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Åsa Devine
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INTRODUCTION

The doctoral thesis is focused is internationalization and performance among small and medium-sized firms. More precisely, it is conducted within the contextual setting of small and medium-sized furniture producers in Sweden. In the introductory chapter, internationalization is introduced to the reader by defining the concept, discussing reasons for involvement, as well as the importance of internationalization on both company and national level. Thereafter, the specificity of research focused on internationalization among small and medium-sized companies is presented, resulting in the identification of a theoretical gap. Resting on the problem discussion is the research question and purpose. Lastly, a reader’s guide provides a visual overview of the dissertation structure.

1.1 BACKGROUND

This research is completed within the context of one specific industry, the Swedish furniture industry. While there are several advantages associated with using a tight contextual framework, it was no coincidence that the furniture industry with its producers was chosen. An important reason for focusing on the furniture industry in Sweden is because this industry traditionally has been viewed as important (Kjaer, 1996), not least when considering the supply of employment opportunities within certain regions (TMF, 2009-10-23b). And it is not only in Sweden that the furniture industry has been an important provider of job opportunities. In the beginning of the 1990s, the furniture industry

---

1 Collecting data from one industry, as compared to multiple industries, empowers the empirical conclusions as well as theoretical implications (Katsikeas and Morgan, 1994). For example, in the study of internationalization behaviour of SMEs by Reuber and Fischer (1997), they used only empirical material from one industry to control for industry effects. In addition industry effects could be controlled for by collecting the empirical material from firms with the same position along a particular value-chain, in this case the producers. Also, focusing on firms from one industry and one country should to some extent ensure a high level of similarity in management values (Pehrsson, 2007), especially when subjective measures such as management perceptions are incorporated into the study (Pehrsson, 2006a). Findings by Bauerschmidt and Sullivan (1989) also flag for caution when using cross-country and cross-industry empirical material.
was ranked as number seven in Europe considering number of employees (NUTEK, 1997).

When studying the furniture industry, and in particular furniture producers, it becomes apparent that the majority of these firms match the definition of small and medium-sized enterprises (SMEs). While various definitions exist of what constitutes an SME, the definition used in this research is the one formulated by the European Commission and taken into effect in 2005 (European Commission, 2008). According to this definition, a company should be considered an SME if it is independently owned and has less than 250 employees. In addition the annual turnover of the company should not exceed €50 million, nor should its annual balance-sheet total exceed €43 million. For more on the definition of SMEs, including a specification of the three different size-classes of micro, small and medium-sized enterprises, see 2.2. Thus, this research is conducted within the immediate context of small and medium-sized Swedish furniture producers and within the extended context of SMEs in general.

Further, research focused on the furniture industry in general, and internationalization among its members in particular, has been sparse. Among the more acknowledged studies focusing on the furniture industry is Brege’s et al. (2001) study of strategic groups. However, Brege’s study ends where an internationalization analysis would begin; and this despite the fact that problems associated with international involvement among the members of the furniture industry have been repeatedly discussed in public reports (Brege et al., 2005; NUTEK, 1997; SIND 1980). More recently, involvement in international business has been shown as one of the most promising and lucrative strategies for the members of the furniture industry (Brege et al., 2005; Óhman and Enocson, 2002). For more specifics about the history, structure, and internationalization of the Swedish furniture industry see the empirical Chapter 2.

While international trade is not a recent phenomenon, the importance of being involved internationally has increased recently among firms of all sizes (Axinn and Matthyssens, 2002; Chetty and Campbell-Hunt, 2003; Coviello and McAuley, 1999; Minifie and West, 1998) and not least among small and medium-sized enterprises (SMEs) (Knight, 2000). For example, SMEs in Europe increased their export by 12 percent between 2005 and 2006 (European Commission, 2007).

The speed and complexity of internationalization has increased (Axinn and Matthyssens, 2002) and can be attributed to factors such as the elimination or reduction of trade borders and simplified paperwork; and the size and structure of the foreign market, which might allow niche strategies, as well as recovery of high research and development (R&D) spending associated with many high-tech products (Albaum and Duerr, 2008). Further, technological improvements such as the Internet allow for improved communication with customers and partners abroad (Ibid.), as well as increased ease of research, advertising, and sales (Ghauri and Cateora, 2006).
A company might also become involved in internationalization out of necessity, or because of less than optimal domestic conditions such as increased domestic competition. This is often the case within small countries with open borders such as Sweden (Melin, 1992). And Sweden is not an exception. While the competitive pressure has increased on a global scale during the last decade, firms operating within Europe have particularly felt this environmental change (European Commission, 2003). For the domestic firm, a small home market also implies dependency of a small customer base, leading to increased risks in case of market saturation (Westhead et al., 2001a). What is important to realize is that even domestic firms are affected by international competitors (European Commission, 2003); particularly small resource-constrained domestic firms using simplistic strategies risk suffering when international competitors enter their home market (Zacharakis, 1997, pp. 24).

Different definitions of internationalization exist. Some view internationalization as a result or strategic goal, or simply a way of thinking (Albaum and Duerr, 2008). However, more frequently internationalization appears to be considered a process through which firms progressively increase their international involvement (Johansson and Vahlne, 1990). Inherent in this definition is the assumption that firms perform internationalization activities as part of their goal towards growth.

The nature of the internationalization process can be described as planned (Albaum and Duerr, 2008), evolutionary (Knight, 2000), and/or dynamic (Coviello and McAuley, 1999). The inclusiveness of the internationalization process varies between researchers: most focus primarily on outward activities (Fillis, 2002; Gripsrud, 1990), while others see the process as a “two-sided coin” (Liang and Parkhe, 1997) considering inward activities to be an important part of the process (Coviello and McAuley, 1999; Korhonen et al., 1996).

In accordance with the majority of the research body focused on internationalization, this research is concerned with the outward activities of the internationalization process. It is important to mention, however, that it is not the process per se that is important here, but the outcomes of the process at a given time in terms of involvement in international business and company performance. Involvement in international business, or internationalization, is used in

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2 Penrose (1995) distinguishes between firms that grow and firms that do not grow. Firms that do not grow might be run by managers who value growth of the firm as less important than personal power, prestige, and public approval. Other reasons as to why firms do not manage to grow include poor management, lack of financial resources, stagnant approach in a dynamic environment, and sometimes simply bad luck (Ibid.).

3 Outward activities include export through agents or own sales personnel, cooperation with other local companies, own sales company, joint ventures, subsidiaries abroad, establishment of own manufacturing facility abroad, acquisitions, licensing, franchising and patents (Holmlund and Kock, 1998; Fletcher, 2001).

4 Inward activities include import of goods, services, finance, and technology through franchising, licensing, direct investment, and allied agreements (Korhonen et al., 1996).
this research as a measure of a firm’s presence in a geographic market other
than the firm’s domestic market. The presence can be of varying degree and
forms and does not insinuate a particular status or position of the firm as com-
pared to competitors. For definitions and a discussion of (objective and subjec-
tive) performance, as used in this research, please see 3.6.4.

The importance of internationalization and in particular export can be dis-
cussed on company or national level. The reasons why internationalization is
important from a company’s perspective is closely tied to the above discussion
of restricted domestic opportunities and the spreading of risk. In short, interna-
tionalization is important to the firm because it is a way, and sometimes the
only way, to grow (Zacharakis, 1997) and make a profit, but also for its sur-
vival.

In brief, the importance of export on a national level relates to the need to
maintain a positive trade balance (Albaum and Duerr, 2008). Small and me-
dium-sized firms play an important role in securing a country’s export level⁵,
and some researchers boldly state that SMEs are the engine behind national
export growth (Mtigwe, 2005) and wealth creation (Westhead et al., 2001b).
For example, 50 percent of the total export from Germany can be ascribed to
companies with less than 20 employees (Czinkota and Ronkainen, 2007). In
practice, the acknowledgement of the importance of SMEs (future) export con-
tribution can, for example, lead to the establishment of export loan programs
targeting specifically SMEs. In Sweden such an export loan program was
launched in the summer of 2007. The aim of the program was to reduce the
country’s reliance on the successes of a handful of large firms that accounted for
40 percent of the country’s total export (Trade Finance, 2007).

Wolff and Pett (2006) claim that because of their vast number, SMEs are
important as drivers of most national economies. This is supported by Knight
(2001). For instance, if many small firms grow a little, possibly as a result of
successful export, they can employ more people and continue to progress inter-
nationally (Ibid.). In the European Union, 99 percent of all firms are classified
as SMEs, providing already 75 million job opportunities⁶ (European Commis-
ion, 2006). It becomes obvious that the creation of a positive growth spiral
among the many European SMEs would make a significant difference on the
labor market within the European Union and subsequently and positively influ-
ence each country’s economy. Consequently, stimulating SMEs survival and
growth through export involvement should benefit any nation’s trade balance,
secure job opportunities and reduce the dependency on large exporters’ per-
formances.

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⁵ 68 percent of Chinas export comes from small and medium sized firms (Hall, 2007). Further, in
1993, 96 percent of all exporting firms in the U.S. were SMEs (Zacharakis, 1997). More precisely,
two thirds of the exporters in the U.S. have less than 20 employees (Czinkota and Ronkainen, 2007).
⁶ Further, small and medium sized enterprises account for two thirds of all jobs in the private sector
(European Commission, 2007).
1.2 PROBLEM DISCUSSION

While internationalization is of increased importance for most any firm, research focused on this topic is lagging behind. This is particularly true for research focused on internationalization among SMEs, a research area that until recently has not received its share of research attention (Holmlund and Kock, 1998; Zacharakis, 1997). As a result, internationalization of smaller firms is not fully understood (Westhead, et al., 2001a).

Two reasons as to why no satisfactory theory exists which can explain SME internationalization are that the existing models are developed around large companies and corporations, and that many of the models are considered outdated.

Company size has long been considered one deciding factor for how firms compete and conduct business. For example, larger firms in general possess more resources, achieve higher levels of economies of scale, and as a result their export ventures are perceived as less risky compared to those of smaller firms (Katsikeas and Morgan, 1994). The larger firm is also believed to use information differently from smaller firms (Souchon et al., 2003). It is therefore puzzling that models developed with regards to larger companies and corporations are still applied, unchanged, to smaller firms. This is, to a large extent, the case within existing internationalization research (Coviello and McAuley, 1999, Chetty and Campbell-Hunt, 2003) resulting in problems associated with explaining international market establishment among small enterprises (Holmlund and Kock, 1998). Thus, considering smaller firms as undersized versions of larger firms would be a mistake (Brouthers and Nakos, 2004) and the corresponding empirical support for existing internationalization models is, not surprisingly, mixed. Some even consider it more luck than rule if the SMEs internationalization process confirms for example one of the stage models or the network approach (Coviello and McAuley, 1999; Axinn and Matthyssens, 2002).

Many of the traditional internationalization models were developed during the 1970’s and have not been modified or updated with regards to the actual internationalization process in which firms are currently involved (Axinn and Matthyssens, 2002). Fletcher (2001) questions the relevance of existing models by pointing to the change in the external environment. This change includes the removal of the importance of national trade borders and the increased cooperation between firms located in different countries. Other changes in the

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7 Already in 1939, it was acknowledged that the size of a firm influence its competitive ability (Mason, 1939).
8 Among the more acknowledged internationalization models are the learning and innovation adoption model; the eclectic decision making model; and the network approach. For a presentation of, for example, these models see chapter 3. Additional theories not discussed in more detail include the portfolio theory; and the monopolistic advantage theory.
environment, which affect a firm's behavior, are the increased importance of services, high-tech markets, and value economic aspects such as the consumer's desire to buy "green" products (Axinn and MatthysSENS, 2002). Also, the existence of the Internet has changed the way in which firms conduct business (Ibid.). For example, firms that internationalize using the Internet as a resource have been found not to act in accordance with the stage theories (Moini and Tesar, 2005).

Existing research particularly focused on internationalization of SMEs is seemingly concentrated around specific interests. One such focus of interest is to determine reasons and motivations behind why firms start exporting (Zacharakis 1997; Gripsrud, 1990). As a consequence, differentiation between exporters and non-exporters is highlighted (Zacharakis, 1997). Another area of interest is perception of barriers (Thirkell and Dau, 1998). A third focus relates to export/entry successes in general (Zacharakis 1997). Export success is also discussed with special emphasis on drivers of export success, determinants of sustained export success, and the relationship between export success and export marketing strategy (Thirkell and Dau, 1998).

While some authors have studied reasons behind export involvement, no consensus has been reached regarding what factors encourage export among small and medium-sized firms (Westhead et al., 2001a) or their ability to actually become involved in export (Westhead et al., 2001b). In particular, few studies have focused on the level of export involvement, ranging from non-exporters to advanced exporters, or investigated whether exporters actually show better performance than do non-exporters (Westhead et al., 2001a). This is supported by Lu and Beamish (2006) who stress that more research is needed on performance implications of internationalization among SMEs. In addition, the behavior and attitudes among existing exporting SMEs deserve more focus (Gripsrud, 1990) as compared to the attention given to non-exporting firms.

There is also a need to develop a conceptual framework of internationalization among SMEs which considers factors such as access and development of export business expertise and knowledge, access to tangible resources, strategy development, and drivers of internationalization (Westhead et al., 2001b). Moen (2002) advocates simultaneous consideration of the external environment of the company and the characteristics of the decision making manager(s) if attempting to shed new light on international behavior of SMEs. This is in part supported by Moini and Tesar (2005) who stresses the urgency to not only include the individual manager(s) into the calculation, but to also give him/her a prominent role.

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9 Critique has been raised which claim that studies focused on perception of internationalization barriers spend all of their focus on identifying and listing potential barriers in order of importance, while neglecting to provide suggestions for how firms can manage to bridge these barriers (Zimmerman, 1999).
The importance of creating meaning within existing research, by relating individually studied concepts into a theoretical framework, is further attested by Bonaccorsi (1992). One such framework could include the three cornerstones of the firm’s external environment; export behavior and activities; and performance. Future research should also benefit from including aspects from the field of competitive strategy (Ibid.). In general, it should be beneficial to incorporate aspects from the field of strategy if attempting to explain export and export performance (Cavusgil and Zou, 1994).

Considering the nature of the research focused on internationalization of SMEs, most of the research includes case studies or small sample surveys using overly simplistic analytical methods. Furthermore, the empirical data most frequently originates from high-tech industries, new and independent firms, and from manufacturing firms located in the US (Westhead et al., 2001a). Lages and Montgomery (2004) found that more research should concentrate on European SMEs.

In conclusion and referring to existing research as discussed above, it should be productive to tie together existing research tracks focused on level of export involvement, perception of barriers, and performance. In addition it may be fruitful to acknowledge the importance of market knowledge, the characteristics of top manager(s), and strategic positioning.

1.3 RESEARCH QUESTION

Based on the above research positioning and problem discussion, the research question is as follows: What factors determine internationalization and performance among small and medium-sized enterprises? The research question being rather broad, it should be beneficial to separate it into more specific subordinate questions. By answering the following three subordinate questions, the overall research question is understood to be answered as well:

- What factors determine whether small and medium-sized enterprises are involved in export or not?
- What factors determine main export mode among small and medium-sized enterprises?
- What factors determine performance of small and medium-sized enterprises?

1.4 PURPOSE

The purpose of this research is to extend the understanding of internationalization and performance among small and medium-sized firms. This is achieved by explaining export involvement and performance of small and medium-sized furniture producers in Sweden. The approach taken implies tying together existing theoretical concepts into a theoretical framework to be tested. Thus,
while the framework used necessarily rests on existing research, it is modified to fit the contextual setting of small and medium-sized enterprises.

1.5 DELIMITATIONS

Delimitations refer to the restrictions that the researcher has defined for the research, considering both theoretical and empirical aspects. The empirical delimitations refer to the companies and their managers and owners that will provide the empirical material. Companies to be included must produce furniture in Sweden and comply with the definition of SMEs as discussed in Chapter 2. The theoretical delimitations defined for this research relate foremost to internationalization theories and SME-based theory.

1.6 DISSERTATION STRUCTURE

To improve the readability of the thesis, particularly considering that different readers have different interests, a visual overview of the thesis structure and content is available. See Figure 1 below. Chapters 1, 2, 6, 7 and 8 might be of particular interesting to industry professionals, representatives, and policymakers.

In the visualization of the dissertation structure shown in Figure 1 are three circles. Positioned in the inner most circle is the industry from which all empirical data used in this research originates. Thus, the small and medium-sized furniture producers, and the empirical data they supplied, should be viewed as a hub around which the rest of the research pivots. In the middle circle, the remaining seven chapters are named together with a rough view of the content of each chapter. In the outermost circle the research process is outlined and related to the chapters. The arrows shown in the outer circle indicates the research process is sequential and undertaken clockwise.
Figure 1: Schematic figure of dissertation structure and research design. Chapter 1, 2, 6, 7 and 8 might be of particular interest to practitioners and policy-makers. Arrows indicate main process flow.
SMALL AND MEDIUM-SIZED SWEDISH FURNITURE PRODUCERS

Based on existing studies and secondary statistical data, an insight into the Swedish furniture industry is provided. The motivation for including such a rather detailed presentation is to define the contextual setting within which this research was conducted. First a brief history of the furniture industry is provided, followed by a definition of small and medium-sized furniture producers. Thereafter the structure of the Swedish furniture industry is described in terms of fragmentation and maturity. Also included are discussions of the furniture producers' position within the industry value chain and geographic clusters and industry consolidations. At the end of this chapter the furniture producers are considered from an international perspective, highlighting particularly issues related to export.

2.1 HISTORY OF THE SWEDISH FURNITURE INDUSTRY

The Swedish furniture industry has deep roots that date back to 1846 (Kjaer, 1996) when the guild system officially ended in Sweden (Nilsson, 1981). The strictly regulated business gave way to free trade, industrial production and new private enterprise. Before the deregulation, furniture making was a handicraft performed within the city limits in close proximity to the end-users. The making of furniture was also commonly considered a household task carried out by family members (Kjaer, 1996).

Between 1860 and 1880 factories were established for the mass-production of wooden chairs. (Kjaer, 1996) The establishment of larger industrial production units outside the cities was not a random process, but was to a large degree decided by proximity to a railroad for communication, the availability of skilled
labor\textsuperscript{10}, and raw material. Access to affordable land was another determinant (SOU 1947). The result of this conscious relocation process was the establishment of concentrated regions of furniture producers, suppliers, and skilled labor. Within these regions, knowledge about furniture production was therefore collected and social networks established. Especially the personal and informal relationships came to constitute the core in the support systems important for the success of the companies (Ibid.).

With the guild regulations gone, the competitive situation became ugly, resulting in price wars and briberies (Kjaer, 1996). To avoid chaos, three trade organizations were formed. The furniture producers, retailers and suppliers correspondingly organized themselves into the following associations: SMI, SMC, and SLAM. In 1937 these three organizations formed a cartel to cooperatively fight free competition. The cartel decided who was authorized to manufacture and sell furniture in Sweden (Ibid.).

At the end of World War II, the Swedish furniture industry changed focus from regulatory activities, to declare that the recipe for the future was to improve efficiency, knowledge and rationalization (Kjaer, 1996). Customers, the labor force, the producers and the industry structure were all thought of as beneficiaries of this modernization (SOU 1947). Problems were at this time related to quality and design, production techniques, sales, and the competence level within the industry. Economical and organizational barriers were considered preventive of both domestic sales and export (Kjaer, 1996).

To improve communications between producers and distributors within the industry, the first Swedish furniture fair was held in Gothenburg in 1951 (Kjaer, 1996). The interest for export also increased in the 1950's and from the early 1960's until the 1970's, the Swedish furniture industry experienced an extraordinary increase in export. In 1970 approximately 20 percent of the production value was exported (Ibid.). Further, the competition within the industry increased between 1970 and 1990, and distribution, rationalization, research and export were considered the main problem areas (Ibid.).

\section{2.2 Small and Medium-Sized Furniture Producers in Sweden}

Different definitions exist of what constitutes an industry. For this study, the definition by Barney is adopted, claiming that two firms are members of the same industry if they \textit{"produce similar goods or services"} (Barney, 2002, pp. 139). However, the contextual boundary of this research does not include all actors within the furniture industry; this research looks in particular at the furniture producers.

\footnote{In certain Swedish regions, for example in wooded regions where farming was not easy, people had traditionally produced furniture for additional income.}
A producer is involved in the production of goods or services. When it comes to the general production of goods the process can be described in the following way:

"There is a clear input of labour and materials at the beginning of the process, and by using equipment of various kinds during the process, the material is converted into a clearly recognisable end product. [...] Quite often, these end products are the result of inputs from many different companies" (Barnett, 1992, pp. 4). Further, "The raw materials, component parts already made and other items bought in from the outside are converted to the end product [...] adding value as the process proceeds." (Barnett, 1992, pp. 9).

Thus, according to Barnett, a producer of furniture would make end products in the shape of furniture. Final assembly is, based on this description, considered a key task performed by a producer. However, to reduce costs associated with transportation and storage, furniture is often delivered to the customer or end-user, partly disassembled, or even in flat packages. Therefore, it is important to add that the producer of furniture makes furniture the way they are received by the customer or end-user. Suppliers of parts and components, as well as retailers, distributors, and interior design firms are not producers. In this study, it is ultimately left to each respondent of the survey to determine if the firm that he or she represents is a furniture producer, a supplier, or some other kind of firm.

Researchers concentrating on the furniture industry include different categories of companies into their research population. In Brege’s et al. (2001) study of the furniture industry, Statistics Sweden’s (SCB) directory of the furniture producers was used. SCB divides the furniture industry into five categories; these include seating and seats, office furniture and shop fittings, other furniture, mattresses, and kitchen furniture. Brege’s research team decided to include SCB’s categories listed above, with the exception of the kitchen furniture group. The motivation for excluding kitchen furniture was because of their focus on companies that strictly belong to the furniture industry. Kitchen furniture is commonly considered fixed interior fittings. Brege’s study includes 438 companies.

Hagström’s (2004) study of 483 companies within the Swedish furniture and joinery industry also used the SCB directory. Contrary to Brege et al. (2001), Hagström did decide to include the kitchen furniture producers. The research at hand is based on the same logic used by Brege et al. (2001), and thus excludes the kitchen producers. However, since producers of kitchen inte-

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11 Statistics Sweden (SCB) is Sweden’s central authority for official statistics, see www.scb.se
iors often cannot easily be separated from producers of bathroom interiors, the decision was made to exclude producers of bathroom interiors as well.

In addition, for a furniture producer to be considered for this research the company should be registered in Sweden. Thus, ownership is not considered a determinant of nationality.

The majority of the Swedish furniture producers are micro, small or medium-sized firms (Brege et al., 2005). According to the data available from SCB, in 2005 99.6 percent of the industry’s members had less than 200 employees each. See Table 1. This small-scale production is not unique to the furniture producers in Sweden, but tends to be the norm throughout Europe and the rest of the world (Maskell, 1998; SIND 1986). The limited size of furniture producers might be due to historical development or the suggestion that mass production simply does not fit this industry (Maskell, 1998). The inappropriateness of mass production refers to the statement that:

"the very nature of furniture consumption as a deeply personal statement of a consumer’s taste and personality" (Maskell, 1998, pp. 101).

Traditionally, furniture end-users have been described as repelled by epithets such as "standard" or "mass produced" furniture (SOU 1947).

Table 1: Number of furniture producing companies per size category (measured by number of employees) and product category as defined by Statistics Sweden. Kitchen furniture producers are not included. (Statistics Sweden, 2006-04-13).

<table>
<thead>
<tr>
<th>Furniture producer category</th>
<th>&lt; 10 employees</th>
<th>10-19 employees</th>
<th>20-199 employees</th>
<th>≥ 200 employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating and seats</td>
<td>1580</td>
<td>38</td>
<td>45</td>
<td>4</td>
</tr>
<tr>
<td>Office furniture and shop fittings</td>
<td>306</td>
<td>38</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Other furniture</td>
<td>743</td>
<td>42</td>
<td>74</td>
<td>2</td>
</tr>
<tr>
<td>Mattresses</td>
<td>17</td>
<td>1</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>2646</td>
<td>119</td>
<td>154</td>
<td>10</td>
</tr>
</tbody>
</table>

From Table 1 it is clear that only a handful of the Swedish furniture producers can be labeled as large. To enable contribution to, as well as the use of, existing literature about small and medium-sized companies, the decision was made to further focus the study onto SMEs. Also, the behavior of SMEs has been found to be not only dependent on the industry (Westhead et al., 2001a) but also dependent on the region (Moini and Tesar, 2005), which strengthens the decision to focus on one industry within one country.

According to the European Commission, micro, small and medium-sized enterprises (SMEs) are defined and divided into groups based on their size and their degree of independence. The requirements of independence imply that an enterprise can be held by public investment corporations, venture capital companies or institutional investors, as long as these organizations do not control the enterprise. The enterprise should not be owned by 25 percent or more by
any one or more enterprises if it is to be considered an SME. The following specifics apply to medium, small and micro-sized firms respectively (European Commission, 2008):

- **Medium-sized enterprises** have between 50 and 249 employees. Their annual turnover should not exceed €50 million, nor should their annual balance-sheet total exceed €43 million.
- **Small enterprises** have between 10 and 49 employees. They should have an annual turnover not exceeding €10 million, and an annual balance-sheet total not exceeding €10 million.
- **Micro-enterprises** are enterprises that have fewer than 10 employees, an annual turnover of €2 million or less, and an annual balance sheet of €2 million or less.

In other studies of the Swedish furniture industry different firm size cut-off levels have been used. Both Brege et al. (2001) and Hagström (2004) include all firms with at least five employees without any consideration made to economic measures or levels of independence. Neither of these two studies had an upper limit for number of employees. On the contrary, Covello and McAuley (1999) reveals in their SME-specific literature review, that the praxis is to set an upper limit for number of employees. Thus, it does not appear to be a separation between small and micro-sized companies. Others, such as Bonaccorsi (1992), have not included micro companies.

Further, a frequently adopted research approach appears to use numbers of employees alone as a determinant of firm size (Jansson and Sandberg, 2008; Wolff and Pett, 2006; Knight, 2000). One motivation for this is that number of employees is a more stable, or “true”, measure compared to economic measures (Wolff and Pett, 2006). Regarding the issue of independence, unless the small firm is administratively fully coordinated with the larger partner firm, it should be of little concern to view the small firm as a separate (SME) unit (Penrose, 1995).

The decision was made to adopt the European Commission’s definition and include micro firms in the SME concept. Thus, despite the fact that the SME abbreviation strands for small and medium-sized enterprises, the micro companies are also included. Further, it might be fruitful to include the micro-SMEs, considering that though it has been concluded that the likeliness of export increases with firm size, as many as 17 percent of all micro-SMEs in the Euro-

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12 A company’s degree of dependence can be decided within the three categories of autonomous, partner, or linked. Most SMEs are autonomous, either completely independent or owned by less than 25 percent by a partner. If the partner owns the firm by up to 50 percent it would be sorted under the dependence category of partnership. A linked relationship means that the partner owns more than 50 percent of the firm. (European Commission, 2008)

13 Note: A firm must respect the employee categorization (for example with 12 employees you are a small enterprise), but does not have to meet both the turnover or balance sheet ceiling. (European Commission, 2008).
pean Union are involved in export (European Commission, 2003). Also, company size has not shown to have a significant effect on export intensity (Ibid.).

Using the classification codes used by SCB, a maximum of 2929 furniture producers in Sweden can be considered micro, small or medium-sized, see Table 1. Noteworthy is that among the 2646 furniture producers with less than ten employees, 81 percent were registered as having no employees at all. In accordance with previous studies\textsuperscript{14}, excluding firm without employees, 785 furniture producers in Sweden were considered SMEs in 2005. A total of 324 companies were included in this research.

With a clear definition of the population that constitutes the empirical framework for this research, a presentation of the industry’s characteristics is available below.

2.3 A FRAGMENTED INDUSTRY

By examining the structure of a particular industry, opportunities that exist for the members of the industry can be defined. It is important to remember that an industry’s structure changes over time and that existing opportunities do not last forever. Porter (1980) discusses five industry structures: fragmented industries, emerging industries, mature industries, declining industries, and international industries. Barney (2002) adds that three more structures have been identified within the literature: network industries, hypercompetitive industries, and empty core industries. Without any further presentation of all of these industry structures listed here, the fragmented and mature industry structures will be further discussed as they can be used to describe the furniture industry (Brege et al., 2001).

The Swedish furniture industry can be considered fragmented (Brege et al., 2001). In a Vinnova report (Brege et al., 2005) it was concluded that the furniture industry has a fragmented industry structure consisting of important subgroups or sub-industries with completely different situations and possibilities. In a fragmented industry there is a lack of market leader, and the majority of the firms are small and medium-sized, privately owned companies (Porter, 1980). Further, competition is typically fierce among both domestic and foreign actors (Ibid.). Barney (2001) adds that no firms distinguish themselves regarding the use of superior technologies.

There are a number of reasons to why certain industries are fragmented (Porter, 1980), and a vast number of these reasons are applicable to the furniture industry. The furniture industry is likely to be fragmented for historical reasons; it has low entry barriers; transportation costs are high; inventory costs and seasonal variations are likewise high; production is small scale to enable

\textsuperscript{14} In a study on characteristics of small and medium-sized enterprises across Europe, "micro-SMEs" had between one and nine employees. Thus, firms with no employees were not considered (European Commission, 2007).
flexibility; products are often customized; the creative content is high; and the level of product differentiation is high because of the importance of brand image.

Porter (1980) presents not only reasons for why an industry is fragmented, but also why it maintains this structure. The furniture industry might have remained fragmented because the companies involved have lacked, and might still lack, resources and ability to grow. Another reason can be what Porter refers to as emotional action. For the furniture producers this emotional action is an expression of the strong personal attachment and pride the owner feels for his or her company. As a result, consolidation within the industry is prevented (Barney, 2001). The benefit of consolidation within a fragmented industry rests on a firm’s possibilities to become an industry leader. This in turn can secure profitability and ultimately survival (Ibid.). According to Brege et al. (2001) the developmental trend within the industry indicates an increase in the number of consolidations, resulting in fewer, larger and more resource-strong companies.

Because the furniture industry has a fragmented structure, it is not without its problems to discuss it as one entity. In all fairness, one cannot discuss the industry as one homogeneous body of firms. One attempt to shed more light on the situation is to divide the industry into strategic groups. Brege et al. (2001) did this by clustering their strategic groups based on aspects such as market (product consumption environment); production techniques; level of processing; design content; and type of products. Nine strategic groups were revealed. For a summary on these strategic groups, see Table 2.

Table 2: Summary of the strategic groups within the furniture industry as defined by Brege et al. (2001).

<table>
<thead>
<tr>
<th>Strategic groups</th>
<th>Characteristics</th>
<th># of firms, ~ firm size</th>
<th>~ export shares</th>
<th>Main sales channel(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product oriented volume producers</td>
<td>IKEA suppliers, high level of automation, flat-packaged furniture</td>
<td>10 firms, 170 employees/firm</td>
<td>3%</td>
<td>IKEA</td>
</tr>
<tr>
<td>Traditional furniture for private homes</td>
<td>Lack of own brand, sell products under private labels</td>
<td>85 firms, 33 employees/firm</td>
<td>18%</td>
<td>Furniture trade (not incl. the chains)</td>
</tr>
<tr>
<td>Traditional furniture for public space</td>
<td>Tradition and quality is important</td>
<td>29 firms, 23 employees/firm</td>
<td>4%</td>
<td>Other producers, indep. marketing firms, directly to end users</td>
</tr>
<tr>
<td>Design furniture for private homes</td>
<td>Design is key</td>
<td>22 firms, 20 employees/firm</td>
<td>20%</td>
<td>Furniture trade (not incl. the chains)</td>
</tr>
<tr>
<td>Design furniture for public space</td>
<td>Lowest profitability among the groups</td>
<td>26 firms, 28 employees/firm</td>
<td>21%</td>
<td>Interior designers, (A&amp;D community)</td>
</tr>
<tr>
<td>Bed producers</td>
<td>Strong brand names, large scale production</td>
<td>17 firms, 84 employees/firm</td>
<td>19%</td>
<td>Furniture trade (not incl. the chains)</td>
</tr>
<tr>
<td>Office furniture producers</td>
<td>Highest profitability among the groups, automated production</td>
<td>18 firms, 98 employees/firm</td>
<td>35%</td>
<td>Interior designers, (A&amp;D community)</td>
</tr>
<tr>
<td>Interior carpentry</td>
<td>Local firms known for their handicraft, strong customer relationships</td>
<td>70 firms, 40 employees/firm</td>
<td>13%</td>
<td>Directly to end users, other producers</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Producers of components for other firms</td>
<td>95 firms, 27 employees/firm</td>
<td>8%</td>
<td>Other producers</td>
</tr>
</tbody>
</table>
Concluding that the furniture industry is small scale with a relatively low level of productivity has been shown to be an oversimplified picture of the real situation. For example, 60 percent of the total industry turnover is generated by just 10 percent of the companies. These companies are larger with highly advanced production facilities and higher profitability. Not surprisingly, Brege et al. (2001) discovered that it was the larger companies with a higher production volume that had the highest profitability.

The furniture industry is often considered highly heterogeneous with regards to the size of the firms, business competence, and profitability (SIND 1986). Producers of furniture can be grouped into production-focused companies and product-design-focused companies (Ibid.). Members of the former group are recognized by mass production, industrial focus, outsourcing to suppliers, and rationalization. The latter group typically handles the entire production internally and shows a high level of craftsmanship.

Another aspect of the heterogeneity among the producers relates to the range of products offered by the furniture producers. The products vary greatly and can be discussed based on the consumption environment and end-user, the material used, and the function and form (SIND 1980).

The industry is naturally also under strong influence of design and consumer trends, which are reflected in the products. Thus, the taste and personality of the end-users affect the production of the goods, which correspondingly demand organizational flexibility and adaptability.

Together with industries such as the textile industry (fashion industry), home ware industry (ceramics, porcelain, and glass), and the industrial design industry, the furniture industry is labeled as a creative industry (Swedish Trade Council 2003).

2.4 A MATURE INDUSTRY

As discussed above, the Swedish furniture industry can be described as fragmented and heterogeneous, but also mature. Just as the fragmented industry structure can be recognized by certain characteristic traits, so too can the mature industry structure. The following descriptions of a mature industry as discussed by Porter (1980), fit the Swedish furniture industry:

- Intensified rivalry and international competition. Competition from foreign firms is increasing and it is creating a hostile environment for the Swedish furniture producers on their domestic market\(^{15}\). For example has the import level shown a positive development since 1996, while the export numbers have not been as continuous. One possible explanation for the increased level of import might be the low entry

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\(^{15}\) Important to consider is that a firm that experiences pressure and challenges on its domestic market is forced to advance. Domestic rivalry can therefore be thought of as have a positive effect on a firm's ability to compete internationally (Porter, 1998a).
barriers to the Swedish market. While, international competition leads to increased rivalry (Barney, 2001), it also opens up some opportunities. One such opportunity, and another explanation for the increased level of import, refers to the increased interest among the Swedish furniture producers to import parts and components in an attempt to improve their overall competitiveness. A more general explanation as to why firms within mature industries are interested in expanding into foreign markets is the slow growth in total industry demand.

- Competition is focused on price and service. This only holds true for certain furniture producers such as the production-oriented volume producers (See Table 2 above) focused on selling to IKEA. To remain suppliers to IKEA, and manage not be outperformed by producers from low-price countries, this group of furniture producers must minimize costs and prices to stay competitive. One example of companies with a strong service focus is the interior carpentry firms (See Table 2). These firms are strongly anchored on different local markets were they provide a high degree of service to their customers by offering for example highly specialized furniture.

- Strengthened position among the retailers. Between 1980 and 1995 the industry became increasingly controlled and dominated by the distribution chains and their networks (Kjaer, 1996). These downstream actors selected what should be produced and who should produce it. The chains also handled the marketing of the products. During the above period, producers of the furniture essentially became subcontractors of the retailers. One plausible reason as to why the retailers strengthened their power against the producers has to do with the decreased profit margin. As the retailers profit margins decreased, so too did the absolute number of retailers. As a result, the reduced number of retailers that survived strengthened their position in the value chain. Another explanation to the retailer dominance is to be found within the historical development among the producers. In the 1960’s the producers lacked marketing knowledge and supposedly did not show any interest in developing such knowledge. As a result, the retailers and distributors took over this task, which ultimately lead the producer into a dependency trap (NUTEK, 1997).

Barney (2001) adds that firms operating within a mature industry seldom present major technological innovations. Instead, advances within mature industries relate to improvements of existing products, technologies, and customer services. Process innovations (i.e. improving the process from design to the end-user) is a frequently used approach to cut costs and improve delivery and, ultimately, customer service.
2.5 THE FURNITURE INDUSTRY VALUE CHAIN

The Swedish furniture industry is fragmented with the result that the structure of the value chain varies between different furniture producers. However, one value chain aspect shared by all the producers is their central placement between suppliers and buyers. For a visualization of a simplified version of the furniture industry value chain, see Appendix A.

Upstream from the furniture producers in the value chain is a diverse group of suppliers, delivering to the furniture producers parts and components originating from industries such as the forest, metal, chemical, and agriculture industries. Downstream from the input (or raw material) industries are a wide range of specialized suppliers to be found. These suppliers serve the furniture producers, but often also producers in other industries. Note that the furniture industry members incorporate many different materials into their final products. Nevertheless, the furniture industry is still considered a wood-product industry. Finally, downstream from the furniture producers we find the furniture trade, which is made up of a multitude of different buyers. The furniture trade in Sweden can be divided into three groups (SIND 1986):

- The volunteer retail chains such as MIO and EM. Typical for these retailers are that they do not keep all products in stock, and they are also involved in importing.
- The independent retailers. These retailers do not keep everything in stock either.
- IKEA. IKEA is not classified as a retailer, but as a distributor who keeps most items in stock. Import and re-export is an important part of their business.

There are essentially two very different markets that the Swedish furniture producers act on: the market for furniture for the home and the market for furniture for the public space. The differences between these markets are foremost on distribution and sales, but also on customer requirements (Brege et al., 2001). The majority of the producers of home furniture sell directly to retail chains. For these producers, marketing tasks are not considered important, except for marketing related to training and updating of the retailers sales staff (NUTEK, 1997).

Many of the producers of furniture for the public space operate without signing contracts with the retail chains. Instead, these firms produce, market, and sell their own brands. For these firms, marketing is obviously very important and the brand images are frequently built on style, comfort, status, and good quality (NUTEK, 1997). Often, the top management team or owner prioritizes the handling of the marketing aspects themselves without hiring experts within the area. The execution of the marketing efforts is thereafter handled by outside contractors.
The traditional approach to selling furniture in Sweden is through retailers (SOU 1947). The prime reason to why the producers of furniture do not sell directly to the end-users is the fear of retaliations from the retailers (Ibid.). Other very important reasons for why the producers sell through middlemen include high transportation and administrative costs, and the increased convenience for the consumer. By collecting a full range assortment, supplied by many different producers, under one roof the customers can get a better total shopping experience and service. Further, using the Internet as a sales channel for furniture is not necessarily easy. The main reasons are that as a durable product the purchase is associated with a rather high risk, and the fact that furniture can be considered an experience product and therefore best appreciated on an in-person basis.

As already mentioned, the furniture industry has to a large extent become increasingly controlled and dominated by the distribution chains and their networks. The strong position of the furniture trade within the value chain has awarded them the name "channel captains" (Brege et al., 2005). However, the role of the channel captains can be described as a two-sided coin. On one side, the channel captains provide the producers with large production volumes. They are also needed to increase the overall export share of the industry (SIND 1986) and therefore secure employment.

On the other side of the coin, the channel captains control the furniture producers by encouraging the dependency situation. This is a dangerous situation for the producers, as the trade organizations (i.e. the retailers), without prior notice, can replace the domestic producer with one from a low-price country. The captains further suppress the suppliers’ chances of profiling themselves towards the customers. Therefore, the furniture producers often lack knowledge about the end-customers’ product requirements (Brege et al., 2005). More explicitly,

"The many small furniture producers that for an extended time have acted as suppliers for the large furniture retail chains have to a large extent been isolated from the market and therefore not have had the opportunity to develop the market knowledge and marketing competence that is necessary to establish a strong brand name and successful export." (NUTEK, 1997, pp. 10).

According to NUTEK’s study from 1997, the distributors actively oppose to the idea that the producers should develop their own brands. While the producers often lack knowledge about consumer preferences and values, the distributors and retailers lack product knowledge.

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16 Examples of channel captains within the Swedish furniture industry include IKEA, Kinnarps, EFG, Martela, Hilding concern, Hästens, Dux, and domestic furniture chains.
2.6 GEOGRAPHIC PROXIMITY AND CONSOLIDATION

The furniture producer segment has previously been described as stable (Lant, et al., 1992) and conservative (NUTEK, 1997), with signs of continuity and rivalry (SOU 1947). The description of this industry segment to have a high degree of rivalry is founded on the fact that there are many competitors of similar size and with similar levels of influence (read: power). Finally, the growth potential within the industry is rather limited, which further adds to the rivalry. For more on rivalry see, Barney (2001). Particularly local rivalry, based on suspicion, has been observed among the furniture producers (NUTEK, 1997).

One effect of the conservatism and thereby resistance to discard historically accepted values and structures (Brege et al., 2005), is the low number of consolidations (SOU 1972). For example, in the years following the wars, the furniture industry even had the fewest number of mergers among all Swedish industries. General collaborations within the areas of purchasing, production, marketing, export, and logistics were also very sparse during this time (Ibid.). It has been predicted that consolidations of furniture producers into larger units, benefiting from scale advantages, will increase in the future. It is not possible to know if this is an indication of a reduced degree of conservatism among the furniture producers. Another immediate influence of the industry’s conservatism is the prolonged adaptation of innovations and cooperation (NUTEK, 1997).

One of the more prominent signs of continuity within the Swedish furniture industry is with regards to the actors’ geographic location. In the year 2008, 16,500 people were employed in the furniture industry (TMF, 2009-10-23b). Today 80 percent of all these jobs are located in the following five southern counties: Västra Götaland, Skåne, Jönköping, Kronoberg, and Kalmar. Interestingly enough, this strong concentration has only strengthened since 1975 (SIND 1986).

The geographical concentration or clustering that exists within the Swedish furniture industry brings about both advantages and disadvantages. Positive effects of geographical proximity include increased cooperation (Brege et al., 2001) and collaboration between producers as well as between producers and suppliers (SIND 1980). Small furniture producers often share responsibilities and expenses for fairs and exhibitions. If a region attracts many producers it commonly also attracts their suppliers including suppliers of raw material, components, and machinery. With the suppliers closely located the producer

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17 Becoming part of a larger company or group should however not be viewed as being only beneficial. Important business traits such as innovation and entrepreneurship are often reduced as a result of consolidations (Porter, 1998b).
can benefit from more timely service, communication, efficient material supply, and maintenance (NUTEK, 1997).

Another advantage of geographic clustering relate to the agglomeration of knowledge and skills. Skilled people are attracted to the region for job opportunities, and companies are drawn to the area due to availability of skilled labor. Thus, there is a match between competent personnel and the companies’ need for a competent workforce (SIND 1980). Furthermore, specialized education and shorter training classes commonly also become available in specialized geographic regions. Still another advantage includes lowered transportation costs (Brege et al., 2001; NUTEK, 1997). If the supplier is located close the producer, costs associated with for example delivery of parts and components can be reduced.

One study describes how geographical proximity between furniture producers in a network has a direct effect on innovativeness, the existence of industrial agglomerations, and the stability of the local industry structure (NUTEK, 1997). Thus, closeness between cooperating companies seems to result in innovations, industrial villages, and structural stability. In this study it was concluded that social proximity, cultural proximity, organizational proximity, and geographical proximity all are building blocks for creating a collaborative forum that can result in innovations.

While geographical clustering of furniture producers leads to benefits for the involved, firms as well as for individuals, a number of disadvantages should also be mentioned. An obvious negative aspect is if the furniture producers lose market shares. Entire regions and many job opportunities could thereby be affected through layoffs and down-sizing (SIND 1980).

Yet another disadvantage is the sluggishness incorporated into the system as a result of doing business locally. If a firm cooperates with other firms operated by old friends, or even family members, the strictly business oriented focus is easily lowered. The conservative tendencies are therefore strengthened, reducing flexibility, effectiveness, and eagerness to act proactively (Brege et al., 2001).

2.7 KEY ISSUES FOR THE INDUSTRY

Companies operating within small domestic markets such as Sweden are highly dependent on export (Melin, 1992). For Swedish SMEs in general, one of the potentially huge growth opportunities is to be found within the European Union, considering its 450 million consumers (European Commission, 2006). However, when the Swedish furniture producers venture outside the national borders they traditionally target the Nordic countries. Preliminary statistics show that the neighboring Nordic countries accounted for more than 50 percent of the total export at the beginning of 2009 (TMF, 2009-10-23b).

The problems with limiting export to the Nordic neighbors are that these countries also have small populations with a multitude of competitors fighting
over the market shares. Instead it is in the non-Nordic countries such as Germany, France, the UK, and the US, were there seem to be the biggest potential for growth (SIND 1986). These markets has primarily been targeted by larger Swedish furniture firms operating within the bed (Hilding Anders and Hästens) and office segments (Kinnarps and EFG) (Brege et al., 2005). In a report from Vinnova (Öhman and Enocson, 2002) it was found that only a minority of the small and medium-sized furniture producers manages to reach past the Nordic region and into other geographic markets. As a consequence, the majority of furniture producers might still be heavily dependent on the domestic market.

From the export and import chart below, see Figure 2, it is clear that import of furniture and furniture parts to Sweden has experienced a rather steady progress since 1996. Over the twelve consecutive years starting at 1996, import increased by 267 percent from SEK 4.2 billion in 1996 to SEK 15.4 in 2008.

![Figure 2: Overview of the Swedish furniture industry considering import and export (The statistics was available from TMF in 2010-03-07, their source being SCB). Note: the numbers above measure import and export of furniture passing the national borders of Sweden. Thus, included in the export numbers are also those products that are imported later to be exported.](image)

During the same period, 1996-2008, the export development has been less strong. In 1996, furniture for a value of SEK 8.6 billion was exported from Sweden. Thus, the export level was more than double the import level at this
time. With export starting to level out in the year 2000, it took until 2004 before exports began to increase again\textsuperscript{18}. However, the export numbers have managed to stay higher than the import comparatives, and in 2009 the trade deficit was still positive for furniture and furniture parts.

The preliminary export and import numbers available for 2009 indicate that export decreased by less than seven percent. During this same period, imports decreased by close to 21 percent (TMF, 2010-03-07). These numbers signals that the global economic down-turn has had a notable impact on the members of the Swedish furniture industry. However, the Swedish furniture industry is believed to have managed the recession comparably well due to its long-term focus on quality and the environment, but also on account of the relatively weak Swedish currency (TMF, 2010-03-06).

