NTNU – Trondheim
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Strategic Pathways to Business Performance

An empirical study of Norwegian exporting
SMEs

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Thesis Statement

International trade is becoming an increasingly important growth strategy to Norwegian SMEs, and many companies try to reap benefits from business opportunities found in the international marketplace. The objective of this thesis is to investigate the strategic determinants that advance the performance of Norwegian exporting SMEs.

Preface

The thesis marks the conclusion of the author's M.Sc. degree in Industrial Economics and Technology Management at the Norwegian University of Science and Technology. The master thesis was written during the spring semester of 2015.

This study is a contribution within the field of international business and strategy, examining the performance dimension of exporting small and medium-sized enterprises (SMEs). The study investigates the strategic factors that may drive performance in domestic and international markets.

There are several contributors that have been valuable to the completion of this thesis. First, I would like to thank my academic supervisor, professor Arild Aspelund, for his appreciated consideration and guidance throughout the entire process. Further, I would like to thank Ph.D candidate Mohammad Javadinia Azari for his constructive feedback, invaluable discussions and supportive demeanor. Also, I would like to expense my gratitude to professor Øystein Moen and his valuable input and assistance with the statistical work. His constructive feedback has brought valuable contributions to the construct of this thesis.

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Abstract

Trade liberalization and increased openness between markets expose emerging market opportunities and impose increasingly tougher competition on firms participating in cross-border trade. A growing number of resource-constrained small and medium-sized enterprises are selling their goods and services in international markets, and have thus evolved into a significant constituent of the world economy. Hence, firm internationalization necessitates complex strategic processes bearing relatively high operational risk, and the successful employment of exporting strategies is becoming progressively important.

Exporting and innovation are widely recognized as two major sources of growth and profitability, and this thesis presents these performance-seeking strategies as vital strategic instruments of above-normal business outcomes. In particular, the following features are investigated; (1) which strategic elements are associated with exporting and innovation capabilities; (2) how is financial performance affected by the use of performance-seeking strategies.

A quantitative research strategy was applied to address the proposed relationships investigating a data sample consisting of 190 Norwegian exporting small and medium-sized enterprises from multiple industry sectors. The thesis attempts to empirically test and estimate the performance profiles of internationalized companies by employing multi-group structural equation modeling.

The study finds that attempts to improve innovation and exporting capabilities should be accompanied by an international orientation. Additionally, an organizational climate for initiative and commitment is essential in developing successful innovation capabilities, while management team diversity complements the adoption and implementation of successful exporting activities. The results also reveal that successful exporting is positively related to firm performance. However, the obtained findings challenge the validity of internal innovation capabilities as predictors of firm performance.

The present study provides significant implications for practitioners and theorist, and the practical and theoretical implications contribute to the knowledge of how strategic risk imposed by exporting activities should be managed in a small and highly specialized economy. Finally, the research illuminates essential determinants of firm performance, and suggests directions for future research in the field of international business and strategy.

Sammendrag

Økende handelsliberalisering og åpenhet mellom markeder gir internasjonale bedrifter nye markedsmuligheter, men eksponerer samtidig disse for stadig tøffere konkurranse. Et økende antall små- og mellomstore bedrifter med en begrenset ressursbase deltar i internasjonal handel, og har med dette utviklet seg til å bli en betydelig bestanddel av verdensøkonomien. Internasjonalisering pålegger bedrifter å implementere relativt komplekse strategier med høy operasjonell risiko, og dermed har viktigheten av vellykkede eksportstrategier blitt stadig mer gjeldende.

Eksport og innovasjon er ansett som to av de viktigste kildene til økonomisk vekst og lønnsomhet. Denne masteroppgaven presenterer disse resultatsøkende strategiene som viktige strategiske virkemidler i prosessen mot å oppnå gode forretningsresultater. Følgende sammenhenger har blitt undersøkt; (1) hvilke strategiske elementer er forbundet med bedrifters evne til å eksportere og innovere; (2) hvordan blir økonomiske resultater påvirket av eksport og innovasjon som resultatsøkende strategier.

En kvantitativ forskningsstrategi er anvendt i et forsøk på å avdekke de foreslåtte relasjonene på et datautvalg bestående av 190 norske små- og mellomstore bedrifter som opererer internasjonalt. Avhandlingen gjør et forsøk på å vurdere strategiske profiler som fremmer økonomiske resultater blant internasjonaliserte selskaper. Dette ble gjort ved bruk av strukturell ligningsmodellering.

Analysen viser at et internasjonalt fokus forbedrer innovasjons- og eksportevner. I tillegg viser analysen at utviklingen av vellykkede innovasjonsevner er drevet av et organisatorisk klima dominert av initiativ og engasjement, mens mangfold i ledelsesgrupper kan føre til en vellykket eksportvirksomhet. Resultatene viser også at suksessfulle eksportaktiviteters er positivt relatert til gode bedriftsresultater. Samtidig viser funnene at intern innovasjonsevne er en relativt svak indikator på vekst og lønnsomhet.

Denne studien bidrar med viktige retningslinjer på bedriftsnivå både for ledere og teori. De praktiske og teoretiske implikasjonene bidrar til kunnskap om hvordan strategisk risiko påført av eksportvirksomheten bør forvaltes i liten og spesialisert økonomi. Til slutt fremlegges viktige faktorer som kan ha innflytelse på bedriftsytelse i internasjonal bedrifter, og angir retningslinjer for fremtidig forskning innen internasjonal strategi.

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Chapter 1

Introduction

Business performance is a chief dependent constructs of interest in the strategic management literature (Eisenhardt and Zbaracki, 1992; Wolff and Pett, 2006). With the growing globalization of business markets, internationalization strategies are increasingly becoming fundamental constituents of firm performance. The impact of internationalization on firm performance is one of the most frequently addressed research problems in the international management field (Werner, 2002). Further, the internationalization of business operations is widely acknowledged as an essential component of a firm's corporate strategy to achieve sustainable competitive advantage and above-average economic performance. Thus, the subjective perception is that access to export markets allows firms to exploit market opportunities abroad, achieve economies of scale, and boost financial results (Sousa, 2004).

Internationalized small and medium-size enterprises (SMEs) are increasingly being confronted by opportunities and challenges in international markets. SMEs that are successful in implementing strategies maximizing the utilization of opportunities and minimizing the accompanying cost and risk, will ultimately experience higher financial performance (Racic et al., 2008). The act of internationalization requires businesses to employ risky management strategies to navigate in the turbulent environment imposed by international disturbance (Baldwin and Caves, 1997). The growing gravity of internationalized SMEs to national economic growth and prosperity entails the importance of a comprehensive recognition of how smaller firms achieve high performance.

Firms' international expansion is widely considered to be a complex strategic endeavor adding to the operational risks. Accordingly, exporting mangers of SMEs face substantial challenges to effectively coordinate scarce human and financial resources in order to meet fierce competition and shifting customer demands in multiple markets. In addition, business experts and theorists have been unrestrained in advocating firms to acquire innovation capabilities. The development of innovation-based strategies may entail increased competitiveness in foreign markets enabling firms to reap higher levels of economic performance. Innovation and internationalization capabilities are widely recognized as critical determinants of a firm´s strategy to achieve a sustained competitive advantage, growth, and superior financial performance (Kuivalainen and Sundqvist, 2007; Kyläheiko et al., 2011; Leonidou et al, 1998; Zucchella and Siano, 2014). Specifically, employing the resource-based

paradigm (Barney, 1991; Barney, 2001), innovation and internationalization are vital internal strategic considerations in the formulation of corporate strategy.

1.1 Research Questions

Both theorists and practitioners could benefit from insight into best-practice characteristics derived from firms adopting an internationalization strategy. A study of Norwegian exporting SMEs may provide an elaborate understanding of the nature of firm performance and uncover the determinants of business performance. Correspondingly, De Clercq et al. (2005) encouraged research efforts to investigate how international activities convert into competitive advantage and explore the internal strategic factors that inhibit such conversion in foreign markets deploying firm performance as outcome variables. Consequently, the research objective of the study is twofold and read:

Research Question 1: *What is the impact of internal strategic attributes* on SMEs' exporting and innovation capabilities?*
> **Includes team characteristics, management orientation, and product strategy characteristics*

Research Question 2: *To what degree are innovation and export capabilities suitable predictors of business performance in exporting SMEs?*

The cumulative objective is to model the antecedent elements through which SMEs source the capabilities to successfully undertake innovation and exporting activities, and subsequently investigate how these strategies transform into performance. In accordance with the recommendations of Knudsen and Madsen (2002), the study treat exporting as a strategic issue whereas the objective is to identify the firm-specific conditions necessary to achieve and preserve above-normal performance. In particular, this study seeks to determine the fundamental strategic determinants that alter business performance. Correspondingly, the underlying premise of this thesis is that internal strategic elements are substantial predictors of business performance. The subsequent hypothesized relationships are developed based on the existing research in the roam of international business and strategic management theory.

1.2 Configuration of the Study

The thesis is organized as follows. Firstly, the study will present relevant theoretical works to give a viable representation of existing knowledge in the field of strategic management and international business. Secondly, the study proceeds to employ structural equation modeling to examine the obtained survey data to provide a more detailed understanding of the determinants of performance. Thirdly, the empirical results from the research model are presented. Fourthly, the study will analyze and discuss the findings and apply relevant

literature to describe and assess the performance profiles of exporting SMEs and provide important implications to the practical and theoretical problems addressed. Lastly, relevant limitations and directions for further research are presented.

Chapter 2

Theory

This chapter will provide a theoretical overview of relevant theory and research on firm performance and international business strategies. First, theory on internationalization and performance-related strategies is given. Next, current theory on determinants of performance is discussed deducing the development of hypotheses and an accompanying research model.

2.1 Globalization of Markets and Firm Internationalization

One of the most notable current market trends of international business is the globalization of markets entailing increasing openness and interconnection across borders (Cavusgil et al., 2012). Globalization is being propelled by the emergence of internationally-active and dynamic small and medium-sized enterprises (SMEs) supported by the accelerating pace of technology change and increasing cross-border trade liberalization (Knight, 2000). Globalization is a forceful process that poses great challenges on SMEs and the national economies in which they operate.

The emergence of a borderless economy has been hastened by the development of information and communication technology capabilities that allow firms to conduct global business and internationalize more efficiently (Knight and Cavusgil, 2004). The globalization of trading activities has led to considerable amendments in the domestic marketplace. Knight (2000) emphasizes that these trends emerge as a consequence of the growth in economic and political liberalism in the postwar period. Traditionally, economist have touted the benefits derived from trade liberalization (Baldwin and Gu, 2004), and the globalization process is being propelled by structural changes in the in the regulatory and economic environment. Consequently, numerous international trade agreements have led to a systematic reduction of trade barriers, which have enabled smaller firms to start exporting products and services despite resource poverty (Aspelund and Moen, 2001). As a result, cross-border trade and cross-border investments have become increasingly commonplace within most industries. In sum, the international competitive landscape has become more intensified, and SMEs are operating in a competitive environment where boundaries between domestic and international markets are becoming less relevant.

Bang and Markeset (2012) found that the drivers of economic globalization indeed affect competition and pose increased pressure on the competitive situation, increased fragmentation of the value chain, increased technology spread, lower technology costs, and increased overall market size. Consequently, firms must seek new markets to extend the life cycle of their product offerings (Nummela et al., 2004). Additionally, the competitive pressure and turbulence may also reduce the firms' ability to control its strategic pathways.

The current market trends are indeed affecting the dynamics in Norway's small and open economy, and the intensified internationalization of the global marketplace has greatly impacted the Norwegian business sector. Companies in small and open economies seeking to achieve rapid growth rely on the expansion into large international markets, which may in turn pose challenges on the firms' ability to increase productivity and reduce inefficiencies (Baldwin and Caves, 1997). The subsequent performance difficulties encountered by internationalized firms have called for the need of contributions to the development of international business theory.

2.2 Performance

The trend toward globalization of business activities has accentuated the importance of understanding the behavior and subsequent performance of firms in international markets. A principal subset of the SME literature is therefore examining the venture-related performance in smaller firms. The economic performance of organizations has been conceptualized using multiple schemes and is the fundamental issues to management practice and research (Venkatraman and Ramanujam, 1987). Recent research acknowledges that organizational performance is a multi-dimensional and perplexing construct (e.g. Carton and Hofer, 2010). According to Venkatraman and Ramanujam (1987), corporate performance can be conceptualized on two distinct dimensions; i.e. operational and financial. In addition, the heterogeneous phenomenon of performance is composed of both environmental variables and managerially controllable variables (Contractor et al., 2003). The latter group is probed in this study, and the construct encompasses firm-specific aspects such as organizational characteristics and strategic behavior.

2.2.1 The Measurements of Performance

Kuivalainen and Sundqvist (2007) note that the performance of internationalized firms may be reflected through partly financial and partly strategic outcome measures. There exist some practical problems in measuring financial performance. Specifically, there could be issues related to the accounting for the effects of market fluctuations or industry-specific economic oscillations. Hence, the phenomenon of business performance is conditioned by the interaction between external (e.g. market opportunities and constraints) and internal (e.g.

resources, strategies and capabilities) factors (Racic et al., 2008). Furthermore, individual differences in accounting standards and currency fluctuations could affect the measurement of performance. Despite the inherit limitations; profitability and firm sales growth are two distinct and separate components of the performance construct featured in this study.

Theorists have empirically identified diverse growth and profitability patterns, and it is generally accepted that organizational performance may be achieved in a number of ways. Due to environmental and competitive factors, business managers may seek to pursue risky strategies that sacrifice profitability for firm growth. Conversely, some SMEs operate towards alternate organizational goals, and may henceforth sacrifice further growth to enhance long-term profitability. This conception assumes that the enterprises that maximize the utilization of opportunities and resources whilst minimize accompanying costs, will ultimately possess the highest performance potential.

2.2.2 The Performance Enablers

A firm's strategy may affect performance in many ways, and strategic behavior and structure of a firm may result from the matching of internal resources and skills, managerial opportunities, and emerging market opportunities. The resource-based paradigm (Barney, 1991, 2001) is a broad theoretical approach classifying performance as descendants of internal, firm-specific factors. Applying this approach, Grant (1991) argues that the resources and capabilities of a firm are the central considerations in formulating corporate strategy. This view argues that performance is derived from the firm's ability to apply appropriate resources to address strategic goals.

The increasing turbulence of the external business environment and an increasingly dynamic market setting have, according to e.g. Grant (1996), focused the attention upon organizational resources as the principal source of business strategy formulation and competitiveness. Generally, current research frequently regards exporting capabilities and innovativeness as two of the main engines driving augmentations of financial performances (e.g. Kyläheiko et al., 2011; Racic et al., 2008).

2.3 Performance-seeking Strategies

There is no single pathway to corporate performance, and firms may seek growth and profitability through its ability to innovate or serving a broader scope of markets. Accordingly, it can be suggested that financial performance is indirectly influenced by relevant strategic attributes, and that the subsequent performance may be either innovation-based or exporting-based. Hence, exporting SMEs may develop distinct strategic capabilities that enable their

internal capacity to counterbalance SMEs' vulnerability in a turbulent economic environment (Raymond et al., 2014).

The substantive notion and conceptualizing of performance-seeking strategies, i.e. innovation and internationalization, is partially retrieved from the conceptual framework compiled by Kyläheiko et al. (2011). The current study seeks to determine the mediating role of innovation and internationalization as performance-seeking strategies, as illustrated in Figure 1.
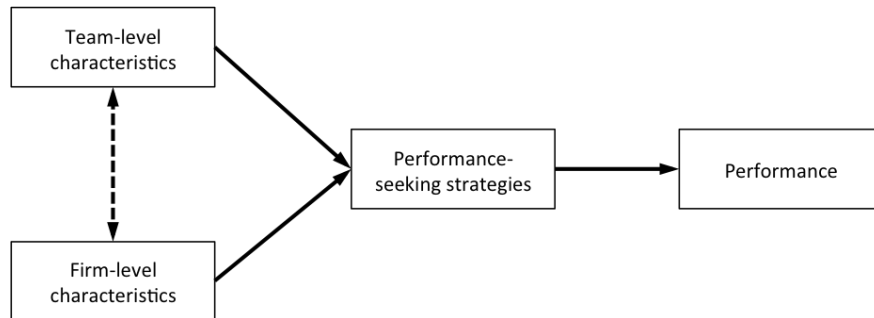
Figure 1: Simplified conceptual model illustration. The model is based on the conceptual framework proposed by Kyläheiko et al. (2011), and is further adapted to the specific context of this study. The notion of 'growth-seeking strategies' is modified to 'performance-seeking strategies' to encompass both profitability and growth as performance indicators

2.3.1   *Internationalization Capabilities*

Scholars and managers have progressively been reflecting on the benefits of firm internationalization strategies deployed by both service and manufacturing firms, and the associated effects of strategic management. International business rests on the bedrock assumption that increased globalization and extensive international trade is positively related to firms' performance (Contractor et al., 2003). In this regard, firm internationalization is widely presumed to potentially improve core organizational outcomes and enhance value creation (e.g. Esteve-Pérez and Rodríguez, 2013; European Commission, 2010; Kuivalainen and Sundqvist, 2007; Lu and Beamish, 2006). Due to its alleged importance, numerous theorists have conceptualized and characterized several patterns of internationalization with respect to geographic range, entry modes, timing, and intensity of commitment to foreign markets (Kuivalainen et al., 2012).

The process of internationalized operations involves a coordination of various activities to penetrate foreign markets and potentially reap benefit from international resources. Essentially, internationalization has been firmly supported by international institutions, such as the World Trade Organization and the European Economic Area (EEA) (Ministry of Foreign Affairs, 2014). This is especially true in a market-driven small and open economy (SMOPEC), such as Norway, where international trade accounts for more than 47 percent of

the national GDP (The World Bank, 2014). The openness to surrounding markets, accompanied by sound fiscal policies, has encouraged an increasing number of actors originating from SMOPECs to participate in the world trade.

For the purpose of this study, the specific emphasis on exporting as entry mode is treated as a proxy for firm internationalization. Exporting performance is widely researched, but is one of the least understood areas of the current international marketing field (Sousa et al., 2008). Overall, exporting is the most common form of foreign entry mode (European Commission, 2010), and due to the relatively low-risk/low-commitment nature of exporting, it is generally found to be the dominant entry mode amongst SMEs (Cassiman and Golovko, 2011; D'Angelo et al., 2013; Kuivalainen et al., 2007). In sum, the general consensus amongst most theorists is that SMEs engaging in exporting activities are relatively well-positioned to gain market share, sales growth, higher profit, and network effects.

2.3.2 *Innovation Capabilities*

The second performance-seeking strategy entails firms to pursue innovation-based growth and profitability. Strategic management scholars have long emphasized that innovation is essential to the survival and performance of firms (Ganotakis and Love, 2012; Keupp et al., 2012). Similarly, The European Commission (2001) states that innovation capability is becoming an increasingly important asset for firms´ long-term competiveness in today´s knowledge based economy with fast-changing market needs. Theorists show that the ability to innovation is an essential strategic resource that induces competitive benefits and advances the efficiencies across a wide scope of industry sectors.

