The Relationship between Initiation, Barriers, Product Quality and Internationalization

by

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Preface

I grew up in a small fishing village on an island in Finnmark. Our connection to the outside world was through boats and ships, which came and went. They supplied the village with necessities such as food, fuel and forestry products. They brought the salt that was necessary to cure the large cods after Ingvald Hansen and Erling Pedersen had split them. When the cod was dried or cured, new ships arrived to fetch the finished products. But where did the salt come from? To which foreign country would the fish be shipped? Who would eat it? Questions such as these were much discussed among the children of the village. We heard that the salt came all the way from Portugal, and that the stockfish produced in our village was used to mend roofs in Africa. All these speculations created curiosity about the ways and manners of people living in distant parts of the world.

Our world was one of mystery, magic and change. The year was cyclic. 24 hours of darkness was followed by 24 hours of daylight. My father Paul, my uncles Agnar and Hagbart and the other fishermen started to prepare for the Lofoten fishery in January, this fishery lasted until Easter. Then they left for the cod fisheries in east-Finnmark. Upon their return, they brought us gifts and stories about the places they had visited and the people they had met. What about the man named Sepp Ladikepp Rapp Marikap? What about the man, who named his daughter Grytvika Lopez, which begs the question: What is in a name? Does a rose smell as sweet, even when it has another name?

After having spent the winter nearly freezing our fingers off while cutting out cod tongues, the season for picking seagull eggs arrived. Soon the nomadic laps would come to the island with their hundreds of reindeers, their dogs, their colorful clothes and, for us, their unusual language. My grandmother would teach me to say “Buorre beaivi”, “Ipmelatti”, “Galgatgo mii mannat” and to count to ten in the Sami language. Soon it would be that time of the year when the manager of the local fish factory would be chasing us down, because we were stealing stockfish from the drying racks.

Stability was provided by the ships that came and went, and the trade that sustained this stability. The old maker of cod-liver oil, Rolf Høyen, told us about the Pomor trade. About the Russian traders that used to come to our Island in order to exchange wheat and barley for
fishery products. He told us how the Russians were addressed by the words “Moya på Toya¹, Kjøpe dokker fisk”, and the Russian would answer in the same mixture of Norwegian and Russian, thus the traders of the two lands through their marketing interactions were developing a new language. A common language: The Pomor language.

The summer was the time to catch the salmon that came to the coast to spawn in the rivers. Soon August was to come. The school year was ready to start and the local ferry would bring us a new teacher, who would stay until he was to leave again with the ferry in June. In the fall there came the saithe fishery, followed by the halibut fishery that lasted until Christmas.

The long winter evenings were spent listening to stories about the Second World War, and inspecting the wooden toys that the Russian prisoners of war had made and given my parents to say thank you for the occasional food, which they had smuggled into the camp. The stories about the burning of Finnmark influenced me to believe in the positive and stabilizing forces of international trade and international relationships.

My mother, Selma, was an important force influencing me to engage myself in academic studies. Then as now, fishermen in Finnmark were highly skilled, and the marketing system for fish was not as well functioning as it should be. Consequently I set out to study marketing.

As a young man from Finnmark, it was clear to me that I had a moral duty to try work as a sailor. I failed somewhat by only being able to land a job as piccolo on the cruiser Royal Viking Sea. My goal of traveling around the world was nonetheless achieved. One and a half years work as a fisheries attaché at the Norwegian export council in Paris, followed by another one and a half year as junior expert for F.A.O. in Kuala Lumpur, before studies took me to the United States and Germany.

This traditional, northern Norwegian lestadianer who picks up every 50 øring he finds on the ground and saves it, because he worries about the future, was himself, by a quirk of fate, thrown together with Danielle, his American trophy wife used to a life with a tad more luxury. She enthusiastically instructs me in the finer points of life, such as the joys of owning Hermes silk scarves, Prada handbags, and the pure luxuriousness of Diors Midnight in Montmartre;

¹ Should actually be Moja tvoja.
the one lipstick she claims is the perfect shade of red. She has implanted in me an understanding of the creative as well as the destructive forces of capitalism, and keeps providing me with constant knowledge about brands and the relationships skills a marketing scholar should have.

When I took it upon myself to write a dissertation, I contemplated my life, the forces and people that had influenced it. It then became clear that international trade, foreign cultures and international travels was very much part of my life. My dissertation had to be about internationalization.

I decided to use the dissertation as a tool to learn the art and craft of writing articles, therefore I asked a real master of this craft to be my advisor. I thank Kjell Grønhaug very much for his efforts. There are many people who have influenced this dissertation indirectly and directly. Among them are: Bjarne Bakka, Gabriel Benito, Jörg Blasius, Andreas Falkenberg, Svein Haugland, Arnulf Hauan, Stig Ingebrigtsen, Ove Jakobsen, Pål A. Pedersen, Frode Nilssen, Geir Ottesen, Magne Supphellen and Rolf Volden. My thanks to them.

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Chapter 1

Introduction, Summary and Conclusions
Background

The overall objective of this dissertation is to advance knowledge about export and internationalization. More specifically, this research develops and tests predictions within three subfields of firm internationalization in order to explain marketing behavior as firms crosses international borders. This research addresses initiation of internationalization, export barriers, product quality and the internationalization of firms. The aim is to make an effort towards theory development within the area of firm internationalization.

Internationalization has to do with business activities that cross borders, and the factors that influence these activities. There are several definitions of internationalization on the firm level. One early definition states that internationalization is a process that “focuses on the development of the individual firm, and particularly on its gradual acquisition, integration, and the use of knowledge about foreign markets and operations, and on its successively increasing commitment to foreign markets” (Johanson and Valne 1977: 23). This definition emphasizes the role of knowledge for firm internationalization, and the importance of knowledge creation and its integration into the firm for the firm’s internationalization.

There are multiple reasons for firms to internationalize. Some firms choose to internationalize because they see opportunities for value creation in foreign markets, such as higher product prices or access to a new market niche. Other firms internationalize in order to survive, due to high competition or decreasing demand in the home market or need for a larger market to be able to reap economies of scale.

Firms that internationalize have to adjust to new external conditions, foreign languages, and foreign culture and to more complicated forms of exchange with markets. Internationalization, therefore, often leads to perceptions of increasing complexity, higher risk and increasing feelings of insecurity.

Much research within internationalization is related to the internationalization process (e.g., Carlson 1975, Johanson and Vahlne 1977, Cavusgil 1980; 1984, Reid 1981, Czinkota and Johnston 1983, Welch and Luostarinen 1988, Andersen 1993), to foreign direct investments (e.g., Aharoni 1966, Newbould et al. 1978, Hennart 1982, Buckley 1988, Dunning 1988), and to born globals (Knight and Cavusgil 1996, Oviatt and McDougall 1994). There have been
several reviews of the internationalization literature (Welch and Luostarinen 1988, Miesenbock 1988, Aaby and Slater 1989, Johanson and Valne 1990, Johanson and Valne 1992, Melin 1992, Andersen 1993, Coviello and McAuley 1999, Bjorkmann and Forsgren 2000). A good deal of research has been done on specific aspects of firm internationalization. This is particularly true for processes and patterns of internationalization, particularly related to market selection (e.g. Davidson 1980; Dunning 1997) and choice of entry strategy (e.g. Andersen 1997; Benito and Welch 1994; Hill et al. 1990). Other elements of internationalization have received much less emphasis, for example questions related to initiation of internationalization, how barriers are related to firm internationalization or how product quality is related to firm internationalization. These elements of internationalization are the focus here. The literature about these three elements is scattered and consists of several bodies of literature that is poorly integrated. This creates a problem in the sense that it is difficult to show how these three elements of internationalization are linked to each other.

Initiation of internationalization is a first step toward making internationalization happen. Without initiation there would be no internationalization. A firm has experience operating in its home market and it knows this market and its environment. Internationalization entails operating in a new market and a new environment. That means moving from the known towards the unknown, from a familiar market to a market that is perceived to be more complex, uncertain and risky than the home market (Reve et al. 1995). When a firm has operated some time in a foreign market, the firm learns how to operate there, hence uncertainty lessens. A firm’s internationalization is difficult in itself, but initiation of internationalization is perhaps the most difficult stage of a firm’s internationalization. The firm needs access to foreign actors, such as agents, importers or distributors. To identify, evaluate, negotiate with and select a foreign partner (Dwyer et al. 1987) is time consuming and binds resources. Once a foreign partner is selected this may exclude other possibilities. Initiation is, therefore, an important issue of firm internationalization.

Barriers impede firm internationalization by making international operations more complicated and resource demanding. There are multiple types of barriers; the most obvious are perhaps tariff barriers that increase the cost and complexity of internationalization. There are also a host of non-tariff barriers that complicate firm internationalization (see e.g. Leonidou 1995 for a review). Such barriers are often evaluated according to firms’
perceptions of them, because perceptions represent reality. If barriers are perceived to be high or if firms are not skilled in handling such barriers, they may seriously weaken and perhaps in some cases prevent firms’ internationalization.

Product quality is an important pre-requisite for firms’ internationalization. Without sufficient product quality, relative to that of ones competitors, it is difficult and perhaps in most cases impossible to become accepted in a foreign market. If the product does not offer a god price-quality relationship there is no reason why foreign buyers shall accept it. Product quality is therefore important for firm internationalization.

In this dissertation four empirical studies of the behavior of Norwegian firms are presented. Specifically, the four studies investigate the following research questions. First, what are the antecedents for direct and indirect personal information in evaluating potential foreign business partners? Second, what is the relationship between psychic distance, a free trade agreement, protectionism and perceived export barriers? Third, how do the various stages in a supply chain perceive product quality? Fourth, is there any systematic variation between volume of supply and quality assessment? These questions deal with important, but relatively unexplored aspects of initiation, barriers, product quality and internationalization.

**Objective and Scope of the Studies**

The internationalization literature tends to rely on the large multinational firm as the unit of analysis, the internationalization literature of small and medium sized firms is relatively recent (Coviello and McAuley 1999).

It is often suggested that small firms differ from large firms. It is for example suggested that that they make use of different managerial process (Smith et al. 1988), have different organization structure (Julien 1993), ownership, scale and scope of operations. Furthermore “they behave differently in their analyses of, and interaction with their environment” (Schuman and Seeger 1986: 8). Small firms may face other and more internal constraints (Buckley 1989) and external barriers (Acs et al. 1997) than large firms do.

Norwegian firms are used as empirical setting. Due to the open economy and the small size of their domestic market, Norwegian firms often have had to expand internationally in order
to grow. Since Norwegian firms in general are very small they have to do so with rather limited resources. Norway is, therefore, interesting as an empirical setting for studying small firms’ internationalization.

According to Root (1987) there are two ways a firm can internationalize. The first way is to export to the foreign market from a production base outside the foreign country. Rooth divides this into export strategy and contract strategy. The second way is to transfer work, capital, technology and enterprise to the foreign country where they are being sold directly to the consumer or put together with local resources to produce a product for sale on the local market. Root calls this investment strategy. Within a transaction cost framework (Williamson 1985) these three strategies can be placed on a continuum from market to hierarchy, where export strategy and contract strategies can be seen as strategies of cooperation or strategic alliances, whereas investment strategy can be seen as hierarchy. An export auction would be an example of a strategy that would be placed on the market side of the continuum.

Firms that use an export strategy provide an appropriate setting for studying the relationship between initiation, barriers and product quality and internationalization. Export firms may, for example, be most exposed to barriers, since firms that follow a contract strategy or investment strategy in a way operate within the borders of the foreign country. Throughout this dissertation the focus is, therefore, on firms that use what Strandskov (1995) calls export based strategy. That is a strategy where almost all upstream activities are located in the home market, while most marketing decisions are taken in the individual geographic market by agents/distributors or sales offices. In this respect it is mainly the downstream activities of the value chain that are internationalized.

The next section develops the research framework for this dissertation.

Framework and Research Questions

This thesis focuses on initiation of internationalization, barriers against internationalization and how product quality is related to internationalization.

Initiation of internationalization
Initiation of internationalization is a foundation for firm internationalization. With no initiation there will be no internationalization. Given this, it is of great importance for a firm to be able to initiate and establish internationalization with other firms. The importance of managing initiation of exchange between a set of partners have been emphasized by several researchers (e.g., Heide 1994, Petterson 1995).

For any company considering initiation of internationalization, a key issue is to evaluate and decide upon who the partner(s) should be. In order to make a careful evaluation of potential partners, managers need accurate and reliable information. However, research on the issue of how managers seek and evaluate information about potential partners is very meager, and the critical process of partner-selection remains largely unexplored. The purpose of this study is thus to explore managers’ need for information, and in particular, personal information when evaluating potential alliance partners. Study 1; therefore, address the question: What are the antecedents for direct and indirect personal information in evaluating potential foreign business partners? It is shown that closeness to the strategic core of the planned alliance and partner dissimilarity are important predictors for how managers seek information about potential partners.

**Barriers against internationalization**

Barriers have a negative effect on firms’ internationalization (e.g. Bilkey 1978, Leonidou 1995). The management of barriers is, therefore, important for internationalization. Export barriers can be defined as all those constraints that hinder the ability of the firm to initiate, develop or maintain export-marketing activities (Leonidou 1995).

The types and number of export barriers are multiple and the literature on general export marketing contains several. The scope and variety of these problems have led to the formation of various classificatory schemes in the relevant literature. Export barriers have, for example, been grouped as internal and external barriers (McWilliams et al. 1992; Leonidou 1995), external, operational, and internal barriers (Yang et al. 1992), as well as strategic, operational, informational and process-based barriers (Morgan and Katsikeas 1997).

Recent research has linked perceived export barriers to firm size (Barker and Kaynak 1992, Katsikeas and Morgan 1994, Leonidou 1995, Leonidou 2000), the company’s products (Leonidou 1995, Leonidou 2000), industries (Keida and Chhokar 1986, Keng and Jiju 1988,

There is, however, little research that attempts to identify the relative importance of barriers in a particular country (McWilliams et al. 1992) or group of countries. Furthermore, there is few studies suggesting the relationship between psychic distance and export barriers or how a free trade agreement and protectionism impact on perceived export barriers. Study 2, therefore, addresses the following three research questions: Is there a relationship between psychic distance and perceived export barriers? Does a free trade agreement with a trade block have any effect on perceived export barriers? What is the relationship between protectionism and perceived export barriers – if any? An empirical test shows surprisingly that neither psychic distance, nor a free trade agreement has a statistical significant effect on perceived export barriers. Protectionism has a statistical significant positive effect on perceived export barriers.

Product quality and internationalization

Product quality is a factor that a firm can have considerable control of (Mohr-Jackson 1998); therefore it is useful to research the role of product quality in internationalization (Calantone and Knight 2000).

Product quality is important because of its relevance for delivering superior customer value. Superior customer value is one cornerstone of competitive advantage (Day and Wensley 1988) and internationalization. Product quality has, for example, been studied in relation to cost implications (Fine 1986), price (Dodds et al. 1991), advertising expenditures (Boulding and Kirmani 1993, Gotlieb and Sarel 1992, Kirmani and Wright 1989, Tellis an Fornell 1988), interdepartmental interactions (Menon et al. 1997), and the impact of quality on

Recently, companies have become aware of the need for a market–driven definition of quality, instead of firm-driven objective quality measures (Main 1994), such as absence of defects, errors or service failures. To understand market-driven quality, companies must learn how customers perceive and evaluate quality (Brucks et al. 2000). Recent research has focused on multiple abstract dimensions of quality (Garvin 1987, Hjorth-Anderson 1984, Maynes 1976, Zeithaml 1988). Other studies have operationalized quality with multiple dimensions for a specific product class. Researchers have, for example, examined specific quality dimensions of running shoes (Etgar and Malhorta 1981, Lichtenstein et al. 1988) and retail stores (e.g. Bearden 1977, Nevin and Houston 1980, Steenkamp and Wedel 1991). Thus the literature to a large degree focuses on determining how consumers perceive quality. Although, there has been much research on distribution chains, few studies have examined how members at different stages in a distribution chain perceive the quality of the products offered. Accordingly study 3 addresses the research question: How do the various stages in a supply chain perceive product quality? It is shown that upstream channel members place more emphasis on distribution quality, while downstream channel members place more emphasis on product quality.

Almost all conceptual work on product quality disregards the business environment context (Menon et al. 1997). The result is that we have little understanding of the link between business context and product quality (Olson et al. 1995). Although there are hundreds of studies of quality (See e.g. Oakland 1999, Sila and Ebrahimpour, 2002 for recent reviews), there is little research on quality assessment, and there is a serious lack of research on how quality assessment practices are institutionalized (Carson et al. 1999). This is surprising given that such institutionalized practices are the foundation of quality assessment in many industries. Study 4 therefore investigates an institutionalized practice of quality assessment and examines the forces that create and sustain it. In particular, this study questions whether there is any systematic variation between volume of supply and quality assessment. It is shown that an institutionalized practice of quality assessment bases its work on “objective” product characteristics, as well as supply/demand considerations, making quality assessment more complex than usually assumed.
Towards a Framework

A framework to study firm internationalization has been developed with the purpose to explain and add to our insights regarding internationalization of small and medium-sized firms marketing behavior as it crosses international borders. The framework draws on empirical studies and examines how initiation, barriers and product quality influence internationalization (marketing behavior as it crosses international borders). First, initiation of internationalization is important. Without any initiation there will be no internationalization. Second, if the barriers are too large or the firm is not able to overcome them, barriers may impede internationalization in a serious way. Third, product quality is important for internationalization. If products do not have a favourable price-quality relation internationalization will suffer.

