et al. (1997) argue that this is why smaller firms often do not need the formal strategies used in large firms to ensure communication and co-ordination. Small firms can on the other hand also be naïve in this respect and often tend to completely ignore the vital managerial activities of planning and development of strategy. Gabrielsson & Politis (2008: 506) though point out that formal planning and focused commitment of resources are crucial requirements for innovation and that this is especially true for small, entrepreneurial firms.

Smaller firms may find it more difficult to develop and manage complex systems and to fund long-term and risky programs due to their frequent weaknesses in the fields of finance, information, advice, and human resources (Garofoli & Musyck 2001). Organizational structures and processes and the integration of different functional units is often of less central importance than in large firms because these functions are in general less specialized and separated in practice. Small firms are also heavily
dependent on the characteristics and attitudes of senior managers and their training, experience, responsibilities and external linkages (Tidd et al. 1997: 155-156).

In the past, research on boards has compromised mostly large US corporations in their samples (Bennett & Robson 2004; Huse 2000). Boards of directors in smaller firms are though receiving growing attention and researchers and managers nowadays acknowledge the importance of well-functioning SME boards, as good governance practices seem to result in the creation of firm value (Huse 2007: 109; Van den Heuvel et al. 2006). The governance of SMEs is distinct from that of larger firms (Bennett & Robson 2004: 95; Forbes & Milliken 1999: 501) and it is well documented that contingencies such as company size are important when understanding boards (Huse 2000: 277; Markman et al. 2001: 278). There is also reason to believe that boards in small firms behave differently than those of larger corporations and that the nature and extent of board involvement in innovation activities differ as well (Fiegener 2005: 629).

Some researchers suggest that the role of the board should be more influential and decisive in smaller firms (Bennett & Robson 2004: 95), because they are better at adopting and implementing change which may facilitate board’s ability to influence on the strategic direction. Nevertheless, boards in many SMEs exist merely because of legal requirements, and do not play an active role in governing the firm (Brunninge et al. 2007: 297; Huse & Landström 2001: 45). When it comes to strategy involvement, few SME boards play a significant role. Fiegener (2005) even found that, among small firms, “when faced with a strategic decision that could affect the long-term performance most respondents did not call a special meeting of the board nor delay discussing the issue until a regularly scheduled board meeting” (2005: 643).

Ownership in small firms is usually much more concentrated and moreover tends to overlap with management, and SME boards are therefore generally characterized by risk aversion, leading to reluctance to change (Brunninge et al. 2007: 304). A distinct characteristic of owner-managed firms is that the board may have no control function in the conventional sense because shareholder rights and managerial responsibilities will reside in the same persons (Bennett & Robson 2004: 97; Forbes & Milliken 1999: 501). Small firms moreover often tend to ignore the fact that managerial activities of planning are required in order to create an innovative organization. A strong and active board of
directors could in this respect discipline the firm to focus efforts on innovation and ensure that strategic directions are in line with long-term goals (Gabrielsson & Politis 2008: 506). Smaller firms may thus have greater needs than large corporations for their board to perform its service role well (Bennett & Robson 2004: 111; Fiegener 2005: 627), because they usually have several weaknesses regarding innovation in the fields of finance, information, advice, and human resources (Garofoli & Musyck 2001). Therefore boards in small firms should play roles such as providing a sounding board, a shoulder to cry on or a source of advice in decision-making (Huse 2007: 110).

2.3.2 The Finnish context

Finland has changed dramatically in terms of its national innovation environment over the last couple of decades, now being a forerunner within innovation and research activities (Georghiou et al. 2003). Finland is one of the most innovative and research-intensive countries in the world and regularly makes it to the top among international innovation comparisons (Unger 2000). Innovation is affecting the Finnish national economy and society as a whole, and can be seen in more productive labor, new enterprises and the growth and of competitiveness and enterprises (Tekes 2009). The Finnish innovation environment is moreover characterized by fast development and commitment from companies, researchers and public institutions and Finnish companies and scientists are forerunners in a number of fields of technology and innovation (Tekes 2009). There are however not many innovative SMEs in Finland (Georghiou et al. 2003), which makes it relevant to focus on enhancing their innovative performance in order for Finland to keep this position as one of the most knowledge-intensive economies in the world (Dahlman, Routti & Ylä-Anttila 2005).

The Finnish corporate climate has, during the past decade, undergone a substantial structural change. Many corporations have abandoned the two-tier board structure featuring supervisory boards and have replaced it with a one-tier system in which the board supervises the operations of the management and the managing director (Liljeblom 2006: 280; Maury 2006; Tahtinen & Kivinen 2002). Little research has been done on the role of the Finnish board in innovation management practices, which is why studies such as this seem utmost important in order to maintain Finland’s strong position as a forerunner within innovation and technology (Georghiou et al. 2003: 56).
General research on Finnish boards of directors includes information on issues such as board structures and composition. Maury (2006: 228) for example found that outsider ratios on Finnish boards are increasing, reporting a 90 percent presence of non-executives on corporate boards in 2000, and states that this partly reflects the abandonment of a two-tier board system in many firms. The separation of the role of the CEO and the chairman of the board is also becoming more common in Finland, less than 1 percent of Finnish boards being characterized by CEO duality (2006: 229). Moreover board diversity has been strongly advocated by politicians, and board internationalization is also a marked trend of Finnish boards (Liljeblom 2006: 281).

2.4 Board roles and tasks

So far we have seen that the board of directors can have great potential to contribute to firm value creation. The previous chapter however pointed out that innovation and governance issues are distinct in firms in different contexts, and that small and medium-sized Finnish firms face specific challenges that need to be taken into account before considering how these boards can contribute to improving the innovative posture of their firm and moreover how they should perform their tasks and responsibilities. This section will now focus on the roles and tasks that the board is expected to carry out and how they by engaging in these tasks can contribute to the innovative posture.

Research has found that the extent of innovation is positively associated with the role of directors (Bennett & Robson 2004: 96). It is therefore crucial to understand the variety of roles that a board can play. On the one hand, boards need to control and monitor the company, and on the other hand, they are expected to be involved in strategy (Van den Berghe & Levrau 2004: 468; Zona et al. 2008: 497). By common agreement, the board has got three key roles:

- **a strategic role** – responsibility for monitoring and influencing strategy;
- **a controlling role** – the legal duty of maintaining control over the management of the company, and;
- **a service role** – providing advice and counsel to executives, helping to acquire critical resources and providing an institutional face for the organization. (Huse 2007; Stiles & Taylor 2001)
2.4.1 The strategic role

There is great pressure for the board of directors to be involved in the corporate strategic decision-making and to challenge the strategic leadership provided by management (McNulty & Pettigrew 1999: 49). Although there is some evidence that boards are becoming more strategically oriented, the overall impression is still one of a somewhat passive board that is reluctant to introducing contestability to the boardroom (Rindova 1999: 968; Stiles & Taylor 2001: 31). By performing its strategic role, the board is expected to review and ratify management proposals and to be a full partner in developing the content of and taking specific strategic decisions (Gabrielsson & Politis 2008: 507; Huse 2007: 239; Stiles & Taylor 2001: 36-37).

More specific tasks within the strategic role of the board encompass taking decisions on strategic change to keep pace with changes in the environment, assessing threats and opportunities, strengths and weaknesses, approving goals and objectives, performing a gatekeeper function by screening ideas and proposals, evaluating the acquisition and allocation of resources, setting policies, and selecting appropriate directors and the CEO. However, the board’s role in strategy is not to formulate strategy, but rather to monitor the process that produces it (Hendry & Kiel 2004: 504). Through these activities, the board can enhance the firm’s capacity for innovation and entrepreneurship, motivate the managers and employees and ensure that operations in the organization match the strategic concept (Gabrielsson & Politis 2008: 507; Stiles & Taylor 2001: 40).

Boards are also expected to be involved in strategic control, which refers to board’s external control duty to assure that resources are committed to the innovation strategy of the firm (Gabrielsson & Politis 2008: 507). This is done through for instance performing high-level reviews of strategic plans, evaluating past strategic decisions, thereby providing information for future action, and appraising executive and firm performance (Fiegener 2005; Forbes & Milliken 1999). These mechanisms usually recognize the long-term aspects of business and highlight the need for imagination and creativity, and can be expected to be consistent with innovation (Gabrielsson & Politis 2008: 508).
It has been recognized that boards tend to get more active in times of crisis (Hendry & Kiel 2004), but the ideal would be a board that constantly is concerned with the running of the firm and the setting of the strategic context. Huse (2007) found that internal innovation is strongly linked to the board’s strategy involvement and even states that the greatest degree of board contribution to internal innovation is expected to be through its strategy involvement (2007: 282). Strategy-making is a challenging task, requiring among others the capacity to interpret a complex environment and the competence to mobilize and manage the resources to respond to the competitive challenges that have been identified (Brunninge et al. 2007: 304). In SMEs, where this can lie in the hands of a single person, resources and skills are often not enough and the strategic role of the board hence becomes even more important (Huse & Landström 2001: 4; Van den Heuvel et al. 2006: 479). Gabrielsson (2007: 528) also found that medium-size firms can benefit from a board that brings discipline and rigor to strategic planning and helps to frame the wide range of strategic issues that the firm faces. He also found that boards that are actively involved in ratifying and monitoring strategic decisions have a positive influence on the value-creating potential of medium-sized companies. Therefore the following hypothesis is proposed:

_Hypothesis 1_ Active strategy involvement by the board of directors is positively associated with the firm’s innovative posture.

### 2.4.2 The controlling role

One of the most fundamental ways for boards to influence the direction and performance of a firm is through the involvement in board control (Gabrielsson 2007: 517; Zahra et al. 2000). The financial control system exercised by boards over top management refers to the internal control duty to monitor top management and corporate performance in order to resist managerial opportunism and self-interested behavior (McNulty & Pettigrew 1999: 50). The presence of control systems used by boards should aim at ensuring that key aspects of organizational activity are properly planned and assessed (Baysinger & Hoskisson 1990; Gabrielsson & Politis 2008: 507; Huse: 2007). Such an operational control system focuses exclusively on management performance against financial objectives, such as budgets concerning revenues, return on investments, liquidity, profit, and staffing requirements and firing or disciplining
executives accordingly. In addition to this, the controlling role also encompasses directly assessing and evaluating the performance, contribution and behavior of chief executive and senior managers (Stiles & Taylor 2001: 64).

External stakeholders in small enterprises usually have a difficult control task since reliable information and formal reporting systems may be lacking, which may cause information asymmetry (Gabrielsson & Winlund 2000: 314; Huse 2007: 110). Baysinger et al. (2007: 299) further argue that in SMEs, the role of the board is different compared to large firms, because the risk of opportunistic behavior by management is lower or even zero and they do hence not need an active board for control purposes (Huse & Landström 2001: 24). The board can therefore focus more on strategic and service activities. In some small firms though, stakeholders other than shareholders, such as banks, customers, suppliers, employees and local societies, may play an important role with both stakes and power in the firms, and therefore the control role can in some SMEs be even more highlighted than in large firms (Bennett & Robson 2004; Huse 2007: 110). In SMEs, board control can moreover reduce the risk that the CEO pursues personal or family interests over the goals of the business, and managers can be encouraged to focus effort on entrepreneurial undertakings (Bennett & Robson 2004; Zahra et al. 2000: 950).

However, heavy emphasis on financial control is generally expected not to encourage visionary thinking and creativity and tends to dampen innovation especially in small firms and in industries relying on innovation (Hitt, Hoskisson, Johnson and Moesel 1996: 1111). It may also emphasize short-termism among managers because it necessarily involves financial targets, which is negatively associated with innovation (Huse 2007: 282; Van den Ven 1986). A feature of many small firms is furthermore ambiguity between reported and actual results, and relying too heavily on financial measures might in this respect lead the firm in the wrong direction (Huse 2007: 50). Roberts et al. (2005: 10) also point out that an overemphasis on control in general tends to be counterproductive, because control can be read as distrust and thereby produce a vicious circle that produces the very behaviors it is designed to prevent. Executive frustration may rise, motivation be damaged and information flows become restricted, thereby feeding mutual distrust and providing a rational for a further increase in control. The following hypothesis is proposed:
**Hypothesis 2**  Heavy emphasis by the board on financial controls is negatively related to the firm’s innovative posture.

### 2.4.3 The service role

It has been argued that it is through a company’s wider network of relationships that corporate performance is sustained and innovation emphasized (Stiles & Taylor 2001: 96). The service role of the board constitutes an external function of co-opting important elements of an organization’s environment (McNulty & Pettigrew 1999: 50) and thereby strengthening the firm’s position by reducing environmental uncertainty (Huse 2007: 257). Hence, boards are useful in that they can provide valuable access to external resources, capital, information, and inter-firm connections (Van den Berghe & Levrau 2004: 470; Zona et al. 2008: 496). Boards can be perceived as an intellectual and reputational resource, focusing on networking and providing advice when needed, and making the decision-making of the CEO less intuitive (Huse 2007: 256; Van den Heuvel et al. 2006: 479).

The service role also comprises the tasks whereby the board acts as the primary signaling source of the organization’s intentions and purposes: it is so to say the face of the company to the outside world (Huse 2007: 256). Moreover, the board members have to serve as sources of information and be able to provide the CEO and management with counsel and advice and perform mentoring and collaboration tasks, whereby the board takes responsibility for helping and supporting the chief executive and management to achieve value creation (2007: 257-260). Bennett & Robson (2004: 99) also emphasize the complementary nature of the skills of boards in relation to management, namely the board’s potential to support and complement management. This makes the service role dependent on good relations and a mutual understanding of objectives between directors and management (Huse & Landström 2001: 24).

Because smaller firms tend to be undiversified, less structurally complex, and less formalized, the range and depth of service activities available to the board are likely to be greater (Forbes & Milliken 1999: 501). Active boards in terms of service are expected to have a positive impact on the firm’s entrepreneurial activities, especially in SMEs that usually lack important internal human resources and competence that are crucial for strategic change (Huse 2007: 110). The board may therefore have to provide
expertise in order to compensate for managerial deficiencies before the decisions are made (Huse & Landström 2001: 4). Consequently, the role of directors’ advice is likely to be more critical to smaller firms and to be based on closer involvement, personal trust and personal working relations with the CEO (Bennett & Robson 2004: 96). Therefore the following hypothesis is proposed:

**Hypothesis 3**  
High involvement by the board in its service tasks is positively associated with the firm’s innovative posture.

### 2.5 Board behavior and working style

So far we have seen that boards of directors can have significant influence on the innovative posture of a firm. The above section presented the different roles by which boards can be expected to influence innovation and strategic change. Boards are expected to be optimally engaged in the formally designed tasks of strategy, control, and service, which in turn is expected to have a positive influence on the entrepreneurial direction taken by the firm. This, however, does not explain how well boards actually go about these tasks (Hendry & Kiel 2004). The following section argues that boards also have to exhibit a certain kind of behavior in order to be able to engage in good task performance and to fully influence the entrepreneurial efforts made by managers.

Studies have shown that there are several demographic and process-related features of boards that indicate a tendency towards change (Huse 2007: 281). However, the best way of how to conceptualize the board-performance relationship remains controversial. The mainstream approach has been to argue for a direct relationship between board demographics and firm performance (Gabrielsson 2007; Huse 2000; Roberts *et al.* 2005). Boards are expected to behave according to their observable demographic characteristics, which consequently are assumed to reflect a board’s resource base and ability to undertake its various responsibilities (Gabrielsson 2007: 512). Along with this view, recommendations for effective boards mostly encompass formal board structures and characteristics such as board size, number of independent directors, CEO duality, and board committees (Van den Berghe & Levrau 2004: 462).