Innovation has also been referred to as 'the driver of the knowledge economy' (Philpott et al., 2011, p.161). Further, the OECD (1996) acknowledges that the globalized economies are increasingly based on knowledge and information, and that knowledge is a driver of economic growth and firm productivity. Teece et al. (1997) deploy the concept of dynamic capabilities to emphasize the importance of capturing the value of acquired knowledge and translate these into organizational routines and operations. The concepts of skill acquisition and management of knowledge are strategic issues that can be closely linked to the innovation capabilities of firms. Hence, innovation-related assets may be regarded as essential components in firms' ability to obtain competitiveness in today's globalized market.

Innovation and its effects on firm´s performance have been subject to extensive research the later years (see e.g. Hall et al., 2009; Porter, 1990; Wolff and Pett, 2000). Additionally, there has been a large body of theoretical contributions suggesting the interrelationship between innovation and internationalization, and the potential mutual reinforcement between the two performance-seeking strategies.

2.3.3 Interrelation Between Internationalization and Innovation

Numerous conceptual or theoretical predictions in the area of strategy imply that exporting and innovation activities are interdependent, suggesting that these strategies could be substitutive or complementary. Theorists have frequently discussed the link between innovation and internationalization, and innovation is often regarded as a prerequisite for competitiveness in an increasingly fierce competitive landscape. The European Commission (2010) asserts the strong relationship between innovation and internationalization, while Porter (1990) argues that advances in technology is a key lever that enables firms to respond to changing market conditions. Due to the effects of globalization, providers of goods are competing on an increasingly global marketplace. In this regard, Knight and Cavusgil (2004) submit a claim that the ability to innovate is one of the key resources to gain access to international market. Further, Kafouros et al. (2008) show that firms may be unable to reap benefits from innovation capabilities unless they have internationalized above a certain threshold.

This alleged interrelationship has led to the emergence of two distinct but partly overlapping mechanisms, namely 'Self-Selection-Effect' and 'Learning-by-Exporting'. Firstly, the effects of self-selection indicate that innovation induces firms to increase their export activities, and that due to the higher levels of competitiveness in international markets, innovative and productive firms have better chances of succeeding with exporting activities (Monreal-Pérez et al., 2012). Second, learning-by-exporting effects imply that exporting activities induce more intense innovation behavior (ibid). This conjecture states that firms may experience benefit from the knowledge generated by internationalization. The notion is supported by Knight (2000) and Zahra et al. (2009), who suggests that an international expansion could potentially facilitate new innovations. Zahra et al. (2000) show that participation in international activities could potentially provide SMEs with information networks, skills and competencies that may improve competitiveness and innovation capabilities. Further, the globalization process has made innovations more readily available, enabling firms to potentially reap potential benefits from technology spillovers (Bang and Markeset, 2012; Grønning et al., 2008).

2.4   Hypothesizing

The last section addresses the embedded capabilities of firms. In particular, the study will review management orientation, product strategy and team characteristics. As illustrated in Figure 2, this study seeks to evaluate the performance-seeking strategies both as outcomes and antecedent variables. In order to properly model and test the proposed research model, both perceived performance and intensity measures, i.e. degree of internationalization and investments in Research and Development (R&D), are tested in the mediating role of exporting and innovation.
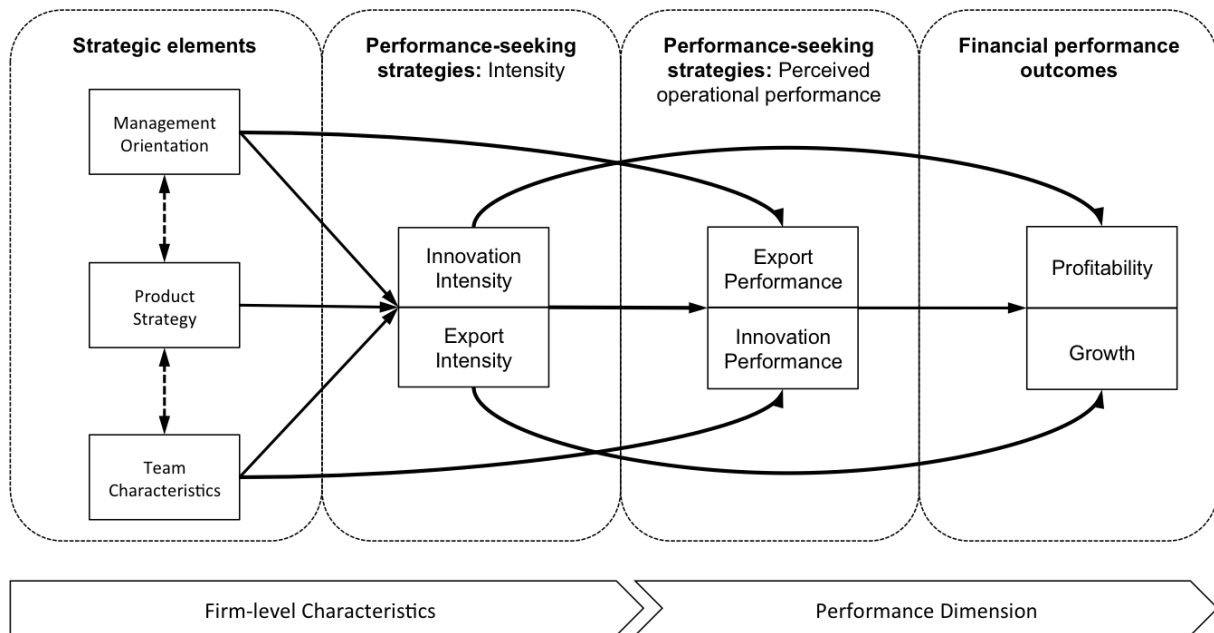
Figure 2: Conceptual framework illustration. Innovation intensity is the relative amount of annual revenue invested in research and development (R&D) Export intensity represents the conceptualization of the percentage amount of revenue coming from international markets.

2.4.1 Organizational Factors and Performance Enablers

In conjunction with the role of internationalization and innovation, previous empirical studies have found numerous firm-specific or team-specific characteristics that may impact firm performance. Previous research has persistently acknowledged firm-specific characteristics to impact performance in export markets (e.g. Beamish et al., 1999), ultimately affecting overall business outcomes.

The Assets and Liabilities of Smallness

Small and medium-sized enterprises have been receiving increasing attentions from policy makers and theorist in recent years. Smaller firms are found to have advantages in terms of rapid decision-making, willingness to take risk and flexibility (Love and Roper, 2015). Due to their responsiveness, SMEs are recognized to be well-suited to address the emerging market opportunities and reap benefits of globalization (Mrak, 2000). Today, 95 percent of all firms in OECD countries fall within this category, employing 60-70 percent of the population (Jansen and Lanz, 2013). Classic marketing and economic theory generally suggest that larger, resourceful firms hold an advantage in international markets. Despite the competition from more resource-rich multinational enterprises, SMEs have become increasingly more important actors in the national economy and in world trade in general. SMEs are ultimately regarded as

crucial drivers of economic growth, social wellbeing and employment (Lilischkis, 2011; Knight, 2000).

SMEs are heterogeneous entities that operate within a wide scope of different capital markets, industrial sectors and competitive environments. Moreover, SMEs are characterized by resource scarcity and a limited financial base, and thus foreign market entries may become complex strategic processes bearing relatively high risk (Zahra et al., 2000). These characteristics influence their strategic behavior, and puts high demands on SMEs' ability to deploy an effective internationalization strategy. Furthermore, the restricted size of most SMEs often entails organizational and managerial characteristics to overlap.

Management Orientation

By expanding the attention to include the characteristics of the decision makers, in particular the motivational attributes of SMEs´ top management teams, the study seeks to uncover the predictive powers of managerial intention or desire to engage in certain strategic endeavors. Managerial teams are the amassed informational and decisional body in which organizational and strategic moves are made, and should be regarded as a principal element in the company's strategy evaluations. The "upper echelon" perspective (Hambrick et al., 1996) emphasizes the significance of the management team and its impact on business performance. In the later years, the number of managers with international experience and comprehensive business networks has increased (Madsen and Servais, 1997). Accordingly, theorists (e.g. Coviello and Martin, 1999; Kaleka, 2002) argue that the increasing internationalization of firms stem from increased importance of global business network relations.

A large body of research is consistently proclaiming that management is the principle force behind the development, initiation and performance of firms' efforts in foreign markets (Leonidou et al., 1998). The theory of planned behavior (Ajzen, 1991) postulates that strategic behavior is a joint function of managerial intentions and perceived behavior control. This theory further predicts that intentions drive desirable strategic outcomes.

International Orientation and Growth Aspiration

Given the importance of managerial factors, the inclusion of management characteristics is warranted. Crick and Jones (2000) show that managers' attitude toward international expansion is an important dimension of firm internationalization. Previous contributions to the international SME literature (Aaby and Slater, 1989; Breashear Alejandro et al., 2011; Knight and Kim, 2009; Kyvik et al., 2013; Zou and Stan, 1998) have found evidence that indicates international orientation as a significant dimension of international behavior and performance of firms. Nummela et al. (2004) find that a global mindset is a key parameter driving international performance. In a review of the empirical exporting literature, Zou and

Stan (1998) found international orientation to be a consistent predictor of export performance. Moreover, Moen et al. (2015) find that SMEs with a strong international orientation also exhibit a strong motivation for growth.

Only a few studies have empirically investigated the aspiration to growth and the subsequent growth of SMEs (Wiklund and Shepherd, 2003). For instance, Delmar and Wiklund (2008) found that managers´ motivation to grow affects realized growth, and that goal-oriented growth motives are effective predictors of firm growth. Conversely, the relationship between growth aspiration and subsequent growth may be weakened due to environmental constraints inflicted on managers, limiting the total volitional control of management teams (Frederic Delmar & Wiklund, 2008; Wiklund & Shepherd, 2003). Despite this, the predictive value of management's aspiration is supported by the findings of a longitudinal study of Norwegian SMEs, where Moen et al. (2015) found that motivation for growth affect the development of appropriate resources that ensure superior growth both domestically and abroad. Ultimately, Delmar (1996) argues that managers' motivation is a crucial decisive construct in explaining organizational performance outcomes.

It is further argued, applying the notion about innovation and exporting as growth strategies (Kyläheiko et al., 2011), that mangers attempt to seek performance through innovation and internationalization capabilities. It is therefore hypothesized that management teams with a strong international orientation and strong aspiration to growth are actively seeking organizational performance through innovation and exporting.

H1: Management orientation toward performance-seeking strategies has a positive effect on perceived performance and investments in performance-seeking strategies.

Product strategy

Theorists dictate that internationalization is positively related to certain product characteristics. Specifically, empirical studies have constantly emphasized the role of technology and product offerings as major facilitators of enhanced business performance (e.g. Cavusgil et al., 1993; Kyläheiko et al., 2011). The successful development of unique products is ultimately a component of an overreaching marketing strategy that may yield differentiation strategy benefits (e.g. Smith, 1956).

Product uniqueness

The capability to develop unique product offerings is likely to be adopted by smaller, resource-constrained firms that will be more inclined to undertake a differentiation strategy in order to facilitate superior performance (Knight and Cavusgil, 2004). This relationship has frequently occupied the research agenda of international marketing strategy, and scholars

have investigated how greater adaptation to unique uses and purposes differentiates firms from rivals (e.g. Cavusgil et al., 1993). Uniqueness in the product offering represents a distinct firm-specific knowledge resource which in turn could facilitate profitable pricing and minimize competitive pressure (Knight and Cavusgil, 2004). In this regard, the internal accumulation of organizational knowledge could be regarded as a strategic asset.

Knight and Cavusgil (2004) provided evidence suggesting that unique product development is indeed a significant driver of performance, and that this construct is associated with the technological competence of firms. Literature suggests that firms providing specialized high-technology products are more likely to obtain higher export intensity (e.g. Burgel and Murray, 2000). Knight and Cavusgil (1996) argue that advances in technology and the improvements of general welfare have created an increased demand for specialized goods. The capabilities required to develop these unique product offerings may originate from the knowledge developed within internal innovative processes (Knight and Cavusgil, 2004), and the nature of the alleged uniqueness of the product offerings requires this knowledge to be tactic or imperfectly imitable (Barney, 1991). This strategy may create a competitive advantage and enable firms to "skim" the market ahead of competition, but the shortening of product life-cycles in the globalized market may put additional pressure on firms' ability to capitalize on such development efforts (Wiklund and Shepherd, 2005). Hence, efficient deployment of performance-seeking strategies is warranted.

It is therefore hypothesized that the knowledge and technological competencies that descend from such a product strategy allows for high levels of innovation capabilities. In addition, the ability to serve customer's specific needs such that direct competitive rivalry is minimized, should support performance in international markets (Burgel and Murray, 2000; Knight and Cavusgil, 2004).

H2: Uniqueness as a product strategy is positively related to perceived performance and investments in performance-seeking strategies.

Team characteristics

A firm's international operations are not only accompanied by sophisticated business techniques, but are also associated with the joint capabilities of its organizational members (Hymer, 1976, p. 69). The principal objective in managing human assets is ultimately to identify organizational approaches that correspond to the desired business goals. According to Beer and Walton (1987), major environmental changes and increasing international competition have introduced human resource management capabilities as critical strategic and competitive asset. Regardless, while several firm-level attributes of SMEs are well understood, the role of employee management is less explored (Love and Roper, 2015).

Top Management Team Diversity

Top management teams are the strategic apex charged with the liability of making decisions on behalf of the organization in order to identify opportunities and ensure that the organization serve its mission in an effective way (Mintzberg, 1979, pp. 24-25). Haleblian and Finkelstein (1993) accentuate the imperative role of top management teams in strategy formation and their influence on business performance. Specifically, Hambrick et al. (1996) note that the management of an organization is a shared effort, and that the composition of the top management team is a crucial element in corporate behavior. Hence, literature claims that the performance of firms may be largely related to managerial characteristics.

The managerial teams are composed of individuals that apply knowledge, experience and perspectives in order to contribute to team-level decision making and the overall direction of the firm (Hambrick et al., 1996). A substantial line of prior empirical research has investigated management team composition, but the research has remained to produce conclusive results about the degree to which top management team diversity is beneficial to firm performance (Wei and Wu, 2013). Love and Roper (2015) remark that the link between team diversity and successful implementation of performance-seeking strategies remain an area of contention. Correspondingly, the appropriate mix of characteristics and qualities depends on the external (e.g. industry, competitive environment) and internal (e.g. business strategy, product offering, workforce profile) context in which the management team operates (Hambrick et al., 1996).

In sum, individual managers contribute to the team composition with different backgrounds and perspectives, where members must draw on individual and collective social and human capital. A heterogeneous skill-set of managers could contribute to nurture customer relationships, and hence reduce the perceived liabilities of foreignness and increase cultural sensitivity (Opstrup and Villadsen, 2014; Sichtmann and von Selasinsky, 2010). This may in turn lead to a reduction of internal barriers to enter foreign markets and improve the ability to utilize the internal development process.

Employee Commitment

The second team-level attributes focus the attention on the psychological construct of organizational commitment. Corporate culture determines how success is defined and accomplished, and thusly serves as a fundamental function within any organization (Schneider, 1995). Organizational culture is a crucial component of organizational development and may substantially impact firm performance (Phipps et al., 2013). Despite its acclaimed importance, past research on the productivity impact of human resource management has been relatively sparse (Jones et al., 2010).

A cultural factor that is related to firms´ productivity is the organizational climate for commitment and initiative of team members (Angle and Perry, 1981; Arthur, 1994; Baer and Frese, 2003; Jassawalla and Sashittal, 2002). According to Cole and Bruch (2006), the conceptualization of organizational commitment refers to the individual´s emotional attachment to and involvement in the employing firm. Organizational commitment (henceforth *commitment*) can be characterized by at least three factors, including 'a willingness to exert considerable efforts on behalf of the organization' (Porter et al., 1974, p. 604). The structuring of commitment in organizations and within teams is a chief objective of human resource policies and practices (Bishop and Scott, 1997). The assumption predicts that high levels of team-level commitment to the organizational goals and mission ultimately foster success. This is further amplified by the claim that team members´ dedication to organizational goals is a crucial requirement even when other vital structural prerequisites are met (Angle and Perry, 1981). A climate that promotes these kinds of team-level mechanisms should therefore improve the overall business outcomes.

As shown in the conceptual model (Figure 2), this study expects that firms seek performance through the mediating role of exporting and innovation. Thus, it is hypothesized that management team diversity and a high degree of organizational commitment will foster higher levels of exporting and innovation performance.

H3: Management team diversity and commitment are team-level characteristics that positively affect perceived performance and investments in performance-seeking strategies.

2.4.2 Performance-seeking strategies and performance

The present study is ultimately concerned with firm-level performance implications. Resource commitment and internal capabilities are often found to substantially affect the performance of firms (Sousa et al., 2008). In particular, Innovation and exporting is conventionally regarded as two separate growth strategies (Onetti et al., 2012). The present research draws on multiple theories to explain outcomes and strategic antecedents. In particular, the investment in strategic capabilities and the corresponding innovation and exporting performance is investigated. Correspondingly, a timely challenge is to investigate the validity of the measurements tied to these performance-seeking strategies.

Investments in Innovation and Exporting Capabilities

Export and innovation are multi-dimensional concepts. This implies that multiple indicators may be necessary for a reliable assessment of the constructs. Investments in these capabilities are generally conceived to alter desirable operational outcomes, and will hence be measured alongside the subsequent performance measures.

Investments in R&D

Innovation activities can be embodied through R&D activities, product development and patents. However, most studies attempting to assess internal technological and innovative capabilities have generally confined to measuring the most readily identifiable inputs, such as R&D expenditures and other R&D related measures.

Ultimately, R&D expenditure represents an investment in in-house knowledge-based resources and development capabilities (Heeley et al., 2006). Specifically, Modern SMEs make strategic choices about R&D expenditure levels in the anticipation of enjoying competitive advantages and financial returns in subsequent periods (Coad and Rao, 2010). Prior empirical evidence frequently finds that R&D capabilities are positively linked to innovation output (Ganotakis and Love, 2012; Love and Roper, 2015; Love et al., 2009). Applying the resource-based paradigm, investments in R&D may bolster the intramural capabilities of the firm, which may subsequently positively affect business operations. This has lead studies to consider innovation and R&D as interchangeable.

Contradictorily, Wang et al. (2009) show that internal R&D indices as a proxy for innovation investments could hold some disadvantages and limitations. Investments in R&D do not guarantee an efficient innovation output (Kleinknecht et al., 2002), often ignore informal R&D and small-scale development (D'Angelo et al., 2013; Kleinknecht and Reijnen, 1991), and is consistently under-reported by SMEs (Kleinknecht, 1987). In addition, Zucchella and Siano (2014) found that export performance of small firms is significantly related to external sources of innovations, and not internal R&D. Regarding these findings, it could be conceptually more appropriate to consider innovation output or other alternative measures to determine the role of internal innovation capabilities (Ganotakis and Love, 2011; Harris and Moffat, 2011). However, research suggests that a certain level of internal R&D capacity is necessary to leverage and benefit from external knowledge sources (Hall et al., 2009; Roper et al., 2008). Despite the inherit limitations, it is suggested that R&D expenditure contribute to the firm's competitiveness in the dynamic environment of international markets.