The relationships between initiation, barriers, product quality and internationalization are shown in Figure 1.

Figure 1: Framework for internationalization

The figure shows that the ability to initiate business relationships is related in a positive way to firm internationalization. The existence of barriers is related in a negative way to firm internationalization. High product quality is related in a positive way to firm internationalization. The next section summarizes the four studies that is the core of the dissertation.
The Studies

This dissertation address a number of internationalization related issues that have been insufficiently studied in past research in general and in the context of Norwegian firms in particular. In order to investigate the research questions empirically three postal surveys were carried out. The first survey was based on a sample of Norwegian firms from 11 industries taking part in an international trade show. The second survey used a sample of Norwegian firms from seven industrial sectors. The third survey consisted in postal interviews with a sample of fish farmers. These interviews were complemented with personal interviews with Norwegian exporters, along with importers and retailers in Singapore. The fourth study used secondary data to answer its research question. Below follows a summary of the four studies, followed by a discussion of the results. The main empirical findings are summarized in table 1.

Initiation of internationalization
This section focuses on how managers go about reducing perceived risk related to evaluation and selection of foreign partners,

Study 1 - SMBs in Search of International Strategic Alliances: Perceived Importance of Personal Information Sources

Problem statement
This article investigates how firms evaluate and select among potential partners by focusing on managers’ use of information sources for gathering reliable information about potential partners. A particular focus is put on determining when managers perceive direct personal information and indirect personal information to be particularly important for making partner evaluation and selection. The research question asked is: What are the antecedents for direct and indirect personal information in evaluating potential foreign business partners?

Theory
Theory about perceived risk is used to propose four drivers of preferences for personal information sources. These drivers are (1) the closeness of the planned alliance to the strategic
core of the company, (2) partner dissimilarity, (3) expected opportunism from partner(s), and (4) company experience with cooperation.

It is argued that an alliance that is closely related to the strategic core of the firm may have a large impact on long term goals. Such a partner must therefore be selected very carefully, hence H1: The closeness of the planned alliance to the strategic core of the company has positive effects on the perceived importance of direct personal information and indirect personal information in evaluating potential foreign business partners.

When a potential alliance partner is perceived to be very dissimilar, it may be hard to evaluate the partners. This should increase the need for personal information sources, hence H2: Partner dissimilarity has positive effects on the perceived importance of direct personal information and indirect personal information in evaluating potential foreign business partners.

The article theorizes that expected opportunism may have a negative effect on the goal of the alliance. In order not to select a partner that may behave in an opportunistic way, the use of personal information sources becomes of importance, hence H3: Expected opportunism has positive effects on the perceived importance of direct personal information and indirect personal information in evaluating potential foreign business partners.

Based on the perceived decision risk of entering an alliance, it is argued that firms that have experience with cooperation should be in a position to better evaluate potential partners and therefore have to rely less on personal information, hence H4: A company’s experience with cooperation has negative effects on the perceived importance of direct personal information and indirect personal information in evaluating potential foreign business partners.

Method
A postal survey among firms looking for a foreign partner at an international trade show gave usable questionnaires from 68 firms. All variables were measured on seven-point Likert-type scales. The data were analyzed by two separate multiple OLS regressions, with the two types of personal information sources as dependent variables.

Main Findings
The analysis supported hypothesis 1. There was a statistical significant relationship between closeness to strategic core and the two types of personal information sources. Hypothesis 2 was partly supported. There was a statistical significant relationship between partner dissimilarity and the use of direct personal information. There was, however, no statistically significant relationship between partner dissimilarity and the use of indirect personal information. The analysis rejected hypotheses 3 and 4. Neither expected opportunism nor a company’s experience was related in a statistical significant way to use of personal information.

**Barriers against internationalization**

This section examines antecedents of perceived export barriers.

**Study 2 - The Effects of Psychic Distance, Free Trade Agreement and Protectionism on Perceived Export Barriers**

Problem statement

This article examines the following three research questions: Is there a relationship between psychic distance and perceived export barriers? Does a free trade agreement with a trade block have any effect on perceived export barriers? What is the relationship between protectionism and perceived export barriers?

Theory

Based on theory about psychic distance it is argued that increasing psychic distance is related to lack of knowledge about foreign markets and what it takes to conduct business in a successful way. High psychic distance gives rise to perceptions of high complexity, high risk and feelings of insecurity, hence H1: There is a positive relationship between psychic distance and perceived export barriers.

Trade blocks try to facilitate trade and reduce export barriers between member countries, therefore firms that belong to a member country of a trade block should meet a relatively low level of barriers when exporting to member countries of the trade block, hence H2: When there is a free trade agreement between an export country and a trade block, then a) the perceived export barriers will be lower, and b) the perceived export barriers will be more
similar to the individual countries within the trade block than to countries outside the trade block.

Protectionism consists in a government trying to protect specific domestic industries or businesses against foreign competition, hence H3: When an import country protects a certain industrial sector, the perceived export barriers will be higher within this sector than within other industrial sectors.

Method
To test the three hypotheses a postal survey collected data from 459 chief executives in Norwegian export firms. The respondents reported their perceptions about the degree their firms meet export barriers in the firms most important market on five-points scales. The data was analyzed by non-linear principal component analyses that provided two factors. Factor one is a continuously scaled latent variable indicating the level of export barriers. This variable was used as the dependent variable in a two-way ANOVA with (groups of) countries and industrial sectors being independent.

Main Findings
The analysis rejected hypotheses one and two, while hypothesis 3 was retained. The result indicates that there is no statistical significant relationship between psychic distance and perceived export barriers. A free trade agreement between an export country and a trade block does not lead to lower perceived export barriers within the individual member countries of the trade block than to other import countries. Further, the perceived export barriers were not more similar for export to the individual countries within the trade block than to countries outside the trade block. There was statistical significant support for the hypothesis that protectionism leads to higher perceived export barriers.

Product quality and internationalization
This section contains two articles focusing the understudied questions of how the various stages in an international supply chain perceived product quality and whether there is any systematic variation between volume of supply and quality assessment.

Study 3 - Quality Perceptions in International Distribution: An Empirical Study of a Complete Distribution Chain
Problem statement
The purpose of this article is to examine how members at different stages in an international
distribution chain perceive the quality of the products offered.

Theory
Role theory is used to argue that the role particular members of a distribution chain have,
determines the activities of the members of a distribution channel. The activities a chain
member undertakes influence its quality perceptions, hence H1: Chain stages upstream
emphasize distribution quality, while chain stages downstream emphasize product quality.

Interaction theory is used to argue that each firm in a dyad influences the other firm, hence
H2a: There is a systematic change of quality perceptions through the distribution chain, i.e.
quality perceptions of producers are more similar to the quality perceptions of intermediaries
than to the quality perceptions of the retailers. From this also follows that:
H2b: Quality perceptions in adjacent chain stages are more similar to each other than to those
of chain stages that are further apart.

Method
The hypotheses were examined empirically in the context of export of fresh salmon to
Singapore. Data was collected through a postal interview with 68 producers and personal
interviews with five exporters, seven importers and five buyers in supermarkets. Quality
perceptions were measured by rating 25 product characteristics. Producers used a rating scale
from 1 to 10, while the other chain stages used a rating scale from 1 to 100. The data were
analyzed using Fisher’s exact test and Spearman rank order correlations.

Main Findings
It was found statistical significant support for all three hypotheses. Chain stages upstream
emphasize distribution quality, while chain stages downstream emphasize product quality.
There is a systematic change of quality perceptions through the distribution chain. Quality
perceptions in adjacent chain stages are more similar to each other than to those of chain
stages that are further apart.
Study 4 - Quality assessment in a turbulent environment: The case of the stockfish industry

Problem statement
This article examines an institutionalized quality assessment practice in order to determine whether the business environment context influences assessment of product quality. In particular the article poses the research question whether there is any systematic variation between volume of supply and quality assessment?

Theory
Based on theory about uncertainty and quality, it is argued that large variation in volume of supply and product quality gives raise to an institution of quality assessment that is able to provide a satisfactory volume of the various quality types for the final customer. It is hypothesized: The percent classified as the highest quality categories covaries negatively with the volume of supply to the market, that is when the volume of supply is low, a higher percent of the products will be classified to be of high quality.

Method
Using data from applications for bank guarantees from 26 firms that were exporting stockfish during the time period from 1992 to 1997 allowed an empirical test of the hypothesis. Volume of supply was measured as the yearly export of stockfish to Italy. Quality assessment/classification was measured by classifying the 22 quality types in the data into three main types of quality, prima (first-rate), secunda (second-rate), and tertia (third-rate). The data were analyzed using correlations.

Main Finding
As hypothesized, it was found that the percent of products classified as the highest quality categories covaries negatively with the volume of supply to the market, that is when the volume of supply was low, a higher percent of the products was classified to be of high quality.
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<td>Initiation</td>
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<td>Positive relationship between closeness to strategic cores and perceived importance of direct personal information.</td>
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<td>Perceived importance of indirect personal information</td>
<td>Positive relationship between partner dissimilarity and perceived importance of direct personal information.</td>
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<td>No statistical significant relationship.</td>
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<td>Barriers</td>
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<td>No negative relationship between free trade agreement and perceived export barriers.</td>
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<td>Positive relationship between protectionism and perceived export barriers.</td>
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<td>Product quality</td>
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<td>Chain stages upstream emphasize distribution quality, while chain stages downstream emphasize product quality.</td>
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<td>There is a systematic change of quality perceptions through the distribution chain.</td>
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<td>Quality assessment</td>
<td>Quality perceptions in adjacent chain stages are more similar to each other than to those of chain stages that are further apart.</td>
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<td>The percent of products classified as the highest quality categories covaries negatively with the volume of supply to the market.</td>
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Discussion of Findings

Here we discuss the findings regarding initiation of internationalization, barriers against internationalization, product quality and internationalization.

Initiation of internationalization

Initiation of internationalization is a foundation for firm internationalization. Initiation involves an evaluation of potential exchange partners, initial negotiations, and preliminary adaptation efforts (Dwyer, Schurr and Oh 1987). According to Granovetter (1985: 490) economic action in modern industrial societies is embedded in “concrete personal relations and structures (of networks) of such relations.” Although firms are primary actors in economic life, individuals’ role in actual business interaction is central. It is therefore important to evaluate future exchange partners to try to secure partners that the firm is able to work well with.

In industrial markets, the importance of interpersonal contacts and social connections between selling and buying firms has long been established (e.g., Easton and Araujo 1994, Turnbull 1979). Personal contacts are often seen to enhance initiation of business cooperation (e.g., Halinen and Törnroos 1998, Salmi and Bäckman 1999, Gulati 1995). The importance of personal contacts on such issues as sales performance (Ahearne et al. 1999, Walter 1999), innovation development (Walter 1999), and customer satisfaction and commitment (Halinen 1997) have been analyzed, but still little is known about the role of personal contacts in the development of internationalization.

The initiation of internationalization has long-term strategic ramifications. The establishment of a strategic alliance involves a substantial commitment of resources that cannot easily be reallocated. It is therefore of prime importance to be able to evaluate and select suitable partner firms.

Study 1 investigates four hypotheses related to the use of perceived importance of direct and indirect personal information for the evaluation of future partners. The reported results of article 1 are interesting as they show that closeness to strategic core is an important predictor of managers’ use of personal information sources. Closeness to strategic core reflects the strategic importance of the alliance to the future development of the company. Companies
entering into such alliances, establish inter-firm routines and processes that will turn the relationship into a critical resource for the company (Dyer and Singh 1998). Personal information represents the richest form of information (Daft and Lengel 1990), and gives managers first hand knowledge about alternative partners. It is therefore reasonable that personal information will be used when making decisions of strategic importance. A strategic alliance has from a relational view been described as an extensive, unique socially embedded relationship which is governed by trust and relational contract (Ring and Van de Ven 1992). By recognizing the importance of trust, interpersonal relationships are introduced into interorganizational relations. Personal information allows for the possibility to detect and evaluate the likelihood of being able to develop such interpersonal relationships that would facilitate the governance of an alliance before entering into it. This should be particularly important when the alliance is close to the firm’s strategic core.

Further, a positive relationship is found between partner dissimilarity and direct personal information. With dissimilar partners it should be very important to gauge the possibilities to develop a good working relationship, as partner dissimilarity may lead to doubt about the possibility to develop smooth working conditions between partners. The use of direct personal information is important because it allows for opportunities to judge the possibility to develop personal relationships and trust that makes the governance of strategic alliances easier (Bradach and Eccles 1989, Young and Wilkinson 1989).

Expected opportunism is not related to direct personal information or indirect personal information. This is surprising as it was expected that firms try to minimize the probability of selecting partners that may behave in an opportunistic way. We would therefore expect them to use personal information in order to evaluate a potential partner and to judge the possibility of being able to develop a relational contract with the partner firm. The theory of relational contracting suggests not only a new perception of how people behave, but also a new, normative structure to accommodate and regulate behavior. This structure affects relations through the introduction of what may be characterized as the principle of reciprocity. The principle of reciprocity, defined by Malinowsky (1932), is a mutually contingent exchange of benefits and a set of sentiments associated with mutual gratification. Sociologists consider reciprocity to be "the vital principle of society" (Hobhouse 1951:12). The principle of reciprocity, based on the common understanding that every party in a relationship has both rights and obligations, reduces the incentives for opportunistic or egoistic behavior.
There is no support for the hypothesized relationship between expected opportunism and personal information. This finding may support transaction cost economics, arguing that companies cannot distinguish beforehand between opportunistic and non-opportunistic actors (Williamson 1985). Opportunistic actors can perhaps first be revealed when opportunistic behavior is detected.

Further, there is not any statistical significant effect of cooperation experience on direct personal information and indirect personal information. This may indicate that every new alliance partner requires in-depth evaluations based on the richest information sources, that is personal information. Assessments based on previous cooperation can perhaps not replace such information. However, although there was not any statistical significant relationships, the estimated signs of the coefficients of the use of the two types of personal information were both negative as hypothesized. This may indicate that companies can transfer experience from one alliance to another, and accumulate knowledge about how to manage alliances (Child and Faulkner 1998) as shown by Lyles (1988). It seems reasonable to argue that companies can learn from previous experience. Since appropriate governance is critical for realizing the advantages of cooperation (Dyer and Singh 1998), experience across different alliances may be a source of improving relational management skills, but perhaps somewhat less important for partner evaluation and selection.

**Barriers against internationalization**

Barriers against internationalization are very important as they influence managers’ strategic decisions making. Barriers impact on which markets are seen as appropriate to enter. They influence choice of entry strategy and marketing decisions of a more tactical nature.

The first hypothesis in study 2 were developed from the internationalization process approach (Johanson and Vahlne 1977) regarding one particular aspect of location, the psychic distance from the home country to the import country. As it turned out, the results gave no support for the hypothesis that low psychic distance between an export country and an import country is associated with lower perceived export barriers. This finding opposes previous research by Shoham and Albaum (1995), who reported a significant positive effect of psychic distance on perceived export barriers. Research relating psychic distance to other concepts seems to be somewhat in accordance with the findings. For example, Evans and Movondo (2002) reported
that empirical research about the relationship between psychic distance and organizational performance shows no conclusive evidence for either a positive or a negative performance. There may be several explanation for the here reported findings. First, one might argue that psychic distance is no longer of large importance, because Norwegian firms has become so internationalized that they have learned how to cope with uncertainties due to experience in operating in far away and uncertain markets. This argument does not seem convincing as Norwegian firms have not come particular far in their internationalization. This is, for example, indicated by the large share of Norwegian exports that go to neighbor countries and to other EU countries. A more likely explanation for the findings that psychic distance is not related to perceived export barriers is that export barriers are due to import countries wanting to protect themselves, rather than export firms perceiving large uncertainty when exporting to them. It seems reasonable to assume that those countries that want to protect themselves are those which are exposed to exports, that is those countries that have small psychic distance to the export countries.

The hypothesized relationship between participating in a free trade agreement and perceived export barriers was developed based on received wisdom. It is indeed very surprising that this hypothesis has to be rejected. A free trade agreement with the European Union appears to be of little value for Norwegian firms. There may be several possible explanations of this finding. First, this can perhaps be because those countries that feel a need to protect themselves against international trade are those that are most subjected to such a trade. This may often be countries with a similar industrial structure and similar level of development, i.e. neighbor countries, and perhaps also countries with large affluent markets. In the given case, this turned out to be the EU-countries. It may be that the European Economic Area agreement is still not properly implemented in the individual EU countries. Bradley (1995: 220) was perhaps right when he stated that EU leaves "... a whole armour of non-tariff trade barriers in the hands of the member states".

As hypothesized, protectionism leads to higher perceived export barriers. This is evidenced by the fishery sector meeting higher perceived export barriers than all other industrial sectors. This is in fact true for every single import country. Perceived barriers turned out to be particularly high in France where the government may protect its’s agricultural industry for
political reasons, and in United Kingdom which has a particular interest in protecting it’s farmed salmon industry.