In contrast to this approach stands a group of scholars who argue for the need to turn to explore behavioral aspects of boards and governance (e.g. Bennett & Robson 2004;
Gabrielsson 2007; Gabrielsson & Winlund 2000; Huse 2000; Rindova 1999; Roberts et al. 2005; Van den Berghe & Levrau 2004). This approach builds upon the recognition that board characteristics are weak predictors of its actual behavior, and that there is a need for bridging the gap between board role expectations and actual board task performance, thus opening the ‘black box’ of the boardroom (Huse 2000, 2005). Hence, to better understand boards, we need to know more about the behavior of those who sit on boards (McNulty & Pettigrew 1999: 47), and research has so far remained at a distance from the inner workings and dynamic processes that take place within the board (Fiegener 2005; Roberts et al. 2005: 6). The specific nature of boards as a group with multi-faceted tasks, few face-to-face meetings, and severe time constraints to work on these tasks makes them specifically vulnerable to interaction difficulties (Forbes & Milliken 1999). Intervening processes are thus expected to significantly influence directors’ decisions, and a board’s actual behavior is therefore predicted to have the most significant impact on its effectiveness (Bennett & Robson 2004: 110).

2.5.1 Decision-making culture

The effectiveness of boards depends on social-psychological processes related to group participation and interaction, the exchange of information and critical discussion (Forbes & Milliken 1999). Therefore, the behavioral aspects of boards place emphasis on analysis of strategizing inside and outside the boardroom, problematic search by board members, value creation through knowledge, and a focus on interactions and decision-making (Huse 2007: 135). According to Roberts et al. (2005), a positive boardroom climate or decision-making culture is what matters most for creating board effectiveness, and it must supportive of constructive criticism and firm decisions based on understanding of facts and opinions (Gabrielsson & Winlund 2000: 315). Boards should be challenging, questioning, probing, discussing, testing, informing, debating, exploring, and encouraging (Roberts et al. 2005: 6).

The next sections focus on the board’s working style, and in accordance with the framework by Gabrielsson & Winlund (2000) and Huse (2007), the board decision-making culture and degree of involvement during and around meetings will be in focus in order to understand how boards can contribute to value creation. Hence, although board behavior can refer to many different aspects of how boards interact and engage
with each other in order to perform their tasks, it is the decision-making culture that is in particular focus for this study. Moreover, how the board acts collectively will be in focus in this section, because it is the collective strength of the board that matters and is argued to give them the capability for judgment (Forbes & Milliken 1999; Gabrielsson & Winlund 2000: 313).

2.5.1.1 Commitment

Gabrielsson & Winlund (2000) found that board member involvement is a main element when understanding boards’ working style that can live up to the demands of effective board performance. Preparation and involvement are central in explaining a group’s expected commitment to fulfill a task, and directors must be both prepared for the meetings and actively involved and committed during the meetings (Fiegener 2005; Forbes & Milliken 1999). Board members who ‘do their homework’, devote sufficient time to their duties and seek out the information they need are better able to govern effectively and to ask discerning questions. Carefully scrutinizing information provided during meetings, researching relevant issues prior to meetings, taking notes during meetings, and time available of board members are hence important features in this respect (Huse 2007: 220-221). Board directors need to be ‘mentally engaged’ in the objectives of the firm’s activities and the strategic decisions (Gabrielsson & Winlund 2000: 316). Commitment of group members sets the whole group’s effort norms, and if some directors perceive low commitment from other directors, they will easily reduce their own contribution (Gabrielsson 2000: 326). Boards should not just stamp management’s decision with an ‘OK’, but it should actively evaluate and scrutinize different alternatives before accepting any decisions.

2.5.1.2 Cohesiveness

Board members will have various kinds of knowledge and skills due to their different backgrounds and experiences and can provide valuable access to competences and contacts, and this is especially important for smaller enterprises that often have several resource limitations. However, it is of little value to have skills and knowledge on the board if they are not used, and directors must hence be generous in the use of their own competencies (Forbes & Milliken 1999: 495; Gabrielsson & Winlund 2000: 315; Huse
Openness and generosity are concerned with this and with the appreciation of different viewpoints: how directors accept and recognize that they are wrong in their considerations and how they willingly give advice based on private knowledge, ideas and viewpoints (Huse 2007: 218).

Van den Berghe & Levrau (2004: 654) state that open, constructive, and in-depth discussions and interaction are essential for effective board meetings. Everyone should be given the chance to present their opinions in a neutral and objective way. Board members should work together as a unified decision-making team, respect and encourage each other and be positively minded (2004: 466). This is also dependent on the culture of the board, which encompasses the ‘style of meeting’ and ‘style of debate’ in the boardroom (2004: 468), and a good atmosphere is a good way of achieving healthy and constructive boardroom dynamics (Huse 2007: 219). Extensive communication is also necessary and board members must have a certain level of interpersonal attraction and affection in order be engaged. This is referred to as board cohesiveness, and may realize high levels of member satisfaction and commitment to the group (Forbes & Milliken 1999: 493), and also reflects the ability of the board to continue working together (Korsgaard, Schweiger & Sapienza 1995: 61).

### 2.5.1.3 Creativity, criticality, and cognitive conflict

The creativity and curiosity of board members should be used in the boardroom and integrated in synergistic ways (Forbes & Milliken 1999: 496). This will be stimulated when people with diverse backgrounds and perceptions are together in a setting in which they are willing to support each other and where the culture encourages a critical and independent working style (Huse 2007: 216-217). Decisions about managerial suggestions should be reached independent of the CEO or the management team. Boards can better monitor firm performance when it takes own initiatives to gather information and ask critical questions about information provided and proposals made by management (Gabrielsson & Winlund 2000: 317; Zahra et al. 2000: 950).

The presence of issue-related disagreement is likely to be present in boards that face complex decision-making tasks. Members are likely to hold different viewpoints and ideas about appropriate responses to task-related issues, which is referred to as cognitive conflict. It results in the consideration of many alternatives and a more careful
evaluation of them – processes that are beneficial to strategic decision-making in uncertain environments (Forbes & Milliken 1999). Inclusion of multiple viewpoints and the exchange of both positive and negative comments are hence, even though time-consuming, valuable for the quality of board output (Huse 2007: 223). Willingness to live with differences in perspectives is also crucial for a functioning decision-making environment (Korsgaard et al. 2005: 61).

2.5.2 Board behavior, task performance and innovation

Consequently, boards with directors that express strong commitment to their tasks, have open, in-depth discussions and interaction, a good atmosphere, and a critical and creative attitude towards the tasks and challenges they are confronted with are in this study considered thus to be exhibiting positive board behavior. Boards that on the other hand are not characterized by these features are considered to be characterized by negative board behavior. These cognitive, dynamic processes taking place within the board room and the inner workings and relationships between board members as described above are thus in this study seen as major determinants of board output.

Among others Minichilli, Zattoni & Zona (2008) found that the set of board demographic characteristics that previous research often investigated has a limited predictive power in understanding how well the board performs its service, strategy and control tasks. Instead, they applied a set of behavioral measures such as described above to study the effectiveness board task performance, and suggest that boards of directors should carefully consider the importance of creating a process-oriented boardroom culture that favors among others the members’ commitment to board activities (2008: 68). They found that positive board behavior leads to good board task performance, thereby influencing the innovative orientation of the firm in a favorable way. This is in line with the arguments presented earlier that good board task performance is expected to steer the direction of the firm towards innovative activities. Consequently, there are for instance personal conflicts among board members or if the members are not at all mentally engaged in the board work, one could expect this to lead to poor board task performance, thereby negatively affecting the innovative posture of the firm.

Therefore, the decision-making culture or behavior of the board is expected to influence how engaged the board is in performing its strategic, control and service tasks,
suggesting that positive board behavior is expected to lead to good board task performance, and vice versa. Positive board behavior is moreover also expected to influence the innovative posture of the firm in a favorable direction. Hence, when the decision-making in the boardroom is characterized by open discussions, generous use of directors’ knowledge and skills and critical questioning, criticality, when directors involved and well-prepared, when the group is characterized by cohesiveness and when an adequate amount of cognitive conflict is present, it is suggested that it will have a positive impact on the entrepreneurial posture of the firm. This thesis therefore also argues for a direct relationship between board behavior and the innovative posture of the firm. The subsequent hypotheses suggest the described relationships between board behavior, board task performance and the innovative posture of a firm:

**Hypothesis 4** Positive board behavior is positively associated with board task performance.

**Hypothesis 5** Positive board behavior is positively associated with the firm’s innovative posture.

As pointed out in the previous section, the board behavioral attributes are expected to have much more explanatory power with regards to board task performance and the firm’s innovative posture than the traditionally used board demographic measures such as board size, CEO duality, or director stock ownership. The following hypotheses therefore suggest the following associations:

**Hypothesis 6** Board behavior is a better predictor of board task performance than the traditional board demographic features.

**Hypothesis 7** Board behavior is a better predictor of a firm’s innovative posture than the traditional board demographic features.

### 2.6 Summary of research model

The purpose of this study is to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland. We have seen that value creation through innovation and entrepreneurship is crucial in today’s business
environment, and an innovative posture is in this study seen as the overall corporate goal that will allow a firm to gain competitive advantages and to secure and defend its strategic position and thereby create firm value. An innovative posture can be seen as a corporate stance that is oriented towards both internal and external innovation and where the strategy, organizational infrastructure and culture encourage the processes leading to innovation and entrepreneurial efforts throughout the whole company. The management of the company should also be characterized by being willing to take on high-risk projects with chances of very high returns, and to boldly and aggressively pursue opportunities (Gabrielsson 2007: 515).

Boards of directors can play a major role in determining a company’s strategic direction. They are an important element of a company’s governance structure with strong potential to contribute to firm value creation (Huse 2000; Zahra et al. 2000). Companies with high entrepreneurship are characterized by managers willing to take risks (Gabrielsson 2007). Boards of directors are on the other by law entitled and expected to conduct the performance of management and the operations of the business, and can therefore play a central role in ensuring that management commits efforts towards innovative thinking and entrepreneurial efforts throughout their company (Van den Berghe & Levrau 2004: 470; Wu 2008: 142). The role of the board in this value creation process is therefore primarily seen to be of a cognitive nature focusing on keeping managers oriented towards continuous innovative undertakings by favoring change and entrepreneurial thinking in decision-making.

Nevertheless, many boards still act ‘paper boards’, existing only for formal or legal requirements. Boards need to be actively engaged in and committed to their various tasks and responsibilities as to be able to influence the firm’s innovative posture. More explicitly, the contribution of the board to the innovative posture of the firm is in this study expected to be achieved through good board task performance and through positive board behavior. Board task performance consists of the strategic, financial control and service control roles assigned to the board. Through exercising its strategic role, the board is expected to ensure that the innovative agenda remains within the strategic context of the firm, which is expected to be positively associated with innovation (Huse 2007). Engagement in the controlling role based on financial measures is on the other hand suggested to deemphasize the firm’s emphasis on
innovation and instead steer management towards short-termism and risk aversion (Hitt et al. 1996). By providing management with support, advice and access to external resources, boards are argued to add value especially to SMEs because they often lack resources that are crucial for pursuing an entrepreneurial strategy (Van den Heuvel et al. 2006).

Optimal engagement by boards of directors in these three tasks is expected to be positively associated with the innovative posture of the firm. However, to explain how boards actually go about these tasks, it is necessary to consider other features of boards as well and a major focus in this study is board behavior or the board decision-making culture. It is argued that because of its specific nature as a group with multi-faceted tasks, few face-to-face meetings, and severe time constraints, their effectiveness is likely to be largely affected by these inner working and dynamic and intervening processes that take place within the boardroom (e.g. Fiegener 2005; Forbes & Milliken 1999; Gabrielsson 2007; Huse 2007; Roberts et al. 2005). Positive board behavior is hence expected to be positively associated with both board task performance and the firm innovative posture. These behavioral aspects of boards are furthermore expected to constitute better proxies of these factors than the traditionally used board demographic measures. The research model is illustrated in Figure 2.

Figure 2 Board contribution to the corporate innovative posture (own model)
3 Methodology

The purpose of this research is to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland. In order to meet this aim and test the hypotheses proposed by the research model, this research was conducted as a quantitative survey questionnaire study from the perspective of a relativist research ideal. This chapter describes the research approach and the specific methods and techniques that have been used for collecting and analyzing the essential empirical data.

3.1 Research approach

In its broadest sense, social science research can be divided into the positivist and the social constructionist tradition of research. Along with positivism, the social world exists externally and research can only be conducted through objective methods and measures, such as collecting facts and measuring how often a certain pattern occurs, contrasting to social constructionism, according to which reality is socially constructed and therefore uses more interpretative measures, appreciating the different meanings and constructions that people place upon their experiences and surroundings (Bryman & Bell 2003: 57-58). This thesis adheres to the positivist tradition of management research. However, one should bear in mind that the philosophical standpoints explained here are the ‘pure’ versions of each paradigm, and that in reality these differences are by no means as clear (Bryman & Bell 2003: 56-57; Easterby-Smith, Thorpe & Lowe 2002: 77).

3.1.1 A relativist position

More explicitly, one can distinguish between different ontologies and epistemologies that lay the ground for management research practice. The underlying methodological standpoints can have a great influence on the way research is conducted and evaluated (Bryman & Bell 2003: 56) and this section will explain more precisely how the results of this study are expected to be reached.
3.1.1.1 Ontology

Questions about ontology are concerned with philosophical assumptions about the nature of reality. Objectivism believes that social phenomena are external to us and beyond our reach or influence, while subjectivism challenges this view and means that reality is subjective and should be considered as social constructions by the actors involved (Easterby-Smith et al. 2002: 31-32; Hatch with Cuncliffe 2006: 12). This thesis adheres to a third major ontological position that, according to Easterby-Smith et al. (2002), can be grouped somewhere between those of objectivism and subjectivism, and which is called relativism. The relativist position implies that “different observers may have different viewpoints and that what counts for the truth can vary from place to place and from time to time” (2002: 32-33). The purpose of this study is to explain and describe a phenomenon and in order to be able to assess the situation as correctly as possible, it is important to survey a broad sample to collect views from many different parties in order to come to a consensus between different viewpoints. This is also important in order to understand the likely degrees of variation that exist among the population (2002: 37-38).

3.1.1.2 Epistemology

Epistemology can be defined as a general set of assumptions about the best way of acquiring knowledge about the reality (Easterby-Smith et al. 2002: 31). This thesis adapts the relativist epistemological approach, attempting to identify and represent, as accurately as possible, the phenomena of investigation. Relativists will often adopt multiple perspectives (Easterby-Smith et al. 2002: 33-34; Hatch with Cuncliffe 2006:13), which in this study is done by surveying viewpoints and experiences of a large samples of cases. It is hence only a question of probability that the findings will provide an accurate picture of reality. Use of multiple methods is especially important in explanatory studies as this one in order to be able to validate data and to provide extensive tests of the causal models proposed (Pinsonneault & Kraemer 1993: 88).

3.1.2 Deductive approach and quantitative strategy

In this thesis, a deductive approach to the role of theory in relation to the research is applied, implying that literature is reviewed and theorized, and hypotheses are derived
prior to conducting the data collection and analysis. Deduction hence means that theory is something that guides and influences the collection and analysis of data (Bryman & Bell 2003: 23). The empirical observations will then be tested against the research model in order to find out if the findings can generate any new contributions. This study furthermore adapts a quantitative research strategy, emphasizing the quantification of collecting and analyzing numerical data (Bryman & Bell 2003: 40). Data collection is distinct from analysis, hypotheses are created and used and concepts, measurements and indicators of the constructs involved are emphasized (Easterby-Smith et al. 2002: 130).

A quantitative strategy is appropriate for the purpose of this study because it allows the collection of data from a large sample and the generalization of findings beyond the research project.