Degree of Internationalization

Another fundamental strategic consideration is how to govern the firm internationalizing process in terms of scope, time and scale (Aspelund et al., 2007). A major issue in the international business literature is the conceptualization of export performance. In a thorough review of the exporting performance literature, Zou and Stan (1998) find that research not have reached an agreement on how to measure export performance. Measuring the absolute sales volume (export intensity) and managers' satisfaction with export contributions to overall performance are two commonly used measures.

Export success is often found to be positively related to capital investments or resource commitment in exporting activities (e.g. Cieślik et al., 2015; Love and Ganotakis, 2013).This could be measured by degree of internationalization, i.e. export intensity. The measure has been subject to criticism from researchers as it fails to operationalize explicitly the performance in international markets (Leonidou et al., 1998). Sousa et al. (2008) suggest that multiple indicators are necessary for a reliable assessment of the export performance construct. This study approach export intensity and export performance as two separate measures of firm internationalization. Although some empirical studies (e.g. Haahti et al., 2005; Katsikeas et al., 2000) generally consider degree of internationalization and export performance to be somewhat compatible, these metrics are investigated separately.

The interrelationship Between Innovation and Exporting Capabilities

An extensive body of research has investigated the alleged mutually-reinforcing interrelationship between innovation and internationalization (e.g. Filippetti et al., 2011; Ganotakis and Love, 2011; Golovko and Valentini, 2011; Harris and Moffat, 2011). The strategic management literature often shows a strong expectation that innovation capabilities (in particular R&D) and exporting are strongly related, and that firms that are highly internationalized need to be highly innovative. Empirical evidence points to innovation as an instrument employed to overcome barriers to export (Ganotakis and Love, 2011). The European Commission (2010) states that the positive relationship between innovation and internationalization amongst internationally active SMEs is persistent. A unilateral focus on finite domestic markets may simply not justify high R&D expenditures and extensive developing efforts. Thus, the ability to generate high sales volumes through internationalization could be viewed as an essential attribute to recoup investments in innovation capabilities (e.g. Burgel and Murray, 2000).

In a summary of SME innovation and exporting literature, Love and Roper (2015) find substantial evidence supporting that innovation activities are related to the success of exporting activities. Research has found evidence suggesting that a higher degree of exporting activities is positively related to firms' abilities to innovate (Bryman and Bell, 2011; Cassiman and Golovko, 2011; Wolff and Pett, 2006). This general expectation regarding the interrelationship between innovation and exporting has generally been accepted with only a limited line of empirical evidence to support this phenomenon (Harris and Li, 2011). Conversely, there are also a few studies that find insignificant relationships between exporting and innovation (Ganotakis and Love, 2011). These findings suggest that the interrelations between innovation and exporting activates are more complex than generally anticipated.

However, exporting organizations are expected to be more innovative in a mutual reinforcement (Leonidou et al., 1998), and it is hence hypothesized that performance and

intensity of the two performance-seeking strategies are interrelated. This has led to the expectation that intensity constructs are positively associated with perceived performance.

H4: Investment in performance-seeking strategies is positively related to perceived innovation and exporting performance.

Internationalization and Innovation as Performance Enablers

Many studies have attempted to explain the differences between exporter and non-exporters, and the vast majority of research provides consistent evidence of internationalization as a performance-enhancing strategy. Researchers have also documented the benefits of development capabilities, and innovation is generally accepted to alter firm performance. Here, the export-performance and innovation-performance relationships are examined separately.

The Export-Performance Relationship

Internationalization is widely regarded as a critical constituent of the corporate strategy to achieve growth and profitability (Kuivalainen and Sundqvist, 2007). Love and Roper (2015) argue that highly productive SMEs are more likely to become exporters, and that exporting firms are more productive (i.e. self-selection). There are numerous reasons for SMEs to engage in international activities despite the additional risks and costs. Contractor et al. (2003) summarize how international expansion accrue due to a combination of factors; the ability to spread overhead cost over larger markets, attaining learning effects, gain access to resources, and potentially reap benefits from renewed market opportunities.

Another possibility is that successful international trade improves productivity and internal efficiency. The proposed potential productivity gains from exporting activities are believed to produce increased financial returns and growth. This notion is supported by The European Commission (2010) that posits that international activities are strongly related to growth. This is further sustained by the findings of Lu and Beamish (2006), who found that export intensity was a significant driver of SME growth. Hence, both export performance and intensity are expected to positively affect economic performance.

In the case of smaller firms, Kuivalainen and Sundqvist (2007) found that higher extent of internationalization mediates better firm-level performance. This notion has received wide support, and export intensity is commonly accepted as a desirable outcome variable. However, recent research has shown the potential liabilities of higher multinationality and high levels of internationalization (Contractor et al., 2003; Kuivalainen and Sundqvist, 2007; Ruigrok et al., 2007). Kuivalainen and Sundqvist (2007) concluded that export intensity in some cases do not necessarily entail a direct positive effect on firm's performance, a tendency that

previously had been conceptualized by Contractor et al. (2003) in the three-stage theory of international expansion. This study argues that some firms may over-internationalize '*into a suboptimal strategy*' by expanding into an excessively amount of nations and hence suffer subsequent negative effects on performance. Conversely, other studies (e.g. Pangarkar, 2008) have found a positive link between high degrees of internationalization and performance.

Still, the conceptual logic underlying the present research in the exporting-performance relationship rests on the assumption that firms reap incremental benefits from extensive engagement in export markets. It is hence conjectured that highly internationalized SMEs generally perform better on firm-level.

The Innovation-Performance Relationship

Porter (1990) and Kaleka (2002) argue that innovation is vital to the competitiveness in international markets. The assumption is that the enhance competitiveness derived from development activities enables firms to reap greater benefits in domestic and international markets. Facing indigenous competitors, superior development capabilities may be contributing to the achievement of a monopolistic advantage (Hymer, 1976) further supporting the substantive performance of SMEs. More specifically, Wolff and Pett (2006) found a positive association between product development capabilities and growth performance, while Hall et al. (2009) found a positive association between innovation capabilities and productivity in SMEs. Researchers generally support the perception that innovators are persistently better performers than non-innovators (Love et al., 2009). Innovation is hence acknowledged as a key element of SMEs' ability to efficiently address and administer successful business strategies.

Previous findings (e.g. Ganotakis and Love, 2012) imply that exporting and innovation are independently exerting a positive effect on the performance dimension. Accordingly, this study will investigate innovation and internationalization as separate strategies having a mediating effect on firm performance. It is hypothesized that innovation and internationalization facilitate both firm growth and profit performance.

H5: *Financial performance is positively related to perceived innovation and export performance and investments in performance-seeking strategies.*

2.5 Research Model

The objective of this study is to model the strategic path through which SMEs source their indispensable capabilities to undertake performance-seeking strategies and exploiting various strategic capabilities to generate firm performance. The strategic capabilities in the left column of the research model (Figure 3) are deemed to influence on SMEs´ performance in right column through a mediate effects of innovation and exporting found in the middle column. The hypothesized relationships account for a total of 32 potential pathways between the focal constructs, all of which with a positive predictive sign.
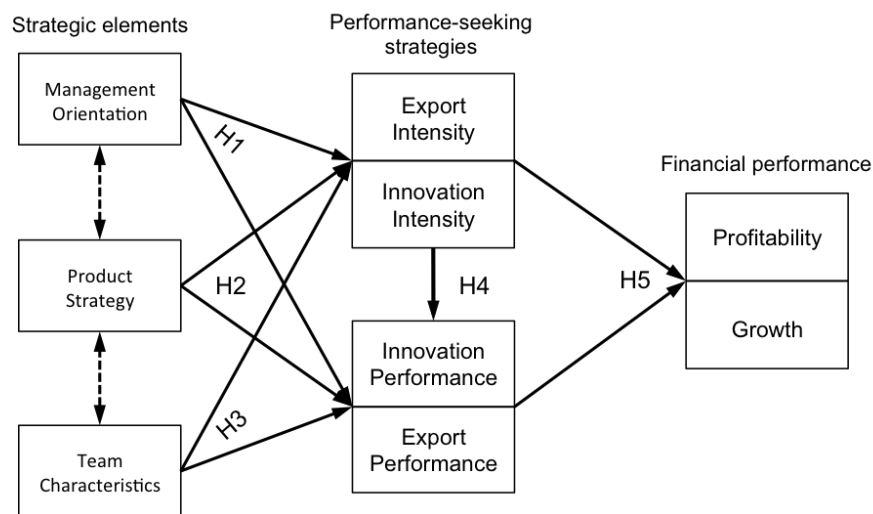
Figure 3: Complete research model containing strategic constructs and hypothesized linkages

Chapter 3

Methodology

This section assesses the various aspects of the methodology deployed in the assessment of the hypothesized relationships between strategic indicators and outcome measures. The predictive analyses aim to explore and describe the phenomenon of internationalized SMEs, and the most appropriate method for this purpose has proved to be a quantitative research strategy. An overview of the applied methods is rendered in Table 1.

Table 1: The principal methods applied in this study

	Research methods
Strategy	*Quantitative*
Design	*Cross-sectional survey*
Data Collection Procedure	*Survey data collection (self-administrated questionnaire) and publicly available data*
Framework for Analysis	*Examination of relationships between various indicators using Structural Equation Modeling*

3.1 Choice of Research Method

The study utilizes a deductive and quantitative research strategy. The quantitative research approach comprises statistical methods and analysis of numerical findings in the obtained data sample. This research method is preferable because it corresponds to the normative nature of this study. The method allows the study to collects data in a single point in time and examines them to detect patterns of association (Braymen et al., 2011; Yin, 2014).

A quantitative approach enables a comparison of findings to previous research, and is thus appropriate when aiming to preserve replicability and limit bias. The method permits a relatively resource-efficient collecting of a large number of data points. In additions, quantitative studies enable a valid generalization to be derived from the data collected, and facilitate the projection of present findings onto larger populations through an objective process (Borrego et al., 2009). The conclusions derived from the measures of statistical analysis allow researchers to make general inferences based on the research model's inherent predictive powers.

The employed research design is cross-sectional, and is utilizing a self-completion survey. Survey are recommended in situations where the research question tries to answer questions about who, what, where, how many, or how much (Yin, 2014). This measurement process collects information in a highly structure manner by inquiring carefully chosen, sequenced, and precisely asked questions (Cooper and Schindler, 2011). The survey is an appropriate approach when the gathering of large amounts of data is desirable. This design is highly flexible and is particularly suitable when studying a wide range of topics aiming to generalize findings of a population (Muijs, 2010).

I argue that Norwegian SMEs operation within a SMOPEC environment represent a population sample that is transmissible to a possible future state of globalized trade. This notion entails that the conclusion found among the current sample must enable replication within larger populations of SMEs, indicating that a quantitative approach is a good fit for the purpose of this thesis. Further, since the research objective seeks to test the validity of the hypothesized variables and quantify these relationships, a quantitative research method is ultimately found applicable.

3.2 The Data

The data in this multisource approach is collected from a selection of exporting SMEs in Norway. This study will employ two different data-collection methods, namely data derived from a comprehensive survey and a subsequent collection of publicly available financial data. The following section will describe the survey data and the publicly available data applied in the analysis.

3.2.1 Data Collection

The firm level data was collected by the survey *"Internationalization of Norwegian Exporting SMEs"*, performed by the Department of Industrial Economics and Technology Management at the Norwegian University of Science and Technology in 2014. The different steps of the data collection procedure were carried out over a period of 6 months, beginning March 2014 and ending in August 2014. In order to collect the necessary data, two PhD students from the Department of Industrial Economics and Technology Management developed the questionnaire. The questionnaire is inspired by researchers at the Department of Industrial Economics and Technology Management at NTNU, and the survey is designed to be a continuation of previous research in order to map the characteristics of Norwegian exporting Business-To-Business SMEs. The previous studies of the Norwegian business sectors were conducted in 1997 and 2005, and have contributed to the fields of international entrepreneurship and international business (e.g. Aspelund and Moen, 2001; Aspelund and Moen, 2005; Moen, 1999).

Sample firms were identified using the Kompass Europe database, and almost 2300 exporting SMEs were identified and selected. The survey was sent to and collected from firms using three different approaches; namely sending the questionnaire by mail and e-mail simultaneously, first sending mail questionnaire followed by e-mail, and lastly sending e-mail followed by mail. The responses submitted electronically were collected using Select Survey, while the responses arriving by mail were manually transferred to a spreadsheet. The survey was primarily addressed to top-level managers.

The total population of investigated firms provided a final data sample consisting of 386 respondents that partially or fully completed the questionnaire. This gives a response rate of 17.1%. About 24.7 percent of the respondents answered the questionnaire on paper and mailed the response back, while the remaining respondents filled out the questionnaire online using Select Survey.

3.2.2 Data Selection Criteria

The data sample is based upon a population of 2 262 SMEs that was required to meet four unalterable criteria: (1) the size of the company must not exceed 250 employees, (2) the company must have been engaged in international trading processes, hence the company must derive a minimum of 0.1 percent of revenue from sales to international markets, (3) the customer base of the SME must be a business, hence the study only consider Business-To-Business companies, and (4) the company must be registered in Norway. The list of criteria was validated against the Kompass Europe online database.

3.2.3 Data Material

The questionnaire was completed by 66.8 percent CEOs or employees holding similar executive positions, and only 4.2 percent of the respondents held a position that did not involve managerial responsibility. Respondent holding executive positions are assumed to obtain good knowledge about the companies' business operations and history. The sample was validated empirically by comparing characteristics such as age and size to data found in the Proff Forvalt database. To further assess the validation of the sample, a comparison with the sample from 1997 was performed. When comparing the main characteristics such as number of employees, age and share of foreign sales, both samples reveal similar results. The characteristics obtained by Aspelund and Moen (2005) were found to correspond to the results attained in Table 5 (Chapter 4).

Of the 386 usable responses that were collected, in total 196 companies were removed from the sample prior to the final analysis. 6 companies were found to be larger than 250

employees, and hence did not fit the definition of SMEs, and were thus disregarded. Of the SMEs that participated in the survey, the study only retains firm with reported international activities in previous fiscal year (2013). Further, 24 respondents did not indicate that their company had international sales in 2013 and were hence removed. This systematic screening was conducted using data from the Proff Forvalt database. In addition, 166 respondents were removed from the data set due to inadequate replies as IBM SPSS AMOS 20.0 (hereinafter referred to as AMOS) requires all items to be complete with no mission data points.

In order to assess the validation of the reduced sample, the sample characteristics of the reduced dataset was compared with the sample characteristics of the full dataset (N = 386), and it was concluded that the reduced data sample sufficiently represented a viable representation of the sample as a whole. The final sample obtained a total of 190 entities. The current sample was deemed sufficiently reliable as a similar sample size was obtained by e.g. Wolff and Pett (2006). The reduced sample employed in the structural equation model (N = 190) is found to inherit characteristics similar to the full dataset attained in Table 5. Based on the similarities between the samples, the reduced sample was deemed reliable for the purpose of this study. Thus, the sample was deemed appropriate to render a representative population of Norwegian exporting SMEs.

The unit for analysis has been business-to-business (B2B) SMEs with exporting capabilities. Exporting is here treated as a proxy for internationalization capabilities. The most internationalized companies obtained all revenue from international sales, while the lowest acceptable amount of foreign sales was 0.1 percent of revenue. The population includes Norwegian firms representing industry sectors ranging from agriculture to service activities. In total, firms representing 20 NACE industry sector categories (European Commission, 2014) participated in the survey.

3.2.4   Survey Description

The survey was carefully designed to give a viable representation of the total population of Norwegian exporting SMEs. The survey comprises nine pages containing questions that allow for the study of several areas of interest. The diversification of the data sample allows for the study of several topics assumed constituting essential driver of internationalization. The questionnaire consists of 165 unique questions that address different aspects of the SMEs. This includes questions about product, employees, top management teams, international activities and business development.

3.2.5 Publicly Available Data

In addition to the survey described above, the study applied publicly available data from different sources. These sources should provide objective information regarding, among other subjects, firm size and financial data. The goal is to reduce the probability of bias and hence ensure the integrity and validity of the data provided.

The survey results are complimented by information from additional public sources to provide a broaden understanding of firm level and environmental level. Yin (2014) claims that the utilization of additional qualitative and quantitative data sources of information ensures a strong analytical strategy. This approach also allows for a triangulation of available data, which in turn improves validity and quality of the research to reduce problems relating to informant reliability and correlated systematic errors, secondary data from Proff Forvalt database was collected. This enables an examination of perceived performance in conjunction with publicly available financial performance data.

3.2.6 Empirical Approach

The data sample consists of three variable categories; ordinal scale, natural scale and nominal scale. This study only makes use of natural and ordinal scale to conduct the analysis in chapter 4. Natural scales where used when the output is a number, for instance the number of patents or year of establishment. The questions in the survey were constructed in such a way that the respondent predominantly replied indicating a position on an ordinal scale using a 7-point Likert type scale, where 1 was strongly negative and 7 strongly positive. The score of 4 on the Likert type scale is regarded as a medium score. Most of mean values lay between 3 and 5, indicating that 3 and 5 represents a relative low score and high score, respectively.

It should be noted that some variables are based on objective facts, such as '*number of employees*'. Other variables are of a more subjective nature, such as '*ability to innovate related to products*'. The majority of scales included in the hypothesized model are latent constructs containing multiple items to reap an underlying concept of interest.

3.3 Constructs and Measures

The strategic capability constructs were assessed based on measures drawn from the extant literature. The study has utilizes both exploratory factor analysis and confirmatory factor analysis to assess numerous multi-item scales and ensure validity and reliability of the measures used. In total, 7 latent scales are included in the expanded research model.

3.3.1 Factor Establishment

The majority of the variables in the study are measured by applying several single items questions into a latent construct. In order to identify the latent constructs and underlying factor structure. Factor analysis is a variable reduction technique that specifies the relationships of the observed measures and the posited underlying latent constructs (Anderson and Gerbing, 1988). The factor loading values is an indication of the strength of relationship between the factor and the variable item in question. According to Byrne (2000), the discriminant validity is established through two basic types of factor analyses, namely exploratory factor analyses (EFA) and confirmatory factor analysis (CFA).

To ensure the reliability and validity of the factors adopted, the items were entered into an exploratory factor analysis using IBM SPSS 22.0. An EFA was deployed with the extraction method of principal component factoring and the oblique rotation technique direct oblimin. This technique was chosen as the endogenous and exogenous factors were allowed to correlate, respectively. The method established a set of potential factors obtaining satisfactory convergent validity and corresponding factor loadings (In accordance with Field, 2009).