The consistent top seven export markets for Swedish furniture are Norway, Denmark, Finland, Germany, Great Britain, France and the US (SOU 1972; SIND 1980; SIND 1986; TMF, 2004-07-29; TMF, 2005-11-18; TMF, 2008-10-07; TMF, 2009-10-23). Norway receives 32 percent of the total export while only nine percent is destined for countries outside Europe. Furniture parts, “other” furniture, and office furniture are the most exported of the SCB’s furniture categories (TMF, 2009-10-23).

Import of furniture and parts come from the following countries in decreasing order: Poland, China, Denmark, Germany, Norway, Lithuania, and Italy (TMF, 2009-10-23). In the past couple of years, the import of furniture and furniture parts from Poland and China has strongly increased. For example, between 2004 and 2005 imports from China increased by as much as 44 percent (TMF, 2005-11-18b). And the Chinese importance does not seem to be fading. While imports from Poland decreased by 30 percent during the first six months of 2009, imports from China decreased by only five percent (TMF, 2009-10-23b). Another country that rapidly is picking up import shares is Lithuania (TMF, 2009-10-23). Further, during year 2008, 78 percent of the total imports originated from within Europe, while 16 percent came from China (TMF, 2009-10-23). The three most frequently imported furniture types (based on SCB’s furniture categories) are furniture parts, “other” furniture, and upholstered furniture (Ibid.).

From the numbers above it is clear that the members of the furniture industry are involved in international activities. However, there are indications that internationalization through primarily export is not considered of interest for everyone. Existing industry reports have also pointed to specific problems facing the furniture industry and its producers when it comes to internationalization and export.

Internationalization problems facing the furniture producers include the establishment of export sales channels, high costs, and weak productivity (Brege

\textsuperscript{18} Between 2002 and 2003 the export level decreased by almost one percent (TMF, 2008-10-07).
et al., 2005). Another study concludes that the low competence available and utilized within the Swedish furniture industry should be the main reasons to why Swedish products do not compete well in the international marketplace (NUTEK, 1997). In a study by Brege et al. (2001), it was concluded that the disadvantages facing the average Swedish furniture producing company with regards to export are company size, sustainability and lack of focus during a launch (Brege et al., 2001). Yet another finding is that there is a clear “lack-luster” side (Brege et al., 2005, pp. 60) within the furniture industry, referring to growth through export. Thus, the industry can best be described as having a defensive approach to internationalization (SIND 1980), a strategic approach that if maintained might lead to future competitive problems. One indication of the recognized importance of export for the furniture producers can further be realized through the main head line on the cover of the trade magazine Trä och Möbel forum (TMF 1/2008): “Export more!”

This research does not advocate that international involvement is essential for all furniture producers in Sweden. But internationalization is an important growth strategy, as well as an approach undertaken by firms aiming to reduce their dependency of a small domestic market. With the reduction of trade borders within the European Union, simplification of paperwork procedures, and the availability of the Internet for marketing and communication, previously export-averse firms might begin to see the potential and value of internationalization.

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19 Competence and knowledge is needed in the following areas: marketing, design, branding, export, use of Internet as a mean to communicate with customers, R&D, computer processing, language, accounting, and engineering. It is further suggested that cooperation would enable sharing of knowledge and spreading of risks in areas such as marketing, export, and general development (NUTEK 1997).
THEORETICAL FRAMEWORK

To offer a brief introduction to the field of strategy, two fundamental perspectives are initially presented. Thereafter brief descriptions of relevant internationalization models are included. Among the various models presented, the international market establishment model called PSE model (where P stands for performance, S for strategy competence, and E for entry mode) was chosen as the main model around which the theoretical framework for this research was built. After a more detailed presentation of the PSE model in its original form, the need for modification of the model is argued. Subsequently the modified version of the PSE model is presented, with particular focus on differences compared to the original PSE model. At the end of this chapter, the reader will find the research model and hypotheses.

3.1 THEORETICAL PERSPECTIVES

The “inside-out” and “outside-in” perspectives are fundamental to the field of strategy. Therefore it seems appropriate to ease the reader into the theoretical discussion through these two views on strategy. This introduction is kept brief and should therefore not be considered as comprehensive.

The “inside-out” perspective is discussed using literature from the resources based view (RBV) and the field of organizational learning. The “outside-in” perspective is discussed using literature produced within the school of industrial organization (IO).

3.1.1 THE “INSIDE-OUT” PERSPECTIVE

Taking a resource-based approach to internationalization means adopting the "inside-out" perspective, focusing on the company’s idiosyncratic resources. The resource-based view implies that a firm should form its business strategy based on its unique resources and competencies (Penrose, 1995). Thus, the internal strength of the company will decide which activities are beneficial, such as which market to compete or not to compete in. Further, the external environment of a firm should not be understood as a fixed or predetermine entity, but something that the firm can manipulate for the benefit of the firm (Ibid.).
The terminology “resource-based view of the firm” (RBV) was formulated by Wernerfelt in 1984 (Galbreath and Galvin, 2008). However, almost 30 years before Wernerfelt coined the phrase, in 1959, Penrose published her book *Theory of the growth of the firm*. Penrose, together with scholars such as Andrews, and Selznick, is considered key contributors in the development of the fundamental ideas behind RBV (Galbreath and Galvin, 2008).

In *Theory of the growth of the firm* Penrose looks inside the company, for answers to questions such as why, how, and at what rate companies grow. By considering a company “a collection of productive resources” (Penrose, 1995, pp. 24) and in the definition of resources including both tangible and intangible resources, a firm’s ability to grow, innovate, and gain, as well as sustain, competitive advantage depend on how successful the firm is in managing its unique resources (Ibid.). Implicit here is that different firms have access to different resources and also that different firms, at varying degrees, manage to take advantage of unused resources. Thus, in accordance with the resource-based view, firms are believed to be heterogeneous.

From the resource-based view of internationalization, a firm’s foreign involvement should be understood as a way to grow (Penrose, 1995), and this growth is based on the firm’s available resources and capabilities. When, or rather before, a firm manages to grow, it undergoes a certain amount of strategic change, also referred to as strategic renewal. Focusing on strategic renewal or change, it should be beneficial to incorporate knowledge gained within the field of organizational learning into the discussion. This is founded on the understanding that:

> “Organizational learning can be conceived of as a principal means of achieving the strategic renewal of an enterprise.” (Crossan et al., 1999)

The phrase “organizational learning” was coined at approximately the same time as the foundation was laid for the resource-based view\(^\text{20}\). Organizational learning, just as the resource-based view, stresses that knowledge is needed for the “success” of the firm (Crossan et al., 1999). Organizational learning and RBV also have in common, for example, their long term focus; interest in core “intellectual”; competences (Ibid.); and sustained competitive advantage (Crossan, and Berdrow, 2003).

Through the “4I framework” developed within the field of organizational learning (Crossan et al., 1999), the processes of intuition, interpretation, integration, and institutionalization are tied to the learning levels of the individual, group, and organization (Ibid.). The “4I framework” can be used for describing

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\(^{20}\) According to Crossan et al. (1999), the research topic referred to as organizational learning has existed since 1965 when Cangelosi and Dill published their article *Organizational learning observations: Towards a theory.*
how a person’s experience can affect the firm’s way of operating, though rules and procedures (Ibid.). In accordance with the resource-based view, organizational learning is, foremost, focused on the processes that occur within the firm as it undergoes change. But organizational learning, also in accordance with the resource-based view, does not ignore that organizations exist, and therefore also learn, within an external environment. Thus, organization learning can be understood to take the “inside-out” perspective.

The resource-based approach to SME involvement in international business is considered to be still emerging (Andersen and Kheam, 1998; Westhead et al., 2001a). This statement refers to the fact that the resource-based theory has primarily been used to explain companies’ diversification strategies (Andersen and Kheam, 1998). Underlying such approach is the assumptions that firms are foremost interested in growing and that all firms have the means to develop and offer new products to a new market. If a firm does not live up to these assumptions from the resource-based view, it has not been considered particularly interesting to study. The second assumption, claiming that firms have the means to develop and offer new products to a new market, eliminates many of the SMEs. Thus, other international growth strategies are more likely to be found among the SMEs, such as international market penetration, market development and product development, which have not commonly been analyzed from a resource-based view (Ibid.).

By applying the strategic concept of the resource-based view onto the internationalization process, two key aspects are identified: namely the availability of resources and the interest in capability development (Ahokangas, 1998; Westhead et al., 2001a). A company’s growth options depend on the available resources; if the company’s available resources enable it to be extensively flexible, it might also be able to undertake more or less unrelated diversification. However, if the firm has access to mostly inflexible resources, such as the physical and intangible resources, it might be more appropriate for the firm to enter into closely related markets using existing products (Andersen and Kheam, 1998).

3.1.2 THE “OUTSIDE-IN” PERSPECTIVE
If the “inside-out” perspective implies searching within the firm for opportunities, the “outside-in” perspective entails scanning the external environment of the firm in search of opportunities. Adhering to the “outside-in” perspective, therefore, implies that it is the external environment, or rather the industry in which the firm operates (Bain, 1956), that determines how a firm will compete.

Adopting the industrial organizational (IO) approach implies formulating strategies that fit the external environment of the firm. The reason why firms should formulate their strategies, based on the external environment is the belief that the performance of a company is determined by the structure and conduct within the industry in which it operates (Bain, 1968). The structure of an industry can be identified and described based on analysis of existing industry
competitors, customers, suppliers, potential entrants, and substitute products and services\(^{21}\) (Porter, 1980). What is externally found, or rather the perception of the market, will subsequently guide the firm’s business actions. Thus, internal resources should ultimately be adapted to accommodate the threats and opportunities found in the market.

The classical perspective of Industrial Organization (IO) was developed during the middle of the last century. The book *Barriers to new competition* written by Bain in 1956, is often viewed as one of the original books within industrial organization. Bain (1968) defines IO as dependent on economic theory. It is however, Porter (1980) that popularized the “outside-in” perspective in the nineteen eighties.

The importance of the school of industrial organization for the field of strategy should not be underestimated. However, the theoretical foundation of industrial organization (IO) as based on North American multinational companies and corporations (or rather North American industries), is not considered particularly appropriate for use on Swedish SMEs. However, because the theories are not directly applicable does not mean the extensive work done within IO should be ignored. Particularly in the discussion of barriers Porter is referenced to.

### 3.2 INTERNATIONALIZATION MODELS

Several models exist that explain internationalization among firms. The particular models, or groups of models, presented here include the learning and innovation adoption models; the network model; the economic-theory based models; and the PSE model. A short presentation of the field of international entrepreneurship is also included as it shares some fundamental elements with this research. Though not necessarily fully comparable with each other, insight into each of these models, or theoretical strands, is important because together they form the platform of knowledge on which this research is defined. Neither of these models is in its entirety and original form, constituting the theoretical framework for this research. But because research on SME and internationalization remains rather undeveloped, incorporating relevant concepts from complimentary models is encouraged (Jansson and Sandberg, 2008, Lu and Beamish, 2006). Further, by presenting and discussing each of the models it should be clear why this research is not resting directly on these existing models.

#### 3.2.1 LEARNING AND INNOVATION ADOPTION MODELS

Of the internationalization models discussed here, the stage models are the most frequently used by researchers focusing on the SMEs internationalization

\(^{21}\) For further reading see for example Porter (1980).
(Coviello and McAuley, 1999). Common to these models is that they are focused on organizational learning and incremental expansion as a way to minimize risk (Ahokangas, 1998) and avoid uncertainty (Johanson and Vahlne, 1990). The stage models assume that internationalization is a step-by-step process that takes places as the company grows (Chetty and Campbell-Hunt, 2003; Svensson, 2003) or entering new markets to reduce risk (Rhee and Cheng, 2002).

Entering market-by-market and building knowledge simultaneously is characteristic of the incremental approach (Rhee and Cheng, 2002). A company that operates with strictly limited resources is likely to use a safe, incremental approach to internationalization. However, if there is a great incentive for the company to enter the market, the uncertainty is reduced and an incremental approach might therefore not be used. Thus, the foreign market uncertainty is industry and situation specific (Ibid.).

In an analysis of the resource-based theory with regards to SME internationalization, Andersen and Kheam (1998) derive at the conclusion that the stage models, in particularly the internationalization process model, is founded on the ideas formulated within the resource-based theory. This conclusion is also supported by Axinn and Matthyssens (2002).

3.2.1.1 THE INTERNATIONALIZATION PROCESS MODEL

Among the incremental stage models, the internationalization process model is the most prominent (Ahokangas, 1998). The internationalization process model, also referred to as the Uppsala model (Johanson and Vahlne, 1990), has its theoretical base in two rather dispersed theories: Cyert and March’s *Behavioural theory of the firm* and in Penrose’s *Theory of the growth of the firm* (Ibid.).

The internationalization process model describes the gradual process by which firms become involved in international business (Johanson and Vahlne, 1977). The steps are small and enable the firm to gain experience as it expands its business and ultimately overcomes the psychic distance. The discussion of gradual expansion, in which the growth-oriented firms use available resources (such as market knowledge) to plan further expansion, rests neatly on the resource-based view. A circular process thus takes place where an expansion leads to access of even more resources that in turn can be used for further expansion.

The main steps defined by Johanson and Vahlne (1977; 1990) are when, first, the firm is involved in no regular export, then exports through independent agents, then the establishment of foreign sales subsidiaries, and lastly by way of establishing foreign manufacturing facilities. If a firm has access to large amount of resources, if the pursued market is stable and homogeneous, or if a firm pursues a market quite similar to a market in which the firm is already familiar, the company might not internationalize using incremental steps (Johanson and Vahlne, 1990).
Johanson and Vahlne’s internationalization model is described as a “dynamic model” where the output of one “cycle of events” is the input for the next (Andersen and Kheam, 1998). Johanson and Vahlne describe this process cycle to consist of the state and change aspects. The state aspects are thought to influence and be influenced by the change aspects, and vice-versa. The state aspect considers the amount of resources committed to a market, degree of the commitment, and different kinds of market knowledge. The change aspects consider the decisions to commit resources to a foreign market and the current activities in foreign markets (Johanson and Vahlne, 1977).

Some researchers have found the internationalization process theory outdated, as it fails to explain the phenomenon of born-global firms (Jansson and Sandberg, 2008; Coviello and McAuley, 1999).

3.2.1.2 THE INWARD, OUTWARD AND COOPERATIVE MODEL

Another learning-based model of internationalization is the model developed by Luostarinen in 1979 (Ahokangas, 1998). While most models of internationalization attempt to describe a firm’s internationalization process by focusing on export activities and intensity (Leonidou, 1995), this model includes the often-preceding inward activities. Thus, though less well known than for example the internationalization process model, the importance of mentioning the inward, outward, and cooperative model here relates to the fact that this model takes a different grasp on internationalization. Thereby it manages to explain aspects of the process that the internationalization process model fails to do due to its more narrow scope. Further, the inward, outward and cooperative model can be understood to bridge the internationalization process model and the network mode.

Luostarinen and his colleagues studied internationalization among small and medium-sized firms based on “inward, outward and cooperative operation modes” (Korhonen, et al., 1996, pp. 318). They found that the importance of considering inward activities, such as import, refers to the fact that

“Inward international operations can be seen as the mirror image of outward operations.” (Korhonen, et al., 1996, pp. 316)

Korhonen and his colleagues (1996) further state that inward activities almost always forego outward activities, and that outward activities follow inward activities. Cooperative, network operations are rarely part of the initial internationalization process. If a firm becomes involved in outward international activities, it can take advantage of the relationships already established through the inward activities. Once a firm has gained more foreign experience and established relationships with foreign parties, the chances of the firm becoming a member of an international network increase (Ibid.).
3.2.2 THE NETWORK MODEL

The network model was developed by Johanson and Mattsson in 1988 (Chetty and Blankenburg Holm, 2000) and is considered an offspring to Johanson and Vahlne’s internationalization process model (Coviello and McAuley, 1999). The network approach is considered more inclusive than the stage models since it includes elements such as social relationships and multilateral developments. The focus is on the firms within a network and how they strengthen and maintain their network position (Ibid.).

Within this theoretical view, relationships are considered of greater importance for internationalization than is the firm’s perceived competitive advantage. If a firm internationalizes through a network it is implied that some of the firm’s key decisions, such as market selection and entry mode, are no longer internally controlled, but externalized (Coviello and Munro, 1997). The behavior of the firm is within the context of inter-organizational and inter-personal relationships (Coviello and McAuley, 1999). Inter-organizational relationships include customers, customer’s customers, suppliers, supplementary suppliers, competitors and private and public support agencies. Inter-personal relationships include family and friends. A firm’s position in the network can be studied both at the micro (firm-to-firm) and macro (firm-to-network) levels, as originally stated by Johansson and Mattsson (Ahokangas, 1998). A firm’s internationalization process can further be categorized, as defined by Johanson and Mattsson, into one of the following four categories (Chetty and Blankenburg Holm, 2000; Ahokangas, 1998):

• **The Early Starter** operates in a market with a low level of internationalization and the firm’s degree of internationalization is also low. Thus, the firm has not established international relationships and export intensity is limited. This group of companies cannot rely on its existing domestic relationships for access to foreign markets. However, existing relationships can become “bridgeheads” (Chetty and Campbell-Hunt, 2003) that help the Early Starters to overcome barriers. The Early Starter might act on unsolicited demand from the market.

• **The Lonely International** operates just like the Early Starter in a limited international market, however this group of firms has a high degree of internationalization. A Lonely International becomes internationally integrated without support from a domestic (formal) network. The firm has acquired the knowledge and resources needed to successfully operate in foreign markets. This group of firms can be part of several international business networks simultaneously.

• **The Late Starter** group is typically active in a highly international market without being highly international themselves. Some Late Starters are not internationally active at all. Some have the intention to internationalize, while others are involved in limited export. This group might also have been internationally active at one point, but were unable to continue the activities. The major obstacle for the Late Starters
is lack of resources. A Late Starter might encounter competitive problems if attempting to enter an existing business network, and if this firm has nothing unique to offer the network it might not be an attractive potential member.

- *The International Among Others* is highly international and competes on the global market. This group of firms is strongly committed to export, motivated by for example unfavorable changes in the domestic market, and might get involved in foreign joint ventures (JVs).

### 3.2.3 Economic-Theory Based Internationalization Models

Three main economic-theory based approaches to internationalization exist; the eclectic decision making model; the transaction cost model; and the foreign direct investment theory (Eriksson et al., 2000). The eclectic-decision making model incorporates portions of the two other models (Axinn and Matthyssens, 2002). The economic-theory based models are the most commonly used theoretical models for analyzing internationalization among multinational enterprises (MNEs) (Dunning, 2000; Zacharakis, 1997). However, this group of models fails to provide a framework for process-based studies of internationalization (Ahokangas, 1998).

According to the eclectic decision-making model, rational decisions of multinational enterprises (MNEs) market entries are based on strategic, environmental and transaction variables (Dunning, 1988). Thus, the general focus of the eclectic models is on decision-making with regards to ownership, location and internalization (OLI) of a firm’s production (Ibid.), which is why this model is also referred to as the OLI paradigm (Dunning, 2000). The eclectic decision making model has been criticized for being too broad, and therefore failing to explain international production and conduct on a firm level (Dunning, 1988). Therefore, it is suggested that the eclectic decision-making model would benefit from integration with, for example, the network model or entrepreneurship theory (Ibid.).

The transaction cost model (TC) is a particularly useful framework if one is interested in predicting or explaining a firm’s entry mode selection (Brothurs and Nakos, 2004). More exactly, the transaction cost model can be advantageous to use when investigating if it is more beneficial for a firm to use contracts or to invest in subsidiaries when doing business in foreign markets (Axinn and Matthyssens, 2002). In determining which mode is more beneficial, the balance between integration and costs of control must be considered (Brothurs and Nakos, 2004). Further, the transaction cost model has been found to be a good tool in explaining the internationalization entry mode selection among SMEs (Ibid.), with emphasize on the reasons behind the entry mode selection. In Brothers and Nakos (2004) broad research, the entry modes considered includes both non-equity modes (licensing, franchising, and export-
ing) and equity-modes (wholly owned foreign subsidiaries and joint ventures). Further, since SMEs are more resource constrained than MNEs, they often lack the ability to internationalize on their own (Zacharakis, 1997). Instead, SMEs often internationalize with the aid of a partner who has some previous experience and knowledge about the target market. Who this partner is determines to a large extent the entry mode of the firm. Under such circumstance, the transaction cost model can be a preferred model to evaluate the problems and risks facing each of the parties (Ibid.). One aspect of internationalization that the transaction cost theory does not consider is how domestically collected resources, such as knowledge, can aid the firm as it becomes involved internationally (Wright et al., 2007). In addition, the TC theory and the foreign direct investment theory share the view that the market “imperfections” forces companies to conduct “value-added activities across national borders” (Axinn and Matthyssens, 2002, pp. 441) in an attempt to retain control.

The third economic-theory based approach is the foreign direct investment (FDI) theory, sometimes called market internalization theory (Knight and Liesch, 2002). The important factors to be considered within the FDI theory are the target market, the path, the investment type, the kind of operation, the size of the investment, motivation and ownership (Ahokangas, 1998). The FDI is said to “primarily explain a pattern of investment” (Coviello and McAuley, 1999, pp. 225) and describes the decision-making to be a five-level process. The process is initiated by investment-stimuli that trigger the firm to investigate in a particular (foreign) market opportunity. After deciding to invest in the market, the internal evolutionary process eventually results in organizational change (Coviello and McAuley, 1999). Traditionally foreign direct investment is believed to be largely out of reach for small and medium-sized enterprises (Zacharakis, 1997).

3.2.4 THE PSE MODEL

The PSE model was developed by Pehrsson (2001). Within the scope of this model it is possible to examines the relationships that exist between how entry barriers are perceived (P), level of strategy competence (S) available within the firm, and what entry strategy (E) the firm selects for establishment into emergent markets.

The PSE model is defined from the understanding that the existing international market entry research is too tied to either the school of industrial organization (IO) or the resource-based view (RBV) (Pehrsson, 2002). Considering the simultaneous importance of external and internal factors for a firm’s international approach, the strength of the PSE model lies in the inclusion of both these elements.

More specifically, the PSE model was developed to answer a number of questions including how companies establish themselves in specific markets. How do companies perceive relevant entrance barriers, such as regulations? What strategy competence do these firms possess? What entry strategies do
companies choose? However, particularly interesting is to combine these questions, highlighting the relationships between a firm’s perceptions of entry barriers, the possessed strategy competence, and entry strategy.

3.2.5 INTERNATIONAL ENTREPRENEURSHIP

Entrepreneurship can be thought of as the “origin of all businesses” (Johnson et al., 2008, pp. 324), and to be an entrepreneur implies transforming innovations into something that can be useful in practice. Entrepreneurship is complex and contextually dependent and an agreed upon definition is therefore not available (Landström, 2005). Two basic aspects of entrepreneurship are the age and size of the company. Entrepreneurial firms are often thought of in terms of younger, new ventures (Lu and Beamish, 2006; Zacharakis, 1997). It also appears that SMEs sometimes are treated as synonymous with entrepreneurial firms (Knight, 2001; McDougall and Oviatt, 2000). Further, some key characteristics of entrepreneurship include innovation of product or service offered; a proactive approach to conducting business (Ibid.); and, not least, an interest in the entrepreneurial leader. These entrepreneurs are often described as being opportunistic, growth oriented, resourceful, creative, visionary, risk-seeking and risk-taking (Kuratko and Hodgetts, 2001). Thus, research within the field of entrepreneurship often incorporates aspects such as innovations, proactive and risk-seeking behavior into the research settings, terms that all originate within the field of strategic management (Oviatt and McDougall, 2005).

One strand of entrepreneurship is international entrepreneurship, which is a broad, multidisciplinary area of research that draws knowledge from both the field of entrepreneurship and international business (Oviatt and McDougall, 2005). Since the theoretical platform for the field of international entrepreneurship did not start to take shape until the mid 1990s (Oviatt and McDougall, 2005), it still remains largely under development. This is demonstrated by a lack of consensus (Wright et al., 2007).

While an agreed on definition of international entrepreneurship might not exist as of today, Oviatt and McDougall (2005) claim that:

“International entrepreneurship is the discovery, enactment, evaluation, and exploitation of opportunities—across national borders—to create future goods and services.” (Oviatt and McDougall, 2005, pp. 540)

International entrepreneurship is basically focused on the internationalization strategies developed by recently established entrepreneurial ventures (Filas-
Further, the speed of internationalization is another interest within this field (Oviatt and McDougall, 2005). More exactly, how quickly a company becomes involved internationally is believed to be directly explained by technological advances, the competitive pressure, and the entrepreneur. In addition, how much foreign market knowledge the entrepreneur has and the nature (strength, size, and density) of the entrepreneur’s international network also affect the speed of internationalization (Ibid.).

Research within international entrepreneurship shares with the internationalization process model an interest in determining what relationships might exist between organizational knowledge, innovation, and international expansion (Filatotchev and Piesse, 2009). International entrepreneurship also ties in with the network model, as networking is believed to be somewhat of a prerequisite (Oviatt and McDougall, 2005) considering the entrepreneurial company’s quest for growth by bringing innovative products/services to the international marketplace soon after being founded (Filatotchev and Piesse, 2009).

3.3 MOTIVATION FOR CHOICE OF THEORETICAL FRAMEWORK

As presented above, several internationalization models exist. Some of these models have little or no influence on the theoretical framework chosen for this research. Others have a rather high importance. Below such importance is explicitly discussed for each of the different internationalization models.

One group of models that have a minor influence on this research is the economic-theory based models of internationalization. The eclectic decision-making model is not considered of interest here based on the focus of this model to explain ownership, location and internalization of production. Since most SMEs do not have the resources needed for considering locating their production facilities abroad, it does not appear important to integrate the eclectic decision-making model into this research. Considering the critique expressed regarding the inability of the eclectic decision making model to explain international activities on the firm level, this further strengthens the decision to disregard this model. In accordance with the above discussion, the foreign direct investment theory is also not considered.

Initially it appears as if the transaction cost model might be an interesting model to integrate into this research due to its ability to explain entry mode selection among SMEs. However, since this research is focused on internationalization of SMEs through different modes of export, it does not seem pertinent to investigate issues of integration, cost of control, and risks of contractual agreements. Though it would have been possible to include investigations of the above listed issues into research on internationalization of SMEs, this would have largely changed and expanded the scope of this research. Also seen as a problem is the failure of the transaction cost model to account for how
domestically acquired resources are of importance for a firm’s internationalization.

Moreover, despite the belief that it appears to be a promising model, no particular part of the network theory is incorporated in this research. The motivation for not including this theoretical track refers to its extensiveness as compared to the ambition of keeping this research within a manageable and tight framework.

Also excluded from the framework of this research is the inward, outward, and cooperative model. The main motivation for this is in line with the reason for not including the Network model: to keep the theoretical boundary tight. The exclusion was done due to necessity, not due to lack of interest or potential importance.

The decision was made to work within the framework of the market establishment model called the PSE model. The strength of the model lies in its compact and well-defined structure, without forcing set rules onto the empirical setting to be studied. Formulated in 2001, this model is relatively young and would therefore benefit from being tested in different contextual settings. Particularly, the PSE model has not, to this researcher’s knowledge, been tested on small and medium-sized firms prior to this study.

Considering the perception of entry barriers and the strategy competence components of the model, the PSE model strongly focuses on the management’s understanding and experience as related to foreign market entry. Such focus should be important to incorporate into research on internationalization of SMEs (Reuber and Fischer, 1997). Another appealing attribute of the PSE model is its simultaneous inclusion of the external and internal environment of the firm.

In addition to being relatively new and untested, the PSE model was originally developed around medium and large multinationals. As a result, the PSE model needed to be modified to fit the contextual setting of this research. The modifications of the model originate from primarily the learning and innovation adoption models and from research focused on SMEs. As a result, selected parts of existing research are brought together into a framework to be used in this research. Therefore, this research can be viewed as contributing to making the mesh of knowledge finer and finer23 (Popper, 1980).

The stage theories are most commonly used among researchers focusing on SME and internationalization, even though support for the models varies (Coviello and McAuley, 1999). One instance, in which they fail to explain the internationalization process undertaken by SMEs, refers to the more recent phenomena of leap-frogging seen among born globals (Jansson and Sandberg, 2008).

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23 In his book *Logic of scientific discovery* Popper (1980) writes that “Theories are nets cast to catch what we call “the world”: to rationalize, to explain, and to master it. We endeavour to make the mesh ever finer and finer” (Popper, 1980, pp. 59).
2008; Coviello and McAuley, 1999). However, the degree of internationalization, as discussed in the stage theories, ranging from non-exporters to those firms that depend on export, is part of the process thought, and moreover included in this research. Also, the understanding that lack of market experience explains level of uncertainty and therefore risk-taking, is incorporated into the barrier dimension of the modified PSE model. Further, the interest in how a firm’s resources (as represented by the strategy competence component of the PSE model) can be linked to entry mode choice and firm performance is another common element of the internationalization process model and the modified PSE model used here.

Further, the state aspect of the internationalization process model discussing market knowledge and market commitment, rests on the idea that the management’s knowledge and competence have a direct influence on the perception of the market and therefore on the market commitment. The same discussion is valid for the change aspect where the management’s knowledge about the current activities directly influences the decisions to change or not to change the commitment of resources to existing and new markets (Andersen and Kheam, 1998). In particular, market knowledge, and also market commitment, is incorporated into this research.

Finally, from the outset, it is clear that this research shares some foundational elements with the field of international entrepreneurship. Particularly, this study shares with research conducted within international entrepreneurship an interest in smaller firms and their decision-makers. And while research within international entrepreneurship also might investigate the importance of market knowledge, such interest seems to originate from the ambition to explain speed of internationalization. However, while this research is restricted to focusing only on small and medium-sized firms, the age of the firm is not used as a qualifying variable. Further, the ambition is not to measure levels of innovativeness, creativity, or growth orientation in a quest to determine if the SMEs are in fact owned and/or operated by an entrepreneur. Further, no attempts are made to explain speed of internationalization. In essence, this research is not conducted within the emergent field of international entrepreneurship, but has taken into consideration what has been published on small and medium-sized firms.

3.4 THE ORIGINAL PSE MODEL

The main foundation for the theoretical framework of this research consists of the PSE model. Before discussing the modifications made to the original PSE model to fit the contextual setting and interest of this research, the original version of the PSE model must be presented in further detail. Therefore, each one of the three components in the PSE model will be introduced as originally described, see Figure 3.
Figure 3: The original PSE model (Pehrsson, 2001), where P stands for perception of entry barriers; S for strategy competence; and E for entry strategy.

3.4.1 PERCEPTION OF ENTRY BARRIERS

Entry barrier is a well-established concept, first defined in 1956 by Bain (McAfee et al., 2004). Within the school of industrial organization economics, many have since redefined Bain's formulation (Yip, 1982). However, according to Bain, barriers to entry or conditions to entry are:

"the advantages of established sellers in an industry over potential entrant sellers, these advantages being reflected in the extent to which established sellers can persistently raise their prices above a competitive level without attracting new firms to enter the industry." (Bain, 1956, pp. 3)

When a company attempts to enter a new market, it is faced, at least temporarily, with entry barriers. These barriers are dynamic, of different types and strengths, and protect the already present firms from new entrants. In 1980, Porter (Porter, 1998a) defined entry barriers, also called mobility barriers, by listing and discussing seven different barrier classes (Porter, 1998b). The perception of entry barriers dimension in the PSE model is resting on the different barrier classes listed by Porter (1998b):

- *Economies of scale*: a company can offer a competitively priced product as a result of increased production volume and therefore lowered production cost per produced unit. While a high production capacity, and therefore a high degree of commitment, might enable lower costs per produced unit it also induces increased risks into the operation.
- **Product differentiation**: compared to a new entrant, a firm already positioned in a particular market has established both a strong bond with its customers and strengthened the brand recognition. Being first on a market can be particularly beneficial, offering first mover advantages in terms of brand identification and customer loyalty.

- **Capital requirements**: if large economic resources are needed to enter a new market, they act as a repellent. High advertisement and R&D costs are known to be especially risky, as they are not recoverable if the operation fails.

- **Switching costs**: the cost the customer has to pay for switching from one supplier to another. This is a one-time cost.

- **Access to distribution channels**: For a firm to get its products onto the market it has to have access to an appropriate distribution channel. Depending on the industry structure this can be hard, forcing the firm to rethink entry strategy.

- **Costs disadvantages independent of scales**: An established firm can have an advantage over a new entrant regardless of the competitor’s financial resources and size. Cost disadvantages independent of scale here refers to patents held, access to raw material, location, and accumulated experience.

- **Government policies and regulations**: a country’s government can restrict entry into a market by requiring certain licenses, restricting access to raw material, and reinforcing standards and regulations such as environmental and safety laws.

An additional entry barrier facing new entrants is *expected retaliation* from established competitors (Porter, 1985).

Considering the complexity and the dynamic nature of entry barriers, it is problematic to obtain objective information about current entry barriers facing companies. As a result, P in the PSE model stands for perceived entry barriers, as perceived by firm management (Pehrsson, 2001).

> "Although there generally exist some objective facts, perceptions are strongly influenced by subjective interpretations of available information. Since complete information is seldom available, managers are required to make valuable judgments on the basis of their experience and available market knowledge." (Pehrsson, 2002, pp. 145).

Thus, perceptions of entry barriers used in the PSE model are the recognized hindrances facing a company as it attempts to enter a new market. These barriers originate from the firm’s external environment and restrict the firm’s possible actions.
3.4.2 STRATEGY COMPETENCE

The concept of strategy competence\(^{24}\) was first introduced in 2000 (Pehrsson, 2000). Being a rather young concept, definitions of the term strategy competence are not readily available. Nwankwo and Richardson (1996) use the term *political strategy competence* when discussing how successfully managers within the public sector make and implement strategic decisions. They conclude that a manager’s level of political strategy competence determines the success of an operation. In connection with the PSE model, strategy competence is defined in the following way:

> "Strategy competence reflects both internal and external factors and is acquired through information-based processes that are firm-specific and developed through complex interactions that depend on available resources and capabilities." (Pehrsson, 2002, pp. 146)

If a management team has a high level of strategy competence, it is able to formulate and implement a successful strategy considering their own as well as their competitors’ product scope; market scope; and services. Thus, a company’s market entry strategy is closely related to its strategy competence.

A firm’s strategy competence can be decided by investigating the two factors referred to as *relatedness* and *market experience* (Pehrsson, 2001).

3.4.2.1 RELATEDNESS

Being a well-researched area, multiple definitions of relatedness are available. Farjoun (1998) offers the following definition of relatedness:

> "the logic and extent by which a firm’s different lines of business (or industries) are connected" (Farjoun, 1998, pp. 611)

Or put another way:

> "The concept of relatedness essentially deals with relationships between activities or resources" (Farjoun, 1998, pp. 628).\(^{25}\)

Originating from within the resource-based view (Pehrsson, 2000), the relatedness term used in the PSE model refers to how closely associated one busi-

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\(^{24}\) Pehrsson concludes that there exist "no clear distinctions in literature between the concepts of competence, knowledge and skills." (Pehrsson, 2000, pp. 91). As a result, strategy competence as used here should be treated as a separate concept not to be confused by the definitions of knowledge and skills.

\(^{25}\) Farjoun’s empirical material came from large, diversified, US manufacturers.
ness unit is to the core competence of the firm. Thus, before a firm's relatedness can be determined, the core competence of the firm has to be known.

"In the short run, a company's competitiveness derives from the price/performance attributes of current products. [...] In the long run, competitiveness derives from an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products." (Prahalad and Hamel, 1990, pp. 79)

Prahalad and Hamel (1990) developed the core competence concept for large diversified corporations. If converting their discussions to fit smaller firm, a company can be envisioned as a tree. The root system is the firm's core competence, the trunk and major limbs the core products, the smaller branches the different departments, while the leaves, flowers, and fruits are the firm's end products. Further,

"Core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies." (Prahalad and Hamel, 1990, pp. 82)

Or in other words, core competence is about harmonizing know-how through communication, involvement and commitment to work across internal boundaries such as different departmental units. It is within people core competencies are held. Thus, building core competence does not necessarily imply spending more than one's competitors on R&D. Prahalad and Hamel (1990) describe how three tests can be conducted to detect core competence.

1. A core competence provides potential access to a wide variety of markets.
2. A core competence should greatly add to the perceived customer benefits of the end product.
3. A core competence should be difficult to imitate.

Further, a firm's relatedness can be discussed based on degree or type (Pehrsson, 2006d). A firm's degree of relatedness would typically be measured along a scale running from low to high. By grasping and measuring the multidimensional relatedness concept in terms of type of relatedness one can attempt to use objective or subjective measurements. For a thorough discussion of how to attempt to measure relatedness in an objective fashion, please see Pehrsson (2006d).

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26 The empirical material came from medium and large, diversified manufacturing companies and corporations with a minimum of two business units (Pehrsson, 2006a).
27 Prahalad and Hamel (1990) think of the smaller branches as business units.
Farjoun (1998) has an objective approach when studying relatedness by using predefined relatedness classes or dimensions. He found that the dimensions of skill and physical relatedness is a good measure of a firm's degree of relatedness, and that these two dimensions together have a positive impact on financial performance. Skill relatedness can refer to R&D teams, experienced salesmen, and management skills or know-how that is shared across multiple product types. Other important skills include social and political skills. A high degree of physical relatedness is found within companies that show strong similarities concerning raw material input, production processes, and end-product consumption. Except for skill and physical relatedness, other dimensions could be considered, such as having the same customer group and maintaining the same reputation in different markets, even though they seem to be of less importance (Farjoun, 1998).

One example of when relatedness has been measured using subjective information is the study by Stimpert and Duhaime (1997). In Stimpert and Duhaime's empirical study of how the CEOs of the largest diversified firms in the US perceived relatedness, it is concluded that relatedness should be discussed in the areas of product and market, as well as differentiation.

Influenced by Stimpert and Duhaime's findings, Pehrsson (2006a) defines a three-dimensional, subjective approach to relatedness by investigating the perceived similarities with regards to product and market, resources, and value chain.

Product and market relatedness can further be broken down into innovation, differentiation, scope, and pricing relatedness (Pehrsson, 2006a):

- The innovation relatedness can be measured by product technology
- Differentiation can be measured by product design and level of customization (Pehrsson, 2004a)
- Scope can be measured by product use, and type and variety of end-customers, including their geographical location, and their competitors
- and finally the level of the product pricing.

Relatedness being rooted in the resource-based view (Pehrsson, 2000), an investigation of the same can include studying resources as a source of relatedness. Attempting to understand if relatedness exists between a firm's resources, one can focus on the unique resources that provide competitive advantage, and/or the general management skills held within the firm. In Pehrsson's study of the association between perceived business relatedness and performance (2006a), he used the general management skills and strategic assets to allow for a comparison between different business units. Pehrsson (2006a) measured management skills by general management skills, technical skills, and administrative skills; while strategic assets were measured by brand identity (prescribed customer value, and customer loyalty), brand recognition (customers' association with the brand), and market knowledge.
Based on previous research, Pehrsson (2006a) measures relatedness between the value chains of different business units by collecting information about their sales channels, supply channels, suppliers and after sales services.

However, after empirically testing the three-attribute approach described above it was confirmed that firm relatedness really is multidimensional, but the three original attributes should not be used (Pehrsson, 2006a).

Instead, Pehrsson concludes that:

"relatedness in industrial firms include five important factors (Product technology, General management skills, End customers, Brand recognition, and Supply channel types" (Pehrsson, 2006a, pp. 277)

Thus, an appropriate way of measuring relatedness between business units should be to use a five-factor approach. Each one of the five factors listed above is made up of assessable variables as presented below:

- The first factor labeled *product technology*, represents product technology, product use, product design, and pricing.
- The second factor is labeled *general management skills*, and stands for general management skills, technical skills, and administrative skills.
- The third factor is *end-customers*, which includes the three variables of end-customer types, sales channel types, and after-sales services.
- The fourth factor, representing firm strategic assets, is named *brand recognition*. This factor includes the two variables of brand recognition and brand identity. Problems arise when managers are asked to evaluate relatedness of a firm's business units through the variables of brand recognition and brand identity, which is why Pehrsson (2006a) suggests researchers to consider redefining the concepts or to measure them differently in the future.
- The final fifth factor is called *supply channel types*, and includes supply channel types and suppliers.

3.4.2.2 MARKET EXPERIENCE

Different types of experience exist, but in international business geographical (i.e. market) and industry experience are particularly important (Ekeledo and Sivakumar, 2004). The market experience dimension of the PSE model is rooted in the industrial organization (Pehrsson, 2000) and refers to a firm's familiarity with market conditions. Firms gain market experience through market entries and by seeking information (Pehrsson, 2004a, 2004b). The extent of market experience can be determined by investigating the firm's level of knowledge

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28 Brand recognition can be understood as the customers' connection or involvement with the brand, while brand identity refers to what value the brand gives the user and customer loyalty (Pehrsson, 2006a).
about market entry barriers, the behavior of their competitors and customers, as well as technological and supplier preferences on the market (Ibid.).

Good knowledge about competitors and their strategies should indicate a high level of experience. Consequently, Pehrsson (2004a; 2004b) used a company’s stated degree of confidence, with regards to its level of insight into its competitors’ strategic approaches, as a measure of market experience. The following variables have been used to measure how well a firm knows its’ competitors:

- **Product/market scope** refers to the range of products offered by the competitors, as well as the customer types and location.
- **Differentiation** includes to what extent the competitors customize their products and how this in turn effects prices.
- **Level of innovation** can be measured by the competitors' degree of product development.

A firm’s market experience can however be approached differently. Pehrsson (2006b) measured corporate experience by the number of foreign countries a firm was established in, and local market experience by the number of years the firm had been present in the market. Reuber and Fischer (1997) studied SMEs degree of internationalization and used market experience of the management team as an explanatory variable. Specifically, previous sales experiences of foreign markets and previous work experiences in foreign countries among top management were included. In Katsikeas (1994) study on export competitive advantage found among Greek exporters, market experience was measured by the number of years a firm had been present in a particular market.

Thus, while the original PSE model equals market experience with *perceived knowledge of competitors’ business strategies, local customers, and other market related issues*, one could potentially also measure market experience by what managers or the firm has done or experienced. However, since market experience used in the PSE model is one component of the firm’s strategy competence, it should be most appropriate to view market experience as an outcome of previous actions instead of the actions themselves.

### 3.4.3 ENTRY STRATEGY

Market entry strategy decisions include entry mode selection for a particular target country, and establishment of a marketing plan for the target market (Albaum et al., 2005). A firm’s international market entry strategy can be defined as:

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29 Other measurements of market experience used to explain export success include to what degree the top manager has experience from traveling abroad, how many foreign languages the top manager can speak, and if the top manager was born abroad, has lived or worked abroad (Reuber and Fischer, 1997). Note: Reuber and Fischer are interested in the impact of managers’ experience, not on the firm’s experience.
"a plan to be used for the product/market scope in question." (Pehrsson, 2002, pp. 146).

In such a plan, the entry strategy should consider the following five important issues: what objectives and goals has the firm defined for the target market; what is needed as far as policies and availability of resources are concerned; what entry mode options exist for penetrating the market; how to monitor the performance on the target market; and what time schedule to operate by (Albaum et al., 2005). Others who have studied firm's entry strategies express entry strategy considerations differently. Rutihinda (1996) states that a firm's entry strategy should include the following five strategic decisions: establishment strategy; ownership strategy; value-added strategy; integration strategy; and competitive strategy.

In Pehrsson’s (2001) study about how telecommunication companies enter emergent markets\textsuperscript{30}, he substitutes the more inclusive term entry strategy (i.e. entry plan) with the more particular term entry mode\textsuperscript{31} (i.e. the execution and implementation of the entry plan).

### 3.5 MODIFICATIONS OF THE PSE MODEL

The modified model used in this research is based on the original PSE model. While the original model does not explicitly discriminate against firms of a particular size\textsuperscript{32}, it was developed for multinational corporations entering emergent\textsuperscript{33} markets. Therefore, the need to question its relevance when used with (exporting) SMEs is apparent. Below the most obvious reasons for modification, including firm size; inclusiveness of barriers regardless of origin; and performance, of the original PSE model are highlighted.

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\textsuperscript{30} Entry into emergent markets and entry into foreign markets basically involve the same problematization (Pehrsson, 2001).

\textsuperscript{31} "An entry mode is an institutional arrangement that a firm uses to market its product in a foreign market in the first three to five years, which is generally the length of time it takes a firm to completely enter a foreign market" (Ekeledo and Sivakumar, 2004). Sarkar and Cavusgil (1996) define international entry mode as "the institutional arrangement" (Sarkar and Cavusgil, 1996, pp. 826) that makes it possible for a company to enter a market with its products and resources.

\textsuperscript{32} By reviewing articles by Pehrsson published between 2000 and 2009, six different empirical data sets used for testing and developing the PSE model or parts of it were identified. Of these six sets of data, three included only large firms; one included firms that on average were large; one included firms that were of medium size or bigger; while one included firms that on average were medium sized. Thus, only one study could possibly include micro and small sized firms. It is however uncertain to what degree micro and small sized firms were included, particularly considering that the average export shares were as high as 63 percent.

\textsuperscript{33} A company entering an emerging market is faced with essentially the same obstacles and uncertainties as a firm entered a foreign market (Pehrsson, 2001). Thus, here entry into a foreign market and entry into an emerging market are here treated without distinction.
3.5.1 DISTINCTIONS BETWEEN FIRMS OF DIFFERENT SIZES

Some important differences exist between large and small firms, which taken together motivates treating SMEs as potentially different from large firms. Compared to large companies and corporations, smaller individual businesses operate with restricted access to financial, physical, human, technological, and organizational resources (Ekeledo and Sivakumar, 2004; Penrose, 1995), which results in a small margin of errors and limited freedom of action (Wolff and Pett, 2006). Thus, larger firms can be understood to have greater competitive strength (Penrose, 1995) and market control (Mason, 1939).

The rate of growth of firms appears to vary with firm size (Vos et al., 2007), where small and large firms alike grow more slowly than do medium-sized firms (Penrose, 1995). When it comes to planning and implementation of possible expansion programs, the approach undertaken by the large firm is a continuous one. Time is, at least in theory, freed up for the appropriate managers to handle the required tasks, while in the small firm expansion is managed in separate spurts whenever possible (Ibid.). Penrose discusses how managers of small firms plan expansion “on an overtime basis” (Penrose, 1995, pp. 50).

Further, the perceived level of risk associated with a particular export venture can often be assumed to decrease with increased firm size (Katsikeas and Morgan, 1994). This might be due to the finding that small firms are particularly known for having problems with collecting, understanding, and using information (Souchon et al., 2003).

In Bonaccorsi’s (1993) study of Italian SMEs it is discussed how firms, depending of size, manage to fully use the marketing mix as a competitive tool. Smaller firms, due to their restricted competitive strength, are limited to controlling and varying the product dimension of the marketing mix. It can of course be debated whether of not an SME can, through for example niche positioning, also manage to manipulate the price dimension. Distribution and promotion are however often not fully controlled by the SME manager(s). Large companies and corporations, on the contrary, can to a large extent increase their competitive positions by simultaneously controlling all the marketing mix components.