### 3.1.3 Survey research

The empirical data collection for this study will be carried out through the use of a survey. Survey research is well suited for the explanation purpose of this study (Pinsonneault & Kraemer 1993: 79-80) because enables the description of the typical pattern of the phenomenon under investigation and to have a good understanding of the likely degrees of variation among the case companies (Easterby-Smith et al. 2002: 37-38). The central features of a survey are the use of a fixed, quantitative design, the collection of a small amount of data in standardized form from a relatively large number of individuals, and the selection of representative samples of individuals from known populations. The practical instrument used in this study for conducting the survey is a questionnaire, which also is the mostly used research instrument for surveys (Robson 2002: 229-230). Self-completion questionnaires as used in this study are favorable in that they are easy and quick to answer and administer, do not suffer from interviewer effects, and are very convenient for respondents since they can answer them when they want and at their own speed, which can increase the chance of respondents giving optimal answers (Bryman & Bell 2007: 241-242).

It is though important to keep in mind that surveys only can detect associations between variables, but not the absolute reasons for their interdependency. It may also be hard to secure a high degree of involvement among the respondents, ambiguities in or misunderstandings of survey questions may not be detected, respondents can skip
questions or cannot be probed to elaborate on answers with the result of missing data, and you can never be sure who answers the questionnaire. (Bryman & Bell 2007: 242-243; Robson 2002: 231-233) These downsides must hence be accepted as likely hazards that can affect the quality and the intended contributions of the research.

### 3.2 Methods of data collection

This section presents the specific methods and individual techniques of data collection that have been used in this thesis, including sampling procedures and design of questionnaire.

#### 3.2.1 Sampling procedure

The unit of analysis in this thesis consists of the chief managing directors of the chosen organizations. This thesis intends to sample widely instead of going for depth in order to provide a sufficient amount of data for being able to drawing statistically significant conclusions and for generalizing the findings among the entire population (Easterby-Smith et al. 2002: 45). The sample used to test the hypotheses of this study was derived from a larger sample of Finnish companies used in a survey that was originally targeted at the 1000 largest firms that are active in Finland in 2009 and that was done within the frames of the Tekes-financed research project as a part of which this study is conducted. In practice, only around 900 of these companies were reached due to outdated contact information. Moreover, out of these 900 companies some appeared to be subsidiaries to non-Finnish companies and did not have any board of directors in Finland, and were therefore excluded from the sample. Responses were received from a total of 92 firms, giving a response rate for the total sample of about 10%. As this thesis focuses on small and medium-sized enterprises, responding companies with up to 500 employees were selected from this sample. The final sample of this study consequently comprises a total of 64 firms.

#### 3.2.2 Questionnaire design

Primary sources of information were collected using a self-completion questionnaire. The questionnaire used in this study is a part of a larger Tekes-financed research project conducted at Hanken School of Economics, which is called ‘The Value-Creating Board’
and studies the role of boards and management teams in maximizing value creation and innovation (Hanken 2009). The questionnaire upon which this thesis relies will hence function as the bottom for other doctoral and master’s theses and academic articles as well. The questionnaire consisted of two separate forms. Background information questions on the company were included in the first form, and the second form contained questions about the board, its inner workings and the firms’ innovation activities. Only parts of the entire questionnaire were used in this particular study, which are displayed in Appendix 1 and 2. Pilot tests were conducted among both researchers and practitioners to assure that the questionnaire was working.

The questionnaire was sent out as a postal questionnaire in January 2009. After two reminders, recipients who had still not answered the questionnaire or who had only answered parts of it were contacted by phone to secure their cooperation in completing the survey. In order to obtain as high a response rate as possible, local research team members also had to use their personal networks in encouraging companies to participate in the questionnaire, implying that the sample was not going to be entirely random (Easterby-Smith et al. 2002: 38), which must be seen as a potential threat to the overall quality and to the intended contributions of the research.

As already pointed out in the previous section, responses were received from a total of 92 firms, giving a response rate for the total sample of about 10%. The issue with low response rates has been a common concern especially with regards to postal questionnaires (Pinsonneault & Kraemer 1993; Saunders et al. 2007). Krosnick (1999: 539-541) though points out that high response rates not always maximize representativeness, and that it not necessarily has to be a concern when evaluating the quality of the research.

### 3.2.2.1 Question types

Relativist studies emphasize the use of standardized questions which means that the same questions are asked of all respondents. This research therefore provides a standardized and structured set of data, from which associations and variations between variables can be established and the results compared for the different respondents (Bryman & Bell 2007: 55; Easterby-Smith et al. 2002: 37-38). The background questionnaire form consists of exclusively factual questions, whereas the questions
regarding board work and innovation activities in the second form are opinion questions. The latter type is useful particularly because there mostly are no correct answers to the issues involved and because people tend to respond to them in different ways (Easterby-Smith et al. 2002: 132-133).

Closed questions that require the respondents to choose among a set of provided response alternatives are favorable in this particular case since the questionnaire is rather lengthy and they are quicker and easier to answer and administer. Most closed questions are in the form of rating questions, collecting opinion data and asking for a response in the form of degree of agreement or disagreement. A seven-point Likert-style rating scale is used (Saunders, Lewis & Thornhill 2007: 372). Krosnick (1999: 544) suggests that, when numbers are used to label rating-scale points instead of words, the numbers should reinforce the meanings of the labeling of the endpoints, rather than communicate conflicting meanings, and the lowest endpoint (1) was labeled ‘disagree’ and the highest (7) ‘agree’.

3.2.2.2 Questionnaire layout

Questionnaires need to be well produced and seem easy to complete, because CEOs in particular seem to be increasingly busy nowadays (Easterby-Smith et al. 2002: 133-134). There is also a clear distinction between respondents giving optimizing answers, in which case they try to generate the most accurate answer according to their own judgments, or they can give satisficing answer, where they are less thorough in their response selection. Satisfying answers may be a result of for example asking unclear and ambiguous questions, distracting events, the motivation of the respondent, beliefs about whether the questionnaire will have useful consequences to the respondent, and fatigue (Krosnick 1999: 546-548). Nevertheless, as mentioned earlier, this questionnaire is rather lengthy because the various researchers participating in the research project wanted to incorporate different parts and measures to match their own particular areas of focus. Respondents giving satisfying answers are hence unavoidable and can affect the quality of this research.
3.2.3 Time horizon

This research is conducted as a cross-sectional study, studying a particular phenomenon at a particular point of time. A cross-sectional design is favorable for the explanatory purpose of this study, as the intent is to describe a population and test relationships within the population at one point of time (Pinsonneault & Kraemer 1993: 82). The time constraints of the academic course in relation to which this thesis is undertaken also affect the possibilities of undertaking a longitudinal study. Nevertheless, a major disadvantage with the cross-sectional research is its inability to observe change and development (Robson 2002: 160-161; Saunders et al. 2007: 148).

3.3 Strategy for data analysis

Quantitative strategies for data processing and analysis were applied for testing the hypotheses. Data on independent and dependent variables were collected by the survey and analyzed with statistical analysis techniques to help to explain the causal relationships as suggested by theory and previous research.

3.3.1 Variables and measures

The research model involves an innovative posture, which is used as the dependent variable, and eight independent variables, which are the board’s strategy role, control role, service role, board behavior, and four board demographic variables. In addition, four statistical control variables are incorporated. All data for the variables were collected from the survey.

3.3.1.1 Dependent variable

This thesis subscribes to a broad view of an innovative posture. Consistently with the frame of reference, strategic planning is an important stage of the innovation process, and successful innovation and entrepreneurship requires the innovation perspective to be effectively integrated into the overall strategy of the firm (Tang 1998). Therefore, to measure the innovation strategy of the firms, respondents were asked if their company has a renewal or innovation strategy, if the company’s main strategic goal is corporate renewal and innovativeness, and if the strategy promotes the company’s renewal and innovativeness.
Furthermore, successful innovation management is also dependent on supporting organizational preconditions that promote both the hard and soft aspects of innovation throughout the entire organization (Wood 2007). This was referred to as the company having an innovative culture or mindset, and the appropriate infrastructure to promote the various processes leading to innovation. To conceptualize an innovative mindset, respondents were asked if their company is innovative, if innovation arises alongside everyday work, and if the company culture and values promote renewal and innovativeness. Measurements of whether the organizational infrastructure promotes innovation included questions about if the company makes significant changes to the organizational structure, if it implements personnel development programs in order to promote creativity and innovations, and if the structures, management practices, operating practice and processes, and expertise within the company promote its renewal and innovativeness.

Consistently with the above reasoning, the operationalization of an innovative posture therefore includes an innovation oriented strategy that was measured with 4 items from the survey (Cronbach’s $\alpha = 0.77$), an organization-wide innovative mindset that was measured with 3 items ($\alpha = 0.67$), and an organizational infrastructure that promotes innovation that was measured with 6 items ($\alpha = 0.82$). The dependent variable ($\alpha = 0.88$) was hence constructed as the mean of these 13 elements. All elements for the dependent variable were measured with a seven-point Likert scale.

In addition, the board’s strategy, control and service roles will also be used as dependent variables in one regression analysis to determine how the behavior of the board influences board task performance. However these roles are also used as independent variables in the other analyses and will therefore be explained in more detail in the following section.

### 3.3.1.2 Independent variables

The board’s strategy role, control role, service role, its behavior and the four board demographic features of board size, insider ratio, director stock ownership, and CEO duality, were used as independent variables.
Strategy, financial control and service

A seven-point Likert scale was used for all the strategy, control, service, and behavior measures. Strategy was measured using a rating scale consisting of the mean of nine items (Cronbach’s α = 0.87). A board was regarded to be involved in its strategy tasks if it in accordance with Stiles & Taylor (2001) to a significant extent participated in making proposals and implementing decisions on a company’s long-term strategies and main goals, supervised the follow-up of decisions related to long-term strategies and main goals, evaluated company acquisitions, restructurings, operational rationalization efforts and new technological solutions, if the content and agenda of board meetings were mainly based on strategic analyses, and if the board focused on preparing future visions and scenarios.

The board’s financial control function was measured using a scale consisting of the mean of seven items (α = 0.69). Financial control mostly encompasses the evaluation of management and business performance against financial objectives (Stiles & Taylor 2001: 64), and the controlling tasks of the board were in this study therefore conceptualized as the board being involved in supervising or controlling the CEO’s and management’s remuneration and the CEO successor, the company’s personnel and recruitment policies, operations, budgets, liquidity, and investments.

Service involvement was measured using a scale consisting of the mean of nine items (α = 0.83). Board involvement in the service tasks mostly encompassed the board as providing management with advice, counsel, and access to the external environment (McNulty & Pettigrew 1999). Specifically, service task involvement was measured as the board having actively assisted management in acting as mentors, forming and utilizing networks and customers relationships, lobbying activities, in identifying business opportunities, in enhancing the company’s public image, in financial arrangements, and by considering and developing future scenarios.

Board behavior

The behavior of the boards of directors was measured using a scale consisting of the mean of 33 items (α = 0.94). Board behavior in this study includes the various aspects of the boards’ decision-making culture and focuses on the inner workings, dynamic processes, actual behavior, and interaction of those who sit on the board (Forbes &
Milliken 1999). The questions about board behavior were based on the work of Huse (2000, 2007) and more specifically involved factors considering the boards’ commitment, cohesiveness, and finally its creativity, criticality, and the presence of cognitive conflict when making decisions and interacting within and around the boardroom. These elements hence together make up the behavioral variable and will be presented in more details below.

When explaining a group’s commitment towards fulfilling a task, involvement and preparation are important in order for boards to be able to govern effectively and ask discerning questions (Fiegener 2005). Board members are hence expected to be well prepared for and mentally engaged in the issues discussed at board meetings. This was measured by asking if the responding companies’ boards spent time on issues essential for the company’s success, considered their tasks to be important and allocated sufficient time for them, were always available when board work so demanded, were well prepared for meetings, actively sought information in addition to information received from the management, always spoke of “us” rather then “them” when referring to the company, considered the company’s success to be their own success, and considered feedback directed at the company to be feedback directed at themselves.

A board’s cohesiveness refers to how openly and generously members use their knowledge and skills, how they handle different viewpoints and if there is a good atmosphere in the boardroom, all of which is essential for effective board meetings (Van den Berghe & Levrau 2004: 654). This was measured by asking if the board members’ strengths were well utilized in the boards’ work, if decisions were set amicably, if members respected diversity and different interaction styles and viewpoints, if members brought complementary perspectives to discussions, got along well and managed to create a good atmosphere in meetings, discussed issues openly and constructively, admitted their mistakes, and helped each other with work.

Boards that are creatively integrating their knowledge, critically questioning managerial suggestions and are characterized by cognitive conflict are likely to constitute an active board that is able to make high quality decisions (Forbes & Milliken 1999; Gabrielsson & Winlund 2000). These features of boards were measured by asking if boards worked using diverse operating practices, were characterized by creative and innovative
solutions and constructive challenging of ideas, beliefs and assumptions, if there were many disputes or tension between members when decisions were made, if the board questioned and strived to improve management proposals, and agreed about the company’s future goals.

Board demographics

Of the demographic variables, board size, insider ratio, director stock ownership, and CEO duality are four of the demographic measures that have been extensively used by previous research to determine board task performance (e.g. Huse 2007). In order to be able to compare their predictive power of both board task performance and the firm innovative posture with the behavioral variable, these four demographic variables are incorporated in this study. Board size was measured as the number of full members of the board of directors the companies had on 1 January 2009. Insider ratio was measured by dividing the number of inside directors by the total number of directors on a company’s board. Director stock ownership was measured by the percentage of directors than own stocks in the company they govern. CEO duality was measured as a dichotomous variable. It was coded 0 when CEO and board chair were separate individuals and 1 when the CEO also served as the company’s board chair.

3.3.1.3 Statistical control variables

In addition to the variables discussed above, the need to incorporate the following control variables to capture firm and governance effects on innovation was recognized: (1) firm size, (2) firm age, (3) mode of government (parent company or subsidiary), and (4) company incorporation (family-owned or not). The mode of government and company incorporation variables were measured as dichotomous dummy variables.

Firm size was included as a control variable because governance and strategic change may be dependent on it, and it is argued that smaller companies are more likely to innovate than larger firms (Acs & Preston 1997). It is also argued to have an effect on board performance (Gabrielsson & Winlund 2000). Firm size was calculated as the logarithm of the total number of employees. Furthermore, during its life cycle, a firm may become stuck in its paradigm and become victim of strategic drift. However, there are also indications that mature businesses can be rejuvenated (Brunninge et al. 2007: 301) and organizational aging has proven that it can have effects on firms’ innovative
outputs (Gabrielsson & Politis 2008: 510). Therefore, firm age was included as a control variable measured as number of years since the corporation was founded.

Subsidiary boards are sometimes seen as formal units with no real function. However, their central role has been highlighted in the literature, as they add value through providing information, understanding and influence over local factors, and they may be expected to have different roles and a different degree of involvement and engagement in the governing of the firm than large firm boards (Kriger 1988). Therefore, whether or not the company was a subsidiary or not was controlled by asking if the company is part of a group. If the answer was yes, it was asked if it is the group’s subsidiary. Likewise family business boards are also expected to have different roles and responsibilities than other boards, because governance issues are more entwined than in large organizations, where the separation of ownership and management is more clear-cut (Brunninge et al. 2007: 296). Company incorporation was therefore also incorporated as a control variable.

3.3.2 Statistical analysis techniques

This thesis aims at exploring relationships between the variables presented above, and the statistical analysis techniques available for this purpose in SPSS for Windows™ that were applied in this study are correlation analysis and multiple regression analysis.

3.3.2.1 Pearson correlation

Pearson product-moment correlation analysis was performed to explore intercorrelations between all variables used in the study in terms of both the strength of the relationship and the direction (Pallant 2007), by calculating simple bivariate correlations. This is an appropriate analysis technique since the data involves both continuous and dichotomous variables. By doing this, information about for example how active involvement by the board in strategy, control and service roles influences the innovative posture of the firm and how the behavior influences board task performance and the innovative posture will be obtained.
3.3.2.2 Multiple regression

Multiple regression analysis was used in several cases to explore the predictive ability of a set of independent variables on one dependent measure (Pallant 2007). For exploring how the board tasks of strategy, control and service predict the innovative posture of a firm, and moreover to find out which of these tasks is the best predictor of a firm’s innovative posture, standard multiple regression analysis was performed. Hierarchical multiple regression was used to assess the impact of board behavior to predict board task performance, after controlling for the board demographic measures. Hierarchical multiple regression analysis was also done to evaluate the ability of the board behavioral variable to predict a firm’s innovative posture, after controlling for the possible effects of the statistical control variables presented in the last section and the board demographic characteristics.