Next, a confirmatory factor analysis (CFA) was undertaken using AMOS to further test convergent construct validity and multidimensionality. According to Eikemo and Clausen (2012), a sample size around 200 entities provides a decent factor solution using CFA, but larger samples are preferable. The CFA should be deployed when the underlying latent variable structure is known (Byrne, 2000). A total of 17 items from six different constructs were removed from the initial EFA factors due to inadequate fit. These techniques, including iterative model fit testing, resulted in two endogenous latent variables and 5 exogenous latent measures included in the hypothesized nomological network (see Cronbach and Meehl, 1955). Additionally, the internal characteristics of the scales need to satisfy several criteria in order to be reliable and should hence be tested.

3.3.2 Measurement Assessment

In order to ensure that the measures obtained from the factor analysis are in fact viable factors, several statistical instruments were applied. The latent constructs were systematically controlled to disclose if the adopted scales would produce reliable results when applied to the research model.

Cronbach's alpha

Internal reliability of the established factors was tested using Cronbach's alpha. This is the most commonly used reliability tests, and is a measure of internal consistency (Field, 2009, p. 675). A Cronbach's value close to 1 indicates a better internal reliability of the scale. Cronbach's alpha values exceeding 0.7 were accepted, but good scales have values larger than 0.8 (Norusis, 2005, p. 430). All composite constructs using multiple items and corresponding CFA loadings and reliability values (Cronbach's alpha) are reported in its entirety in Appendix A.

Goodness of Fit

Multiple criteria were used to assess the goodness-of-fit for the constructs included in the model. The standardized loadings are deemed significant, indicating the validity of the underlying constructs. The final CFI data fit indexes obtained fell well within an acceptable range: $X^2 = 467.48$, $df = 349$ (p < .001): Root Mean Square Error of Approximation (RMSEA) = .043; Comparative Fit Index (CFI) = .961. The satisfactory data fit confirm the convergent validity and dimensionality of the hypothesized constructs (Anderson and Gerbing, 1988). The fit indices used to evaluate the factors are further explained in section 3.4.2.

Multicollinearity and Autocorrelation

Table 2 displays the correlation between latent model constructs. Pearson's r of .8 or greater is considered an upper limit of collinearity for the predictor variables (Field, 2009, p. 224). The variance inflation factor (VIF) indicates whether a predictor has a strong linear relationship with the other constructs, and values close to 1 are generally accepted to indicate relatively weak linear relationships between predictors (Field, 2009, p. 242). The highest Pearson's r for the pair of independent constructs was .382 (p < .001), and VIF values were found to be between 1.040 and 1.202. Both results indicate that multicollinearity between the independent constructs is unlikely. The absence of autocorrelation is another assumption in the estimation of regression parameters, and is usually detected using a Durbin-Watson test. According to Eikemo and Clausen (2012) this value should be close to 2, and Field (2009, p. 236) suggest this value to be greater than 1 and less and 3. In the current model, the Durbin – Watson test ranged from 1.766 and 2.249, suggesting that autocorrelation should not be a problem in this study.

Table 2: Construct means, standard deviations, and Pearson´s correlation coefficients

Descriptive statistics and correlation (N =190)

Constructs	Mean	S.D.	2	3	4	5	6	7
1 Export performance♦	3.990	1.434	.367***	.303*** .	.019	.050	.137	.133
2 Innovation performance ♦	5.028	1.173		.299***	.150*	.349***	.132	.310***
3 International Orientation ❖	4.538	1.581			.348***	.286***	.183*	.382***
4 Growth Aspiration ❖	5.668	1.444				.201**	.165*	.258**
5 Product Uniqueness ❖	3.909	1.578					.167*	.280***
6 Management Diversity ❖	4.549	1.246						.107
7 Process team commitment ❖	4.613	1.192						

*** p < 0.001; ** p>0.01; *p < 0.05 (all two-tailed tests)

❖   Exogenous latent scales

♦   Endogenous latent scales

Reliability and Validity

Anderson and Gerbing (1988) suggest that convergent validity is observed when the item coefficients to the latent constructs are significant. Within the AMOS software, the critical rations should be loaded significantly (Critical Ratio > 2) on the corresponding construct (Wolff and Pett, 2006). This was found to be true for all items on the .001-level (2-tailed) of significance. To further establish construct validity and reliability, the measurements were tested employing four different measures, including construct reliability (CR) and average variance extracted (AVE) (Hair et al, 2010). The complete list of construct validity and reliability is reported in Table 3.

Table 3: Construct reliability and validity

	CR	AVE	MSV	ASV
Innovation performance	.810	.520	.203	.177
Export performance	.919	.696	.193	.063
International orientation	.915	.684	.140	.090
Growth aspiration	.921	.854	.108	.045
Product uniqueness	.833	.558	.166	.068
Commitment	.807	.460*	.203	.105
Management Diversity	.773	.475*	.042	.021

CR (Reliability) - Composite Reliability (Threshold: CR > .7)
AVE (Convergent validity) – Average Variance Extracted (Threshold: AVE > .5)
MSV (Discriminant validity)– Maximum Shared Variance (Threshold: MSV < AVE)
ASV (Discriminant validity – Average Shared Variance (Threshold: ASV < AVE)
Thresholds are found in Hair et al. (2010, pp. 687-688)
*Convergent validity issue

Two of the latent constructs (market in red) experience convergent validity issues. According to (Malhotra and Dash, 2011, p. 702), the latent constructs may be adequate if CR is accepted as the sole measure of interest. Hence, the validity and reliability tests establish that there may be issues with convergent validity, but the constructs are found to be satisfactory for the purpose of this study.

3.3.3 Endogenous Latent Variables

The endogenous latent variables and scales are synonyms with the dependent variables, and are in that effect influenced by the exogenous constructs in the model (Byrne, 2000). These variables are conceptualized by the notion of performance-seeking strategies and financial business outcomes.

Performance

The sensitive nature of the performance constructs entails SMEs to be reluctant to provide specific information regarding financial outcomes (Wolff and Pett, 2000). Following previous research (e.g. Kyläheiko et al., 2011) the study utilizes both self-reported subjective measures and publicly available objective measures. This approach provides the study with multiple assessments of performance on firm-level. Research in strategic management has employed

both the perceptual assessments of senior executives in addition to secondary data sources to measure economic performance (Venkatraman and Ramanujam, 1987).

The measurement and conceptualization of financial performance is an important aspect facing management strategy. Previous research in the domain of SME performance (e.g. Wolff and Pett, 2006) has proclaimed that that return and growth are two distinct dimensions of firm performance. Here, the corporate performance is conceptualized deploying strictly financial dimension, i.e. sales-related growth and profitability. Following the recommendations of Lu and Beamish (2006), this study treats profitability and growth as two separate dimensions.

Growth. Organizational growth can be achieved in a number of ways, and firms may follow different pattern of growth over time. This implies that growth metrics are multidimensional and that various organization growth patterns could be captured using different growth measures (Delmar et al, 2003). The hypothesized relationships will be investigated utilizing a quantitative approach utilizing time series financial data from Norwegian SMEs covering the period 2008 – 2013. The first construct to measure financial performance, "growth", was composed of the average growth rate in revenue over a five-year period.

Profitability. The second performance measure was labeled "profitability" utilizing return on assets (ROA). Different firms may utilize different outcomes to measure performance, and the validity of ROA could be influenced by industry affiliation or accounting practices. Despite its limitations, several studies have drawn theoretical findings from this measurement (Lu and Beamish, 2006). The accounting-based measure was retrieved from the Proff Forvalt database utilizing data from the fiscal year of 2013.

Innovation Capabilities

R&D Expenditure. Levels of investment in innovation are measured using a single item variable. Previous research (e.g. Qian and Li, 2003; Wolff and Pett, 2006) recognize R&D expenditures a general indicator of a firm's effort to improve its innovation capabilities and operation processes. To measure internationalization capabilities the respondents were asked to specify the firm´s current R&D expenditure (as a percentage of total revenue).

Innovation performance. Innovation performance was measured on a 7-point Likert scale using four items that yielded a single reliable construct (α = .799). The respondents were asked to assess their overall satisfaction with the innovation level of the organization, and report to what degree the firm's development activities have affected business outcomes such as profitability, competitiveness and market share. The respondents were also asked to report overall satisfaction with the firm's current innovation level. The scale is inspired by SIEID

Statistics Canada (2002, p.9), and has previously been used in Branzei and Vertinsky (2006, p.88).

Internationalization Capabilities

Export intensity. Export intensity is the most frequently used measure of export performance in the literature (Katsikeas et al., 2000). Previous research (see e.g. Kuivalainen and Sundqvist, 2007) has investigated export intensity as a construct function of several items, including number of export markets. Here, due to data sample limitations, export intensity was measured using a single item. The intensity of internationalization reflects the amount of resources committed to reach international markets. Here, the intensity is measured in terms of the firms' share of international sales in an international/total turnover ratio.

Export performance. Export performance is the second measure of internationalization capabilities. One generic way of measuring export performance, is the perceived export success (Haahti et al., 2005). Respondents were asked to compare international efforts in terms of relative satisfaction equated to expected outcomes. As with the innovation performance scale, the perceived export performance scale includes items related to the respondent's satisfaction with "hard" results; profitability, growth, and market share. Also, satisfaction with competitiveness and overall satisfaction with exporting efforts were included in the construct ($\alpha = .924$). All items were answered on a 7-point Likert scale. The export performance scale has been inspired by SIEID Statistics Canada (2002, p.9) and similar constructs have been utilized in several previous studies (e.g. Madsen et al., 2012; Wolff and Pett, 2006).

3.3.4 Exogenous Latent Variables

The strategic capability constructs were assessed based on surrogate measures drawn from the extant literature. These exogenous latent construct are assumed to be correlated with each other, and are synonyms with independent variables (Byrne, 2000). The items were all scaled on a 7-point Likert scale.

Product Strategy

Product uniqueness. Product strategy was measured by the use of four-item construct assessing the firm´s product uniqueness. Specifically, the scale asks the respondents to report the relative innovativeness and uniqueness of the firm´s main export commodity in terms of design, technology, and use. The scale is partly adopted from Knight and Cavusgil (2004). The construct was deemed applicable ($\alpha = .847$).

Management Orientation

Growth aspiration. Growth aspiration is the first of two scales measuring management orientation and motivation towards certain strategic endeavors. The aspiration for growth scale employed a two-item scale to estimate a firm´s desire to growth from a managerial perspective. In particular, the construct related to the growth aspiration of management and owners. The construct's internal reliability consistency was strong ($\alpha = .921$).

International orientation. International orientation measures the management team orientation through a multi-item scale. The respondents were asked to gauge the SME's orientation with respect to internationalization as a focused and deliberate strategy. Specifically, the respondents rated their firm's cultural attributes related to internationalization and strategic efforts to engage in international activities. The one-factor solution yielded good reliability ($\alpha = .912$), providing strong indication that this latent factor captures the underlying construct of "international orientation".

Team Characteristics

Management diversity. The first team-level exogenous construct addresses the heterogeneity of management team composition. This four-item scale measures to what degree the management team has a diverse composition in terms of education, international experience and personality. The scale's reliability ($\alpha = .758$) was acceptable.

Commitment. Commitment is the second team-level construct included in the model, and was measured on a five-item scale. Respondent from each sample firm were asked to evaluate the employees' effort and sense of responsibility within the firm environment. The Cronbach's alpha for the construct was .840, indication an acceptable reliability of the scale.

Control Variables

There are several other firm characteristics that may affect the firm´s financial outcomes. Previous literature has identified a few contextual firm-level characteristics that potentially could encourage above-normal performance, and control variables should therefore be considered as constituents in the overall model. Sousa et al. (2008) found 40 determinants of export performance, and it can therefore be assumed that several constructs not included in the conceptual model could influence the performance dimension. Firm size and firm age were deemed to be the most relevant control variables in this study.

Age. Firstly, an influential aspect of firm performance is the enterprise´s age. Older firms have survived the liability of newness, and age may influence international business activities and the returns from foreign operations (Zahra et al., 2000). Esra Karadeniz and Göçer (2007) found that a firm's ability to be an exporter is related to the age of the enterprise. Other endogenous construct, such as growth and innovation capabilities, may also be age-sensitive. Age is calculated as the difference between the enterprise's year of establishment and the year of 2013.

Size. Secondly, the size of the enterprise has been identified by existing research to be a factor that substantial influence firm's internationalization strategy. Larger SMEs may have access to more managerial and financial resources enabling the firms to absorb risk and achieve economies of scale (e.g. Raymond et al., 2014). As an example, Moen (2000) found a direct link between firm size and performance amongst internationalized SMEs. On the flip side, larger firms may become less flexible and slower to respond to economic opportunities as they grow larger have a detrimental effect on growth and performance This allows smaller enterprises to exploit certain industry opportunities more readily than larger counterparts (Dean, Brown, & Bamford, 1998). As suggested by Salomon and Shaver (2005), this study uses employment rather than sales as a measure of firm size inhibiting the potential causal links between performance and sales. Hence, the number of employees was used to indicate the firm size.

3.4 Data Analysis

The study utilizes SEM to examine the data collected. The data analyses were performed in two phases using AMOS to conduct each analysis. The first phase was described in section 3.3, and involved a multistage process to validate the validity and reliability of the hypothesized constructs. The second phase employs SEM to test the hypotheses in the model.

3.4.1 Structural Equation Modeling

The present analysis is based on the use of Structural Equation Modeling (SEM), and the method is presumed to provide an viable estimation of the hypothesized set of causal pathways between observed variables (e.g. Firm size, export intensity, R&D expenditures). This estimation technique can account for the hypothesized relationships among various explanatory and dependent constructs. The structural equation modeling approach allows for the construction of predictive conceptual models with complex relationships more accurately than with alternative standard multivariate statistics techniques (IBM Software, 2015). The rational for choosing this model is founded in the belief that such a model is more

representative of actual conditions in organizations than models that do not allow for simultaneous multiple dependent relationships.

SEM has become an increasingly widespread method for theory testing and development in the social sciences (e.g. Anderson & Gerbing, 1988; Filippetti et al., 2011; Hooper, Coughlan, & Mullen, 2008). Further, the confirmatory methods deployed in the substantive use of SEM provides the study with a comprehensive agent for assessing theoretical models (Anderson & Gerbing, 1988).This technique allow for an examination of the simultaneous impact of multiple independent variables on multiple dependent variables.

First, all possible relations based on the original hypothesis were included. Second, select paths that were not significant at the .05-level or had a p-value greater than .150, were dropped. The model development procedure resulted in a structural model whereby the path parameters between performance and each of the other focal constructs (export and innovation intensity, export and innovation performance, management orientation, product strategy, team characteristics) reached an acceptable model fit.

The substantive model of interest consists of a nominal network of hypothesized constructs. The final model (see figure 4) fit the data reasonable well, X^2/df^1 = 1.421, p < .001; CFI[2] = .948, TLI[3] = .937, RMSEA[4] = .048, NFI[5] = .846. As a result, the validity threshold of CFI > .950 was not met, but the data fit indexes was presumed to be satisfactory as relatively recent studies (see e.g. Gary A Knight & Cavusgil, 2004; Moen, 2000) has accepted lower CFI values. These values are further explained in the next section.

3.4.2 Testing SEM Assumptions

Goodness of Fit

The goodness-of-fit statistics represents the required values for the model to represent a viable representation of the underlying dataset. The parameters were estimated using the method of maximum likelihood. Researchers should be reluctant to accept the proposed findings without applying more fine-grained studies to the dataset. Even though analysis indicates that the model obtained an adequate fit to the data, it is emphasized that we cannot affirm the validity

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[1] Relative/Normed Chi-Square (X^2/df): Acceptable ratio as high as 5.0 (Wheaton et al., 1977)

[2] Comparative Fit Index (CFI): CFI is a revised form of NFI accounting for sample size (Byrne, 2000, pp. 83). Cutoff value ≥ .950 is recognized as indication of good fit (Hu and Bentler, 1999)

[3] Tucker-Lewis Index (TLI): Values close to .95 (for large samples) indicate good fit (Hu and Bentler)

[4] Root mean Square Error of Approximation (RMSEA): Values below 0.08 represents reasonable fit and 0.05 indicate a "close fit" and a good error of approximation (Browne et al., 1993)

[5] Normed Fit Index (NFI): Cutoff criteria at ≥ .95 (for large samples) is indicated by Hu and Bentler (1999), models with fit indices under .90 can be improved substantially (Bentler and Bonett, 1980)

or causality of the aforementioned relationships (Byrne, 2000; Hox and Bechger, 1998). The model rests on several underlying assumptions that ultimately can compromise the legitimacy of the findings.

The Chi-square statistics assumes multivariate normality and is sensitive to sample size, causing the test to nearly always reject models when relatively large samples or skewed data are used (Byrne, 2000; Hooper et al., 2008). Due to these restrictions, alternate indices to assess model fit are more fitting. To minimize the impact of sample size, the relative/normed chi-square (X^2/df) is presented. This value was found to be well within the recommended threshold of 5 (Wheaton et al., 1977).

Fit indices in Table 4 indicated that the overall model demonstrated acceptable fit. The CFI (Bentler, 1990; Hu & Bentler, 1999) is slightly below the threshold of a "good fit", but both RMSEA (Browne et al., 1993) and X^2/df (Wheaton et al., 1977) indicated good model fit. NFI[1] (Bentler and Bonett, 1980) was found to be below the acceptable limit, but this could be a syndrome of the NFI indices' tendency to underestimate fit in smaller samples less than 200 (Byrne, 2000, p. 83; Hooper et al., 2008; Hu and Bentler, 1999). The same is applicable for TLI, as smaller samples yield relatively large Type 1 error rates rejecting models under the nonrobustness conditions (Hu and Bentler, 1999).

Table 4: Summary model fit indices.

	X^2/df	RMSEA	TLI	NFI	CFI
Model	1.402	.046	.940	.842	.948.
Model of good fit	< 5	< .05	>.90	>.90	>.95

Normally Distributed Residuals

Structural equation modeling, utilizing analysis of covariance and mean structures, assumes the model's residuals to have a multivariate normal distribution (Byrne, 2000; Eikemo & Clausen, 2012; Norusis, 2005). A visual inspection of the single items´ normal Q-Q plots and histograms showed that the majority of variables were not normally distributed, thus violating the underlying assumption of distributional normality embedded in structural equation modeling (Byrne, 2000, pp. 267). All item variables employed from the sample data is also found to be skewed and kurtotic, further suggesting nonnormality (Doane & Seward, 2011; Field, 2009). A Shapiro-Wilk´s test (Razali & Wah, 2011; Shapiro & Wilk, 1965) further validated the findings of nonnormal data. The above findings are reported in Appendix B. Consequently, the presences of excessive skewness and kurtosis in the data could impair the validity of the findings obtained by the SEM. Further, the nonnormal data may yield modestly underestimated fit indexes, such as the CFI (Byrne, 2000). It should be noted that the

restrictions of normally distributed residuals is generally a prerequisite for smaller samples (Eikemo & Clausen, 2012). For the purpose of this study we assume that a sample N = 190 is adequately large to void significant influences on the reliability of this model. In order to encounter the most significant effects of nonnormal data, the excessively left-skewed factors of R&D expenditure and growth were transformed using the logarithm value of the items (see e.g. Eikemo & Clausen, 2012, pp. 147).