Another important difference between small and large firms has to do with the firms’ planning horizons (Penrose, 1995). A large firm has the ability to plan further ahead than does a smaller firm. This ability should be seen as both an advantage and disadvantage: it is an advantage in the sense that due to the firm’s financial strength it can plan ahead, and therefore through market positioning and preparation capture predicted opportunities. On the other hand, the large firm’s greater production volume requires a large demand. When demand drops unexpectedly the large firm has a hard time coping. The smaller

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34 The four P's of marketing include product, price, place, and promotion.
firm typically operates using a high degree of flexibility (Wolff and Pett, 2006) and adaptability (Knight, 2001), and consequently the planning horizon does not have to span a substantially long time period, and faulty predictions or unforeseen changes in the external environment do not necessarily cause the firm major problems.

Further, the control and strategic decision-making of SMEs are often under the direct supervision of their owners (Verhees and Meulenberg, 2004), as compared to larger corporations were decision-making is more cumbersome, and rigorous check-and-balance points are necessary parts of the organizational structure. As a result, the characteristics of the key decision-maker or owner are more critical for SMEs, since the firm’s international marketing strategy to a large extent is dependent on only one, or very few, person(s). Further, the attitude (Bonaccorsi, 1993), behavior, and way of thinking of the owner/key decision-maker of an SME dominate the firm’s performance and conduct (Fillis, 2002). The manager of an SME is also found to measure success differently than do managers of large firms (Mtigwe, 2005). Therefore, a model adapted or created for SMEs should probably benefit from the inclusion of owner/key decision-maker characteristics. In the modified PSE-model used in this research, the importance of the owner/key decision-maker is acknowledged by the incorporation of barriers originating within the owner/key decision-maker himself/herself.

3.5.2 INCLUSION OF BARRIERS REGARDLESS OF ORIGIN

One strength of the PSE model is that it incorporates both internal and external elements, acknowledging the importance of both the resource-based view (RBV) and industrial organization view (IO) (Pehrsson, 2002). Still, the model incorporates these two views in a somewhat non-integrative manner. More exactly, the entry barrier dimension considers only barriers found in the external environment of the firm. The ambition is here to extend the model to also include internal barriers and barriers originating within the key decision-maker. This approach should result in a more balanced model.

3.5.3 INCLUSION OF PERFORMANCE

Within the field of strategy one of the main interests has long been to reveal what determines firm performance (Venkatraman and Ramanujam, 1987). The prime reason for this is simply that firm performance is the result of a particular strategy, and therefore a way to assess the appropriateness of that particular strategy (Venkatraman and Ramanujam, 1986). However, considering research conducted on SMEs, the focus is frequently on the internationalization process

35 Characteristics of the owner/key decision-maker are also controlled for as discussed in 4.3.5.
or the factors that explain this process, while the performance of internationalizing SMEs is still rarely explored (Lu and Beamish, 2006). Thus, the outcome of the internationalization process at any given time, measured in terms of firm performance remains a “black-box” (Lu and Beamish, 2006, pp. 28). Appropriately, the ambition of this research is to explain performance, and consequently performance is added to the PSE model. The use of the model would correspondingly change to search for and explain relationships between perception of internationalization barriers; entry strategy; strategy competence; and performance.\(^{36}\)

The adjustments made to the PSE model embrace modifications of varying degrees to all three existing components of the model, and an extension of the model to include performance as a fourth component. The key reason for modifying the PSE model refers to the contextual boundary defined for this research. Contributions should therefore include the changes made to the original model, using primarily influences from the internationalization process theory, SME literature, and the particular contextual setting of the research. To emphasize the importance of the contextual setting of the research, the contextual boundary is incorporated into the research model, see Figure 4.

Note that no attempts are made to use the modified PSE model to study the internationalization process of the firms by capturing time effects. This is in line with the use of the original PSE model. Each dimension of the modified model is discussed below.

### 3.6 THE MODIFIED PSE MODEL

While the original PSE model incorporates many appealing attributes, there was a need to modify it to fit this study of SMEs and to allow for answering the overall research question. Consequently, the modified PSE model came to include four components, each one of them discussed in more detail here.

#### 3.6.1 PERCEPTION OF INTERNATIONALIZATION BARRIERS

Pehrsson’s perceptions of entry barriers include only factors external to the firm as defined by Porter. Still Pehrsson (2001) argues that:

> “Perceptions of opportunities differ from company to company, and even from one individual to another.” (Pehrsson, 2001, pp. 5).

\(^{36}\) While performance is included as a fourth component in the modified PSE model, it is restrictively treated as a dependent variable, not reciprocal, despite the understanding that “past success is a powerful aid to future progress” (Penrose, 1995, pp. 205).
If perceptions of opportunities vary depending on the firm, its owners and its employees, the perceptions of internationalization barriers should vary as well. Even though Pehrsson states that people within the organization influence how the firm perceive opportunities, and barriers, this is ignored when constructing the PSE model and empirical research design.

From existing literature it is evident that a firm’s internationalization process\(^{37}\) is simultaneously influenced by three factors: the firm’s key decision-maker; the internal organization; and the firm’s external environment (Axinn and Matthyssens, 2002; Fillis, 2002; Leonidou, 1995). These three factors influence the internationalization process by hindering it, driving it, and enabling it. While Pehrsson’s PSE model contains a barrier dimension named perception of entry barriers, the modified model will have a barrier dimension labeled *perception of internationalization barriers*\(^{38}\). Thus, contrary to the original model the model used in this study is extended to include barriers regardless of origin.

Before simply bringing the influences of the key decision-maker, internal organization, and external environment of the firm into the model, each one of the factors deserves a short introduction. Following this introduction will be a discussion of perception of internationalization barriers, as it is debated in the literature, including the origin of each of the barriers.

3.6.1.1 THE KEY DECISION-MAKER

The key decision-maker of a small firm has a strong and direct impact (Holmlund and Kock, 1998) due to his or her relatively high degree of freedom (Reuber and Fischer, 1997). He or she acts as the extension of the firm itself. One can therefore expect that the key decision-maker affects organizational outcomes in general, including the firm’s international involvement and establishment. Existing research have even revealed that the thoughts of the owner/key decision-maker of a small firm, can be as preventative of export as the externally bound export barriers (Fillis, 2002) and the entrepreneur is the most important reason why a small firm behaves the way it does (Mtigwe, 2005). Despite these findings, the characteristics of the owner/key decision-maker are rarely highlighted in contemporary research focused on SMEs (Moini and Tesar, 2005).

Within the field of organizational learning, the impact of the individual on the activities of the firm is considered important (Crossan et al., 1999). It is believed that the experience of the individual, through a “silent”\(^{39}\) intuitive proc-

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37 While this research is concentrated to the use of the static PSE model, this model can be understood as a snapshot of the internationalization process.

38 Perception of internationalization barriers is interchangeably used with the terms “perception of barriers” and “perception of export barriers”.

39 The intuitive process takes place on the individual level and is explained to be a “preconscious recognition of pattern and/or possibilities” (Crossan et al., 1999, pp. 525). The intuitive process can be understood to be “silent” as it is not until it is communicated to other people verbally or in action that
ess, affects the institutionalization of rules and procedures within the firm and, ultimately, strategic renewal (Ibid.). For example; how the owner/key decision-maker recognizes international opportunities can be explained by his or her previous experience.

Thus, depending on who the key decision-maker is; his or her experiences and personality, the behavior and ultimately the performance of the SME is likely to follow (Reuber and Fischer, 1997). The personal characteristics of the owner/key decision-maker have been found to decrease in importance along with increased firm size and management team (Penrose, 1995). A practical example of how this insight is put to work is to look of how banks use business owner characteristics instead of business characteristics to determine and predict small business loan performance (Vos et al., 2007).

Within existing literature the following decision-maker characteristics have been identified as potential influencers of the internationalization process: demographics (Riddle and Gillespie, 2003); educational background (Leonidou and Katsikeas, 1996; Riddle and Gillespie, 2003; Chetty and Campbell-Hunt, 2003; Czinkota and Ronkainen, 2001); the level of international exposure (Czinkota and Ronkainen, 2001) and experience (Fletcher, 2001); country specific and general market knowledge (Rhee and Cheng, 2002); as well as attitude (Korhonen et al., 1996; Bonaccorsi, 1993; Mtigwe, 2005) and commitment (Czinkota and Ronkainen, 2001). Further, it has been found important to study the key decision-makers’ perception of different internationalization issues, since these perceptions are often believed to correspond poorly with “objective” market threats and opportunities (Moini and Tesar, 2005).

3.6.1.2 THE INTERNAL ORGANIZATION

Even though internationalization of SMEs is clearly influenced by organizational factors, few studies have taken this into consideration (Leonidou, 2000). Firm-specific attributes found to influence a firm’s internationalization process include firmographics and strategy. Since the strategy dimension is represented in the strategy competence and entry strategy components of the PSE model it is not discussed here in further detail.

However, vital within SME literature is the understanding that a firm’s key objective is not always growth (Westhead et al., 2001b; Vos et al., 2007). Thus, the strategic approach of an SME might be a reflection of the firm’s strives toward maintenance of control (Vos et al., 2007); access to and acquisition of resources (Chetty and Campbell-Hunt, 2003); and maintenance and enhancement of the lifestyle of the owner and his family (Westhead et al., 2001b).

Firmographics (Riddle and Gillespie, 2003) refers to firm-specific features such as firm size and age (Riddle and Gillespie, 2003; Eriksson et al., 2000;
Moen, 2002); geographical market focus (Moen, 1999; Fletcher, 2001; Eriks-
son et al., 2000); export intensity (Riddle and Gillespie, 2003; Fletcher, 2001;
Moen, 2002), ownership (Riddle and Gillespie, 2003; Korhonen et al., 1996)
and business language (Holmlund and Kock, 1998; Moen, 2002). In this study,
various firmographics are used as control variables.

3.6.1.3 THE EXTERNAL ENVIRONMENT
The third influencer of a firm’s internationalization process is to be found
within the external context of the firm. The external environment can be di-
vided into domestic (Leonidou, 1995) and foreign industry-specific issues and
refers to for example the characteristics of the markets (Rhee and Cheng, 2002)
and attractiveness (Moen, 2002).

3.6.1.4 CATEGORIZATION OF INTERNATIONALIZATION
BARRIERS
Within the literature on entry barriers facing SMEs in their internationaliza-
tion process, different authors group barriers differently. Leonidou (2000) dis-
cuss attitudinal, structural, procedural, and operational barriers, while Westhe-
ad and his colleagues (2004) use the following groupings: strategic, informa-
tional, process-based, and operational. In this research, barriers will be grouped
into psychological; operational; product/market related; and organizational
(Hamill, 1997).

Psychological barriers include perceptions of internationalization as being too
expensive; too risky; not appropriate for the particular type of business; and not
considered as a result of the domestic market being of satisfactory size. Accord-
ing to Hamill (1997) operational barriers refer to hindrances related to the han-
dling of export paperwork and documentation; a lack of language skills; and de-
lays in receiving payments. Organizational barriers include a lack of resources to
devote to exporting; and a lack of export experience.

Finally, product/market barriers are factors caused by a misfit between what
the firm has to offer and what the market demands. Other market-specific hin-
drances, such as capital requirements needed for a particular market are also in-
cluded in this group of barriers. In a market with intense competition, the need
for spending money on advertising and R&D increases compared to a less
competitive market. Another product/market barrier that might need to be ex-
plained originates within the key decision-maker. The key decision-maker of
an SME is often also the person in charge for export activities. In case the deci-
sion maker is too busy, has a negative attitude towards export, or simply fails to
get or correctly assess relevant information, the decision-maker can be thought
of as a gatekeeper or bottleneck. Accordingly, relevant and needed informa-

40 A gatekeeper is here viewed as a person that is largely the opposite of a risk-taker (Wiersema and
Bantel, 1992). While the gatekeeper is thought of as conservative, the risk-taker is innovative. Penrose
tion does not reach the rest of the organization as the only channel into it is blocked.

To get a better insight into the research body of barriers to internationalization, a literature review was completed. For the result of this review, see Table 3. Even though the focus of the literature study was on SME research, other academic references, such as Porter, were not excluded. The table is organized in accordance with the four barrier groups mentioned above. The origin of each of the barriers is listed in the left column and examples of the different types of barriers are listed in the center column. The divide of barriers based on origin and type, can be managed differently. The divide presented here should therefore be understood as the one used in this particular research, and not necessarily the only way of categorizing the barriers. Further, from the list of barriers presented in Table 3, the operationalization variables used to measure perception of internationalization barriers are selected.

discusses how micromanagement can cause the decision-maker of a firm to become "a bottleneck which effectively restricts further growth" (Penrose, 1995, pp. 72).
<table>
<thead>
<tr>
<th>Psychological</th>
<th>Example</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key decision maker</td>
<td>Mental models</td>
<td>Chetty &amp; Campbell-Hunt (2003); Hamill (1997)</td>
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<td></td>
<td>Short term perspective</td>
<td>Fillis (2002); Hamill (1997)</td>
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<td></td>
<td>Foreign markets are too risky</td>
<td>Westhead et al (2004); Hamill (1997); Fletcher (2001)</td>
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<td></td>
<td>Inertia</td>
<td>Leonidou (1995)</td>
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<tr>
<td>Operational</td>
<td>Key decision maker</td>
<td>Acts as a gatekeeper</td>
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<td></td>
<td>Documentation &amp; paperwork difficulties</td>
<td>Westhead et al (2004); Björkman &amp; Kock (1997); Hamill (1997)</td>
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<td></td>
<td>Difficulties related to financial resources</td>
<td>Westhead et al (2004); Leonidou (2000); Fillis (2002); Chetty &amp; Campbell-Hunt (2003); Björkman &amp; Kock (1997); Holmlund &amp; Kock (1998); European Commission (2006)</td>
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<tr>
<td>External environment</td>
<td>Delay in receiving payments</td>
<td>Hamill (1997)</td>
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<td></td>
<td>Lack of governmental assistance</td>
<td>Fletcher (2001)</td>
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<td></td>
<td>Difficulties related to distribution</td>
<td>Westhead et al (2004); Holmlund &amp; Kock (1998); Bonaccorsi (1992); Porter (1998b)</td>
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<td></td>
<td>Need for economies of scale</td>
<td>Porter (1998b)</td>
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<tr>
<td>Product/ Market</td>
<td>Internal organization</td>
<td>Cost for product adoption</td>
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<td></td>
<td>Lack of foreign market information and knowledge</td>
<td>Westhead et al (2004); European Commission (2006)</td>
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<td>Existing laws</td>
<td>European Commission (2006)</td>
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<td></td>
<td>Cultural differences</td>
<td>Westhead et al (2004); Holmlund &amp; Kock (1998); Johanson &amp; Vahlne (1977), (1990)</td>
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<td></td>
<td>Market size, stability &amp; structure</td>
<td>Bonaccorsi (1992)</td>
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<td></td>
<td>Geographic distance</td>
<td>Holmlund &amp; Kock (1998)</td>
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<td>Preferred location occupied</td>
<td>Porter (1998b)</td>
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<td>Product differentiation</td>
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<td>Customer switching costs</td>
<td>Porter (1998b)</td>
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<td></td>
<td>Patents held by competitors</td>
<td>Porter (1998b)</td>
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<td>Expected retaliation</td>
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<td></td>
<td>Competitors are more experienced</td>
<td>Porter (1998b)</td>
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<td></td>
<td>Lack of customer access</td>
<td>Pehrsson (2006b)</td>
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<td>Lack of management resources</td>
<td>European Commission (2006)</td>
</tr>
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<td></td>
<td>Access to and control of sales channel</td>
<td>Holmlund &amp; Kock (1998); Fillis (2002); Hamill (1997); Fletcher (1997)</td>
</tr>
<tr>
<td></td>
<td>The small size of the company</td>
<td>Fillis (2002)</td>
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</table>

1 Lack of production capacity, high risk, and product suitability.
2 Lack of customer relations and brand recognition already attained by established competitors.
3 The price paid by local customers for buying products and services from a new provider.
4 Lack of large economic resources needed for advertisement and R&D.
5 Cost for legal consulting services, translation of documents, travel expenses (E.C, 2006).
3.6.2 STRATEGY COMPETENCE

The strategy competence of a firm’s management team is made up of the two sub-concepts relatedness and market experience. The relatedness concept is not frequently used when discussing international establishment among SMEs. The main reason might be that relatedness generally is used to discuss to what degree a firm’s different business units align with the firm’s core competence. By definition, SMEs are restricted size-wise, which suggests that these firms might not operate multiple business units. One might even contemplate if relatedness is possible and appropriate to include when studying small and medium-sized companies?

Thus, the relatedness aspect of SMEs’ strategy competence cannot necessarily be determined based on a business unit’s relatedness to the core competence of the firm. Instead it might be more appropriate to think of relatedness as how different firm functions or departments utilize resources and conduct activities that are similar to each other. This is in line with Farjoun’s (1998) definition of relatedness as referred to relationships between activities or resources.

As discussed above, for the original PSE model it was suggested that relatedness between a firm’s different business units and its core competence is measured by five factors. It is also among the same five factors that the operationalization variables for this study will be selected. Considering that the entry strategy mode included here is to be limited to different types of export activities, some of the five relatedness measurements are becoming hard to incorporate.

If one measures relatedness between a firm’s different activities as part of the firm’s international establishment, it seems feasible to compare for example how the pricing of a product for the domestic market corresponds to the pricing of the same product in a foreign market. Further, the same logic should be possible to apply on general management skills; administrative skills; end-customer types; after-sales services; and brand recognition. Thus, it seems appropriate to incorporate aspects from the factors of product technology, general management skills, end-customer, and brand recognition into a study of relatedness among exporting SMEs.

However, the fifth factor called supply channel types, incorporating variables such as supply channel types and suppliers, will not be included as operationalization variables of relatedness. The motive behind this decision is that the supply of parts and components is not likely to differ for the product sold domestically and the product sold in foreign markets by the same company.

41 After-sales services are important to consider since they strongly affects future export sales (Albaum et al., 2005).
The decision was also made not to include sales channel types as a measure of relatedness. The motive behind this decision has to do with the investigation of interrelationships between the four components of the modified PSE model. Investigating the effect of sales channel type relatedness on entry strategy, problems would arise considering that entry mode selection is restricted to indirect and direct export.

The market experience concept used in the PSE model will be adopted here without any major changes but with the addition of including customer certainty. Thus, a firm’s market experience will be subjectively measured by degree of confidence concerning its knowledge of competitors’ strategies and current and potential local customers. A higher confidence level will imply more market experience.

3.6.3 ENTRY MODE
Implementing an inappropriate entry mode can have long-term negative effects on the firm’s performance and ultimately its survival, since a faulty entry mode decision can cost the company time and money (Sarkar and Cavusgil, 1996). Selection of entry mode is therefore a crucial task that should be completed by carefully balancing available entry options with company-specific resources (Ekeledo and Sivakumar, 2004).

"all firms in the industry do not and cannot pursue strategies that are likely to offer the highest returns. Instead, firms adopt strategies that their resources can support."(Ekeledo and Sivakumar, 2004, pp. 73).

What entry mode a firm decides to implement depends ultimately on the company’s past experiences; current state; access to resources; and stability and structure of the target market (Johanson & Vahlne, 1977). Ekeledo and Sivakumar (2004) use the following firm-specific factors as determinants of chosen entry mode: home country factors, host country factors, nature of the product, and degree of control sought by the firm. Not only the degree of control varies with regards to different entry modes: degree of commitment, involvement, risk (Albaum et al., 2005), and potential return on investment (Ekeledo and Sivakumar, 2004) differs as well.

Investigating possible entry mode options available to manufacturers, one should first assess location of production. Depending on whether the products are made domestically; abroad; or in so-called "free areas" (not further discussed here), a variety of entry modes exist (Albaum et al., 2005). A firm with domestic production can choose to get its products into a foreign market by either indirect or direct export.

42 Control can here be defined as the "level of authority a firm may exercise over systems, methods, and decisions of the foreign affiliate." (Ekeledo and Sivakumar, 2004, pp. 74)
Firms deciding, for whatever reason, to have their products made abroad might invest in a manufacturing facility or assembly plant. Yet another option is to get involved in a strategic alliance with one or several foreign companies. Examples of strategic alliances include licensing, joint ventures, management contracting, or contract manufacturing (Albaum et al., 2005).

Additionally, the Internet deserves to be mentioned here due to its heightened importance as a platform for conducting market research; developing new marketing channels; maintaining relations with and offer support to customers and partners; advertising; and not least trading often referred to as E-commerce (Ibid.).

Since SMEs are known to have more restricted access to resources than do large firms, they typically enter foreign markets by using less resource-demanding entry modes such as export (Lages and Montgomery, 2004). Benefits associated with export, as compared to other more advanced entry modes such as the establishment of a production facility abroad, include low risks; low resource commitment; and high flexibility (Léonidou and Katsikeas, 1996). Export is also found to be a comparably fast internationalization approach (Lu and Beamish, 2006). As a result, export is commonly considered an easy and attractive entry mode.

Existing empirical studies also confirm that SMEs are more frequently involved in export than for example in the establishment of foreign subsidiaries (Westhead et al., 2001b; European Commission, 2007). The reason behind the increased interest among SMEs to internationalization through export is explained by the fact that export results in long-term survival and growth (Morgan and Katsikeas, 1997).

Export is extremely important not only for individual firms but also on a national level, as it increases societal wealth; industry development; job creation; and acts as a balance to import (foreign exchange reserves) (Lages and Montgomery, 2004, pp. 1186). Considering these findings along with the contextual setting of this study, the decision was made to restrict the entry mode options to different kinds of export. Due to this entry mode delimitation, the term export will henceforth be used synonymously with the term internationalization. Export is here defined in terms of how products made in Sweden are sold to foreign countries through different direct and indirect sales channels.

43 In a study of British manufacturing SMEs, Westhead et al. (2001b) found that 67 percent used direct export as their main mode of entry into their main market. The corresponding numbers for other modes of entry were that 15 percent used export agents, 7 percent used piggybacking, 7 percent joint ventures, and 4 percent foreign direct investment. Among Swedish SMEs (all industries considered) 24 percent are exporters, while only 2.3 percent receive some income from foreign subsidiaries or joint ventures (European Commission, 2007).

44 For example, perception of internationalization barriers will also be referred to as perception of export barriers.
In essence, export can be direct or indirect. **Indirect export** is when a firm supplies a foreign market through an intermediary domestic partner (European Commission, 2003). Depending on if the intermediary partner takes ownership of the product to be sold or not, one talks of merchants (who take ownership) and agents (who do not take ownership). Examples of merchants that can be used for indirect export are export merchants\(^{45}\) and trading companies (Leonidou and Katsikeas, 1996). Home-country based agents include, for example, export commission houses\(^{46}\); brokers\(^{47}\); export management companies\(^{48}\); and export agents\(^{49}\). Piggyback\(^{50}\) is yet another type of export (Leonidou, 2000), sometimes considered a mix between indirect and direct export (Albaum et al., 2005). However, for this study piggyback will be considered as indirect export, based on the fact that the transactions are domestic.

General advantages associated with indirect export are low costs; access to export professionals; speed of accumulating export volume; and low risk. The main disadvantages include the lack of (end) customer contact; that product goodwill is not ascribed the producer; and that conflicts of interest between producer and intermediary (Albaum et al., 2005).

When a company sells directly to a foreign importer or buyer, it is called **direct export**. Characteristic for this type of export is the existence of a domestically located export department\(^{51}\) (Albaum et al., 2005). Different sorts of direct export include foreign sales branches (Leonidou and Katsikeas, 1996); foreign warehouse facilities; foreign sales subsidiaries\(^{52}\); traveling salespeople\(^{53}\); and

\(^{45}\) An export merchant shows high similarity with a regular domestic wholesaler as it primarily handles staple commodities (Albaum et al., 2005).

\(^{46}\) An export commission house is an export buying agent or representative, operating on orders from a foreign buyer (Albaum et al., 2005).

\(^{47}\) A broker brings together buyers and sellers and deals primarily with basic commodities such as lumber (Albaum et al., 2005).

\(^{48}\) An export management company (EMC) can be described as an export specialist performing all the same tasks an export department would, including conducting business in the name of the producer. Advantages associated with engaging an EMC, particularly for a small or inexperienced firm, include immediate access to experienced professionals and interesting foreign markets (Albaum et al., 2005).

\(^{49}\) What differentiates an export agent from the EMC is, among other things that the export agent conducts business using its own name and is more restrictive when it comes to performing export-marketing tasks such as advertising (Albaum et al., 2005).

\(^{50}\) Piggyback involves joint export with another (often current customer) domestic exporter (Holmlund and Kock, 1998).

\(^{51}\) If the direct exporter is small or new to export, the export department is likely to be built-in. While the built-in export department is staffed with an export sales manager responsible for generating sales on foreign market, no designated export department exists. For firms with a higher degree of export involvement, having a separate export department focused entirely on export related issues, might be necessary. Yet another version of an export department is the export sales subsidiary.

\(^{52}\) Foreign sales subsidiaries have a lot in common with foreign sales branches. However, foreign sales subsidiaries have broader responsibilities (Albaum et al., 2005).

\(^{53}\) A travelling salesperson is based out of the producer’s domestic market, while a resident salesperson essentially is a foreign sales branch (Albaum et al., 2005). Holmlund and Kock (1998) found that one the most important entry modes among Finnish SMEs were to have their own salesmen. One advan-
foreign-based agents or distributors (Albaum et al., 2005). The first four listed examples of direct export entry modes have in common that they are "owned" by the manufacturing firm with the benefits of no profit-sharing; full control; direct communication with foreign customers; permanent structure; that product goodwill is granted the producer; and that economy of scale is made possible.

Foreign-based agents and distributors are quite similar to the merchants and agents discussed above in conjunction with indirect export. Important differences concern the location of the agent or distributor; the degree of commitment; and how exclusively the producer is treated. Among the various approaches to direct export, using exclusive agents or distributors is the easiest and least costly way (Albaum et al., 2005). Franchising is considered a close relative of the foreign-based agents and distributors, with the difference that the franchisee has a tighter relationship with the producer.

In general, direct export is believed to entail a higher degree of management commitment, risks and costs, than indirect export. While risks and costs are up, the direct exporter might be rewarded with higher returns on investment (Albaum, et al., 2005).

Firms are believed to select entry modes, in a path-dependent fashion, in accordance with the stage theory. A review of current empirical work of the export development process completed by Leonidou and Katsikeas (1996) resulted in the three-category classification of pre-engagement, initial, and advanced involvement.

In the **pre-engagement** category, firms are not involved in international business for one of three reasons. First, some SMEs, or rather their founders, may simply not have the ambition to grow beyond a certain size or market (European Commission, 2003). The key decision-maker or management team might have reached the conclusion that internationalization does not fit the firm’s type of business, and that the domestic market provides adequate demand now as well as in the future.

"exporting may not always be the best growth strategy, especially if the firm can achieve positional competitive advantage in the domestic market" (Crick, 1995 in Leonidou and Katsikeas, 1996, pp 63)

Second, some companies are interested in export even though they are not presently involved. One reason why these firms are not involved includes the perception of internal and external entry barriers as being too high to bridge (European Commission, 2003). Third are the de-internationalized firms. The-
se are companies that have been involved in international businesses but for some reason regressed to the pre-engagement phase.

In the initial export category, export is sporadic and can be either increasing or decreasing. Indirect export is the preferred entry mode for firms in this developmental phase. Firms answering unsolicited orders present a reactive export behavior (Riddle and Gillespie, 2003), and are therefore also included in this primary export phase (Leonidou, 2003).

At the advanced export level one finds the more experienced exporters involved in regular export activities. Firms conducting direct export are often found in this advanced state of development. The contradictory finding suggesting that companies select direct export modes as a result of inexperience and lack of awareness of other optional entry modes is interesting (Westhead et al., 2001b).

This study will mainly focus on direct and indirect exporters while still allowing for a separation between exporters and non-exporters. Thus, based on this research, it will be possible to comment on how firms' choices of entry modes influence performance. However, working within the framework of the static PSE model, no attempts will be made to comment on whether different firms pursue different strategic approaches or if they have reached different levels of internationalization as part of an ongoing process.

3.6.4 PERFORMANCE

Attempting to increase our knowledge about what factors influence a firm's performance positively and negatively is logically of great interest to researchers (Venkatraman and Ramanujam, 1986), policy-makers, and not least practitioners. As a result, such research has received a lot of attention (March and Sutton, 1997). The individual components of the PSE model have also been used in performance-searching research efforts. Perception of entry barriers and strategy competence have shown particular appropriateness (Pehrsson, 2004a; 2004b; 2006a; 2006b).

However, it is not unproblematic to comprehend variations in firm performances (March and Sutton, 1997). One reason is that as firms' imitate an acknowledged "best practice" business approach, the advantage of the approach itself is diminished and could possibly lead to eroded positive performance outcomes. Further, performance studies often rely on past performance as remembered by the firm's management. Since such recollections often are influenced by current beliefs and results, distorted information is brought into the research study.

However, challenged by the above critique, firm performance will most certainly remain a popular ingredient in future research. This should not be considered problematic as long as the measurement items included in the research are selected with caution. For example, some argue that (past) performance should be measured using both subjective and objective data (Lages and Montgomery, 2004). Others argue that both economic and non-economic variables
should be considered when studying entry strategy and firm performance (Sarkar and Cavusgil, 1996). Yet others prefer to discuss performance in terms of three levels: financial performance, operational performance, and organizational effectiveness (Venkatraman and Ramanujam, 1986).

Thus, performance can be assessed by both financial and non-financial measures (Katsikeas et al., 2000) and can be either objective or subjective (Pehrsson, 2004a; 2004b, 2002). While different researchers seem to prefer different performance measures, an agreement seems to have been reached claiming that performance should preferably be measured on different levels and using different types of variables (Thirkell and Dau, 1998). If including different performance measures into a particular research setting, it should not be surprising if these measures were found not to be positively related to each other at a particular time (Lu and Beamish, 2006). In the long-run however, such performance measures can be assumed to be positively and strongly correlated (Katsikeas et al., 2000).

Objective financial measures typically include sales growth, profitability, earnings per share (Pehrsson, 2004a; 2004b), turnover (European Commission, 2003), and export shares\(^5\) (Katsikeas et al., 2000; Axinn, 1988). In Farjoun’s (1998) study about how companies’ degree of relatedness affects performance, four financial performance measures were used. These measures were return on assets (ROA), return on sales (ROS), market to book value of equity (MBOOK), and Jensen’s alpha (ALPHA). Pehrsson (2006a) suggests using the accounting based measurement of return on assets, ROA. In a study focused on manufacturing firms in Australia, Sharma (2004) measured the firms’ financial performance in terms of profitability, or return on total assets (ROTA). Vos et al. (2007) investigated small business financing behavior in the UK versus the US. The financial performance indicators used in Vos’s study are annual revenue growth, return on total assets, and net profit margin.

Financial measures can also be subjective. Pehrsson (2004b) asked managers to indicate their firms’ performance in a local foreign market compared to the industry average. Performance was stated along a five-grade Likert scale. The motivation for using a subjective financial measure was that it might better correspond with the "real" performance of the firms. Others report that subjective performance corresponds well with objective performance (Brouthers and Nakos, 2004), suggesting that a subjective performance measure can be used as a substitute for an objective performance measure. Lages and Montgomery (2004) advocate that the subjective measure performance measure of satisfaction with performance:

\(^5\) Export shares (or ratio of export sales to total sales) is the most commonly used export performance measure (Katsikeas et al., 2000). Export shares is a preferred export performance measure because it indicates export involvement and export success (Axinn, 1988). Note: Brouthers and Nakos (2004) consider export shares as a non-financial measure.
“allows us to compare performance across the wide range of groups presented in our sample because managers will be able to evaluate export performance while taking into consideration their own firm’s reference groups […] Hence, by measuring satisfaction with performance instead of performance per se, we are able to capture the degree to which performance has matched the aspiration levels of the firm, and compare it across a variety of exporting firms.” (Lages and Montgomery, 2004, pp. 1191)

Lant et al. (1992) conclude that:

“There is a growing body of work in the strategic management literature that suggests that managers’ interpretations matter” (Lant et al., 1992, pp. 604)

Examples of a non-financial performance measurement are competitiveness (European Commission, 2003); number of export markets; internationalization process stage (Byberg, 2006); absolute employment change during a certain time period; survival (Westhead et al., 2001a); market diversification; customer satisfaction (Thirkell and Dau, 1998); and strategy (Lages and Montgomery, 2004; Morgan et al. 2004).

Lages and Montgomery’s satisfaction measurement refers to past performance (last year) while Pehrsson’s performance comparison measures performance in real time. Byberg (2006) used the satisfaction with performance variable to learn about both current and past performances. By incorporating different measures of performance into one study, a more comprehensive representation of firm performance can be obtained. Also, the different measurements might complement each other and therefore strengthen the results. For the research at hand, subjective performance measures will be collected along with objective performance measures.

In this research, both overall and export performance are considered. Through these two performance measures both subjective and objective measures are incorporated. The overall and export performance measures also differ from each other, considering that the former measures past performance while the later measures current performance. By incorporating both these measures, different aspects and dimensions of a firm’s performance are investigated. It is important to remember that a company’s export performance might not be directly and positively associated with the overall performance of the firm. Instead, the two measures can be understood to complement each other rather than confirming each other.

55 Export performance was measured by asking: "How satisfied is the firm with export sales?" and "How satisfactory has the export turnover turned out to be compared to the management’s expectations?" Byberg (2006).
3.7 RESEARCH MODEL

Based on the preceding theoretical discussions, the research model is established. Thus, this model is a development of the original PSE model to particularly benefit research of SMEs within the current contextual boundary. For the model see Figure 4 below. Evident in Figure 4, and consistent with the original PSE model, no directional relationships of dependence are specified between the factors included in the model. Instead the strength and direction of existing relationships are likely to vary depending on company-specific (and key decision-maker specific) attributes and is therefore a possible result of this study. The inner oval is dashed to indicate that the result is directly applicable to this group of firms, hence the providers of the empirical data. The outer oval is solid, confining more definite borders between small and medium sized firms (SMEs) and larger firms. The generalizability of the results should be extended to the broader contextual setting of SMEs in general, but it should not be applicable to other types of companies.

![Figure 4: A visualization of the modified PSE model shown within the contextual boundary. P stands for Perception of internationalization barriers; S for Strategy Competence; E for Entry strategy; and Perf for Performance.](image)

Within the modified research model, the freedom of selecting how to measure each component is rather unrestricted. However, based on the theoretical discussions of the original and modified PSE model, it is at this point possible to add more detail to the modified model. In Figure 5 sub-components and other elements have been added, offering a research model with increased
structural clarity. Operationalization variables to be used for measuring each one of sub-components and elements are discussed in 4.3. In 4.3 one will also find an even more detailed research model, including the operationalization variables as they are realized.

Figure 5: The detailed modified international market entry model includes sub-components and elements.

3.8 HYPOTHESES

Hypotheses are generally formulated in light of conflicting theoretical findings or a lack of such findings. Consequently, all hypotheses for this research are constructed in relation to the modified PSE model in an attempt to test what factors determine export involvement and firm performance within an SME context.

In Figure 6 the hypotheses are positioned within the model to visualize what relationship each hypothesis aims to test. All hypotheses, except hypothesis H8 which is not shown in the figure, are applicable for and tested on exporters only. Hypothesis H8 is put forward to test if and how the origins of barriers explain a firm’s decision to export or not. An implied assumption valid for all of the hypotheses is that they are limited to SMEs. Hypotheses (H2, H3, H6, and H7) are put forward to test what factors explain firm performance. Each of these four hypotheses is tested on overall (subjective) and export (objective) performance. In total, the eight main hypotheses are tested through 19 sub-hypotheses.
H1: BARRIERS EFFECT ON ENTRY MODEL
If a firm’s management team perceives barriers to enter a particular market to be too risky, the outcome might be no entry. However, if deciding to get established on a market that appears risky, a low risk and low resource demanding approach is most likely to be used. If the export venture instead is understood to involve only a small risk, an entry mode involving a different level of management and resource commitment, risk taking, and speed of entry should be preferred. This discussion suggests that if export is perceived to be risky, the selection of an indirect, low risk entry mode is likely to follow (Albaum, et al., 2005).

The expressed view of high perceived risk, associated with market entry leading to a low risk entry mode, is not shared by all. In an article by Anderson and Gatignon (1986) it was argued that external uncertainty or risk, such as political instability and economic fluctuation, combined with demand for local product adaptation should result in a high control entry mode.

As a consequence, what claim can be made considering the relationship between risk of entry and selection of a direct or indirect entry mode? The following hypothesis is formulated in correspondence with the predominant view that a seemingly risky export venture has a positive effect on the selection of a low risk entry mode.

\[ H1a: \text{Firms perceiving export to be too risky are involved in indirect export.} \]

SMEs are often described as having less access to resources than do larger firms (Ekeledo and Sivakumar, 2004; Penrose, 1995). Export involvement in itself demands an increased need for financial resources, and some SMEs might
be rather restricted when it comes to how much funds they can dedicate to export. Therefore it seems reasonable to assume that exporting SMEs operating under a tight budget prefer a less financially demanding export mode such as indirect export. The following hypothesis is put forward:

*H1b: Firms perceiving export to lead to increased need for financial resources prefer to be involved in indirect export.*

**H2: BARRIERS EFFECT ON PERFORMANCE**

Acknowledging that companies perceive barriers differently, an attempt to reveal how companies' performances are affected by perception of export barriers should be pertinent. Previous studies have shown that perception of limited (external) entry barriers leads to high performance (Pehrsson, 2004a). In a study by Pehrsson (2006b) it was found that particularly the two barriers "absence of accurate relationships with local customers" and "a need for local product customization" have a negative effect on performance.

"Absence of accurate relationships with local customers" indicates problematic customer contacts. Due to cultural differences between countries, a firm might fail to establish well functioning relationships with customers abroad. As a result, problems with receiving payments from overseas customers might follow. It should be worthwhile testing if the two externally-based barriers “delay in receiving payments” and “cultural differences between countries” have negative effects on firm performance, just like “absence of accurate relationships”.

As for "a need for local product customization" the equivalent variable used in this research is “requirement for product adaptation”. However, while a need for product customization can be viewed as an externally-based barrier, here it can also be sorted as an internally-based barrier (Leonidou, 1995). More specifically, depending on firm specific functions such as production and order handling, a customized product might not be perceived as a problem. Thus, the problem does not occur until an order is placed and the firm finds it is not equipped to efficiently handle such a request. Thus, in this research, the problem is understood to occur internally.

Since the effects of external and internal barriers on performance are to be tested, the effects of barriers originating within the key decision-maker might also be worth including. By including barriers of different origins it is now possible to assess if the influence of barriers on performance differs based on the origin of the barrier. Attempting to reveal such patterns, three hypotheses are formulated. Two of the hypotheses are directly based on the existing research as presented above (H2b and H2c), while the motive for including the third (H2a) is based on the ambition to include at least one barrier originating within the key decision-maker. The psychological export barrier “current export barriers are too high” represents the barriers originating within the key decision-maker. The externally-based barriers considered here are delay in receiving pa-
yments from customers abroad and cultural differences between countries causing export problems.

\[ \text{H2a: Barriers originating within the key decision-maker have negative effects on firm performance.} \]

\[ \text{H2b: Internally founded barriers have negative effects on firm performance.} \]

\[ \text{H2c: Externally-based barriers have negative effects on firm performance.} \]

**H3: RELATEDNESS EFFECT ON PERFORMANCE**

When a firm considers committing resources to a particular export opportunity, it should evaluate the competitive advantage(s) the venture offers the firm, along with how this competitive advantage aligns with the firm's existing activities and resources (Ansoff, 1965). Thus, the firm should consider if a promising export venture is providing synergy, or joint, effects. An export venture that promises competitive advantage and synergy effects should be attractive for any firm striving for a high level of performance. Thus, there seems to be a direct relationship between relatedness and performance. In testing what effect relatedness has on performance, it was revealed that different types of relatedness have different effects on performance (Pehrsson, 2006a).

Cavusgil and Zou (1994) found that a low level of product relatedness, or rather a high level of product adaptation, can strengthen an exporting firm's competitive advantage. Aaby and Slater (1989) report in their literature review article that firms with good (export) performance tend to have a low level of price relatedness. The effect of relatedness onto performance is further investigated by Pehrsson (2004b), who finds that relatedness with regards to product design; pricing; end-customer types; and end-customer requirements, were not associated with high performance. Consequently, another attempt was made to learn how relatedness measured by product technology; product use; product design; and pricing affected performance (Pehrsson, 2006a). It was found that these four relatedness measures not only had a positive effect on performance, but also imposed a higher performance outcome compared to relatedness measured by end-customer types and sales channel types. Further, relatedness measured by managerial skills; technical skills; and brand recognition is associated with high performance (Pehrsson, 2004b).

In the second attempt to determine the effects of relatedness on performance, Pehrsson (2006a) distinguishes two relatedness-based groups of firms that had a less favorable effect on performance when compared to firms with high relatedness along the dimensions of product technology, product use, product design, and pricing. These two relatedness-based groups were labeled "high degree of relatedness" and "low degree of relatedness" (Ibid.).
assumed that firms with "high degree of relatedness" were single-business firms, and firms with "low degree of relatedness" were those with unrelated business-units. Consequently, high relatedness firms did not have the same performance effect as low relatedness firms. In addition, relatedness measured by end-customer types and sales channel types were not associated with a higher performance when compared to firms with high or low business relatedness (Ibid.).

Another interesting finding is that SMEs seem to execute little control over the pricing, promotion and distribution of their products (Bonaccorsi, 1993). If in fact these three aspects of the marketing mix are outside the control of the firms, how likely is it that for example price relatedness is based on a conscious decision by the firm's management? And how likely is it that price relatedness has a positive relationship with firm performance?

Based on these somewhat contradictory findings, three hypotheses are formulated and tested using both objective and subjective performance measures.

\[ H3a: \text{Relatedness with regards to pricing is positively associated with performance.} \]

\[ H3b: \text{Relatedness with regards to general management skills is positively associated with performance.} \]

\[ H3c: \text{Relatedness with regards to end-customer types is positively associated with performance.} \]

**H4: RELATEDNESS EFFECT ON ENTRY MODE**

Inconsistent views exist on how relatedness affects choice of entry mode. Some argue that a high level of relatedness between a foreign business unit and the core competence of the parent firm, leads to a full control market entry mode (Pehrsson, 2008). In particular, product/market relatedness and intangible resource relatedness have proved to have a positive effect on full control entry mode. Such a scenario suggests that a firm with high relatedness selects a full control entry mode to allow for knowledge sharing between operations. However, others report that customization and product differentiation, as in a low level of product relatedness, is positively related to high control entry modes (Sarkar and Cavusgil, 1996; Anderson and Coughlan, 1987; Anderson and Gattignon, 1986). Thus, further investigation of the relationship between relatedness and choice of entry mode should be valid.

Product/market relatedness measures included in this study are pricing and end-customer types. Intangible resource relatedness measures included are general management skills, administrative skills, and brand recognition. Here, general management skills will be used in the formulation of H4b. Two hypotheses are formulated.
**H4a**: High degree of relatedness with regards to end-customer types in the domestic versus foreign market is positively associated with direct export.

**H4b**: High degree of relatedness concerning management skills in the domestic versus foreign market is positively associated with direct export.

Considering price relatedness, it would be of interest to find out to what extent high price relatedness is an indirect export phenomenon, while low price relatedness is found among firms foremost involved in direct export. It seems logical that firms that charge different prices for their products, depending on what markets these products are destined for, are involved in direct export. But is this really the case? And does the opposite hold true? Are firms that charge the same prices for their products indirect exporters as a result of being in the hands of an intermediary domestic partner and having acquired limited knowledge about their overseas customers? One hypothesis is formulated:

**H4c**: High degree of relatedness with regards to price in the domestic versus foreign market is negatively associated with direct export.

**H5: MARKET KNOWLEDGE EFFECT ON ENTRY MODE**

Conflicting findings exist on how market experience influences entry mode selection (Ekeledo and Sivakumar, 2004). Westhead et al. (2001a) state that specific industry know-how significantly effects export involvement among SMEs. This discovery is supported by Mtigwe (2005). However, within the PSE model, market knowledge is measured with more accuracy than stated industry know-how, which is why it is hard to draw conclusions based on the findings of Westhead and Mtigwe. In Ekeledo and Sivakumar’s (2004) study of the effects of experience on entry mode selection, experience was measured in terms of geographic and industry experience. After testing the proposed relationship, Ekeledo and Sivakumar concluded that a firm with a high degree of experience uses a full-control mode to enter a foreign target market. Thus, high degree of market experience should stipulate direct entry mode selection. This statement is also supported by Reuber and Fischer (1997) who found that a firm's ability to form partnerships with foreign actors (as in direct export) has been found to benefit from increased market experience.

Interestingly enough, when Pehrsson (2008) tested if corporate competitor certainty had a positive effect on full control entry into foreign markets, he found that this was not the case. Based on this finding, familiarity with competition does not seem to have effect on entry mode choice.

These inconsistent findings stir the aspiration for further investigation of the interrelation between market experience and export mode selection. Two
hypotheses are to be tested. In H5a the unlikely finding proposed by Pehrsson is questioned.

\[ H5a: Market \text{ knowledge with regards to competitor certainty is positively associated with direct export.} \]

H5b is formulated in line with the more established view supported by Ekceledo and Sivakumar (2004), Reuber and Fischer (1997). However, now the effect of customer certainty, as a measure of market experience, on main export mode is tested.

\[ H5b: Market \text{ knowledge with regards to foreign customer certainty is positively associated with direct export.} \]

**H6: MARKET KNOWLEDGE EFFECT ON PERFORMANCE**

Does a company with a good knowledge of its foreign competitors and customers enjoy higher performance? Several studies indicate that so is the case: Katsikeas (1994) states that companies with a high level of export market experience achieve better export performance compared to firms with low levels of market experience. Thirkell and Dau (1998) agree by claiming that degree of export market knowledge to a significant extent determine export performance to be either high or low. Yet others found that market knowledge drives company performance (Galbreath and Galvin, 2008; Morgan et al., 2004; Souchon et al., 2003; Aaby and Slater, 1989). Thus, it seems as if a high degree of market experience would lead to increased performance.

However, further investigation of the subject conducted by Pehrsson (2006b) does not strengthen the above findings. What Pehrsson discovered was that an increased knowledge on foreign competitors' product/market scope and product differentiation did not have a positive effect on performance. One interpretation of this discovery is that too much focus on the competitors implies loosing focus on one's own firm's customers, with suffering performance to follow.

In Pehrsson's study (2006b), awareness of competitors' product/market scope is measured with regards to product range, customer scope, and geographic scope. Product differentiation of foreign competitors was similarly measured with regards to pricing policy, product development, and product customization. Except for the market experience measures used by Pehrsson, this research includes stated knowledge about local customer segments. Two hypotheses are presented below. The first (H6a) build directly on the above discussion, while the second (H6b) includes market experience as measured by how much the firm is said to know about its foreign customers.
H6a: Market experience measured in terms of stated knowledge about foreign competitors affects firm performance positively.