3.3.3 Significance level

In studies as this one where the group size is small, one needs to be aware of the possibility that a non-significant result may be due to insufficient power. Stevens (1986) suggests that when small group sizes are involved, it may be necessary to adjust the alpha level to compensate, in other words set a cut-off of .10 or .15, instead of the traditional .05 level. The sample of this study comprises only 64 companies, and the significance level is therefore set to .10.

3.4 Research methods implications

This study suffers from some limitations related to the quality of the research methods employed, and which are important to identify when evaluating the contributions of this study. First of all when the study was designed, decisions were made about the respondents concerning which persons the questionnaire was to be sent to, and the questionnaire was initially addressed to the CEO and the chairman of the firm. However, responses were obtained mostly from CEOs, and a decision was therefore made not to include the chairpersons’ responses in the final data. Since all the CEOs in the final sample are not part of the board of directors, it must be recognized that it would be valuable to have a second survey response from another member of the board,
such as the chairman of the board, in order to avoid measurement bias in the evaluation of the performance of the board. In fact, Huse (2000) once used a dyadic approach studying differences in CEOs’ and chairpersons’ responses and discovered that chairpersons usually gave higher evaluations on all board role measures than the CEOs did. Therefore, when interpreting the results from this study this limitation has to been kept in mind.

The low response rate of the study may also have affected the research findings and it may be difficult to generalize the findings beyond the research context. Moreover, the lengthy nature of the questionnaire might have affected the validity of the study since recipients may have tended to give satisficing instead of optimizing answers because they did not find the time or the energy of completing the questionnaire in a careful way. This can result in missing information because information about respondents’ actual opinions and feelings are not obtained.
4 Analysis and Results

This study aims at testing hypotheses of the influence of boards of directors on small and medium-sized Finnish firm’s commitment to innovation and entrepreneurial efforts. This chapter presents the analysis of the empirical data obtained from the self-completion questionnaire. The hypotheses are tested with the analysis software SPSS for Windows™. First, some descriptive statistics on the sample and research results will be presented showing demographics of the firms, their innovation activities, board task performance, and behavioral and demographic features of the boards. Relationships between all variables in the study will be presented in order to display associations and the strength and direction of these associations between the variables.

Thereafter, relationships between the boards’ strategic, controlling, and service roles and the firm’s innovative posture will be presented to find out how the different board tasks relate to the innovative efforts of the firm. Tests will also be performed on the influence of the board behavioral variable on the three board roles in order to find out if the behavioral approach is appropriate when studying board task performance and if it is able to explain how boards actually go about their tasks and responsibilities. The innovative posture will then be related to the behavior of the board to observe if board behavior has a direct impact on the firm’s innovation and entrepreneurial efforts. Comparisons between the board demographic and behavioral approaches will be made in order to find out if the recent trend towards exploring behavioral features of boards can yield interesting findings among Finnish SMEs as well and to see if board behavior is a better proxy of board task performance and the firm innovative posture than the traditionally used observable demographic features of boards. These results will then be aggregated in order to answer the purpose of the study, which is to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland.

First, a correlation analysis was conducted to explore the intercorrelations among the variables in this study. The hypotheses were then tested by multiple regression analysis. For testing hypotheses 1 through 3, where we have a continuous measure as the dependent variable and several continuous independent variables, standard multiple
regression analysis was considered to be an appropriate statistical technique because it enables comparisons of the contributions of each independent variable in order to determine which independent variable makes the largest prediction to the dependent one. Hierarchical multiple regression analysis was used to test hypotheses 4 through 7 because it enables the assessment of the impact of different sets of independent variables on a dependent variable and to control for the effects of certain other measures.

4.1 Descriptive statistics

Table 1 reports descriptive statistics for all variables used in this study, involving means, minimums, maximums, standard deviations, number of cases, and skewness for the 64 firms in the final sample. The distribution of firm size measured as number of employees ranged from five to 500 employees, with a mean of 211 employees. The right-skewed distribution moreover shows that there are many small firms among the responding companies. Companies had an average age of 47 years, the youngest company being three and the oldest 189 years old, skewness indicating that the sample involves more younger than older firms.

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<tr>
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</tbody>
</table>

* Dichotomous dummy variable

Table 1 Descriptive statistics for all variables
Concerning board demographic features, boards of these companies had a mean of 5.9 directors, ranging from 3 to 24 member boards. The reported mean and the positive skew indicate that many of the surveyed companies’ boards have quite few members. 12% of these companies’ board directors were employed by the firm (executive directors). In addition, 25% of the directors owned shares in the company they governed, and in 35% of the companies the CEO was a member of the board of directors. About one half of the firms (46%) were subsidiaries, and 21% of the firms in the sample were family-owned. The quite large amount of subsidiary boards in this sample can be expected to influence the findings on board’s roles and effectiveness examined in this study (e.g. Brunninge et al. 2007).

On a seven point Likert-scale, where 1 stood for low and 7 for high degree of involvement, companies showed an average score of 4.76 concerning their innovative posture (IP), which is above the mean, indicating that Finnish small and medium-sized companies are consciously engaged in innovative thinking and promote entrepreneurial efforts throughout their organizations. Moreover, the lowest score on IP was 3 and the highest 7, revealing that all companies are to some extent engaged in innovative activities. Out of the three board roles strategy, financial control and service, the responding companies’ boards seemed to be mostly involved in financial control, and least involved in the service activities. Moreover considering the negative skew and the fact that no board scored either 1 or 2 on financial control, Finnish SME boards seem to be to a large extent involved in monitoring management and corporate performance against different financial objectives. This is an interesting finding, since financial control was in this study expected to deemphasize innovative efforts rather than to keep the management team glued around an entrepreneurial agenda.

No board showed very high degree (7) of involvement in the service task, contrary to strategy and financial control involvement, which both received some very high scores (7). No single board scored 1 on strategy involvement, indicating that all boards are to some extent involved in reviewing and ratifying management proposals against strategic objectives and being a full partner in developing the content of the company strategy. Negative skew of the distributions of scores for both strategy and service indicated that boards are quite highly involved in activities such as making proposals and decisions concerning long-term strategies and goals, evaluating mergers and acquisitions, making
strategic analyses, acting as mentors to management, and forming and utilizing relationships with external parties.

According to the seven point Likert-scales used in the questionnaire, board activity in the strategy, financial control and service roles was then divided into low (1-2), mid-level (3-5), and high (6-7) involvement according to the scores on the scale of each case. In general, firms showed mostly mid-level or high involvement in the strategy, financial control and service tasks. Out of these three roles, boards moreover seemed to be most actively engaged in financial control, 63% out of all the surveyed corporate boards being highly involved in financial control (i.e. scoring either 6 or 7 on the Likert-scale). 44% of the boards were highly involved in strategy, and 28% were highly involved in the service role. Only 4% of the companies had a board with low involvement in strategic issues and respectively only 3% had a board with low involvement in service tasks (i.e. scoring either 1 or 2 on the scale). No single board displayed low involvement in financial control. Boards of Finnish small and medium-sized enterprises hence seem to be mid-levelly or highly involved in their strategic, financial control, and service tasks, being mostly involved in financial control and least involved in service activities. Responding company boards furthermore seemed to have a positive boardroom culture, scoring in average 4.9 out of 7, no company board showing low scores in board behavior.

4.2 Correlations

The relationships between the various variables involved in this study were investigated using Pearson product-moment correlation coefficient. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Table 2 displays intercorrelations among the study’s variables as a result of the correlation analysis. The correlations provide good initial support for some of the hypotheses in this study.

4.2.1 Board tasks and innovation

All three board tasks showed positive correlations with IP, indicating that higher involvement by the board of directors in any of the three roles is associated with a higher degree of IP of the firm. There was a positive correlation between strategy and IP
Table 2: Correlation matrix

<table>
<thead>
<tr>
<th></th>
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<th>10</th>
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<th>12</th>
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<td>-</td>
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<td>Strategy</td>
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<td>-.007</td>
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<td>.116</td>
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<td>-.211</td>
<td>-.036</td>
<td>.129</td>
<td>-.136</td>
<td>-.320*</td>
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<td>.062</td>
<td>.013</td>
<td>-.118</td>
<td>-.043</td>
<td>-.158</td>
<td>-.028</td>
<td>-.039</td>
<td>.014</td>
<td>-.220</td>
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<td>Director stock ownership</td>
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<td>-.085</td>
<td>.375*</td>
<td>-.159</td>
<td>.025</td>
<td>.328*</td>
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<td>.046</td>
<td>.212</td>
<td>-.102</td>
<td>-.066</td>
<td>-.056</td>
<td>.072</td>
<td>-.198</td>
<td>.508***</td>
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Pearson correlation coefficient *p < .05 (2-tailed). **p < .01 (2-tailed)
(r = .47), a strong, positive correlation between financial control and IP (r = .50), and a positive correlation between service and IP (r = .45). Of the three board roles, financial control hence seems to be most strongly correlated with IP and hence most able to predict the firm’s emphasis on innovative activities, whereas the service role seems to be the one that is least affecting the IP of a firm. These are interesting findings because boards that are highly involved in financial control are generally expected not to encourage innovative and visionary thinking among managers, whereas strategy and service involvement by the board usually are considered strong proxies of entrepreneurship and innovation outcomes (Huse 2007: 278).

In the correlation matrix, strong positive intercorrelations were also found between strategy, control, and service. In other words, boards that are involved in one of the three board roles are also to some extent involved in the other roles. This is not surprising, since active boards will probably be active in all tasks, and will hardly perform them selectively (Minichilli et al. 2008: 65). In particular, the correlation between strategy and financial control was the highest (r = .68), showing that boards that are highly involved in strategy related tasks are also to a high degree involved in financial control of management and business operations, and vice versa. A cross-tabulation moreover found that the main proportion of the sample (47%) was having about the same level of involvement in the strategy, control and service roles, more explicitly either mid-level or high involvement in all roles. 20% of the surveyed companies displayed high board involvement in all three tasks simultaneously, and 27% displayed mid-level involvement in all tasks at the same time. 45% showed high involvement in one or two tasks, and mid-level involvement in one other or two other tasks. Only one company displayed low board involvement in one role and high involvement in another role.

These findings point towards that the boards of Finnish small and medium-sized firms generally are involved to about the same degree in strategy participation, financial control of management and company operations, and service tasks such as mentoring and utilizing networks, although exhibiting somewhat higher involvement in financial control than in strategy and service. Boards moreover seem to have acknowledged the necessity of using their potential and making a contribution to the management and direction of the company, instead of just being ‘paper boards’ existing for legal reasons
only. No single board namely showed low involvement in all of the three roles simultaneously, indicating that Finnish SME boards indeed generally are not ‘low or no activity boards’ composed mainly to meet legal demands as recognized above, but instead may be considered to have rather functioning boards, as they are either mid-levelly or highly involved in ratification and monitoring of strategic issues, providing advice and counsel to management and controlling the operations of the firm (92% of the sample). However, the results show that the main proportion of boards is still only mid-levelly involved in some tasks, and there hence seems to be some unutilized potential among boards of directors in Finnish SMEs.

4.2.2 Board behavior

IP was also strongly correlated to board behavior \( (r = .51) \), suggesting that the more positive the boardroom decision-making culture, the higher the firm’s entrepreneurial efforts. The traditional board demographic variables of board size, insider ratio, director stock ownership, and CEO duality did on the other hand not reveal any significant findings in relation to IP, and hence do not seem to be able to predict the entrepreneurial posture of a firm. These results support previous empirical findings that suggest that board demographics are not enough to assess board outcomes and that board behavioral aspects should me more integrated into research on boards and governance (e.g. Forbes & Milliken 1999; Gabrielsson 2007).

Board task performance also seemed to be significantly related to the behavior of the board. There was a strong, positive relationship between strategy and behavior \( (r = .73) \), and between service and behavior \( (r = .70) \), suggesting that a positive boardroom culture leads to higher involvement by the board in its strategy and service roles. A positive correlation, although not as strong as the correlations with the strategy and service roles, was also found between financial control and board behavior \( (r = .48) \), indicating that a more positive boardroom culture is also associated with higher board involvement in financial control tasks. Consequently, how involved the board is in its strategy, financial control, and service roles seems to be largely dependent on the process-related features and inner workings between directors that take place within the boardroom.
4.2.3 Other correlations

The correlation matrix showed some other interesting correlations as well. Innovative posture was negatively associated with firm age \((r = -.29)\), suggesting that younger firms are more entrepreneurially oriented than older firms. Interestingly, younger firms also seem to be more characterized by board involvement in financial control and service tasks than older firms. No correlations were found between firm size and any of the other variables, indicating that the findings do not vary between small firms and medium-sized firms. Findings did not either vary among subsidiary and non-subsidiary firms, or family-owned and non-family-owned firms. In addition, correlation findings revealed that firms with boards that have many executive directors also have many directors that own stocks in the company, and more often have boards that are characterized by CEO duality.

4.3 Regression analyses

Standard multiple regression was used to assess the effects of board task performance on a firm’s innovative posture. Hierarchical multiple regression was used to test how the board’s behavior and working style influences the performance of its various board tasks and how it is related to the innovative posture of the firm. Hierarchical multiple regression was also used to compare the effectiveness of the board demography versus the board behavioral approach in evaluating actual board task performance and a firm’s innovative posture.

4.3.1 Board task performance and innovation

Standard multiple regression was used to test hypotheses 1 to 3 and thus to assess the ability of board involvement in strategy, financial control, and service to predict levels of a firm’s innovative posture, or in other words, how board task performance can affect the innovative efforts made by a firm’s management team. IP was used as the dependent variable and the three board roles (strategy, financial control, and service) were used as independent variables. The results of this analysis are presented in Table 3, including \(R^2\) and adjusted \(R^2\). Preliminary analyses were conducted to make sure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. The total
variance in IP as explained by the model was 26%, and the model reaches statistical significance at $p < .001$. Of the strategy, financial control, and service roles, only financial control makes a statistically significant unique contribution at the .10 level with a beta value of .29, showing a unique contribution of 4% to the explanation of variance in IP. Strategy ($\beta = .16$) and service ($\beta = .19$) did on the other hand in this model not help to predict the dependent variable even at the .10 level.

<table>
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<tr>
<th>Dependent variable</th>
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</tbody>
</table>

*Note: The table reports partial standardized coefficients (Beta), multiple $R$, $R^2$, adjusted $R^2$ and significance levels.*

$p < .10$, and $*** p < .001$

**Table 3 Standard multiple regression**

Contrary to hypothesis 1, there was thus no statistically significant unique contribution found by the strategy role to a firm’s IP. Similarly, the results for testing hypothesis 3 showed no unique contribution of the service role to the IP of a firm either. There was consequently no support for the variables that were expected to make the main contributions to a firm’s innovation and entrepreneurial efforts. Previous research has namely found that strategy and service are strongly linked to the firm’s innovation activities, especially for small and medium-sized firms (e.g. Forbes & Milliken 1999; Huse & Landström 2001; Van den Heuvel *et al.* 2006). Boards are expected to enhance the firm’s capacity for innovation and entrepreneurship by for instance motivating managers and employees and ensuring that operations match the strategic concept (Stiles & Taylor 2001) and by providing access to important human resources and competences that are crucial for strategic change, but these findings give no support to these arguments. In a study Huse (2007) even found that strategy participation was able
to make the greatest degree of board contribution to internal innovation, but these findings show no support for these arguments and hence do neither support nor deny the arguments. Hence, due to lack of significance, the hypotheses can neither be accepted nor rejected.