3.5 Research quality

Yin (2014) postulates a few research design criteria to assess quality of the research design. Hence, Bryman and Bell (2011) suggest validity and reliability testing to assess the quality of data collection process and the substantive quality of the multiple-indicator measures included in the model. The model was developed using a systematic approach problematic construct and alternate model outlines were systematically tested and adjusted to improve model fit, and subsequently enhance reliability and validity.

3.5.1 Validity and Reliability

Issues with common method variance may lead to systematic measurement errors that could threaten the validity of the current conclusion (Podsakoff et al., 2003). This becomes an issue when a single respondent is the chief source of information (Madsen et al., 2012). To address the issues with common method variance, numerous measures were initiated. First, we assure confidentiality and anonymity, urging the respondent to answer the questionnaire according to actual situation of the firm. Second, a pilot study involving ten firms was performed to assure the concise questions and the overall survey quality.

Further, to ensure construct validity, the accuracy of the answers given was cross-referenced for any evidence of self-reporting bias by using multiple data sources. This was carried out by data triangulation, cross-referencing survey results and financial documentation. In particular, the published accounts available, accessed by using the Proff Forvalt database, were compared with the information provided by the respondent on firm age, size and turnover.

Considerable efforts was made to ensure the reliability (as described by Yin (2014)) of the quantitative study throughout the process. The reliability of measures of self-reported surveys could be reflected in its internal consistency. This was ensured by a comprehensive factor analysis where several items are included and statistically tested in the construction of a wide scope of latent factors.

The reliability has been enhanced by maintain a chain of evidence elaborated in this chapter. It should be noted that the author did not ensure the testing environment due the reported

nature of the self-completion questionnaire. A potential source of error in this study could hence originate from the participant's lack of tacit and specific knowledge. Also, temporary limitations and situational conditions (e.g. impatiens, mood variations, and other distractions) could compromise the survey reliability (Cooper and Schindler, 2011).

3.5.2 Research Limitations and Shortcomings

First and foremost, the author has only been able to test a finite number of constructs and pathways to performance due to a time-consuming data refinement and a comprehensive iterative model-testing process. This has included an extensive construct reliability study approach employing factor analysis and validity testing. The acclaimed shortcomings point to further inquiry. Researchers should be aware of the limitations these result may put on the empirical evidence suggested in this study. Further, researchers should emphasize the design of more neutral question items to ensure data normality. In addition, future research should strive to increase the extent and validity of the data by ensuring higher response rate with more complete submissions in order to enhance the overall research quality. Lastly, in regards to research approach, future research should contemplate to employ the two-step approach (see e.g. Wolff and Pett, 2006) presented by Anderson and Gerbing (1988) to further strengthen the theory testing application of the structural equation modeling and verify construct validation.

Chapter 4

Results

The study aims to utilize quantitative and qualitative sources in order to progress the understanding of the strategic elements entailing high-performance of internationalized firms. The results from the analysis will be reported in this chapter. Furthermore, the results are compared to the hypotheses deduced from theory in Chapter 2. First, the survey data will be presented as a whole to gain a general overview of the sample. Next, more profound analysis will be carried out employing structural equation modeling in order to further assess the determinants of SME performance.

4.1 Sample Characteristics

Some of the main characteristics of the dataset are summarized in Table 5. The sample firms appear to be relatively heterogeneous with great variations in age, size, and levels of exporting activities. The general characteristics reveal that Norwegian business sector mainly consists of relatively small firms with the majority of firms being older than 32 years. Additionally, the sample shows certain notable characteristics in regard to industry affiliation and internationalization patterns.

The sample contains companies that derive between .1 percent and 100 percent from international sales, but this fluctuates greatly across industry sectors. The sample represents a cross-section of industry affiliations with companies representing a broad scope of industry sectors ranging from agriculture to high-technology. Overall, the sample is generally focused around a few dominating industries. Combined, manufacturing and trade are the dominant industry sectors accounting for 72 percent of the total population. Studies show that manufacturing, trade, transport, research and communication are the most internationalized business sectors (European Commission, 2010).

Considering the internationalization patterns of the sample, the typical Norwegian exporting SME will derive 45 percent of revenue from foreign sales exporting to almost 12 international markets. However, this distribution is highly skewed with 48.8 percent serving 5 international markets or less. Further, Norwegian SMEs tend to internationalize 14 years after inception, and newer firms tend internationalize faster than older exporters. SMEs founded after 2000 are found to engage in exporting activities more than seven times faster than companies

established 25 years earlier. Over 60 percent of the SMEs in the sample have less than half of its revenue coming from export markets.

Table 5: Sample characteristics (Full sample, N = 386)

	Min.	Median	Max.	Mean	Std. Dev.	N
Year of Establishment	1812	1982	2013	1972	28.65	332
Share of Foreign Sales	.10 %	40.0%	100%	45.45	34.41	261
Number of Foreign Markets	1	6	100	12.29	16.18	275
Employees	0	19	247	37.73	49.08	334
Turn-Over 2012 ○	0	45.3	6 278.6	194.6	492 967	333
Time to Internationalization	0	6	183	13.54	20.80	268
Number of new products last five years	1	4	1499	17.61	106.63	227
Number of Patents	0	0	100	1.56	6.84	261
Number of Licenses	0	0	10	.35	1.18	252
Size of Management Team	1	4	60	4.62	3.99	328
Revenue Average Annual Growth Rate	-89.3	4.0%	3 198.5%	.19		

○ Currency quoted in million NOK

The data sample represents a population ranging from very old companies to newly established startups. The average SME is employing 37 people, and obtains a mean annual revenue growth rate close to 0.2 percent. The OECD is defining high-growth SMEs as firms that experience an average annualized growth in employees or in turnover greater than 20% a year. About 10.9 percent of the companies in the sample were found to sort under this definition. Generally, the sample characteristics demonstrate a wide range of different SMEs, and it is believed that this multilateral sample represents a viable representative population of Norwegian exporting SMEs.

4.2 SEM Results and Hypotheses Evaluation

Structural equation modeling (SEM) was applied to test the entire system of constructs and variables in the hypothesized model simultaneously. First, the significant and notable findings are summarized in Table 6 and are visually presented in Figure 4. Second, the findings are coupled with the hypotheses and summarized in Table 7.

4.2.1 Structural Equation Modeling Results

This study complements existing work emphasizing firm-specific determinants of SME performance by incorporating innovation and exporting as important influencers of such outcomes. I have replicated the research setting proposed by Kyläheiko et al. (2011) to investigate the mediating role of innovation and exporting. This model suggests that firm-specific capabilities and resources may influence the firm's ability to perform internal

development efforts and internationalization activities. Not all relevant relationships were included in the final model due to insignificant connections between constructs. Baron and Kenny (1986) suggested researchers to test all possible relationships between the hypothesized constructs and remove non-significant relationships to improve model fit.

Table 6: Structural model parameter estimates and goodness-of-fit statistics

Estimates and fit statistics	Standardized critical			
Model parameters	SRW	p	Critical Ratios	SMC
Strategic Elements				
International orientation → Export intensity	.789	***	9.941	
Employee commitment → Export intensity	-.143	.001	-3.248	
Growth aspiration → Export intensity	-.099	.103	-1.633	.510
International orientation → Export performance	.222	.032	2.144	
Growth aspiration → Export performance	-.111	.134	-1.498	
Management diversity → Export performance	.192	.009	2.598	
Export intensity → Export performance	.242	.009	2.628	.203
Product uniqueness → R&D Expenditure	.323	***	3.791	
Management diversity → R&D expenditures	-.198	.008	-2.634	
Growth aspiration → R&D expenditure	.155	.047	1.984	.225
International orientation → Innovation performance	.163	.047	1.983	
Employee commitment → Innovation performance	.268	.006	2.771	
Product uniqueness → Innovation performance	.280	.002	3.145	.291
Performance Dimension				
Management diversity → Average Revenue Growth Rate	-.141	.076	-1.774	
Export intensity → Average Revenue Growth	-.230	.003	-3.004	
Export performance → Average Revenue Growth	.186	.033	2.128	
Innovation performance → Average Revenue Growth	.078 ♦	.101	1.641	.084
Export performance → Profitability (ROA)	.291	***	3.478	
Management diversity → Profitability (ROA)	-.185	.021	-2.313	
Export intensity → Profitability (ROA)	-.180	.019	-2.351	
R&D Expenditure → Profitability (ROA) ♦	-.074	.100	-1.363	.091

Goodness-of-Fit Statistics (Default model):
X^2/df = 1.402
RMSEA = .046
TLI = .940
NFI = .842
CFI = .948

SRW = Standardized Regression weights
SMC = Squared Multiple Correlations
♦ These values were extracted using a slightly different model than the above. Hence, there could be moderate deviations between the reported values and the ones found in the original model.
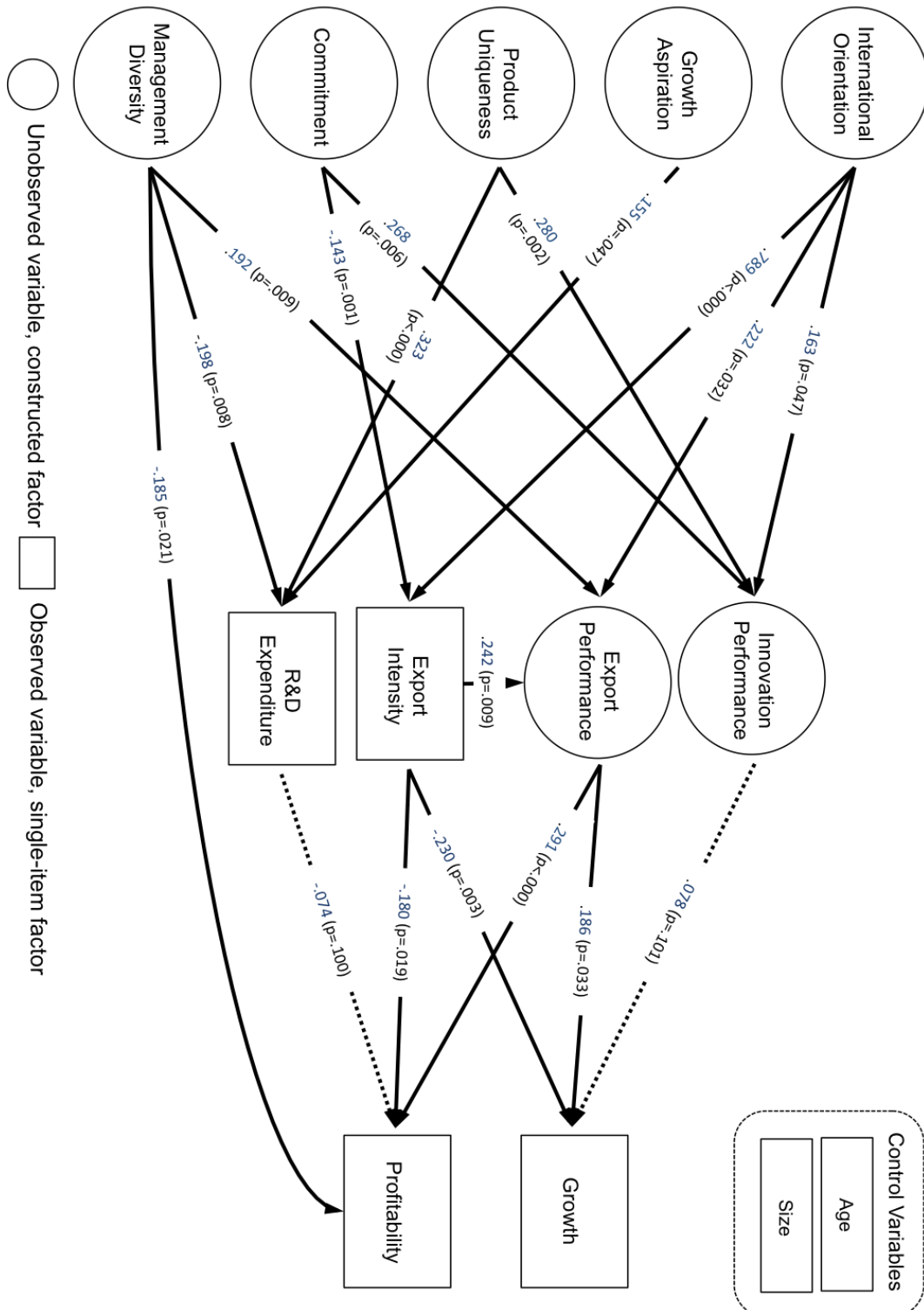
Figure 4: Structural equation model

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The model presented in Figure 4 contains both significant relationship (solid lines) and selected non-significant tendencies (dashed lines) of interest. The model is a simplified version of the actual model designed in AMOS. Error terms, exogenous factor variance, control variables, indicators and correlations between exogenous factors are not included.

4.2.2 Hypotheses Testing

The set of hypotheses were tested simultaneously using AMOS. Of the 32 connections outlined in Chapter 2, 17 were found to be inconclusive, while 11 relationships were supported and 4 were rejected on the .05-level of significance. The results from the hypotheses testing are summarized in Table 7.

H1 - Management Orientation

Hypothesis 1 suggests a positive connection between management orientation and subsequent strategic performance and capabilities. The findings reveal that, among SME business managers, growth aspiration is a significant predictor of investments in R&D. Further, this construct tend to (though not significantly) be negatively associated with the export constructs. The behavioral theory (Ajzen, 1991) suggests that motivation aspire certain outcomes, while other scholar repeatedly claim exporting as a growth strategy (e.g. Kyläheiko et al., 2011). Hence, theory implies stronger and more positive relations between these constructs than the current evidence suggests.

Evaluating the construct of international orientation, several significant relationships become evident. These results demonstrate that international orientation and exporting are distinctly related. Further, international orientation is a significant predictor of innovation performance. In sum, the findings suggest that international orientation is a relevant predictor of performance-seeking strategies and an important variable to include in studies of firm growth. Hence, Hypothesis 1 was supported in regard to international orientation as a predictor of innovation and exporting performance.

H2 - Product Strategy

Evaluating the hypotheses for product strategy, both R&D expenditure and innovation performance are affected by uniqueness in the product offerings. This is not surprising as this endogenous construct is easily associated with the firm's innovation capabilities. Theory (e.g. Knight and Cavusgil, 2004) generally predicts that technology capabilities and internationalization are strongly interrelated. While the hypothesized relationship between uniqueness and export performance was not materialized, the results suggest that innovation is

directly linked to product uniqueness. Because of the ambiguous results, Hypothesis 2 is supported in regard to innovation capabilities, while remaining inconclusive in relation to exporting.

H3 - Team Characteristics

Hypothesis 3 suggests that SMEs with certain team-level characteristics achieve higher levels of innovation and internationalization. Theory researchers have acknowledged organizational practices and policies as an essential subject of study. Testing the strategic human resource perspective, the model showed that team-level characteristics are strongly association with innovation and exporting. Firstly, commitment is a significant predictor of innovation performance, without any significant relationship between R&D investments and commitment uncovered in the model.

The results reveal that the management team diversity construct was found to impact on the economic performance dimension directly. This result shows that management team homogeneity is positively and directly related to the performance of exporting SMEs. Conversely, management team diversity was positively associated to the level of export performance, yet the construct was negatively related to investments in R&D. This means that homogeneous teams are associated with innovation capabilities and business outcomes, whilst the notion of heterogeneous teams is significant predictor of international performance.

The heterogeneous composition of the managerial team is hence expected to influence the firm´s strategic behaviors that mediate international performance, providing general support for hypothesis 3 in terms of exporting. On the other hand, the hypothesis was rejected in regards to the relationship between innovation capabilities and management team diversity, and between commitment and export intensity. Turning to the commitment scale, hypothesis 3 was supported with its connection to innovation performance.

H4 - Intensity and Performance

Hypothesis 4 suggests that a high degree of internationalization and substantial investments in in-house innovative capabilities generate high performance in exporting and innovation activities. A large body of literature predicts that the intensity of performance-seeking strategies related to the antecedent performance constructs. Export intensity and R&D expenditure are constituent of SMEs´ strategic behavior, and are the concrete measures of firms' exporting and innovation capabilities, respectively.

In-house R&D show a positive tendency, even though not significant, to affect innovation performance. No tendencies were found between internal innovation capabilities and export performance, and between export intensity and innovation performance. The only significant

relationship found between these mediating constructs, is the relation between export intensity and export performance. Consequently, the results of the intensity-performance relationship provided partial support to hypothesis 4. Specifically, export intensity is a significant predictor of export performance.

H5 - Performance-seeking Strategies and Performance

Hypothesis 4 postulates that high-performing firms are utilizing innovation and exporting as performance-seeking strategies. The firm-specific resource base, related to export and internal innovation intensity, is embodied through the degree of internationalization and investments in R&D, respectively. The performance is, on the other hand, derived from the perceived effectiveness of these constructs.

Both lone-standing theory and more recent empirical evidence imply that firm performance depends greatly on the firm's innovative capabilities. Despite the comprehensive body of research supporting the interrelation between these strategic concepts, no significant results were obtained from the current research. Nevertheless, without being significant, innovation performance tends to be positively associated with growth. Another notable result is the limited importance of (in-house) R&D activities on financial performance. Furthermore, investments in R&D tend to be negatively associated with profitability. Thus, Hypothesis 5 receives very limited support in regard to innovation.

Further, the model demonstrates a tendency as to where export intensity is negatively associated with profitability and growth. These findings suggest that degree of internationalization is a relatively weak predictor of financial performance. Hence, the validity of this scale as a performance measure may be impugned. Overall, the export performance scale appears to be a significant factor in explaining growth and profitability. More specifically, hypothesis 5 was supported regarding the connection between export performance and financial performance, and rejected in regard to the association between growth and export intensity.

Control Variables

A brief assessment of the effects of the control variables is warranted. The inclusion of the control variables provided no significant impact on the performance-seeking strategies. The remaining factors of the performance dimension were also not affected either by the age nor size. The control variables were removed from the model to increase model fit, and is therefore not included in the proposed model.

Table 7: Summary of the hypothesis testing

Hypothesis	Variables	Predicted Sign	Performance-seeking strategies			
			R&D intensity	*Export intensity*	*Innovation performance*	*Export performance*
H1	International orientation →	+	-	Supported	Supported	Supported
	Growth aspiration →	+	Supported	-	-	-
H2	Product uniqueness →	+	Supported	-	Supported	-
H3	Management Diversity →	+	Rejected	-	-	Supported
	Commitment →	+	-	Rejected	Supported	-
H4	Export intensity →	+	N/A	N/A	-	Supported
	R&D intensity →	+	N/A	N/A	-	-
H5	Profitability (ROA) ←	+	-	Rejected	-	Supported
	Growth ←	+	-	Rejected	-	Supported

'-' = Inconclusive result at the .05-level

'Supported' = Hypothesis is supported at the .05-level

'Rejected' = Hypothesis is rejected at the .05-level

'←/→' = Indicates the direction of the hypothesized relationship

4.2.3 Post Hoc Analyses

To further verify the findings obtained by the SEM and gain additional insight, a few post hoc analyses were conducted. Figure 5 and 6 graphically illustrate the linkage between the performance-seeking strategies and realized business outcomes. These graphs expose R&D expenditure and exporting intensity as poor predictor of growth and economic return. The results suggest that the above model is not suited to establish meaningful best-practice ratios in terms of the deployed intensity of the two performance-seeking strategies. Table 8 further elaborates this notion. The correlation table shows that exporting intensity may be treated as an overreaching measure of international commitment due to its strong association to the number of export markets served.