H6b: Market experience, measured by stated knowledge of foreign customer segments affects a firm’s performance positively.

H7: ENTRY MODE EFFECT ON PERFORMANCE
Everything else being equal, exporters have been found to have higher financial performance than non-exporters have (Westhead et al., 2004). However, the ability to be an exporter does not ensure survival (Westhead et al., 2001b). Thus, if performance was measured by survival, exporters could not be presumed to have higher performances than non-exporters. Nonetheless, performance is here measured in financial terms, and entry mode selection is limited to indirect or direct export. Direct export is associated with higher risks, costs, degrees of control, and returns on investments (Albaum, et al., 2005). Thus, if a firm can handle a direct export approach to internationalization, it might be rewarded with a higher return on investment compared to a firm involved in indirect export.

Reviewing 26 empirical studies of exporting SMEs in Italy, Bonaccorsi (1993) reveals that there are no significant relationship between entry mode (direct versus indirect export) and (export) performance. The author explains this discovery by stressing that there is not a “best” export entry mode. However, Bonaccorsi appears hesitant about the robustness of this finding, and highlights the need for further exploration of the relationship between entry mode and performance. The following hypothesis is formulated:

H7: Direct export is positively associated with performance meaning that firms involved in mainly direct export have a higher performance than firms involved in mainly indirect export.

H8: BARRIERS EFFECT ON THE FIRMS DECISION TO EXPORT OR NOT
Existing research has shown that exporters and non-exporters perceive barriers differently (Leonidou, 1995; Sharkey et al., 1989). Therefore, and in addition to the above listed hypotheses, three hypotheses are stated with the purpose of revealing what effect perception of barriers has on export involvement as measured in terms of export or no export.

The ultimate barrier preventing export involvement should logically be the one that categorically prevents the option even being considered. For example, it is reasonable to believe that if the decision-maker has no previous experience of conducting business in markets abroad, fear of the unknown might act as a
barrier inhibiting export incentives and ultimately export involvement. In cases where the decision-maker actually possesses information important to export initiation, such information is often not being used (Souchon, et al., 2003). Here, perception of export not fitting the firm’s line of business will be used as an example of a barrier originating within the owner/key decision-maker.

\[ H8a: \text{Barriers originating with the owner or key decision-maker of the firm prevent export involvement.} \]

In accordance with the resource-based view (RBV), a firm’s strategy is formed around, and therefore also limited by, its unique resources (Penrose, 1995). As a result, a strategic decision to compete in a particular foreign market is only plausible if the internal resources (tangible and intangible) of the firm support such a plan (Johnson et al., 2008). In case the required internal resources are not available, the firm is most likely not to become active on the desired market (Moen, 1999). Thus, one can strongly suspect that internally-based barriers prevent export. Problems related to finding the preferred overseas partner\(^{56}\) will be used in the hypothesis H8b.

\[ H8b: \text{Internally-based export barriers prevent export involvement.} \]

If the key decision-maker and the internal resources available within a firm might have direct influence on whether a firm is an active exporter or not, so might the external environment of the firm. Export barriers of a logistic nature, including shipping and documentation problems, have been found to be less problematic among active exporters compared to non-exporters and sporadic exporters (Sharkey, et al., 1989). International trade rules and regulations have also been found to be common and serious barriers to export (Leonidou, 2000). Therefore, tariffs will be considered a good representative for the externally bound barriers in testing their effects on export involvement.

\[ H8c: \text{Externally-based barriers have negative effect on export involvement.} \]

\(^{56}\) Established business connections can be thought of as an intangible resource.
METHODOLOGY

Methodology is the research strategy or plan of action that guides researchers in their choice of method (Crotty, 1998.) Methods, on the other hand, are the techniques or procedures applied by the researcher to collect and analyze data. Correspondingly, the issues of methodology and method are discussed here along with a presentation of variables. Lastly, this chapter includes a discussion concerning research quality.

4.1 RESEARCH DESIGN

Different types of research strategies exist, including experimental research, survey research, ethnography, grounded theory, and action research (Crotty, 1998). All of these research strategies come with its own set of strengths and weaknesses, which make each one more or less beneficial to use for a particular study. Depending on the research question; the researcher’s level of control over what is being studied; and the contextual timeframe, the researcher must decide which research strategy is the most advantageous to use (Yin, 1984).

A “what” question, such as the one formulated for this study, can be either explorative or measure frequencies and quantities (Yin, 2003). If the “what” implies an explorative study, the research strategy can be in form of an experiment, a survey, an archival analysis, an historical analysis or a case study. If the “what” conveys measurement of frequencies or quantities, the preferred strategy could be either a survey or an archival analysis. Surveys are also used when examining patterns. Further, it may be beneficial to use a survey when collecting

"information about motives, circumstances, and sequence of events or mental deliberations.”(Ekeledo and Sivakumar, 2004, pp 83)

In this research, "what", as in what factors determine, suggests distinguishing particular factors from a pre-defined number of factors. Thus, this research involves counting and examining patterns as compared to a quest for exploration. Further, there is no need for the researcher to control the events to be studied,
as for example when conducting experiments. Also, the time focus of the study is the present\textsuperscript{57}, thus historical approach would not be suitable. Accordingly it was determined that the most appropriate methodological approach for this study was the completion of a quantitative survey using questionnaires.

Using questionnaires is only one example of how to go about collecting the empirical data. Other such techniques include observations and case studies (Crotty, 1998). However, since this research is a quantitative study largely preoccupied with the testing of hypotheses, questionnaire was chosen as the preferred choice of data collection method.

Depending on the nature of the data collected (qualitative versus quantitative) the analysis options vary. Two examples of data analysis approaches include statistical analysis and data reduction (Crotty, 1998). In this research the quantitative data was analyzed using statistical analysis allowing for the testing of the hypotheses. More precisely, incorporated into this research are the analysis methods of multiple linear regression, logistic regression, and ordinal regression. For more on these analysis methods, see 4.4.

## 4.2 DATA COLLECTION

Empirical data used in this research is collected using a survey questionnaire. The (population) survey procedure is initiated by the construction and testing of the survey questionnaire, followed by the administration of the data collection (Fowler, 2002). Also discussed here in conjunction with the data collection is the definition of the respondents making up the population studied and unit of analysis.

### 4.2.1 SURVEY CONSTRUCTION

Creating a professional survey questionnaire involves paying attention to both content and physical attributes. Regarding the content, it is important to ask the right questions to ensure answers to everything one needs to learn. Before contemplating formulation of specific survey questions, the appropriate items to measure must first be defined. Here operationalization variables and control variables are defined on the premises of existing theory, see 4.3.

The next step includes formulation of statements, or questions, using the selected operationalization variables. On the basis of what kind of information one is trying to measure (including the respondent's attitude, belief, behavior, and demographic attributes) the appropriate structures of the questions differ (Dillman, 1978). Dillman (1978) separates between open-ended questions, closed-ended with ordered choices, close-ended with unordered choices, and partially close-ended questions. It is beneficial to use the closed-ended questions

\textsuperscript{57} The subjective performance measure measures last year's financial performance as compared to competitors.
with ordered choices when the researcher a priori can assess to what degree the answers possibly may vary. Using this type of question one can determine intensity, degree, and frequency. The closed-ended questions with ordered choices can be answered along a Likert scale ranging from strongly agree to strongly disagree. Closed-ended questions included in this research questionnaire were constructed with a six-grade Likert scale. The logic behind this was to avoid the median choice that a seven-grade Likert scale offers, and to force the respondents to indicate which of the two extremes they preferred.

Regarding the physical attributes of the survey questionnaire, it must have such an appearance that the respondents can readily judge its importance, difficulty, and length\(^{58}\) (Dillman, 1978). The researcher should therefore pay special attention to the appearance of the questionnaire: it must look both pleasant and easy to complete. The questionnaire used for this study was designed using Query & Report (QR)\(^{59}\).

Once a draft of the questionnaire was available it was tested on a panel of four academic colleagues\(^{60}\) with different research specialties and questionnaire experiences. Critic and comments from these reviewers resulted in changes being made to the survey. Thereafter the survey was examined by TMF’s representative Börje Pihlquist. With Pihlquist’s help, the survey was once again modified and improved. The final step towards a ready-to-send-out questionnaire involved the selection and contact of a company\(^{61}\) from the respondent list that could help by testing the survey. The process of ultimately improving a questionnaire by using reviewers with different backgrounds and areas of expertise should overall help strengthening the usefulness of the data collected as well as the response rate.

The final version of the questionnaire consisted of 23 questions, including three qualification questions and twelve control questions, covering six printed pages. The approximate completion time was between ten and fifteen minutes, which the respondents were informed of before starting to answer the questions. The final version of the questionnaire and the letter of intent are available in Appendix D.

\(^{58}\)The questionnaire should not be too long. Dillman conclude that 11 pages or a total of 125 questions is the maximum length.

\(^{59}\)QR is a user-friendly software particularly developed for designing professional looking questionnaires and collection of the data. The software can also be used for a certain degree of data analysis.

\(^{60}\)Anders Baudin is professor in forest product market analysis. Anders Pehrsson is professor in business economics with focus on international strategy. PhD Åsa Gustafsson is a lecturer in logistics. PhD Tobias Schauerte is a lecturer in industrial engineering.

\(^{61}\)Originally the idea was to have three companies reviewing the questionnaire draft. Representatives from three companies agreed to provide feedback, but two of them failed to do so in the allotted time. The decision was made to proceed without comments from the two other firms.
4.2.2 SURVEY ADMINISTRATION

Every effort placed on the details of the survey administration is to convince the target group that their help and cooperation is vital to resolve a considerably important issue. The reward of each respondent therefore refers to the consultancy role offered to him or her by the researcher.

Regarding who should be the respondent for each of the firms included on the list of respondents, the key informant approach was used.

"The role of a key informant is to aggregate information about organizational activities or outcomes; hence, informants should be selected on the basis of expertise." (Ekeledo and Sivakumar, 2004, pp. 84).

Adopting the key informant approach corresponds well with discussions carried out within the SME literature, where the key decision-maker is believed to have a prominent role as a strong and direct influencer of the firm's actions. In particular, SME research has found that it is often the key decision-maker(s) who is (are) responsible for handling the export (Byberg, 2006). Moreover, a company’s CEO has been found to be the preferred person to answer questions of strategic nature and those related to firm performance (Galbreath and Galvin, 2008). Correspondingly, the questionnaire was addressed to the key decision-maker and/or owner of the firm.

To ensure a high response rate, Katarina Lagerbielke, in charge for furniture and living at TMF, was approached regarding the possibility of TMF supporting this research. Consequently, TMF became a supporting partner of the survey study. Linking the study to a renowned person or organization has been found to strengthen the trust between the respondents and the researcher, and aid the respondents' willingness to answer the survey questions.

Further, to increase the response rate additionally, the researcher attempted to initially reach each respondent by phone. To talk to the addressee in person can often resolve problems such as the questionnaire being directed to the wrong person, that the firm no longer exists, and/or that the addressee is too busy to answer the questionnaire. However, the main reason for calling all the respondents was to inform them briefly about the survey and to ask for their participation. This approach should ensure the respondents that their participation was highly important. If a respondent agreed to answer the survey questions, he or she was given the option of completing the survey over the phone, electronically using E-mail, or to receive a traditional paper copy of the survey.

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62 The key informant approach has been criticized for generating of measurement errors due to behavioral judgments, bias, and ignorance of facts. However, put to a test, it has been found not to show any significant respondent errors (Katsikeas, 1994).

63 TMF, Trä- och Möbelindustriförbundet, is the organization for the wood- and furniture industry. (www.tmf.se)
in the mail. By offering the respondents these options, they could answer the questions whenever they preferred, adding to their convenience (Fowler, 2002). This is particularly important when asking busy professionals to answer questionnaires. For more details on questionnaire response options and the data collection schedule, see Appendix B.

4.2.3 RESPONDENTS
To be included as a respondent in this study, a firm had to meet the following three requirements:

1. Be an SME.
2. Be producing furniture in Sweden.
3. Have at least one employee (≥ 1).

In 2005 the furniture industry in Sweden was made up by 785 companies (Statistics Sweden, 2006-04-13). One year later, this number had been reduced to 697 (TMF, 1/2008).

For this study, an extensive and updated list of 693 furniture producers was graciously provided by Market Manager Partner (MMP) in Stockholm (http://www.mmp.se). The list was cross-referenced with TMF's member list of furniture producers. Three companies were added as the result of the cross-reference. The list of 696 companies was thereafter carefully reviewed in search of firms that should not be included, based on any of the three requirements presented above. The database Affärsdata (http://www.ad.se) and the individual companies' homepages were used to control what business the company was engaged in (for example kitchen versus furniture production), as well as company size. If the business scope was hard to determine, the company was kept on the list as a potential furniture producer. Thus, the reduction of the list was done in a conservative fashion: Of the 696 potential furniture producers in Sweden, 323 were excluded. For details on why these firms were excluded, see Appendix C.

In Hagström’s (2004) study of the Swedish furniture and joinery industry, Statistics Sweden’s (SCB) directory of companies was used. Even though Hagström’s study used a slightly different population, cross-referencing the respondents'...
dent list for this research with Hagström's list from SCB was considered of value. The list obtained from Hagström, contained 483 companies; of these, 436 companies were removed for reasons specified in Appendix C.

Finally, during the process of contacting each of the firms regarding their willingness to participate in the survey, each firm’s homepage was once again reviewed. This time the review was more in-depth, and as a result an additional 96 firms were excluded from the final list of respondents. For details on the exclusions, please see Appendix C.

Thus, of a total number of 1179 companies (693 from the MMP list; 3 from TMF’s membership records; and 483 from Hagström's list), 855 firms were duplicates or in some way did not meet the predefined requirements. See Table 4 for reasons for exclusions. The final number of respondents is therefore 324. This is believed to be close to the total number of companies producing furniture in Sweden with more than one employee as of spring 2008.

Because the population of interest here is restricted to the manageable number of 324 firms, the decision was made to include all firms.

Table 4: List of excluded firms. The summarized reasons for why 855 firms were excluded from the MMP list, the TMF membership listing, the list provided by Lina Hagström, and the firms that were excluded during the contacting phase. The unspecified “Other” category include for example makers of windows, staircases, log houses, healthcare products, and artists.

<table>
<thead>
<tr>
<th>Reason for exclusion</th>
<th>Number of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>No employees</td>
<td>111</td>
</tr>
<tr>
<td>250 or more employees</td>
<td>7</td>
</tr>
<tr>
<td>Suppliers</td>
<td>161</td>
</tr>
<tr>
<td>Retail &amp; distribution</td>
<td>56</td>
</tr>
<tr>
<td>Other: kitchen/bath interior</td>
<td>44</td>
</tr>
<tr>
<td>Other: (re)upholstery &amp; repair</td>
<td>37</td>
</tr>
<tr>
<td>Other: no longer in business</td>
<td>95</td>
</tr>
<tr>
<td>Other: could not be found</td>
<td>45</td>
</tr>
<tr>
<td>Other: interior design/architecture</td>
<td>13</td>
</tr>
<tr>
<td>Other: duplicates</td>
<td>200</td>
</tr>
<tr>
<td>Other:</td>
<td>86</td>
</tr>
<tr>
<td><strong>Total number of excluded firms</strong></td>
<td><strong>855</strong></td>
</tr>
</tbody>
</table>
4.2.4 POPULATION

When the empirical data for a study constitutes the total population, also referred to as a census (Moore and McCabe, 2006; Fowler, 2002), one does not have to worry about whether the findings are valid for the entire population (Djurfeldt et al., 2003). They automatically are.

The sample frame and population overlap for this research if the following assumptions can be made: No new small and medium-sized furniture producers have been established in Sweden since the compilation of the respondent list. The second assumption has to do with missing data. All small and medium-sized furniture producers in Sweden should be included in the study, but some respondents failed or denied to answer the questionnaire. Thus, even though this survey is designed to be inclusive of the total population of small and medium-sized furniture producers in Sweden, 141 (43.5 percent) of the respondents did not reply. Conclusions can be considered reliable if the missing observations can be assumed to be random. For more on the response rate see section 5.1.

Few studies include total populations. One reason is that total populations are cumbersome to handle and entail a high cost (Djurfeldt et al., 2003). Another reason is that these populations have to be so narrowly defined that they risk becoming of little importance (Studenmund, 1997). Also, if the population is infinite, including the total population obviously becomes impossible (Nilsson, 1978). For this study it was reasonable to include the entire population because it was of a manageable size. Also, the concern that focusing on a specific population reduces the possibility of generalizing the findings onto other firms is not considered a major problem here. On the contrary, keeping the research within a defined context (one industry and one domestic country) reduces response style bias often seen in cross-cultural (Chami-Castaldi et al., 2008) and industrial studies.

It might appear unsuitable to conduct a statistical test on a total population, such as the one included in this research. However, statistical tests can be motivated for census data on the premise that within the defined population there are believed to be variations over time. Thus, the total population can be viewed as one sample along a continuous and unlimited timeline. Statistical tests can further be motivated on total population data, thus treating the population as if it were a sample (Javalgi, et al., 2000), if missing data of random nature is present (Tan, et al., 2007). However one should use extra precaution when conducting statistical tests on a total population, and it is therefore advisable that special attention is paid to the correlation numbers. High correlation numbers are therefore required to assume important relationships.

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68 A population can be defined as "an amount made up by the total elements that have some defined property in common." (Translated from Nilsson, 1978, pp. 89).
4.2.5 UNIT OF ANALYSIS
The unit of analysis is the firm. However, by applying the key informant approach, it is the owner/key decision-maker that answers all questions related to the firm. Therefore, the importance of barriers; of subjective performance; and of customer and competitor certainty are measured as perceived by the informant representing the firm. Thus, the perception of the owner/key decision-maker (i.e. the informant) represents the “perception” of the firm. Existing research concludes that the key informant approach does not generate any significant respondent errors (Katsikeas, 1994).

Indeed, the unit of analysis is the firm and the focus of the research is foremost on firm level. However, since the interest of this research is on specific internationalization activities (export sales but not domestic sales), the analysis level incorporates both the company and the specific activities in which the company is involved.

Barriers are included in this research without prior categorization. In other words, barriers originating within the owner/key decision-maker, the internal organization, and the external environment of the firm are considered. Including barriers with different origins should not be a problem given that the analysis is kept on the firm level. This is because it is each firm’s perception of the barriers that is measured, not the objective barriers themselves.

Further, to ensure separation between the personal characteristics of the owner/key decision-maker of the firms and the firm itself, control variables are included on the individual level. It should thereby be possible to determine to what extent the characteristics of the owner/key decision-makers affect the internationalization and performance among the analyzed firms.

4.3 VARIABLES
Operationalization is one of the hardest and also one of the most critical aspects of empirically based research. Management of the operationalization process includes a systematic approach to the translation of abstract theoretical concepts into measureable items that can be used for studying reality. Therefore, operationalization deserves specific attention when conducting scientific research.

The operationalization variables included in the survey all originally derive from the theoretical discussion of the original and modified PSE models. However, aspects that directly apply to furniture producers have been considered by ensuring the inclusion of particular important barrier-variables. More precisely, knowledge gained through preparatory interviews and while attending industry member meetings69 have been used as a complement to the speci-

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69 From a meeting held 10 January 2008 in Lammhult, Sweden, organized by Möbelriktet Småland and Trä- och Möbelindustriförbundet, representatives from Swedish furniture producers debated prob-
fied theoretical constructs. The main reason for considering the empirical character was that if a particular variable was of importance for the population being studied, the result of the analysis would be less important. As a consequence, it is possible, if not likely, that the resulting models lack in explanatory power, and thereby the theoretical contribution of the research would be low. Thus, it should be suitable to proceed through the analysis process in such a way that the richness and specificity of the empirical data are fully explored.

Operationalization variables for each of the four components of the modified model are listed below. Following the presentation of the different operationalization variables the reader will find a detailed research model. By adding the operationalization variables to the modified PSE model, increased structural clarity is gained. See Figure 7 for the detailed research model.

4.3.1 PERCEPTION OF INTERNATIONALIZATION BARRIERS

Perception of internationalization barriers is measured along the four types of psychological, operation, product/market, and organizational barriers to internationalization. Preferably, the relative importance of the different barriers should be measured. Katsikeas and Morgan (1994) suggest measuring frequency and degree of importance. Here, perceived barriers will be measured with regards to their degree of significance for the individual companies, ranging from no significance to very large significance. The idea was initially also to investigate with what frequency the barriers were present, but it appeared problematic. To measure, for example, how often an SME lacks access to financial resources is not feasible in practice, particularly considering how different projects can run into each other. Feedback from reviewers of the survey also confirmed that it was hard or impossible to answer how often they perceived each of the listed barriers. Based on this feedback it was determined not to measure frequency of perception of barriers.

The variables measuring psychological barriers assess to what degree export is perceived too risky; export does not fit the type of business; and export barriers are too high.

Originating from the operational level of the firm, the following barrier aspects are included: export is too time-consuming; lack of language skills; document and paperwork difficulties; access to foreign sales channel including finding an overseas partner; delay in receiving payments; and lack of government assistance.

Lenses related to export. Among other things, the following conclusions were reached: export is too time-consuming and therefore demands patience; export is too expensive with regards to marketing, fair visits, and working with agents. Further, producing to order implies long lead and delivery times; lack of brand recognition; lack of foreign market information and knowledge; long-distance transportation is expensive and adds to the delivery time; and it is hard to find foreign partners (franchisees).
On the product/market level the issue needed to be addressed is whether foreign market knowledge (or the lack of such knowledge) and information should be included as barriers or incorporated into the strategy competence component. To avoid tautology, the decision was made to include foreign market knowledge and information under strategy competence. The reason behind this decision was that the strategy competence dimension, to a higher degree is adopted in its entirety as originally described, compared to perception of internationalization barriers. Within existing literature no consensus is reached on which variables should be used when measuring perception of internationalization barriers. On the contrary, many different approaches exist which can be understood from the barrier discussion at hand.

Along the product/market dimension, internationalization barriers are investigated by measuring costs for product adaptation; trade impediments; cultural differences; and geographical distances causing increased lead time.

Finally, the organizational barrier included in this research is the lack of financial resources. Similar to the above discussion concerning foreign market knowledge, the lack of qualified and experienced personnel will not be measured as an organizational barrier but is accounted for under strategy competence (market experience). Also, specific qualifications desirable for exporters, such as language skills, are measured on the operational barrier level.

4.3.2 STRATEGY COMPETENCE
As mentioned previously, the strategy competence component defined for the original PSE model is included in this research without any major modifications. Thus, a firm's strategy competence is determined by measuring the combined strength of the relatedness degree by which the firm explores foreign markets, as well as the collective market experience of the firm. It is important to stress here that while measuring strategy competence (except for the determination of knowledge of present and future customers outside Sweden) only the firm's main export market venture (MEV) is considered. The reason for not asking the respondents to consider other export projects when answering the questions, is that

"in many firms managers develop a marketing strategy only for the MEV. Many of the secondary export ventures have no defined strategy or just a consequence of the strategy defined for the MEV." (Lages and Montgomery, 2004, pp. 1198)

Here, firm relatedness refers to the correspondence between the domestic market and the foreign market with regards to the following five aspects: pricing; general management skills; administrative skills; end-customer types; and after-sales services.
Brand recognition\textsuperscript{70} was excluded for the following reasons. First, existing research has highlighted problems associated with how to measure brand recognition and brand identity as part of the relatedness concept (Pehrsson, 2006a). One of the questionnaire reviewers also questioned how the respondents were expected to assess how similarly the firm’s brand was recognized among domestic customers versus customers in the main export market. Second, even the firms that depend on export can be assumed to have a much smaller market share in their main export market than in their home market. Therefore, to ask the representative of an SME about how the customers abroad recognize the company’s brand compared to how the brand is recognized domestically seemed futile. Third, many of the surveyed producers do not produce and market products under their own brand name.

Market experience is determined by the firms’ stated knowledge of local competitors and local customers. The question is: how much does a firm knows about its competitors’ product offers, customers, degrees of customization, pricing policies, and positioning of brand? How much each respondent firm knows about its current and (future) potential local customers is evaluated in terms of knowledge about customer segments.

4.3.3 ENTRY STRATEGY

Entry strategies of the surveyed SMEs are studied along the dimensions of non-exporters, sporadic exporters, indirect exporters, and direct exporters, and other\textsuperscript{71}. Among the non-exporting firms distinction are made between those who have never been involved in export and those that have previously been exporting but are currently not.

The operationalization variable of sporadic export is included to capture firms that fill unsolicited orders. Responding to this kind of orders does not necessarily reflect a conscious strategic export decision, and these firms often do not strive towards becoming regular exporters (Katsikeas, 1994).

Some of the indirect export options discussed in the theoretical chapter, see 3.6.3, do not particularly apply to small and medium-sized furniture producers and therefore will not be included. These excluded entry modes are export merchants; trading companies; export commission houses; brokers; and export management companies. The included indirect export modes are correspondingly export agents and piggybacking\textsuperscript{72}.

\textsuperscript{70} Brand recognition can be understood as the customers’ connection or involvement with the brand, while brand identity refers to what value the brand gives the user and customer loyalty (Pehrsson, 2006a).

\textsuperscript{71} Other types of entry modes include joint ventures, and foreign direct investments. Firms indicating that they use the "Other" entry mode will be asked to specify mode.

\textsuperscript{72} Joint export with another (often current customer) domestic exporter (Holmlund and Kock, 1998).
Similar to the above discussion of indirect entry modes, the following direct entry modes were not considered here: foreign warehouse facilities; and foreign sales subsidiaries. Direct export is therefore be measured by the following entry modes: foreign sales branches (including foreign resident sales person); traveling salespersons; and foreign-based distributors.

4.3.4 PERFORMANCE
Two performance measures are included in this research: export performance is measured by the objective financial measures of export shares, while overall performance is measured by the subjective financial measure of perceived company performance compared to the company’s competitors.

Perception of internationalization barriers

<table>
<thead>
<tr>
<th>Key decision maker:</th>
<th>Foreign markets are too risky; export does not fit this type of business; export barriers are too high; and export is too time consuming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal organization:</td>
<td>Lack of financial resources; cost for product adaptation; lack of language skills; document and paperwork difficulties; access to foreign sales channel;</td>
</tr>
<tr>
<td>External environment:</td>
<td>Trade impediments; cultural differences; geographic distance; delay in receiving payments; and lack of government assistance.</td>
</tr>
</tbody>
</table>

Entry mode

- **Non-exporter**: Has never exported; has exported before.
- **Sporadic export**: Answering unsolicited orders.
- **Indirect export**: Export agent; piggybacking.
- **Direct export**: Foreign sales branch (including foreign resident sales person); traveling salesperson; and foreign-based distributor.

Strategy competence:

- **Relatedness**: Pricing; general management skills; administrative skills; end customer types; after-sales services.
- **International market experience**: Stated knowledge about competitors’ product offers; customers; degrees of customization; pricing; and positioning of brand. Stated knowledge about current and future potential local customer segment(s).

Performance

- **Export performance** (objective financial measure): Export shares.
- **Overall performance** (subjective financial measure): Perceived performance compared to competitors.

Figure 7: The detailed modified international market entry model containing information about operationalization variables.

4.3.5 CONTROL VARIABLES
Control variables are variables that are either known for, or thought of, as having effects on the phenomena under study. Controlling for such effects becomes important to ensure that they do not interfere or blur the effects of the operationalization variables. Byberg (2006) specified the following criteria for deciding
whether a potentially interesting variable should be treated as a control variable or an operationalization variable:

- To what degree can the respondent companies have an impact on the variables? Internal and external circumstances outside the control of the firm should be separated from those factors that can be influenced. What the firm can have an impact on is of more practical and strategic interest, and should therefore be rewarded with a more prominent position within the research.

- Influential factors that are very different from each other imply grouping problems. If it is hard to group the factors or variables included as operationalization variables, reduction of variables and their categorization becomes almost impossible. In this situation it is better to keep these different factors as control variables.

- Ultimately, what is known about the variable? If there is agreement within existing literature on whether a particular variable has a significant influence on what is being studied, or if there are conflicting findings, it might be rewarding to include the variable as a control variable. Logically it is not advisable to include a variable as a control variable if it has not shown any potential for influencing what is being studied.

Thus, selection of control variables is a task that should be completed using a high degree of caution and selectivity. The process of selecting control variables was therefore initiated by listing variables that seemed interesting to include because of their potential influence on the components included in the model. The literature related to the PSE model was primarily considered. Thereafter a search within existing literature was undertaken to identify additional (control) variables that have been found to have effect on firms’ international involvement and performance. Thirdly, a comparison was completed between variables that appeared interesting to include, and variables with a documented effect on internationalization and performance. The comparison resulted in a preliminary list of 18 control variables to be included in this study.

It is neither possible nor desirable to be too inclusive regarding what variables and components to include in the model. The preliminary list of control variables was further reduced from 18 variables to the slightly more manageable number of twelve variables (the motives for exclusion are found at the end of this section). A brief presentation and motivation for selection of control variables is found below. Note: while information was collected for these twelve possible control variables, this not to say that these control variables are to be considered “generic”. On the contrary, the usefulness of including any of the control variables refers directly to which dependent variable that is to be explained.

Control variables to be included in this research, are defined along the company and owner/key decision-maker levels. On the firm level the following general variables are controlled for: firm age, and product scope. Firm age is included as a control variable because conflicting findings exist on how a com-
pany’s age affects international involvement (Reuber and Fischer, 1997) and export propensity (Westhead et al., 2001a). Some researchers report that younger firms are operated by aggressive managers, leading to the assumption that younger firms show a higher export performance than do older firms (Aaby and Slater, 1989).

In the original PSE model, product scope (product technology, product use, and product design) is used for measuring relatedness. In the modified PSE model it is however not feasible to keep this parameter as an operationalization variables, which is why it is to be included as a control variable.

Additional control variables refer specifically to export, as they measure degree of internationalization\(^73\). Here geographical market focus, the number of markets entered, the number of years exporting\(^74\), and the number of employees spending more than 50 percent of its time on export relating activities are considered.

When measuring geographical market focus, countries should be grouped together so as to consider cultural, institutional, and business practice similarities from a domestic standpoint. Studying the geographical market focus of Swedish companies it is suggested that the following four areas are used: The Nordic countries (outside Sweden); the rest of Europe; North America; and the rest of the world (Eriksson et al., 2000). It is not unlikely that depending on where the firms export their strategy competence, perception of internationalization barriers, entry mode; and not least performance, vary.

The number of markets entered has frequently been used in existing studies as a control variable (Pehrsson, 2004a; Katsikeas, 1994). However, recently it has been found that the number of markets entered by a company has little effect on performance (Pehrsson, 2006b).

How long a firm has been involved in exporting should influence the firm’s market experience, as measured by its knowledge about competitors and local customers. Coupling information about what year the firm was founded with

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\(^{73}\) During a literature review it became clear that different authors define DOI differently. Sullivan (1994) developed a formula for how to calculate the degree of internationalization scale. This formula added the weight of five different components: foreign sales as a percentage of total sales, foreign assets as a percentage of total assets, overseas subsidiaries as a percentage of total subsidiaries, psychic dispersion of international operations, and top managers’ international experience. Reuber and Fischer (1997) used three components to measure firms’ degree of internationalization among SMEs. DOI\(_{SME}\) included foreign sales as percentage of total sales, what percentage of the firm’s employees that spent over 50 percent of their time on international activities, and the geographical scope of sales. Leonidou and Katsikeas (1996) found that the following variables were commonly used as segmentation variables with regards to the stage of export development: export sales intensity, the length of exporting experience, the number of foreign markets, the number of foreign customers, and the number of business transactions conducted abroad. Finally, Souchon et al. (2003) suggested a distinction between three parameters for determining the degree of internationalization: export dependence (exports sales as percentage of total sales), export experience (the number of years involved in export), and export complexity (the total number of countries served).

\(^{74}\) Export market experience cut-off level is suggested to be 15 years, with less experienced exporters being involved for less than 15 years (Katsikeas and Morgan, 1994).
the time of export initiation, it is possible to compute both the number of years it has been exporting and time lapsing between establishment and export initiation. The importance of including the later variable has to do with the finding that this variable has a significant effect on export involvement (Moen and Servais, 2002), and therefore on the entry mode component of the modified PSE model.

Among the small and medium-sized firms investigated in this research, foreign assets and overseas subsidiaries are assumed to be very rare. As a result, a company’s commitment to, and its degree of, internationalization should be assessed by a different (structural) measure. In Reuber and Fischer’s (1997) study of Canadian SMEs they suggest including the percentage of employees spending more than 50 percent of their time on international activities. The urgency to include commitment here refers to the fact that commitment is found to strongly influence export behavior (Gripsrud, 1990).

The personal characteristics of firm managers have been reported to be one of the most important if striving to explain why some firms become involved in export, why others remain domestic (Cavusgil and Naor, 1987), and variation in firms’ financial performance (Wijewardena et al., 2008). Here, on the owner/key decision-maker level, four main areas will be controlled for including educational background, level of international exposure, age, and attitude towards conducting business in foreign markets. Riddle and Gillespie (2003) include the highest educational level of the founders as an operationalization variable in their study of Turkish SMEs. Leonidou and Katsikeas (1996) claim that companies with considerable international involvement have a managerial staff with a greater educational background. Wiersema and Bantel (1992) found that among other variables, a high educational level among firm executives was likely to lead to strategic changes, including targeting a new market.

A strong reason for including the level of international exposure as a control variable is that practical experience has been found to be the most important source of market-specific knowledge (Meyer and Skak, 2002). Here the level of international exposure will be measured by to what extent the owner/key decision-maker was born abroad, lived abroad for more than three months, or worked abroad for more than three months (Axinn, 1988).

There are mixed views on whether the decision maker’s age has any influence on the company’s operations. Westhead et al. (2001a) found that the age of the decision-maker had a significant effect on export involvement, while Byberg (2006) on the other hand concluded that age of the SME owner had no effect on export and export performance. Findings from a study by Wiersema and Bantel’s (1992) indicate that the age of executives affect strategic decision-making: older executives are less flexible and more resistant to change. As a result, it was determined that age should be an interesting factor to include as a control variable on the owner/key decision-maker level.

Finally, as attitude towards conducting business in foreign markets has been found by some researchers to be an important determinant of internationaliza-
tion (Calof and Beamish, 1995) and export performance (Aaby and Slater, 1989) it should be controlled for. This is supported by Reuber and Fischer (1997) who claim that managerial attitude is one of the most important requisites for international involvement.

The following potential control variables were removed from the final list of control variables included on the firm level: the importance of import, business language, domestic market shares, supplier (supply chain type and supplier), and domestic sales channel.

Import importance as measured by degree of importance of import was removed with the motive of concentrating the research to export. Including import as part of the internationalization efforts of the firm would lead to a substantial expansion of the research scope.

Business language might be an indicator of export commitment. Still this variable was removed on the premises that it might not affect the day-to-day business of the organization and therefore be of low relevance.

Further, the decision not to include domestic market share as a control variable rests on the assumption that in the furniture industry, with its many small niche actors, no firms have any particularly high market shares.

Finally, in the original PSE model, supplier and sales channel were used to measure relatedness. The decision not to include supplier-attributes (supplier type and location) as control variables rests on the belief that such an inclusion would make it hard to maintain the research focus and a manageable size of the survey. Thus, since this study is concentrating on export (outward internationalization), to include import (inward internationalization) would be to distort this focus. Import in itself is an important research area, and to include it into this study without deeper penetration would most likely be unproductive.

In this study, measuring entry mode by different export approaches, it seems unreasonable to include the sales channel as an operationalization variable. Instead the idea was to include domestic sales channels as a control variable. However, this was not feasible either, on the premises that the number of control variables should be kept as low as possible, and that domestic sales channel has not, to this researcher’s awareness, been pointed out to have any particular effect on the dependent components of the model.

While export relating studies have included demographics such as gender, religion, and ethnicity (Riddle and Gillespie, 2003), no evidence has been presented that these factors effect internationalization. Consequently, gender, religion, and ethnicity will not be controlled for. Also the number of language spoken by the decision maker/ owner was excluded.

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75 Riddle and Gillespie’s (2003) general findings show that men more frequently than women operate SMEs. Also, the chance that a firm is operated by a women increases slightly with the firm’s age and that younger firms often have younger owners. Additionally, no relationships were found between religion, ethnicity, and firm age.
4.4 ANALYSIS METHODS

Preparing for the quantitative analysis involved exporting answers (data), from respondents that answered the survey electronically, from Query and Report (QR) into an Excel spreadsheet. The data from the other respondents (phone and letters) were manually coded into corresponding spreadsheets. These spreadsheets were later combined and imported into the SPSS program.

4.4.1 MEASUREMENT SCALES

Since the measurement scale of a (dependent) variable restricts the analytical options and processes available to the researcher, it is appropriate to briefly mention something about the fundamentals behind measurement scales before discussing analytical methods used in this research. Also important to keep in mind is that to a large extent the researcher determines on what scale the collected data should be measured.

There exists two general types of data: metric and non-metric. Non-metric or qualitative data is measured either along a nominal or ordinal scale. Both of these scales include only discrete values but not a zero point (Djurfeldt et al., 2003), and while indicating the existence of an attribute, nothing is learned about any amount (Hair et al., 1998). Variables measured along the nominal scale are categorized, but the categories are not ranked internally. Examples of variables measured along the nominal scale include: gender (man–woman); production focus (producer of furniture–producer of bathroom interior–supplier to the furniture industry); export involvement (have never exported–exported before–export currently). The most obvious distinction between the nominal and ordinal scales is that for the ordinal scale, the categories are ranked. Attitude questions are often measured along ordinal scales ranging from, for example, strongly disagree to fully agree. Another example of an ordinal scale measure is grades.

The metric, or quantitative, data is measured along interval or ratio scales. Both interval and ratio measurements are expressed using equal-width intervals (Miethe and Gauthier, 2008), and can be either discrete or continuous. The main difference between interval and ratio scales is that the ratio scale has a definite, non-arbitrary, zero point. Ratio scales are more frequently used than interval scales, and includes variables such as age, number of employees, and export shares. One example of a variable that is measured along an interval scale is temperature\(^{76}\).

Ratio scale is the highest measurement scale, followed by (in decreasing order), the interval, the ordinal, and lastly the nominal scale. It is always possible

\(^{76}\) For a ratio scale measure such as age, the zero point has a meaning. Thus, 20 years of age is double as old as 10 years of age. For an interval scale measure such as degree Celsius, it is not meaningful to claim that 20 degrees is twice as warm as 10 degrees (Djurfeldt et al., 2003).
to go from a higher scale level to a lower on. For example, the ratio measure of age can be converted into an ordinal measure of old, medium, and young. The opposite, of going from a lower to a higher measurement scale, is generally not possible. Two exceptions exist however: When several variables measured along an ordinal scales are combined into an index, the ordinal scale measures are transferred into one interval measure (Djurfeldt et al., 2003). The second exception refers to the creation of a factor variable from several variables measured along an ordinal scale.

4.4.2 FACTOR ANALYSIS

In factor analysis a factor is created to represent a number of variables in the same theoretical area as each of the individual variables. While information is not lost, the amount of data is reduced which makes the analysis and interpretation more straightforward. The technique of factor analysis is used primarily to achieve summarization, data reduction (Hair et al., 1998), or for structural detection (SPSS 16.0, tutorial manual). As a result, factor analysis is often performed prior to other (multivariate) analyses for which the purpose is to detect dependency.

In short, summarization means that the data is described in a more manageable amount of concepts compared to the original variables (Hair et al., 1998). The purpose of data reduction is to remove highly correlated variables from the data, and possibly even replace the entire data set with a few uncorrelated factor variables. This is attained through the calculation of a score for each variable. This score is thereafter used instead of the original variables. Finally, factor analysis can be used for structural detection while searching for underlying or latent relationships between variables (Ibid.). In this research factor analysis was used foremost for the purpose of data reduction. For more on how factor analysis was used in this research see 5.3.3.

When conducting the factor analysis in this research, the approach suggested by Hair and his colleagues (1998) was used as a guide. In short, the factor analysis process involves designing the factor analysis and ensuring that the underlying assumptions are met, deriving factors and assessing overall fit, interpretation, and finally validation. Since the process steps presented here are rather brief, the interested reader should continue to read Hair et al. (1998).

Designing the factor analysis includes determining how many variables to include. Five variables are recommended as the minimum to include in a factor analysis (Hair et al., 1998), and is also the number of variables included in this research. At this point the researcher should consider if the number of cases included in the study is appropriate. Hair (1998) recommends that at least a five to one ratio is met: thus, there should be a minimum of five observations per variable. With 85 observations and five variables, this requirement is exceeded.

Designing the factor analysis also includes the creation of a correlation matrix for the variables that possibly should be included in the factor analysis. In this research, the correlation between the variables included in the factor analy-
sis ranges from 0.657 to 0.833. A related matter is to test for partial correlation using tests such as the Kaiser-Meyer-Olkin (KMO) measure and Bartlett’s Test of Sphericity (SPSS version 16.0, tutorial manual). In this research using the KMO measure, the partial correlation test revealed a value of 0.869 (Hair, et al., 1998).

The following task involves selecting factor method. Based on the goal of the factor analysis, a method should be selected to include the total variance or common variance. The total variance method of principal component analysis (PCA) was used in this research. The unrotated and rotated factor matrices were thereafter calculated, allowing the researcher to determine the number of factors to be extracted. The orthogonal method of Varimax was used here for creation of the rotated matrix.

4.4.3 MULTIPLE LINEAR REGRESSION ANALYSIS

Classic linear regression models were introduced by Legendre and Gauss as early as 1805 and 1809, both within the area of astronomy (McCullagh and Nelder, 1989). Still today, linear regression is often the researcher’s first choice of analysis method, and many other methods are built on the platform of linear regression analysis.

Conducting a multiple regression analysis (MRA) allows the researcher to draw conclusions on what relationships can be found between a (quantitative) dependent variable and several independent variables and determine the model’s level of significance (Djurfeldt, et al., 2003). More specifically, multiple regression allows the researcher to assess the degree and character of the relationships between the independent and dependent variables (Hair et al., 1998). Thus, the reasons for conducting multiple regression analyses as part of this research is to reveal the existence, magnitude, nature, and direction of the relationships between the variables included in the model. More than mere revelation of relationship is important here.

The multiple linear regression equation has the following general (practical) form (Miethe and Gauthier, 2008):

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + \ldots + b_nX_n + \epsilon, \]

where

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77 Correlation coefficients for individual variables that are below 0.5 are unacceptable; 0.6 or above average; 0.7 are tolerable or okay; while 0.8 or higher r-values reveal “commendable” correlation. If the number of correlations between the variables does not exceed 0.3, little correlation exists (Hair et al., 1998).

78 Other names for a dependent variable include regressands, response variables, measured variable, and predicted variable.

79 Independent variables can also be referred to as predictors, explanatory variables, covariates, regressors, exogenous variables, and input variables.

80 The theoretical presentation of this formula is: \( y = \beta + \beta x + \epsilon \), where \( \epsilon \) is the random error with \( E(\epsilon) = 0 \) and \( V(\epsilon) = \sigma^2 \).
\(a\) represents the constant (also referred to as the intercept) and \(e\) the standard error. \(X_1, X_2, X_3 \ldots X_n\) are independent variables and \(b_1, b_2, b_3 \ldots b_n\) are the corresponding regression coefficients. For example, \(b_1\) is the regression coefficient for the effects of \(X_1\) on \(Y\) controlling for all other independent variables.

Multiple regression analysis can be described in terms of a six-stage model-building process (Hair et al., 1998). The aim of this process is to construct a model that has a minimum sum of squared errors (Pampel, 2000). These steps guide this research in an effort to avoid creating models that are entirely wrong, to avoid sticking to a particular model among other useful models for the wrong reason, and to ensure fit of the model to the data (McCullagh and Nelder, 1989).

The first step involves determining what independent and dependent variables to include in a model. Since this research is conducted within the framework of an existing though modified model, the dependent and explanatory variables are more or less given within the theoretical framework. But because the dependent variable, the one to be explained, must be quantitative when using MRA (Djurfeldt, et al., 2003), not all of the dependent variables included in this study can be analyzed using MRA. Because of those dependent variables that do not meet the requirement of being quantitative, the techniques of logistic regression and ordinal logit regression are discussed in 4.4.4 and 4.4.5. The independent variables, those variables that explain the dependent variable, included in multiple linear regression as well as in binary or ordinal regression, can be continuous, categorical, or a mixture of the two (McCullagh and Nelder, 1989).

The second step involves assessing if the number of observations allows for multiple regression. Small samples of about 20\(^{81}\) observations lend themselves best to binary regression techniques, while a very large sample of 1000 or more observations pushes the research into practical insignificance (Hair et al., 1998). Thus, with 136 responses, of which 98 were exporters, the techniques of multiple regression should be appropriate. Another rule of thumb says that there should be an absolute minimum of four observations for every independent variable included in the analysis\(^{82}\). This minimum requirement is met in this research. Moderator, or interaction, effects, in which the relationship between an independent and dependent variable is influenced by a second independent variable\(^{83}\), could possibly be determined at this point. However, moderator effects are not further considered here, since this research is the first step to

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\(^{81}\) Other authors conclude that the minimum number of observations required when conducting a multiple regression analysis is 30 (Djurfeldt et al., 2003).

\(^{82}\) 10-15 observations per independent variable can be considered a desirable goal (Hair et al., 1998).

\(^{83}\) In the model \(Y = b_0 + b_1X_1 + b_2X_2 + b_3X_1X_2\), the term \(b_3X_1X_2\) represents the moderator effects of \(X_1\) and \(X_2\) on \(Y\).
learning if the particular theoretical model can be used for explaining the responding firms export involvement. As part of further research, the use of moderating effects could well be included.

Thereafter four (or five\textsuperscript{84}) assumptions (Hair et al., 1998) underlying multiple linear regression have to be tested. These four assumptions or prerequisites are linearity, heteroscedasticity, independence, and normality.

There must be a linear relationship between the dependent and independent variables when conducting a multiple regression analysis (Djurfeldt et al., 2003). Completion of a partial regression plot reveals which independent variable that has a nonlinear relationship to the dependent variable (Hair et al., 1998). However, the most common way to assess linearity is to review the scatterplots between two variables (Ibid.). In case of non-linear relationships, one can use nonlinear models or conduct a transformation of the variables to ensure linearity (Moore and McCabe, 2006). In this research, linearity is assumed.

The assumption of heteroscedasticity implies verifying whether or not the variance of a variable is uneven. If the variance is uneven it does not have roughly the same number of observations along the x-axis. To check for heteroscedasticity, one can, for example, conduct the Levene test for homogeneity of variance (Hair et al., 1998). In this research, heteroscedasticity is assumed.

The assumption of independence refers to the fact that there cannot be any noteworthy correlations between the independent variables (Djurfeldt et al., 2003). Multicollinearity means that two explanatory variables have a high degree of collinearity and as a result explain to a high degree the same thing. Including two such independent variables in one model results in that little can be said about any of these variables’ individual effect on the dependent variable. Independence between the independent variable can be determined by examining the correlation matrix. If the correlation between two variables is inside the interval \((-0.7) \leq r > 0.7\textsuperscript{85}\), where \(r\) stands for Pearson’s \(r\), it does not appear to be any serious problems with multicollinearity\textsuperscript{86}. Correlation matrices for the independent variables included in this research are presented in Appendix E. If the problem with multicollinearity is detected it might be beneficial to keep only one of the variables in the model, increasing that variables predictive power. An alternative approach is to combine the correlated variables into a factor variable as discussed in factor analysis 4.4.2.