However, and contrary to what was hypothesized, active board involvement in financial control was by the results suggested to improve the innovative posture of the firm, thus making board financial control the only board role that seems to be able to predict the IP of Finnish SMEs. This is also supported by the results in the correlation matrix presented in Table 2. These findings were thus not consistent with the hypothesis proposed by the research model, which suggested that extensive involvement by the board in financial control would disorient management’s foci from innovation and entrepreneurial objectives towards more short-term goals (Van den Ven 1986). Hypothesis 2 is therefore rejected. Financial control is therefore the only board role that could be related to the innovative posture of the firm, the results indicating that the more the board is supervising and controlling the CEO’s remuneration, the selection of his or her successor, the company’s personnel and recruitment policies, and comparing performance against financial objectives such as operations, budgets, liquidity, and investments, the more entrepreneurially oriented are management and the company as a whole.

4.3.2 Board behavior and task performance

Hierarchical multiple regression analysis was conducted to test hypothesis 4, which predicted that positive board behavior is positively associated with board task performance. It was also used to test hypothesis 6, which predicted that board behavior is a better proxy of board task performance than traditional board demographics. The regression analysis also gives an indication of which board task is most influenced by the behavior of the board. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. The analyses were realized considering three different models for each of the board tasks presented and with three different dependent variables in order to assess the influence of a set of independent variables on each dependent variable.
Table 4 Hierarchical multiple regression I

Table 4 shows the results of the performed regression analyses. The variables were included in two steps for each analysis so that the separate effects of the demographic variables and the behavioral variable could be identified. First, the traditional demographic board measures of board size, insider ratio, director stock ownership, and CEO duality were included in each analysis with strategy, financial control and service as the dependent variable (step A). This step is presented as I in Table 4. Then the behavioral variable was included (step B) in each analysis as II. The table presents standardized beta coefficients for each variable and R², adjusted R² and change in R². The differences in adjusted R² and change in R² between I and II are displayed by the table, and, as can be seen, the demography variables did not explain much of the variation in any of the three board roles, and the models were not significant. Instead, it is when the behavioral variable is entered that one can explain some of the variations in board task performance. Of the different analyses for the three board tasks, board behavior seems to explain a full 63% of the variation in board strategy involvement, 31% in financial control involvement, and 47% in board service involvement. Boards’ strategy participation hence seems to be the role that is most positively related to board

<table>
<thead>
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<th>Service</th>
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<td>I</td>
<td>II</td>
<td>I</td>
</tr>
<tr>
<td>A Demographic variables</td>
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Note: The table reports partial standardized coefficients $\beta$, multiple R, R², adjusted R², R² change and significance levels: * $p < .10$, ** $p < .05$, *** $p < .01$, and **** $p < .001$
behavior, indicating that a board with a positive boardroom decision-making culture will be mostly engaged in strategic tasks and least engaged in financial control tasks.

The board demographic variables hence provided only limited explanations of board task performance. In the second model (II) of the analysis where strategy is used as the dependent variable, board size showed a positive relationship (.34) with strategy involvement. This finding thus suggests that a larger board will be more involved in strategic issues than boards with a few members. Insider ratio also showed a significant relationship with strategy involvement, suggesting that as the number of executive directors on the board increases, the board will be more involved in strategy related activities. Board size also seems to be positively related to financial control. Larger boards hence seem to rely slightly more on financial measurement of performance and operations than smaller boards. However, these were the only significant findings concerning the relationship between board task performance and demographic features of the boards of directors.

The general findings from this regression analysis support the argument in hypothesis 4 predicting that board behavior is positively associated with board task performance. Hence when the boardroom culture is positive and constructive, the board seems to be more engaged in monitoring and ratifying strategy, controlling management and performance against financial measures, and supporting management with various service activities. The behavioral approach to studying boards and governance also receives support from these findings, in contrast to the approach relying on board demographics. Hypothesis 6 was therefore also accepted. Board behavior hence seems to be an important factor when it comes to evaluating how involved the board is in its strategy, financial control, and service roles and moreover how well it performs these tasks. Dependent on how the board as a group behaves and interacts together within the boardroom, it will be differently involved in the tasks and roles that it is prescribed to. It furthermore seems that when the working style of the board is positive, the board’s involvement in strategy and thereafter in service increases the most, and involvement in financial control is the least affected.
4.3.3 Board behavior and innovation

Hierarchical multiple regression was also used to test hypotheses 5 and 7 and thus to assess the ability of different sets of independent variables to predict levels of a firm’s innovative posture, after controlling for the influence of firm size, firm age, whether or not the company is a subsidiary, company incorporation, and moreover to compare the demographic and behavioral approaches in relation to the innovative posture of the firm. Table 5 displays the results from this analysis. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Equation I</th>
<th>Equation II</th>
<th>Equation III</th>
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<tbody>
<tr>
<td>A Control variables</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Firm size</td>
<td>.105</td>
<td>.128</td>
<td>.344+</td>
</tr>
<tr>
<td>Firm age</td>
<td>-.021</td>
<td>-.022</td>
<td>-.248</td>
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<tr>
<td>Subsidiary</td>
<td>-.095</td>
<td>-.078</td>
<td>.019</td>
</tr>
<tr>
<td>Company incorporation</td>
<td>-.046</td>
<td>.021</td>
<td>-.133</td>
</tr>
<tr>
<td>B Demographic controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board size</td>
<td>.130</td>
<td>.314</td>
<td>.294</td>
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<tr>
<td>Insider ratio</td>
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<td>Director stock ownership</td>
<td>.071</td>
<td>.174</td>
<td></td>
</tr>
<tr>
<td>CEO duality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Behavioral variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>.720**</td>
<td>.023</td>
<td>.042</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>.023</td>
<td>.042</td>
<td>.433**</td>
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<tr>
<td>( \text{Adj } R^2 )</td>
<td>-.116</td>
<td>-.277</td>
<td>.211</td>
</tr>
<tr>
<td>( \text{Change in } R^2 )</td>
<td>.023</td>
<td>.019</td>
<td>.391</td>
</tr>
</tbody>
</table>

Note: The table reports partial standardized coefficients \( \beta \), \( R^2 \), adjusted \( R^2 \), \( R^2 \) change and significance levels + \( p < .10 \), * \( p < .05 \), ** \( p < .01 \), and *** \( p < .001 \).

Dependent variable: Innovative posture

Table 5 Hierarchical multiple regression II
The variables were included in three steps into the regression analysis so that the separate effects of the control variables, the demographic variables, and the behavioral variable could be identified. First, the statistical control variables of firm size, firm age, subsidiary, and company incorporation selected for this study were included (step A) to control for their potential influence on the IP. Then the board demographic variables of board size, insider ratio, director stock ownership, and CEO duality were included (step B) to test their predictive power with respect to the innovative posture of the firm. These two steps are presented as Equations I and II. Finally the board behavioral variable was included (step C) as Equation III.

In Table 5, the final regression model (Equation III) shows that of the four statistical control variables only firm size shows a significant positive association with innovative posture ($p < .10$). Larger firms do according to these results consequently seem to have a higher degree of innovative posture than smaller firms. The findings hence suggest that IP varies across firms of different sizes, or more specifically across small or medium-sized firms. The other control variables of firm age, if the firm is a subsidiary or if it is a family-owned company did here on the other hand not help to explain any of the variance in IP in small and medium-sized companies in Finland.

The model as a whole reached statistical significance at the .001 level only in the final equation when the behavioral variable was included (Equation III), and the behavior variable thus offers strong explanatory power with regards to the innovative posture of a company. After entry of the behavior variable (step C) the total variance explained by the model as a whole was 21%. The behavioral variable explained an additional 39% of the IP variance after controlling for the effects of firm size, firm age, whether or not the firm is a subsidiary, if it is family-owned, and the board demographic features. In the final model, only the firm size and behavioral measure were statistically significant, with the behavior scale recording a higher beta value ($\beta = .72$) than the firm size scale ($\beta = .34$).

One can hence conclude that there is a direct relationship between board behavior and a firm’s IP, when the possible effects of the control variables and the demographic variables are controlled for. Hence, when the boardroom culture is positive and constructive, the firm is more engaged in entrepreneurial thinking and innovation
activities. In addition, this analysis also gives additional support to the arguments that board behavioral aspects are a better predictor of board task performance than are the traditional demographic features of the board and its members. These results consequently seem to support the general arguments for hypotheses 5 and 7, which were both based on the board behavioral approach.

As can be seen, the four traditional measures of board task performance (board size, insider ratio, number of directors, and CEO duality) included in the model in step B did not help to explain any of the variation in the dependent variable and therefore appear to be weak proxies of actual board task performance. Instead, it seems that it is with the board behavioral variables that one can explain some of the variations in board task performance. Hence, it appears to be when one ‘opens up’ the ‘black box’ with the working style variables that one can explain some of the variations in the innovative posture of the firm, instead of by focusing on aspects such as how many members sit on the board or if the CEO is a member of the corporate board or not. These findings are supported by previous empirical research by for example Forbes & Milliken (1999), Gabrielsson & Winlund (2000), Huse (2000, 2007), and Van den Berghe & Levrau (2004).

4.4 Summary of findings

The research findings provided support for four out of seven hypotheses in this study. The other three hypotheses were either rejected or could not be supported because the tests did not reach statistical significance. The hypotheses were supported or not supported as follows.

H1 The results show that there was no significant relationship between board strategy involvement and the firm’s innovative posture. Hypothesis 1 was thus not supported.

H2 Contrary to the initial expectations, board involvement in financial control showed a positive significant relationship with the innovative posture. Consequently, hypothesis 2 was not supported.
$H3$ There were no significant relationships between the board’s service task involvement and the innovative posture of the firm. Hypothesis 3 was not supported.

$H4$ Positive significant relationships were found between board behavior and board task performance with regards to strategy, control and service involvement. Hypothesis 4 was supported.

$H5$ There was a strong, positive significant relationship between board behavior and the innovative posture of the firm. Hypothesis 5 was supported.

$H6$ Board demographic characteristics showed only limited predictive power in understanding how boards of directors perform their tasks, while the board behavioral variable indicated a strong positive association with board task performance. Hypothesis 6 was supported.

$H7$ A positive significant relationship was found between board behavioral and innovative posture and no significant relationships were found between the board demographic variable and the innovative posture. Board behavior is thus a better predictor of IP than board demographic characteristics, and hypothesis 7 was hence supported.
5 Discussion

The objective of this research was to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland. An innovative posture was conceptualized as firms having strategies and objectives concerning innovation and entrepreneurship, an organization-wide innovation-oriented culture or mindset, and an organizational infrastructure that promotes innovation. Based on literature and research on board roles and task performance (e.g. McNulty & Pettigrew 1999; Stiles & Taylor 2001), board roles were divided into a strategic, a controlling, and a service role. Board behavior referred to features of a board involving its commitment, cohesiveness, criticality, creativity, and the presence of cognitive conflicts (Huse 2007).

To reach the purpose of the study, the relationships and the strengths and directions of the relationships between various board and innovation related variables have been examined with statistical analyses on a sample consisting of 64 small and medium-sized Finnish companies. The first set of hypotheses predicted the board roles’ impact on innovation. The second set of hypotheses was based on the behavioral approach to boards and governance and predicted the influence of board behavior on board task performance and the innovative posture of the firm. However, the findings only partly supported the research model proposed in Figure 2. Four of seven hypotheses received support. First and foremost, the empirical evidence from this thesis gave ample supports for the arguments that boards can have considerable influence on the innovation activities of the firm they govern, and second that there is a need to turn towards exploring behavioral aspects of boards and governance in order to be able to assess actual board task performance. A more detailed discussion of the findings will now follow, together with a consideration of the study’s limitations.

5.1 Board role involvement and innovation

Extensive research emphasizes that a strong and vigilant board can have significant positive influence on the value-creating potential of SMEs by favoring strategic renewal and innovation throughout the whole organization (e.g. Gabrielsson 2007; Huse 2000; McNulty & Pettigrew 1999; Zahra et al. 2000). The roles of directors have also
frequently been found to be positively related to the extent of innovation (Bennett & Robson 2004: 96). Three key roles of the board were examined and related to the innovative posture of the firm so as to examine which of these roles influence the innovative behavior of a firm and furthermore how they influence it. The overall findings support the expectations that active board role involvement has an impact on the innovation outcomes of small and medium-sized firms in Finland. As can be seen in the correlation matrix in Table 2, active task performance of strategy, financial control and service seems to play an important role in influencing and determining the companies’ organizational stance in innovation and entrepreneurship, displaying positive relationships between all three board tasks and innovation.

However, when put into a regression analysis, which is presented in Table 3, only financial control showed a unique significant association with the innovative posture, suggesting that financial control is the only board role that alone can explain variations in the innovative posture of a firm. The only persistent result concerning the different board roles and their impact on innovation hence seems to be that financial control is a key variable in increasing board contribution to innovation. This constitutes an interesting finding since among others Huse & Landström (2001: 24) reason that smaller firms do not need an active board for control purposes and therefore should focus more on service and strategic activities. Nevertheless, especially SME boards are often mostly involved in controlling and monitoring performance against financial measures and generally show lower involvement in other than these financial duties (Brunninge et al. 2007: 297; Huse & Landström 2001: 45), which is also supported by the findings presented in Table 1 and Table 3.

5.1.1 Financial board control and innovation

The main problem of applying financial and operational principles of control to promote innovation is often seen as that of dealing with the unknown (Garielsson & Politis 2008: 513). There was, however, no support for the hypothesis that higher board involvement in financial control would be negatively associated with the entrepreneurial posture of the firm. On the contrary, a positive correlation between the two variables was found, hence suggesting that actively exhibiting financial control mechanisms is important for boards’ ability to contribute to the entrepreneurial stance of the firm they govern. The
results are interesting, because financial controls are generally expected to deemphasize the firm’s emphasis on a creative and innovative organizational culture (Huse 2007: 282). It is argued to shift the focus of management away from visionary thinking and creativity and may emphasize short-term thinking because it necessarily involves financial targets, which is expected to dampen innovation (Roberts et al. 2005: 10).

Gabrielsson & Politis (2008) also contrary to their expectations found a positive correlation between financial board control and organizational innovation, and suggest that the findings may be explained by the fact that efficient financial controls can generate increased potentialities for slack resources, which again can be imperative for innovation. The rather broad conception of financial control used in this study – encompassing board involvement in decisions related to company operations, budgets, liquidity, investments, and personnel and recruitment policies, CEO remuneration, and selection of CEO successor – could also explain part of the results. Furthermore, in SMEs, board control is argued to reduce the risk that the CEO pursues personal or family interests over business goals, and managers can instead be encouraged to direct more efforts towards entrepreneurial activities (Bennett & Robson 2004), which may also be an explanation for these findings. The latter argument is especially true for small and family-owned firms with few employees with close ties, and since the sample of this study consisted of many such firms (see Table 1), this could also partly explain the results.

According to Minichilli et al. (2008: 70), boards are likely to place emphasis on some board tasks according to the contingencies the firms are experiencing, such as firm size or firm life-cycle. Variations in context may thus have considerable influence in the dynamic interplay of board practices, processes and performance over time. The research findings may thus also be a result of that the consideration of budgets, plans and projects and other financial measures is something that boards carry out all the time, irrespective of what goes on in a firm’s environment. Strategy involvement and use of advice and counsel, on the other hand, are activities that tend to be greater at those points in the life-cycle of a firm that involve strategic transitions or in times of crisis (McNulty & Pettigrew 1999: 67). Hence, the firms in the sample might not right now be experiencing such contingencies requiring additional involvement in strategy or service related tasks. However, the ideal is still a board that is actively and constantly engaged
in its roles, not only from time to time when circumstances so demand (Hendry & Kiel 2004). This might hence be a reason why financial control appears to be most clearly associated with the firm innovative posture. However, these are only speculations which provide several new avenues for exploring the relationships between financial board control and entrepreneurship in future research.