Pearson's Correlations (N =190)

Variables	Mean	S.D.	2	3	4	5	6	7	8	9	10
1 Growth in assets	.1411	.5484	.106	.093	.121	-.045	-.094	-.084	-.129	.006	-.093
2 Profitability (ROA)	.1015	.3373		.031	-.269***	-.053	.040	.121	.112	.042 .591	.071
3 Growth in sales	.2331	1.8420			-.011	-.060	-.060	-.073	-.093	-.005	-.034
4 R&D intensity (percent of sales)	.0693	.1296				.081	-.093	-.078	-.089	-.037	.052
5 Export intensity (percent sales)	.4269	.3337					-.154*	.127	-.004	.176*	.446***
6 Firm age when starting export	.1343	.1713						.066	.689***	.035	-.040
7 international experience	28.0118	19.3572							.769***	.059	.383***
8 Company age	41.9477	26.8764								.062	.264**
9 Number of patents	1.81	8.254									.168*
10 Number of exporting countries	13.13	18.402									

*** p< 0.001; ** p>0.01; *p < 0.05 (all two-tailed tests)

Table 8: Pearson's correlation table between performance-related variables
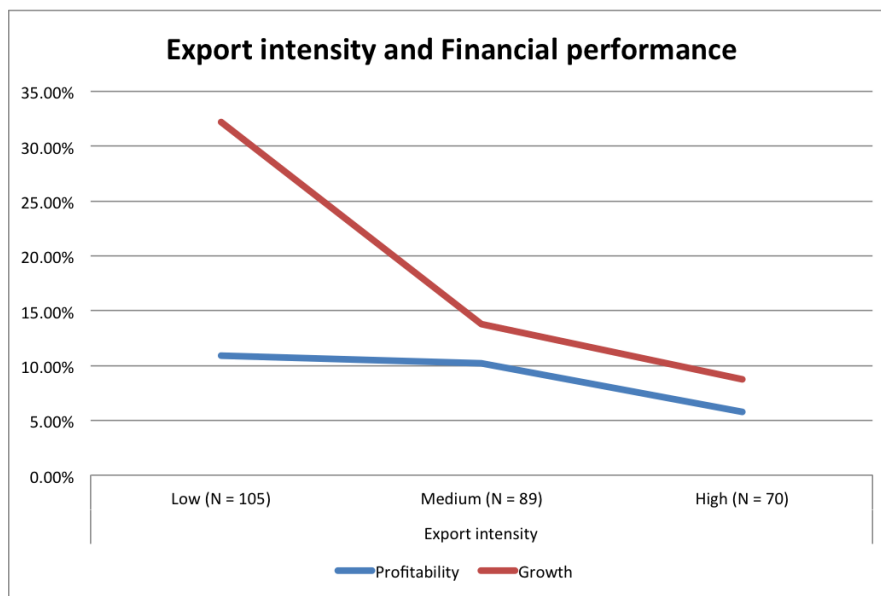
Figure 5: Relationship between export intensity and financial performance
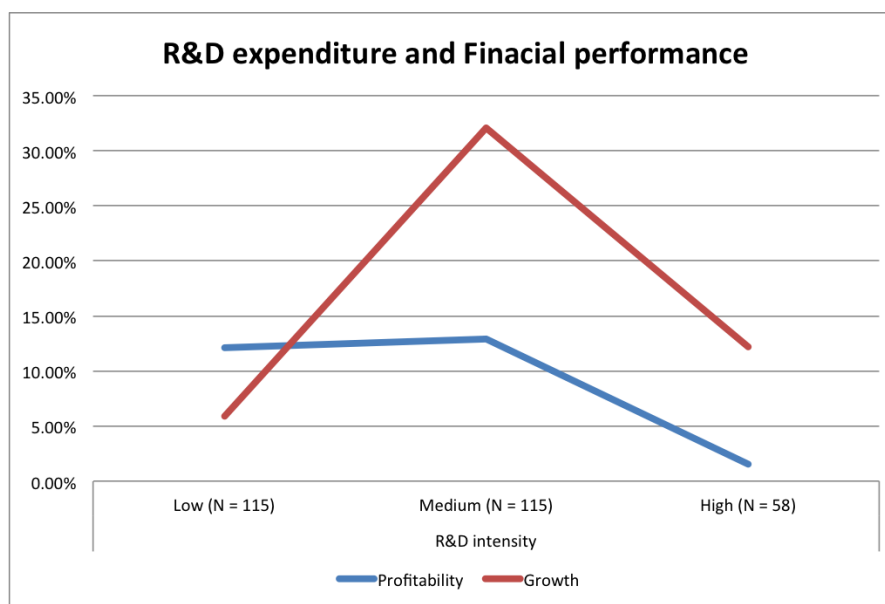
Figure 6: Relationship between R&D expenditure and financial performance

The findings represented in Figure 5 and 6 were not significant at the .05-level, but these graphs display the general tendency linking innovation and exporting intensity to the performance dimension. The innovation intensity, measured by ratio of revenue investment in R&D, shows an inverted U-shaped relationship with the performance measures. Export performance, on the other hand, shows declining performance with higher degree of internationalization. The post hoc analyses provided additional support to the results obtained by our framework, and strengthen the notion of strategy intensity as relatively insufficient performance indices.

Chapter 5

Discussion

The current empirical study represents an effort in testing some major perceptions and hypotheses that have emerged in the business strategy literature over the later decades. In the present study, I have investigated which internal strategic attributes are the most prevalent in determine firm performance, and which strategic pathways entail above-average business outcomes amongst internationalized SMEs.

Considering the ambiguity nature of previous results, there is a need to synthesize the extant knowledge on the determinants of SME performance to facilitate improvements in management practices and theory development. The results from the structural equation model applied in this study have produced some noteworthy findings that will be elaborated in this chapter. The subsequently discussion may have implications for both theorist and business practitioners alike.

5.1 Theoretical Implications

Several scholars have attempted to explain the benefits of internationalization as opposed to firms that remain inactive in foreign markets. The present study is investigating SMEs that are currently engaged in exporting activities, and is hence a contribution to research on the best-practice peculiarities of international strategies.

One major implication of these findings is that it makes sense to study certain strategic determinants in the context of SME performance. To this end, in addition to confirming some general expectations (e.g. the interrelationship between product uniqueness and R&D expenditures, between product uniqueness and innovation performance, and between homogeneous management teams and R&D expenditures), the data sample reveals a number of interesting relationships. A few relationships are not subject to further discussion, despite significant and unexpected relations to the performance-seeking strategies.

Specifically, a number of internal attributes have been identified to inflict on the various hypothesized pathways to performance. Thus, particular performance goals, i.e. international expansion, internal development capabilities, and operational performance, are found to require a diverse set of firm-specific resources and capabilities. These pathways are examined and discussed individually to reap the inherit complexity of the SME internationalization

phenomenon. The subsequent discussion is structured as follows. First, the pathways to exporting performance are identified and discussed. Second, pathways to innovation are considered. Third, the relationships between performance-seeking strategies and financial performance is discussed, followed by an overreaching evaluation of the mediation role of exporting and innovation measures.

5.1.1 Pathways to Exporting and Innovation

First, some of the notable pathways to exporting and innovation are discussed. The determinants of exporting and innovation are investigated individually as the two performance-seeking strategies demonstrate distinct relationships to the different strategic elements.

Determinants of Exporting

Our results revealed a positive and significant relationship between management and firms' internationalization strategy. Specifically, the strategic orientation of management teams is expected to influence the deployment of international activities. The results affirm that international orientation may be treated as a prerequisite of exporting activities, and can be associated with both export performance and overall commitment to foreign markets. The findings of the study clearly support the prior assumption regarding the importance of international orientation in assessing exporting performance.

The result indicates that SME exporting, across multiple industry sectors, is significantly supported by managers' international orientation. Prior research in the international business literature predicts that international orientation is a significant influencer of the international performance of SMEs (e.g. Breashear Alejandro et al., 2011; Crick and Jones, 2000; Nummela et al., 2004). It is worth noting that while management orientation toward export is significant, there was no significant relationship between aspiration for growth and export performance. This may indicate that a strong managerial aspiration towards growth does not sufficiently mediate export-based performance directly. Contradictorily, the specific emphasis on committing resources to international activities is a vital influencer of exporting.

Transposing these arguments into a firm setting, our findings predict cultural constructs, strategic priorities and human resource management to support successful exporting. Hence, this managerial feature is a performance-enhancing trait suggesting that export should be treated as a strategic endeavor, and ought to be a prioritized task within the organization. Whilst some SMEs predominantly focus their operation in the domestic market, other firms have exporting operations as a dominant focus. Accordingly, the latter group of exporters is actively adapting internal strategies and resources to meet the requirements of international markets. This suggest that it is not the manager's aspiration to growth that significantly

support international expansion, but the subsequent coordination and allocation of resources aimed to reap benefits from international activities, that foster above-normal export performance.

Another distinguishing feature of successful exporting SMEs is the prediction that a diverse management composition facilitates effective engagement in international markets. Diversity can hence be viewed as a positive asset for organizations, allowing for a broader scope of knowledge and human skill set on team-level (Opstrup and Villadsen, 2014). These results reveal that managerial factors indeed facilitate or inhibit exporting as a performance-seeking strategy. The combined, significant roles of management orientation and management team composition provide further evidence to the notion of exporting being strongly related to managerial factors in smaller firms. This result complements those of Aaby and Slater (1989). They found that studies are consistently proclaiming SME management as a potent and decisive element in developing successful export. In sum, the current results accentuate managers' orientation and integrated role in internationalization strategies.

Determinants of Innovation

Innovation is a second feasible option for exporting SMEs to promote growth and receive financial return. In this regard, the present empirical results confirm that commitment is a significant predictor of managers' perceived innovation performance.

Organizational behavior research has previously suggested that commitment is an organizational asset expected to positively impact firm productivity (e.g. Phipps et al., 2013) and team-level operation efficiency (Angle and Perry, 1981). This indicates that the resource-based paradigm still is applicable for strategic management, and that human resources could be treated as a significant exogenous factor to the success of innovation activities. Hence, human resources practices may be regarded as an intangible asset that advocate certain behaviors and foster a stronger sense of organizational identity, and subsequently encourage teams to commit to organizational goals, such as innovation. Accordingly, the emphasis on creating self-directed and dedicated process teams is a vital factor in succeeding with internal development efforts.

The commitment scale could also be interpreted to indicate organizational practices and procedures referred to as '*climate for initiative*'. Contributions to the innovation literature demonstrate the importance of organizational culture in the innovation processes. Specifically, SMEs that develop integrated innovation-supportive cultures may foster such initiative-taking behavior (Jassawalla and Sashittal, 2002). Further, theorists argue that initiative is a fundamental ingredient in organizational performance (e.g. Baer and Frese, 2003). Hence, the results show that SMEs possessing a committed and self-directed workforce that take initiative are more likely to attain more successful innovation efforts.

In general, the empirical evidence shows that the human resources management environment is strongly related to the innovation performance dimension of international SMEs. Correspondingly, the structuring of human resources policies and practices that facilitate certain team-level mechanisms should be a principal objective for SMEs seeking innovation-based growth and business performance. Ultimately, the emotional attachment to and involvement in an employing organization may push process teams to positively contribute to the organization´s productivity and its mission (Cole and Bruch, 2006).

5.1.2 Pathways to Business Performance

Second, the results provide empirical evidence that demonstrate the mediating role of the performance-seeking strategies. Both innovation and exporting are investigated as performance enablers, and will be discussed separately.

Innovation as Performance Enabler

Contrary to the proposed expectations, innovation performance does not significantly materialize into realized revenue growth, nor is it a significant predictor of profitability when economic performance scales are included in the model. Additionally, dissimilar to the theoretical predictions, R&D intensity was found to be a non-influential on growth and negatively associated with probability. This indicates that in-house developing efforts are not found to be significant mediators of firm performance. These results do not cohere with the results obtained by Wolff and Pett (2006) and Lu and Beamish (2006) who found that innovation efforts is positively related to growth and profitability, respectively.

Intuitively, the association between innovation and business performance may seem weak. The theory expedites product uniqueness as a predictor of exporting success. Accordingly, Kaleka (2002) predict that a product competitive advantage and the accompanying intangible resources should influence the achievements in business performance. The current results show, however, that superior performance is not likely to be derived from product competitive advantage alone. The poor predictive power of this scale may be evaluated in conjunction with the limited influence of innovation on financial outcomes. Previous research indicates that the effects of innovation are more complex than the conceptualization of the phenomenon might indicate (see e.g. Wolff and Pett, 2006). An innovation-based growth strategy implies committing considerable resources to development projects where the business outcomes are unknown. Wiklund and Shepherd (2005) specify that the shortening of product life-cycles in today's business environment puts additional uncertainties on the firm's existing operations and its ability to capitalize on product development investments Thus, the continuous investments in developing capabilities may not be recouped before the competitive advantage

in global markets is lost, indicated by the weak relationship between innovation efforts and returns.

Bang and Markeset (2012) argue that the globalization process has made internationalization easier due to technology spread and lower costs of technology. When technology and innovation is becoming more readily available, these capabilities have become more easily accessible to an increasing number of industry actors. The use of Internet is one example of a technology available to almost everyone. Grønning et al. (2008) provide evidence that a large number of innovations in Norwegian firms are diffusion-based, i.e. adoptions of innovation made by others. These studies suggest that innovation ultimately matter for exporting, but the current results indicate that the innovation dimension is not captured in its entirety by the investment in development and research activities. These evidences point to a reconsideration of internal innovation capabilities in the international business literature. Accordingly, developing alternative innovation capabilities may be an underexplored measure to gain competitive advantage in international markets.

A priori, internal innovation and product developing capabilities may be less relevant in the case of smaller firms. The historical bias in support of technological innovation and its role in internationalization process may be less relevant when evaluation the cross-section of an entire population of exporting SMEs. In this regard, the non-technological innovation has received weak empirical support in the past, despite being important in both service-related and manufacturing industries (Love and Roper, 2015). The present study establishes that these firms may also perform well, despite holding limited in-house innovation capacity. In sum, the effects of globalization and general accessibility of technology may have lessened the importance of traditional innovation capabilities as a driver of economic performance. Hence, there may be other preliminary features promoting the overall innovation success amongst exporting SMEs.

Holmes and Glass (2004) argue that classic R&D remains to be just one of the levers within firms' innovation portfolio. They also allege that the use of alternate innovation mechanism, such as acquisition, joint ventures, external collaboration, and licensing, are intensifying. Chesbrough (2003) shows that the logic of the old paradigm of '*Closed Innovation*' is being challenged by, among other factors, growing mobility of knowledge, increasingly knowledgeable customers and suppliers, and the reduced product life-cycle. Subsequently, the internal metrics applied in this study do not match the current emergence of '*Open Innovation*'. Open innovation provides SMEs with a method of overcoming internal resource constraints which limit the scope of their in-house innovative activities (Holmes and Glass, 2004; Love and Roper, 2015). Hence, smaller firms may overcome the obstacle of high innovation cost by utilizing external sources of innovation and employing more efficient innovation portfolios.

Hall et al (2009) argue that a minimum of investments placed in R&D is a necessary knowledge asset to benefit from spillover and external knowledge. The post hoc analysis shows that moderate levels of investments in R&D may mediate higher performance (see Figure 6). Therefore, the role of R&D as a firm necessity is undeniable. This implies that internationalized SMEs may view innovation capabilities as a prerequisite for competitiveness, providing support to the claim that internationally exposed industry sectors are required to maintain a certain minimum level of innovation capabilities.

Exporting as Performance Enabler

The results revealed that the exporting performance is a significant factor explaining both growth and profitability. This indicates that SMEs are more likely to experience firm-level performance if they succeed in employing an efficient exporting strategy. Hence, the study provides empirical evidence that exporting significantly affects core organizational outcomes, urging SMEs to treat exporting activities as a strategic priority rather than a sporadic and opportunistic activity.

As previously discussed, one of the most distinguishing features of high-performing exporting SMEs seems to be the international managerial orientation. Contrarily, aspirations to growth are not a significant predictor of export performance. Wiklund and Shepherd (2003) claim that business outcomes may not be under the total volitional control of management teams. Further, Delmar and Wiklund (2008) argued that aspiration to reach certain organizational goals may be weakened by the fuzzy and complex nature of the tasks associated with international activities. Despite not being directly related to business outcomes, the managerial attitudes towards international expansion, mediated by effective utilization of exporting behaviors, are significant antecedent of above-average business outcomes. The suggested pathway indicates that SMEs may achieve enhanced firm-level performance by actively coordinating the task of international activities specifically. It is further likely that a focused international endeavor allow managers to take incremental steps to gain recognition and experience abroad. Hence, management teams may achieve a certain level of volitional control over business outcomes through the mediating role of exporting. In this regard, it could be anticipated that there are significant feedback loops from the performance dimension to managerial orientation and supplementary firm-level characteristics.

Considering the fact that successful exporting is a significant determinant of overall firm performance, it is reasonable to presume that exporting activities are projecting benefits on the organizational operations in general. Accordingly, the combined impact of international orientation and management team diversity, may accentuate the importance of learning-by-exporting effects as explained by Monreal-Pérez et al. (2012). This could be due to progressive learning accumulations where SMEs actively increase performance in international markets through acquired market knowledge and business networks.

Coviello and Martin (1999) concluded that the internationalization of SMEs is strongly influenced by a variety of formal and informal network relations, while Kaleka (2002) shows that the development of overseas relationships enhance the probability of export positional advantages. These findings underline the focused importance of the act of exporting itself. A deliberate strategy to engage in an international expansion and reap the benefits from these activities could therefore be a prerequisite for successful international activities. In this regard, Zahra et al. (2009) speculate that there exists a causality that may go from exporting to innovativeness, and that there exists a learning accumulation in international markets that ultimately can be linked to the organization´s absorptive capacity. Evidence provided by Golovko and Valentini (2011) find support for the claim that innovation and exporting indeed reinforce each other in a dynamic virtuous circle. The significant association between export performance and innovation performance scales further supports this notion (Table 2). This may indicate that successful exporting potentially mediates performance through information networks and innovation skill acquisitions, as indicated by Zahra et al. (2000).