In testing coefficients of a regression model, the distribution of the model's error term has to be considered. In standard statistical packages, normality of the residuals, or observations of the error term, is often considered and tested

\textsuperscript{84} A fifth test involving autocorrelation should also be conducted if completing time series analyses (Djurfeldt et al., 2003).

\textsuperscript{85} These boundaries could be considered as a general rule of thumb (Hair et al., 1998).

\textsuperscript{86} Hair et al. (1998) determine that \(r = 0.8\) means that the correlation is relatively high and \(r = 0.9\) means that the correlation is high. Djurfeldt et al. (2006) concur by stating that any correlations over 0.8-0.9 means problems with multicollinearity.
by means of chi-squared goodness of fit test. Non-existent, or small, deviations from normality confirms the validity of the test of coefficients. However, testing coefficients in regression analysis is quite robust to deviations from normality (Westlund, 1975). This also applies to severe deviations from normality and (even symmetry) of distributions. A large number of observations contribute to a reduction of the problem, since the central limit theorem applies (Hair et al., 1998).

In the forth step the decision is made of what estimation techniques to use when building the model. Since hypotheses testing is essential for this research, the components of the various regression models are in part directly specified by the hypotheses. In addition, which control variables to include in each of the hypotheses testing models are selected based on sequential search. It’s important to remember here that the overall ambition of any model-building effort is to simplify through reduction in complexity. As a result, all variables that are unnecessary, that is those that have insignificant effect on the variable to be explained, should be removed. Removing noise variables allow for the production of a simple theoretical pattern that provides improved predictions (McCullagh and Nelder, 1989).

If the total number of independent variables is small \((k \leq 12)\) the effort of specifying all possible combinations of independent variables to include in a model is somewhat manageable (McCullagh and Nelder, 1989). When the independent variables exceed 12 the use of a “short-cut” search method becomes more or less necessary. In this research there are ten different possible control variables in addition to the other covariates specified by the hypotheses. Thus, search methods are used in this research. While the search method technique of backwards elimination\(^87\) was primarily used, the backward solution suggested by the SPSS software was not automatically accepted. If the researcher accepts the solution provided by the statistical software, he or she not only risk missing the “best” model, but also ends up with a mechanically built model that has little meaning (Hosmer and Lemeshow, 2000). However, using the backward elimination technique, all possible, and in this case theoretically meaningful, variables are initially included. Thus, the variables are removed one at a time starting with the least important until only the most important variables remain in the model.

At this stage, with a preliminary model available, it is now possible to determine the explanatory power of the included independent variables. With a rather small sample size\(^88\), the adjusted coefficient of determination, or adjusted \(R^2\), is used in this research. Having several possible models and attempting to determine which of them is the best, the researcher can compare the \(R^2\) values.

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\(^{87}\) In addition to backward elimination the researcher can use forward selection or stepwise regression (McCullagh and Nelder, 1989).

\(^{88}\) Djurfeldt and his colleagues (2006) recommend that if working with fewer cases than 200, the adjusted \(R^2\) should always be used in favour of \(R^2\).
The higher the value the better the included explanatory variables manage to explain the variance of the dependent variable. Thus, the model has a higher degree of predictive value. However, before a model can even be accepted for consideration, the researcher has to assess the significance level of the F-value. If the model is not significant on at least the ten percent level, or for preference the most commonly used five percent, the $R^2$ value has little meaning, and the model should be considered poor.

The fifth model-building step involves evaluating the regression model using the individual regression coefficients, particularly considering their significance. Strongly significant regression coefficients support the researcher in claiming which variables influence the dependent variable, and how. However, once the best possible model is constructed, collinearity should be checked for among the independent variables. In this research, only correlation matrices are used to assess multicollinearity, but it would also have been possible to combine the correlation value inspection with the tolerance value or the variance inflation factor (VIF) (Hair et al., 1998).

With the best regression model at hand, the last step in the regression model-building process entails ensuring generalizability and transferability (Hair et al., 1998). Thus, the model’s correspondence with existing theoretical findings and results is considered. If the resulting regression model corresponds well with previous results, the model is said to be validated. If the ambition with the model is prediction, it is strongly recommended that the model is validated using the sub-sample technique or tested on another data set (Hosmer and Lemeshow, 2000).

### 4.4.4 LOGISTIC REGRESSION ANALYSIS

When the dependent variable is not continuous but categorical, the use of linear regression analysis is commonly believed to be inappropriate. The two main reasons for not using linear regression when the dependent variable is binary are that the results risk being of little meaning, and that the statistical tests are inappropriate (Hellevik, 2009). More exactly, in linear regression the line can extend upward or downward towards positive and negative infinity, depending on the values of the explanatory variables. However, with a binary dependent variable, the probabilities have a maximum value of “1” and a mini-

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89 If the research is truly ground-breaking and exploratory in nature no theory or previous results might exit. In such an instance the researcher should test the validity of the model onto a new data sample.

90 Recently, arguments for using linear analysis when the dependent variable is dichotomous have been raised. Hellevik (2009) compared the results from linear and logistic regressions and found that differences were “extremely modest” even for small samples with skewed distribution. Further, Hellevik believes that researchers should choose an analysis method based on the purpose of the analysis as compared to the “desire to demonstrate mastery in complicated statistics tools” (Hellevik, 2009, pp. 60). Particularly within social sciences, Hellevik argues, were persons not belonging to an academic milieu frequently take interest in the results of the research, it is important that the statistical methods are kept as simple as possible.
imum value of “0”. Further, regression with a binary dependent variable inevitably violates the assumption of normality\(^{91}\) and homoscedasticity\(^{92}\) (Pampel, 2000). Thus, linear regression is not considered a preferred option when the variable to be explained is binary; either discriminant analysis or logistic regression analysis are useful methods.

While discriminant analysis can manage two or more classification groups, the logistic regression analysis handles only dichotomous dependent variables. The independent variables included in a logistic analysis can be either qualitative or quantitative (Erramilli and Rao, 1993).

Logistic regression is preferred over discriminant analysis on the premise that the former is applicable to a broader range of research situations. (SPSS 16.0, tutorial manual). Another reason why logistic regression is used in this research instead of discriminant analysis is that other authors, such as Morschett (2006) and Erramilli and Rao (1993), have found this technique useful when analyzing questions of foreign market entry-mode choice. In this research binary logistic regression is used to test what factors explain if a firm is involved in export or not (Dummyexport: 1 = export, 0 = no export) and why the exporting firms choose to use mainly direct or indirect export modes (Dummydirect: 1 = mainly direct export, 0 = mainly indirect export).

In 1940, logistic regression was introduced within the context of biological assay (a type of scientific experiments) and medicine (McCullagh and Nelder, 1989). In logistic regression, also referred to as binary logistic regression, a dependent variable that has non-linear relationships with some particular independent variables is transformed into a dependent variable that has linear relationships with those same independent variables using the S-shaped curve\(^{93}\) (Pampel, 2000). The logistic or logit transformation is calculated by taking the natural logarithm of the ratio of a probability \(P_i\) of an event occurring. Put another way, the logit is calculated by taking the natural logarithm (base \(e\) log) of the odds. The mathematical formula for the logit (2), or logged odds, equals:

\[
L_i = \ln \left[ \frac{P_i}{1 - P_i} \right],
\]

where \(P_i\) = the likelihood of an event in proportion to both occurrence and non-occurrence. \(P_i\) ranges from 0 < \(P_i\) < 1.

Odds = the likelihood of an event to occur relative to the likelihood of an event not to occur \(P_i / (1 - P_i)\). Odds can range from zero to infinity (0 < Odds < \(\infty\)). Thus, no upper boundary exists which allow for a certain degree of line-

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\(^{91}\) With binary dependent variable, only two values on Y and two residuals exist for any X value (Pampel, 2000).

\(^{92}\) Some argues that violating the demand for homoscedasticity is of little practical importance (Hellevik, 2009).

\(^{93}\) The logit is symmetrical around the probability value of 0.5 (Pampel, 2000)
arity. When the probability of an event to occur is greater than the probability of an event not to occur, the odds are greater than 1. On the opposite the probability of an event not to occur is greater than the probability to occur, the odds are less than 1.0.

$L_i$ = logged odds. $L_i$ can range from negative infinity to positive infinity ($-\infty < L_i < \infty$) and thus no boundaries exist allowing for complete linearity.

The logistic regression equation has the following general form (3) (Pampel, 2000):

$$\ln[P_i / (1 - P_i)] = b_0 + b_1X_i$$

At large, the principles that guide the model building process and analysis for the linear regression analysis discussed previously are also valid for the logistic (and ordinal) regression analysis (Hosmer and Lemeshow, 2000).

When selecting which independent variables to include in a model (as for the linear analysis, the dependent variables in this research are given by the theoretical model), one should pay particular attention to empty cells. While empty cells are almost always present, particularly if continuous independent variables are included in a model (O’Connell, 2006), the researcher should not ignore their presence. The importance of reducing the inclusion of empty cells in a model is simply because they completely lack informational value (McCullagh and Nelder, 1989). If modelling of an independent variable leads to empty cells, and this turns out to be a problem, one of three approaches should be undertaken (Hosmer and Lemeshow, 2000): collapse several categories into one, exclude the category that creates empty cells, or model variables measured on at least the ordinal scale as if they were continuous.

Except for empty cells, numerical problems can also be due to either multicollinearity or complete separation (Hosmer and Lemeshow, 2000). Multicollinearity is, as described for linear regression, controlled for by inspection of the correlation matrices. Complete separation is not a problem within this research because of the use of a population (as compared to a sample), the number of respondents, and not least the number of variables included in each model.

Further, assumptions of linearity, normality and heteroscedasticity are not applicable for logistic regressions (Pampel, 2000), as these assumptions are inherently violated (O’Connell, 2006).

As discussed for multiple linear regression, having an adequate number of observations is also important when fitting a logistic regression model. When using logistic regression for analysing data, a somewhat stringent rule of thumb is that there should be at least 10 observations per parameter\(^{94}\) to avoid over or

\(^{94}\) Including independent variables with multiple terms (not exclusively dichotomous covariates), Hosmer and Lemeshow (2000) advocate that it is more relevant to consider parameters as compared to number of covariates.
under estimation of regression coefficients (Hosmer and Lemeshow, 2000). The number of cases included in this research should be sufficient for allowing for the use of logistic regression, at least when testing what factors explain if a firm is involved in export or not. When testing what factors explain why the exporters choose indirect or direct export involvement, the number of cases is somewhat on the low side. But, according to Hosmer and Lemeshow (2000), the rule of 10 to 1 is possibly too rigid of a rule and the authors suggests that more work is needed in this area.

The model-fit of a logistic regression model can be determined by the change in log likelihood\(^9\) between the baseline model, also referred to the “intercept only model”, and the fitted model. In the tables presenting the results of the regression analyses for this research (see 5.4) “-2 log likelihood” and Chi-square are provided. The former is called “model log likelihood” and represents the likelihood of producing the observed data, given the final independent variables. The sum of the values for “-2 log likelihood” and Chi-square equals the “Intercept only log likelihood”. Thus, the Chi-square value indicates how much the model has improved by including the independent variables, as compared to only include the intercept variables (Pampel, 2000). The Chi-square used in logistic regression corresponds to the F-test value used in linear regression.

An alternative measure of model-fit is the Hosmer-Lemeshow test (O’Connell, 2006). This test is supposed to be particularly useful when the sample size is small and/or when the independent variables are continuous. Since the number of observations used in this research meet the basic rule of thumb as advocated by Hosmer and Lemeshow (2000) and the majority of the independent variables are measured along an ordinal scale, the Hosmer and Lemeshow test for model-fit is not used in this research.

Further, because the log likelihood measure does not inform us of any amount of explained variance of the dependent variable, the measure of pseudo-variance (pseudo R\(^2\)) explained is also provided. Pseudo R\(^2\), offering a complimentary idea of the overall model fit used in logistic regression, is the equivalent version of the R\(^2\) measure used in multiple regression (Hair et al., 1998; Pampel, 2000). In this research, Nagelkerke’s R\(^2\) (Pehrsson, 2008) while Cox & Snell’s R\(^2\) is not further considered.

One way to learn whether or not a particular independent variable should be included in a model is to remove the variable from the model to find out if the model improves or not. When determining improvement of a particular model one should return to the likelihood ratio test and the estimated coefficients for each variable included in the model (Hosmer and Lemeshow, 2000). When comparing models, the better model has a lower value of –2 log likelihood. Other options include the Wald test and the score (O’Connell, 2006), neither

\(^9\) For a presentation of the elementary likelihood theory, see for example McCullagh and Nelder (1989).
of which are used in this research. The Wald test has been found not to work well with a smaller number of cases, and/or when variables of different scales are included simultaneously in a model. The score test is not used for the simple reason that it is not readily available in SPSS.

While interpretation of a linear regression model is rather straightforward, interpretation of a logistic model is more complicated (Hellevik, 2000). Pampel (2000) describes the following three ways to interpret effects in logistic regression:

- **Logged odds**: The coefficients have exactly the same interpretation as the coefficients in the linear regression, with the important exception that it is the expected changes in logged odds that are given. Since changes in logged odds lack meaning to most people, interpreting the logistic model using logged odds is often of little value.

- **Odds**[^96]: By calculating the exponent of the logistic regression coefficients the independent variables come to affect the odds of the dependent variable. Note: the estimate of the odds for dichotomous independent variables is obtained by exponentiating the regression coefficients (Hosmer and Lemeshow, 2000). The odds for the reference category coded 0 is always 1.0 ($e^0 = 1$).

- **Probabilities**: As stressed by Pampel (2000) no one single coefficient can represent the relationships between the independent variables and probabilities of an event to occur. Instead the effects the independent variables have on the probabilities are to be described for a particular value or set of values. This can be obtained by the calculation of the linear slope of the tangent of the nonlinear curve at any single point[^97].

For further penetration of this subject, see for example Pampel (2000).

### 4.4.5 ORDINAL REGRESSION ANALYSIS

As described for the logistic regression, linear regression is commonly not considered suitable for use when the dependent variable is dichotomous. Neither is the method appropriate for fitting models around dependent variables measured on an ordinal scale. Historically, however, this has frequently been the case, assuming that the robustness of the linear regression technique could compensate for the dependent variable not being quantitative and thereby managing to bridge any interpretation problems. This approach is criticized for several reasons. While the ordinal scale variables are assigned numbers, these numbers are simply representative of differences in magnitude, for example attitude degrees, not a number that in itself has a meaning. Further, the numbers

[^96]: Odds = ratio of probabilities. Odds ratio = ratio of odds.

[^97]: The effort of calculating the partial derivative to get the linear slope of the tangent line, can be viewed as a waste of time. Some critics argue that the procedure will lead to a misleading result barely better than the utilization of linear regression analysis (Pampel, 2000).
of the ordinal scale variables are ordered, but not necessarily equally spaced. In addition the normality assumption underlying linear regression is not met by the ordinal scale variables. In a comparison between multiple regression and ordinal regression conducted by O’Connell (2006), it was shown that the directions of the effects the indirect variables had on the dependent variable were the same, while the magnitudes differed.

While some researchers used linear regression in the past to explain ordinal dependent variables, others have used logistic regression. By rigorously coding the ordinal variables into binary categorical variables, and thereafter using logistic regression, models are developed that lack explanatory power. Using logistic regression analysis for ordinal dependent variables, eliminates the possibility to distinguish between the ordinal scores (O’Connell, 2006).

Ordinal regression should however be seen as a continuation of logistic regression, and is sometimes even referred to as ordinal logistic regression (Hosmer and Lemeshow, 2000) or ordinal logit regression. For examples the terminologies used in logistic regression appears, though somewhat extended, in ordinal regression (O’Connell, 2006). And the model building process used in ordinal regression analysis models are built in accordance with both the logistic regression (Hosmer and Lemeshow, 2000) and the linear regression analysis\(^98\) (O’Connell, 2006).

In short, ordinal regression models are built by stepwise selecting independent variables to be included in the model. Thereafter, the excluded variables are revisited to learn if in fact they should be included in the model, despite the fact that they were omitted. As a final step the researcher should investigate if moderators should be included. In this research moderator effects are not considered as mentioned in the discussion of linear regression.

Three\(^99\) different types of ordinal logit regression models are available\(^100\) (Hosmer and Lemeshow, 2000). The researcher should select what model to employ based on the maturity of the theories used and the research question guiding the study. Also, since different statistical software packages are prompted to work with different ordinal regression models, it is easy to assume that a researcher choose model based on his or her familiarity with a particular software package.

\(^98\) Logistic regression and ordinal regression are sometimes grouped together under the epithet “generalized linear models” (O’Connell, 2006). McCullagh and Nelder (1989) specify the following types of models to be so called generalized linear models: logit and probit models, log-linear models, and multinomial response models. The generalized models should be considered an extension of classical linear models (Ibid.).

\(^99\) A fourth model, or version of model, is the partial proportional odds model (O’Connell, 2006).

\(^100\) For a more detailed presentation of the three models, please consult O’Connell (2006)
The first, and currently most popular of the three models (Liu, et al., 2009), is the *proportional odds model*\(^{101}\), also referred to as the *cumulative odds model*. The popularity of this model, as compared to other available ordinal regression models, is due to its applicability and easy-to-grasp underlying assumptions (Parsons et al., 2009). In this research, using SPSS, the ordinal regression is called PLUM which is a cumulative odds model. The cumulative odds model compares the probability of an equal or smaller response (or an equal or larger response). In logistic regression, one is interested in learning what the probability is that a particular event occurs (often referred to as a “success”) or does not occur (referred to as a “failure”). In ordinal regression this becomes more complicated because depending on the ordinal scale there can be quite a few “success” possibilities. If, as in this research, the ordinal scale is measured on a six-graded scale, it is possible to define five different “success” characterizations. Note: with every “success” follows an intercept ($\theta_j$).

The ordinal regression equation has the following general form (4) depicting cumulative logits:

$$\ln \left[ \frac{P_j}{1 - P_j} \right] = b_j + b_1x_1 + b_2x_2 + \ldots + b_px_p$$

(4)

\(j\) = categories \((j = 1, 2, \ldots, K-1)\) The final category will always have a cumulative probability of 1.0

\(b_j\) = Intercept for category \(j\)

The similarity between this model (4) and the general logit model used in logistic regression (3) is obvious. Thus, if interested in the cumulative odds of being at or below a category \(j\) one only has to exponentiate the cumulative logits. From the cumulative odds it is not far to find the cumulative probabilities related with being at or below category \(j\).

If it turns out that the cumulative odds approach does not result in a well-fitted model, it could be wiser to use one of the other two ordinal regression models. Each of these models is briefly mentioned below.

The *continuation-ratio model* is contrary to the cumulative odds model comparing each response with all lower responses. This model is often beneficial to use in early-phase, exploratory type studies (Hosmer and Lemeshow, 2000). The *adjacent-category model* compares each response to the next larger response (Ibid.).

Overall the interpretation of the ordinal regression models follows closely to the interpretation of logistic regression models. When using SPSS PLUM for running ordinal regressions, as compared to logistic regressions, some (inter-

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101 The model is called proportional odds model because the ratio of the odds for a particular event “for any pair of sets of explanatory variables is independent of the choice of scores category” (Parsons et al., 2009, pp. 633).
pretation) differences should however be pointed out. First, when modelling ordinal dependent variables using dichotomous independent variables, the researcher must observe that it is the lower category that codes. By simply reversing the sign of the regression coefficient of the dummy, the interpretation can be managed as for the logistic regression. Second, in ordinal regression, in addition to the two pseudo-$R^2$ values provided in logistic regression, a third pseudo-$R^2$ value is provided. This pseudo value is referred to as McFadden’s pseudo $R^2$. McFadden’s value is not used here, but as for the logistic regression Nagelkerke’s pseudo $R^2$ is used.

4.5 RESEARCH QUALITY

A researcher must expose to the reader such insight into the research design and management that assessment of research quality can be made. Research quality is commonly discussed in terms of validity and reliability (Fowler, 2002). The validity of a study relates to what degree concepts and theories used are relevant for the particular scope of the study (Djurfeldt et al., 2003). The success or appropriateness of the operationalization process therefore to a large extent determines the validity of a study. It is when transferring theoretical constructs into measurable items that systematic errors can be either avoided or built into the research. In other words, validity refers to whether or not a question manages to measure what it is supposed to measure (Buckingham and Saunders, 2004). Validity can further be divided into face validity, content validity, construct validity, and external validity (Ibid.).

Assessing the face validity of a measure means evaluating if the measure “expresses the characteristics of a phenomenon” (Buckingham and Saunders, 2004, pp. 296) satisfactorily. Face validity is based on subjective judgements and essentially leaves it to each person to determine if a measure, question, or even an entire questionnaire appears valid. Content validity is closely related to face validity as it has to do with how well a particular measure manages to operationalize a concept. While face validity can be judged by virtually anyone, content validity should be assessed by persons with good insight, preferably theoretical knowledge, into the research area. In this research, face validity and content validity were ensured by asking six different reviewers, amongst whom two were practitioners and four were academic colleagues, to assess the quality and scope of the questionnaire. The reviewers thereby judged if the individual questions seemed to manage to measure what they were intended to measure.

Construct validity concerns the issue of whether or not the individual variables that are used for measuring a particular concept are consistent with each other (Buckingham and Saunders, 2004). Since the operationalization variables for this research are selected based on previous research and existing theory, construct validity can be assumed.

Further, the external validity concept refers to how well a finding aligns with other studies (Buckingham and Saunders, 2004). To ensure external valid-
ity, the results can be tested on a different sample. For example, if working with model development such as in this research, the final model versions can be tested on an additional sample; alternatively the researcher can chose to work with split samples (Hair et al., 1998). However, here external validity is assessed by comparing the results from the empirical analysis with theories and existing research. Correspondence implies that external validity can be assumed.

In general, to increase the validity of a questionnaire it is pertinent that the researcher pays attention to four basic issues (Fowler, 2002):

1. Do all respondents understand all questions? In striving to ensure that all the respondents understood all the questions, definitions were included in the questionnaire when needed. Also, specific theoretical terms, such as relatedness, were not included. Instead the meaning of the term relatedness was explained. Asking practitioners to review the questionnaire before sending it out was explicitly aimed to test if the respondents understood all the questions asked.

2. Do the respondents have the knowledge needed to answer the questions? To ensure that the respondents had the right qualifications, the questionnaire was addressed specifically to the owner or key decision-maker of each company.

3. Are some questions of a sensitive nature? The answers to research questions addressing sensitive issues, for example personal health and various types of addictions, are often found to be answered with a low degree of accuracy. The belief is that none of the questions included in this research should be perceived by the respondents as particularly sensitive. However, the respondents were given the options to answer the questionnaire electronically or through mail. These two different reply modes explicitly imply self-reporting and anonymity.

4. Are subjective measures included? In this research, several subjective measures are included. One approach to ensure high validity while including subjective measures is to measure a concept in several different ways. In this research, an attempt was made to include an objective performance measure to balance the subjective performance measure. In addition, knowledge about competitors in the main export market was measured using several items. More explicitly, five items were summated to an index measuring competitor certainty. Cronbach’s alpha ensured high internal consistency by testing inter-item correlation (SPSS version 16.0, tutorial manual). The subjective measure of attitude towards export was managed the same way as competitor certainty.

A short note on a systematic type of bias referred to as common method bias (Podsakoff et al., 2003) is also warranted. Common method bias can be caused by, for example, letting the same respondents supply data for both the
explanatory and dependent variables. This is referred to as common rater effects (Ibid.). Existing research has shown that this type of bias can have strong misleading effects on a study, causing the researcher to accept a hypothesis when it should not be accepted, or reject a hypothesis that instead should have been accepted. The most serious problem with letting the same respondents supply both dependent and independent data is when this data refer to past attitudes, perceptions, and behaviour (Ibid.). Since the need here for collection of historical data is minuscule, the most problematic instance of common method bias is avoided. Also, the common rater effect should not be understood to severely distort this research, even though one person provided data for both the dependent and independent variables. This is because for three of the four dependent variables (export involvement, main export mode, and export shares) the respondents were asked to re-report objective information about their firms. Also, in a study by Venkatraman and Ramanujam (1987) it was revealed that the single informant approach should not necessarily be associated with biases and eroded results. Instead, the business performance data supplied by the single informant strongly correlated with the collected secondary data (Ibid.). Further, numerous approaches exist for how to control for various common method biases (Podsakoff et al., 2003). One of the more fundamental measures relates to the design of the questionnaire. For example, by defining abstract (theoretical) terms, formulating simple questions, and ensuring anonymity, the common rater effect can be reduced (Ibid.). These precautions are made here. In addition, statistical tools can also be used to control for common rater effects.

Further, if the result from a research study contains a minimum amount of random errors, it can be said to be reliable (Djurfeldt et al., 2003). Thus, reliability is largely about how replicable a particular study is: if empirical data was collected from different respondents using the same questionnaire, or from the same respondents but at different times, to what extent would the results correspond with each other? A high level of reliability is ensured here through careful and continuous documentation of the research process. By keeping the data collection process and analysis transparent, the reader should have the opportunity to judge the level of reliability. High level of documentation also allows for replication of the study and ultimately critics have the opportunity to duplicate the empirical study in search for "identical" findings. In general, reliability tends to be higher in quantitative research compared to qualitative research due to the use of questionnaires. On the contrary, validity often is understood to be

\footnote{The only variable for which the respondents were asked to supply retrospective data, is the subjective performance measure. For the subjective performance measure the respondents were asked, during the spring/summer of 2008, to report on the perceived financial performance for the fiscal year of 2007. Thus, the historical aspect of this variable is not substantial and can therefore be understood to be of little importance here.}
higher in qualitative research due to the high level of flexibility in question formulation (Buckingham and Saunders, 2004).

Striving towards creating research of a high quality one can incorporate triangulation into the research (Denzin and Lincoln, 2003). Triangulation simply means that several "realities" are considered simultaneously, ensuring that the research does not become dependent on one critical source. Yin (2003) distinguishes between four types of triangulation, more or less incorporated into this research: data triangulation, investigator triangulation, theory triangulation and methodological triangulation.

Investigator triangulation is used in the design of the questionnaire, since several academic colleges and industry professionals provided valuable feedback. As a result, the quality of the questionnaire was improved, yielding a high response rate and a low number of non-responses.

Further, theory triangulation should, to some extent, always be present in academic research. Here, literature focused on strategy, internationalization, and the reality of small and medium-sized enterprises (SMEs), all influenced the construction of the modified PSE-model.

Data and methodological triangulations are to some extent used in this research: secondary data of an historical nature was used to establish a foundation of insight into the furniture industry, while original empirical data was collected primarily using a survey. While the survey provided quantitative data, two preparatory interviews (not further presented) offered qualitative data.

Another way to improve research quality, after the empirical material is compiled, is to return to survey respondents and interviewees to ask for comments and feedback. This can be managed in a seminar setting or in individual meetings. The purpose of this approach is to ensure that what was found and concluded in the research corresponds with the respondents' perceptions and intentions. In this research, the findings from the survey will be communicated to interested members of the industry.

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103 Crystallization is an alternative to triangulation (Denzin and Lincoln, 2003). Crystallization seems primarily appropriate to use when conducting qualitative research and is consequently not used here.
The response rate of the survey questionnaire is presented, and the different recoding procedures applied to the various variables explained. In addition, an analysis of non-responses is offered. Thereafter the findings from the quantitative analysis are presented, including the hypotheses testing and results.

5.1 RESPONSE RATE

In total, 324 firms were asked to complete the survey. 183 of the contacted firms completed the survey, resulting in a response rate of 56.5 percent. Of the responding firms, 44 were found not to comply with the qualification criteria defined and were therefore eliminated. Consequently, 139 firms constitute the total number of eligible respondents of which 38 were found to be non-exporting firms. Among the exporters, four were found to be involved only in sporadic export.

As previously explained, attempts were made initially to contact each of the 324 firms by phone to explain the purpose of the study and to ask for each firm’s participation. 22 percent of the firms could not be reached by phone, but received the survey in the mail without prior notice. The response rate among those firms was 49 percent.

Among the firms that were reached by phone, ten percent declined to participate. The two most commonly mentioned reasons for not participating included “lack of time” and “against answering surveys”. The remaining 68 percent of the firms agreed to participate. Among the firms agreeing, 62 percent preferred receiving the questionnaire electronically; 22 percent preferred receiving the questionnaire in the mail; while 16 percent wanted to answer the survey over the phone. The final response rate among the firms that had in advance agreed to answer the questionnaire reached 67 percent. Taken together, mailed-out questionnaires accounted for 36 percent of the 183 responses, E-mail for 45 percent and phone for 19 percent.

The software Query and Report (QR) was used for administering the electronic questionnaires. Using QR it was not feasible to assess differences be-
tween the respondents when considering those that answered without a reminder and those that answered after being reminded up to three times.104

Among the responding and eligible firms, 53 percent are micro, 36 percent small and 10 percent are medium-sized. The lower representation by medium-sized firms is somewhat compensated by the fact that these firms were those most willing to answer the survey. 62 percent of all medium-sized firms answered the survey, while the corresponding number for the small firms was 60 percent and for the micro firms 53 percent.

As a complement to the investigation of how the non-responding firms were distributed across the different company size classes, a similar examination was conducted with regard to the prime consumption environment (home or public) of the producers' products. Firms focusing on making furniture for the home environment were somewhat under-represented regarding completion of the survey (42 percent responded). The response rate among the producers focusing on the public market was 64 percent and for the firms serving both the home and public markets the response rate was 76 percent.105

Considering both company size and consumption environment, no systematic pattern of error was observed. Thus, the missing data seems to be randomly generated among firms regardless of company size or type of primary consumption environment of the products.

Finally, controlling for the respondents' positions at each firm it was found that 78 percent of them were owners or co-owners, 72 percent CEOs, 26 percent export managers and eight percent "other".106

5.2 ANALYSIS OF NON-RESPONSES

There are essentially three reasons why data is missing (Buckingham and Saunders, 2004), or rather why some respondents have not answered all the questions in the questionnaire. First and most obvious is the skip, meaning that the question did not apply to the respondent and therefore the respondent was prompted to skip ahead to the next question that was relevant to him or her.

The second reason for non-responses relates to human error or oversight. The respondent was asked to answer the question, but simply failed to do so. Contrary to the oversight explanation, the third reason for non-responses is due to the respondent's refusal to answer the particular question. The nature

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104 Query and Report automatically sent out a reminder to all respondents that had not answered at the time the reminder was added to the system. Since respondents were added to the “list of respondents” as they agreed to participate (thus, at different dates), all non-responding firms received between two and three reminders.

105 One interpretation of the non-even distribution of responses is that some of the firms listed as producers of furniture “equally for home and public space” should have been included as producers of furniture for the home environment.

106 The respondents were asked to indicate all applicable options, thus many of the owners were also CEOs. For example, only 15 percent of the export managers were not also CEO or owner. Reviewing the eleven respondents that had indicated “other”, only five did not also indicate ownership position or CEO. Further, investigation of the five non-owner/non-CEO respondents showed that only two should not be considered as key decision-makers.
of the question is likely to determine the respondent’s willingness to answer the questions. Additional reasons for missing data are if the respondent does not know the answer, or if the respondent answers in an unexpected way, making the answer not useful.

After coding the survey data it became clear that some questions more often than others were not being answered. This is most likely the result of both oversight and refusal. Seven questions were less frequently answered than others. Among these seven questions Q14 had most missing data, followed by Q2_1, Q2_3, Q2_4, Q2_5, Q17_2, and Q17_5.

In question Q14 the respondents were asked to answer how many countries they currently exported to. Talking to the respondents who preferred answering the survey over the phone, it became obvious that this was a hard question to answer. What countries each firm currently exported to frequently seems to vary on an order basis. This should be particularly true for the sporadic exporters.

More surprisingly, the Q2 questions, aiming to determine the producers’ main product scope and customer type, received low scores. Since one must assume that the producers know to what degree they produce furniture using their own brand names, and to what degree their products are consumed in a home environment setting or public space, the conclusion is that they did not want to answer these questions.

Q2_3 is a slightly different issue. Here the respondents were asked to state to what degree their products complied with the definition of “designed furniture” (or “designer furniture”). Recently the terminology “design” (and versions such as designer and designed) have been used in mass media and by retailers to distinguish a particular type of styled products without defining what sets designed furniture apart from other furniture. Clearly all furniture, and all other products for that matter, are designed to some extent, or they would not exist. However, the fashionable use of the term “designer furniture” implies something else, as it provides the owner with status and proves his or her exclusive taste. As a result, the producers are either confused by the use of the word or they are irritated by how it is used and, for whatever reason, several of them (or six percent of the eligible respondents) have not answered the question.

Two of the questions which focused on relatedness also received a comparatively low response rate. Q17_2 dealt with relatedness as referred to general management competences, while Q17_5 asked about relatedness in term of after-sales services. It is possible that the concept of relatedness in general was new to the respondents, something that was not made obvious, however, by the respondents that answered the questionnaire by phone. However, if relatedness was not understood by the respondents it is likely that they, due to interpretation problems, hesitated to answer the associated questions. Also, and in particular, after-sales service might not have been applicable to some of those who did not answer this sub-question and therefore they simply left it unanswered.

In retrospect it might have been possible to redesign and reformulate some of the survey questions to ensure a higher response rate for each question.
However, most respondents followed the instructions given and provided the researcher with answers to the questions. For example, in 81 percent of the questions only a maximum of four respondents failed to provide answers.

In cases of missing data the researcher can decide to include only those cases for which there are complete data available, also referred to as listwise inclusion (SPSS version 16.0, tutorial manual); delete the variables for which data is missing; or use an imputation method. For more on the benefits and disadvantages associated with each of these approaches, see Hair et al. (1998). In this research, both the pairwise (correlation) and the more conservative listwise (linear regression) imputation options are utilized.

5.3 RE-CODING

When analysing data one should always strive towards creating the simplest model that explains as much (of the variance of the dependent variable) as possible, or in other words simplifying without losing the richness of the data (Djurfeldt et al., 2003). Further, a simple model is a stable model\(^{107}\) that also is more easily generalized (Hosmer and Lemeshow, 2000) and interpreted. Clearly this has to do with the actual model-building process of determining what variables should be included in a model, but also with what type of scale the included variables should be measured on. Thus, considering a specific circumstance, it might be beneficial to re-code included variables, but such action should only be undertaken when needed.

For example, to minimize empty cells and the number of intercepts, an investigation was made into whether the ordinal dependent variables should be collapsed into a three-graded scale\(^{108}\). This would imply that two success characterizations and two intercepts were available for all models analyzed using ordinal regression in this research. However, while empty cells do exist, it does not appear to be problematic. When the dependent variable is measured on an ordinal scale the number of empty cells, or cells with zero frequencies, is high. At the same time the models created have stronger explanatory values and lower levels of significance (p-value) compared to if the dependent ordinal scale variable was re-coded to reduce empty cells. Investigating how the model profits from re-coding both the dependent and independent variables measured on the ordinal scale, as compared to only re-coding the dependent variable, revealed that re-coding of all ordinal scale variables included in the model had essentially no effect on empty cells. Consequently, the decision was made to use the variables measured on the ordinal scale as reported by the respondents, with the exception of market knowledge expressed in terms of competitor certainty and attitudes towards export.

\(^{107}\) “The more variables included in a mode, the greater the estimated standard errors become, and the more dependent the model becomes on the observed data.” (Hosmer and Lemeshow, 2000, pp. 92).

\(^{108}\) One important characteristics of model building using ordinal regression is that the resulting model is unaffected by the number of categories (grades) used. This means that if several categories are collapsed into one, the conclusions remain unchanged; this is because “the same parameter is being measured however many categories are combined.” (McCullagh and Nelder, 1989, pp. 151).
Re-coding of the specific variables is discussed here, which includes the measurements of objective performance, export entry mode, and market knowledge. Nine of the ten control variables were also re-coded. Variables not re-coded, but used as reported by the respondents, include subjective performance, perception of export barriers, relatedness, and firm size.

5.3.1 RE-CODING OF OBJECTIVE PERFORMANCE

This research includes two measures of performance: subjective and objective. Subjective performance is measured in terms of perceived performance compared to competitors, while objective (export) performance is measured in terms of export shares. A firm’s export share is measured in percent (ratio scale) as reported by the respondents (See survey question Q11 in Appendix D). Of the 89 exporters (not including the sporadic exporters or those firms equally involved in direct and indirect export) the average export share is 34 percent.

By visually inspecting the frequency plot, see Figure 8, it becomes clear that the distribution of the variable does not follow a normal distribution and that there is a large variation in the variable. In an attempt to neutralize this variation, the decision was made to use the logarithmic version of the variable. For the distribution of the logarithmic version of the variable \( LG10Q11 \), see Figure 9.

![Figure 8: Frequency report (histogram) and normal curve for the objective performance variable export shares (Q11). Mean=33.78, Standard deviation=26.5, N=89](image)
5.3.2  RE-CODING OF ENTRY MODE

Determining the firms’ entry modes or export involvement can be described as a two-step process. First it was assessed whether or not a firm was involved in export. Thereafter, firms involved in export were further categorized into those mainly involved in direct export or indirect export.

A binary variable named Dummyexport was created (1=currently exporting, 0=not exporting). This type of dummy variable re-coding is called indicator coding (Hair et al., 1998) as compared to effects coding. Effects coding is not used in this research and therefore not further discussed. The re-coding resulted in 38 of the 139 respondents categorized as non-exporters, while the remaining 101 respondents were coded as exporters.

Among the 101 exporting firms, four indicated that they were only involved in sporadic export. The decision was made to exclude these firms from the exporters on the premise that sporadic exporters can be assumed to lack active strategic decision-making as related to export involvement. Thus, sporadic export involvement is believed to be random and not something the firm is committed to. This decision is further supported by existing research claiming that sporadic, or marginal, exporters are not much different from non-exporters (Sharkey et al., 1989). Excluding the firms involved in only sporadic export also allowed grouping the exporters into being involved mainly in direct or indirect export. For more details on the four sporadic exporters, see Appendix F.
The remaining exporters were thereafter divided into two groups based on their export involvement. This division depended on how each firm had indicated the use of a variety of different indirect and direct sales channels (see survey question Q13 in Appendix D). The result was a classification of direct and indirect exporters\textsuperscript{109}. Eight of the firms involved in export were involved equally in indirect and direct export entry modes. These firms were separated from the other exporting firms and presented and discussed in more detail in Appendix G.

In order to learn more about the differences and similarities between the two main types of exporters, a dummy variable was created called Dummydirect (1=the firm is foremost involved in direct export, 0=the firms is foremost involved in indirect export). Of the 89 exporters remaining on the list, 20 were found to be involved primarily in indirect export; 65 in direct export, while four could not be classified.

5.3.3 RE-CODING OF MARKET KNOWLEDGE VARIABLES

Market knowledge was measured in terms of customer certainty and competitor certainty. The two customer certainty items (see survey question Q16 in Appendix D) were not re-coded, but used as entered by the respondents. The reason was that it was believed to be of interest to be able to distinguish between the firms’ knowledge when it comes to current and potential customers abroad. In addition, neither the correlation matrix nor the factor analysis (not included) mandate combining the two variables into one representative variable.

The concept of competitor certainty was measured by five variables using the six-grade Likert scale (see survey question Q18 in Appendix D). Because the multicollinearity between these five variables was high, see correlation matrix Table 5, factor analysis was conducted.

Table 5: Correlation matrix for the five variables measuring market knowledge in terms of stated knowledge about competitors in main export market.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q18_1: Competitors’ product scope</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q18_2: Competitors’ customer segment</td>
<td>0.833**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q18_3: Competitors’ level of customization</td>
<td>0.657** &amp; 0.752**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q18_4: Competitors’ pricing</td>
<td>0.744** &amp; 0.789**</td>
<td>0.738**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q18_5: Competitors’ profiling of brand</td>
<td>0.796** &amp; 0.747**</td>
<td>0.669**</td>
<td>0.793**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(N = 85, *p < 0.05; **p < 0.01\) (2-tailed)

\textsuperscript{109} The reason for using the broad division of exporters applied here refers to the limited number of cases. A higher number of cases, and research of a confirmatory nature, both would allow for a more specific grouping approach.
The KMO measure was 0.869 and the significance less than 0.001. Thus, significant correlation can be assumed and completion of factor analysis should be valuable. The principal component analysis (PCA) technique was used suggesting a one component solution, see Table 6. This solution explains more than 80 percent of the total variance.

Table 6: The total variance explained for the variables measuring market knowledge in terms of stated knowledge about competitors in main export market. Extraction method: Principal Component Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of variance</td>
</tr>
<tr>
<td>1</td>
<td>4.008</td>
<td>80.156</td>
</tr>
<tr>
<td>2</td>
<td>0.379</td>
<td>7.577</td>
</tr>
<tr>
<td>3</td>
<td>0.277</td>
<td>5.544</td>
</tr>
<tr>
<td>4</td>
<td>0.202</td>
<td>4.039</td>
</tr>
<tr>
<td>5</td>
<td>0.134</td>
<td>2.684</td>
</tr>
</tbody>
</table>

Each variable’s loading in the component is shown in the component matrix, see Table 7.

Table 7: Factor analysis structure in terms of the component matrix showing each variable’s loading in the component. Extraction Method: Principal Component Analysis.

<table>
<thead>
<tr>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q18_1</td>
</tr>
<tr>
<td>Q18_2</td>
</tr>
<tr>
<td>Q18_3</td>
</tr>
<tr>
<td>Q18_4</td>
</tr>
<tr>
<td>Q18_5</td>
</tr>
</tbody>
</table>

The results of the factor analysis indicate that it should be beneficial to construct a new variable out of the five original variables. Consequently a variable named \( \text{IndexCompknowdiv} \) was created to be used instead of the five individual variables in the hypotheses testing. Cronbach’s alpha was 0.938 for the five items indicating a high level of reliability. The new variable was created as an index, meaning that the scores of the five variables were summarized and thereafter divided by five.
5.3.4 RE-CODING OF CONTROL VARIABLES

5.3.4.1 FIRM AGE
The age of each company was calculated using information of what year each firm was founded (see survey question Q3 in Appendix D). The age of the 139 responding firms ranged from zero to 150 years, with an average age of nearly 41 years. Striving towards reducing empty cells, it was clear that the company age variable needed to be re-coded into valuable categories. Reviewing the history of the Swedish furniture industry it became clear that the end of the Second World War became a turning point for the industry. Further, the millennium can be viewed as a new business era offering sophisticated technical solutions and alternative marketing and sales possibilities. Also, in 2000 the export of furniture and furniture parts from Sweden entered a plateau of unchanged volume that was to be maintained for four years. Accordingly, the decision was made to divide the firms into three company age groups: 1= New companies, those founded in 2000 or later; 2= Middle-aged companies, those founded between 1946 to 1999. Finally, 3= Older firms founded in 1945 or earlier. The variable was labelled Q3recoded. 12 percent of the respondents were coded as new firms, 65 percent as middle-aged, and 23 percent as older firms.

5.3.4.2 OWNERSHIP STRUCTURE
By definition a firm must meet certain size and independency criteria to be called an SME. In this research the size of a firm, as determined by number of employees, has been strictly obeyed. Level of independency, as measured in terms of ownership structure, is however incorporated as a control variable. This seems to be the common practice within SME-focused research such as discussed in section 2.2.

A dummy variable named Dummyautonomous was created where 1=independently owned; 0=firms that are 25-100 percent by someone else. The majority of the firms, or 60 percent, were independently owned.

5.3.4.3 MAIN PRODUCT FOCUS
The main product focus of the firms was determined along the dimension of producing furniture primarily for private homes or for public environments (see survey question Q2_4 and Q2_5 in Appendix D). This information was thereafter coupled with the information collected from the companies’ home pages. For many of the firms it was difficult to determine whether they were producing foremost furniture for public spaces or for home use.

As a result, three categories, of almost equal size, were created (represented by two polychotomous dummy variables): 49 firms (or 36 percent) were found to be primarily involved in production of office furniture and furniture for public spaces. These firms were coded into Dummyoffice (1=main product focus is office furniture, 0=main product focus is not office furniture).
40 firms (or 29 percent) were equally involved in the home and public end of the business and were coded into Dummyequalofficehome (1=equally involved in production of home and office furniture, 0=not equally involved in production of home and office furniture). The third category was the producers of primarily furniture for the home (due to redundancy a third dummy variable was not created for these firms). 38 of the respondents were primarily involved in production of furniture for the home environment. For the remaining firms it was not possible to determine any product focus due to missing data or lack of information on home page.

5.3.4.4 ATTITUDE TOWARDS EXPORT

In this research, two items measured attitudes towards export (current and future perceived importance of export) on a six-grade ordinal scale (see survey questions Q7_1 and Q7_3 in Appendix D). A correlation of 0.595 (significant at the 0.01 level) indicates that it might be beneficial to create a new variable representing both Q7_1 and Q7_3. Consequently a principal component analysis was completed revealing that a one component solution explains 80 percent of the total variance. Each of the variables (Q7_1 and Q7_3) loaded 0.893 in the component matrix and Cronbach’s alpha was 0.738. Thus it seems appropriate to create one new variable that will represent the two original variables. By summarizing the scores of the two items and thereafter dividing by two, an index (IndexExpatt2div) was created measuring attitudes toward export (mean=4.15, standard deviation=1.502, N=89). A high index rating indicates that the respondents view export to be important today as well as for the future, or in other words, that the respondents have a positive attitude towards export.

5.3.4.5 NUMBER OF YEARS EXPORTING

The number of years that a firm has been involved in export (YrsExp) was calculated from survey question Q10 (time of first export order). On average, the firms had been involved in export for 24 years. The frequencies of the variable YrsExp is shown in Figure 10. The distribution is skewed in the figure due to the fact that a large number of respondents have only a few years’ export experience, while firms with many years of experience are spread out forming a tail to the right in the figure.
Figure 10: Frequency report for the variable measuring number of years exporting (YrsExp). On average the firms had been involved in export for almost 24 years. $N = 80$. Mean=23.6, Standard deviation=17.998, $N=80$

The logarithmic version labelled $Lg10YrsExp$ of the variable was therefore calculated, for the distribution, see Figure 11. Since the distribution of the logarithmic version of the variable appears less skewed than the distribution of the original variable, the decision was made to use the logarithmic version of the variable as a control variable.
5.3.4.6 NUMBER OF MARKETS ENTERED

How many countries a firm exports to was measured by survey question Q14. In Figure 12 the frequency report and normal distribution curve is shown for this variable.