**Product quality and internationalization**

Product quality is associated with internationalization in important ways. If product quality does not provide value for the final customers it is very unlikely that a product will survive in an international market.

Study 3 examines three hypotheses related to which quality perceptions various chain members in an international distribution chain have. All three hypotheses are supported. First, it is shown that producers and exporters emphasis distribution quality, that is aspects of quality that has to do with the augmented product (Kotler and Armstrong 1984), i.e. additional services and benefits, such as availability, delivery, and documentation of temperature during transportation. Importers and supermarkets emphasize product quality, that is aspects of product quality that have to do with the core product (Kotler and Armstrong 1984), i.e. the problem solving service the customer is really buying. This is in accordance with the hypothesis that persons with the same role in a distribution channel have homogenous quality perceptions due to a division of labor in the distribution chain, where chain members develop quality perceptions in accordance with their roles and activities in the distribution chain.

Second, there is a systematic change in quality perceptions through the distribution chain. This may reflect a systematic difference in roles and activities of the consecutive channel levels. The differences in the roles and activities, together with the communication flow between channel stages, may explain why a gradual change in preferences takes place in this international distribution channel.

Further it is shown that quality perceptions in adjacent chain stages are more similar than those of chain stages that are further apart. There are at least three possible forces that impact on this. First, the role functions and activities of adjacent chain stages have more in common with each other, than with chain stages that are further apart. This is probably the most important reason for the similarity of quality perceptions in adjacent distribution chain stages.

Second, consecutive chain stages interact with each other. Such long term, complex patterns of interaction between buyers and sellers serve to create mutual understanding, goals and
perceptions, although the way in which firms deal with one another as buyers and sellers is
affected by its connections with other firms (Håkanson 1982). Over time such interactions and
reciprocal experience may lead to diminishing perceptual differences.

Third, national culture may influence quality perceptions. Culture or national character is
gaining importance for research in international marketing (Clark 1990), because a firm’s
native culture influences its business strategies, tactics and practices in the global marketplace
(Tse et al. 1988). Cultural differences can affect quality perceptions of distribution chain
stages, as producers and exporters are located in the export country, while importers and
supermarkets are located in the import country. It may appear that quality perceptions within a
given country have greater similarities than those between countries. This country effect is in
keeping with most research on culture, for instance Hofstede (1980), who defines culture as
the “collective programming of the mind” (Hofstede 1984: 21).

Study 4 investigates quality assessment. The study questions whether there is any systematic
variation between volume of supply and quality assessment. The hypothesized relationship
between volume of supply to the market and quality assessment is tested in an environment
characterized by large variation in volume of supply and in product quality. The finding that
there is a strong negative relationship between export volume and quality assessment
indicates that the usual assumption of quality assessment being based on objective, stable and
fixed criteria has to be loosened up, at least in this context. This may have to do with the
much discussed perceptual differences between the marketing and engineering based
functions (Griffin and Hauser 1996), and the important challenge of coordinating these
functions (Fisher et al. 1997). Whereas engineers tend to see quality as conformance to
specifications, marketers tend to put a larger emphasis on customers’ view. The
institutionalized quality assessment practice used within the stockfish industry seems to
combine the engineering view and the marketing view. It may, in fact, be argued that when
quality consists in meeting and/or exceeding customers expectations (Grönroos 1983,
Parasuraman et al. 1985), then applying an institutionalized quality assessment practice in
order to achieve this is very much a way of being marketing oriented (e.g. Jaworski and Kohli
1993).

This research indicates that quality assessment, at least in this setting, is linked to
environmental uncertainty. Environmental uncertainty may be considered a contingency
variable. One assumption of contingency theory is that there is no one best way of organizing (Galbraith 1979), because factors in the environment influence firms’ adaptation strategy. Contingency theory suggests contingency variable(s) that can be used to classify environmental settings (Lee et al. 1993). Contingency theory may therefore be a useful theoretical approach to study institutionalized quality assessment practice, as contingency theory suggests that organizational design depends on contextual factors (Thompson 1967). This theory is widely accepted within strategic management (Ginsberg and Venkatraman 1985) and marketing strategy (Zeithaml et al. 1988), and has been used to investigate marketing phenomena such as marketing task structure (Ruekert et al. 1985), sales behavior (Weitz 1981), channel management (Frazier and Sheth 1985) and sales force management (Futrell and Parasuraman 1984).

Although institutional theory has been little used in research on internationalization, this article shows that an institutional approach has much to offer when it comes to explaining phenomenon of internationalization. The study of institutions and institutionalized practices that support or prevent international marketing and international trade is indeed of large importance for understanding firms’ internationalization behavior. This is true whether one chooses to focus on regulative, normative or cognitive institutions (e.g. Scott 1995).

**Contributions of the Studies**

The purpose of this dissertation is to provide insights into Norwegian firms’ internationalization. This encompasses several under-researched areas relating to firm internationalization, i.e the relationship between initiation, barriers, product quality and internationalization.

The contributions of this dissertation principally lie in that it gives insight into almost unexplored topics and topics that are not well understood. By providing empirical evidence of theoretically relationships, this dissertation will hopefully contribute to further research on firms’ internationalization.

An important contribution of this dissertation to the literature about initiation of internationalization is to address overall strategic issues related to designing and forming alliances and the use of personal information sources to evaluate and select a partner. Second,
a theoretical rationale is developed, before it is shown empirically that personal information are used when the alliance is close to the strategic core of the company. It is further argued theoretically and shown empirically that personal information sources are used when the degree of dissimilarity among potential partners are high. In this way the dissertation demonstrates a link between overall strategic issues and the use of personal information sources to evaluate and select partners. It is a fourth contribution to show evidence that expected opportunism from partner(s) is not related to use of personal information and fifth, that company experience with cooperation is not related to the use of personal information.

This dissertation contributes to the literature on barriers in several ways. First, this is done by developing a theoretical perspective linking psyching distance, a free trade agreement and protectionism to perceived export barriers. Second, a contribution is made by showing empirically that psychic distance is not related to perceived export barriers in a statistical significant way. Third, the finding that a free trade agreement does not lead to lower perceived export barriers is important as it opposes received knowledge is an empirical contribution. Fourth, the finding that protectionism is related to perceived export barriers is as hypothesized. This is also a contribution, as to the best of my knowledge this is the first time the relationship between protectionism and perceived export barriers has been shown empirically in a study within the international marketing literature.

The dissertation contributes to the literature about product quality and internationalization. First, it develops and tests a theory-based perspective relating distribution chain members’ roles, activities and interactions to quality perceptions. Second, it shows empirically that members at different stages in a distribution chain emphasize different attributes of product quality. Third, it further presents empirical evidence that there is a systematic change of quality perceptions through the distribution chain, and that quality perceptions in adjacent chain stages are more similar to each other than to those of chain stages that are further apart.

Earlier research has often viewed perceptual differences in a relationship as a source of measurement error (e.g. Philips 1981). It seems, however, that such differences may be due to real perceptual differences between the parties based on their roles and activities, rather than due to measurement error.
A further contribution to the literature about product quality is to show that an industry characterized by highly uncertain conditions has put in place an institutionalized quality assessment practice in order to buffer between supply and demand and to provide benefits for all participants in the value chain. This is achieved by providing a systematic relationship between volume of supply and quality assessment.

This dissertation makes a methodological contribution by studying a complete distribution chain, that is three consecutive dyads. This is an extension of the current practice of studying relationships by studying single actors or dyadic business relationships (e.g. Dwyer et al. 1987, Anderson and Narus 1990). Studying consecutive dyads opens up for the possibilities of studying whole distribution chains, distribution channels and value chains. This is therefore a contribution to the somewhat related literatures of logistics, organization studies, marketing, internationalization and strategy.

A further methodological contribution is to introduce nonlinear principal components analysis into the international marketing literature. Within the above streams of literature it is a common practice to apply factor analysis to data, even though the data are often only of a ordered categorical nature. However, factor analysis requires continuous data. As shown by Blasius and Thiessen (2001), sometimes five-point-scales are not even ordered categorical because respondents misunderstand questions and/or words. As shown (Gifi 1990, Heiser and Meulman 1994) nonlinear principal components analysis is an appropriate technique of displaying relationships between cases associated with a set of ordered categorical variables. A more standard use of nonlinear principal component analysis in the international marketing literature may therefore be an important step towards better fit between the measurement properties of variables and choice of appropriate analysis technique.

The dissertation also makes several contributions in its attempts to conceptualize and measure concepts such as: Closeness to strategic core, partner dissimilarity, direct personal information, indirect personal information, psychic distance, distribution quality and quality assessment.

**Implications and Further Research**
This section draws theoretical and practical implications of the dissertation.

**Theoretical implications**

The formation of international alliances is an important area within research on initiation of internationalization. As pointed out by several researchers, strategic alliances and long-term cooperative relationships are being implemented in an increasing degree (cf., Dyer and Singh 1998, Gulati 1998, Hagedoorn 1993). The results of this research are interesting as they show that closeness to strategic core and partner dissimilarity are important predictors for how managers seek information about potential partners. This implies that theory of relational contracting would be useful for increasing the understanding of use of personal information, as this theoretical approach emphasizes the relational aspects of transactions and stresses that "the exercise of choice (of contract content) is ...(an) incremental process in which parties gather increasing information and gradually agree to more and more as they proceed" (Macneil 1981:1041). Furthermore, this should lead to an emphasis on trying to relate personal information to the possibility of evaluating the likelihood of developing social-psychological bonds embodied in mutual norms, sentiments, and friendships (Homans 1961, Ring 1993).

Surprisingly, we do not find that expected opportunism is related to the use of direct personal information or indirect personal information. This appears to be in accordance with transaction cost theory, which emphasizes the difficulty in ex ante detection of opportunistic actors (Williamson 1985).

This research shows that the in the literature proposed relationship between psychic distance and perceived export barriers (e.g. Shoham and Albaum 1995) is not clear. In fact this study falsifies this relationship. This demonstrates that it is necessary with more conceptual and measurement work related to what psychic distance and export barriers really are. The finding that a free trade agreement does not lead to lower perceived export barriers is important, as it opposes received knowledge. This opens up for research on how various ways of regulating trade between countries (e.g. Malhorta et al. 1998) really is related to perceived export barriers. The finding that protectionism is related to perceived export barriers is as expected.
Researchers in marketing have put emphasis on studying dyadic business relationships (e.g., Anderson and Narus 1990, Dwyer et al. 1987, Frazier 1983, Hallén et al. 1991). This dissertation makes clear that theoretical contribution can be made by extending this stream of research to study whole channel systems or extended parts of whole channel systems. Further, this research concludes that the different roles and activities of the various distribution chain stages determine their quality perceptions, although such perceptions may be homogenized through a process of interactions between adjacent chain stages.

It is often argued that companies try to restructure and simplify distribution channels by limiting the number of channel levels to economize on costs. This study may indicate that one reason for trying to shorten distribution channels may be to decrease perceptual differences due to a large difference in roles and activities.

This research questions what product quality is and demonstrates that the often assumed roles and consequences of an institutionalized marketing practice may not be as expected. It is shown that an institutionalized quality assessment practice is able to provide a stable assortment/ product quality over time, and in this way provide the final customers with the product qualities they demand. This helps maximize joint value across the marketing value system. Moreover this institutionalized practice is flexible in that it is able to adjust for environmental uncertainty that creates variation in both the “objective” product quality and the volume of supply.

**Practical implications**

There are often high levels of perceived risk related to initiation of international strategic alliances. As closeness to strategic core reflects the importance of the planned alliance for the future development of the company, careful evaluations of potential partners based on both direct and indirect personal information is likely to be a critical factor in the decision process. Moreover, when potential partners are perceived to be very different, the cost of a poor choice is greater than when alternative partners are relatively similar. In such situations direct personal information can be used to reduce uncertainty about the choice alternatives.

When the risk is high and the result of cooperation critical to company performance, managers need to seek out the richest (personal) information sources available in order to select the optimal partner. It is therefore important to provide opportunities to use direct
personal information and indirect personal information when a planned alliance is closely related to the companies’ strategic core or when potential partners are very different. Under these conditions, managers responsible for evaluating potential partners need to have access to rich personal information.

Export barriers are related to time and place, and they depend to a large degree upon the actual political and economical situation within the import country. Therefore, there is a need for a continuous monitoring of the developments in the import countries and for considering the possibility of the establishment of new export barriers. Most firms have no influence on laws and regulations in other countries, they only have the opportunity to shift their exports to countries in which the market conditions are more convenient, i.e. their export barriers are lower. Firms considering an initial entry should take into account that export barriers in individual countries appear to be industry specific, rather than being related to psychic distance.

To reduce export barriers, exporters should work together with importers and processors, which have an interest in continuous trade. The common interest and lobbying of firms in both the export and the import countries may help to protect against export restricting regulations and laws. To increase the competitive power, firms may need a lobby in the import country, which protects them against export barriers and this, in turn, increases the profitability. In this way, internationalization is important for getting and/or holding an open market.

This research may put some doubt of the value of one of the cornerstones of Norwegian foreign politics (the agreement of the European Economic Area). From a cost-benefit point of view it may indicate that the Norwegian government should seriously consider spending the yearly fee of about two billion N. kroners on activities that perhaps could create more value for Norwegian firms and consumers. Furthermore, the finding that export barriers are related to protectionism implies support of international organizations, such as WTO, which work towards reducing protectionism.

The reported findings suggest that it may be useful to research quality perceptions of all stages in a distribution chain and communicate the results between them. This may lay a foundation for better understanding of the roles, functions and perceptions of each channel.
stage. Shared perceptions among chain stages can facilitate interaction and lead to better communication and increased efficiency in the whole chain system rather than having the individual chain stage optimize only its own operation.

This research shows that a carefully crafted institutionalized marketing practice is able to provide value for all participants in an international value chain. Policymakers and practitioners could do well to contemplate appropriate marketing institutions and institutionalized practices that can facilitate international trade and provide value for the involved parties. This may be particularly useful for industries characterized by large environmental uncertainty.

**Limitations of the studies**

Several limitations of the studies should be noted. The objective of the research is primarily to investigate a number of theory-driven hypotheses. The scope of the empirical research is mainly limited to internationalization of Norwegian manufacturing firms and in particular to firms from the fisheries sector. The research only focuses on exporting and the context of export firms. These firms tend to be small, reflecting the general size of Norwegian firms. They are located within industries that mainly produce relatively standardized industrial products. They tend to use conventional marketing channels, to work in fragmented industries and they tend to use an export-based strategy.

Study one and two use samples from several industries. It is likely that the findings of these studies can be generalized at least across the sampled industries, and perhaps also to Norwegian manufacturing firms in general. Study three used data from the aquaculture industry, whereas study four made use of data from the stockfish industry only. The findings of those two studies can probably be generalized safely to each of those industries respectably. The findings of study three can probably also be generalized to firms in other manufacturing industries characterized by loosely aligned distribution chains. The findings of study four can perhaps be generalized to other industries based on renewable resources where there are large variation in environmental factors and volume of supply.
Even though the research was carried out in order to examine statistical associations rather than causation, issues related to internal validity (e.g. spurious relationships) can be raised. A large effort has, however, been undertaken in order to include relevant variables and to try to rule out alternative explanations (see e.g. study four). All four studies were conducted after reviewing the relevant literature and developing a theoretical rational for inclusion of the selected variables. This should provide a certain protection against misspecification of the hypothesized relationships.

A related question has to do with statistical conclusion validity, that is whether there is sufficient statistical evidence to draw strong conclusions regarding the findings. Study four was a longitudinal study using data from six consecutive years. Such a short timeseries lead to low statistical power and limited possibility to draw statistically significant conclusions. The findings were, however, very strong as evidenced by the high correlation coefficients.

Considerable efforts were made in order to operationalize the variables in the four studies in the best possible ways. To the extent possible the concepts were based on previous research. It was, however, necessary to develop new operationalizations of some concepts (e.g. closeness to strategic core and partner dissimilarity). Multi-item scales and factor analysis were used to investigate the construct validity of concepts such as closeness to strategic core, partner dissimilarity, expected opportunism, cooperation experience, perceived importance of direct personal information, perceived importance of indirect personal information and perceived export barriers. In general the concepts selected had a satisfactorily internal consistency as evidenced by relatively high coefficient alphas. The two concepts of perceived importance of direct personal information and closeness to strategic core had a slightly low reliability of about .60. Product quality and distribution quality was measured using several items, although small sample size in several distribution chain levels did not allow for the use of statistical measures of construct validity. Volume of supply to the market and quality assessment was measured using available trade data, which should have high reliability. Other variables were perhaps measured somewhat more crudely. A case in point is psychic distance. This is a multifaceted concept that could perhaps be better measured using multiple indicator measurement.

Suggestions for further research
The studies in this dissertation suggest that the relationships between initiation, barriers, product quality and internationalization provide a fruitful area of future research. There seems to be several interesting avenues for further research regarding firms' internationalization.

More and more industries are becoming international and global. This calls for more research related to questions, such as the selection of which market to enter, the sequence of markets entered, as well as how and why firms move between geographical markets, between industries and between markets and industries. This research focused on industries with many small firms. Further research should investigate markets with other characteristics, such as, for example, oligopolistic markets. The research reported here will probably be less relevant in such settings.