### 5.1.2 Strategy, service and innovation

Board strategy involvement and the various service tasks available to the board are generally expected to encourage innovation – it is even stated that the greatest degree of board contribution to innovation is expected to be through its strategy involvement (Huse 2007). Nevertheless, the findings presented in Table 3 suggest a lack of clear relationships between strategy and service on the one hand and the innovative posture on the other hand among the surveyed companies. Strategy and service were expected to be the strongest predictors of a firm’s innovative efforts, but these findings hence suggest the opposite.

The counter-intuitive findings may be explained by the fact that boards of Finnish SMEs do not participate enough in strategy or service related tasks, or in other words to as high a degree as is frequently advocated by theorists and researchers. As displayed in Table 1, boards were most involved in financial control and less involved in strategy and service. Consequently, when boards are only little involved in a specific task, it is hard to determine if the involvement in this task actually has an impact on another factor, which here is the innovative posture of the firm. If the surveyed boards would be more involved in their strategy and service roles, it might hence probably have an influence on the innovative posture of the firm, as has been widely advocated by previous research within the same subject field (e.g. Forbes & Milliken 1999; Gabrielsson & Politis 2008; Huse 2007; Stiles & Taylor 2001). If they on the other hand are not involved in these tasks, it will logically not have an impact on the innovative posture.

It has been found that SME boards in general tend not to play an active role in governing the firm, and in particular when it comes to strategy formulation (Fiegener 2005: 627). According to the findings from this study, the situation seems to be the same concerning the board’s service tasks. Although it is often argued that especially
small firms are in greater need of a board that performs its service tasks well, including to act as a sounding board and a source of advice to ease decision-making (Huse 2007: 110), Finnish SME boards do not seem to be characterized by enough service involvement. This is supported by previous research that found that boards of smaller firms in other national contexts often have a more formal role and are more involved in operational control tasks than providing managers with advice and counsel (Bennett & Robson 2004).

This study therefore provided only limited support for the argument that strategy and service involvement by the board improves the innovative posture of the firm. Although Table 2 shows relationships between strategy and service on the one hand and IP on the other hand, the regression analysis in Table 3 did not reveal any associations between these variables. Hence, by getting more involved in their strategy and service roles, these boards might have greater potential to contribute to the entrepreneurial posture of the firm. It has in fact frequently been suggested that the role of the board should be more influential and decisive in smaller firms (Bennett & Robson 2004: 95). The low response rate of this study could also have influenced the results. Another possible explanation for the findings may be that the established dimensions of board tasks related to strategy and service may be too roughly defined, and that the lack of significance may be overcome by refining the definition of board strategy and service role involvement (Minichilli et al. 2008: 69). However, these are mere speculations that provide interesting opportunities for future research in this area.

**5.2 Behavioral aspects of boards**

Mainstream research on how boards of directors contribute to the direction and performance of companies has generally used observable board demographic characteristics as proxies for board’s ability to undertake the responsibilities put upon them (Huse 2000). In opposition stands a growing number of researchers and studies that argues for the need to more closely study behavioral processes that take place inside and outside the boardroom in order to better understand the linkages between boards and actual performance (e.g. Huse 2007; Roberts et al. 2005). Empirical studies comparing the two approaches are however still surprisingly scarce (Gabrielsson 2007), something which highlights part of the contribution of this study.
In support of arguments from researchers adhering to the behavioral approach in the study of boards and governance (e.g. Forbes & Milliken 1999; Gabrielsson & Winlund 2000; Huse 2000; Roberts et al. 2005), the empirical research findings show that the working style of the board seems to be positively associated with both the innovative posture and board task performance in small and medium-sized companies in Finland. The board behavioral variable hence offered good explanatory power with regards to both board task performance and the firm innovative posture. Consequently, the evidence from this study confirms the arguments that there is a need to go beyond the widespread practice of investigating observable board characteristics as proxies for the ability to perform board tasks effectively. The importance of opening the ‘black box’ in board research as suggested by Huse (2000, 2005) by addressing the working style and the decision-making culture of the group of individuals that make up the board of directors should thus be emphasized.

5.2.1 Board working style and task performance

Minichilli et al. (2008) also found that the set of board demographic characteristics has limited predictive power in explaining how boards perform their strategy, control, and service roles and state that there is a need to reconsider the antecedents of board task performance. The empirical findings from this study clearly suggest that the working style of the board is a strong proxy of how involved boards are in monitoring and ratifying strategy, providing managers with advice and counsel and controlling management and business operations by financial means. Table 4 displays that especially strategy and service involvement are strongly influenced by the boardroom culture, and financial control as well but not to as high a degree as the strategy and service tasks. Hence, a board with positive board behavior is more likely to be largely involved in strategy and service, and less in financial control. Moreover, as was explained above, the findings from this research may suggest that Finnish SME boards are not enough involved in their strategy and service roles. Committing efforts to creating positive board behavior could therefore be a useful way of getting the boards more active in terms of strategy and service, and thereby potentially make a greater positive contribution to the innovative posture of the firm.
Consequently, board behavior seems to be a more powerful antecedent of board task performance than board demographics when studying Finnish SMEs as well. The findings suggest that boards of directors should carefully consider the importance of creating a process-oriented boardroom culture which favors board members’ commitment to board activities, their cohesiveness, and their criticality, creativity in decision-making and cognitive conflicts in order to be more effective in the completion of their tasks and responsibilities, especially with regards to strategy and service. However, as explained previously, these board tasks were in turn not as clearly related to the innovative posture of a firm as was expected by the research model.

In general it can be considered important that boards become more involved in and committed to their various duties in order to be more effective, and not constitute ‘paper boards’ that exist only for legal reasons and not take an active role in governing the operations of the firm. Nevertheless, the findings from the regression analysis presented in Table 3 suggested no clear relationships between all board tasks and innovation. Although positive board behavior thus is associated with better board task performance, this study provides no clear evidence of whether better board task performance in turn will influence the innovative posture of the firm or not. In fact, according the findings from this study, it is financial board control that is expected to make the largest unique contribution to the innovative posture, and board behavior seems to influence foremost the strategy and service tasks in a favorable direction. Hence, it seems as although positive board behavior will result in good board task performance, it does not mean that it also will improve the innovative posture of the firm. Consequently it seems necessary to focus on whether there is a direct relationship between board behavior and innovative posture, as presented in the following part.

5.2.2 Board working style and innovation

As predicted by the board behavioral approach, the empirical findings suggest that firms with boards that are characterized by a positive working style and a constructive decision-making culture also succeed in making management commit more energy and efforts to promoting innovative behavior throughout the organization. The regression analysis in Table 5 displays the great explanatory power of board behavior with regards to the innovative posture of a firm, and there thus indeed seems to be a direct
relationship between board behavior and the innovative posture as suggested by the research model presented in Figure 2. It suggests that boards of directors can have significant and positive influence on the value-creating potential of small and medium-sized companies in Finland by being committed, by generously using their skills and knowledge, by having open and constructive discussions, by expressing criticality and creativity in decision-making, and by having cognitive conflicts. These findings are in line with Gabrielsson (2007) who found that companies with a strong entrepreneurial orientation are characterized by strong and vigilant board in terms of their actual behavior in and around board meetings.

5.2.3 Demographic versus behavioral approaches to boards

The board demographic variables did not provide much explanation of the variation in small and medium-sized Finnish firms’ innovative posture and their boards’ task performance. The correlation matrix in Table 2 and the regression analyses in Table 4 and 5 show that the demographic characteristics of board size, insider ratio, director stock ownership, and CEO duality that were included in this study seem to be weaker proxies than the behavioral variable. Hence, the physical attributes of boards and directors do not tell us much about actual board behavior, but despite this most studies of boards of directors and governance do not measure the performance of board tasks directly, but infer the behavior of boards from indicators of their demographic characteristics (Gabrielsson 2007). However, these findings indicate that actual board behavior cannot be successfully inferred from demographic measures alone, at least not in small or medium-sized firms in Finland.

From what can be seen in the regression analyses in Table 4 and 5, only board size showed some associations with firms’ innovative posture and board task performance, all suggesting that a larger board will be more favorable with regards to board task performance and the innovation posture of small and medium-sized firms. Previous research has argued that larger boards will form a larger pool of expertise and experiences and have better linkages to the external environment. This has moreover been pointed out to be of greater importance to smaller firms because they often lack critical resources for innovation (Bennett & Robson 2004: 111; Brunninge et al. 2007: 304), which may be an explanation for this finding. The other demographic measures
included in this study of insider ratio, director stock ownership, and CEO duality, were neither able to explain the degree of a firm’s innovative posture nor variations in board task performance.

The conclusions that can be drawn from this empirical evidence are thus that board demographics offer some explanation of board task performance and the innovative behavior of firms, but that the behavioral approach seems to be more appropriate in assessing real, actual board performance. Processes that take place within the boardroom, such as discussions, appraisals, and conflicts form the decision-making culture of the board and can have an impact on the board’s involvement in its different roles. A positive boardroom culture where directors are deeply involved, committed, get along well and are ready to co-operate and not hesitate to criticize the other board members thus seems to be essential in creating effective board role involvement and in achieving board contribution to value creation through innovation.

5.3 Other dimensions of Finnish SME boards and innovation

The regression analysis results in Table 5 display a higher degree of innovative posture among larger firms, although only at the .10 significance level. Hence, larger firms are more innovatively oriented than small firms. These findings could be due to the fact that larger firms often have clearly stated goals and business objectives concerning innovation in contrast to smaller firms, which on the other hand may not have as clearly formulated strategies and objectives regarding innovative and entrepreneurial organizational efforts. Smaller firms may hence not be as consciously engaged in innovative efforts and therefore do not report innovation involvement, even though they are in fact engaged in it. Tidd et al. (1997: 71) also argue that smaller firms often do not need the formal strategies used in large firms to ensure communication and coordination, because of their faster decision-making, ease of communication and degree of employee commitment and receptiveness to innovation.

Hence, although it from the evidence of this study appears that larger firms are more engaged in and receptive of innovative efforts than small firms, it may only mean that they are more consciously involved in these efforts because they might have more formal plans concerning these issues. Gabrielsson & Politis (2008: 506) though point
out that formal planning and focused commitment of resources are crucial activities for making a whole organizational committed to and receptive of innovation efforts, and that smaller firms are often naïve in this respect and tend to ignore these vital managerial activities of planning and development of strategy. Small firms may also experience several disadvantages concerning activities that are crucial for success in innovation, and that are not true for larger firms. It is for example harder for them to manage complex systems and to fund long-terms and risky projects, and they may have less access to external sources of competence. However, these are all mere speculative ideas that provide opportunities for new research topics in the future.

5.4 Limitations

This study suffers from a number of limitations, which deserve to be carefully acknowledged. First, the study provides some preliminary insights into how board behavior and decision-making processes might influence different board roles. However, it must be recognized that board task performance is determined by a number of dynamic interactions that require further consideration and study. In addition the working style and decision-making culture as focused on in this study is just one aspect of the behavioral approach to boards and governance, and other dimensions of board behavior in this context must be explored as well in order to create a well-established theoretical framework on board behavior and processes in SMEs in Finland. Moreover, because of the strictly confidential and highly interpretive nature of board activity, it is likely to be extremely difficult for researchers to measure the task performance of boards in ways that are both reliable and comprehensive (Forbes & Milliken 1999: 492), something which can have affected the research findings of this study.

Third, only the answers of the CEOs were chosen as part of the sample to the questionnaire. This choice may imply the risk that the CEO presents an idealized version of events, and the risk of normative and single respondent biases must hence be recognized. Fourth, a broad sample of SMEs was opted for varying firm size, industry, and governance. This increases the generality of the findings, facilitating inference to a wider population. However, it increases heterogeneity relative to a more limited and uniform sample, and results should therefore be interpreted with some caution. Fifth, the sample size may have affected the credibility of the findings, and a larger sample may
therefore reveal contradictory and more accurate results. Finally, the data for this study is collected from small and medium-sized firms in Finland. Although the hypotheses tested and supported by our data are based on general theories and findings from a range of countries, country-specific effects cannot be ruled out. Generalizations of specific findings to other countries and firm sizes must thus be undertaken with caution.
6 Conclusions

The final conclusions inferred from this study will be presented here along with some practical managerial recommendations and implications for future research. The purpose of this research was to explain how boards of directors contribute to the innovative posture of small and medium-sized firms in Finland. This was done by first considering how boards through involvement in their main assigned tasks can contribute to innovation, and by then moving beyond the traditional approach of studying the influence of board demographic characteristics on board task performance and innovation to exploring behavioral aspects of boards of directors. The purpose was then pursued through testing hypotheses on the impact of board tasks and board behavior on the innovative posture of a firm. Based on the results of the analyses, indications were given of how to organize the boards of Finnish SMEs and their work in order for them to be able to contribute to value creation through innovation in the firm they govern.

The research questions raised in the beginning were:

1. How do these boards fulfill their strategy, control and service roles and how does this influence the firm’s innovative posture?
2. How does the behavior of the board influence board task performance and the innovative posture of the firm?
3. Is the behavioral approach to boards and governance a better predictor of board task performance and the firm’s innovative posture than the traditionally used board demography approach?

6.1 Finnish SME board contribution to innovation

It is widely recognized that small and medium-sized companies must increasingly behave more entrepreneurially in order to survive and prosper in dynamic and uncertain competitive business environments. This is especially true for the Finnish economy, the number of innovative SMEs being rather small (Georghiou et al. 2003). In addition, there have been calls for the need to develop our knowledge of how effective board governance can support smaller companies’ ability to innovate (Huse 2000; Zahra et al. 2000). These pressures put the relationship between corporate entrepreneurship and
innovation on the one hand and boards of directors in Finnish SMEs on the other hand high on the research agenda. Two main findings have been reached with this study. First, regarding board task performance, board involvement in financial control seems to be a crucial element for Finnish SME boards to contribute to value creation, whereas strategy and service did not reveal any significant relationships. Second, the board behavioral approach seems to be an ample device for explaining both board role involvement in strategy, control, and service tasks and board contribution to innovation and entrepreneurship. In all, these findings suggest that the board of directors can be seen as a strong potential resource that can promote innovation and entrepreneurial efforts by being engaged in financial control mechanisms and by succeeding in creating and exhibiting positive board behavior.

Consequently, the findings suggest that Finnish SME boards do not exist for formal or legal requirements only but also are engaged in their board work in excess of these minimum requirements, a quality which might entail good chances of succeeding in contributing to the innovative posture of the firm. Hence, these boards seem to contribute to the innovative posture of the firm by engaging in financial board control and by exhibiting positive board behavior, the latter of which being the strongest predictor of the innovative postures of these firms.

**6.1.1 Financial board control versus strategy and service**

This study has shown that in order to influence the long-term value creation of Finnish SMEs by making these firms more oriented towards innovation and entrepreneurship, boards need to make active use of financial and operational control mechanisms to monitor management and firm performance so as to assure that efforts and investments are committed to innovation-intensive undertakings. Activities of formal planning and focused commitment of resources in a financially conscious manner seem to be crucial in establishing and following innovation strategies, in creating an innovation oriented organizational mindset, and in making the organizational infrastructure supportive of innovations and entrepreneurial behavior.

In addition, of all three board roles, boards of Finnish small and medium-sized firms seem to be mostly involved in financial control, and consequently devote limited efforts to participating in strategy making and providing managers and the CEO with advice,
support and linkages to the external environment. Evidence from this study moreover provided only limited support for the arguments that board involvement the strategy and service tasks is crucial for corporate success in innovation. It is though argued that if boards were more involved in their strategic and service roles, associations with the firms’ innovation efforts might appear. However this is just a speculation which should be further investigated by future research, as the findings from this study were not able to reveal anything on the contribution of board strategy and service involvement to the innovative posture.