Figure 12: Frequency report for the variable measuring number of markets entered (Q14). N = 76, Mean=7.75, Standard deviation=7.66
As shown in Figure 12, the variable measuring the number of markets entered does not have a curve that is symmetrical around the mean value. An attempt was therefore made to learn how the distribution of the variable improved if the variable was transformed to the logarithmic version. The result of this approach is seen in Figure 13. Since the logarithmic version of the variable measuring the number of markets entered (LG10Q14) has an improved distribution compared to the original version of the variable, the decision was made to use this re-coded version in the hypotheses testing.

Figure 13: Frequency report for the logarithmic version of the variable measuring number of markets entered (LG10Q14). N = 76, Mean=0.72, Standard deviation=0.384

5.3.4.7 HIGHEST EDUCATIONAL BACKGROUND
On the individual level, the highest educational level of the owner or key decision-maker was controlled for. A dummy variable was created and called Dummyuniversity (1=university studies or university degrees; 0=no university studies). 74 of the 134 valid responses (54 percent) had no university studies while 60 had.

5.3.4.8 THE OWNER'S AGE
The age of the owner or key decision-maker was also included as a possible control variable, again using a dummy variable, Dummyownerage (1=older; 1=younger). The decision was made to use the mean value of the data as the dividing point for older and younger. This resulted in three dividing points: considering all respondents, the average age was 48.79 years, resulting in that the younger category included those of 48 years of age or younger. For the exporters younger owners/ key decision-makers were 47 years and younger.
Finally, for the non-exporters the average age was 50.45 years, resulting in that to be classified as younger one should be 50 years or younger. Overall, the youngest of the owners/ key decision-makers were 20 years old and the oldest 75 years old.

## 5.4 HYPOTHESES TESTING AND RESULTS

The survey analysis and hypotheses testing was conducted in line with the overall research question and corresponding subordinate questions. The subordinate questions directly guided the analysis. For a visualization of the connections between research question and analytical approach, see Figure 14.

### Overall Research Question:

What factors determine internationalization and performance among small and medium sized enterprises?

### Subordinate questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Analytical approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What factors determine whether small and medium-sized enterprises are involved in export or not?</td>
<td>5.4.1. Determining differences between exporters and non-exporters. Overview and ranking of barriers as perceived by the exporters and non-exporters. Determination of why some firms’ export why others do not. Analysis method: Binary logistic regression. Dependent variable: Dummyexporter (1=exporter, 0=non-exporter).</td>
</tr>
<tr>
<td>2. What factors determine main export mode among (exporting) small and medium-sized enterprises?</td>
<td>5.4.2. Determining differences between firms involved in primarily indirect or direct export. 5.4.2.1 Binary logistic regression (Dummydirect: 1= direct export; 0= indirect export)</td>
</tr>
<tr>
<td>3. What factors determine performance among small and medium-sized enterprises?</td>
<td>5.4.3. Determination of the exporting firms’ performance. 5.4.3.1 Multiple Linear Regression (Objective performance: LG10Q11) 5.4.3.2 Ordinal Regression (Subjective performance: Q6)</td>
</tr>
</tbody>
</table>

*Figure 14: Connections between the overall research question, the subordinate questions, the analytical approach and the chapter structure.*

Common for the different hypotheses-testing approaches, was that the control variables included in the various models were selected from the theoretically motivated list of ten possible control variables. Based on the dependent variable, the urgency of including a particular control variable varied. As a result, different control variables were included in different models. Thus, control variables included as explanatory in a model are understood to be important when it comes to illuminating the variations of a particular dependent variable.

A summary of rejected and accepted hypotheses is available in 5.5. Correlation matrices for the independent variables are found in Appendix E. For the investigation of which factors determine (subjective) performance among non-exporting firms, see Appendix H. The importance of determining what explains performance among the non-exporters is based on the overall re-
search question. However, since it is not a central considering within the re-
search model used and hypotheses formulated, the decision was made to in-
clude this investigation as an appendix.

In accordance with conventional social science research, the hypotheses
testing models have to be significant on at least the five percent level ($\alpha=0.05$)
(Miethe and Gauthier, 2008). If accepting a hypothesis on the ten percent
significance level, the risk of committing a Type 1 error\textsuperscript{110} is amplified (Ibid.).
Using the ten percent significance level as a cut-off level is often motivated by
the nature of the research being holistic and explorative (Kessler, 2007), which
is not the case here. Note: while hypotheses accepted on the ten percent level
are presented, they are not considered to be of importance for the main results
of this research.

5.4.1 EXPORTERS AND NON-EXPORTERS

5.4.1.1 OVERVIEW OF THE EXPORTERS AND NON-
EXPORTERS

A main focus of this research, as defined by the research question, is to inves-
tigate which factors determine the internationalization of small and medium-
sized companies. Consequently, and on the most basic level, it is of interest to
learn if there are any differences between exporters and non-exporters, consid-
ering foremost their perception of barriers and performance. For a summary
of how the exporters and non-exporters differ from each other, considering
the control variables and performance measures, see Appendix I.

Perception of barriers differs between the exporters and non-exporters\textsuperscript{111}. This is obvious when looking at the average scores\textsuperscript{112} of two categories, and
the ranking of each of the barriers. In Table 8 the average scores and ranking
order for each of the barriers as perceived by the exporters and non-exporters
are listed. Note: The barrier that is ranked as number 14 is the most impor-
tant barrier, while the barrier ranked as number one is the least important.
The table should be understood in the following way: the higher the average
score the stronger (negative) impact the barrier is perceived to have on the
companies’ export involvement.

\textsuperscript{110} A Type 1 error occurs when a true null hypothesis is rejected (Miethe and Gauthier, 2008).
\textsuperscript{111} Grouped with the non-exporter were also the firms that had answered that they were only in-
volved in sporadic export.
\textsuperscript{112} The average score was calculated by first summing up all scores for each barrier variable and there-
after dividing the score by number of cases.
Table 8: The average scores and ranking order listed for each barrier as perceived by the exporters and non-exporters.

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Exporters</th>
<th></th>
<th>Non-exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ranking</td>
<td>Average</td>
<td>Ranking</td>
</tr>
<tr>
<td>Export does not fit the company’s line of business (Q7_5)</td>
<td>1</td>
<td>1.55</td>
<td>6</td>
</tr>
<tr>
<td>Current export barriers are too high (Q7_6)</td>
<td>2</td>
<td>1.84</td>
<td>1</td>
</tr>
<tr>
<td>Export is too risky (Q7_4)</td>
<td>3</td>
<td>1.91</td>
<td>2</td>
</tr>
<tr>
<td>Tariffs (trade impediments) (Q8_3)</td>
<td>4</td>
<td>2.59</td>
<td>3</td>
</tr>
<tr>
<td>Governmental export assistance is insufficient (Q8_11)</td>
<td>5</td>
<td>2.94</td>
<td>4</td>
</tr>
<tr>
<td>Cultural differences between different countries (Q8_4)</td>
<td>6</td>
<td>2.95</td>
<td>5</td>
</tr>
<tr>
<td>Geographic distance to foreign markets cause long lead times (Q8_5)</td>
<td>7</td>
<td>3.07</td>
<td>9</td>
</tr>
<tr>
<td>Export is time consuming (Q8_6)</td>
<td>8</td>
<td>3.20</td>
<td>8</td>
</tr>
<tr>
<td>Export lead to high demand for product adoption (Q8_2)</td>
<td>9</td>
<td>3.32</td>
<td>7</td>
</tr>
<tr>
<td>Export increase demand for access to economic resources (Q8_1)</td>
<td>10</td>
<td>3.62</td>
<td>12</td>
</tr>
<tr>
<td>Export lead to increased amount of documentation and paperwork (Q8_8)</td>
<td>11</td>
<td>3.66</td>
<td>13</td>
</tr>
<tr>
<td>Delayed payments from overseas customers (Q8_10)</td>
<td>12</td>
<td>3.97</td>
<td>11</td>
</tr>
<tr>
<td>Difficulties in finding an overseas partner (Q8_9)</td>
<td>13</td>
<td>4.13</td>
<td>14</td>
</tr>
<tr>
<td>Export lead to increased demand for language skills (Q8_7)</td>
<td>14</td>
<td>4.21</td>
<td>10</td>
</tr>
</tbody>
</table>

A comparison of the two tables of the exporters’ and non-exporters’ average ratings of the barriers reveal several patterns:

- Four barriers are rated the same or almost the same by both exporters and non-exporters. Three of these barriers are external barriers (Q8_3: tariffs act as an export barrier; Q8_4: cultural differences between countries cause export problems; Q8_11: lack of government assistance) and one originates within the key decision-maker (Q8_6: managing export is time-consuming).
- The biggest discrepancies between how the exporters and non-exporters rate the barriers are seen for one psychological barrier (Q7_5: export does not fit the type of business) and one operational barrier (Q8_7: export cause increased need for language skills). The non-exporters rate the psychological barriers much higher than the exporters, while the exporters rate the operational barrier much higher than the non-exporting firms.
- The lowest and highest average scores among the non-exporters versus the exporters are 2.19 and 3.95 versus 1.84 and 4.21. Thus, exporters use the extreme values of “no importance” and “very high importance” more often than do the non-exporters.
- The three highest rated barriers among the exporters originate within the internal organization and the external environment. For the non-exporters the top three barriers all originate within the internal organization.
- For the exporters, the three least important barriers are all of the three psychological barriers included in this study. Thus, it seems as they have come past mere basic obstacles to export. For the non-exporters two of the psychological barriers are amongst the bottom-three on the list. The third barrier is externally based.
5.4.1.2 DETERMINING DIFFERENCES BETWEEN EXPORTERS AND NON-EXPORTERS

How the perception of barriers explains whether or not a firm is exporting is tested by hypotheses H8a, b, and c. A dummy variable was used as the dependent variable (Dummyexport), where “1” represented the exporters and “0” the non-exporters. With a dichotomous dependent variable, the preferred analysis method is binary logistic regression. Models created through logistic regression are here understood in accordance to Pampel’s (2000) recommendations in the following way: If the independent variable has a positive coefficient it benefits a firm’s decision to be involved in export. On the other hand, if one of the independent variables included in the explanatory model has a negative coefficient, this variable affects the firm in favour of not becoming involved in export.

Model 5 in Table 9 has a high overall explanatory power of 49 percent and with a model Chi² value of 52.630 (six degrees of freedom, \( p < 0.001 \)). Thus the independent variables seem to discriminate well between exporters and non-exporters. In addition, the model fit can be described as good, since close to 83 percent of the control mode choices are classified correctly. This represents an improvement of eleven percent fewer errors (The beginning block, not listed here, predicted 72 percent correctly).

Table 9: The testing of the hypotheses aimed at finding what determines export involvement among exporters and non-exporters. The analysis method used is binary logistic regression. The dependent variable is Dummyexport (1=export, 0=no export). All respondents were considered.

<table>
<thead>
<tr>
<th>Exp. Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.360</td>
<td>0.851</td>
<td>-0.757</td>
<td>-0.566</td>
<td>0.042</td>
</tr>
<tr>
<td></td>
<td>(0.945)</td>
<td>(1.162)</td>
<td>(1.203)</td>
<td>(1.178)</td>
<td>(1.421)</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm age (Q3recoded)</td>
<td>0.845**</td>
<td>0.825*</td>
<td>0.848*</td>
<td>0.744*</td>
<td>0.676</td>
</tr>
<tr>
<td></td>
<td>(0.424)</td>
<td>(0.430)</td>
<td>(0.433)</td>
<td>(0.440)</td>
<td>(0.461)</td>
</tr>
<tr>
<td>Attitude towards export (IndexExpatt2div)</td>
<td>0.793****</td>
<td>0.642***</td>
<td>0.826****</td>
<td>0.853****</td>
<td>0.652***</td>
</tr>
<tr>
<td></td>
<td>(0.165)</td>
<td>(0.192)</td>
<td>(0.174)</td>
<td>(0.179)</td>
<td>(0.197)</td>
</tr>
<tr>
<td>Highest educational level (Dummyuniversity)</td>
<td>1.088**</td>
<td>1.251**</td>
<td>1.118**</td>
<td>1.231**</td>
<td>1.363**</td>
</tr>
<tr>
<td></td>
<td>(0.499)</td>
<td>(0.537)</td>
<td>(0.506)</td>
<td>(0.529)</td>
<td>(0.577)</td>
</tr>
<tr>
<td>Export barriers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H8a: Export does not fit the company’s line of business (Q7_5)</td>
<td></td>
<td>-0.405**</td>
<td>-0.467**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.193)</td>
<td>(0.209)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H8b: Difficulties in finding a preferred overseas partner (Q8_9)</td>
<td></td>
<td>0.065</td>
<td>0.234</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.166)</td>
<td>(0.194)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H8c: Tariffs act as export barrier (Q8_3)</td>
<td></td>
<td>-0.068</td>
<td>-0.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.174)</td>
<td>(0.199)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of (valid) cases incl. in analysis</td>
<td>133</td>
<td>131</td>
<td>129</td>
<td>128</td>
<td>127</td>
</tr>
<tr>
<td>^2 log likelihood</td>
<td>111.574</td>
<td>103.014</td>
<td>106.591</td>
<td>103.147</td>
<td>96.910</td>
</tr>
<tr>
<td>Chi-square</td>
<td>47.566****</td>
<td>54.767****</td>
<td>46.163****</td>
<td>47.035****</td>
<td>52.630****</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Nagelkerke’s (Pseudo) R2</td>
<td>0.431</td>
<td>0.488</td>
<td>0.433</td>
<td>0.445</td>
<td>0.490</td>
</tr>
<tr>
<td>Correct classification (%)</td>
<td>83.5</td>
<td>81.7</td>
<td>84.5</td>
<td>84.4</td>
<td>82.7</td>
</tr>
</tbody>
</table>

*p<0.10; **p<0.05; ***p<0.01; ****p<0.001, N = 136

S.E. (standard variation) is presented within parenthesis immediately below the beta values for each of the independent variables.
Hypothesis H8a states that barriers originating with the owner or key decision-maker of the firm, here exemplified by the psychological barrier of “export being perceived not to fit the company’s line of business”, have a negative effect on export involvement. This hypothesis is accepted on the five percent significant level.

Hypothesis H8b claims that internally found barriers, measured in terms of “difficulties in finding an overseas business partner”, have a negative effect on export involvement. This hypothesis is rejected. Also rejected is hypothesis H8c; in H8c it is argued that hindrances found in the firms’ external environment prevent export. The externally bound barrier used to test hypothesis H8c was “tariffs act as an export barrier”. Three control variables appeared to be of importance when attempting to explain why some firms are involved in export while others are not. These variables are the age of the company, attitude towards export, and the owner/key decision-maker’s highest educational background. Considering Model 1 which includes only control variables, the three control variables manage to explain approximately 43 percent of the variation. Model 1 is significant on the highest ($p < 0.001$) level. Each of important control variables are now discussed in order of importance (significance of regression coefficient).

There is a positive and very strong relationship between having a positive attitude towards export and actually being involved in export. The attitude towards export and export involvement relationship is visualized in the crossstabs bar chart in Figure 15.

![Crossstabs bar chart](image)

**Figure 15:** Relationship between firms’ attitude towards export and their involvement in export. $N = 135$. Pearson’s Chi-Square value=62.867, $p$ (Asymp. Sig 2-sided) $< 0.001$. 

\[127\]
Close to 55 percent of the exporters rate 4.5 or higher on the six grade scale measuring attitude towards export. The corresponding number for the non-exporters is less than 16 percent. Considering the other end of the spectrum, 71 percent of the non-exporting firms and nine percent of the exporters rate 2.0 or lower. This indicates that a majority of the exporters understand export to be highly important to them considering both their current and future business, while there seems to be a strong majority of the non-exporters that do not perceive export to be of important to them.

The owner/key decision-maker’s highest educational background has a positive effect on the firms’ export status. In fact, the odds of a firm’s involvement in export increases almost threefold if the owner/key decision-maker has studied at a university compared to if he or she has not studied at a university.

It appears that the age of a firm has a positive influence on whether a firm is involved in export or not. Thus, older firms seem to a higher degree to be involved in export when compared to more recently established firms. More precisely, more than 87 percent of the older firms (those established prior to 1946) were involved in export. The same number for the medium old firms (those established between 1946 and 1999) is 68 percent. Finally, among the youngest firms (those established 2000 or later), 62 percent were involved in export.

5.4.2 EXPORT MODE PREFERENCE AMONG EXPORTERS

Among the exporters, eight firms were equally involved in direct and indirect export. These firms are presented separately, see Appendix G. The remaining 89 exporters (sporadic exporters excluded, for discussion see Appendix E) were included in the testing of the hypotheses aimed at determining why some exporters are primarily involved in indirect export while others are primarily involved in direct export.

In accordance with the second sub-question, it is of interest to determine what factors explain the exporting firms’ main type of export involvement. Two hypotheses (H1a and H1b) tested the effect barriers may have on the exporters’ type of involvement; three hypotheses (H4a, H4b, and H4c) the effect of business relatedness; and two hypotheses (H5a and H5b) the effect of market knowledge. The dependent variable was Dummydirect (1=currently exporting, 0=not exporting) and analysis method binary logistic regression, see Table 10.

Model 9 in Table 10, manages to explain close to 64 percent of the total variance in the dependent variable. The Chi² value of Model 9 is 34.9 ($p < 0.001$) with 12 degrees of freedom. The model fit should be considered good.

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113 As discussed in the methodological chapter binary logistic regression, estimates of the odds ratio for dichotomous independent variables are obtained by exponentiating the coefficients. In this case, the odds ratio $= e^{1.088} = 2.968$. 

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due to the finding that there is a 93 percent correct classification, an improvement of twelve percent compared to the beginning block model.

Five of the seven hypotheses are accepted or partly accepted (if considering hypotheses that are accepted on the ten percent level). The rejected hypotheses are H1a and H4a.

Table 10: Hypotheses testing of what determines a firm’s level of export involvement among exporters. Nine models were built in the process of testing the seven hypotheses put forward in an attempt to learn if barriers, relatedness, and market knowledge can explain a firm’s involvement in indirect or direct export. Analysis method: Binary logistic regression. Dependent variable: Dummydirect. Only exporters were considered.

<table>
<thead>
<tr>
<th></th>
<th>Exp. sign</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
<th>All</th>
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<tbody>
<tr>
<td>Intercept</td>
<td>-1.735</td>
<td>-1.603</td>
<td>-0.553</td>
<td>-1.648</td>
<td>-0.963</td>
<td>0.477</td>
<td>-3.103</td>
<td>-6.195*</td>
<td>-10.738*</td>
<td>-10.738*</td>
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</tr>
<tr>
<td></td>
<td>(1.608)</td>
<td>(1.906)</td>
<td>(1.904)</td>
<td>(2.169)</td>
<td>(1.901)</td>
<td>(2.013)</td>
<td>(2.257)</td>
<td>(2.754)</td>
<td>(5.728)</td>
<td>(5.728)</td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership structure (Dummymultinational)</td>
<td>0.745</td>
<td>0.046</td>
<td>0.716</td>
<td>0.074</td>
<td>0.562</td>
<td>0.931</td>
<td>1.091</td>
<td>1.367*</td>
<td>1.013</td>
<td>(0.651)</td>
<td>(0.669)</td>
</tr>
<tr>
<td>Attitude towards export (IndexExport2div)</td>
<td>0.060**</td>
<td>0.710**</td>
<td>0.567**</td>
<td>0.542**</td>
<td>0.524*</td>
<td>0.565**</td>
<td>0.501*</td>
<td>0.806**</td>
<td>1.094*</td>
<td>(0.245)</td>
<td>(0.282)</td>
</tr>
<tr>
<td>Number of markets entered (L010140)</td>
<td>-2.494**</td>
<td>-2.589*</td>
<td>-2.276*</td>
<td>-2.441*</td>
<td>-2.290*</td>
<td>-2.150*</td>
<td>-2.441*</td>
<td>-4.314*</td>
<td>-4.867*</td>
<td>(1.232)</td>
<td>(1.338)</td>
</tr>
<tr>
<td>Firm size (Q4)</td>
<td>0.690</td>
<td>0.812</td>
<td>0.544</td>
<td>0.473</td>
<td>0.509</td>
<td>0.638</td>
<td>1.437**</td>
<td>3.650**</td>
<td>(0.577)</td>
<td>(0.572)</td>
<td>(0.596)</td>
</tr>
<tr>
<td>Export barriers</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a: Export is too risky (Q17_4)</td>
<td>-0.390</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.283)</td>
<td></td>
</tr>
<tr>
<td>H1b: Export increase demand for access to economic resources (Q8_1)</td>
<td>-0.231</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(258)</td>
<td>(-0.622)</td>
</tr>
<tr>
<td>Relatedness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4a: End customer type relatedness (Q17_4)</td>
<td>0.209</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.272)</td>
<td>1.080</td>
</tr>
<tr>
<td>H4b: Company’s general management skills relatedness (Q17_2)</td>
<td>0.109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.288)</td>
<td>1.877**</td>
</tr>
<tr>
<td>H4c: Price relatedness (Q17_1)</td>
<td>-0.354</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.283)</td>
<td>-1.987**</td>
</tr>
<tr>
<td>Market knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5a: Competitor certainty (IndexCompetition)</td>
<td>0.808**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.289)</td>
<td>0.596</td>
</tr>
<tr>
<td>H5b: Knowledge about current customers abroad (Q16_1)</td>
<td>-0.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.249)</td>
<td>-0.693</td>
</tr>
<tr>
<td>H5c: Knowledge about future potential customers abroad (Q16_2)</td>
<td>1.344**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.515)</td>
<td>1.377**</td>
</tr>
<tr>
<td>Number of (valid) cases included in analysis</td>
<td>76</td>
<td>73</td>
<td>75</td>
<td>74</td>
<td>74</td>
<td>74</td>
<td>73</td>
<td>73</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;-2 log likelihood&quot;</td>
<td>65.381</td>
<td>60.361</td>
<td>63.672</td>
<td>61.606</td>
<td>62.052</td>
<td>60.485</td>
<td>56.053</td>
<td>52.276</td>
<td>32.282</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nagelkerke’s R²</td>
<td>0.198</td>
<td>0.224</td>
<td>0.174</td>
<td>0.153</td>
<td>0.144</td>
<td>0.175</td>
<td>0.256</td>
<td>0.369</td>
<td>0.636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi-square</td>
<td>10.122**</td>
<td>11.004*</td>
<td>8.531</td>
<td>7.181</td>
<td>6.735</td>
<td>8.301</td>
<td>12.344**</td>
<td>19.088***</td>
<td>34.911****</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
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<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct classification (%)</td>
<td>80.3</td>
<td>80.8</td>
<td>78.7</td>
<td>85.1</td>
<td>82.4</td>
<td>82.4</td>
<td>86.3</td>
<td>89.0</td>
<td>92.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Because H1b was accepted (Note: on the ten percent level) it appears that firms that associate export with increased demand for financial resources may select a lower cost and lower control export mode such as indirect export. Since H1a was rejected we cannot draw any conclusion as to how firms that perceive export to be risky prefer an indirect or direct export mode.

Accepting H4c (on the five percent level) means acceptance of the statement that high level of price relatedness may lead to indirect export. Further, also accepted (Note: on the ten percent level) is H4b claiming that a high degree of relatedness concerning management skills in the domestic versus foreign market is positively associated with direct export. In hypothesis H4a relatedness is measured in terms of end-customer type, which was not proven to have any effect on either direct or indirect export involvement.
H5a is, on the other hand, accepted on the five percent level of significance. Thus, a high degree of market knowledge, with regards to competitor certainty, seems to be positively associated with direct export entry mode. Also positively associated with direct export is knowledge about future potential customers abroad, which was tested through hypothesis H5b (accepted on the one percent level). Hypothesis H5b is however only partly supported, since knowledge about current customers abroad was not found to explain entry mode preference.

The effect of the four control variables on the dependent variable Dummydirect is assessed in Model 1. Model 1 includes only control variables and is significant on the five percent level. The combined explanatory power of the control variables is 20 percent of the total variance. Three control variables have significant regression coefficients and are discussed below, while the ownership structure of the firm is not discussed further here.

Attitude towards export appears to have a positive effect on the firm preferring a direct export mode. In other words, a firm that indicates that export is not only currently important, but also important to the firm in the future, prefers to be involved in direct export rather than indirect export. The number of foreign markets to which the firm is exporting also seems to have an effect on the choice of export mode. This effect is negative, indicating that firms that export to a large number of markets are more likely to be involved in indirect export. In addition, the size of the firm seems to have a positive effect on the firm being primarily involved in direct export (See Model 9, Table 10). Thus, medium-sized firms should be more likely to choose a direct export mode when compared to small or micro-sized firms.

5.4.3 PERFORMANCE AMONG THE EXPORTERS
An important part of the overall research is to learn what it is that determines a firm’s performance. Since two kinds of performance measures were collected subjective (overall) performance and objective (export) performance, two parallel analyses were undertaken. Multiple linear regression was used in the analysis of the objective performance and ordinal regression was in the analysis of the subjective performance.

In total nine hypotheses were used to test the effect of various variables on firms’ performance: three hypotheses for barriers effects (H2a, H2b, and H2c); three hypotheses considering relatedness effects (H3a, H3b, H3c); two hypotheses for market knowledge effects (H6a, H6b); and finally one hypothesis (H7) considering type of export involvement (Dummydirect).

5.4.3.1 DETERMINING OBJECTIVE PERFORMANCE
Objective performance was measured in terms of export shares (LG10Q11). With the dependent variable measured on the ratio scale, the choice of analytical method was multiple linear regression.

In testing the nine hypotheses mentioned above, eleven models were built. In Model 11, see Table 11, all independent variables are included explaining
39 percent of the variance in the dependent variable objective performance. The F-value for this model is 4.064 ($p < 0.001$, 14 degrees of freedom).

Table 11: Nine hypotheses were tested to reveal what determines the exporting firms' objective performance (measured in terms of export shares). Analysis method: Linear regression.

<table>
<thead>
<tr>
<th>Exp.</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
<th>Model 10</th>
<th>Model 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.862***</td>
<td>0.8***</td>
<td>0.933***</td>
<td>0.749***</td>
<td>0.661***</td>
<td>0.699***</td>
<td>0.747***</td>
<td>0.586***</td>
<td>0.679***</td>
<td>0.568***</td>
<td>0.502*</td>
</tr>
<tr>
<td>Control</td>
<td>(0.126)</td>
<td>(0.161)</td>
<td>(0.157)</td>
<td>(0.209)</td>
<td>(0.167)</td>
<td>(0.153)</td>
<td>(0.178)</td>
<td>(0.164)</td>
<td>(0.135)</td>
<td>(0.265)</td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude towards export</td>
<td>0.108***</td>
<td>0.125***</td>
<td>0.119***</td>
<td>0.125***</td>
<td>0.116***</td>
<td>0.125***</td>
<td>0.112***</td>
<td>0.110***</td>
<td>0.128***</td>
<td>0.119***</td>
<td>0.116***</td>
</tr>
<tr>
<td>(IndexExpatt2div)</td>
<td>(0.029)</td>
<td>(0.033)</td>
<td>(0.031)</td>
<td>(0.029)</td>
<td>(0.03)</td>
<td>(0.029)</td>
<td>(0.03)</td>
<td>(0.032)</td>
<td>(0.029)</td>
<td>(0.034)</td>
<td></td>
</tr>
<tr>
<td>Number of markets entered</td>
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<td>0.112</td>
<td>0.149</td>
<td>0.082</td>
<td>0.125</td>
<td>0.138</td>
<td>0.141</td>
<td>0.146</td>
<td>0.103</td>
<td>0.087</td>
<td>0.178</td>
</tr>
<tr>
<td>(LG10Q14)</td>
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<td>(0.118)</td>
<td>(0.114)</td>
<td>(0.114)</td>
<td>(0.107)</td>
<td>(0.105)</td>
<td>(0.107)</td>
<td>(0.104)</td>
<td>(0.114)</td>
<td>(0.11)</td>
<td>(0.122)</td>
</tr>
<tr>
<td>Owner's age</td>
<td>0.105</td>
<td>0.084</td>
<td>0.104</td>
<td>0.103</td>
<td>0.126</td>
<td>0.103</td>
<td>0.117</td>
<td>0.081</td>
<td>0.076</td>
<td>0.12</td>
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</tr>
<tr>
<td>(Dummyownerage)</td>
<td>(0.076)</td>
<td>(0.079)</td>
<td>(0.077)</td>
<td>(0.078)</td>
<td>(0.074)</td>
<td>(0.074)</td>
<td>(0.074)</td>
<td>(0.075)</td>
<td>(0.079)</td>
<td>(0.075)</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Export barriers</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>H2a: Current export barriers are too high</td>
<td>+</td>
<td>-0.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>(O2_6)</td>
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<tr>
<td>H2b: Export implies strong requirement for product adaptation (Q8_2)</td>
<td>+</td>
<td>-0.040</td>
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<tr>
<td>H2c: Delay in receiving payments from customers abroad (Q8_10)</td>
<td>+</td>
<td>0.018</td>
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<tr>
<td>H2d: Cultural differences between countries cause export problems (Q8_4)</td>
<td>+</td>
<td>0.000</td>
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<tr>
<td>Relatedness</td>
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<tr>
<td>H3a: Price relatedness (Q17_1)</td>
<td>+</td>
<td>0.026</td>
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<tr>
<td>H3b: Company’s general management skills relatedness (Q17_2)</td>
<td>+</td>
<td>0.036</td>
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<tr>
<td>H3c: End customer type relatedness (Q17_4)</td>
<td>+</td>
<td>0.006</td>
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<tr>
<td>Market knowledge</td>
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<tr>
<td>H5a: Competitor certainty</td>
<td>+</td>
<td>0.062**</td>
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<td>(IndexCompknowdiv)</td>
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<td>(0.031)</td>
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<tr>
<td>H5b: Knowledge about current customers abroad (Q16_1)</td>
<td>+</td>
<td>0.039</td>
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<tr>
<td>H5c: Knowledge about future potential customers abroad (Q16_2)</td>
<td>+</td>
<td>0.000</td>
<td></td>
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<tr>
<td>Entry mode</td>
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<tr>
<td>H7: Export involvement (Dummydirect)</td>
<td>+</td>
<td>-0.214*</td>
<td>-0.216*</td>
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<td>(0.089)</td>
<td>(0.106)</td>
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<tr>
<td>R²</td>
<td>0.274</td>
<td>0.279</td>
<td>0.302</td>
<td>0.304</td>
<td>0.365</td>
<td>0.361</td>
<td>0.347</td>
<td>0.382</td>
<td>0.302</td>
<td>0.32</td>
<td>0.513</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.244</td>
<td>0.238</td>
<td>0.262</td>
<td>0.252</td>
<td>0.318</td>
<td>0.324</td>
<td>0.309</td>
<td>0.346</td>
<td>0.250</td>
<td>0.282</td>
<td>0.387</td>
</tr>
<tr>
<td>Std. Error of the Estimates</td>
<td>0.329</td>
<td>0.333</td>
<td>0.327</td>
<td>0.330</td>
<td>0.311</td>
<td>0.309</td>
<td>0.313</td>
<td>0.306</td>
<td>0.331</td>
<td>0.321</td>
<td>0.296</td>
</tr>
<tr>
<td>F-value</td>
<td>0.077***</td>
<td>0.689***</td>
<td>7.573***</td>
<td>5.862***</td>
<td>9.499***</td>
<td>9.743***</td>
<td>1.148***</td>
<td>10.530***</td>
<td>5.788***</td>
<td>8.362***</td>
<td>4.064***</td>
</tr>
</tbody>
</table>

p<0.10; **p<0.05; ***p<0.01; ****p<0.001, N=89
S.E. (standard error) is presented within parenthesis for each of the independent variables.

Of the four hypotheses testing the effect that perception of barriers have on a firm’s export performance, only hypothesis H2b was accepted. However, this hypothesis was only accepted on the ten percent level of significance. Thus, it is not possible to claim that barriers originating within the key decision-maker of the firm, the internal organization, or the external environment, have any negative effects on, and thereby help to determine, objective performance.

Further, neither is much gained from testing the effect different types of relatedness have on objective performance. Once again only one of the tested hypotheses (H3b) was found to be significant (on the ten percent level). Thus, relatedness measured in terms of pricing, general management skills, and end-customer types, does not appear to have any (positive) effect on a firm’s export performance.

One of the two hypotheses testing the affect of market knowledge on performance was accepted on the five percent significance level. More exactly, it seems that with increased knowledge of one competitor in the main export...
market (H6a), higher export performance results. Through hypothesis H6b, tests of whether potential and current customer certainties have positive effects on performance were made. This hypothesis was rejected.

The final hypothesis (H7), put forward to reveal what factors explain company export performance, states that direct export is positively associated with performance. This hypothesis was rejected on the premise that the hypothesis was formulated in terms of a positive association, while the test revealed a negative association between direct export and objective performance. Thus, there is a positive association between indirect export and objective performance.

The following three control variables were included as independent variables explaining objective performance: the attitude towards export, the number of markets entered, and the age of the owner/key decision-maker. Model 1 (Table 11) reveals that the control variables alone explain 24 percent of the variance in the dependent variable. Of the three control variables, only attitude towards export was found significant (on the highest level of significance, \( p < 0.001 \)). Thus, there is a strong, positive relationship between how important the firm understands export to be, currently as well as for the future, and the firm’s performance. For example, none of the firms with 75 percent or higher export shares had an attitude towards export of less than 4.5 on the six-grade scale. Among firms with export shares ranging between one and 24 percent, only 32 percent had an attitude towards export of 4.5 or higher.

5.4.3.2 DETERMINING SUBJECTIVE PERFORMANCE

The subjective performance measure reflects how the respondents viewed their performances compared to their competitors. Since subjective performance is measured on a six-grade ordinal scale, ordinal regression analysis is the preferred choice of method when subjective performance is the dependent variable. For a summary of the result of the ordinal regression, see Table 12.

In Model 11 (Table 12) the effects of all the independent variables on the dependent variable are considered simultaneously. Taken together, the independent variables manage to explain 35 percent of the variance, the Chi\(^2\) value is 27.723 (\( p < 0.05 \)) and 14 degrees of freedom.

Four of the nine hypotheses are supported or partly supported. H3c claims that high relatedness with regards to end-customer types may be associated with high performance. This statement is accepted at the five percent significance level (Model 7).

Also accepted on the five percent level is hypothesis H6a (Model 8). H6a states that high degree of market experience, measured in terms of stated knowledge about foreign competitors, might affect a firm’s performance positively. When a firm’s level of competitor certainty improves, its subjective performance improves too.

H6b is partly supported (Model 9). High degree of market experience, measured in terms of stated knowledge about potential customers abroad, is found likely to affect the firm’s performance positively. This part of the hypothesis is accepted at the one percent level. However, the part of the hy-
hypothesis stating that a high degree of knowledge about current customers affects performance positively is rejected. Table 12: Nine hypotheses were tested to reveal what determines the exporting firms’ subjective performance. Analysis method: Ordinal regression.

<table>
<thead>
<tr>
<th>Exp.</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
<th>Model 10</th>
<th>Model 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept 3</td>
<td>-0.995</td>
<td>-0.817</td>
<td>-1.197</td>
<td>-2.048</td>
<td>-1.108</td>
<td>-0.687</td>
<td>-0.681</td>
<td>-0.558</td>
<td>0.512</td>
<td>-1.331</td>
<td>0.960</td>
</tr>
<tr>
<td>Intercept 4</td>
<td>-0.295</td>
<td>-0.061</td>
<td>-1.003</td>
<td>-0.13</td>
<td>-0.404</td>
<td>0.041</td>
<td>0.032</td>
<td>0.176</td>
<td>1.380</td>
<td>-0.618</td>
<td>1.606</td>
</tr>
<tr>
<td>Intercept 5</td>
<td>0.376</td>
<td>0.645</td>
<td>-0.325</td>
<td>-0.641</td>
<td>0.272</td>
<td>0.718</td>
<td>0.716</td>
<td>0.870</td>
<td>2.131*</td>
<td>0.058</td>
<td>2.415</td>
</tr>
</tbody>
</table>

Control variables
- Firm age (Q3recoded)
  - 0.942*** | 0.975** | 0.940** | 0.972** | 0.916** | 0.911** | 0.972*** | 0.999*** | 0.960** | 0.881** | 0.988** |
  - (0.362) | (0.378) | (0.363) | (0.378) | (0.362) | (0.366) | (0.372) | (0.379) | (0.363) | (0.407) |
- Number of markets entered
  - 0.766 | 1.037 | 1.056 | 0.857 | 0.866 | 0.827 | 0.895 | 0.540 | 0.929 | 1.226 |
  - (0.622) | (0.665) | (0.639) | (0.647) | (0.638) | (0.629) | (0.637) | (0.635) | (0.641) | (0.776) |
- Attitude towards export
  - -0.113 | -0.126 | -0.213 | -0.260 | -0.210 | -0.258 | -0.227 | -0.396** | -0.380** | -0.202 | -0.452** |
  - (IndexExpatt2div) | (0.157) | (0.174) | (0.166) | (0.167) | (0.174) | (0.168) | (0.182) | (0.177) | (0.165) | (0.219) |
- Export barriers
  - H2a: Export barriers are too high
    - Q27_6
      - 0.305
      - (0.194) |
  - H2b: Export implies strong requirements for product adaptation (Q6_2)
    - -0.454
    - (0.203) |
  - H2c: Delay in receiving payments from customers abroad (Q8_10)
    - -0.099
    - (0.165) |
  - H2d: Cultural differences between countries cause export problems (Q8_4)
    - -0.031
    - (0.164) |
  - Relatedness
    - H3a: Price relatedness (Q17_1)
      - * 0.116
      - (0.136) |
    - H3b: Company’s general management skills relatedness (Q17_2)
      - * 0.201
      - (0.173) |
    - H3c: End customer type relatedness (Q17_4)
      - * 0.282**
      - (0.139) |
  - Market knowledge
    - H5a: Competitor certainty
      - (IndexCompknowdiv)
      - 0.438**
      - (0.189) |
    - H5b: Knowledge about current customers abroad (Q16_1)
      - 0.263
      - (0.179) |
    - H5c: Knowledge about future potential customers abroad (Q16_2)
      - 0.758***
      - (0.241) |
  - Entry mode
    - H7: Export involvement (Dummydirect)
      - * 1.192**
      - (0.580) |
  - Number of (valid) cases incl. in analysis
    - 228.908
    - 223.021
    - 232.919
    - 228.537
    - 231.983
    - 232.123
    - 232.381
    - 225.605
    - 213.109
    - 227.478
    - 202.687 |
  - Chi-square
    - 8.18**
    - 9.530**
    - 9.450**
    - 10.370**
    - 9.020**
    - 10.249**
    - 9.988**
    - 14.539***
    - 26.137***
    - 12.400**
    - 27.723** |
  - Degrees of freedom
    - 3
    - 4
    - 5
    - 4
    - 4
    - 5
    - 4
    - 5
    - 4
    - 14 |
  - Nagelkerke’s (Pseudo) R²
    - 0.110
    - 0.130
    - 0.127
    - 0.142
    - 0.122
    - 0.137
    - 0.134
    - 0.191
    - 0.322
    - 0.162
    - 0.350 |

*p<0.10; **p<0.05; ***p<0.01; ****p<0.001, N = 89
S.E. (standard variation) is presented within parenthesis immediately below the beta values for each of the independent variables. Intercept 1 indicate the logit for Q6 level 5 and 6; Intercept 2 for level 4, 5, and 6; Intercept 3 for level 3, 4, 5 and 6; Intercept 4 for level 2, 3, 4, 5 and 6; Intercept 5 for level 1, 2, 3, 4, 5 and 6.

Finally, it is also accepted (on the five percent significance level) that direct export may have positive effects on overall performance. Thus, firms involved foremost in direct export seem to show higher performance than firms involved mainly in indirect export.

The five rejected hypotheses are H2a, H2b, H2c, H3a, and H3b.

Three control variables (Model 1) are included, based on their ability to explain subjective performance among the exporters. Eleven percent of the variance in the subjective performance variable is explained by the three control variables. Of these three variables it is however only the age of the firm (Q3recoded) that has a (consistent) significant effect. The positive sign of the
company’s age variable indicates that the older the company the higher the company’s overall performance.

5.5 SUMMARY OF THE FINDINGS

In total, eight hypotheses and 19 sub-hypotheses are included in this research. See Table 13 for a summary of accepted and rejected hypotheses. Of the 19 sub-hypotheses, 5 are fully accepted, 3 partly accepted, while 11 are fully rejected on at least the five percent level of significance. Thus, 42 percent of the hypotheses are accepted. Since the five percent significance level is used as a cut-off level for the hypotheses testing models, it should be fair to state that the support for the accepted hypotheses is not based on randomness.

63 percent of the variation could be explained for the dependent variable separating firms primarily involved in indirect compared to direct export (Dummydirect). For the dependent variable separating exporters and non-exporters (Dummyexport), 49 percent of the variation could be explained. The corresponding numbers for objective (LG10Q11) and subjective (Q6) performance are 39 and 35 percent. Since this research is focused on explanation, as compared to statistical prediction, it is not considered problematic that the predictive, or explanatory, power for two of the models does not exceed 40 percent. Experience shows that the predictive power (Adj. R²/ Nagelkerke’s R²) does not often reach or exceed 0.6 and an R² (or pseudo R²) of 0.3 is not to be considered a poor result (Djurfeldt et al., 2003).

Hypotheses H1 and H2, through which claims are made of how export barriers influence a company’s main export mode and firm performance, were only partially accepted on the ten percent level. Thus, both hypotheses securing perception of export barriers within the modified PSE model were rejected, or rather accepted on too weak a ground.

Refining the results, certain patterns start to emerge allowing for a visualization of the key results in the format of the research model. In Figure 16 the most important relationships between the different components, and sub-components, of the modified PSE model are shown for the small and medium-sized exporting firms surveyed. All relationships included in Figure 16 are as revealed by hypotheses accepted on at least the five percent level of significance. Perception of export barriers seems to have no significant effect on either a company’s main export mode or its performance. Performance appears to be positively affected by main export mode, relatedness, and customer and competitor certainty. What export mode a company primarily utilizes seems to be explained in part by relatedness, and customer and competitor certainty.
Table 13: Summary of the hypotheses testing. Each hypothesis is presented along with the expected sign of the likely effect the indirect variable(s) has on the dependent variable. In the far right column the analytical status of the hypotheses are given.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Exp. sign</th>
<th>Accepted/rejected¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Firms perceiving export to be too risky are likely to be involved in indirect export.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H1b: Problems with getting access to financial resources is positively related to indirect export.</td>
<td>-</td>
<td>Accepted*</td>
</tr>
<tr>
<td>H1c: Barriers originating within the key decision maker have negative effects on the firm's (subjective) performance.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H1d: Barriers originating within the key decision maker have negative effects on the firm's (objective) performance.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2a: Internally based barriers have negative effects on the firm's (subjective) performance.</td>
<td>-</td>
<td>Accepted*</td>
</tr>
<tr>
<td>H2b: Internally based barriers have negative effects on the firm's (objective) performance.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2c: Externally based barriers have negative effects on the firm's (subjective) performance.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2d: Externally based barriers have negative effects on the firm's (objective) performance.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3a: Relatedness with regards to pricing is positively associated with (subjective) performance.</td>
<td>+</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3b: Relatedness with regards to general management skills is positively associated with (subjective) performance.</td>
<td>+</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3c: Relatedness with regards to end customer types is positively associated with (subjective) performance.</td>
<td>+</td>
<td>Accepted**</td>
</tr>
<tr>
<td>H4a: High degree of relatedness with regards to end customer types is positively associated with direct export.</td>
<td>+</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4b: High degree of relatedness concerning management skills is positively associated with direct export.</td>
<td>+</td>
<td>Accepted*</td>
</tr>
<tr>
<td>H4c: High degree of relatedness with regards to price is negatively associated with direct export.</td>
<td>-</td>
<td>Accepted**</td>
</tr>
<tr>
<td>H5a: Market knowledge with regards to competitor certainty is positively associated with direct export.</td>
<td>+</td>
<td>Accepted**</td>
</tr>
<tr>
<td>H5b: Market knowledge with regards to current customer certainty is positively associated with direct export.</td>
<td>+</td>
<td>Rejected</td>
</tr>
<tr>
<td>H5c: Market knowledge with regards to potential customer certainty is positively associated with direct export.</td>
<td>+</td>
<td>Accepted***</td>
</tr>
<tr>
<td>H6a: Market experience measured in terms of stated knowledge about foreign competitors affects firm (subjective) performance positively.</td>
<td>+</td>
<td>Accepted**</td>
</tr>
<tr>
<td>H6b: Market experience measured by stated knowledge of current customers abroad affects firm (subjective) performance positively.</td>
<td>+</td>
<td>Rejected</td>
</tr>
<tr>
<td>H6c: Market experience measured by stated knowledge of potential customers abroad affects firm (subjective) performance positively.</td>
<td>+</td>
<td>Rejected</td>
</tr>
<tr>
<td>H7: Direct export is positively associated with (subjective) performance.</td>
<td>+</td>
<td>Accepted**</td>
</tr>
<tr>
<td>H8a: Barriers originating within the owner or key decision maker of the firm prevent export involvement.</td>
<td>-</td>
<td>Accepted**</td>
</tr>
<tr>
<td>H8b: Internally based export barriers prevent export involvement.</td>
<td>-</td>
<td>Rejected</td>
</tr>
<tr>
<td>H8c: Externally based barriers have negative effect on export involvement.</td>
<td>-</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

¹ For a hypothesis to be accepted the hypothesis testing model must be significant on at least the 5 percent level.
The significance level of each individual beta-value is indicated by *p<0.10; **p<0.05; ***p<0.01; ****p<0.001
In the model-building efforts undertaken to test the hypotheses, the relevance of including, or alternatively excluding, certain control variables was evaluated. A summary of the importance of each of the control variables for explaining whether or not SMEs export; their subjective and objective performances; as well as the main exporting modes among the exporters, is available in Table 14.

The seemingly most important of the control variables explaining internationalization and performance among SMEs is their attitude towards export. In other words, firms in which current and future export involvement is highly valued and appreciated tend to be involved in export and in particular favour direct export modes. Further, those firms that have a strong positive attitude towards export perceive their own firm to show a lower performance compared to its competitors. It is, however, the firms that have a positive attitude towards export that have a higher objective performance level measured in terms of export shares.

In addition, the age of the firm seems to be positively associated with the firm being involved in export. Owners/ key decision-makers of older firms also tend to perceive their own firms as showing a higher performance compared to their competitors. The size of the firm, measured in terms of number of employees, is positively associated with the preference for choosing direct export entry modes. Further, the number of export markets in which the firm is involved in is however negatively associated with a preference for a direct export mode. Instead, it seems as if firms that export using indirect export modes are exporting to a larger number of countries. Finally, the highest edu-
cational level of the owner/key decision-maker of an SME seems to influence the firm’s decision to become involved in export or not. If the owner/key decision-maker has experience from studying at a university, the firm is about three times more likely to export compared to if the owner/key decision-maker has no experience from studies at university level.

Table 14: Summary of the importance of each of the control variables included in this research.