Strategic alliances are frequently used to meet strategic goals in response to global opportunities (Doz and Hamel 1998). This calls for more attention to the issue of evaluation and selection of international partners. This is likely to become an even more important area for managerial decisions in the future.

In the case of initiation of internationalization, issues related to information needs and information uses in evaluation of foreign partners are understudied. For example, does the information needs and information use change between earlier and later stages in the process of selecting a partner? What is the effect of the specific purpose of alliance formation on information search behavior? Does ex ante information use decrease the need for certain ex post governance mechanisms? If this is the case, it may lead to cost savings in the running of strategic alliances.

Much work is undertaken by organizations, such as the WTO, in order to reduce export barriers. However, as more products and services are moved between an increasing number of countries, there is scant evidence that barriers and their trade distorting effects are about to disappear. The increasing degree of firms’ internationalization and the fast increase in the volume of international trade make the study of barriers against internationalization still relevant.
There is a need for research on the relationship between export barriers and internationalization. The question of the relationship between psychic distance and perceived export barriers is still unresolved as study two found no statistical significant relationship between psychic distance and perceived export barriers, whereas Shoham and Albaum (1995) report a significant positive effect of psychic distance in export barriers. This may indicate that there is a need for better conceptualization and measurement of psychic distance and perceived export barriers, as well as the boundaries between these two concepts.

Further, there is a need for research on how the various types of trade arrangements between countries are related to export barriers. This is interesting for bilateral trade arrangements as well as for multilateral trade arrangements. There is, for example, a trend towards bilateral trade agreements between countries. This trend is problematic since it counteracts the work towards creating a general environment of free trade.

This research did not consider the effects of firm specific factors such as a firm’s stage in the internationalization process (Bilkey and Tesar 1977), organizational size (Barret and Wilkinson 1985, Ghauri and Kumar 1989) and export involvement (Sharkey et al. 1989) on export barriers. Such factors may well covary with perceived export barriers. This should be addressed in further research.

Product quality is a key issue in firms' internationalization. There are several interesting research questions that can be asked regarding the relationships between product quality and internationalization. As pointed out in study three, roles and activities are important in order to understand differences in quality perceptions of chain stages. It would be interesting to research how roles and activities are related to product quality within other types of distribution chain, such as within a vertical integrated marketing chain that is expected to have less variance in the quality perceptions of individual chain stages. This would allow for a stronger setting for testing hypotheses such as those of study three.

Furthermore, what are the effects of various forms of vertical coordination on perceived product quality of various chain stages. For example, what are the effects of contractual elements (e.g. Stinchcombe 1985) such as authority structure, standard operating procedures, incentive systems, non-market pricing and dispute resolution on perceived product quality among distribution chain stages? Will such contractual elements impact on perceived product
quality due to a higher degree of coordination in the distribution chain? The research streams looking at communication (e.g. Mohr and Sati 1995), communication flows (e.g. Mohr and Nevin 1990) and information sharing (e.g. Heide and John 1992, Noordewier et al. 1990) could be related to research on perceived product quality in interesting ways. More communication and information sharing in a distribution chain will perhaps decrease the relationship between activities, roles and perceived product quality. Furthermore, what are the effects of power, conflict and time duration of a chain relationship on quality perceptions - if any? Do, for example, the length of the relationship between chain stages influence their roles, activities and quality perceptions. Such research may help distribution chains operate in more efficient ways, because it may lead to better coordination between actors at the various distribution chain levels.

Study four is one of very few investigations of an institutionalized marketing practice. This research demonstrated the value of studying institutionalized marketing practices, because such investigations give insights into how such practices work, what are the outcomes from them, and also about how they can be initiated, maintained and terminated. This research could be extended by studying other institutionalized practices and institutions for buffering between variation on the supply side and a stable demand. There is also ample opportunity to study other institutions of importance to internationalization, for example sales organizations (e.g. Holm 1995). Study four took place in an environment characterized by large environmental uncertainty. It would be interesting to investigate whether the findings could be replicated in less uncertain environments, because this would provide for a stronger test of the relationship between volume of supply and quality assessment. Is it perhaps a general phenomena that quality assessment changes depending on supply/demand questions? There has been much research on the conforming to specification view of quality, whereas the meeting or exceeding customer expectations point of view of quality is under-researched.

Turning to methodological issues, more research should be done on whole distribution systems rather than using data from single key informants and dyads of informants. This will allow the investigation of other phenomena such as how products and information flows move through a distribution chain. This may be interesting from both a practical and theoretical point of view. Using more experimental research designs for investigating some of the issues addressed in this dissertation may allow for better control of the internal validity of some of the findings.
Further, in addition to cross-section surveys, there is a need for longitudinal studies that investigate the internationalization process. There is also a need for more qualitative research that reflects the processes and time-lags between input and outputs. Does firm with experience in selecting international partners have other information needs and do they use other information sources than firms with less experience? How do information needs and information use change over time? It would also be interesting to research how export barriers change over time, how psychic distance change over time and how the change in psychic distance is related to perceived export barriers. Further it would be interesting to study the initiation and maintenance of international marketing institutions and how such institutions change over time.

The remaining part of the dissertation is organized in the following way. Chapter two addresses the issue of how small and medium sized companies seek information about potential international partners for cooperation. Chapter three investigates whether psychic distance, a free trade agreement and protectionism impacts on perceived export barriers. Chapter four examines how members at different stages in the distribution chain perceive the quality of products. Chapter five investigates the relationship between volume of supply and quality assessment. These four chapters constitute the heart of the dissertation.
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Chapter 2

SMBs in Search of International Strategic Alliances:
Perceived Importance of Personal Information Sources²

Abstract
This study addresses the issue of how small and medium sized companies seek information about potential international partners for cooperation. In particular, we focus on two information sources; direct personal information and indirect personal information. We argue that the use of these information sources is related to how closely related the planned alliance is to the strategic core of the company, the degree of dissimilarity among potential partners, the degree of expected opportunism from potential partners and prior experience with cooperation. Our hypotheses were tested on a sample of small and medium sized companies. The results indicate that the planned alliance’s closeness to the strategic core of the company and partner dissimilarity are important predictors for how managers seek information about potential partners.

² Co-authored with Magne Supphellen and Svein Haugland. This article was published in Journal of Business Research, 2002, Vol. 55, No. 9, 785-795.
Introduction

The phenomenon of strategic alliances has received increasing interest in both business research and practice. In the literature, researchers have demonstrated that companies are using strategic alliances to gain access to new markets as well as to broaden product lines and share research and development (cf., Varadarajan and Cunningham 1995). Researchers have also argued that alliances have increased in frequency, particularly in high-technology industries (cf., Jorde and Teece 1989, Hagedoorn 1993). From a research point of view, the key issues have been to explain when companies should rely on strategic alliances instead of performing the activities internal to the organization or rely on market exchange (i.e. Williamson 1985), defining and describing different kinds of strategic alliances and identifying management problems.

The selection of a partner is an important issue in forming a strategic alliance, as any alliance represents a possible adverse selection problem (Barney 1997). Due to a lack of information the company may, after a period of cooperation, experience that the partner neither possesses the expected resources and competencies, nor behaves as expected. The selection of a partner is thus critical for alliance success. Even though the adverse selection problem is well acknowledged, we have scant knowledge on how managers seek and use information to overcome this problem. The purpose of this study is to shed light on how companies evaluate and select among potential partners by focusing on managers’ use of information sources for gathering reliable information about potential partners.

Personal information is considered to be the richest form of information (Daft and Lengel 1990), and such information should be important for managers in making careful partner evaluation and selection. We pay special attention to two different sources of personal information: direct personal information (direct personal communication with potential partners) and indirect personal information (personal information from third parties such as other companies familiar with potential partners). We address the question of when, or under which alliance conditions, managers perceive personal information sources to be particularly important for making partner evaluation and selection. We argue that the importance of personal information is related to the strategic importance of the alliance, how comparable the potential partners are, the company’s experience with cooperation and expected opportunism
from potential partners. The article contributes to the alliance literature, by exploring the interplay between overall strategic issues related to designing and forming alliances and the use of personal information sources to evaluate and select the partner.

The empirical context of the reported study was an EU-initiated event, the Northern Scandinavian Europartnariat, arranged in Luleaa, Sweden, in June 1996. During the Europartnariat, 386 small and medium-sized businesses (SMB) from the northern regions of Scandinavia hosted company representatives from over 60 countries, seeking out the possibilities of cooperation. Three to four months prior to the arrangement, the Scandinavian companies had received summary information about visiting companies (describing the type of business activities performed by the companies, number of employees, location, annual turnover, etc). The present investigation was conducted 2 to 3 months after the companies had received this information, that is, about a month before the event. Managers of the Scandinavian SMB companies represented an adequate and convenient sampling frame for our research objective, since they were all involved in a process of evaluating potential foreign business partners, and additionally, represented a variety of sectors and industries.

In the following section, we first discuss the concept of strategic alliances and introduce two kinds of personal information sources. Further, we discuss variables that are likely to influence the perceived importance of personal information sources in evaluating potential partners. The various factors discussed are developed into a conceptual framework, and four research hypotheses are derived. We then report the research methodology, followed by a presentation of the empirical results. Finally, the results are discussed and theoretical as well as managerial implications are emphasized.

**Personal information and alliance partner evaluation**

**Strategic alliances**

Before discussing the use of personal information in evaluating potential alliance partners, we will define the concept of strategic alliances, and describe alliance challenges which are relevant to this study. According to Jorde and Teece, a strategic alliance can be defined as: “a bilateral relationship characterized by the commitment of two or more partner firms to reach a common goal, and which entails the pooling of specialized assets and capabilities” (1989, p. 29). Such a definition means that strategic alliances can be differentiated from exchange
transactions where the seller supplies the transaction in exchange for cash, and further strategic alliances do not include mergers, since mergers involve acquisition or controlling interest in another firm. However, strategic alliances may involve equity investments, but this is not a requirement. Strategic alliances involving equity investments are typically joint ventures and cross equity holdings, while non-equity alliances are usually based on contracts between the partners.

The core idea of strategic alliances is that such ventures are “voluntary arrangements between firms involving exchange, sharing or co-development of products, technologies, or services” (Gulati 1998, p. 293). However, it is observed that strategic alliances are diverse in nature. They can take many different forms from rather informal cooperation with weak ties between the companies to long-term cooperation with strong ties and a high degree of dependence. Further, alliances can be between buyer and seller in a value chain (vertical), between competitors or companies at the same level in the value chain (horizontal), or between companies in different industries.

According to Gulati (1998), the formation of alliances is one of five key areas for research on strategic alliances. Within this area researchers have focused on explaining why some firms enter into strategic alliances, as well as studying the decision process of selecting the partner. These two considerations are closely related. A firm’s decision to enter into an alliance is often determined by the availability of relevant partners (Gulati 1998). As choosing the wrong partner may result in poor alliance performance, as well as incur economic losses on the companies, it is very important to judge the appropriateness of an alliance partner (Child and Faulkner 1998). Several researchers have discussed the criteria for determining whether a partner is appropriate or not (cf., Child and Faulkner 1998, Geringer 1991, Kanter 1994, Lorange and Roos 1992, Porter and Fuller 1986). Even though these authors do not represent any coherent view, it seems evident that such judgement should include assessments of how the companies together can realize the strategic objectives of the alliance, as well as the companies’ ability to work smoothly together. First, the partner needs to possess the resources and capabilities necessary for fulfilling the goals of the alliance. This is related to discovering the compatibility between the companies and the potential for learning in the alliance. Secondly, during the process of cooperation, a company can be exposed to opportunistic

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3 The other four areas are the choice of governance structures, the dynamic evolution of alliances, the performance of alliances, and the performance consequences for firms entering alliances.
behavior from the partner (Gulati 1998). The partner may neglect to do what they have jointly agreed upon, or even try to act harmfully at the expense of the other company. Upon deciding who the partner should be, a company should therefore have sufficient information to judge whether cooperating with a particular partner will realize the strategic objectives of the alliance, how the companies can work together and detect possible obstacles inhibiting cooperation.

Accurate and reliable information about potential partners is not freely available for all companies in a market (Gulati 1998). Companies need to actively acquire such information, and a company’s ability to acquire partner information may be vital to alliance success. However, we have scant knowledge on how managers use different information sources to acquire accurate information in order to confidentially decide on who the partner should be. From a managerial point of view, business managers should know when specific sources of information are suitable for making reliable partner evaluations. The study thus contributes to the alliance literature by enhancing our knowledge on one important aspect of alliance formation; the use of information sources in relation to partner evaluation and selection.

**Two kinds of personal information**

Information about potential partners can be acquired through different sources. As we in this study focus on small and medium-sized companies, we believe that personal information sources are of special importance. Compared to larger companies, small and medium sized companies have fewer resources available for collecting information. Furthermore, due to time restrictions, SMB managers are likely to use a limited number of information sources, and finally, small and medium-sized companies have fewer resources and less capacity for information processing. SMB managers are thus likely to focus on information sources that are easily accessible, provide reliable information and require limited information processing capacity. Personal information, communicated directly, either face-to-face or by telephone, is one source that should be very suitable for SMB managers. Personal information represents the richest form of information (Daft and Lengel 1990), as it allows for fast feedback and observation of multiple cues, including tone of voice and natural, non-reviewed and varied language. Face-to-face communication also contains observations of body language and facial expression, which convey information beyond the spoken message (Daft and Wiginton, 1979). Communicating personally implies that information is collected and processed simultaneously. As people are talking face-to-face, they can obtain information by addressing
one specific issue, judge and evaluate this information, and try to obtain more information in order to get better knowledge of this issue.

One major problem with personal information is related to the validity of such information. In talking to another person, it may be difficult to know whether the person possesses valid information, or is willing to provide valid information. In evaluating possible alliance partners, it is important to be aware of this problem. A potential partner may try to overestimate his/her own capabilities and resources, and neglect to inform about weaknesses in order to become an alliance partner. If an SMB manager in evaluating a potential partner is only communicating personally with representative(s) from the potential partner, the manager may not be fully aware of how valid this information is. One way of controlling the validity of such information is to seek information about a potential partner indirectly from third parties. Information from third parties can serve as a validity check of the information provided by a potential partner, but also provide complementary information.

We will thus make a distinction between two kinds of personal information sources; direct personal information and indirect personal information. Direct personal information (DIRPI) is derived from direct contact with representatives of potential partner companies, for example telephone conversations or personal meetings. Social encounters may take place in formal business meetings or in less formal contexts such as restaurants, pubs, fairs or business conferences. Indirect personal information (INPI) refers to information about potential partners derived indirectly from third parties, for instance from competitors, customers or suppliers. Rumors and word-of-mouth are considered being aspects of INPI.

DIRPI is probably the major source of personal information. Impressions derived directly from social encounters with potential partners should provide insight into the capabilities of the potential partner, and reveal the potential for an alliance. The primary role of INPI is to serve the function of validating and complementing information received directly from potential partners. In the following, we discuss possible drivers of managers’ need for personal information sources in the context of partner evaluation and selection, and develop hypotheses that address the effects of the different drivers on the two sources of personal information.
Drivers of perceived importance of personal information
Partner selection is important both with respect to finding a partner that possesses the required resources and capabilities, and avoiding a partner that may act opportunistically. However, the consequences of selecting the wrong partner can be very different from one situation to another. If an alliance involves only cooperation on minor activities, the potential losses are rather limited, compared to an alliance involving cooperation on strategic areas important for the future development of the company. Accurate and valid information about the partner is thus of greater importance as the potential losses of selecting the wrong partner increase. This is related to the perceived risk of the decision. When the risk is high, the consequences of bad decisions are grave. Therefore managers need rich information in order to make the right choice. We therefore suggest a relationship between the perceived decision risk of entering a strategic alliance and managers’ preference for personal information. In particular, we propose four drivers that we anticipate to be important for understanding managers need for such information. These drivers are (1) the closeness of the planned alliance to the strategic core of the company, (2) partner dissimilarity, (3) expected opportunism from partner(s), and (4) company experience with cooperation.

Closeness to Strategic Core
One important indicator of the importance of an alliance with another company is the closeness of the activities involved in the cooperation to the strategic core of the company. Strategic core refers to skills and resources that are unique, valuable, hard to imitate, and efficiently organized (Barney 1991). When an alliance is closely related to the strategic core of the company, it may have a substantial impact on long-term goals. Thus, the cost of a wrong decision is substantially higher at this strategic level than at the tactical level. When much is at stake, managers need more and richer information in order to arrive at a final decision (Cavusgil 1984).

Moreover, as decisions within organizations are made in social contexts, managers need to justify their judgments and decisions to other stakeholders (Tetlock 1990). This concern is accentuated for important decisions. Alliances closely related to the strategic cores of the companies are likely considered as extremely important, resulting in strong needs for personal information. However, our position on the role of closeness to strategic core as a variable positively affecting preferences for personal information sources, is partly at variance with other researchers. For example Douglas and Craig (1983, p. 29) have contended that strategic
decision-making in international markets is likely to rely heavily on secondary data sources whereas tactical decisions are likely to require primary data collection. Despite this proposed importance of secondary data, we contend that primary data collection in terms of personal information acquisition is increasingly important to SMB managers, the closer a planned alliance is related to the strategic core of the company. We thus propose the following hypothesis:

**H 1**: The closeness of the planned alliance to the strategic core of the company has positive effects on the perceived importance of DIRPI and INPI in evaluating potential foreign business partners.