6.1.2 Importance of board behavioral aspects

As the empirical results indicate, the behavioral or working style variable seems to have great explanatory power both with regards to board task performance and the innovative posture of the firm. In order to maximize the board’s contribution to a firm’s innovative posture, it is hence also necessary to focus on creating a positive decision-making culture within the board that stimulates active and engaged board work involvement. However, although board behavior seems to be positively related to board task performance, and in particular to the strategy and service roles, this study did not provide any evidence concerning whether there are any associations between board task performance and the firm’s innovative posture. Instead the findings from this study suggest a direct relationship between board behavior and the firm innovative posture.

In addition, the behavioral approach seems to explain considerably more of the variations in board task performance and board contribution to the innovative posture of the firm than the board demographic variables do. The research findings hence suggest that the traditional board demographic measures are weak proxies of board task performance and that they cannot fully explain a firm’s commitment to an innovative posture. To create well-functioning boards, it may thus not be enough to demand changes in the composition or structure of the board of directors, but it is instead necessary to focus more on process-related features of the board. This study therefore contributes to the growing body of research that suggests a shift of the point of attention in studies on boards and governance towards focusing on behavioral and process-related features of boards of directors to create effective corporate governance systems. Future
research on boards and governance in small and medium-sized firms in Finland should therefore direct attention also to the working styles of boards.

### 6.2 Managerial recommendations

This study has some directions and implications for the future. Practical and managerial recommendations that the findings from this study may have for both managers and directors on how boards can contribute to value creation through innovation in small and medium-sized companies in Finland can be summarized as follows.

First and foremost, boards should continuously make use of financial control mechanisms to supervise and control that the operations and effort dedications of the firm and its managers are in line with the strategies promoting innovative and entrepreneurial undertakings. Furthermore, instead of focusing on board demographic characteristics such as board size, insider ratio, director stock ownership, or CEO duality, directors and above all the chairman of the board should pay increasing and constant attention to the board’s decision-making culture and how individual and team processes influence the effectiveness and outcomes of boards. By committing efforts to creating a good atmosphere within the board, directors are stimulated to work together and thereby the board can influence the innovative posture of the firm in a positive way.

Managers must moreover adhere to the advice and counsel of the board. As was pointed out earlier, if boards are to influence the innovative posture of the firm, they have to focus on assuring that managers actually place emphasis on innovative activities and dedicate efforts and resources toward providing good preconditions for innovative behavior to take place throughout the organization. This calls for managers that are willing to cooperate, follow the advice given by their board, respect it, and consider it a valuable source of strategic guidance. This of course presupposes that the board is actively involved in its work, concerned about relevant and topical issues and up to date with the operations of the firm, because otherwise the board would not be able to give valuable advice to management. Hence, managers should focus on assuring that there are good relations and a mutual understanding of objectives between directors and management.
6.3 Implications for future research

This study opens up some opportunities for future research in this area. First and foremost, research on boards and governance has leaned heavily on archival data, often using samples of large US corporations (Huse 2000). This approach may not be appropriate for an increased understanding of board behavior, especially not under other contingencies such as firm size and national context and these results hence need to be further tested and explored in other contexts. Moreover, the cross-sectional research design of this study may undermine board dynamics that might be better conceptualized by longitudinal studies to improve our knowledge and understanding of board interactions and processes and to strengthen the consistency of these findings. As the sample of this study was rather small, it would also be interesting to conduct similar studies with larger samples to see if it generates any contradicting findings. Moreover a similar analysis could be done on large firms in Finland and studies comparing the situation in Finnish SMEs and large firms also need to be conducted.

As Huse (2005) points out, the support for the behavioral approach to boards and governance also calls for the need to employ more qualitative-oriented methodological approaches in order to more systematically observe the actions and behaviors of boards at close quarters. Given the relatively modest amount of research within this area, focused attention to the antecedents and outcomes of actual board behavior suggests great promise for an improved understanding of how boards of directors contribute to the direction and performance in small and medium-sized firms (Gabrielsson 2007: 527). Thus, it would be interesting to study more closely how other behavioral aspects of boards that their decision-making culture can influence a firm’s innovative undertakings, in order to increase our understanding of smaller firms and their specific governance needs.
Swedish summary of thesis

Avhandlingens rubrik: Styrelsens bidrag till värdeskapande genom innovationer och entreprenörsbeteende Hur påverka den innovativa inställningen hos små och medelstora företag i Finland

Inledning


Styrelsen är ett centralt organ av den högsta ledningen som kan ha en stor inverkan på företagets verksamhet samt dess värdeskapande potential. Genom att se över ledningsgrupps initiativ och evaluera dess prestationer ska styrelsen fatta beslut som är meningen att reflektera aktieägarnas intressen samt skapa värde för företaget. (Baysinger & Hoskisson 1990). Litteraturen har dock hittills inte fokuserat på att förklara hur styrelser kan öka ledningsgruppens risktagande i jakten på innovativt beteende (Miozzo & Dewick 2002), vilket gör det relevant att studera styrelsens potential och möjligheter att påverka organisationens inställning till innovationer och entreprenörskap.

Forskning kring styrelser har hittills använt sig främst av sampel med stora amerikanska företag och styrelser i andra nationella kontexter och av mindre storlek har fått betydligt mindre uppmärksamhet (Fiegener 2005: 628; Huse 2000: 271). Studier som utvecklar vår kunskap om hur effektiva styrelser kan stöda sitt företags förmåga att växa och skapa innovationer har heller inte gjorts i stor omfattning (Zahra et al. 2000), vilket

Syftet med denna studie är att förklara hur styrelsen i små och medelstora bolag i Finland kan påverka företagets innovativa inställning. Följande forskningsfrågor har dessutom ställts för att inhämta så mycket information som möjligt för forskningsprocessen:

1. Hur uppfyller dessa styrelser sina strategi-, kontroll- och serviceuppgifter och hur påverkar detta företagets innovativa inställning?
2. Hur påverkar styrelsens beteende hur dess engagemang i sina uppgifter samt företagets innovativa inställning?
3. Är det nya synsättet att studera styrelsers beteende ett bättre sätt att förutse styrelsens engagemang i sina uppgifter samt företagets innovativa inställning än det traditionella synsättet som innebär att fokusera på demografiska egenskaper hos styrelsen?

Referensram

Ett företags syfte är att vara värdeskapande på lång sikt och i denna studie anses detta uppfyllas genom att företag har en god så kallad innovativ inställning, vilket därmed ses som det ultimata målet för ett företag. Styrelsen anses vidare kunna styra företaget och dess ledningsgrupp mot detta mål genom att vara aktivt engagerad i de olika uppgifterna och rollerna som den är tilldelad att utföra istället för att utföra endast de formella kontrolluppgifter som lagen kräver. De huvudsakliga rollerna som styrelsen förväntas delta i och som vidare förväntas påverka företagets innovativa inställning är dess strategi-, kontroll- och serviceruppgifter. Utöver detta anses det i denna avhandling dock inte vara tillräckligt att endast engagera sig till en viss grad i dessa roller, utan
styrelsen måste också utöva ett visst beteende för att vara optimalt involverad i alla dessa uppgifter och för att kunna påverka företagets innovativa inriktning.

Företagets innovativa inställning


Styrelsens roll i företagets innovationsverksamhet

Framgång i värdeskapande genom innovationer kräver starkt och fortsatt stöd från företagets högsta ledning (Brunninge et al. 2007: 304). En viktig aspekt i detta sammanhang är ledningsgruppens villighet att förespråka innovationer och entreprenörsbeteende och styrelsens uppgift är främst att styra ledningsgruppens handlingar och prestationer och därigenom se till att ledningsgruppen verkligen engagerar sig i dessa frågor (Zahra et al. 2000: 950). Mycken litteratur har poängterat att en stark styrelse kan ha betydlig positiv inverkan på små och medelstora företags värdeskapande potential genom att favorisera förändring och innovation i ledningsgruppens beslutsfattande (t.ex. Huse 2000; Gabrielsson 2007; McNulty &

**Styrelsens uppgifter**


Styrelsens beteende


Ett nytt synsätt som dock vunnit allt mer mark inom forskning kring styrelser fokuserar istället på beteendet bland dem som sitter i styrelsen (e.g. Bennett & Robson 2004; Huse 2000; Gabrielsson 2007; Rindova 1999; Roberts et al. 2005). Detta synsätt baserar sig på antagandet att styrelser är en grupp av individer som jobbar med multifaceterade uppgifter, få fysiska möten och hårda tidsbegränsningar, vilket gör dem mycket känsliga för olika interaktionssvårigheter (Forbes & Milliken 1999). Denna nya infallsvinkel syftar därmed till att studera styrelsens inre arbete och de dynamiska processer som försiggår inom styrelsen (Roberts et al. 2005: 6).

Denna studie fokuserar speciellt på styrelsens beslutsfattningskultur och argumenterar för att styrelsen borde karaktäriseras av ett positivt beteende, vilket innebär att styrelsemedlemmarna är engagerade och välförberedda, generöst delar med sig av sin kunskap och sina erfarenheter, har en öppen och konstruktiv växelverkan, stark gruppsamhörighet, kan ha olika åsikter och handskas med de konflikter som kan uppstå därigenom samt ett kritiskt och kreativt sätt att ta sig an sina uppgifter (Huse 2007). Det argumenteras i denna studie för att ett positivt beteende hos styrelsen har en positiv inverkan på både hur styrelsen utför sina uppgifter samt företagets innovativa inställning.

Hypoteser

Tre hypoteser ställdes upp för att undersöka styrelsens olika rollers inverkan på företagets innovativa inställning. De fyra resterande hypoteserna testar styrelsens beteende och dess inverkan på styrelsens engagemang i sina uppgifter och företagets innovativa inställning.
**Hypotes 1**
Aktivt engagemang av styrelsens i dess strategiroll är positivt relaterat till företagets innovativa inställning.

**Hypotes 2**
Aktivt engagemang av styrelsens i dess kontrollroll är negativt relaterad till företagets innovativa inställning.

**Hypotes 3**
Aktivt engagemang av styrelsens i dess serviceroll är positivt relaterat till företagets innovativa inställning.

**Hypotes 4**
Positivt beteende hos styrelsen är positivt relaterat till styrelsens engagemang i sina uppgifter.

**Hypotes 5**
Positivt beteende hos styrelsen är positivt relaterat till företagets innovativa inställning.

**Hypotes 6**
Styrelsens beteende är ett bättre sätt att mäta hur styrelsen utför sina uppgifter än det traditionella synsättet att mäta demografiska egenskaper hos styrelsen.

**Hypotes 7**
Styrelsens beteende är ett bättre sätt att mäta företagets innovativa inställning än det traditionella synsättet att mäta demografiska egenskaper hos styrelsen.

**Forskningsmetodologi**

Undersökningen för denna studie genomfördes som en kvantitativ tvärsnittsstudie utgående från ett relativistiskt forskningsideal. Detta angreppssätt var lämpligt eftersom denna studies förklarande syfte kräver att man ger en översikt över ett brett sampel för att kunna bedöma det studerade fenomenet så korrekt som möjligt och för att kunna få en uppfattning om den sannolika graden av variation som existerar inom populationen. Denna studie ämnar att fokusera på att sampla brett istället för att gå på djupet för att kunna dra statistiskt signifikanta slutsatser för att kunna generalisera svaren från denna studie bortom ramarna för detta forskningsprojekt (Easterby-Smith et al. 2002).

Data för denna studie insamlades med ett självfyllbart frågeformulär som skickades ut per post till verkställande direktörer i företag i Finland med upp till 500 anställda. Det slutgiltiga samplet bestod av 64 respondenter, vilket gav en svarsprocent på ungefär 10 procent. Även om detta utgör en ganska låg svarsprocent påpekar Pinsonneault & Kraemer (1993) att detta ofta är fallet med frågeformulär som sänds per post.
Frågeformuläret bestod av slutna, standardiserade och strukturerade frågor, vilket bland annat möjliggör att jämföra svaren mellan olika respondenter och att dra slutsatser angående associationer och variationer mellan olika variabler (Bryman & Bell 2007: 55). De flesta frågorna frågades i form av en Likert-skala som samlar in data om respondenternas åsikter i form av en grad av samtycke eller oenighet.

Forskningsmodellen innehåller en beroende variabel, nämligen företagets innovativa inställning, och åtta oberoende variabler, nämligen styrelsens strategiroll, kontrollroll, serviceroll, dess beteende samt fyra demografiska variabler angående styrelsen. Dessutom används fyra kontrollvariabler i studien. Dessa är företagets storlek, företagets ålder, ifall det är ett moder- eller dotterbolag och ifall det är familjeägt eller ej familjeägt. All data för variablerna har samlats in med hjälp av frågeformuläret. För att analysera data användes SPSS for Windows™. De statistiska analysverktygen som används för att upptäcka samband mellan de olika variablerna samt dessa sambands riktning och styrka är korrelations- och regressionsanalys.

**Resultat och diskussion**

Förhållanden mellan alla variabler presenteras med hjälp av en korrelationsanalys för att få en första bild av vilka variabler som påverkar varandra samt till vilken styrka och i vilken riktning. Styrelsens strategiska, kontroll- och servicerolle rs inverkan på företagets innovativa inställning testas med hjälp av standardregressionsanalys. Styrelsens beteendes inverkan på styrelsens tre roller samt företagets inovativa inställning testas med hierarkisk regressionsanalys för att ta reda på om det nya synsättet att studera styrelsers beteende är passande, hur styrelser egentligen är involverade i sina uppgifter och för att jämföra detta sätt med det traditionella sättet att undersöka styrelser som baserar sig på att observera demografiska egenskaper hos styrelsen.

**Forskningsresultat**

Den första analysen av interkorrelationer mellan studiens variabler visade starka samband mellan alla tre styrelserroller och företagets innovativa inställning. Denna analys presenteras som Tabell 2 i avhandlingen. I motsats till förväntningarna visade dock styrelsens engagemang i finansiell kontroll en positiv association till företagets
innovationer, vilket innebär att ju mera styrelsen utöver kontroll över verksamheten och ledningsgruppen och jämför detta mot finansiella mål, desto bättre är företagets innovativa inställning. Styrelser som är involverade i en roll visade sig dessutom vara även starkt involverade i andra roller, vilket tyder på att styrelser inte utför sina roller selektivt utan är till ungefär samma grad aktiva i alla tre roller samtidigt. Styrelser i små och medelstora finska bolag verkar dessutom i allmänhet utgöra aktiva styrelser som är engagerade i de olika rollerna. Resultaten visade också att styrelserna har ett relativt positivt styrelsebeteende vilket vidare visade starka korrelationer med företagets innovativa inställning och styrelsens strategi-, kontroll- och servicroller.

En standardregressionsanalys över styrelserollernas inverkan på den innovativa inställningen visade dock endast stöd för att styrelsens engagemang i finansiell kontroll påverkar företagets innovationer i en positiv riktning. Denna analys presenteras som Tabell 3 i avhandlingen. Sambanden mellan strategi och service å ena sidan och företagets innovativa inställning å andra sidan visade sig dock inte vara signifikanta. Detta utgör ett intressant resultat eftersom det enligt förväntningarna var strategi och service som skulle ha den största inverkan på företagets innovativa inställning medan finansiell kontroll förväntades påverka det negativt. Varken hypotes 1, 2 eller 3 fick därmed stöd av forskningsresultaten.

Hierarkisk regressionsanalys genomfördes för att testa styrelsens beteendes inverkan på de tre styrelserollerna. Denna analys presenteras som Tabell 4 i avhandlingen. Resultaten visade att de demografiska egenskaperna hos styrelsen inte kunde förklara mycket av variationerna i styrelsens engagemang i sina olika roller medan beteendevariabeln visade ett starkt positivt samband med de tre rollerna. En styrelse med positivt beteende kommer alltså att vara aktivt engagerad i de tre rollerna, varav vidare mest i de strategirelaterade och minst i de kontrollrelaterade uppgifterna. Inga av de kontrollvariabler som insattes i analysen visade några starka separata effekter på de olika styrelserollerna. Dessa resultat gav därmed stöd åt både hypotes 4 och 6.