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Export involvement or not (Dummyexport)</th>
<th>Subjective performance (Q6)</th>
<th>Objective performance (LG10Q17)</th>
<th>Main export mode (Dummydirect)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size (Q4)</td>
<td></td>
<td></td>
<td>0.35  +**</td>
<td>0.06  **</td>
</tr>
<tr>
<td>Ownership structure (Dummyautonomous)</td>
<td></td>
<td></td>
<td>0.08  **</td>
<td>0.06  **</td>
</tr>
<tr>
<td>Firm age (Q3recoded)</td>
<td>+**</td>
<td></td>
<td>+***</td>
<td></td>
</tr>
<tr>
<td>Main product focus (Dummyoffice)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main product focus (Dummyequalofficehome)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets entered (LG10Q14)</td>
<td></td>
<td></td>
<td>0.72  ****</td>
<td>0.07  ****</td>
</tr>
<tr>
<td>Number of years exporting (Lg10YrsExp)</td>
<td></td>
<td></td>
<td>0.06  **</td>
<td>0.07  **</td>
</tr>
<tr>
<td>Attitude towards export (IndexExpatt2div)</td>
<td>-**</td>
<td>-**</td>
<td>+****</td>
<td>+***</td>
</tr>
<tr>
<td>Highest educational background (Dummyuniversity)</td>
<td></td>
<td></td>
<td>0.65  ****</td>
<td>0.08  ****</td>
</tr>
<tr>
<td>Owner’s age (Dummyownerage)</td>
<td>+**</td>
<td></td>
<td>0.02  ***</td>
<td>0.06  **</td>
</tr>
</tbody>
</table>

For a control variable to be considered of importance, the hypothesis testing model must be significant on at least the 5% level. The significance level of each individual beta-value is indicated by *p<0.10; **p<0.05; ***p<0.01; ****p<0.001. Except for the dependent variable Dummyexport, only exporting firms were included.
DISCUSSION AND INTERPRETATION OF RESULTS

This chapter includes a discussion and interpretation of the research results founded on comparison with existing research as discussed in the theoretical chapter. The discussion is absolutely dependent on and therefore also directly applicable to the small and medium-sized furniture producers in Sweden. Since general theory, as compared to industry-specific, has been used in the formulation of theoretical framework and hypotheses, these results should also be possible to generalize onto generic SMEs. First, a discussion of why small and medium-sized companies are involved in export is presented; that is followed by an investigation of what factors seem to determine export mode preference. Thereafter the focus turns to the factors that explain firm performance. Finally, a discussion of overall results is included.

6.1 WHY SMALL AND MEDIUM-SIZED COMPANIES EXPORT

From the analysis results, it appears that the answer to why some small and medium-sized furniture producers export and why others do not, might be found among four of the explanatory factors. These factors are export barriers originating with the owner/key decision-maker, attitude towards export, the owner/key decision-maker's highest educational background, and the age of the firm. Thus, three of four variables explaining whether or not a firm is involved in export, relates to the owner or key decision-maker of the firm. Each one of the four factors is discussed below. At the end of this section, a reflection on why internally and externally-based barriers do not seem to determine overall export involvement is provided. For a discussion of if, and if so why, exporters and non-exporters rate potential barriers as being of different importance, see Appendix I.

First, support was found for the hypothesis (H8a) claiming that barriers originating within the owner/key decision-maker of the firm prevent export. This is in line with findings put forward in previous research. Such research has found that the absolute power of the owner/key decision-maker to determine the strategy of the firm (Holmlund and Kock, 1998; Reuber and Fischer, 1997), including export involvement, may be of such strength that ex-
port barriers originating within this person may become deterrent or impossi-
ble to surpass. Therefore barriers originating within a powerful ow-
ner/decision maker may be considered ultimate preventers of export. Thus, if
the owner/key decision-maker of a small and medium-sized furniture produc-
ing company perceive export not to be an appropriate option for his or her
company, the company is not likely to be involved in export.

Second, the finding that “attitude towards export” positively affects
whether or not a firm is actually involved in export, is in line with existing re-
search (Cavusgil and Naor, 1987). Other researchers, such as Calof and
Beamish (1995), have found that attitude towards conducting business in for-
eign markets is, in fact, the most important determinant of internationaliza-
tion. Considering the small and medium-sized furniture producers, it appears
that the exporters have a more positive attitude towards export than do the
non-exporting companies. However, some 10.5 percent of the non-exporting
firms have a very positive attitude towards export, indicating future export in-
volvement.

The third factor that seems to explain why some firms export when others
do not is the educational background of the owner/key decision-maker. If a
company is owned or managed by a person who has studied at a university, it
is more likely to be involved in export. In fact more than 75 percent of the
non-exporting furniture producers were headed by a person who had not at-
tended university, and the chances of a company to become an exporter in-
creased more than three times if it was managed by someone with university
education. This finding is consistent with existing research stating that there
is a positive relationship between well-educated managerial staff and interna-
tional involvement of the firm (Leonidou and Katsikeas, 1996).

Regarding the fourth factor, conflicting findings exist as to whether or not
a company’s age has any an effect on international involvement (Reuber and
Fischer, 1997; Westhead et al., 2001a). This research supports the notion that
export involvement is, in fact, positively affected by increased firm age. Intui-
tively, this finding makes sense as older firms have had more time to acquire
viable resources, knowledge, and business connections needed for foreign ven-
tures. In conjunction with this finding it seems valuable to further investigate
the relationship between the firms’ age and how many years each firm had
been in business before starting to export. Among the small and medium-
sized furniture producers surveyed, a large number (about 48 percent) of the
older companies waited more than 50 years after the foundation of the com-
pany before starting to export. About 41 percent of the middle aged compa-
nies exported before their 10th year of operation, and as many as 82 percent of
these companies exported within 19 years of being founded. 50 percent of the
younger companies involved in exports start to sell abroad right at the start of
their existence. This result mirrors the increasingly competitive and interna-
tionalized business environment that firms of all sizes operate in today (Axinn
and Matthyssens, 2002).

Support was not found for the two hypotheses (H8b and H8c) which cla-
aim that internally and externally-based barriers prevent export involvement.
Thus, the existence of internally-based barriers, measured in terms of prob-
lems associated with establishing preferred business relationships abroad, was not found to prevent export involvement. This finding goes somewhat against discussions carried out by followers of the resource-based view who argue that lack of sufficient internal resources prevents growth (Penrose, 1995) possibly realized through export. Others, such as Moen (1999), have also found that required internal recourses need to be available for a firm to become involved in international business. One explanation as to why internally-based export barriers do not appear to prevent export might be that these barriers may not completely block, but only restrict, a company’s export involvement.

Support is also lacking for the effect that externally bound barriers have as preventers of export involvement. While others have found that externally-based barriers such as trade regulations (here measured in terms of tariffs) are serious barriers to export (Leonidou, 2000), such claims are not supported by this research. Considering the removal of trade regulations within the European Union and the fact that the majority of the exports generated by the Swedish furniture producers do not reach past the borders of the European Union, this finding does not seem unexpected. In essence, rejection of the hypothesis claiming that external barriers prevent export supports the argument that theories explaining internationalization must be updated to match environmental changes as stated by Axinn and Matthyssens (2002); and Fletcher (2001).

6.2 DETERMINANTS OF EXPORT MODE PREFERENCE

To explain what it is that determines if an SME prefers to export using a direct or indirect export mode, the result of this research suggests that the following six explanatory variables should be considered: price relatedness, foreign competitor certainty, knowledge about potential customers abroad, the attitude towards export, the number of markets entered, and the size of the firm. Each of these variables is discussed here, along with a brief reflection on why perception of export barriers, end-customer type relatedness, general management skills relatedness, and knowledge about current customers abroad do not seem to explain export mode preference.

Hypothesis H4c claims that a company that charges the same price for its products regardless whether they are sold domestically or abroad is not likely to be involved in direct export. This hypothesis was accepted, which indicates that companies that charge the same price for their products, regardless of what geographic market the product is sold to, are involved in indirect export.

Contradictory findings have been reported on how market experience and knowledge influence entry mode selection (Ekeledo and Sivakumar, 2004). One reason as to why such contradictory findings exist might be connected to the way different researchers use different measurements of market experience and knowledge including industry know–how (Westhead et al., 2001a; Mtigwe, 2005); geographic and industry experience (Ekeledo and Sivakumar, 2004); and corporate competitor certainty (Pehrsson, 2008). While the research at hand incorporates three measures of market knowledge, conclusions
can only be drawn based on two of these measurements (H5a was accepted while H5b was only partly accepted).

Market knowledge, as measured in terms of competitor certainty in the main export market, seems to have a positive effect on the selection of a direct export mode. Thus, it appears as if the more the firms know about their competitors, the more likely they are to choose a direct export mode. In other words, with an increased knowledge of their competitors, a firm should feel confident in selecting the apparently more risky, but potentially more lucrative, mode of direct export. This is contrary to the somewhat unlikely findings presented by Pehrsson (2008), which possibly should be considered an exception, unless the variations in results are due to contextual differences.

Regarding market knowledge measured in terms of certainty about current and potential customers abroad, only knowledge about potential customers was found to explain export preference. A possible explanation as to why knowledge about current customers does not seem to explain why a firm prefers either direct or indirect export, might be that knowledge about current customers is gained through export involvement. Thus, export involvement, either direct or indirect, increases a company’s knowledge about current customers abroad, while the reverse does not seem to apply. However, knowledge about potential customers might be gained through active search and market analysis. If the firm manages to attain knowledge about potential customers, it seems to prefer to be involved in direct export. Further, a firm that claims to have a good understanding of who the future customers are in a particular market might be less reluctant to make a commitment to this market in terms of direct export.

A company whose management (owner/key decision-makers) has a positive attitude towards export appears to prefer being involved in direct export. It seems logical that managers that perceive export to be important today as well as in the future also show a high level of commitment to export and a willingness to accept the possibly higher risks and costs associated with direct export (Albaum et al., 2005). Among the exporting furniture producers surveyed, the average score for the variable “attitude towards export” was 4.15 on the six-graded scale. This implies that a higher number of firms had a positive attitude towards export compared to firms with a negative attitude towards current and future export involvement. More than 75 percent of all the exporters also preferred a direct export mode rather than an indirect export mode. This finding might suggest that previous studies of the furniture industry, in which it is claimed there is a clear “lack-luster” side among the furniture industry members to grow through export (Brege et al., 2005) needs to be questioned.

How many geographic markets a firm is exporting to affects its preference for either direct or indirect export. Firms that export to a large number of markets seem to be involved in indirect export, while firms that export to fewer markets seem to prefer direct export. Indirect export is commonly associated with lower costs and risks than is direct export (Albaum et al., 2005). It should not therefore be surprising that firms that export to a large number of markets prefer indirect export to direct export. Direct export on the contrary
is often related to, for example, management commitment (Ibid.). It is understandable that the management of an SME, however committed to export, cannot be committed to every possible market to the same extent. Instead, the managers might specify a reasonable number of markets to focus on, and thereafter concentrate their efforts there. Thus, few export markets are positively associated with direct export. Considering the Swedish furniture producers, these firms are known to concentrate their export efforts towards neighboring Nordic countries (TMF, 2009-10-23b).

The size of the company has a positive association with preference for direct export. This means that the larger the company (measured in terms of number of employees) the more likely it is to be involved in direct export. The larger the company, the more resources it is often assumed to have. Since direct export costs more it seems reasonable that it is the comparably larger companies among those companies categorized as small and medium-sized that are involved in direct export.

Finally, a reflection on why perception of export barriers, end-customer type relatedness, and general management skills relatedness do not seem to explain export mode preference. No support was found for the claim that the perception of export to be risky leads to a preference for indirect export. Export being too risky is a psychological barrier originating within the owner/key decision-maker of the firm. As already discussed, barriers originating within the owner/key decision-maker seem to prevent export involvement, but do such barriers have a diminishing effect on the firm’s export involvement once the company starts to export?

Further, no support was found for the claim that firms that understand export to lead to an increased need for financial resources prefer to be involved in indirect export. Lack of support for this hypothesis (H1b) might be due to the (possibly faulty) assumption that firms that view export activities to lead to increased needs for financial resources also have problems getting access to financial resources. In fact the opposite might hold true: firms that view export to be an activity that demands additional expenses are the same firms that are involved in direct export (more costly) as compared to indirect export (less costly).

Little could further be learned about how end-customer type (H4a) and general management skills (H4b) relatedness support a high control entry mode (such as direct export compared to indirect export). Could it be that discussing relatedness in terms of end-customer types and general management skills is not relevant when attempting to distinguish between two different types of export modes, as compared to other types of foreign market entry modes? Or does the rejection of these hypotheses depend on the contextual settings of this research? These questions remain unanswered.

### 6.3 DETERMINANTS OF PERFORMANCE AMONG EXPORTERS

A key ambition of this research is to investigate what factors determine performance among small and medium-sized enterprises. This task is undertaken
by investigating the determinants of export performance (objective measure) and overall firm performance (subjective measure of performance) among the exporting firms surveyed. Since these two measures of performance assess different performance levels, it seems appropriate to keep the following discussions separate.

6.3.1 DETERMINANTS OF EXPORT PERFORMANCE
If attempting to explain export performance among small and medium-sized companies, the analysis of this research suggests that it is important to understand how much a company knows (or rather claims to know) about its competitors in the main export market, and to what extent the firm’s owners/managers have a positive attitude towards export.

Good knowledge about the competitors’ marketing strategies in the main export market is associated with a high export performance measured in terms of export shares (H6a). This finding is consistent with previous research (Katsikeas, 1994; Thirkell and Dau, 1998; Galbreath and Galvin, 2008; Morgan et al., 2004; Souchon et al., 2003; Aaby and Slater, 1989). Thus, it does not appear that too much focus on the competitors puts the firm’s performance at risk, as suggested by the implications of Pehrsson’s (2006b) research. But how does this finding correspond with how competitor certainty and the number of export markets explain export mode preference? Recall that the more the firm claims to know about its competitors in the main export market, the more likely the firm is to be involved in direct export. Also, the higher number of markets being exported to, the more likely the firm is to prefer an indirect export mode. This suggests that the direct exporters concentrate their efforts on a limited number of target markets. But do the direct exporters report a higher export performance than do the non-exporters, as suggested by Leonidou and Katsikeas (1996)?

Direct export does not appear to have a positive relationship with export performance. By rejecting hypothesis H7 it does instead appear that it is the companies that prefer the indirect export mode which show the strongest export performance. Thus, indirect exporters sell their products on a higher number of markets than direct exporters do, and the indirect exporters also show a higher export performance measured in terms of export shares. While these findings go against the path-dependent stage models, it aligns with Bonaccorsi’s (1993) conclusions that there is not a “best” export mode. When anchoring this finding within the furniture industry it seems logical that a company that sells furniture to, for example IKEA, actually produces furniture for a high number of markets and has a high export performance. Such company might not have a good knowledge about their competitors abroad, however dangerous that might seem, but instead concentrates its effort on one dominant domestic customer.

Attitude towards export has a strong positive association with export performance. This is fully in line with existing research (Aaby and Slater, 1989). If the managers (owners/ key decision-makers) of a small and medium-sized company view export as important today as well as for the future, it is not surprising that such a company also shows a high export performance. What is
somewhat complicated though is that firms that report a positive attitude towards export are also found to prefer a direct export mode, and a direct export mode does not, as discussed above, have a positive effect on export performance.

Support was not found for the seven hypotheses testing what effect perception of export barriers (H2a, H2b, and H2c), relatedness (H3a, H3b, and H3c), and knowledge about potential and current customers (H6b) might have on export performance. Hypothesis H2a states that barriers originating within the owner/key decision-maker of the firm have a negative effect on firm performance. As already discussed, this type of barrier seems to have the greatest impact on the non-exporting firms. Internally and externally-based barriers do not seem to explain export performance either, despite the findings from existing research (Pehrsson, 2004a, 2006b). If this is due to, for example, contextual differences, changes in the external environment, or the ways in which companies conduct business today is not contemplated further.

Since hypothesis H3a, H3b, and H3c were rejected as regards dependent variable export performance, little is known of how relatedness explains export performance. More precisely, it remains unknown how the strategy of a company charging the same price for its products regardless of where they are sold; of targeting the same type of end-customers domestically as well as abroad; and of using a set of generic management skills regardless of target market, affects export performance.

Neither knowledge about potential nor current customers has any apparent influence on export performance. While firms that are involved primarily in indirect export might have a high export performance (export shares), their customers (Note: not end-customers) might not be located abroad. Thus, one might contemplate if it is relevant to ask indirect exporters to what extent they know their current and potential customers abroad.

6.3.2 DETERMINANTS OF OVERALL PERFORMANCE

Overall performance is measured in terms of how each of the companies understands its own (financial) performance to be better than its competitors’ performances. Competitors are not specified, but can be either domestic, foreign, or both. While export performance could potentially help explain overall performance, a direct and positive relationship between these two performance measures should not be assumed. With that said, it should not be considered problematic if the factors that explain export performance do not also explain overall performance, particularly not in the same way or to the same extent.

This research suggests that six explanatory variables should be recognized as important among researchers interested in explaining overall performance among small and medium-sized enterprises. These variables are: end-customer type relatedness, knowledge about competitors abroad, knowledge about potential customers abroad, preferred export mode, the age of the firm, and attitude towards export. The importance of each of these variables will be discussed in more detail below.
There is agreement between this research and previous research (Pehrsson, 2006a) in that different types of relatedness have different effects on performance. More exactly, in this research price relatedness (H3a) and general management skill relatedness (H3b) were not found to have positive associations with overall performance, while end-customer type relatedness (H3c) was. Thus, considering the three particular relatedness measures, to target the same type of end-customers seems to be a financially and competitively sound strategy.

As for the export performance measure discussed above, it appears that overall performance can be explained by how much knowledge the company claims to have about its competitors abroad (H6a). In addition, overall performance seems to depend on how much knowledge the firm has about its potential customers abroad (H6b). A firm that has a good knowledge of potential customers abroad might also be more likely to have a better overall performance than its competitors. This finding of market knowledge leading to high level of performance aligns well with the understanding that market knowledge and market competence are prerequisites for success among the small furniture producers in Sweden, as reported by NUTEK (1997). However, stated knowledge about the firm’s current customers abroad does not appear to explain overall performance. One explanation might be that while knowledge about potential customers allows the firm to report a better financial performance than its competitors, knowledge about current customers might be more of a prerequisite, for conducting business. Thus, knowledge about current customers should be needed for survival, and therefore be understood as a threshold type of knowledge, while potential customer knowledge provides the firm with a competitive advantage.

Further, direct export is positively associated with strong overall performance (H7) among the small and medium-sized Swedish furniture producers. This finding corresponds well with the generally accepted assumption that direct export involvement leads to higher financial performance (Albaum, et al., 2005) compared to indirect export. Since overall performance is a subjective, self-reported measure, it should be interesting to investigate whether direct export is also positively associated with a heightened level of confidence regarding the firm’s capabilities. This is however not investigated further.

The age of the company also has a positive influence on the company’s overall performance. More exactly, it was found that older companies seem to show better overall performances than do the younger companies. Instinctively this make sense, considering that with increasing age a company can manage to accumulate industry-based knowledge and establish valuable formal and informal relationships which can result in a strong performance. Another explanation as to why older firms indicate higher overall performances than their younger competitors, relates to the idea that companies become more confident with increasing age.

It is also interesting to consider the association between overall performance and whether or not the firm is involved in export: firm age has a positive effect on both of these variables and exporters tend to have higher overall performance than non-exporters.
Attitude towards export helps determine the overall performance of the firm. Here, a firm’s attitude towards export is negatively associated with overall performance. This might imply that those small and medium-sized furniture producers that report high overall performance at large still rely on the domestic market. With a low level of dependency on export, currently as well as in the foreseeable future, it is reasonable that these firms do not perceive export to be important, as measured by attitude towards export. It would however be interesting to study if these firms change their attitude towards export in cases of saturation on the domestic market. In contrast, firms that claim export to be of great importance to them do not report high overall performance. This can be explained in at least three different ways: first, younger firms might become involved internationally rather soon after being established, in accordance with the predominant trend of increased international involvement among firms of all sizes (Axinn and MatthysSENS, 2002; Chetty and Campbell-Hunt, 2003; Coviello and McAuley, 1999; Minifie and West, 1998; Knight, 2000). For such newly founded exporting companies, it is understandable that the overall performance is not very strong, at first. Secondly, firms that have a positive attitude towards export perceive their own performance to be no stronger than their competitors. This might imply that they compare themselves with foreign competitors who are, or at least appear to be, high performers. The third explanation rests on the understanding that export can potentially be both a risky and costly adventure for the resource-constrained SMEs. Thus, it is possible that a company that has a positive attitude towards export, or in other words views export to be important today as well as for the future, is in fact not performing so well. Because export is viewed as important it is not necessarily so that it leads to high overall performance. The relationship between attitude towards export and overall performance deserves more attention.

Perception of export barriers was not found to explain overall performance among the exporting small and medium-sized furniture producers (H2a, H2b, and H2c were rejected). Consequently, how the managers of these SMEs perceive export barriers does not have a reducing affect on the overall performance of these firms. This finding goes against existing research in which it has been suggested that, for example, lack of external barriers lead to high performance (PEHRsson, 2004a). Regardless, it seems more surprising that export barriers do not manage to explain export performance than the inability of these variables to explain overall performance.

6.4 GENERAL DISCUSSION OF RESULTS

Recall the definition of SMEs as stated by the European Commission in section 2.2. To be an SME a firm should comply with three specific requirements: firm size in terms of number of employees; firm size measured in economic terms; and independency. While all three of these measures were collected for the respondents included in this research, only the measurement of the number of employees was used to determine firm size. As previously discussed this is in line with existing research. However, the “level of independ-
ency of the firm” was incorporated into this research as a control variable. Firm size (measured in terms of number of employees) was found to have a positive effect on preferred export mode (direct versus indirect export). Ownership structure was however not found to have any influence on export involvement or performance. Thus, overall, these two measures can be thought of as having a somewhat minor effect on export involvement and performance among SMEs. This raises the question of whether firm size is of little importance when studying internationalization? Is it worthwhile to treat small and medium size enterprises (SMEs) and large firms as if they are different from each other? In existing studies focused on SMEs it is often argued that there are important differences between large and small firms. Such an understanding shapes the foundation of this research. However, this research is from the outset of the study focused categorically on firms that meet the definition of a small and medium-sized firm. One suggestion is therefore to control for company size, particularly in research incorporating firms of all sizes ranging from micro to very large firms.
CONCLUSIONS AND LIMITATIONS

Some of the most important conclusions of this research coincide with the answers to the subordinate research questions. As a result, a summary of these answers is presented. Also included is an assessment of the appropriateness of modifying the PSE model to work within the contextual setting of this research. Thereafter a new model entitled SCEMPER is introduced. Research limitations are discussed at the end of this chapter.

7.1 CONCLUSIONS

This research has been guided by one overarching research question: What factors determine internationalization and performance among small and medium-sized enterprises? Due to the inclusiveness of this question, it was divided up into three more specific research questions, or sub-questions. By answering the three sub-questions, the overall research question should be considered answered as well. Consequently, the key conclusions of this research coincide with the answers to the three sub-questions. To present the essence of this research in a concise, but still easy-to-read format, the answers to the subordinate research questions are listed in Table 15.
Table 15: Presentation of subordinate research questions and corresponding answers.

<table>
<thead>
<tr>
<th>Subordinate research questions</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What factors determine whether small and medium-sized enterprises are involved in export or not?</td>
<td>Barriers originating within the owner/key decision maker of the firm; the owner/key decision makers’ attitude towards export; the age of the firm; and whether or not the owner/key decision maker has studied at a university.</td>
</tr>
<tr>
<td>2. What factors determine the main export mode among exporting small and medium-sized enterprises?</td>
<td>Price relatedness; level of market knowledge measured in terms of competitor certainty considering main export market and potential customers abroad; attitude towards export; number of export markets; and firm size.</td>
</tr>
<tr>
<td>3a. What factors determine the export performance among small and medium-sized enterprises?</td>
<td>Level of market knowledge measured in terms of competitor certainty considering main export market; and attitude towards export.</td>
</tr>
<tr>
<td>3b. What factors determine the overall performance among small and medium-sized enterprises?</td>
<td>End customer type relatedness; level of market knowledge measured in terms of competitor certainty considering main export market and potential customers abroad; main export mode; firm age; and attitude towards export.</td>
</tr>
</tbody>
</table>

Further, this research is conducted within the framework of the modified PSE model. The original PSE model was adapted primarily for three reasons: to specifically fit small and medium-sized firms; to a larger extent account for both internally and externally-based barriers and therefore create a more balanced model; and to include performance. But were the modifications of the PSE model of value? The belief is that they were, as is discussed below.

To fit SMEs in particular, the modified PSE model was extended to include barriers originating with the owner/key decision-maker. In addition, an alternative treatment of relatedness was found necessary.

Counting the number of hypotheses that include barrier variables originating from the owner/key decision-maker, one finds that support is found for 33 percent of these hypotheses. This is to be compared with the fact that support was found for none of the hypotheses including the externally-based barriers, and considering all the hypotheses tested, support was found for 42 percent. Therefore, it should be considered at least as equally important, if not more so, to include barriers originating within the owner/key decision-maker as it is to include barriers originating within the firm’s external environment. This conclusion is founded on the understanding that the more the variables manage to explain, the more important it is to include in the model. If very little can be explained by a particular variable, or set of variables, it seems rather unnecessary to include it in the research in its current form. However, only a portion of the modified PSE model could be used for explaining why some SMEs become involved internationally, and why others remain domestic. Therefore, a general recommendation from this research is to include barriers originating within the owner/key decision-maker when explaining export involvement among SMEs.

One should recall that relatedness in this research is defined differently compared to how relatedness is defined in the original PSE model. The alternative definition was found to be necessary to fit within the contextual setting...
of this research. Thus, relatedness is measured here in terms of the level of similarity between the domestic market and the firms most important export market, considering such aspects as pricing; management skills; and after-sales service. Of all the hypotheses which included relatedness of some kind, a total of 33 percent were accepted. Thus, it should be concluded that relatedness, as measured here, is a valuable factor to consider in research on internationalization of SMEs.

Should it be considered of value that the PSE model was adopted to reflect the importance of internally-based barriers? None of the hypotheses which included internally-based barriers were accepted. Thus, it therefore appears as if internal, as well as the external, export barriers might be of little importance to include if researching international involvement and performance among SMEs. However, if external barriers are to be included (see the original PSE model), there is no reason for why internally-based barriers should not. The importance of including internally and externally-based barriers in research on internationalization among SMEs deserves, however, more attention before making any drastic recommendations considering their importance.

The interest in including performance relates to the ambition among contemporary strategy researchers to explain firm performance. Consequently, extending the model to include performance could be viewed as an attempt to renew the model. But to what extent does the PSE model benefit from inclusion of the fourth component performance? The answer lies with the result, revealing that 35 and 39 percent of the variations in overall performance and export performance among the exporters could be explained. This indicates that the model can be considered valuable when explaining the performance of exporting SMEs.

Thus, it seems beneficial to include barriers originating within the owner/key decision-maker of the firm; relatedness; and (overall and export) performance when conducting research on internationalization among SMEs. While, the original PSE model offered an adequate foundation for this research, a new version of the model is proposed, based on the outcomes of this research, see Figure 17. This new tripod model was named SCEMPER, for which SC stands for Strategy Competence, EM for Entry Mode, and PER for Performance. The SCEMPER model was particularly developed to explain internationalization and performance among small and medium-sized firms. Note: to be consistent with the research model, see Figure 6, the SCEMPER model considers only exporters, thereby the exclusion of the barriers originating with the owner/key decision-maker.

From the new SCEMPER model it is clear that a firm’s strategy competence, measured in terms of relatedness and market knowledge, is a key influencer of both export mode preference and firm performance. An interesting finding is that stated knowledge about potential customers abroad appears to

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114 Among the non-exporting firms, 45 of the variation in overall (subjective) performance could be explained. See Appendix H.
explain both overall performance and the main export mode. At the same time, knowledge about current customers abroad does not appear to explain either performance or main export mode. However, the previous finding that strategy competence drives performance (Pehrsson, 2004b) also seems to be valid for exporting small and medium-sized firms. In addition, export mode preference can help explain performance among exporters.

![Figure 17: The SCEMPERS model is developed as a result of this research focused on internationalization and performance among exporting SMEs. SC stands for Strategy Competence; EM stands for Entry Mode; and PER stands for Performance.](image)

Five of the control variables included in this research appear important in explaining export involvement and performance among SMEs. The most important of these variables is attitude towards export, followed by the age of the firm. The other three variables are firm size, the number of markets entered, and the owner/key decision-maker’s highest educational background. Thus, two of these five variables are measured on the owner/key decision-maker level. Therefore, and in correspondence with other researchers such as Reuber and Fischer (1997), it should be of value to consider who the owner/key decision-maker is when conducting research on export involvement and performance of SMEs.

### 7.2 LIMITATIONS

Limitations refer to restrictions placed on the research that are realized during the research process, and thereby not predetermined by the researcher. Here, limitations will be discussed regarding number of respondents; the number of subjective measures; the operationalization outcome; the hypotheses formulated; and the analysis methods employed.

During the analysis it became clear that it would have been beneficial to have a higher number of respondents. With more respondents it would have been possible to first divide the respondents into exporters and non-exporters, and thereafter investigate, at a higher level of detail, patterns of differences within and between these groups. This would have been particularly desirable...
considering the prominent position of the entry mode component in the PSE model. For example, it would have been interesting to learn how behaviour, attitude, and performance vary between the non-exporters considering if they have ever exported before, or previously been involved in export. Further, with more respondents it might have been possible to use cluster analysis for dividing the exporters into more precise sub-groupings (as compared to direct and indirect exporters) based on the level of export dependency and preferred export mode. Following such a divide of the exporters, the ability to explain firm performance might have increased. However, to include more cases in the research, the contextual setting of this research would have changed. Thus, more respondents would have led to a different research in many aspects.

This research includes a high number of subjective measures, including subjective performance, attitude towards export, perception of barriers, customer and competitor certainty, and relatedness. The ambition, whenever possible, was to match the subjective measures with an objective measure. This was however only feasible for the performance measure. However, because the two performance variables measure performance on different levels (overall versus export performance) they should be viewed as complimentary to one another. Therefore it might have been interesting to extend this study to also include subjective and objective non-financial performance measures. In addition, further efforts could have been made in the analysis phase of this research to assure item reliability, particularly among the self-reported subjective measures.

What variables to include in the research are determined during the operationalization process. While this process was conducted with a high degree of caution and contemplation, it is still relevant to consider the appropriateness of the operationalization outcome. In particular it should be appropriate to reflect on whether the operationalization of the export barriers was “the best” in the light of the analysis result, or rather a lack of evidence that export barriers can help to explain the performance and/or preferred export mode of exporting SMEs. Also, the fact that some questions more often than others were not answered, allow for the interpretation that the operationalization might have been less than optimal considering the particular contextual setting. For example, it seemed problematic for the respondents to answer the question on how many countries their firm currently exported to. This implies that the small and medium-sized exporting furniture producers in Sweden sell their products to different countries, and that these countries vary on an order basis. While export mode preference was found to explain performance, the effects (strength and direction) of this variable differed depending on which of the performance measures that was being considered. In retrospect it might have been wise to formulate separate hypotheses when attempting to explain each of the two performance measures.

Finally, another possible limitation of this research refers to the decision not to use factor analysis to reduce the number of barriers. This decision rested on the twofold difficulty of interpreting the factors created, and the lack of explanatory power of these factors when tentatively considered during the model building stage.
RESEARCH IMPLICATIONS

The ambition of this research is to contribute theoretically to the knowledge of internationalization of small and medium-sized enterprises. In addition it is hoped that this study could be of value to practitioners and policy-makers. Thus, contributions and implications are stated on both theoretical and practical levels. First, the extent of which this research contributes theoretically to the field of strategy is discussed. Thereafter the value of the results from this research is addressed, for policy-makers and practitioners. Suggestions for further research, presented at the end of this chapter, should be considered as a possible source of inspiration for anyone interested in conducting research related to internationalization and performance among small and medium-sized firms.

8.1 THEORETICAL CONTRIBUTIONS

The overall ambition of this research is to add to the existing body of research focused on explaining internationalization and performance among SMEs. The selection of theoretical framework for this research was, therefore, based on the expressed need to tie together frequently studied concepts (Bonaccorsi, 1992) such as the level of export involvement (Zacharakis, 1997); the perception of export barriers (Thirkell and Dau, 1998); and export/entry success (Zacharakis, 1997) into one model. Other researchers focusing on internationalization of SMEs advocate that other important concepts to consider include attitudes among exporters (Gripsrud, 1990); export expertise and knowledge (Westhead et al., 2001b); the company’s external environment (Moen, 2001); and the decision making manager (Moen, 2001; Moini and Tesar, 2005). As a result, a modified version of the original PSE model developed by Pehrsson (2001) was selected as the theoretical framework for this research. The above concepts, which are commonly studied separately from each other, were to some extent incorporated into the modified PSE model.

Therefore, on the very highest level, it should be possible to claim that one theoretical contribution of this research is the formulation and testing of a model that brings together separate aspects of the internationalization of SMEs into one framework.

The original PSE model was developed for, and previously used on, medium and large sized firms. Through modification, the original version of the
model was adapted to fit SMEs. Thus, another theoretical contribution of this research could be the evaluation of the PSE model using a different contextual setting. The PSE model in its original form should be considered useful, though not optimal, for explaining international market establishment among small and medium-sized firms; it was this that motivated the development of the SCEMPER model, see Figure 17. The usefulness of the SCEMPER model rests on the basis that it was developed specifically for exporting SMEs, it includes performance, and reveals the directions of the relationships between the components of the model. In addition, the SCEMPER model differs from the original PSE model in that export is the only entry mode considered, relatedness is measured in terms of the level of similarity between domestic and export markets, market knowledge is measured in terms of competitor certainty as well as current and potential customer certainty; and not least considering the importance of the individual owner/key decision-maker of the firm. Discussing these theoretical contributions on a more detailed level, the following findings may be worth noting:

- Research conducted within the field of strategy is particularly interested in explaining firm performance, while SME-based research often seems to focus on explaining the process, and not the outcome of the process in terms of SME performance. Because performance is a key component of the SCEMPER model, this research contributes to the understanding of the performance of small and medium-sized exporters.

- Strategy competence, measured by relatedness and market knowledge, seems not only to be a driver of performance; it also affects selection of entry mode. Therefore, one important contribution of this research is the acknowledgement that it seems important to consider strategy competence of a company when conducting research on internationalization of SMEs. It is apparent in the design of the SCEMPER model that without the component of strategy competence very little can be assumed regarding the relationships of the components of the model. Strategy competence is what really holds the SCEMPER model together, and it is therefore viewed as the most important of the four originally considered components. More precisely, knowledge about both competitors and potential customers abroad seems to be an important measure of market knowledge. In contrast, stated knowledge about current customers abroad does not seem to be a valuable measure of market knowledge for exporting SMEs. In a similar fashion, it is important to choose wisely which relatedness measures to consider, due to their differences in explaining performance and preferred export mode.

- Perception of barriers does not seem to explain firm performance among exporting SMEs. This is contrary to research conducted on larger firms which suggests that perception of entry barriers affects
performance (Pehrsson, 2004a; 2006b). Further, perception of barriers does not seem to have a significant influence on a firm’s selection of entry mode (direct versus indirect export). This is also contrary to existing research (Anderson and Gatignon, 1986). Thus, this research contributes to our understanding of internationalization of SMEs by claiming that the importance of the effects of perception of barriers onto performance and entry mode selection might not be as high as previous research suggest.

- This research reveals that barriers originating within the owner/key decision-maker of a firm are at least as important as externally-based barriers when studying internationalization among SMEs. Interestingly, internally-based barriers seem to be of less importance than those that stem from the owner/key decision-maker. Thus, this research contributes to existing theory by claiming that the importance of a barrier might relate to its origin. Consequently, it should be considered a sign of ignorance to assume that only externally-based barriers matter.

- The importance of the owner/key decision-maker of the firm is investigated in this research, both in relation to the discussion of origins of barriers, but also through the control variables. In particular, two of the four control variables measured on key-decision maker level were found to be of importance in this research. These variables are attitude towards export, and whether or not the key decision-maker had studied at a university. The two other variables measured on the key decision-maker level (level of international exposure and age) were not found to be of importance. Thus, a further contribution of this research is the finding that, to some degree, it does matter who the owner/key decision-maker of an SME is, and what he or she thinks or believes.

8.2 IMPLICATIONS FOR POLICY-MAKERS AND PRACTITIONERS

Here, findings of specific interest to policy-makers and practitioners are highlighted in accordance with the wish that this research becomes valuable to small and medium-sized furniture producers in Sweden, and hopefully also be of interest to other small and medium-sized firms.

Existing research has made apparent the importance for governmental support agencies to customize their internationalization assistance to small and medium-sized firms for maximum results (Morgan and Katsikeas, 1997). Therefore, on the policy-making level it should be of value to reveal the type of support certain firms are in need of. This research provides profiles of com-

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115 In Pehrsson 2004a the included firms were on average medium sized. Thus, Pehrsson’s study from 2004a could possibly include even micro sized and small firms. However, with an average export share of 63 percent, it seems doubtful to what extent micro and small firms were represented in Pehrsson’s sample. In Pehrsson 2006b, the included firms were on average large.
panies at varying degrees of export engagement, which can be of value when designing export promotion programs.

For example, policy-makers might be influenced by this research while searching for answers to questions such as: Which non-exporting firms might it be appropriate to target as potential members of an export launch program? And what type of assistance should be offered to existing exporters to be of maximum value to the firms? This research suggests that if a support agency screens a group of non-exporters for the selection of candidates on which to focus its export assistance, three criteria might be of special importance:

- To what extent does the firm perceive export to be appropriate, considering its current line of business? It seems important that the management of a firm strongly believes that export will suit its current line of business.

- How important does the firm perceive export to be in the future? The result of this research reveals that the more positive the firm is towards export, by rating importance of future export as high, the more it is likely to be, and therefore the more likely to become, an exporter.

- Which are the owner/key decision-maker's formal qualifications, measured in terms of whether or not he/she has studied at a university? It is suggested in this study that university studies have a positive affect on being, or becoming, an exporter. This can be explained by the fact that a higher level of education is associated with a good ability to process information as well as the ability to make rational decisions in a stressful environment (Wiersema and Bantel, 1992).

Further, how should a support agency optimally invest its resources while assisting existing exporters? Assuming that the most desirable outcome or goal for the firm is improved performance, then support should be offered in terms of knowledge about competitors abroad and of future potential customers abroad. In addition, a support agency should assist the firm in becoming involved in direct export, thus offering help with, for example, establishing contact with a foreign based agent or distributor. Further, it seems suitable that a support agency advise the firms to concentrate their efforts on targeting the same type of customers domestically as well as abroad.

Judging by both exporters’ and non-exporters’ ratings of importance of export barriers, a support agency could maximize the value of its resources by offering help to the firms in terms of language skills; the establishment of contacts with possible business partners abroad; securing timely payments from customers; the management of paperwork and documentation; as well as financial support.

Though this research cannot be used as a (normative) guide for how to compete successfully, practitioners hopefully will find it interesting to learn more about the extent, how, and with what results other small and medium-sized companies are, or have become, involved in export. Such insights could be a source of benchmark, and therefore strengthen a company’s level of confidence if/when making related decisions. Overall, from the practitioners’
point of view, the hope is that this study becomes a source for reflection and discussion.

It might be surprising to learn that as many as 72 percent of the small and medium-sized Swedish furniture producers were active exporters, and among the non-exporting firms only 35 percent appear to fully lack international experience. Thus, in actuality, less than ten percent of the researched firms lack previous experience with international business. Further, the average export share among exporting furniture producers was 34 percent. This is to be compared with the average export shares reported for each of the strategic groups presented by Brege et al. (2001). In Brege’s study only the office furniture producers’ export share exceeded 34 percent, and this by only one percent. Thus, since the collection of the empirical data used in Brege’s study, the furniture producers seem to have increased their export shares quite dramatically.

The most important types of export modes found among the studied exporters are ranked in order of importance: exporting through a foreign based agent; piggybacking; export through a foreign based distributor; and employing a traveling salesperson. Further, close to 60 percent of the firms occasionally fill sporadic orders from customers abroad. Companies that choose to export using primarily direct export modes, tend to have a higher overall performance than those that prefer an indirect export mode.

Further, this study reveals that strategy competence, measured in terms of relatedness and customer and competitor knowledge, is a key influencer of the firm’s performance. In conjunction with this finding, it is of value to stress that a firm’s strategy competence, and therefore also its performance, can be strengthened or improved. The firm can be determined to learn more about its customers and competitors, and also strive towards increasing the relatedness (particularly end-customer type relatedness), as a means to improve firm performance.

On average, exporting companies are older, larger, and to a lesser extent independently owned, and have a higher (overall) performance than do non-exporters. This research also shows that on average the owner/key decision-maker of an exporting SME is slightly younger, has a higher educational level, and a more positive attitude towards export compared to the non-exporting SME. See also Appendix I.

8.3 SUGGESTIONS FOR FURTHER RESEARCH

In the process of researching and writing a doctoral thesis, many interesting research tracks are unfolded but have to be omitted. Below are a number of such interesting tracks that were either entirely left outside the scope of this thesis, or where included, deserves additional attention.

Joint export with another (often current customer) domestic exporter (Holmlund and Kock, 1998).
This research attempts to explain firm performance among SMEs. Consequently, performance is included as a dependent variable. This is in line with contemporary strategy research praxis. However, researchers within the field of strategy have long acknowledged that how well a firm has performed in the past has a major impact on how well it does in the future\textsuperscript{117} (Penrose, 1995). Some have been explicit in claiming that performance should not, without reflection, be positioned in a model as merely a dependent variable (Katsikeas et al., 2000), as performance has been found to “feed back upon itself” (March and Sutton, 1997, pp. 701). Some researchers have also incorporated performance into their research as an explanatory variable (March and Sutton, 1997; Lages and Montgomery, 2004); Lant et al., 1992; Wiersema and Bantel, 1992; and Leonidou, 2000). In essence, it appears interesting and feasible to incorporate performance into research on internationalization of SMEs as a reciprocal variable. This would, to this researcher’s knowledge, be a contribution to the field of strategy.

Variance in export and overall performance among the exporting SMEs were explained to 39 and 35 percent respectively\textsuperscript{118}. Thus it should be fair to conclude that at least one, and possibly several, important independent variables were not considered in this research. As a result, more research is needed within the field of strategy to determine performance among exporting SMEs. When exploring what additional independent variable(s) to consider when explaining performance among exporting SMEs, a qualitative approach might be the most advantageous.

The finding that attitude towards export is negatively associated with overall performance among exporting SMEs should be further investigated. For example, it would be interesting to test whether attitude towards export was still found to have a negative association with overall performance if an objective financial performance measure, such as ROI, was used. A related consideration refers to the belief that the small and medium-sized furniture producers who indicate high overall performance, might depend to a large extent on the domestic market. Since collecting the empirical data used in this research, the furniture industry, along with many other industries, has felt the pressure from the global economic downturn that hit most economies hard during the fall of 2008. It would therefore be interesting to return to the furniture industry to learn if the attitude of the surveyed companies towards export has changed as a result of drastically changed competitive circumstances. In other words, have the Swedish furniture producers become more positive towards export due to changes in the demand for their products?

The somewhat conflicting finding that good knowledge about one’s competitors leads to high export performance and a preference for direct export, while at the same time indirect export also leads to strong export performance deserves more attention. The suggestion is that this finding is tested on a different group of small and medium-sized firms.

\textsuperscript{117} Penrose writes that “past success is a powerful aid to future progress” (Penrose, 1995, pp. 205)

\textsuperscript{118} The variance in overall performance among the non-exporting SMEs was explained to 45 percent.
While certainty about potential customers abroad appears to be more valuable than current customer knowledge, it has not been within the frame of this research to fully investigate why this is so. Therefore, more research is needed to reveal why potential customer knowledge seems to be of more importance than current customer knowledge among exporting SMEs. Further, what determines how much a firm claims to know about its (current and potential) customers abroad could also be investigated.

More needs to be done as far as investigating the importance of barriers (internal and external in particular) when considering internationalization among SMEs. This suggestion is based on the understanding that while external barriers have been found to affect performance among larger firms (Pehrsson, 2004a; 2006b), such associations could not be revealed here. Therefore, this topic needs to be further examined, potentially within a contextual setting spanning micro to very large companies within one industry. Such a study could also test if barriers originating within the owner/key decision-makers hinder export involvement (internationalization), but seem to have little effect once the firm has become an exporter (internationally involved).

Existing research on internationalization among small and medium-sized firms has shown that firms often become involved in import before they start exporting (Korhonen, et al., 1996). The logic is that, while involved in import, a firm gains experience and establishes contacts that can thereafter be of value to the firm as an exporter. Consequently, it would be interesting to expand the SCEMPER model to include not only export, but also to investigate to what extent firms are active importers before they become exporters. And how does import experience influence a company’s strategy competence, and therefore also its performance and perception of barriers? Thus even though inward activities do not receive any actual attention in this thesis, inward internationalization is important, and should therefore be considered in future studies.

Interpreting the length of the list of suggestions for further research presented here, it should be obvious that this research is far from completing the puzzle of internationalization regarding small and medium-sized enterprises. Instead, and as expressed in the purpose, this research should be seen as a source for increased understanding of internationalization and performance among small and medium-sized firms.
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APPENDIX A:

THE FURNITURE INDUSTRY VALUE CHAIN

For a visualization of the furniture industry value chain, see Appendix A/ Figure 1.

Appendix A/ Figure 18: A simplified value chain of the furniture industry. The figure is constructed by combining the furniture value chain developed by Maskell (1998) with the furniture sales and distribution value chain presented by NUTEK (1997).
APPENDIX B:

QUESTIONNAIRE RESPONSE OPTIONS
The data collection phase was completed during 26 days between April and August 2008. During this time, the researcher initially attempted to reach each respondent by phone to ask for his or her participation. Each agreeing respondent was thereafter given the options of answering the survey questionnaire by phone, post, or E-mail. Below, a reflection/description of each of the options available is included.

PHONE
Collecting the data over the phone obviously ensured that the respondents actually provided answers to every question. Another advantage was that no reminders were necessary. Further, having a conversation with the respondents, the researcher could explain any uncertainties related to the questionnaire. In essence, the dialogue provided the researcher with valuable insight.

POST
For administration of those questionnaires sent out by post, a version of the total design method developed by Dillman (1978) was used. The survey questionnaire was posted together with a letter of intent and a pre-paid, self-addressed return envelope. For the letter of intent see Appendix D. After approximately two weeks a letter reminding the respondents about the survey, with a new questionnaire and pre-paid envelope, was sent to all respondents that had not yet answered the survey.

One advantage associated with the traditional paper copy questionnaire, included the respondents' familiarity with the format. For the researcher, the paper copy version implied no need for detailed information such as the respondent's E-mail address and his or her availability in the office. The administration was however rather cumbersome compared to the electronic version.