**Partner Dissimilarity**

Strategic alliances require commitment among the partners to a common goal (Jorde and Teece 1989). In order to reach the goal, the companies need to pool resources and coordinate their behavior. Close interaction is thus an important feature of strategic alliances, and managers should, in evaluating possible alliance partners, seek information about how well the companies are able to interact in order to produce the desired outcomes. If the potential partners are perceived to be very different, such an evaluation can be hard to make, as it may be difficult to compare the different companies.

The characteristics of the decision alternatives (e.g. the potential partners) may thus be a major source of decision risk. Specifically, when decision alternatives are perceived as very different at the outset, managers are likely to perceive high levels of decision risk and to be strongly motivated to seek out personal information sources. This is because the alternative cost of making a sub-optimal decision is large when potential partners are very different. In such situations, the marginal value of new and rich information is substantial. Conversely, if potential partners are very similar, managers are likely to experience lower levels of decision risk as the consequences of making a sub-optimal choice are less serious (other partners would have produced about the same results). We therefore suggest the following hypothesis.

**H 2**: Partner dissimilarity has positive effects on the perceived importance of DIRPI and INPI in evaluating potential foreign business partners.
**Expected Opportunism**

The concept of opportunism is broadly defined as the degree to which individuals can reliably be expected to obey rules or keep promises (Williamson 1985; 1993). According to transaction cost economics, opportunism plays an important role in long-term business relationships, especially when the parties invest in specific assets that have a lower value outside the relationship than inside (Williamson 1985). Opportunistic behavior from one actor, such as early termination of the cooperation, can incur large losses for the partner, as the investments cannot readily be transformed into alternative uses. As strategic alliances require the pooling of specialized assets in order to reach common goals and create company advantages (Dyer and Singh 1998; Jorde and Teece 1989), offsetting the risk of opportunistic behavior is critical for alliance success. While transaction cost economics focuses on contracts, monitoring and safeguards as mechanisms to constrain opportunistic behavior (Williamson 1985, Nooteboom et. al. 1997), other researchers have pointed at the importance of personal relationships, trust and social norms as means of preserving long-term relationships and avoiding harmful behavior (Nooteboom 1997 et. al.; Håkansson and Snehota 1995; Heide and John 1992; Macaulay 1963).

In the literature, opportunistic behavior has mainly been considered to be relevant after cooperation has started. This is due to the fact that the consequences of opportunism will first appear after an alliance has been formed, and it is also a question of whether potential opportunism can be assessed before alliance formation (cf., Williamson 1985). As we in this study are concerned with the formation stage, we focus on *expected opportunism*, defined as beliefs about opportunistic behavior from a potential partner. Alliance partners are after alliance formation in need of offsetting the risk of potential opportunistic behavior, either through formal mechanisms or by personal relationships, social norms or trust. We therefore argue that expected opportunism is important and relevant in this context, as managers can beforehand acquire information concerning appropriate mechanisms offsetting potential opportunism as well as the required degree of such mechanisms. Further, by gaining personal contact and acquaintance with managers from target companies, SMB managers can start the process of developing social norms as a base for alliance management (Granovetter 1985; Macaulay 1963; Ouchi 1980), and develop consensual expectations, which is the foundation of interpersonal trust (Zucker 1986, p.54). Thus, SMB managers are more likely to rely on personal information sources when they expect opportunistic behavior from potential partners. This allows the following hypothesis.
H 3: Expected opportunism has positive effects on the perceived importance of DIRPI and INPI in evaluating potential foreign business partners.

Cooperation Experience
Another factor related to the perceived decision risk of entering a strategic alliance, is the company’s experience with cooperation. Strategic alliances have become a very popular way of organizing economic activities (cf., Gulati 1998, Hagedoorn 1993). However, there is large variation among companies as to how experienced and skilled they are at cooperating. Since companies need to learn how to cooperate, the perception of risk is likely to be influenced by previous experience. Companies with little prior experience in cooperating with other companies are likely to perceive the task of finding an appropriate partner as more complex than highly experienced companies (cf., Killing 1988). Experience from previous cooperative ventures should result in knowledge about what kind of information is needed when selecting a new partner, and furthermore, experience should enable the companies to determine which companies they should avoid as partners, and which companies are very suitable as partners. In general, experience should reduce the need for new information, and make the companies better able to judge the validity of specific information. Thus, experience is expected to make the companies less dependent on personal information sources.

H 4: A company’s experience with cooperation has negative effects on the perceived importance of DIRPI and INPI in evaluating potential foreign business partners.

When comparing the two sources of personal information, DIRPI seems to be most important. Impressions derived directly from social encounters with potential partners are usually perceived as more reliable and easier to evaluate, and thus more effective in reducing uncertainty than information collected from third person sources. Therefore, the need for DIRPI is expectedly stronger than the need for INPI.

The hypothesized relationships between the variables are summarized in Figure 1. Before testing the hypotheses, we will present the research design of the study.
Research design

Sample
As this research was funded by the Export Council of a Scandinavian country, the 123 SMB companies registered for the 1996 Europartenariat from this country were selected as a sampling frame. Five of these companies backed out. The questionnaire was mailed to the remaining 118 companies. Five companies withdrew after the questionnaire was administered, resulting in a final sample consisting of 113 companies. We received usable questionnaires which were returned from 68 companies. This gives an effective response rate of 60%. The companies’ contact person for the Europartenariat committee, typically the operating manager, was selected as key informant, as this individual was assumed to be especially influential in the company’s search for potential partners. The average size of a company in terms of the number of employees was 27.4 (range: 3 to 95), and the average proportion of a company’s sales originating from exports was 35.2% (range: 0-100%). Industries and sectors represented in the sample are grouped in eleven categories and reported in Table 1.
Table 1: Description of the sample: Sectors and industries

<table>
<thead>
<tr>
<th>Sector/industry</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and food processing industries</td>
<td>14</td>
<td>21.9%</td>
</tr>
<tr>
<td>Wood industries, carpentry and joinery, furniture</td>
<td>5</td>
<td>7.8%</td>
</tr>
<tr>
<td>Building/construction industries</td>
<td>3</td>
<td>4.7%</td>
</tr>
<tr>
<td>Plastic industry, chemical products, printing industry</td>
<td>6</td>
<td>9.4%</td>
</tr>
<tr>
<td>Metalworking and processing, products and tools</td>
<td>5</td>
<td>7.8%</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>4</td>
<td>6.3%</td>
</tr>
<tr>
<td>Vehicles, agricultural and forestry machinery, equipment and accessories</td>
<td>2</td>
<td>3.1%</td>
</tr>
<tr>
<td>Electric engineering and electronics</td>
<td>5</td>
<td>7.8%</td>
</tr>
<tr>
<td>Energy and environmental technologies</td>
<td>7</td>
<td>10.9%</td>
</tr>
<tr>
<td>Technical services, information technology, R&amp;D</td>
<td>7</td>
<td>10.9%</td>
</tr>
<tr>
<td>Other industries and services</td>
<td>6</td>
<td>9.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>64</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

18 companies delivered raw materials, manufactured materials and parts to other companies, 10 companies produced plant and equipment goods for the business sector, 14 companies produced services for the business sector, and 22 companies produced consumer goods.

The companies had varying export experience. 29 companies were either sporadically involved or not at all involved in export, 11 companies had a clear export strategy that they were ready to implement, while 23 companies wanted to expand an already active export by adding new products or entering new markets.

The companies also indicated how interested they were in cooperating with several types of partners. This was tested on a seven-point Likert-type scale with not interested (1) and very interested (7) as endpoints. They were most interested in cooperating with a customer
(M=5.57, SD=1.80), and secondly most interested in cooperating with a company similar to theirs, but not a direct competitor (M=4.90, SD=1.70). Their interest in cooperation with a supplier (M=4.75, SD=2.14), was greater than their interest in cooperation with a company in another industry (M=3.66, SD=2.1), while they were least interested in cooperating with a competitor (M=3.20, SD=1.71).

The companies rated several motives for entering into alliances with foreign companies on a Likert-type scale from 1 (little relevant) to 7 (very relevant). The means and standard deviations are listed in ascending order in Table 2.

Table 2: Motives for establishing alliances with foreign companies

<table>
<thead>
<tr>
<th>motive</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to new markets</td>
<td>5.92</td>
<td>1.39</td>
</tr>
<tr>
<td>Sell products to a larger market</td>
<td>5.54</td>
<td>1.77</td>
</tr>
<tr>
<td>Access to knowledge about foreign industries</td>
<td>5.23</td>
<td>1.57</td>
</tr>
<tr>
<td>Part of the internationalization process</td>
<td>5.23</td>
<td>1.47</td>
</tr>
<tr>
<td>Access to distribution channels</td>
<td>5.19</td>
<td>1.92</td>
</tr>
<tr>
<td>Increase the companies information network</td>
<td>4.95</td>
<td>1.79</td>
</tr>
<tr>
<td>Access to competence</td>
<td>4.83</td>
<td>1.79</td>
</tr>
<tr>
<td>Getting ahead of competitors</td>
<td>4.65</td>
<td>1.87</td>
</tr>
<tr>
<td>Access to new or better technology</td>
<td>4.63</td>
<td>1.78</td>
</tr>
<tr>
<td>Increase product development</td>
<td>4.40</td>
<td>1.85</td>
</tr>
<tr>
<td>More breadth in product development</td>
<td>4.24</td>
<td>1.75</td>
</tr>
<tr>
<td>Reduce distribution costs</td>
<td>4.11</td>
<td>1.95</td>
</tr>
<tr>
<td>Reduce procurement costs</td>
<td>4.05</td>
<td>2.23</td>
</tr>
<tr>
<td>Reduce production costs</td>
<td>3.92</td>
<td>2.03</td>
</tr>
<tr>
<td>Reduce risk</td>
<td>3.92</td>
<td>1.96</td>
</tr>
<tr>
<td>Improve the production process</td>
<td>3.44</td>
<td>1.81</td>
</tr>
<tr>
<td>Public regulations/ avoid barriers</td>
<td>3.24</td>
<td>1.83</td>
</tr>
</tbody>
</table>
It is worthwhile to note that the companies’ motives for forming alliances are primarily related to how they can serve the markets. Most companies are interested in establishing new alliances in order to gain access to new or larger markets, or better market information and knowledge. Access to competence and technology is also of importance, while cost reductions seem to be less important.

**Measures**
All variables were measured on seven-point Likert-type scales. Operationalizations of independent and dependent variables are described in the appendix 1. DIRPI and INPI items were collapsed and entered into a factor analysis with oblique rotation in order to establish the presence of two separate constructs. In accordance with our expectations, the DIRPI and INPI items loaded clearly on two separate factors (all items loaded above .80 on the “right factor” and below .15 on the other). Items for the other measures were also submitted to factor analyses, and all measures were found to be unidimensional.

*Closeness to strategic core*
Closeness to strategic core was measured by three items describing the extent to which the planned alliance would be related to the core competence and activities of the company.

*Partner dissimilarity*
Partner dissimilarity was measured by three items describing the extent to which potential partners were perceived to be different.

*Expected opportunism*
The measure of expected opportunism was developed from John’s (1984) operationalization of opportunism in marketing channels. The measure consisted of four items.

*Cooperation experience*
Cooperation experience was measured by four items, and was adopted from Brucks’s (1985) operationalization of subjective product knowledge.

*Direct personal information (DIRPI)*
DIRPI contained two items referring to two slightly different aspects of direct personal information: (a) the perceived importance of personal conversations with managers of
potential partner companies in general, and (b) the perceived importance of meeting with managers of potential partner companies in a social setting outside work.

**Indirect personal information (INPI)**
INPI was measured by two items: the perceived importance of personal conversations with managers from third-party companies which had previously cooperated with the potential partners in question, and second, rumors about potential partners.

**Results**

Since the two dependent variables, DIRPI and INPI, were not correlated (see Table 3), the effects of the four independent variables on the two dependent variables were investigated by means of two separate multiple OLS regressions. The level of intercorrelations among the independent variables were relatively low, ranging from .022 to .442 (see Table 3). Still, in order to check for the presence of multicollinearity, we calculated variance inflation factors (VIF). A variance inflation factor expresses the extent of inflation in standard errors caused by non-orthogonality among the independent variables. The variance inflation factors ranged from 1.02 to 2.63, well below the cut-off value of 10 suggested by Neter, Wasserman, and Kutner (1989, p. 409). The low VIF values imply that it is tenable to discuss the independent effects of each predictor variable on the two dependent variables.
Table 3: Correlations, means and standard deviations

<table>
<thead>
<tr>
<th></th>
<th>Closeness to Partner</th>
<th>Expected opportunism</th>
<th>Cooperation experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPI</td>
<td>.173</td>
<td>.268**</td>
<td>.341**</td>
</tr>
<tr>
<td>DIRPI</td>
<td></td>
<td>.212*</td>
<td>-.033</td>
</tr>
<tr>
<td>Closeness to partner</td>
<td>-.140</td>
<td>.225*</td>
<td>-.442***</td>
</tr>
<tr>
<td>Dissimilarity</td>
<td>.212*</td>
<td>.022</td>
<td>.155</td>
</tr>
<tr>
<td>Expected opportunism</td>
<td></td>
<td>.155</td>
<td>-.442***</td>
</tr>
<tr>
<td>Cooperation experience</td>
<td></td>
<td>.055</td>
<td>.222*</td>
</tr>
<tr>
<td>Means</td>
<td>4.95</td>
<td>5.63</td>
<td>5.12</td>
</tr>
<tr>
<td>S.D.</td>
<td>(1.26)</td>
<td>(.95)</td>
<td>(.94)</td>
</tr>
</tbody>
</table>

*** p ≤ .01
** p ≤ .05
* p ≤ .10

The results of the regressions are summarized in Table 4. Two out of four independent variables were significantly related to direct personal information (DIRPI), and one was significantly related to indirect personal information (INPI).
Table 4: Predictors of perceived importance of personal information sources: Standardized regression coefficients

<table>
<thead>
<tr>
<th>Predictor:</th>
<th>Perceived importance of direct personal information (DIRPI)</th>
<th>Perceived importance of indirect personal information (INPI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness to strategic core</td>
<td>.321***</td>
<td>.234*</td>
</tr>
<tr>
<td>Partner dissimilarity</td>
<td>.273**</td>
<td>-.043</td>
</tr>
<tr>
<td>Expected opportunism</td>
<td>.065</td>
<td>.135</td>
</tr>
<tr>
<td>Cooperation experience</td>
<td>-.127</td>
<td>-.153</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>.11</td>
<td>.063</td>
</tr>
<tr>
<td>F</td>
<td>3.003**</td>
<td>2.077*</td>
</tr>
<tr>
<td>N</td>
<td>65</td>
<td>65</td>
</tr>
</tbody>
</table>

*** p ≤ .01  
** p ≤ .05  
* p ≤ .10

Hypotheses H1 and H2 addressed the impact of closeness to strategic core and partner dissimilarity on DIRPI and INPI. As predicted, closeness to strategic core is positively related to both direct personal information ($\beta = .321, p < .01$) and indirect personal information ($\beta = .234, p < .10$). These findings support our contention that SMB managers appreciate first-hand personal contact as well as the perspectives of third parties when potential alliances are strategically very important. Further, partner dissimilarity is positively related to DIRPI ($\beta = .273, p < .05$), but not to INPI ($\beta = -.043$, n.s.). This result indicates that SMB managers recognize and adapt to substantial alternative costs already at this stage in the evaluation and selection process. H2 was thus partly supported.

Hypotheses H3 and H4 addressed the impact of expected opportunism and company experience in DIRPI and INPI. Somewhat surprisingly, expected opportunism and company experience were not related to either DIRPI or INPI. H3 and H4 were thus not supported.
Discussion and implications

Discussion of the results

In sum, the results supported H1 and partly supported H2. However, no support was found for H3 and H4. The reported results are interesting as they show that closeness to strategic core and partner dissimilarity are important predictors for managers’ use of personal information sources. Closeness to strategic core reflects the strategic importance of the alliance to the future development of the company. Companies entering into such alliances, establish inter-firm routines and processes that will turn the relationship into a critical resource for the company (Dyer and Singh 1998). In situations when the alliance will play a key role in the overall strategy of the company, it is especially important to make the right partner decision, as selecting a wrong partner may seriously damage the company. Managers thus need to be confident that they have as good and reliable information as possible for making strategically important decisions. Personal information represents the richest form of information (Daft and Lengel 1990), and gives managers first hand knowledge about alternative partners. Our result shows the importance and advantages of using such information sources upon forming an alliance that will be closely linked to the strategic goals of the company. In addition, we should take into account that our sample consists of small and medium sized companies. Compared to larger companies, these companies have fewer resources available for collecting and processing secondary data, and personal information sources should thus be even more important for such companies.