The ability to capitalize on knowledge accumulation and learning through a favorable strategic position could be an important aspect to the subsequent business success in exporting SMEs. The study does not allow us to conclude on the comparative strength of these relationships specifically. However, the inherit benefits derived from exporting and the accompanying resource allocation, allows us to accentuate the relevance of the processes and behaviors in which firms reap benefits from exporting activities.

5.1.3 The Mediating Role of Performance-seeking Strategies

For SMEs engaged in the internationalization process, a third strategic problem is whether firms should focus their attention on expanding their export activities or further invest in innovation activities in order to pursue financial performance. One of the main assumptions underlying the research on SMEs is that higher levels of innovation and internationalization generally support superior performance on firm-level. Conversely, this study show that highly R&D intensive and highly export-oriented organizations do not perform well in financial terms, implying that these relationships should be further investigated.

The Liabilities of Over-internationalization

In the export performance literature, numerous variables have been associated with economic measures of performance, including export sales intensity (Katsikeas et al., 2000). The current results indicate that highly intensive international expansion alone is not a sufficient strategy to support firm growth and high profitability. This finding is supported by Kuivalainen and Sundqvist (2007) who concluded that export intensity do not entail a direct positive effect on

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firm's performance in export markets. They further argue that export intensity could be problematic measurement as the international expansion often is non-linear and sporadic. Additionally, the relationship between export intensity and financial performance tend to be context specific causing research to produce contradictory result (ibid). Despite this, export intensity has traditionally been treated as a desirable outcome (e.g. Haahti et al., 2005; Katsikeas et al., 2000).

Theorists constantly tout the benefits of exporting and argue that increased multinationality is generally beneficial to the firm's performance (Contractor et al., 2003). Multinationality is highly correlated with export intensity (see Table 8), and can therefore be moderately assumed to be two aspect of the same phenomenon. Despite the postulated benefits of extensive export, the current results show symptoms of SMEs that may have over-expanded beyond an optimum level, and hence report weaker performance. This observation is supported by theorists suggesting that highly dispersed international operations cripple the performance benefits due to increased constraints and costs (Kuivalainen & Sundqvist, 2007). Accordingly, recent research has suggested that extreme levels of international operations may entail lower relative performance.

In an investigation of multinational large Swiss companies, Ruigrok et al. (2007) found that companies operating at extreme degrees of internationalization face lower performance means and greater performance variation. This internationalization-performance tendency has been conceptualized by Contractor et al. (2003) in the three-stage theory of international expansion. This study argues that international expansion tend to be non-linear and that some firms may over-internationalize by expanding into an excessively amount of nations and suffer sub-optimal effects on performance. The current results suggest that this propensity may also be applicable for smaller firms.

The exact location of the proposed "internationalization threshold" of sub-optimization has not been specifically identified, and there could be numerous variables driving the observed result. It should be noted that high export intensity could also be a deliberate strategy in order to tap into attractive markets or acquire strategic networks and knowledge clusters (Contractor et al., 2003). Additionally, the study fails to address the SMEs that are successful innovators due to their internationalization expansion specifically. Further, the study has not specifically addressed the firms that employ internationalization as a strategic tool because of limited domestic market opportunities. However, the awareness of the occurrence of over-internationalizing and its potential negative effects on performance, might give important insight to the research of internationalization strategies.

The Validity of Innovation Measures

Evaluations of innovation capabilities are commonly confined to measure the most readily identifiable input, namely current investments in R&D (Freel, 2005). While some studies

claim the benefits of investing in R&D, other studies find that the relationship between investments in R&D and corresponding performance scales are insignificant (e.g. Ganotakis and Love, 2011), Despite comprehensive previous efforts to discuss and clarify innovation strategy in the literature, the current findings could be a symptom of the `*confliction theoretical predictions, persisting knowledge gaps and theoretical inconsistencies*` (Keupp et al., 2012, p. 367).

Harris and Moffat (2011) show that resources invested in R&D are not particularly strongly related to innovation output. The same result was obtained employing the current model, and the results indicate that that this metric could be either misdirected or inefficient. As mentioned by D'Angelo et al. (2013), R&D expenditures relative to revenue as a metric for innovation could be misleading in the case of smaller firms, as SMEs often do not possess a formal R&D infrastructure. In addition, in the majority of smaller firms the innovation activities tend to be more informal, ad hoc and opportunistic (Love and Roper, 2015). The sample contains relatively small firms (see Table 5), so the R&D infrastructure may not be as well-established as previously assumed. Accordingly, R&D may be irrelevant as the sole performance indicator in the case of smaller firms, and should consequently be investigated as one of several constituents of internal development capabilities.

Our findings point to internal R&D as an outdated performance measure of SMEs' overall ability to innovate. It is further suggested that innovation performance may be expanded to measure firms' ability to establish an integrated multiple-source innovation strategy (Holmes and Glass, 2004). Research has consistently supported the notion that innovation is an important source of competitive advantage in international markets and that internationalization is a crucial instrument to capitalize on innovation efforts. Therefore, the operational measures through which performance is measured matters.

Evaluating Export Intensity and Innovation Investments

The intensity of performance-seeking strategies does not necessarily mediate higher performance levels, and researcher should reconsider the validity of this economic measure as a performance indicator in the case of smaller firms. The current insight urges researchers to be very specific as to what constitutes good strategic performance. If export performance is measured as the ability to derive revenue from international sales and maintain a reasonable volume of sales in foreign markets, an economic measure could be adequate. Contrarily, if performance is conceptualized as the fulfillment of operational goals, such measures might be more relevant as indicators of goal achievements rather than the ability to capitalize on the strategic behaviors in question. The empirical evidence affirms that smaller enterprises pursuing more ambitious business strategies, i.e. maintaining a strong export orientation and high levels of innovative capabilities, may be burdened by additional costs and risk. Therefore,

scholars and business managers should carefully consider the incorporation of strategic elements that support the operational goals of the organization.

Conclusively, the above implications provide supplementary insight for theory by illuminating strategic attributes instrumental in achieving above–average performance. The current assessment only delivers partial answers on the complexity of the direct and indirect relationships between the focal constructs of capabilities and performance. Accordingly, a more comprehensive and in-depth investigation of the key factors affecting performance prosperity is appropriate.

5.2 Managerial Implications

For managerial teams the practical implication will advance the acumen to how strategic risk imposed by exporting is best managed within the sphere of a specialized economy. An elaborate understanding of the processes from which SMEs source innovation and export capabilities and the recognitions of the benefits flowing from these capabilities in terms of performance is therefore essential. Managers of SMEs should put emphasis on analyzing the disadvantages and advantages of the various configurations addressed, and subsequently choose the optimal strategic combination according to their mission and organizational goals. Hence, the results can serve for both evaluative and diagnostic purposes in the formation and execution processes of exporting activities.

Managerial Aspirations

Leonidou et al. (1998) found that there is a lack of consensus among researchers as to what exporting elements are influenced by managers. The current study has tested the importance of managerial attributes in the context of internationalized SMEs, and finds managerial controllable instruments to be associated with innovation and exporting capabilities. Despite the influence of additional internal strategic elements and external turbulence, the management's volitional control is affected by their underlying aspirations. The study has shown that managers do in fact facilitate firm behaviors. Business managers in smaller firms may indeed affect the firm´s financial performance by adjusting management orientation to appropriate strategies. Hence, in order to create and exercise certain strategic options, practitioners need to align the underlying vision with the desired business outcomes. In particular, the active search for international opportunities and the employment of strategies to accommodate the firm´s international ambitions, may serve as a good strategic option for smaller firms.

Reaping Benefits From International Efforts

Export performance rates the firms' ability to reap benefits from international efforts, a scale that is positively related to financial returns and growth. Managers may therefore benefit from focusing efforts on developing competitive strategies that specifically seek to succeed in international markets. Here, SMEs with a strong international orientation are actively seeking international opportunities, adapting product offerings to meet international demand, and otherwise consolidate and communicate the international focus within the organization. The subsequent allocation of resources in internationally oriented SMEs is predicted to better firms' ability to identify and benefit from emerging opportunities. To reap the benefits of exporting, managers must ensure that the entire organization is actively seeking exporting opportunities, adapt product offerings to fit international demands, and otherwise develop resources required for such international activities.

Further, managers that want to pursue export-based performance may consider alternating the organizational structure. Accordingly, Beamish et al. (1999) found that a positive managerial attitude toward export opportunities is related to the progression of more internationalized organizational structures that may in turn increase the firm's ability to compete in foreign markets. SMEs with an international orientation should pay particular attention to developing exporting skills, as research consistently shows that international mindset might prove to be essential in the directing of scarce resources to exporting activities. In addition, the intensified competitive landscape of international markets presses firms to employ capable management teams who are able to navigate in turbulent environments. The results demonstrate that diverse management teams are more likely to experience export success. In particular, Hambrick et al. (1996) illustrated that management team additions and team replacements may be necessary in order to reach the strategic goals of the organization

The issue of over-internationalization (Contractor et al., 2003; Ruigrok et al., 2007) should encourage managers to actively control risks and expenses related to exporting activities, and avoid higher degree of internationalization unless strategic operational goals require extensive international expansion. Since highly internationalized SMEs show symptoms of over-internationalization, companies should put emphasis on developing or acquiring analytical skills to prevent over-expansion into international markets. This may help managers to gain a more all-encompassing understanding of internationalization and its associated performance dimension.

External Innovation and Skill Acquisition

The current study offers limited directions on how mangers should investments in innovation capabilities to positively affect core organizational outcomes. The results shows that innovation may not require major investments in a formal R&D structure in order to be

successful. However, Thornhill (2006) identified low innovation levels as a potential obstacle to further SME growth. Consequently, the author discourages managers to disregard the importance of the overreaching concept of innovation. Mangers should hence evaluate their innovation efforts and consider leveraging external research spillover as an R&D complement. This is in accordance with the recommendations of (Chesbrough and Crowther, 2006), who argued that *Open Innovation* should be included in the firm's current innovation portfolio, regardless of industry affiliation. In this regard, managers should focusing on developing dynamic capabilities (Teece et al., 1997) to improve the organization's ability to recognize and utilize learning benefits from external sources (Zahra et al., 2009). Additionally, capabilities and knowledge from international markets may be projected to activities in the home market, subsequently increasing domestic competitiveness as well.

Strategic Human Resource Management

The empirical evidence implies that expedient innovation performance outcomes partly stem from the inhibit culture of involvement and participation, demonstrating the predictive value of the strategic human resources perspective. Organizational commitment is a cultural construct (Phipps et al., 2013) that is found to impact innovation performance, and should thus have implications for human resource management practices. Thus, SMEs that want to enhance internal innovation capabilities should employ systematic efforts to enhance organizational climates. The development of informal and formal organizational procedures and practices that support self-starting and proactive approaches to organizational work tasks may encourage higher levels of commitment and initiative within the work teams (Baer and Frese, 2003). This could encourage a climate were difficulties and problems are met with persistence to overcome serious disruptions impairing the development activities.

Final Remarks

The study has exposed a substantial array of levers for reshaping strategic attributes to better the probability of reaching organizational goals. A prioritized effort on exporting activities, as a performance-seeking strategy, is advisable when the firm's managerial resources and capabilities are scarce or limited. However, SMEs may benefit from engaging in internationalization and innovation as complementary activities if the firm's available resources permit such an ambidextrous focus, although this has not been specifically investigated. In sum, these results should encourage managers to adopt more sophisticated internationalization strategies, aligning exporting activities with the strategic operating goals of the firm. The author will hence spur researchers to examine supplementary relationships between strategic elements and firm-level outcomes.

5.3   *Limitations and Directions for Future Inquiry*

If the findings outlined above are to be put into their proper perspective, there should be noted that certain limitations apply in this study. Turning attention to research legitimacy and potential, the study exposes a number of shortcomings and issues of interest for future performance research. Specifically, limitations linked to the survey, validity of measures, external influencers, and causality, have been acknowledged and will be presented in this section.

First, the survey method inherits several limitations. The use of a survey instrument inevitably involves a trade-off between the depth and breadth of data collected. Accordingly, the thesis relies on the data acquired from a cross-sectional dataset of SMEs, which limits the depth of analysis. Due to data unavailability, the study strongly relies on self-reported generic data from a single respondent. Attempting to extend the sample to include multiple respondents from each organization and obtain additional external objective data could complement future research and enhance the overall validity and reliability. Another notable limitation is the fact that the empirical results were derived from a sample of Norwegian exporting SMEs, which may induce the findings to be country-specific. Thus, a similar research should be deployed using data from dissimilar business environment contexts.

A premise, on which the research model rests, is the prerequisite that the capabilities reported in the current year are in fact a vial representation of consistent past endeavors. The snapshot survey may not account for the time-dependent variations due to the discontinuous nature of performance measures. The performance effects of strategic choices may lag in time, and the study applies data that may not capture potential time dependent effects. This notion is supported by Coad and Rao (2010), who argue that commercially valuable discoveries derived from R&D may take considerable time to materialize in terms of profits and growth of sales. Consequently, the strategic elements disclosed in this study are only effective predictors of firm performance when they are kept stable over time.

The study covers different performance aspects, but the causal relationships suggested in the conceptual model cannot be perfectly inferred. As with the findings obtained by e.g. Kyläheiko et al. (2011), there could be a potential problem with reversed causality, i.e. 'strategy follows performance'. The cross-sectional study limits the excretion of causal relationships between constructs, and the analysis does not discriminate between alterative directions of causality. Studies that utilize a longitudinal research design can contribute to confirming the suggested causal relationships and evaluate the long-term stability between the focal constructs.

There has been given limited focus to environmental factors, sectorial effects (e.g. underlying value chain infrastructure, product cycles, and technological opportunities), exporting patterns, market structure, technological capacity, and market characteristics in the theoretical model.

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These factors may be expected to be relevant drivers of firm behavior and performance (Aspelund et al., 2007; Harris and Li, 2011; Nummela et al., 2004). Love and Roper (2015) noted that it remains unclear which eco-system characteristics are acting as vital influencers of successful export and innovation activities. In particular, this includes external sources of innovation and effects of industry affiliation. Research endeavors examining internationalized SMEs should be aware of the research potential embedded in the dynamics of positional advantage in exporting markets. Specifically, future research may provide further insight by focusing on single and related-industries studies.

Further, an extraction of highly internationalized and high-performing exporters to investigate a more refined sample of SMEs may help uncover the specific determinants of performance in turbulent business markets. The author also suggests developing export strategy research based on the dynamic capabilities perspective. Knudsen and Madsen (2002) suggest that the creation and coordination of knowledge should be treated as a crucial part of firms' internationalization. Such research efforts could aid the research stream in resolving inconsistent findings and provide managers with more practically relevant implications.

Despite its limitations and shortcomings, this study has advanced the understanding of organizational attributes into the domain of exporting SMEs. Although the result obtained in this study should be seen as preliminary due to the proclaimed data limitations and methodological validity issues, this study provides future research with empirical evidence that encourage new perspectives on firm performance outcomes and organizational capabilities. It is clear the results on the observed differences need to be corroborated in additional empirical research. Hence, these results beg further research efforts.

Chapter 6

Conclusion

The current study has offered an empirical examination of Norwegian exporting SMEs and have sought to investigate a broad set of strategic pathways leading to or inhibiting financial performance. More specifically, this contribution has tested and discussed the strategic antecedents of performance by introducing firm-level and team-level strategic constructs and investigating the subsequent gravity of innovation and exporting capabilities as predictors of above-average business performance. These interrelations have stipulated a more complete portrait of the performance of SME, providing considerable managerial and theoretical implications.

Five notable findings were found to be of particular interest. Firstly, the exogenous constructs of managerial attributes were some of the principal predictors of the employment of performance-seeking strategies. In particular, management with strong international orientation experience high international resource commitment, and are more likely to obtain significantly higher levels of innovation and export performance. Secondly, an organizational climate for commitment and initiative is a significant driver of innovation success. Thirdly, investments in internal R&D capabilities and the successful development of internal innovation capabilities appear to project limited effects on core organizational outcomes. Rather than assuming a simplistic relationship between innovation and performance outcomes, strategy researchers should consider more dynamic capabilities that incorporate firms' ability to establish an integrated multiple-source innovation strategy. Fourthly, the highly internationalized SMEs show a tendency to attain significantly lower performance than firms with lower export intensity, indicating that exceedingly high dispersion of international markets and over-internationalization may cause SMEs to sub-optimize its export activities. Lastly, the successful pursuance of exporting activities is a significant predictor of overall SME performance, emphasizing the vital role of internationalization as a performance-seeking strategy.

The identification of these relationships has enhanced our understanding of the accumulated performance profiles of internationalized SMEs providing managers with strategic tools for improving aggregated performance levels. These results indicate that managers with ambitions to improve core organizational outcomes should put emphasis on developing and implementing effective exporting strategies. Managers should also be aware of the potential deficiencies and strategic risks imposed by over-internationalizing or a unilateral focus on in-house innovation capabilities. These insights have provided fundamental insight to the

increasing number of international SMEs executing strategies in an intensifying competitive environment. Finally, a useful line of extension of this research is to examine innovation and exporting capabilities in a more fine-grained manner.