En hierarkisk regressionsanalys genomfördes också för att testa styrelsens beteendes inverkan på företagets innovativa inställning. Denna analys presenteras som Tabell 5 i avhandlingen. Även i denna analys visade sig beteendevariabeln ha en stark positiv inverkan på företagets innovativa inställning, medan de styrelsedemografiska

**Diskussion av resultaten**

I motsats till förväntningarna visade denna studie att styrelsens engagemang i finansiell kontroll i finländska små och medelstora bolag var positivt relaterat till företagets innovativa beteende, medan dess engagemang i strategi och service inte gav upphov till några signifikanta samband. Detta utgör ett intressant resultat eftersom bland andra Huse & Landström (2001: 24) anser att mindre bolag inte behöver en styrelse som är aktiv vad gäller diverse kontrollaktiviteter utan istället en som fokuserar på att bistå ledningsgruppen med strategi och service. En tänkbar orsak till detta resultat är att ökat engagemang i finansiell kontroll kan skapa ökat potential för överloppsresurser, vilket igen kan skapa ökade möjligheter för innovationer och entreprenörsbeteende (Gabrielsson & Politis 2008).

Resultaten kan även bero på att de tre rollerna i denna studie är ganska brett definierade eller på att små och medelstora bolag i Finland inte är tillräckligt involverade i sina strategi- och serviceuppgifter. Enligt vad framgår av Tabell 1 i avhandlingen är styrelserna nämligen mest involverade i sin kontrollroll, vilket dessutom ofta är fallet för företag av denna storlek (Bruninge et al. 2007: 297). När styrelser är lite involverade i någon uppgift är det svårt att finna ifall engagemang i denna uppgift påverkar någon annan faktor. Om dessa styrelser alltså skulle bli mera involverade i sina strategi- och serviceuppgifter skulle de antagligen kunna ha en större positiv inverkan på företagets innovativa inställning. Detta är dock bara spekulationer som utgör intressanta möjligheter till fortsatt forsknings inom detta ämnesområde.

Med stöd av tidigare empirisk forskning (t.ex. Huse 2000; Forbes & Milliken 1999; Gabrielsson & Winlund 2000; Roberts et al. 2005) tyder även denna studies resultat på att styrelsens beteende kan förklara mycket angående hur engagerade styrelser är i sina olika roller samt angående företagets innovativa inriktning även i små och medelstora bolag i Finland. Detta ger alltså ytterligare stöd åt de argument enligt vilka forskning kring styrelser borde fokusera mycket mera på styrelsens sätt att arbeta och de
dynamiska processer som äger rum inom styrelsen, istället för att fokusera på klart observerbara demografiska egenskaper hos styrelsen, såsom till exempel styrelsens storlek eller huruvida styrelsemedlemmarna även jobbar inom företaget eller inte, och sedan anta att styrelsen kommer att bete sig enligt dessa egenskaper.

Enligt forskningsmodellen som presenteras i Figur 1 i avhandlingen förväntades styrelsen även genom sitt beteende påverka hur styrelsen engagerar sig i sina roller och vidare genom att aktivt engagerar sig i dessa roller bidra till en bättre innovativ inställning. Forskningsresultaten tyder dock endast på ett direkt samband mellan styrelsens beteende och företagets innovativa inriktning, eftersom styrelsens engagemang i framför allt sina strategi- och servic roller inte visade några signifikanta samband med hänsyn till företagets innovationsverksamhet.

Sammanfattning

Syftet med denna studie var att förklara hur styrelsen i små och medelstora företag i Finland kan påverka företagets innovativa inställning. För att uppnå detta syftade hypoteser som föreslog samband mellan olika variabler relaterade till styrelsen och innovationer. Forskningsresultaten visar att styrelser i finländska små och medelstora bolag bidrar till sitt företags innovativa inställning genom att vara starkt engagerade i finansiell kontroll av verksamheten och ledningsgruppens arbete samt genom att utöva ett positivt beteende.

Slutsatser och rekommendationer


För att maximera styrelsens bidrag till värdeskapande genom innovationer verkar det för det andra vara viktigt att se till att styrelsen har ett positivt beteende. Detta innebär att
styrelsen ska vara engagerade i sina uppgifter, föra öppna och djupa diskussioner, ha en konstruktiv växelverkan, en bra atmosfär och en kritisk och kreativ attityd gentemot de uppgifter och utmaningar den konfronteras med. För att skapa välfunctionerande styrelser räcker det alltså inte med att kräva förändringar endast i styrelsens sammansättning eller struktur utan man måste alltså också fokusera på dessa dynamiska processer och denna interaktion som äger rum inom styrelsen.

**Begränsningar och förslag till fortsatt forskning**


Denna studie ger också upphov till nya forskningsämnen inom detta ämnesområde. Dessa resultat kunde till exempel testas och utforskar vidare bland företag av annan storlek. Denna studie gjordes som ett tvärsnitt vilket kan underminera vissa dynamiska processer inom styrelsen och det skulle därmed vara intressant att även undersöka dessa fenomen med hjälp av longitudinala studier. Liknande studier kunde också genomföras med större sampel. För att närmare och mera systematiskt kunna observera styrelsens beteende kunde det också vara lämpligt att tillämpa mera kvalitativt inriktade forskningsmetoder.
List of References


**Appendices**

Appendix 1 Questionnaire Background

Appendix 2 Questionnaire Value-Creating Board
Appendix 1 Questionnaire Background

THE VALUE-CREATING BOARD

Background information on the company and the work of the Board of Directors

This questionnaire complements the questionnaire of 15.11.2009 addressed to CEOs/Managing Directors and Chairmen of Boards of Directors, which examines the role of company boards in value creation and innovation.

This questionnaire asks for background information about the companies and boards participating in the research. The questionnaire can be completed either by the CEO/Managing Director or another person who knows the company’s operations well. We are using company codes to facilitate the internal processing of the questionnaires. If you are downloading this questionnaire through the internet, please write down your company name or the code number written on the original Finnish questionnaire under the logo in the upper right hand corner of this questionnaire.

Please answer all of the questions – every answer is important to us to ensure the success of the research. All of your answers will be processed in complete confidence. Please send your answers at the latest by the 20th February 2009, together with the questionnaire addressed to the CEO/Managing Director and the Chairman of the Board using the prepaid envelope or by sending them to Katja Peltola, Hanken, PO Box 479, 00101 Helsinki, Finland. You can also fax the completed questionnaire to the following number: +358 09 431 33275.

If you have any questions or comments relating to the questionnaire, please contact Dr. Annika Vatanen (annika.vatanen@hanken.fi), +358 40 3521 517. We are happy to answer your questions and receive your feedback.

A Company information

A1 In what year was the company officially founded (regardless of corporate form)? .................................... in ______

A3 Is the company, in your opinion:
  1) a family-owned business ........................................................................ □ Yes □ No

A4 How many employees did the company have on 31 December 2008? ..................................................... c.____ employees

A5 What was the company’s turnover in 2008 (EUR million)? ........................................................................ c. EUR ____ million

A15 Is the company part of a group? .............................................................................................................. □ Yes □ No

A16 If yes, is the company the group’s subsidiary? ........................................................................................ □ Yes □ No

A19 Is the CEO/Managing Director a Member of the Board of Directors? ...................................................... □ Yes □ No

B Composition of the Board of Directors

B1 How many regular full Members of the Board of Directors did the company have on 1 January 2009? ................................................................ Members of the Board

B2 How many of the regular members of the company’s board
  2) work in the company? .................................................................................................................. Members of the Board
  3) own the company’s shares? .......................................................................................................... Members of the Board
Appendix 2 Questionnaire Value-Creating Board

THE VALUE-CREATING BOARD

Questionnaire for CEOs/Managing Directors and Chairmen of the Board, 15.1.2009

This questionnaire is part of a TEKES-funded project that examines the role of company boards in value creation and innovation. The research is part of an international project, co-ordinated in Finland by Hanken (the Swedish School of Economics and Business Administration) (see http://www.hanken.fi/public/en/valuecreatingboard).

The questionnaire consists of four main sections: A) Background information, B) Tasks of the Board of Directors, C) Functioning and composition of the Board of Directors, and D) Company strategy and renewal. Most of the questions are presented as statements, to which we ask you to express an opinion on the scale 1 – 7. Circle the number that corresponds to your opinion. Some of the statements are selected academic measures and some have been chosen to give a more practical view of the work of the Board of Directors. The questionnaire has been sent out to a large number of companies. As a result, some of the questions may seem less relevant for your company and board. However, try to answer all the questions and provide any possible comments in the space provided in the end of the questionnaire. We hope that the statements will also stimulate ideas as far as the work of your own Board of Directors is concerned.

Please answer all of the questions – every answer is important to us to ensure the success of the research. All of your answers will be processed in complete confidence. We are using company codes to facilitate the internal processing of the questionnaires. If you are downloading this questionnaire through the internet, please write down your company name or the code number written on the original Finnish questionnaire under the logo in the upper right hand corner of this questionnaire. Please send your answers at the latest by the 20th February 2009, using the prepaid envelope or by sending them to Katja Peltola, Hanken, PO Box 479, 00101 Helsinki. You can also fax the completed questionnaire to the following number: +358 09 431 33275.

If you have any questions or comments relating to the questionnaire, please contact Dr. Annika Vatanen (annika.vatanen@hanken.fi), +358 40 3521 517. We are happy to answer your questions and receive your feedback.

B Tasks of the Board of Directors

To what extent do you agree or disagree with the following statements about the tasks of the Board of Directors in this particular company?

B2 The Board of Directors and its members have actively assisted the company’s management: Disagree Agree

1) by acting as mentors to the CEO/Managing Director and the company’s senior management .......... 1 2 3 4 5 6 7
2) in forming and utilising networks ....................................................................................................... 1 2 3 4 5 6 7
3) in forming customer relationships ..................................................................................................... 1 2 3 4 5 6 7
4) in lobbying activities .......................................................................................................................... 1 2 3 4 5 6 7
5) in identifying business opportunities ................................................................................................. 1 2 3 4 5 6 7
6) in enhancing the company’s public image ........................................................................................ 1 2 3 4 5 6 7
7) in internationalisation-related issues ................................................................................................. 1 2 3 4 5 6 7
8) in financial arrangements ................................................................................................................. 1 2 3 4 5 6 7
9) by considering & developing future scenarios .................................................................................... 1 2 3 4 5 6 7

B6 The Board of Directors has, to a significant extent, supervised/controlled the following factors: Disagree Agree

1) the Managing Director’s remuneration ................................................................................................ 1 2 3 4 5 6 7
2) the selection of the Managing Director’s successor ........................................................................ 1 2 3 4 5 6 7
3) the company’s personnel and recruitment policy ............................................................................... 1 2 3 4 5 6 7
4) the company’s operations ................................................................................................................. 1 2 3 4 5 6 7
5) the company’s budget ........................................................................................................................ 1 2 3 4 5 6 7
6) the company’s liquidity ..................................................................................................................... 1 2 3 4 5 6 7
To what extent do you agree or disagree with the following statements about the work of the Board of Directors?

C5

1) The Board of Directors spends time on issues essential for the company's success ........................................ 1 2 3 4 5 6 7
2) The Board of Directors works using diverse operating practices (i.e. not only in the form of meetings) ........................................................................ 1 2 3 4 5 6 7
3) Creative and innovative solutions are characteristic of the Board of Directors ........................................ 1 2 3 4 5 6 7
4) The Board of Directors looks systematically into the future ........................................................................ 1 2 3 4 5 6 7
5) The strengths of the members of the Board of Directors are well utilised in the board's work ........................ 1 2 3 4 5 6 7
6) The Board of Directors respects diversity and different styles of interaction ............................................... 1 2 3 4 5 6 7
7) Differences in opinions on the Board of Directors focus on issues rather than on individuals .................. 1 2 3 4 5 6 7
8) Board members who disagree respect each other's viewpoints ................................................................. 1 2 3 4 5 6 7
9) Board decisions are settled amicably ............................................................................................................. 1 2 3 4 5 6 7
10) There is constructive challenge of ideas, beliefs and assumptions on the Board of Directors .............. 1 2 3 4 5 6 7
11) In the Board of Directors there are many disputes between members ..................................................... 1 2 3 4 5 6 7
12) In the Board of Directors there is a lot of tension between members when decisions are made ........... 1 2 3 4 5 6 7

To what extent do you agree or disagree with the following statements about the Members of the Board of Directors?

C6

1) consider their board tasks to be important and allocate sufficient time for them ........................................ 1 2 3 4 5 6 7
2) are always available when board work so demands ..................................................................................... 1 2 3 4 5 6 7
3) are always well prepared for meetings ......................................................................................................... 1 2 3 4 5 6 7
4) actively seek information on the company's operations in addition to information received from the company's management ............................................................................................................. 1 2 3 4 5 6 7
5) question and strive to improve the proposals made by management .......................................................... 1 2 3 4 5 6 7
6) present creative and innovative proposals in meetings ............................................................................... 1 2 3 4 5 6 7
7) bring mutually complementary perspectives to meeting discussions ............................................................. 1 2 3 4 5 6 7
8) actively participate in discussions in board meetings .................................................................................. 1 2 3 4 5 6 7
9) identify and utilise company-external interest groups .................................................................................. 1 2 3 4 5 6 7
10) manage to create a good atmosphere in meetings ..................................................................................... 1 2 3 4 5 6 7
11) discuss issues openly in board meetings ..................................................................................................... 1 2 3 4 5 6 7
12) are able to discuss issues constructively even when they represent different views ............................ 1 2 3 4 5 6 7
13) admit their mistakes ....................................................................................................................................... 1 2 3 4 5 6 7
14) agree about the company's future goals ....................................................................................................... 1 2 3 4 5 6 7
15) complement each other well ...................................................................................................................... 1 2 3 4 5 6 7
16) get along well with each other ..................................................................................................................... 1 2 3 4 5 6 7
17) help each other with work ............................................................................................................................. 1 2 3 4 5 6 7

C8

1) always speak of "us" rather than "them" when referring to the company .......................................................... 1 2 3 4 5 6 7
2) consider the company's success to be their own success ........................................................................... 1 2 3 4 5 6 7
3) consider feedback directed at the company to be feedback directed at themselves .................................. 1 2 3 4 5 6 7
4) always speak of "us" rather than "them" when referring to shareholders .......................................................... 1 2 3 4 5 6 7
D Company strategy and renewal

To what extent do you agree or disagree with the following statements about the company’s strategic activity?

D1 The company’s key strategic goal is:

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) corporate renewal and innovativeness</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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</tbody>
</table>

D6 What has been the goal of the company’s acquisitions, strategic partnerships and new business openings made during the last five years? In these activities, our company’s goal has been:

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
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</thead>
<tbody>
<tr>
<td>1) improving the ability to innovate</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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</table>

To what extent do you agree or disagree with the following statements about the company’s renewal and innovativeness?

D7

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Our company is innovative</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

D9 Our company has

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) a renewal strategy</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2) an innovation strategy</td>
<td>1 2 3 4 5 6 7</td>
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</tbody>
</table>

To what degree has your company been characterised, during the last two-three years, by:

D13 Organisational innovations

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>1) making significant changes to its own organisational structure in order to promote innovations</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2) implementing personnel development programmes to promote creativity and innovations</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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</tbody>
</table>

D15 In our company, renewal takes place and innovations arise:

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) alongside everyday work</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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</table>

D16 In our company’s operations, the following factors promote our company’s renewal and innovativeness

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
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</thead>
<tbody>
<tr>
<td>1) structures</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>2) strategy</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3) company culture and values</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4) management practices</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5) operating practices and processes</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6) remuneration schemes</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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</table>

MANY THANKS FOR YOUR ANSWERS!