Further, we found a positive relationship between partner dissimilarity and direct personal information. When potential partners are perceived to be very similar, the company can choose between several alternative partners that may equally contribute to the goals of the alliance. Selecting one or another partner may not be a critical issue. However, when potential partners are perceived to be very different, the cost of a poor choice is greater. Perhaps only one of the potential partners may possess the resources and competencies necessary to realize the aims of the alliance, and consequently it is critical for the success of an alliance to find this particular partner. The study also shows the appropriateness of personal first hand information to make such judgements.

Surprisingly, we did not find that expected opportunism was related to DIRPI or INPI. In spite of this non-finding, it is not tenable to conclude that expected opportunism does not have any
impact on SMB managers’ need for personal information sources. It should be noted that the companies in our sample were at the stage of finding an alliance partner. Expectations about opportunistic behavior may first be developed after the cooperation has started. In this respect, the study supports transaction cost economics, contending that a company cannot before entering into a relationship with another actor know, whether this actor will behave opportunistically or not (Williamson 1985).

The fact that we did not find any effect of cooperation experience on DIRPI and INPI indicates that every new alliance partner requires in-depth evaluations based on the richest information sources. Assessments based on previous cooperation cannot replace such information. A new alliance requires independent evaluations and judgments based on the most relevant and accurate information. In this respect, our study broadens our knowledge about cooperation experience. Researchers have argued that companies can transfer experience from one alliance to another, and accumulate knowledge about how to manage alliances (Child and Faulkner 1998). Some empirical support has also been found for such a view (cf., Lyles 1988). However, according to this study, cooperation experience does not seem to reduce the need for personal information about new partners. It seems reasonable to argue that companies can learn from previous experience the challenges and pitfalls of operating alliances. Since appropriate governance is critical for realizing the advantages of cooperation (Dyer and Singh 1998), experience across different alliances may be a source of improving relational management skills, but less important for partner evaluation and selection.

When testing the hypotheses, we searched for the impact of the independent variables on DIRPI and INPI separately. However, there might be an overlapping effect between DIRPI and INPI. The same kind of information can for example be obtained both through direct and indirect personal information. Since DIRPI and INPI are uncorrelated, and the DIRPI and INPI items loaded on separate factors, we did not test for such an effect. However, we should be aware of this possible effect when interpreting the results.

**Theoretical implications**

The formation of alliances is an important area within strategic alliance research (Gulati 1998). Upon forming an alliance, the partners need to clarify how the alliance fits into the overall strategy of the companies, and clarify what kind of impact the alliance is expected to
have on company development and performance. From a strategic point of view, this is an important consideration. This paper contributes to our knowledge by demonstrating the link between overall strategic issues and the use of personal information sources. The planned alliance’s closeness to the strategic core of the company and partner dissimilarity are important predictors for managers perceived need for direct and indirect personal information sources. As researchers have pointed to the increased use of strategic alliances and long-term cooperative relationships (cf., Dyer and Singh 1998; Gulati 1998; Hagedoorn 1993), partner selection and choice is likely to become an important area for managerial decisions in the future. As partner choice has a large impact on alliance outcomes, accurate and reliable information is required in order to find a partner that strategically possesses the resources and competencies necessary for realizing the desired benefits. How managers seek information about potential partners may thus have an impact on both alliance and company performance.

However, it can be questioned whether companies always are free to choose alliance partners. Researchers arguing that business relationships are socially embedded, have demonstrated that relationships and networks among companies are stable over time, and that it is difficult for new companies to enter into new networks (cf., Granovetter 1985; Håkansson and Snehota 1995). In many cases, companies have very limited choice alternatives. However, when it comes to international business, and particularly if a company is searching for new international business options, it sounds reasonable to argue that the company has choice alternatives. In this study, the sampled companies participated in an event aiming at exploring new international business options, and we should here expect relationships and networks to be less socially structured. More and more industries are becoming international and global, and strategic alliances are frequently used to meet strategic goals in response to global opportunities (Doz and Hamel 1998). This calls for more attention to this issue in the international management literature.

The fact that we did not find any support for the hypothesis suggesting that expected opportunism has an impact on DIRPI and INPI, may support transaction cost economics, arguing that companies cannot distinguish beforehand between opportunistic and non-opportunistic actors (Williamson 1985). Opportunistic actors can first be revealed when opportunistic behavior is detected. This may particularly be valid for international alliances. When seeking international partners, compared to national partners, we must expect that it is more difficult to learn whether a potential partner has previously acted opportunistically or
not. Such information is probably harder to obtain about international partners than national, as this kind of information is often based on rumors and direct observation.

**Managerial implications**

The present findings offer several implications for owners and managers of small and medium sized companies, and for potential partners. First, owners and managers of SMB companies should provide ample opportunities for personal contact between the company and potential partners when a planned alliance is closely related to the companies’ strategic core or when potential partners are very different. Under these conditions, managers responsible for evaluating potential partners need rich information.

However, it should be noted that such information might not necessarily be easy to obtain. Potential partners also want to obtain some benefits from personal encounters, and companies seeking direct information about possible partners must be expected to pass out information about their own company. If they are unwilling to do so, they will probably experience difficulty in getting the needed information. Managers should also take into account that there is always a risk that company information can be misused. The management team meeting with potential partners should develop a consensus, regarding which kind of information about the company should and should not be displayed.

Companies planning to enter alliances with small and medium sized companies may benefit from considering these companies’ need for information. It should be possible to judge whether an alliance will be closely related to the strategic core from secondary data sources, and to make a qualified guess about the company’s perception of differences between choice alternatives. In situations where alliances are expected to be closely related to the strategic core and potential partners are perceived to be very different, a potential partner may benefit from making a first move to set up meetings and provide ample opportunities for personal interaction. Such meetings can also be a step in establishing mutual social norms and interpersonal trust in order to reduce uncertainty (Ouchi 1980; Zucker 1986). Hence, potential partners should emphasize the aspects of their business history that are appropriate for this purpose, that is, instances in which the company has actively promoted joint interests and collective goals (Dwyer, Schurr, and Oh 1987).
Another important implication for potential partners follows from the finding that managers are likely to seek out indirect personal information from third parties when the planned alliance will be closely related to the strategic core. Companies should thus be aware of the possible negative effects caused by bad rumors and former disappointed partners.

**Future research**

Different aspects of ongoing relationships between companies have been addressed in the literature (cf., Bucklin and Sengupta 1993; Day 1990; Ohmae 1989). Still, the issue of information need and information use in evaluations of potential partners is largely ignored. A single study can only scratch the surface of this important topic. However, several avenues for future research in this area follow from the limitations of the study.

First, our study focused on the early stages in the process of selecting a partner. Other variables may direct managers’ attention toward personal information sources later in the process. For example, as previously noted, opportunism may play a role later in the process, when managers know more about potential partners. It is also possible that the importance of direct and indirect personal information sources differs at different stages in the process.

Another important issue to be addressed in future research is the order of attention devoted to the selection of cooperation activities and selection of partner, respectively. Do companies first select activities for cooperation or could it be the other way around; do companies first find a reliable partner and then select adequate activities for cooperation? The order of choices is likely to affect the need and search for information.

Still another issue worthy of future scrutiny is the effect of the specific purpose for alliance formation on information search behavior. For instance, managers looking for partners in order to gain access to expertise might be more concerned with personal information than managers who are motivated by cost reduction. It should also be noted that the present study focused on Scandinavian small and medium sized companies’ search for international partners within the EU. As suggested by Zaheer and Zaheer (1997), companies information-seeking behavior might be different in other parts of the world due to different levels of market volatility and different national cultures. Finally, this study concentrated on evaluations of personal information sources. Future research should also investigate which sources of secondary information are preferred and actually used in evaluations of potential partners.
Conclusion

Due to increased globalization in many markets and rapid technological change, many companies have realized that they cannot operate successfully on their own, but are dependent upon cooperation with other companies for successfully pursuing their strategies (cf., Child and Faulkner 1998; Dyer and Singh 1998). As selecting the right partner is critical for alliance success, it is of importance for managers to use the most appropriate information sources in order to make careful evaluations. Accurate information about potential partners can help companies avoid problems at later stages in the cooperation process.

In this respect, our study sheds light on an under-researched area of strategic alliances, the use of personal information sources to evaluate and select partner. We recommend that managers can particularly benefit from using personal information sources when the planned alliance is close to the strategic core of the company, and when potential partners are perceived to be different. Moreover, we have reasons to believe that it is difficult to judge the likeliness of opportunistic behavior at early stages of partner evaluation and selection, and that experience from previous cooperation cannot replace the need for first hand personal information.
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APPENDIX 1

Measures of constructs

_Closeness to strategic core_ (Reliability = .60)
Three-item, seven-point scale, anchored by “very poor description” and “very good description.”
- The content of this cooperation is close to the company’s core business areas.
- This cooperation will be of strategic importance for us in the future.
- This cooperation will provide valuable knowledge and competence for the future development of our core business areas.

_Partner dissimilarity_ (Reliability = .68)
Three-item, seven-point scale, anchored by “very poor description” and “very good description.”
- Potential partners are likely to be very similar [R].
- It will be very difficult to distinguish potential partners along key characteristics [R].
- Potential partners for cooperation are likely to share the same characteristics [R].

_Expected opportunism_ (Reliability = .92)
Four-item, seven-point scale, anchored by “very poor description” and “very good description.”
- The partner can easily be expected to mislead us.
- The partner can easily be tempted to misuse the cooperation for obtaining benefits at our expense.
- The partner can be tempted to hold back important information.
- If we give the partner sensitive information, the partner can easily be tempted to use this information in other contexts.

_Cooperation experience_ (Reliability = .83)
Four-item, seven-point scale, anchored by “very poor description” and “very good description.”
- Our company has extensive experience in cooperating with other companies.
- The company has through previous strategic alliances developed extensive competence in how to manage cooperative relationships.
- The company’s previous experience is of great importance for how future cooperation will be organized and governed.
- Compared to similar companies, our company has little knowledge about strategic alliances [R].

_Perceived importance of direct personal information (DIRPI)_ (Reliability = .57)
Two-item, seven-point scale, anchored by “not at all desirable” and “very desirable.”
How desirable are the following information sources in evaluating potential partners?
- Personal talks with managers from potential partners.
- Experience with managers from potential partner companies in social contexts.
Perceived importance of indirect personal information (INPI) (Reliability = .76)
Two-item, seven-point scale, anchored by “not at all desirable” and “very desirable.”
How desirable are the following information sources in evaluating potential partners?
- Talks with other companies that have cooperated with our potential partners.
- Information from other companies that know our potential partners.

[R] designates reverse coding.
Chapter 3
The Effects of Psychic Distance, Free Trade Agreement and Protectionism on Perceived Export Barriers

Abstract
This paper addresses the question of whether psychic distance, free trade agreement and protectionism impacts on perceived export barriers. An empirical test shows surprisingly that neither psychic distance, nor a free trade agreement has a statistical significant effect on perceived export barriers. Protectionism has a statistical significant positive effect on perceived export barriers.

\[^4\text{Co-authored with Jörg Blasius. This article is submitted to International Marketing Review. A previous version was presented at the 32nd European Academy of Marketing Conference, 2003.}\]
Introduction

Markets are becoming increasingly more international - and even global, resulting in many firms being located further away from their buyers and final customers. To reach the final consumers, products need to be sold and distributed across borders, and thus export becomes of the greatest importance. Exporters’ survey and evaluate the expected performance of their products in export markets to monitor and evaluate their goal-directed activities (Aaby and Slater 1989, Zou and Stan 1998). Such evaluations can be based on multiple criteria. One aspect often evaluated is to what extent the firm meets export barriers in particular markets.

Export barriers can be assessed in various ways, e.g. according to some “objective” standard. Export barriers are, however, often evaluated according to some subjective standard, e.g. according to expectations learned in their actual context. Exporters’ (and non-exporters’) subjective evaluations are important, because what they perceive represents their reality (c.f. Berger and Luckman 1967). The perceived export barriers thus becomes of the greatest importance. Both “objective” and “subjective” export barriers may change over time and exporters may also learn how to handle them, influencing their assessment of export barriers. Here, three factors believed to be important for firms’ perception of export barriers are addressed, i.e. the psychic distance between the home market and foreign markets, how the export firms home country is related to an important trade block, and the degree of protectionism export firms meet. These three factors are only modestly addressed in past research.

This article contributes to the literature on barriers by exploring the interplay between psychic distance, trade arrangements with a trade block, protectionism and perceived export barriers. The interplay of these three forces is of great theoretical and practical importance; since they have large impact on export behavior, firm internationalization and international trade. The following three research questions are investigated: Is there a relationship between psychic distance and perceived export barriers? Does a free trade agreement with a trade block have any effect on perceived export barriers? What is the relationship between protectionism and perceived export barriers – if any?

The remaining part of the article is organized as follows. In the next section we review the relevant literature and advance a set of inter-related hypotheses. In the section to follow we
report our research methodology including our data, measurements and the statistical approach used in this paper. After this, we report our findings. Finally we draw conclusions and highlight theoretical and managerial implications.

**Perspective and hypotheses**

Export barriers relate to perceived difficulties for firms to export to a foreign market. Export barriers can be defined as “all those attitudinal, structural, operational, and other constraints that hinder the firm’s ability to initiate, develop, or sustain international operation” (Leonidou 1995: 31). They are associated with firms continuity in export (da Silva and da Roche 2001), to export profit contribution (Leonidou and Katsikeas 1996) and to business profitability (Leonidou 2000). A common assumption is that the higher the barriers are perceived to be, the more reluctant a firm will be to try to export. The negative role export barriers have on firm internationalization behavior has been shown in several literature reviews (Bilkey 1978, Boddewyn 1981, Cavusgil and Nevin 1981, Misenbock 1988).

The literature about export barriers has been thoroughly reviewed and assessed by Leonidou (1995, 2000). We, therefore, only review literature relevant for our study. In particular we investigate how export barriers are associated with psychic distance (Barret and Wilkinson 1985), a free trade agreement with a trade block (Malhorta et al. 1998) and protectionism.

**Psychic distance and export barriers**

It is suggested that psychic distance is linked to export barriers (Barret and Wilkinson 1985). Few studies have, however, examined this. Psychic distance has been defined as “factors preventing or disturbing the flow of information between firm and market (Johanson and Wiedersheim-Paul 1975: 308, Johanson and Vahlne 1977: 24), as “factors preventing or disturbing firms’ learning about and understanding of a foreign environment” (Nordström and Vahlne 1994: 49) and as “…a firm’s degree of uncertainty about a foreign market resulting from cultural differences and other business difficulties that present barriers to learning about the market and operating here” (O’Grady and Lane 1996: 330). Individual and organizational learning decreases psychic distance. Theory of learning thus has a central role in explaining how psychic distance may change over time (Shoham and Albaum 1995).
Psychic distance is proposed to include factors such as cultural distance (Benito and Gripsrud 1992), attitude/value orientation (O’Grady and Lane 1996) and geographic distance (Johanson and Wiedersheim-Paul 1975, Dicht et al. 1990). It is suggested that psychic distance is a summary construct, which include “language, business practices, political and legal systems, economic environment, industry structure and national culture” (Evans and Mavondo 2002: 516).

The degree to which firms meet export barriers is proposed to vary with the psychic distance between the export and the import country (Barret and Wilkinson 1985, Stottinger and Schlegerlmilch 1998). The rationale for this proposition is that when firms begin to export or extend their export to psychologically distant markets, the perceived export barriers increase. In an empirical test of this proposition Shoham and Albaum (1995) found a significant positive effect of psychic distance on export barriers. Therefore, we hypothesize:

H1: The lower the psychic distance between an export country and an import country, the lower the perceived export barriers.

**Free trade agreement with a trade block and export barriers**

The aims of a trade block are better economic welfare for its members, prosperity, access to a secure and large market, growth in employment and defense against other alliances/trading blocks (Barker and Kaynak 1992). To achieve these aims a trade block tries to facilitate trade and reduce export barriers between the member countries of the trade block.

There has been some research on the barriers exporters in member countries meet when exporting within a trade block (intra-block trade). Examples are studies of export within the European Economic Community (Katsikeas 1994), within the European Union (Katsikeas and Morgan 1994, Kaleka and Katsikeas 1995, Katsikeas et al. 1996), within the Free Trade Agreement between Canda and U.S.A (Barker and Kaynak 1992), within the North American Free Trade Agreement (Bangchi-Sen 1999, Campbell 1996) and within the Southern Common Market (da Silva and da Rocha 2001). Few studies have, however, investigated the barriers exporters in non-member countries meet when exporting to a trade block. This is unfortunate, since trade blocks constitute a large and growing part of international trade.

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5 Psychic distance and export barriers are concepts with overlapping boundaries, still psychic distance has a role in determining export barriers (Shoham and Albaum 1995).
Trade blocks have various degree of economic integration. The European Union (EU) is, for example, a full economic union with a free movement of goods, services, persons and capital, and common external tariffs and, more or less, complete harmonization of public policies (see Malhorta et al. 1998).

Since one objective of a trade block is to create a common market with common policies, rules and regulations, export barriers should be relatively similar across member countries (Bradley 2002). This implies that the members of a trade block should have common rules and regulations for their trade with countries outside the trade block. Barriers, such as tariffs, should therefore be uniform across all member countries (Williams 2002).