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Appendix A – Factors

Factor analysis results

Scales	Loadings	Cronbach´s alpha

Performance-seeking strategies

Innovation performance ◊◊

		Loadings	Cronbach´s alpha
617	Development activities has increased company´s profitability	.809	.799
703	Development activities has increased market share nationally	.826	
704	Development activities has made it possible to keep up with competitors	.802	
619	Management is very pleased with company´s innovation level	.733	

Export performance ♦♦

		Loadings	Cronbach´s alpha
908	Satisfaction with the company´s international efforts (during last three years) with regard to achieved market share	.791	.924
905	Satisfaction with the company´s international efforts (during last three years) with regard to sales growth	.906	
907	Satisfaction with the company´s international efforts (during last three years) with regard to sales compared to competitors	.856	
906	Satisfaction with the company´s international efforts (during last three years) with regard to earnings/profitability	.926	
916	Satisfaction with the overall result of export efforts for the last 3 years	.892	

Product strategy

Product uniqueness ❖

		Loadings	Cronbach´s alpha
115	The main commodity represents a new, innovative way to met customer needs	.805	.847
116	The main commodity is unique in terms of design	.788	
117	The main commodity is unique with respect to technology	.832	
118	The main commodity is unique in use	.850	

Team characteristics

Process team commitment ❖
314	Employees often make an extra effort to make sure that the customers/users are excited about the company's product/service	.702	.840
315	Employees take responsible for improving or developing the company's product/service	.760	
316	Employees use their spare time to read material that could benefit their work	.762	
317	Employees make an extra effort without getting paid for it	.770	
318	Employees make the extra effort even if they know that management will not notice	.853	

Management diversity ◆
212	The management team has a diverse composition in terms of educational background (education type)	.859	.758
213	The management team has a diverse composition in terms of educational intensity (degree, number of years studying)	.837	
214	The management team has a diverse composition in terms of previous international experience	.548	
215	The management team has a diverse composition in terms of personality	.766	

Management orientation

International orientation ❖
507	The firm's culture is characterized by active search for new opportunities in foreign markets	.872	.912
508	The company has a strong ability to develop and adapt new and existing product to international markets	.775	
509	The importance of success in the company's international ventures is emphasizes to all employees	.892	
510	It is emphasized to develop human and other resources that can contribute to successful export	.871	
511	Decisions regarding one export market are coordinated with decisions regarding other export market	.823	

Growth aspiration ❖
417	Growth is a strong desire for the company's management	.959	.921
501	Growth is a strong desire for the company's owners	.952	

Model Fit:
X^2/df = 1.351 (p < .001)
NFI = .866
TLI = .954
CFI = .961
RMSEA = .043

❖ Measured on a Likert scale from "1: Do not agree" to "7: Strongly agree"
◆ Measured on a Likert scale from "1: No variation" to "7: Great variation"
◆◆ Measured on a Likert scale from "1: Not satisfied" to "7: Completely satisfied"
◊◊ Measured on a Likert scale from "1: No impact" to "7: High impact"

Appendix B – Test of Normality

	Variable	Mean	Skewness Statistic	S.D.	Kurtosis Statistic	S.D.	Shapiro-Wilk
314	Commitment	5.64	-1.060	.187	1.462	.371	.859***
315		5.31	-.752		.413		.900**
317		3.91	-.025		-1.109		.933***
316		3.76	.108		-.661		.948***
318		4.45	-.275		-.434		.945***
212	Management	5.05	-.745	.187	.102	.371	.900***
213	Diversity	4.45	-.265		-.516		.940***
214		3.81	.003		-1.140		.925***
215		4.88	-.650		.503		.913***
417	Growth Aspiration	5.75	-1.025	.187	.488	.371	.812***
501		5.59	-.843		-.213		.838***
507	International	4.60	-.436	.187	-.921	.371	.902***
508	orientation	4.73	-.535		-.531		.917***
509		4.53	-.378		-.906		.919***
510		4.50	-.312		-.898		.931***
511		4.34	-.351		-.890		..923***
115	Product uniqueness	4.04	-.087	.187	-.862	.371	.942***
116		3.76	.051		-1.061		.928***
117		4.01	-.151		-1.164		.917***
118		3.82	.079		-1.049		.928***
905	Export Performance	3.92	-.234	.187	-.688	.371	.933***
906		3.80	-.051		-.852		.943***
907		4.09	-.160		-.766		.944***
908		3.91	-.278		-.554		.933***
916		4.24	-.337		-.750		.935***
617	Innovation	5.12	-.560	.187	-.229	.371	.914***
619	Performance	4.78	-.464		-.393		.931***
703		5.45	-.912		.855		.885***
704		4.77	-.431		-.126		.932***

*** p < 0.001; ** p>0.01; *p < 0.05 (all two-tailed tests)

When the Shapiro-Wilk test is significant (p<.05), the item is significantly different
from normal distribution

Appendix C – The Survey

Translated back to English on May 2014

Internationalization Of Norwegian Exporting SMEs

Return to:

Department of Industrial Economics and Technology Management (IØT)
W/ Ann Elida Eide
NTNU
7491 Trondheim

The questionnaire survey is also available on Internet: iot.ntnu.no / survey

About the company

In the following you will find questions related to the company's main export product or service:

	General information about the company: *Please enter the details:*	
101	Company Name:	
102	Approx. Which year was the company established?	
103	Which position do you hold in the company?	

Product

In the following you will find questions related to the company's main export commodity.

	How would you describe your main export? *Please check the box that best describes your answer:*	do not agree		To some extent			strongly agree	
104	Can be described as a physical product	1	2	3	4	5	6	7
105	Can be described as a software	1	2	3	4	5	6	7
106	Can be described as a service	1	2	3	4	5	6	7
107	Considered by customers as technically advanced	1	2	3	4	5	6	7
108	Is complicated to use	1	2	3	4	5	6	7
109	Requires a high degree of adjustment to fit individual customers	1	2	3	4	5	6	7
110	Requires extensive customer service and follow-up long after the sale has taken place	1	2	3	4	5	6	7
111	From the first contact with a potential customer to a sale is finalized, it typically take very long time	1	2	3	4	5	6	7
112	Doubt and uncertainty often occurs during the sales process	1	2	3	4	5	6	7

	When you compare your company's products / services to competitive solutions in Norway and abroad, would you say that your main commodity: *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
113	Is specialized for a limited type of customers (niche)	1	2	3	4	5	6	7
114	Solve specialized customer needs	1	2	3	4	5	6	7
115	Represents a new, innovative way to meet customer needs	1	2	3	4	5	6	7
116	Is unique in terms of design	1	2	3	4	5	6	7
117	Is unique with respect to technology	1	2	3	4	5	6	7
118	Is unique in use	1	2	3	4	5	6	7

Competitive Environment

In the following you will find questions related to the company's market and competitors.

	To what extent do you agree with the following: *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
201	The company can easily capture changes in customer needs	1	2	3	4	5	6	7
202	The company can easily replace existing suppliers	1	2	3	4	5	6	7
203	The company can easily predict competitors' actions	1	2	3	4	5	6	7
204	The customer can easily replace your commodity with the competitor's solution	1	2	3	4	5	6	7
205	The growth of new competitors is a constant threat for your business	1	2	3	4	5	6	7
206	Competitive products / services is a constant threat for your business	1	2	3	4	5	6	7
207	There is considerable variation in your company's launched products (product mix/assortment)	1	2	3	4	5	6	7
208	The company's products / services are frequently being outdated	1	2	3	4	5	6	7
209	The production technology is changing rapidly	1	2	3	4	5	6	7
210	For your company's type of products / services, price is important for the customer	1	2	3	4	5	6	7

Management and employees

In the following you will find questions related to the company's management team, employees and board of directors as well as management's and owners' growth ambitions for the company.

The term "management team" consists of those persons who regularly make decisions which affect the company's operations (may consist of one person or more).

	Please enter the number:
211	How many people would you say are part of the management team in the company?

The management team's composition and efficiency

	To what extent do the people who are part of the management team, have a diverse composition in terms of: *Please check the box that best describes your answer*	no variation		some variation			great variation	
212	Educational background (education type)	1	2	3	4	5	6	7
213	Educational intensity (degree, number of years studying)	1	2	3	4	5	6	7
214	Previous international experience (having worked with international actors, living abroad, is foreign, etc.)	1	2	3	4	5	6	7
215	Personality	1	2	3	4	5	6	7
216	Age	1	2	3	4	5	6	7

The management team's composition and efficiency

	To what extent do you agree that the following statements holds true for the management team? *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
301	The management team members has experience from previous work with entrepreneurship	1	2	3	4	5	6	7
302	The management team has experience from working in the same industry	1	2	3	4	5	6	7
303	The management team has previous management experience	1	2	3	4	5	6	7
304	The management team handles change very well	1	2	3	4	5	6	7
305	The management team meets new challenges in an efficient manner	1	2	3	4	5	6	7
306	The management team change behavior to meet external requirements	1	2	3	4	5	6	7
307	The management team works very efficiently	1	2	3	4	5	6	7
308	The management team does a very good job	1	2	3	4	5	6	7

	To what extent do you agree that the following statements holds true for the management team? *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
309	The management team believes that one should try to do several things at once	1	2	3	4	5	6	7
310	The management team would rather instead focus on one project every day than on parts of several projects simultaneously	1	2	3	4	5	6	7
311	The management team has a tendency to juggle multiple tasks simultaneously	1	2	3	4	5	6	7
312	The management team believes it is best to complete one task before starting the next	1	2	3	4	5	6	7
313	The management team believes it is best that employees are given several tasks and projects to do simultaneously	1	2	3	4	5	6	7

The company's employees

	To what extent do you agree that the following statements are true for the employees of your company? *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
314	Employees often make an extra effort to make sure that the customers / users are excited about the company's products / services	1	2	3	4	5	6	7
315	Employees take responsibility for improving or developing the company's products / services	1	2	3	4	5	6	7
316	Employees use their spare time to read material that could benefit their work	1	2	3	4	5	6	7
317	Employees make an extra effort without getting paid for it	1	2	3	4	5	6	7
318	Employees make the extra effort even if they know that management will not notice it	1	2	3	4	5	6	7
319	How serious an employee's ideas and suggestions are	1	2	3	4	5	6	7

			do not agree		To some extent			strongly agree	
	taken by others often depends more on who the person is than how much he / she can								
320	The company is adept at capturing lessons / new knowledge from the employees' work experiences	1	2	3	4	5	6	7

	Please check the box that best describes your answer	do not agree		To some extent			strongly agree	
401	Employees find it frustrating to work in this business because of conflict situations	1	2	3	4	5	6	7
402	Employees find it frustrating to work in this business because lack of resources or competencies	1	2	3	4	5	6	7
403	Employees find it frustrating to work in this business because "bureaucracy"	1	2	3	4	5	6	7
404	Generally, employees are very pleased to work in this company	1	2	3	4	5	6	7

	To what extent do you agree that the following statements are true for the employees of your company? *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
405	The company's employees appreciate and respect each other's contributions	1	2	3	4	5	6	7
406	In this company it is safe for employees to undertake risky projects that have higher probability to fail	1	2	3	4	5	6	7
407	When an employee makes mistakes, it is often held against him / her	1	2	3	4	5	6	7
408	In this business it's easy to bring up difficult topics and discuss issues	1	2	3	4	5	6	7
409	It is difficult to ask other employees for help in this company	1	2	3	4	5	6	7
410	Employees actively share their knowledge and expertise with each other	1	2	3	4	5	6	7

	About the company's Board of Directors *Please enter the number:*	
411	How many external people (outside investors and those without any other connection with the company), does the board of directors consist of?	
412	Approx. how many board meetings with a physical presence were held in 2013?	

	To what extent do you agree with the following: *Please check the box that best describes your answer*	do not agree		To some extent			strongly agree	
413	It is often informal contact between management and the company's board members	1	2	3	4	5	6	7
414	The board is concerned with controlling and evaluating historical events (for example, by looking at the accounting data)	1	2	3	4	5	6	7
415	The board is concerned with planning for the future (for example by developing company strategy)	1	2	3	4	5	6	7
416	We have an active, demanding and experienced board of directors	1	2	3	4	5	6	7

Growth and international activities

	To what extent do you agree with the following: *Please check the box that best describes your answer*	**do not agree**		**To some extent**			**strongly agree**	
417	Growth is a strong desire for the company's management	1	2	3	4	5	6	7
418	International expansion is a strong desire for the company' management	1	2	3	4	5	6	7
	Please check the box that best describes your answer	**do not agree**		**To some extent**			**strongly agree**	
501	Growth is a strong desire for the company's owners	1	2	3	4	5	6	7
502	International expansion is a strong desire for the company's owners	1	2	3	4	5	6	7
503	Growth is necessary for company survival	1	2	3	4	5	6	7
504	International expansion is necessary for company survival	1	2	3	4	5	6	7
505	The company looks at the world and not just Norway as its company market	1	2	3	4	5	6	7
506	Due to uncertainty on export markets you find it best to expand the activities gradually and with caution	1	2	3	4	5	6	7
507	The firm's culture is characterized by active search for new opportunities on foreign markets	1	2	3	4	5	6	7
508	The company has a strong ability to develop and adapt new and existing products to international markets	1	2	3	4	5	6	7
509	The importance of success in the company's international ventures is emphasized to all employees	1	2	3	4	5	6	7
510	It is emphasized to develop human and other resources that can contribute to successful export	1	2	3	4	5	6	7
511	Decisions regarding one export market are coordinated with decisions regarding other export markets	1	2	3	4	5	6	7

	Within a decade it is likely that your company: *Please check the box that best describes your answer*	**not likely**		**somewhat likely**			**very likely**	
512	... Is acquired by new owners	1	2	3	4	5	6	7
513	... will acquire other companies	1	2	3	4	5	6	7
514	... Will work increasingly close with other companies	1	2	3	4	5	6	7
515	... Will be substantially larger than today	1	2	3	4	5	6	7

Business Development

We will hereinafter ask some questions about the company's business development

	Launch of new products: *Please check the box that best describes your answer and fill in the numbers*		
516	Have your company launched any new products / services in the last five years?	Yes	No
517	If yes, how many?		

	Start with what you believe to be the company's main product launched in the past five years; do you agree that this item is:	**do not agree**	**To some extent**	**strongly agree**

	Please check the box that best describes your answer							
518	New in your company							
		1	2	3	4	5	6	7

	Please check the box that best describes your answer	do not agree		To some extent			strongly agree	
601	New to the company's home market?							
		1	2	3	4	5	6	7
602	New to the international market?	1	2	3	4	5	6	7
603	A minor improvement of existing solutions in your company's sector?	1	2	3	4	5	6	7
604	A radical improvement / new solution compared to existing solutions in your company's sector?	1	2	3	4	5	6	7

	How would you rate your company's ability to be innovative related to: *Please check the box that best describes your answer*	no ability to innovate		some ability to be innovative			excellent ability to innovate	
605	Products							
		1	2	3	4	5	6	7
606	Services	1	2	3	4	5	6	7
607	Production Processes	1	2	3	4	5	6	7
608	business model	1	2	3	4	5	6	7

	How much focus does the company have on the development activities listed below? *Please check the box that best describes your answer*	no focus		To some extent			high focus	
609	Improvement of existing product							
		1	2	3	4	5	6	7
610	Development of new product	1	2	3	4	5	6	7
611	Improvement of existing service	1	2	3	4	5	6	7
612	Development of new service	1	2	3	4	5	6	7
613	Improvement of existing production process	1	2	3	4	5	6	7
614	Development of new production process	1	2	3	4	5	6	7
615	Improvement of existing business (the way a company benefits)	1	2	3	4	5	6	7
616	Development of new business model	1	2	3	4	5	6	7

	What impact has the company's development activities had for your company? *Please check the box that best describes your answer*	no impact		some impact			high impact	
617	Increased the company's profitability							
		1	2	3	4	5	6	7
618	Increased the company's productivity	1	2	3	4	5	6	7
619	Increased the company's market share nationally	1	2	3	4	5	6	7

	Please check the box that best describes your answer	no impact		some impact			high impact	
701	Increased the company's market share internationally	1	2	3	4	5	6	7
702	Made it possible for the company to maintain its profit margin	1	2	3	4	5	6	7
703	Made it possible for the company to keep up with its competitors	1	2	3	4	5	6	7
704	Generally, management is very pleased with the company's innovation level	1	2	3	4	5	6	7

No.	**Patents and licensing** Please check the box that best describes your answer and fill in the numbers		
705	Has the company applied for a patent	Yes	No
706	Is the company actively seeking to buy patents / licenses as part of its business strategy?	Yes	No
707	How many patents have the company applied for and / or currently own?		
708	How many licenses have the company applied for and / or currently own?		

Sources of inspiration

In the following you will find questions related to sources of new ideas for the company and how the company captures learning from international activities.

	Which of the following have been sources of new / important ideas for your company's development activities? Please check the box that best describes your answer	Not a source of new / important ideas		To some extent a source of new / important ideas			great source of new / important ideas	
709	management	1	2	3	4	5	6	7
710	other employees	1	2	3	4	5	6	7
711	Associated companies in the same company group	1	2	3	4	5	6	7
712	Suppliers	1	2	3	4	5	6	7
713	Customers	1	2	3	4	5	6	7
714	Competitors	1	2	3	4	5	6	7
715	Consultants	1	2	3	4	5	6	7
716	Universities, colleges and/or research institutes	1	2	3	4	5	6	7

717	Support schemes	1	2	3	4	5	6	7
718	Internet	1	2	3	4	5	6	7
719	Trade fairs and exhibitions	1	2	3	4	5	6	7
720	Conferences and scientific publications	1	2	3	4	5	6	7

	Please check the box that best describes your answer	no source of new / important ideas		To some extent source of new / important ideas			great source of new / important ideas	
801	Mainly actors in the domestic market	1	2	3	4	5	6	7
802	Mainly actors internationally	1	2	3	4	5	6	7

	To which extent does the company use each of the following activities to capture, interpret, synthesize and integrate what you have learned from your international activities? *Please check the box that best describes your answer*	to a little extent		To some extent			to a great extent	
803	Use of formal reports and memos to summarize learning	1	2	3	4	5	6	7
804	Information sharing in meetings	1	2	3	4	5	6	7
805	Discussions face-to-face between different teams	1	2	3	4	5	6	7
806	Use of experts and consultants to facilitate learning	1	2	3	4	5	6	7
807	Formal analysis of failing international projects	1	2	3	4	5	6	7
808	Formal analysis of successful projects	1	2	3	4	5	6	7
809	Formal discussions of the best ways to use what has been learned in developing new products (or upgrading existing ones)	1	2	3	4	5	6	7

Economy and international activities

Finally, we will ask some questions related to the company's revenue and profit, international activities and market development.

	Key numbers Please fill in:	
810	Approx. in which year did the company have its first sale to a foreign market?	year:
811	In which country was this first international sale?	country:
812	In approx. how many countries were the company's products sold in 2013 (excluding Norway)?	number of countries:
813	What country was the company's main international market in 2013?	country:

814	Approx. what percentage of the company's turnover did this market represent in 2013?	Percent (%):
815	Approx. What was the company's revenue in 2013?	total money:
816	Provide an estimate of how sales were divided in 2013, in **percentage**:	Norway:
		Nordic countries (including Norway)
		Europe (including Scandinavia)
		Rest of the world:

	Please fill in:	
901	Approx. how much of a company's total sales went to research and development in 2013	Percent (%):
902	Approx. how many employees worked for the company in 2013?	number of employees:
903	Approx. How many people in the company traveled in connection with the company's international activities during 2013?	number of people:
904	Approx. How many travel days did the company's employees have to international markets in 2013?	number of days:

The company's international activities

	In terms of your expectations, how satisfied are you with your company's international efforts during the last three years with regard to: *Please check the box that best describes your answer*	not satisfied		partly satisfied			completely satisfied	
905	Achieved market share	1	2	3	4	5	6	7
906	Sales Growth	1	2	3	4	5	6	7
907	Sales growth compared to competitors	1	2	3	4	5	6	7
908	Earnings / profitability	1	2	3	4	5	6	7
909	The image the company has gained	1	2	3	4	5	6	7
910	Competence building	1	2	3	4	5	6	7
911	Knowledge about competitors' strategies and behavior	1	2	3	4	5	6	7
912	Knowledge of new technologies and innovations	1	2	3	4	5	6	7
913	Knowledge about new possible ways of distribution	1	2	3	4	5	6	7
914	Access to additional new markets	1	2	3	4	5	6	7
916	Building networks internationally	1	2	3	4	5	6	7
916	All things considered, how satisfied are you with the overall results of the export efforts for the last 3 years?	1	2	3	4	5	6	7

	About the market's development *Please check the box that best describes your answer*	sharp decline		stability			strong growth	
917	Market developments in our industry in Norway is characterized by ...	1	2	3	4	5	6	7
918	Market developments in our main export market is characterized by ...	1	2	3	4	5	6	7
919	Overall demand in the industry over the last 3 years have been characterized by ...	1	2	3	4	5	6	7
204	We expect the company's revenue over the next three years	1	2	3	4	5	6	7

920	to show...							