E-MAIL
The software Query & Report (QR) was not only used for the design of the survey questionnaire but also for the administration of the electronic version of the questionnaire. Once a respondent decided to answer the questionnaire using E-mail, he or she provided the researcher with an E-mail address. The E-mail address was correspondingly added to the “list of respondents” created in QR. By adding the respondents to the list, each person/company was given an ID that made it possible to keep track of who had answered and who had not. Once the first questionnaire was sent out, all new respondents added to the “list of respondents” automatically received an E-mail. This E-mail, referred to as the “initial E-mail”, contained a short message mimicking the style of an ordinary letter of intent. The initial E-mail also contained a direct link to the questionnaire. By clicking on the link, the addressee was brought
to the questionnaire designated for his/hers particular ID. At the end of the questionnaire, the respondent was asked to send in the answers. The answers were thereafter automatically coded by the program and could be exported into an ordinary excel spreadsheet for further analysis.

When an E-mail reminder was needed, a reminder message was created. When the reminder was mailed out it was sent to all respondents on the “list of respondents” that had not answered the E-mail questionnaire. If new respondents were added after the reminder was sent out, they did not get the reminder.

The advantages of administering the collection of data using E-mail appears to benefit both the respondents and the researcher. The respondents seemed to believe that it was more convenient to answer the survey electronically. The fact that quite a number of respondents were curious about the actual function of the electronic survey possibly benefitted the response rate. For the researcher the major advantages refer to the ease with which the respondents were added to the mailing list and reminded when needed. The automatic coding of the answers also saved time.

The disadvantages of using electronic questionnaires were twofold. First, if the researcher initially did not get hold of the respondents to ask about which E-mail address to send the survey to, electronic mailing was not possible. Second, the respondents’ E-mail servers might determine that the E-mail containing the questionnaire was spam, or harmful in some way. As a result the E-mail could not be delivered. Fortunately, when the QR server got the information that an E-mail could not be delivered, the researcher was notified. In such instances, the respondents received a paper copy of the survey accompanied by a letter explaining what happened.

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Sometimes it was possible to find the E-mail address on the company’s home page, but often the E-mail address provided by the respondents did not correspond to the officially announced address.
APPENDIX C:

REASONS FOR EXCLUSION OF POTENTIAL RESPONDENTS
In the process of deciding who should be included as a respondent, three sources of potential respondents were consulted. From the list provided by Market Manager Partner (MMP) and TMF’s list of members, 323 firms were excluded. See Appendix C/Table 1 below. From the list provided by Hagström, 436 firms were removed, see Appendix C/Table 2. An additional 96 firms were excluded during the process of contacting each of the companies, see Appendix C/Table 3. As a result 324 firms remained on the final list of respondents. This is believed to be close to the total population of small and medium sized furniture producers in Sweden in the spring of 2008.

Appendix C/Table 1: Reasons for excluding companies from the MMP list and the TMF membership listing.

<table>
<thead>
<tr>
<th>Reason for exclusion:</th>
<th>Number of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>No employees</td>
<td>87</td>
</tr>
<tr>
<td>250 or more employees</td>
<td>4</td>
</tr>
<tr>
<td>Suppliers</td>
<td>82</td>
</tr>
<tr>
<td>Retail &amp; distribution</td>
<td>44</td>
</tr>
<tr>
<td>Other: kitchen/bath interior</td>
<td>21</td>
</tr>
<tr>
<td>Other: (re)upholstery &amp; repair</td>
<td>23</td>
</tr>
<tr>
<td>Other: no longer in business</td>
<td>5</td>
</tr>
<tr>
<td>Other: interior design/ architecture</td>
<td>8</td>
</tr>
<tr>
<td>Other:</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total number of excluded firms</strong></td>
<td><strong>323</strong></td>
</tr>
</tbody>
</table>
**Appendix C/Table 2: Reasons for excluding companies from the list provided by Lina Hagström.**

<table>
<thead>
<tr>
<th>Reason for exclusion</th>
<th>Number of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>No employees</td>
<td>14</td>
</tr>
<tr>
<td>250 or more employees</td>
<td>2</td>
</tr>
<tr>
<td>Suppliers</td>
<td>54</td>
</tr>
<tr>
<td>Retail &amp; distribution</td>
<td>4</td>
</tr>
<tr>
<td>Other: kitchen/bath interior</td>
<td>16</td>
</tr>
<tr>
<td>Other: (re)upholstery &amp; repair</td>
<td>9</td>
</tr>
<tr>
<td>Other: no longer in business</td>
<td>79</td>
</tr>
<tr>
<td>Other: could be found</td>
<td>43</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
</tr>
<tr>
<td>Duplicates</td>
<td>193</td>
</tr>
<tr>
<td><strong>Total number of excluded firms</strong></td>
<td><strong>436</strong></td>
</tr>
</tbody>
</table>

**Appendix C/Table 3: Reasons for excluding companies during the contacting stage.**

<table>
<thead>
<tr>
<th>Reason for exclusion</th>
<th>Number of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>No employees</td>
<td>10</td>
</tr>
<tr>
<td>250 or more employees</td>
<td>1</td>
</tr>
<tr>
<td>Suppliers</td>
<td>25</td>
</tr>
<tr>
<td>Retail &amp; distribution</td>
<td>8</td>
</tr>
<tr>
<td>Other: kitchen/bath interior</td>
<td>7</td>
</tr>
<tr>
<td>Other: (re)upholstery &amp; repair</td>
<td>5</td>
</tr>
<tr>
<td>Other: no longer in business</td>
<td>12</td>
</tr>
<tr>
<td>Other: could not be found</td>
<td>2</td>
</tr>
<tr>
<td>Other: interior design/ architecture</td>
<td>5</td>
</tr>
<tr>
<td>Other: duplicates</td>
<td>7</td>
</tr>
<tr>
<td>Other:</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total number of excluded firms</strong></td>
<td><strong>96</strong></td>
</tr>
</tbody>
</table>
APPENDIX D

LETTER OF INTENT (IN SWEDISH)

Institutionen för teknik och design

Till XX 2008-06-27

Små och medelstora företag, och därmed majoriteten av Sveriges möbeltillverkare, har en nyckelroll för landets fortsatta ekonomiska utveckling. När framtida tillväxt diskuteras, uppmärksammas export ofta som en avgörande faktor. I linje med detta genomför Växjö universitet nu en undersökning i samarbete med TMF med fokus på just export, strategi, och lönsamhet bland landets möbeltillverkare. Ny och fördjupad kunskap inom detta område leder till ökad förståelse för branschen bland politiker, branschföreträdare, och forskare.

Enkäten består av 23 frågor och uppskattas ta mellan 10-15 minuter att fylla i. Alla svar behandlas anonymt. Oavsett om du är en erfaren exportör eller trogen den svenska marknaden, är just din medverkan i den här undersöknings av stor betydelse. Har du frågor eller kommentarer vänligen kontakta Åsa Devine via E-mail asa.devine@vxu.se alternativt på telefon 0470-708868.

Tack för din medverkan!

Åsa Devine, Doktorand, Teknik och Design, Växjö universitet, Kontakt
Anders Baudin, Professor, Teknik och Design, Växjö universitet
Anders Pehrsson, Professor, Ekonomihögskolan, Växjö universitet
Trä- och Möbelindustriförbundet, TMF genom Katarina Lagerbielke, Chef Möbler och Boende.
APPENDIX D

LETTER OF INTENT (IN ENGLISH)

Växjö University
School of Technology and Design

To XX 2008-06-27

Small and medium sized companies, and thereby the majority of the Swedish furniture producers, play a key role in securing a positive development of the national economy. Considering such a development, export is often viewed as a determining factor. Therefore, Växjö University, together with TMF, is conducting a study focused on particularly export, strategy and performance among the furniture producers in Sweden. New and extended knowledge within this area will lead to increased understanding of the industry among politicians, trade representatives, and researchers.

The questionnaire consists of 23 questions and it takes approximately 10-15 minutes to complete. All respondents remain anonymous. Regardless of whether you are an experienced exporter or loyal to the domestic market, your cooperation is highly important. If you have any questions or comments, please contact Åsa Devine by E-mail asa.devine@vxu.se or phone 0470-708868.

Thank you for your cooperation!

Åsa Devine, PhD candidate, School of Technology and Design, Växjö University, Contact person
Anders Baudin, Professor, School of Technology and Design, Växjö University
Anders Pehrsson, Professor, School of Economics, Växjö University
Trä- och Möbelindustriförbundet (Wood- and Furniture trade organization), TMF through Katarina Lagerbielke, director of furniture and living
I Institutionen för teknik och design
Internationell etablering bland möbelföretag.

En enkätundersökning i samarbete mellan Växjö universitet och TMF med fokus på svenska möbeltillverkarens export, strategi och lönsamhet. Din medverkan är av stor betydelse!

1 Vilken av nedanstående beskrivningar stämmer bäst överens på ert företag? (Välj ett alternativ.) Om ert företag inte "tillverkar möbler i Sverige" berör inte resten av frågorna i enkäten. 

- tillverkar möbler i Sverige.
- tillverkar köks- och/ eller badinredningar.
- är en underleverantör till möbelindustrin.
- Inget av ovanstående alternativ stämmer.

Din medverkan är av stor betydelse!

2 I vilken utsträckning stämmer följande påståenden på ert företag? (1= stämmer inte alls, 6= stämmer helt) Företaget tillverkar ...

<table>
<thead>
<tr>
<th>Möbelkategori</th>
<th>Stämmer inte alls 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Stämmer helt 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>möbler under eget varumärke.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>möbler under annans namn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>möbler med stort designinnehåll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>möbler avsedda för hemmiljö.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>möbler avsedda för offentlig miljö.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>planmöbler (t ex. förvaringsmöbler och hyllor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arbetsstolar.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stoppmöbler.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sängar.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>övriga möbler för hemmet ( t ex. hall-, sovrum-, och köksmöbler).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 Vilket är grundades ert företag?
4 Hur många anställda har ert företag, räknat i heltidstjänster? (Välj ett alternativ.)

- 0
- 1-9
- 10-49
- 50-249
- 250 eller fler

5 Vilket påstående stämmer bäst överens med ägarstrukturen på ert företag? (Välj ett alternativ.) Företaget ägs till ...

- mindre än 25 procent av en eller flera partners.
- mellan 25 och 50 procent av en eller flera partners.
- mellan 51 och 99 procent av en eller flera partners.
- 100 procent av ett annat företag/ moderbolag.
- 100 procent av en enskild person/ familj (familjeägt).

6 I vilken utsträckning instämmer Du med följande påstående angående ert företags lönsamhet? (1=instämmer inte alls, 6=instämmer helt)

<table>
<thead>
<tr>
<th>Jag upplever att företagets lönsamhet år 2007 är bättre än våra konkurrenters.</th>
<th>Instämmer inte alls 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Instämmer helt 6</th>
</tr>
</thead>
</table>

Nu följer ett antal frågor som behandlar olika aspekter av export. Export avser i det här fallet försäljning av produkter tillverkade i Sverige till utländska marknader genom indirekta och direkta kanaler.

7 I vilken utsträckning anser Du att följande påståenden stämmer på ert företag? (1=stämmer inte alls, 6= stämmer helt)

<table>
<thead>
<tr>
<th>Export är idag mycket viktigt för företaget.</th>
<th>Stämmer inte alls 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Stämmer helt 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Att sälja på export är lika viktigt, men inte viktigare, än inhemsk försäljning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export kommer att vara än viktigare för företaget i framtiden.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export är för riskabelt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export passar inte företagets verksamhet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Befintliga exporthinder är för höga.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8 Här nedan finns exempel på omständigheter som kan uppfattas som hindrande för ett företags exportverksamhet. Vilken betydelse har nedanstående påstående för ert företag? (1=ingen betydelse, 6= mycket stor betydelse)

<table>
<thead>
<tr>
<th>Uttryck</th>
<th>Ingen betydelse</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mycket stor betydelse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export ställer ökade krav på tillgång till ekonomiska resurser.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export medför höga krav på produktanpassning.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tullavgifter medför exportsvårigheter.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kulturella skillnader mellan olika länder medför exportsvårigheter.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Långt avstånd till kunder i andra länder medför långa ledtider.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export är tidskrävande.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export medför ökade krav på språkkunskaper.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export leder till ökad dokumentation och pappersarbete.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Det är svårt att hitta rätt samarbetspartner i utlandet.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fördröjd betalning från kunder i utlandet medför problem.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statligt exportstöd är otillräckligt.</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9 Vilket av följande påståenden stämmer bäst överens på ert företag? (Välj ett alternativ.)

- ☐ Vi har aldrig exporterat. **Fortsätt på fråga 19.**
- ☐ Vi exporterar inte nu, men har gjort det tidigare. **Fortsätt på fråga 19.**
- ☐ Vi exporterar idag.
- ☐ Vi når ut med våra produkter till marknader utanför Sverige på något annat sätt än genom export, specificera. **Fortsätt därefter på fråga 19.**

10 Vilket år fick ert företag sin första exportorder? (Ange år)

- ☐

11 Hur stor del av den totala försäljningen utgörs idag av export? (Ange procent)

- ☐

12 Hur många anställda, omräknat i heltidstjänster, spenderar idag mer än 50 procent av sin tid på exportrelaterade arbetsuppgifter? (Ange antal)

- ☐
13 I vilket utsträckning exporterar ert företag via följande säljkanaler? (1= aldrig, 6= alltid)

<table>
<thead>
<tr>
<th>Utsträckning</th>
<th>Aldrig 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Alltid 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vi möter sporadiska ordrar från utländska kunder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vi exporterar via en svensk exportagent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vi exporterar via en av våra svenska kunder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vi exporterar via vårt utländska försäljningskontor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vi exporterar via en försäljningsagent bosatt i exportlandet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vår kringresande försäljare bosatt i Sverige genererar vår exportförsäljning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vi exporterar via en distributör som befinner sig i exportlandet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14 Till hur många länder exporterar ert företag idag? (Ange antal)

15 Hur fördelas ert företags totala export på följande geografiska områden?

<table>
<thead>
<tr>
<th>Område</th>
<th>0%</th>
<th>1-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-99%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norge.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Övriga nordiska länder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Övriga Europa.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nordamerika.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Övriga världen.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16 I vilket utsträckning instämmer Du med följande påståenden angående nuvarande och potentiella kunder i utlandet? (1=instämmer inte alls, 6=instämmer helt). Inom företaget har vi mycket goda kunskaper om...

<table>
<thead>
<tr>
<th>Kunskaper om</th>
<th>Instämmer inte alls 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Instämmer helt 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>våra nuvarande kundsegment i utlandet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>potentiella kundsegment i utlandet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17 Hur stor är likheten mellan den svenska marknaden och företagets viktigaste exportmarknad med avseende på följande faktorer? (1=ingen likhet, 6=mycket stor likhet)

<table>
<thead>
<tr>
<th>Likhet</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prissättning av företagets produkter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Företagets allmänna managementkompetens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Företagets administrativa kompetens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typ av slutkund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eftermarknadsservice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18 Avseende ert företags viktigaste exportmarknad, med hur stor säkerhet kan Du bedöma era konkurrenter med hänsyn till följande faktorer? (1=mycket osäker, 6=mycket säker)

<table>
<thead>
<tr>
<th>Likhet</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produkflora</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kundsegment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grad av kundanpassning</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prissättning</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profilering av varumärke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19 Med vilket eller vilka påståenden kan man beskriva Dig som person? (Välj ett eller flera alternativ)

- Jag är född i ett annat land än Sverige.
- Jag har bott utomlands i mer än tre månader.
- Jag har arbetat utomlands i mer än tre månader.
- Inget av ovanstående påståenden stämmer på mig.

20 Vilken är Din högsta utbildning? (Välj ett alternativ)

- Grundskola
- Gymnasium
- Yrkesutbildning (YTH, KY)
- Universitets-/högskolestudier men inte examen
- Universitetets-/högskoleexamen
- Om annan utbildning, specificera __________________________________________________________________________

21 Vilket år är Du född? __________
22 Vilken befattning har Du på företaget? (Välj ett eller flera alternativ)

☐ Ågare/ delägare
☐ Vd
☐ Exportchef/ exportansvarig
☐ Om annan befattning, specificera ____________________________

23 Är Du intresserad av att ta del av undersökningens resultat?

☐ Nej
☐ Ja, ange E-mail adress ____________________________

24 Tack för Din hjälp med att fylla i enkäten! Finns det ytterligare något Du skulle vilja berätta som kan öka vår förståelse för export, strategi, och lönsamhet inom branschen? Använd gärna utrymmet nedan för att bidra med mer information.

Kontaktperson: Åsa Devine, doktorand, asa.devine@vxu.se, Tel: 0470-708868
Institutionen för teknik och design, Växjö universitet, 351 95 Växjö
APPENDIX D

QUESTIONNAIRE (IN ENGLISH)
The survey questionnaire was originally formulated in Swedish. Here the questions are translated into English. The answers to the following questions Q2, Q6, Q7, Q8, Q13, Q16, Q17, Q18 were answered along a six-grade Likert scale.

Q1: Which of the descriptions listed below corresponds best with your company? (Choose one alternative.) If your company do not “produce furniture in Sweden”, you do not need to answer the remaining survey questions, but we would still ask you to send in your answer. The company …
  o Produces furniture in Sweden.
  o Produces kitchen and/or bathroom interior.
  o Is a supplier to the furniture industry.
  o None of the above options.

Q2: To what extent do the following statements correspond with your company? (1=does not correspond at all, 6=corresponds fully) The company produces …
  o Furniture under its own brand name.
  o Furniture using someone else’s name.
  o Designer furniture.
  o Furniture for the home environment.
  o Furniture for public spaces.
  o Flatline furniture (for example storage units and shelves)
  o Office chairs.
  o Upholstered furniture.
  o Beds.
  o Other furniture for the home (for example hall-, bedroom, and kitchen furniture)
  o Outdoor furniture.
  o Interior carpentry.

Q3: In which year was your company founded?

Q4: How many employees does your company have, measured in full-time positions? (Choose one option)
  o 0
  o 1-9
  o 10-49
  o 50-249
  o 250 or more

Q5: Which statement corresponds best with the ownership of your firm? (Choose one alternative.) The firm is owned by …
  o Less than 25 percent of one or several partners.
  o Between 25 and 50 percent of one or several partners.
  o Between 51 and 99 percent of one or several partners.
  o 100 percent of another firm/parent company.
  o 100 percent of a single person/family (family owned)
Q6: To what extent do you agree with the following statement considering the performance of your firm? (1=do not agree at all, 6=fully agree)
   o  I believe that the performance of the firm during the year 2007 was better than our competitors' (performance).

Now over to a number of questions which are focused on different aspects of export. Export is defined here as the selling of products made in Sweden to markets abroad, either through indirect or direct sales channels.

Q7: To what extent do you believe that the following statements correspond with your firm? (1=does not correspond at all, 6=corresponds fully).
   o  Export is currently very important for the firm.
   o  To export is as important, but not more important, than the domestic business.
   o  Export will become of even higher importance in the future.
   o  Export is risky.
   o  Export does not fit the company’s line of business.
   o  Existing export barriers are too high.

Q8: Listed below are examples of situations which might be perceived as barriers for the export business of a firm. To what extent are the listed situations of any importance to your firm? (1=of no importance, 6=of very high importance)
   o  Export implies increased demand for access to financial resources
   o  Export implies strong requirements for product adaptation
   o  Tariffs act as export barriers
   o  Cultural differences between countries cause export problems
   o  Geographic distance cause increased lead times
   o  Export is time-consuming
   o  Export causes increased needs for language skills
   o  Export causes increased documentation and paperwork difficulties
   o  Problems exist in finding the right business partner abroad
   o  Delays exist in receiving payments from customers abroad
   o  There is lack of sufficient government assistance

Q9: Which of the following statements corresponds best with your firm? (Choose one alternative.)
   o  We have never exported. Please continue to question 19.
   o  We do not export now, but have done so in the past. Please continue to question 19.
   o  We are currently involved in export. Please continue to question 19.
   o  Our products reach foreign markets through other means than export. Please specify. Thereafter please continue to question 19.

Q10: In which year did your company receive its first export order? (Please provide year).

Q11: What portion of the company’s total sales is currently generated through export? (Provide a percentage).

Q12: How many of your employees, counted in the number of full-time positions, spend more than 50 percent of their time on export related tasks? (Provide number of employees).
Q13: To what extent does the firm export using the following sales channels? (1=never, 6=always).
   - We answer sporadic orders from customers abroad.
   - We export through a Swedish export agent.
   - We export through one of our Swedish customers.
   - We export through our sales office located abroad.
   - We export through a sales agent living in the country to which we export.
   - Our travelling sales person living in Sweden generates our export sales.
   - We export through a distributor located in the country to which we export.

Q14: To how many countries does your firm currently export to? (Please provide the number of countries).

Q15: What amount of the firm’s total export is destined for the following geographic areas? (Options: 0%, 1-24%, 25-49%, 50-74%, 75-99%, 100%)
   - Norway
   - The other Nordic countries
   - The rest of Europe
   - North America
   - The rest of the world

Q16: To what extent do you agree with the following statements regarding current and potential customers abroad? (1=do not agree at all, 6=fully agree).
   - Within the firm we have very good knowledge of…
     - Our current customer segment abroad.
     - Potential customer segment abroad.

Q17: What is the similarity between the Swedish market and the firm’s most important export market with regards to the following factors? (1= no similarity, 6= very high degree of similarity)
   - Pricing of the firm’s products
   - The firm’s general management competence
   - The firm’s administrative competence
   - Type of end customer
   - After-sales service

Q18: Considering your firm’s most important export market, with what level of certainty can you evaluate your competitors with regards to the following factors? (1=very uncertain, 6=very certain)
   - Product scope
   - Customer segment
   - Level of customization
   - Pricing
   - Branding

Q19: What or which statement describe(s) you as a person? (Choose one or several option)
   - I was born in a country other than Sweden.
   - I have lived abroad for more than three months.
   - I have worked abroad for more than three months.
   - None of the above statements describes me.
Q20: Which is your highest educational background? (Choose one option)
- Primary school
- High school
- Trade school
- University/college studies but no degree
- University/college degree
- If other education, please specify

Q21: What year were you born?

Q22: What is your position at the firm? (Choose one or several options)
- Owner/part owner
- CEO
- Export manager
- If other position, please specify

Q23: Are you interested in the result of this survey?
- No thanks
- Yes, please provide E-mail address

Thank you for your help in answering this questionnaire. Is there anything else that you would like to share with us that might increase our understanding of export, strategy, and/or performance within the furniture industry? Please use the space below to provide more information.
APPENDIX E:

DESCRIPTIVES AND CORRELATIONS

Descriptive statistics and Pearson correlation coefficients, $r$, for all independent variables included in the models explaining exporting/non-exporting behaviours (Dummyexport); type of export involvement (Dummydirect); and exporters’ performance (subjective and objective). If the correlation between two variables is inside the interval $(-0.7) < r > 0.7$ there does not appear to be any problem with multicollinearity (Hair et al., 1998).

Appendix E/Table 1: Correlation matrix and descriptive statistics for the six independent variables explaining the variance in the dependent variable Dummyexport.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm age (Q3recoded)</td>
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<td>0.584</td>
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<td></td>
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<tr>
<td>Attitude towards export (IndexExpattDiv)</td>
<td>3.607</td>
<td>1.705</td>
<td>-0.103</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest educational level (Dummyuniversity)</td>
<td>0.45</td>
<td>0.499</td>
<td>0.016</td>
<td>0.225**</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Export does not fit the company’s line of business (Q7_5)</td>
<td>1.92</td>
<td>1.380</td>
<td>0.072</td>
<td>-0.596*</td>
<td>-0.133</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties in finding a preferred overseas partner (Q8_9)</td>
<td>4.17</td>
<td>1.504</td>
<td>-0.691</td>
<td>-0.038</td>
<td>0.098</td>
<td>0.141</td>
<td></td>
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<tr>
<td>Tariffs act as export barrier (Q8_3)</td>
<td>2.84</td>
<td>1.420</td>
<td>-0.130</td>
<td>-0.029</td>
<td>-0.118</td>
<td>0.100</td>
<td>0.355**</td>
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</table>

N = 136, *p<0.05; **p<0.01 (2-tailed)
### Appendix E/Table 2: Correlation matrix and descriptive statistics for the 12 independent variables explaining the variance in the dependent variable Dummydirect.

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<th>Variables</th>
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<tbody>
<tr>
<td>Ownership structure (Dummyautonomous)</td>
<td>0.53</td>
<td>0.502</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Attitude towards export (IndexExpatt2div)</td>
<td>4.145</td>
<td>1.503</td>
<td>-0.021</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Number of markets entered (LG10Q14)</td>
<td>0.717</td>
<td>0.386</td>
<td>0.045</td>
<td>0.439**</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Firm size (Q4)</td>
<td>2.88</td>
<td>0.688</td>
<td>-0.138</td>
<td>0.232**</td>
<td>0.588**</td>
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<td></td>
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<tr>
<td>Export is too risky (Q7_4)</td>
<td>1.97</td>
<td>1.142</td>
<td>0.053</td>
<td>-0.208</td>
<td>-0.092</td>
<td>-0.050</td>
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</tr>
<tr>
<td>Export increases demand for economic resources (Q8_1)</td>
<td>3.79</td>
<td>1.445</td>
<td>0.005</td>
<td>0.122</td>
<td>0.104</td>
<td>-0.058</td>
<td>0.261**</td>
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</tr>
<tr>
<td>End customer type relatedness (Q17_4)</td>
<td>4.39</td>
<td>1.513</td>
<td>0.118</td>
<td>0.226**</td>
<td>0.113</td>
<td>-0.027</td>
<td>-0.178</td>
<td>-0.112</td>
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<tr>
<td>Company’s general management skills relatedness (Q17_2)</td>
<td>3.96</td>
<td>1.5</td>
<td>0.294**</td>
<td>0.328**</td>
<td>0.154</td>
<td>-0.003</td>
<td>-0.173</td>
<td>0.078</td>
<td>0.604**</td>
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<tr>
<td>Price relatedness (Q17_1)</td>
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<td>1.501</td>
<td>0.217**</td>
<td>0.064</td>
<td>0.147</td>
<td>0.160</td>
<td>-0.124</td>
<td>-0.176</td>
<td>0.581**</td>
<td>0.673**</td>
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<tr>
<td>Competitor certainty (IndexComplknowdiv)</td>
<td>3.6</td>
<td>1.315</td>
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<td>0.085</td>
<td>0.140</td>
<td>-0.100</td>
<td>0.073</td>
<td>0.177</td>
<td>0.286**</td>
<td>0.128</td>
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<tr>
<td>Knowledge about current customers abroad (Q16_1)</td>
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<td>1.515</td>
<td>-0.059</td>
<td>0.224**</td>
<td>0.107</td>
<td>0.177</td>
<td>-0.144</td>
<td>-0.016</td>
<td>0.323**</td>
<td>0.365**</td>
<td>0.240*</td>
<td>0.510**</td>
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<td>Knowledge about future potential customers abroad (Q16_2)</td>
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<td>0.171</td>
<td>0.215</td>
<td>0.171</td>
<td>-0.190</td>
<td>-0.017</td>
<td>0.172</td>
<td>0.286**</td>
<td>0.193</td>
<td>0.480**</td>
<td>0.540**</td>
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*N = 89, *p < 0.05; **p < 0.01 (2-tailed)
Appendix E: Table 3: Correlation matrix and descriptive statistics for the 12 independent variables explaining the variance in the dependent variable Dummydirect.

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<tr>
<th>Variables</th>
<th>Mean</th>
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<td>Number of markets entered (LG10Q14)</td>
<td>0.717</td>
<td>0.366</td>
<td>0.045</td>
<td>0.439*</td>
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<tr>
<td>Firm size (Q4)</td>
<td>2.88</td>
<td>0.688</td>
<td>-1.38</td>
<td>0.232*</td>
<td>0.586**</td>
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<td>0.118</td>
<td>0.226*</td>
<td>0.113</td>
<td>-0.027</td>
<td>-0.178</td>
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<td>0.328**</td>
<td>0.154</td>
<td>-0.003</td>
<td>-0.173</td>
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<td>1.501</td>
<td>0.217*</td>
<td>0.064</td>
<td>0.147</td>
<td>0.160</td>
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<td>0.673**</td>
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<td>1.315</td>
<td>-0.177</td>
<td>0.205</td>
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<td>0.177</td>
<td>0.286**</td>
<td>0.128</td>
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</tr>
<tr>
<td>Knowledge about current customers abroad (Q16_1)</td>
<td>3.34</td>
<td>1.515</td>
<td>-0.059</td>
<td>0.224*</td>
<td>0.107</td>
<td>0.177</td>
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<td>0.323**</td>
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<td>0.240*</td>
<td>0.510**</td>
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<td>Knowledge about future potential customers abroad (Q16_2)</td>
<td>2.41</td>
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<td>0.171</td>
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<td>-0.017</td>
<td>0.172</td>
<td>0.266**</td>
<td>0.193</td>
<td>0.480**</td>
<td>0.540**</td>
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</table>

N = 89, *p<0.05; **p<0.01 (2-tailed)
APPENDIX F:

SPORADIC EXPORTERS
Among the responding firms involved in export, four were only involved in sporadic export. The decision was made to separate these four firms from the other exporting firms for two reasons. First of all, firms only involved in sporadic export are believed to export on a random, non-planned, basis. An example is when a firm answers an unsolicited order received for example during a trade show. Thus, to inquire about these firms’ strategy competences related to the export venture(s), might not be appropriate or be of value.

The second reason relates to the need to categorize the exporters into meaningful units. To avoid having too few cases per category the decision was made to divide the exporters into those mainly involved in direct and those mainly involved in indirect export. Adopting such a divide, it became problematic to include firms only involved in sporadic export. With a larger number of respondents it might have been possible to include three types of entry modes: sporadic, indirect, and direct.

In Appendix F/Table 16, basic information about these four sporadic exporters is presented, revealing a predominantly random nature of the firms.

Appendix F/Table 16: Summary of information for the four firms involved in only sporadic export.

<table>
<thead>
<tr>
<th></th>
<th>Micro-sized</th>
<th>Small</th>
</tr>
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<td>1</td>
</tr>
<tr>
<td>Ownership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% owned by one person/family</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25-50% owned by a partner(s)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Product focus</td>
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<td></td>
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<tr>
<td>Equal for home and public space</td>
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<td>1</td>
</tr>
<tr>
<td>Performance</td>
<td></td>
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<tr>
<td>Low performance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Very high performance</td>
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<td>1</td>
</tr>
<tr>
<td>Importance of future export</td>
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<td></td>
</tr>
<tr>
<td>Export will not the noticeably more important</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Export will be slightly more important</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Export will be somewhat more important</td>
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<td></td>
</tr>
<tr>
<td>Export will definitely be more important</td>
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<td></td>
</tr>
<tr>
<td>Year founded</td>
<td>1950, 1989, 2000</td>
<td>Before 1900</td>
</tr>
<tr>
<td>Number of years before export</td>
<td>4, 6, 15</td>
<td>45</td>
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</tbody>
</table>

Of the four sporadic exporters, three were micro-sized and one was small. Thus, no medium-sized respondent was involved in sporadic export activities alone. All of the firms were to an equal extent making furniture for the public (office furniture) and private (home furniture) spaces. Thus, none of the sporadic exporters was primarily making furniture only for private homes or only for public spaces. Without further investigation one might contemplate if the somewhat undecided, or random, nature in which the sporadic exporters be-
came involved in foreign business, was mimicked by the way they determined, or maybe fail to determined, what market to serve.

Finally, at least three of the firms indicated that export will become more important for them in the future. But until then, they will be treated separately from the other exporters. Thus, at least for some of these firms, being a sporadic exporter might be the first stage towards later becoming an established and committed exporter.
APPENDIX G:

FIRMS EQUALLY INVOLVED IN INDIRECT AND DIRECT EXPORT

It was not possible to categorize eight of the exporting respondents as being primarily involved in indirect or direct export. Rather than randomly, or forcefully, placing them into one of the main types of export, the decision was made to treat them separately from the rest of the exporters. A note on the characteristics of the eight firms equally involved in direct and indirect export is therefore available here.

There is an over-representation of micro-sized firms among those equally involved in indirect and direct export. All of them are independently owned, and half of them were founded between 1986 and 1997. Only one of the firms is “younger”, founded in year 2000 or later. With the exception of two firms that indicated that they have each been exporting for 33 years each, all had been exporting for less than six years. This should be considered a rather short time particularly considering that the other exporters had been exporting for 25 years on average. The average export share for the eight firms equally involved in indirect and direct export was 22 percent, and the average number of countries exporting to was less than four. For the other exporters, the corresponding numbers were 34 percent average export shares and exporting to, on average, almost eight countries.

Another difference between the exporters that export equally through indirect and direct sales channels and the other exporters, was how they rated their own performance compared to their competitors. Among the firms involved equally in indirect and direct export as many as 50 percent stated that they felt their performance was below that of their competitors. The equivalent number for the other exporters was 28 percent.

No noteworthy differences were found between the eight firms involved equally in indirect and direct export and the other exporters when it came to the following parameters: attitude towards export, the owner/key decision maker’s average age, and a preference for either indirect or direct export.

---

120 63 percent of the firms equally involved in indirect and direct export are micro sized firms. The equivalent numbers for all respondents and other exporters (not including the eight exporters discussed above, nor the firms involved only in sporadic export) are 39 percent and 30 percent.

121 The most frequently used indirect export mode was export through a Swedish customer (piggybacking) and the most frequently used direct export mode was export through a sales agent living abroad.
APPENDIX H:

PERFORMANCE AMONG NON-EXPORTING SMES

The overall research question reads: What factors determine internationalization and performance among small and medium-sized firms? In other words, explaining what determines non-exporting SMEs’ performance fit within the scope of this question. However, considering the research model, and the related hypotheses, it is not central within this research to focus on non-exporters per se. The importance of the non-exporters refers to the comparative opportunities this group of respondents allows for. However, a comparison of the exporters’ and non-exporters’ performance is not absolutely relevant, considering the different model building approaches dictated by the research model. As a consequence, performance of non-exporters is discussed separately here.

In total, four control variables and four barriers were tested for their effect on subjective performance among the non-exporters. Model 5, Appendix H/ Table 1, has a 45 percent explanatory power, the Chi-square value is 18.494 (p < 0.05), and there is eight degrees of freedom. Thus, it appears as if the independent variables included in the model, manage to explain performance among the non-exporters satisfactory.

The four barriers are of different origins (they correspond to the four barriers included in hypotheses H2a, H2b, and H2c): one originate within the key decision maker of the firm; one within the internal organization; and two from the external environment of the firm. Of these four barriers, only one of the externally-based barriers appears to have effect on firm performance. More precisely, firms that perceive the potential export barrier “Cultural differences between countries cause export problems” to be a major obstacle to export, indicate that they have a stronger performance than their competitors. This externally based barrier is significant on the one percent level, see Model 4, Appendix H/ Table 1.

Among the four control variables, three seemingly prove to be important in explaining performance among the studied group of firms. These three variables include, in order of importance, the ownership structure of the firm; main product focus (office furniture); and age of the company.

The ownership structure variable has a negative effect on firm performance. This can be understood as the independently owned non-exporting firms perceiving themselves as having a less favourable performance than do their competitors. Also, those firms that are owned in part or fully by someone else appear to have a stronger (subjective) performance.

Further, companies mostly focusing on making furniture for the public space (office furniture) seem to be significantly different from those companies that are making home furniture (reference category). Those non-exporters who make office furniture seem to show a weaker performance than those non-exporting firms that are making home furniture.
Finally, age of the company has a positive effect on subjective firm performance. Thus, the older the non-exporting firm, the better the company’s performance.

Appendix H/ Table 1: Presentation of analysis investigating what explains subjective performance among non-exporters. Analysis method: ordinal regression. Only non-exporters were considered.

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>(1.660)</td>
<td>(1.745)</td>
<td>(1.795)</td>
<td>(1.902)</td>
<td>(1.937)</td>
</tr>
<tr>
<td>Intercept 2</td>
<td>-1.358</td>
<td>-1.775</td>
<td>-1.295</td>
<td>-1.644</td>
<td>-1.817</td>
</tr>
<tr>
<td></td>
<td>(1.613)</td>
<td>(1.697)</td>
<td>(1.760)</td>
<td>(1.868)</td>
<td>(1.903)</td>
</tr>
<tr>
<td>Intercept 3</td>
<td>0.199</td>
<td>-0.263</td>
<td>0.244</td>
<td>0.087</td>
<td>-0.084</td>
</tr>
<tr>
<td></td>
<td>(1.613)</td>
<td>(1.684)</td>
<td>(1.752)</td>
<td>(1.851)</td>
<td>(1.878)</td>
</tr>
<tr>
<td>Intercept 4</td>
<td>1.291</td>
<td>0.991</td>
<td>1.486</td>
<td>1.564</td>
<td>1.428</td>
</tr>
<tr>
<td></td>
<td>(1.633)</td>
<td>(1.698)</td>
<td>(1.768)</td>
<td>(1.857)</td>
<td>(1.880)</td>
</tr>
<tr>
<td>Intercept 5</td>
<td>1.994</td>
<td>1.941</td>
<td>2.401</td>
<td>2.646</td>
<td>2.543</td>
</tr>
<tr>
<td></td>
<td>(1.667)</td>
<td>(1.753)</td>
<td>(1.826)</td>
<td>(1.924)</td>
<td>(1.994)</td>
</tr>
</tbody>
</table>

Control variables

|                      |        |        |        |        |        |
| Firm age (Q3recoded) | 1.773**| 1.725**| 1.905**| 2.036***| 2.003**|
|                      | (0.727)| (0.744)| (0.756)| (0.774)| (0.792)|
| Ownership structure  |        |        |        |        |        |
| (Dummyautonomous)    | -2.294***| -2.385***| -2.494***| -2.649***| -2.666***|
|                      | (0.854)| (0.872)| (0.908)| (0.918)| (1.005)|
| Main product focus office furniture | -2.629***| -2.389**| -2.273**| -2.065**| 2.091**|
| (Dummyoffice)        | (0.989)| (0.998)| (0.998)| (1.010)| (1.011)|
| Main product focus both office and home (Dummyequalofficehome) | -0.851 | -0.591 | 0.703 | -0.164 | 0.233 |
|                      | (0.826)| (0.867)| (0.883)| (0.903)| (0.910)|

Export barriers

|                      |        |        |        |        |        |
| Export barriers      |        |        |        |        |        |
| Export is too high   | -0.129 | -0.158 |        |        |        |
| (Q7_6)               | (0.266)| (0.271)|        |        |        |
| Export implies strong requirements for product adaptation (Q8_2) | 0.161 | 0.039 |        |        |        |
|                      | (0.231)| (0.304)|        |        |        |
| Delay in receiving payments from customers abroad (Q8_10) | -0.517 | -0.524 |        |        |        |
|                      | (0.295)| (0.330)|        |        |        |
| Cultural differences between countries cause export problems (Q8_4) | 0.892***| 0.884***|        |        |        |
|                      | (0.316)| (0.322)|        |        |        |

Number of (valid) cases incl. in analysis | 35 | 33 | 33 | 35 | 35

Chi-square: 10.172** 18.494** 9.978* 18.138*** 18.494**
Degrees of freedom: 4 5 5 6 8
Nagelkerke’s (Pseudo) R²: 0.262 0.267 0.271 0.439 0.446

*p<0.10; **p<0.05; ***p<0.01; ****p<0.001, N = 38

S.E. (standard variation) is presented within parenthesis immediately below the beta values for each of the independent variables. Intercept 1 indicate the logit for Q6 level 5 and 6; Intercept 2 for level 4, 5, and 6; Intercept 3 for level 3, 4, 5 and 6; Intercept 4 for level 2, 3, 4, 5 and 6; Intercept 5 for level 1, 2, 3, 4, 5 and 6.

For the descriptive statistics and Pearson correlation coefficients, r, for the independent variables, see Appendix H/Table 2. Since none of the correlations between two variables are outside the interval (-0.7) < r > 0.7 there does not appear to be any problem with multicollinearity (Hair et al. 1998).
Appendix H/Table 2: Correlation matrix and descriptive statistics for the independent variables explaining the variance in the dependent variable subjective overall performance among the non-exporters.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm age (Q3recoded)</td>
<td>2.05</td>
<td>0.517</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ownership structure (Dummyautonomous)</td>
<td>0.74</td>
<td>0.446</td>
<td>-0.173</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Main product focus office furniture (Dummyoffice)</td>
<td>0.371</td>
<td>0.490</td>
<td>-0.416*</td>
<td>-0.299</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Main product focus office furniture (Dummyequalofficehome)</td>
<td>0.343</td>
<td>0.482</td>
<td>0.375</td>
<td>-0.076</td>
<td>-0.555**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Export barriers are too high (Q7_6)</td>
<td>2.25</td>
<td>1.204</td>
<td>0.201</td>
<td>0.078</td>
<td>-0.089</td>
<td>0.035</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Export implies requirements for product adaptation (Q8_2)</td>
<td>3.17</td>
<td>1.558</td>
<td>0.264</td>
<td>0.269</td>
<td>-0.350*</td>
<td>0.303</td>
<td>0.114</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Delayed payments from customers abroad (Q8_10)</td>
<td>3.75</td>
<td>1.61</td>
<td>0.184</td>
<td>-0.137</td>
<td>-0.086</td>
<td>0.257</td>
<td>0.092</td>
<td>0.586**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cultural differences cause export problems (Q8_4)</td>
<td>3.06</td>
<td>1.472</td>
<td>0.142</td>
<td>-0.062</td>
<td>-0.113</td>
<td>0.060</td>
<td>0.105</td>
<td>0.432**</td>
<td>0.572**</td>
<td>-</td>
</tr>
</tbody>
</table>

N = 38, *p < 0.05; **p < 0.01 (2-tailed)
A high score indicates that export is important today as well as in the future.

APPENDIX I:

SUMMARY EXPORTERS VERSUS NON-EXPORTERS
A summary of the characteristics of exporters and non-exporters, based on control variables and performance, is available in Appendix I/Table 1. Following this summary is a discussion of differences between the exporters and non-exporters with regards to how they perceive (potential) export barriers.

Appendix I/Table 1: The characteristics of exporters and non-exporters considering control variables and performance.

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Exporters (N = 89)</th>
<th>Non-exporters (N = 38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm age</td>
<td>Mean = 45.3 years (S.D. = 34.8)</td>
<td>Mean = 31.7 years (S.D. = 24.8)</td>
</tr>
<tr>
<td>Number of years exporting</td>
<td>Mean = 23.6 years (S.D. = 18)</td>
<td>NA</td>
</tr>
<tr>
<td>Owner's age</td>
<td>Mean = 48 years (S.D. = 10.2)</td>
<td>Mean = 50.5 (S.D. = 10.6)</td>
</tr>
<tr>
<td>Highest educational background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nine years compulsory school</td>
<td>9%</td>
<td>18%</td>
</tr>
<tr>
<td>Highschool</td>
<td>25%</td>
<td>42%</td>
</tr>
<tr>
<td>Technical college or trade school</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>University/college studies, but no degree</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>University/college degree</td>
<td>36%</td>
<td>16%</td>
</tr>
<tr>
<td>Other education</td>
<td>4%</td>
<td>-</td>
</tr>
<tr>
<td>Attitude towards export</td>
<td>Mean = 4.146 score* (S.D. = 1.502)</td>
<td>Mean = 2.224 score (S.D. = 1.616)</td>
</tr>
<tr>
<td>Main product focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home furniture</td>
<td>32%</td>
<td>26%</td>
</tr>
<tr>
<td>Public space furniture</td>
<td>39%</td>
<td>37%</td>
</tr>
<tr>
<td>Equally furniture for public use or homes</td>
<td>27%</td>
<td>37%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2%</td>
<td>-</td>
</tr>
<tr>
<td>Ownership structure</td>
<td>53% independently owned</td>
<td>74% independently owned</td>
</tr>
<tr>
<td>Firm size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro</td>
<td>30%</td>
<td>55%</td>
</tr>
<tr>
<td>Small</td>
<td>52%</td>
<td>37%</td>
</tr>
<tr>
<td>Medium</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>Number of markets entered</td>
<td>Mean = 7.75 markets (S.D. = 7.7)</td>
<td>NA</td>
</tr>
<tr>
<td>Export experience non-exporters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never been involved in export</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exported previously but not now</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sell abroad but no export</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective export performance</td>
<td>Mean = 34% export shares (S.D. = 26.5)</td>
<td>NA</td>
</tr>
<tr>
<td>Subjective overall performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower than competitors</td>
<td>29%</td>
<td>40%</td>
</tr>
<tr>
<td>About the same as competitors</td>
<td>48%</td>
<td>47%</td>
</tr>
<tr>
<td>Higher than competitors</td>
<td>22%</td>
<td>13%</td>
</tr>
</tbody>
</table>

* indicate the mean score on a 6-grade scale.
A high score indicate that export is important today as well as in the future.

How exporters and non-exporters rate potential barriers as being of different importance to them is discussed in 5.4.1.1. This investigation resulted in the finding that for 29 percent of the rated barriers, exporters and non-exporters seem to be in agreement. Thus, to some extent the respondents, regardless of their level of export involvement, perceive barriers to export (or barriers to potential export) to be the same.

It might be interesting to note that of the barriers that are rated the same by exporters and non-exporter, three out of four are external. Assuming that exporters have an understanding of the external barriers based on actual ex-
experience, the non-exporters seem to have a rather good understanding of this group of barriers as well. This is not too surprising, however, considering that 65 percent of the non-exporters were either selling abroad using a different entry mode than export, or had previous experience of export. Thus, it is only 35 percent of the non-exporters that have truly restricted experience in international business.

The fourth barrier, which was rated the same by exporters and non-exporters is “export being too time consuming”. Thus, it might be appropriate to assume that export is as time consuming as the non-exporters understand it to be.

The fact that the non-exporters rate the psychological barrier “export does not fit the type of business” much higher than the exporters, should not be too surprising. Meanwhile, exporters rate the operational barrier “export causes increased need for language skills”, as the most important of all the barriers, which is much higher than the rating this barrier receives from the non-exporting firms. This seems logical in the sense that exporters are, compared to non-exporters, actually experiencing the problems of not being able to communicate sufficiently with customers abroad, and therefore realizes what this might imply.

The variation of the average barrier scores ranges from 1.84 to 4.21 among the exporting respondents. This is to be compared with average scores ranging from 2.19 to 3.95 found among non-exporters. One reason for this difference in the average score range might be that the exporters actually have encountered some of the suggested barriers during operations, while the non-exporters judge the importance of the barriers from an inexperienced (and possibly indifferent) point of view. All the three barriers, which rated the highest among the exporters (average scores of 3.97, 4.13, and 4.21) are also, not surprisingly, operational barriers.

Two patterns seem to have emerged regarding how exporters and non-exporters perceive barriers: Exporters and non-exporters rank (potential) export barriers in a somewhat similar fashion. However, the average rating of the barriers shows that, while non-exporters rate barriers in a modest way, the exporters’ ratings involve divergences from the centre of the rating scale. Thus, this research seems to partly support that claim that exporters and non-exporters perceive barriers differently from each other (Leonidou, 1995; Starkey et al. 1989).