Countries may have various types of trade arrangements with particular trade blocks (see Malhorta et al. 1998 for a review of the different levels of trade agreements). When an export country has a free trade agreement with a trade block, this implies that each member country of the trade block should try to minimize the trade barriers firms in the export country are being subjected to (Malhorta et al. 1998). The export firms should therefore meet low export barriers within the individual countries of the trade block. Therefore, we hypothesize: H2: When there is a free trade agreement between an export country and a trade block, then a) the perceived export barriers will be lower, and b) the perceived export barriers will be more similar for export to the individual countries within the trade block than to countries outside the trade block.

**Protectionism and export barriers**

Protectionism is the use of legal means and other controls by governments to protect specific domestic industries or businesses against foreign competition. From a normative standpoint, protectionism is harmful, both in the short and long run (Colombatto 2000), even though protectionism may provide a particular group with advantages at the expense of other groups. Although protectionism generally is considered harmful even for the protected country, it has been, and still is fashionable (Colombatto 2000). There are several theories about possible benefits of protectionism (see e.g. Appleyard and Field 2001). The arguments for protectionism are varied. They may, for example, be to protect infant industry, to favor domestic production, strategic-protection, or have to do with foreign policy or expediency. Whatever the reasons for protectionism are, we hypothesize:
H3: When an import country protects an industrial sector, the perceived export barriers will be higher within this sector than within other industrial sectors.

**Research methodology**

In order to investigate the above hypotheses empirically, we need to capture exporters’ perceptions of barriers they meet in various countries. We need variation in the psychic distance between exporters’ home country and import countries. We also need import countries, which are members of a trade block that the exporters’ home country has a free trade agreement with, as well as other import countries. Our study requires the inclusion of industries, which the foreign market tries to protect, as well as industries where no such protective efforts are present. Due to the lack of secondary data, primary research was conducted to test the hypotheses. A survey design was chosen. This was expected to give enough variation in terms of the concepts selected for investigation.

The empirical study was made using export firms from Norway. This country’s firms are exporting to countries with various psychic distances to the export country. Furthermore, Norway is an independent country, which since 1972 has a free trade agreement with a trade block, the European Union.

In 1960, Austria, Denmark, Norway, Portugal, Sweden, Switzerland and the United Kingdom established the European Free Trade Area (EFTA) on the premise of free trade between the member countries. Since then, the European Union (EU) has been EFTA's most important trading partner. In 1972, individual EFTA countries signed free trade agreements with the members of the EU with the aim to abolish import duties on industrial products. Currently, only Norway, Iceland, Liechtenstein and Switzerland are members of EFTA, the other previous members have joined the EU.

Norway is among the richest countries in Europe and has a relatively successful export industry. In 1995, the year in which the data was collected, the total value of exports from Norway was about 23.2 billion US$: 21.8% of these exports went to Sweden, 49.2% to the other countries of the EU, 10.4% to Canada and the United States, 3.4% to countries in Eastern Europe and 10.4% to Asia (www.ssb.no/muh/mu1995/tab12-01.html).
Sample
Since the research was designed to study export barriers, sample firms were selected from industries with a high percentage of export firms. The sampling started with an initial contact with the Confederation of Norwegian Business and Industry (Norwegian Næringslivets Hovedorganisasjon)\(^6\) to ask for help to secure a sampling frame and to support our study in order to get a high response rate. The confederation was interested in the study, and called on representatives from seven of their national trade organizations to assist. They prepared a sampling frame consisting of all member firms expected to have export activities \((n = 1400)\). One of the chief executive officers in each firm was asked to participate in a mail survey to assess the importance of the various export barriers that the firms meet. Approximately 200 of the selected 1400 firms noted that they were not involved in exports and returned the questionnaires unanswered. We do not know the exact number of firms involved in exports, and are therefore not able to calculate the exact response rate. At the end of the fieldwork, which included sending off reminders, 459 returned questionnaires are suited for the analyses. The unit of analysis is the firm.

The average firm employed 208 people, had 35 years of export experience, an export share of 50% and a turnover of 60 million US dollars. Firms from the following sectors are included in the survey: fishery and fish farming \((n = 54, 11.8\%)\), textile \((n = 46, 10.0\%)\), processing and manufacturing \((n = 145, 31.6\%)\), technology \((n = 184, 40.1\%)\), building and construction \((n = 9, 2.0\%)\), building industry \((n = 4, 0.9\%)\) as well as furniture and appliances \((n = 17, 3.7\%)\). Since there are only a few firms from the last three sectors, we combined them \((n = 30, 6.5\%)\) into the group “Others”.

Measurement
Export barriers
A multiple-item approach was used to measure export barriers. Based on earlier research (Bauerschmidt et al. 1985, Sullivan and Bauerschmidt 1989) the following indicators were selected: tariffs, rules of origin (documentation costs), border crossing costs, veterinarian certification, threats of anti-dumping measures, minimum price, import quotas, sales tax regulations, import duties and unclear import rules and procedures. To measure the

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\(^6\) We thank the Confederation of Norwegian Business and Industry for their help when contacting firms.
importance of these barriers, five-point scales were used, where “1” indicates that the barrier is of very low importance and “5” that the barrier is of very high importance.

The similarity of export barriers within a trade block is measured by the differences in the similarity of the importance ratings of export barriers within each industrial sector of the individual EU countries. The similarity should be relatively high compared to all countries (EU and Non-EU); e.g. the variance in the means of the EU countries (based on the average importance of export barriers in each industrial sector in the EU countries) should be significantly lower than the variance in the mean values of all countries.7

Psychic distance
Psychic distance has been measured in various ways. Examples are measures based on geographic distance, Sethi’s (1971) clustering of world markets or Hofstedes (1980) cultural distance. There has been much dispute about what is an appropriate measure of psychic distance, and recent research suggests that in order to progress with research on psychic distance we need better operationalization of this concept (Evans et al. 2000, Stottinger and Schlegelmilch 1998, 2000). We use a slight variation of a measure developed by Nordström (1991), as described in Nordström and Vahlne (1994). This operationalization shows a ranking of twenty-two countries according to their psychic distance from Sweden. This measure strikes “a reasonable balance between content validity and construct validity” (Dow 2000: 53). One advantage of using this measure is that it is developed in Sweden, Norway’s closest neighbor country. In fact, the lowest psychic distance in this measure is the one between Sweden and Norway. We are using the original operationalization, with the exception that we have exchanged Norway with Sweden as the highest ranked country. The psychic distance can then be examined according to how import countries are ranked in table 1.

7 The difference in the importance ratings of export barriers between all individual countries is expected to be relatively high, i.e. their variance is high. Focusing on a homogeneous group (the countries of the EU) within the whole set of countries, their differences in the importance ratings of export barriers should be lower, i.e. their variance should be lower.
Table 1: Ranking of psychic distance between Norway and twenty-two countries

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<tr>
<td>1</td>
<td>Sweden</td>
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<td>Denmark</td>
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<td>Finland</td>
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<td>Great Britain</td>
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<td>West Germany</td>
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<td>21</td>
<td>Argentina</td>
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<td>22</td>
<td>Chile</td>
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According to Vahlne and Nordström (1994: 46) we see “validity in that the Nordic neighbors being closest, followed by other northern European countries, North America, southern European countries, Japan and South America”.

One problem with this approach is that some countries were not ranked by Nordström (1991). However, this problem is alleviated because research shows that countries can be clustered together according to cultural environment. For example, Ronen and Shenkar (1985) shows the existence of eight country clusters: Nordic, Germanic, Anglo, Latin European, Latin American, Far Eastern, Arab and Near Eastern.

**Free trade agreement with a trade block**

In 1992, Norway, Iceland and Liechtenstein structured their relations with the trade block EU in an agreement on the European Economic Area (EEA), through which they participate in the common market. The EEA agreement unites the three countries with the members of the EU into one single market, and implies a free movement of goods, a free movement of persons, a
free movement of services, and a free movement of capital within the European Economic Area. Excluded from the common market-regulations are only the agricultural and fishery sectors.

**Protectionism**

We use the fishery sectors as a measure of a protected industrial sector. The reasons are that the food producing sectors tend to meet a higher level of protectionism than other industrial sectors and that fishery products are the most exported food product from Norway. The rational for the high degree of protectionism in the food producing sectors is varied. According to Hoekman and Kostecki (2001:210), it may include: “to stabilize and increase farm incomes, to guarantee food security, to improve the balance of payments, to support the development of other sectors of the economy, to increase agricultural output”.

**Data on export barriers**

The first question in the survey started with the statement “In the first part of the questionnaire we would like to ask you to assign how important different export barriers are for your firm. We ask you to think about the firm’s most important import country when you answer the following questions. Which country is the firm’s most important import country?” Then followed a list of export barriers referring only to the country chosen to be the most important.

Within the list of the most important import countries there are some countries that have been selected by only a few firms. Those countries that have been selected by less than ten firms have been aggregated into groups: Southern Europe (Italy, Spain and Portugal), Eastern Europe (Russia, Poland, Czech Republic and the Baltic countries), Other European (Austria, Belgium, Ireland, The Netherlands, Iceland, Turkey), Canada/USA, Other Asia (Taiwan, Thailand, Philippines, South Korea and China) and Other World (Brazil, Chile, Egypt, Indonesia, Mozambique, Saudi Arabia, South Africa and United Arabic Emirates). The remaining countries have been selected as the most important import country by between 13 (Finland) and 151 firms (Sweden).
Nonlinear principal components analysis

In the following we apply nonlinear principal components analysis to the ten indicators of export barriers, expecting to find a common factor to be positive correlated with all items.

Nonlinear principal components analysis (NLPCA) is an appropriate technique of displaying relationships between cases associated with a set of ordered categorical variables (Gifi, 1990; Heiser and Meulman, 1994). NLPCA provides factor loadings (the correlations of the variables with the axes) and scores for the respondents on each dimension (the factor values); the respondent scores are standardized for each dimension to the mean of zero and to the variance of one. NLPCA does not require interval level data, and can be regarded as principal components analysis applied to ordered categorical data; the procedure is available under the name “categorical principal component analysis” (CATPCA) in the SPSS module CATEGORIES (SPSS, 1999).

From the nature of the items of export barriers, it can be assumed that there is a major dimension that reflects the importance of export barriers with all ten variables having positive loadings on this factor. We further expect a dimension that reflects a particular composition of export barriers, for example, when a certain industrial sector meets export barriers only important for that particular sector.

However, we are mainly interested in the importance of export barriers. This continuously scaled latent variable will be the dependent one in the two-way ANOVA with countries and industrial sectors being independent. This research strategy allows us to test the three hypotheses.

Results

Applying NLPCA to the ten indicators, the first dimension explains 50.7% of the total variation. All indicators have high positive factor loadings on this dimension, ranking from .625 (Border Crossing Costs) to .800 (Import Duties). Because of the common positive loadings, this dimension can be labeled as importance of export barriers. If a firm receives a high score on this latent variable, the firm reported on average a relatively high degree of

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8 A table of factor loadings can be obtained on request from the first author.
importance to all export barriers, if a firm receives a low score on that dimension, the firm reported on average a relatively low importance to all export barriers.²

Dimension 2, which explains an additional 13.4% of the total variation, contrasts two kinds of export barriers: “tariffs”, “rules of origin”, “border crossing costs”, “sales tax regulations”, “import duties” and “unclear import rules and procedures” versus “veterinarian certification”, “threats of anti-dumping measures”, “minimum price” and “import quotas”. The second type of barriers contrasts fishery from all other sectors. With respect to our hypotheses, we concentrate on the first dimension.

In the next step we break down the importance of export barriers by the five industrial sectors and by the 13 (groups of) countries. Applying two-way ANOVA allows us to investigate if there are some differences in the importance of export barriers between the countries within each industrial sector. Table 2 shows the mean values and the number of cases for each country within each industrial sector.

² Because of missing cases, only 437 cases remained in the analysis.
Table 2: Two-way ANOVA table of single countries within industrial sectors

<table>
<thead>
<tr>
<th></th>
<th>All sectors</th>
<th>Fishery</th>
<th>Textile</th>
<th>Process.</th>
<th>Techn.</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>-0.21</td>
<td>1.09</td>
<td>-0.14</td>
<td>-0.27</td>
<td>-0.29</td>
<td>-0.13</td>
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<td>5</td>
<td>21</td>
<td>42</td>
<td>70</td>
<td>6</td>
</tr>
<tr>
<td>Denmark</td>
<td>-0.08</td>
<td>0.37</td>
<td>-0.52</td>
<td>0.55</td>
<td>-0.55</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Finland</td>
<td>0.34</td>
<td>1.49</td>
<td>0</td>
<td>0.70</td>
<td>-0.61</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>-0.11</td>
<td>0</td>
<td>-0.03</td>
<td>0.12</td>
<td>-0.44</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>0</td>
<td>6</td>
<td>32</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-0.05</td>
<td>1.67</td>
<td>-0.60</td>
<td>-0.23</td>
<td>-0.19</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>7</td>
<td>3</td>
<td>23</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>0.86</td>
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<td>-0.71</td>
<td>-0.41</td>
<td>-0.52</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0.69</td>
<td>0.95</td>
<td>1.24</td>
<td>0.04</td>
<td>0.73</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Eastern Europe</td>
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<td>0.39</td>
<td>1.66</td>
<td>0</td>
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<tr>
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<td>2</td>
<td>0</td>
<td>8</td>
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<tr>
<td>Other Europe</td>
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<td>-0.93</td>
<td>-0.23</td>
<td>0</td>
</tr>
<tr>
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<td>0</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Canada/USA</td>
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<td>0.04</td>
<td>-0.51</td>
<td>0.09</td>
<td>-0.16</td>
<td>-0.47</td>
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<td>4</td>
<td>2</td>
<td>9</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Japan</td>
<td>0.67</td>
<td>1.34</td>
<td>1.51</td>
<td>0.14</td>
<td>-0.80</td>
<td>1.87</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Other Asia</td>
<td>-0.14</td>
<td>-0.79</td>
<td>-0.38</td>
<td>-0.08</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Other World</td>
<td>0.23</td>
<td>1.08</td>
<td>-0.33</td>
<td>-0.42</td>
<td>-0.84</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>(N) (mean)</th>
<th>(std.dev)</th>
<th>(N) (mean)</th>
<th>(std.dev)</th>
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<tbody>
<tr>
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<td>53</td>
<td>42</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>1.20</td>
<td>-0.10</td>
<td>-0.07</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td>1.05</td>
<td>0.90</td>
<td>0.92</td>
</tr>
<tr>
<td>EU</td>
<td>339</td>
<td>33</td>
<td>37</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>-0.04</td>
<td>1.44</td>
<td>-0.16</td>
<td>-0.09</td>
</tr>
<tr>
<td></td>
<td>.99</td>
<td>.90</td>
<td>.83</td>
<td>.92</td>
</tr>
</tbody>
</table>

Effects (with 13 countries/country groupings):
Industry: F = 6.8, df = 4, p < .001, η = .26  Country: F = 1.9, df = 12, p < .05, η = .24
Country x Industry: F = 1.7, df = 36, p < .01, η = .37  R² = .332 (adj. R² = .240)
The table is to be read in the following way. The rows contain the thirteen countries/country groups (from Sweden to Other World), the mean values for all countries (based on 437 cases) as well as the mean values for the EU countries (based on 339 cases) only. The overall mean is zero. Negative signs indicate that the barriers are lower than the overall mean, positive signs indicate that the barriers are higher. The columns refer to the industrial sectors, thereby the first column contains all sectors and columns two to six contain the individual industrial sectors. Within each country/country group the first line shows the mean importance of export barriers within the particular industrial sector, whereas the second line contains the number of firms belonging to the particular industrial sector.

For example, five firms in fishery reported that Sweden is their most important import country, these five firms have a mean importance of export barriers of 1.09. Compared to the overall mean of zero, this value is very high. In comparison with all 144 firms that have chosen Sweden as the most important import country, the importance of export barriers looks even higher (1.09 versus –0.21), but compared to all 53 firms from fishery, the value is below average (1.09 versus 1.20). Compared to all 33 firms from fishery that have chosen a EU country as most important, the value from Sweden is clearly below average (1.09 versus 1.44). Because of small numbers in some cells, we comment only on those means, which are based on more than three firms within a particular industrial sector within a particular country, e.g., the values Denmark and Eastern Europe have in fishery will be neglected.

**Psychic distance**

The effect of country on export barriers is significant on a five-percent level (p<.01), but the expected effect of psychic distance is not reflected in the data. On the overall level, the hypothesized relationship between psychic distance and export barriers find a certain support in the sense that the export barriers are low in Other Europe, Sweden, Germany, Canada/USA and Germany and high in Japan and Other World. However, the difference in the importance of export barriers between these countries is not ordered according to psychic distance. For some countries the relationship between psychic distance and export barriers are the opposite of what has been hypothesized. In Other Asia the importance of export barriers are low, and they are highest in France and Southern Europe (Italy, Portugal, Spain).

A further investigation of export barriers within the individual sectors shows that there is no consistent relationship between psychic distance and export barriers. In fact, within the
individual country(ies) there is often a large variation of export barriers across individual sectors. For example, United Kingdom belongs within fishery to those countries with a relatively high importance of export barriers, within processing and manufacturing to those countries with a relatively low importance of export barriers. In contrast, Denmark and Canada/USA received relatively low mean values from fishery and relatively high mean values from processing and manufacturing. Germany has in technology and Others a mean value of below average, in processing and manufacturing the mean value is above average; Japan has a relatively high mean value in fishery and a very low mean value in technology. There is no stable pattern of psychic distance for most of the countries over the industrial sectors. The only exception is Sweden, which received in all industrial sectors means of below average. With respect to hypothesis 1, we find Sweden at the expected position in the importance of export barriers; for the other countries the positions differ strongly by industrial sector. Therefore, hypothesis 1 has to be rejected.

**Free trade agreement with a trade block**

According to hypothesis 2, the member countries of a trade block should have low and relatively similar mean values in the importance of export barriers. In the case of the EU this does not seem to be the case: Whereas Sweden, Denmark, Germany, United Kingdom, and other Europe have low mean values, France and Southern Europe have the highest in the whole set of countries (see the mean values in the column “All sectors”).

Further, if the EU countries would have similar export barriers, their variation in the importance of export barriers should be lower than the variation within all countries. This is not the case, the standard deviations over all industrial sectors for the EU countries and for all countries are almost the same (0.99 versus 1.00). We have to reject hypothesis 2 on the basis of the data from all sectors. If we investigate the sectors individually we obtain similar results. For example, within the fisheries sector the mean value for the EU countries is clearly higher than the one for all countries (1.44 versus 1.20); i.e. fishery meets within the EU the highest importance of export barriers. Further, within fishery the standard deviation for the EU countries is somewhat lower than for all countries (0.90 versus 1.05), but on a very high importance of export barriers. If we test for variance homogeneity, the difference is not significant on the five-percent level. This means, we can reject the expectation that fishery meets a relatively homogeneous importance of export barriers in the EU – the EU countries have very different import barriers. This solution conflicts with hypothesis 2.
With respect to processing and manufacturing, the means for Sweden and United Kingdom are noticeably below average, whereas the means for Denmark and Germany are relatively high. As reported for fishery, the members of the EU have very different importance of export barriers and again, the variances for the EU countries and for all countries are similar. Again, hypothesis 2 has to be rejected. Although the importance of export barriers within technology is low in general, there are differences too: the means for Denmark, Finland and Germany are below average, the mean for United Kingdom is slightly above average. All in all, hypothesis 2 has to be rejected.

Protectionism

Although we control for import country (psychic distance), the effect of industrial sector is highly significant (p<.001). There is a clear distinction in export barriers between fishery and the other sectors. Table 2 shows that fishery reported with an overall mean value of 1.20 the highest degree of export barriers of all industrial sectors (compare the mean values in the row: all countries). In contrast, with an overall mean value of −0.28 firms from technology have the lowest importance on export barriers, whereas the mean values of the other three industrial sectors are relatively similar and close to zero.

Furthermore, when comparing the mean importance of export barriers met within the fishery sector with the mean importance in the other industrial sectors within each single country, we see that the mean importance of export barriers is in all cases higher within the fishery sector than in the other sectors10.

 Whereas technology seems to meet nearly no export barriers in any country and whereas the other three sectors seem to meet varying export barriers being on average little below zero, fishery seems to meet large export barriers in all countries. Because of this clear distinction, hypothesis 3 is supported. Protectionism is related to a higher importance of export barriers.

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10 The only exception is Other Asia, but this is only based on one observation.
Discussion and conclusion

The purpose of this article was to investigate the effects of psychic distance, a free trade agreement with a trade block and protectionism on export barriers. The use of a relatively large sample of 459 firms allowed us to do this.

The findings in this study are useful and surprising. They are useful, because they give substantial benefits to exporters and policymakers, as will be shown in the section about implications. The findings are surprising in that some of them differ from current beliefs about export barriers.

Psychic distance

From our solutions we reject the hypothesis that the lower the psychic distance, the lower the importance of export barriers. Nevertheless, Sweden, the country with the smallest psychic distance to Norway, has in all industrial sectors importance of export barriers that are below average. For the other Scandinavian countries we do not find a noticeably low importance of export barriers. This contrasts the findings from Shoham and Albaum (1995) who reported for Denmark a positive relationship between psychic distance and export barriers. Evans and Mavondo (2002) reported that empirical research about the relationship between psychic distance and organizational performance shows no conclusive support for either a positive or a negative relationship. We have to conclude that the situation is similar regarding the relationship between psychic distance and export barriers. Stottinger and Schlegelmilch (1998, 2000) proposed that psychic distance between countries has diminished due to globalization. The reason for our finding is, however, more likely due to export barriers being more closely related to import countries protecting particular industrial sectors, than to the psychic distance between export and import countries.

Free trade agreement with a trade block

The finding that a free trade agreement between an export country and a trade block does not appear to lead to lower perceived export barriers within the individual member countries of the trade block than to other import countries is surprising, because it flies in the face of received wisdom. We believe this to be an important finding, because it admonishes us to investigate empirically the outcomes of trade agreements rather than just relying on the texts of the trade agreements.
As further shown, in each industrial sector the firms reported to meet very different importance of export barriers within the various EU countries. The EU has not realized a common harmonization of rules and regulations regarding exports from Norway. Although Norway has a free trade agreement with the EU, on average the firms reported to meet the same importance of export barriers within the EU as within the rest of the world. In 1995, Bradley criticized the EU for their proliferation of national industrial policies, because this leaves “… a whole amour of non-tariff trade barriers in the hands of the member states” (Bradley, 1995: 220). Bradley’s (1995) quite negative description of the lack of harmonization of national laws and regulations within the EU turns out to be right. Shoham and Albaum (1995) suggested that as EU becomes more integrated, then export barriers should be less important within this trade block. This does not seem to be true for a country integrated into this trade block with a free trade agreement.

We do, of course, not know the importance of export barriers, which the firms would have been subjected to without the free trade agreement with the EU, but still we find it surprising that the importance of export barriers is not lower than in countries with which Norway has no free trade agreement. This can perhaps be because those countries that feel a need to protect themselves against international trade are those that are most subjected to such a trade. This may often be countries with a similar industrial structure and similar level of development, i.e. neighbor countries, and perhaps also countries with large affluent markets. In the given case, this turned out to be the EU-countries.

**Protectionism**

We found support for the hypothesis that protectionism leads to higher export barriers. As expected firms within the fishery sector met a considerably higher importance of export barriers than firms within other industrial sectors.

With respect to fishery, United Kingdom should have a particular interest in protecting its farmed salmon industry, since Scotland is a powerful producer of this product (Fredriksen, 2002). Norwegian salmon farmers export to the same market; consequently, Scottish and Norwegian salmon farmers are competitors. Higher export barriers on Norwegian salmon leads in the short term to less competition and higher profitability in the Scotland based salmon industry.
Similar is the case of France, here the government may protect its agricultural industry for political reasons. According to the Economist (2002), France has the worst EU-record on infringing internal-market laws. Turning to the empirical data, fishery reported with mean values of 2.04 and 1.67 the highest export barriers in France and United Kingdom (cf. Table 2). Interestingly, although the export barriers are relatively high, there is a quite large number of firms from fishery who chose France ($n = 8, 15.1\%$) or United Kingdom ($n = 7, 13.2\%$) as the most important import country. Further evidence of protectionism in the food sector is provided by Fink (2001), who reported that the EU in 1996 applied average tariffs of 7.2\%, whereas the tariffs in the processed food sectors were 16.0\%.

Since the perception of export barriers towards the single countries of the EU is very different and since it varies strongly with the industrial sector, it can be assumed that export barriers are at least partly associated with protectionism. If a country wants to secure a sufficient profitability of it’s own industry, protection of a certain industrial sector (or of a certain product) might be a convenient strategy. In short-term perspective, it might be profitable to help a national industry by increasing the export barriers, for example, with regulations such as “anti-dumping” and “tariffs”.

**Implications for managers and policy-makers**

There are several implications for managers. For firms considering an initial entry into international markets, the implication is that psychic distance may not be a good predictor of export barriers. Firms considering an initial entry should rather consider that export barriers in individual countries appear to be industry specific. Rather than using rules of thumb such as “the lower the psychic distance, the lower the export barriers”, they should investigate the structure of export barriers met within their particular industrial sector before deciding to enter.

Managers should assess the implications of participation in a trading block on their own firm. Special attention should be paid to its unique set of circumstances (Barker and Kaynak 1992). Managers should among other things consider the importance of export barriers for their own
firm, when deciding which type of trade arrangement would be appropriate in relation to important trade blocks.\footnote{For instance, two Norwegian referendums have declined membership in the EU.}

Another implication for managers is to recognize that much of the work to reduce export barriers is done and has to be done through national trade organization and the national Ministry of foreign affairs. Their efforts need to be supported and they need regular input regarding the state of affairs of export barriers within individual import countries in order to take this up with the relevant authorities.

There are some implications for policy makers too. This study shows the importance of documenting export barriers through empirical work. For example, although Norway has a free trade agreement with the EU and is therefore expected to have free access to EU markets, this study shows that the importance of export barriers varies considerably across sectors and EU countries. Empirical classification of export barriers may thus provide an important foundation for bilateral and international negotiations to reduce export barriers. Furthermore, the high importance of export barriers due to protectionism is hard to reduce by the efforts of individual export countries. Significant reduction in export barriers can perhaps best be achieved through the efforts of international organizations, such as WTO. Their work should be supported. This is particularly important for small countries that have an open economy and little clout in bilateral negotiations.

**Future research**

Future research should investigate the boundaries between psychic distance and export barriers. This may well lead to better conceptualization of both constructs. Evans et al. (2000: 165) suggest that in order to progress in the understanding of psychic distance we need to measure the key factors in this construct. Hence there is need for conceptual and measurement work on psychic distance and export barriers, and empirical work to identify how the two concepts are related.

Further, there is a need for research on how the various types of trade arrangement between countries are related to export barriers, and also how the various types and degrees of protectionism are related to export barriers.
In this study only the perceived importance of barriers was measured. Future research can assess the importance of “objective” barriers.

The nature of the export barriers used in this study indicates that they are related to border-crossing costs. The list of barriers may be expanded to cover other types of barriers, such as, for example, cultural and language barriers.

This study focused on the most important import country for each export firm. Import countries that have very high barriers may not become the most important country for any exporter. Our research design would not be able to pick up such countries. This may lead to import countries with very high barriers not becoming identified. A qualitative study, where one for instance asks exporters to name import countries with high barriers, before proceeding to investigate barriers in such a country may be useful. Furthermore, we only have data from one country at one time-point. It would be interesting to investigate if the EU has common strategies against other countries, for example USA and Canada, and if other trading blocks, for example the NAFTA, also has country-specific import barriers.
References


Chapter 4

Quality Perceptions in International Distribution: An Empirical Investigation in a Complete Distribution Chain

Abstract

Three theory-based hypotheses related to distribution chains and quality perceptions are advanced and examined empirically. The reported findings show that upstream chain stages place more emphasis on distribution quality, while downstream chain stages more emphasize product quality. A systematic change in quality perceptions is observed across national borders. In addition, more similar quality perceptions are observed among adjacent chain stages than those chain stages that are further apart.

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12 Co-authored with Kjell Grønhaug. This article was published in Supply Chain Management: An International Journal, 2003, Vol. 8, No. 5, 467-475.
Introduction

Markets are becoming increasingly more international - and even global, resulting in many companies being located further away from their buyers and final customers. To reach the final consumers, products need to be distributed, and thus distribution chains become of utmost importance. Buyers and users evaluate products. Their evaluations are usually based on multiple criteria. One aspect of utmost importance is product quality. However, the notion of product quality is an ambiguous one that is extensively discussed in the literature (see Oakland 1999). Quality can be assessed in various ways according to some “objective” standard. However, product quality can also be evaluated according to some subjective standard. This implies that buyers and users perceptions of the quality of the products offered become important. Because quality expectations may be influenced by the actual context in which the buyers and users are embedded, their perceptions of a given product quality may vary. As the “objective” product quality may change during the distribution process, quality assessment becomes even more complicated.

It is widely accepted that several “flows” take part in distribution chains. Rosenblom (1999) distinguishes between title flow, negotiation flow, product flow, finance flow, information flow and promotion flow. Here the focus is on one particular aspect of the flow of products; namely how members at different stages in an international distribution chain perceive product quality. This is of considerable importance because how things are perceived represents actors “reality”, implying that how chain members perceive the actual quality and quality requirements will influence the quality they try to obtain. In other words, if chain members perceive quality requirements in different ways, they will pursue different quality aspects and standards. Although, there has been much research on distribution chains (see Stern, El-Ansary and Coughlen, 1996), few studies in the supply chain literature have examined how members at different stages in the distribution chain perceive the quality of the products offered. The purpose of this paper is to help fill this gap in the literature.

The remaining part of the article is organized as follows: In the next section we will review some of the relevant literature, used to guide our empirical study which follows. We then
report the research methodology underlying our empirical study, followed by a report of our findings. Finally, managerial and theoretical implications are discussed.

Theory and perspectives

To bring products from the local producer (manufacturer) to distant consumers, a variety of activities have to be performed. An important characteristic is that many of the activities are performed in a sequence. For example, the producer may make the product, hand it over to an exporter, who organizes transportation to and makes contact with an importer and so on (Håkansson and Snehotta, 1991; Porter, 1985). Together this can be considered an “activity chain”. It is important to note that the various activities and their performance are interdependent. The value of these activities is heavily dependent on the extent to which the product offered satisfies the requirement of the ultimate consumers. Thus, it is the concerted effort of all the chain members (including the producer) that make the complete set of activities valuable.

Because firms often concentrate on and specialize in performing different tasks, a clear division of labor among chain members often will often be the case. Activities that represent different phases of a process of production are complementary (Richardson, 1972). Because the activities of the various actors in the international distribution chain are interdependent, the value activities of the actors are also complementary. To exploit the benefits from these complementary activities, they must be coordinated.

Customers want products and services to be of a certain quality. Here we use the label “product quality” to mean features of the product itself. In order to bring forth the product, a variety of activities must be conducted in a satisfying way, such as packaging and actual delivery of the product, here termed “distribution quality”. In order to satisfy customers, a product must have the desired product characteristics, e.g. the wanted taste and colour which may be influenced by the distribution quality. For example, if a distribution chain for a perishable food product does not maintain the appropriate temperature, the quality of the product may deteriorate during its distribution. In which type of distribution chain a product has been moved and through what type of retail outlet a product is sold may be as important to the customer as the product quality offered by the producer. This is particularly true when
the quality of the products offered by competitors is perceived as satisfying, which usually will be the case in highly competitive markets. Thus, mediocre distribution quality, e.g. unsatisfying availability, failing deliveries and so on, may be harmful to the offering firm and influence its sales negatively.

The various chain stages may put different emphasis on product and distribution quality. An important challenge is adequate coordination between the various actors and activities involved. This coordination is important because it influences the performance of the entire distribution chain. There are, however, well-documented findings demonstrating that actors involved in different activities may vary in “world views” (see Fisher et al., 1997). Such differences may lead to misunderstanding due to factors such as language, dissimilarities and disagreements about goals and preferred solutions (Griffin and Hauser, 1996). Such differences in “world view” are likely to be more pronounced within an international distribution chains than within the single firm due to geographical and cultural distance.

**Perspective and hypotheses**

Based on our above discussion we now introduce the perspective underlying our study. Our perspective is shown in Figure 1.

**Figure 1: Product/quality - cognition in a distribution chain**

Producers -----> Middlemen -----> Retailer
quality       quality       quality
perception   <------   perception   <-----  perception

Figure 1 indicates that products are produced and distributed through a distribution chain. Actors at different stages in the chain play different roles and undertake different activities due to specialization and the division of labor. Such variations in roles and activities are important in understanding differences in the quality perceptions of the chain stages. Due to this division of labor and the continuous interaction between chain stages, they influence each other’s quality perceptions through the distribution chain.

A chain members’ role determines his/her goals and activities. Chain members hold perceptions. The activities a chain stage undertakes influences its quality perceptions, so that
each chain stage will “perceive those aspects of the situation that relate specifically to the activities and goals” (Dearborn and Simon 1958, p. 140) of the chain stage. This relationship between functional background and biased perception is caused by a functionally-oriented knowledge structure. This knowledge structure has been developed by “the confluence of functionally-oriented goals and positive outcomes” (Bunderson and Sutcliffe, 1995, p. 463).

As noted above, various chain stages play different roles, here being a producer, an intermediary or a retailer. A chain stage will focus its activities related to the quality aspects of the product according to its role in the distribution chain. We suggest that chain stages upstream emphasize distribution quality, because this type of quality supports and extends the quality of the product. Chain stages downstream are believed to emphasize product quality because this type of quality is closer to their perceptions of consumer preferences that reflect the physical features of the product itself. Hence,

H1: Chain stages upstream emphasize distribution quality, while chain stages downstream emphasize product quality.

Chain stages that are adjacent to each other are performing sequential activities. To secure a smooth coordination these activities will tend to be more similar to each other than to the activities of chain stages that are further apart in the activity chain. Since adjacent chain stages are performing relatively similar activities, we expect them to have relatively more similar quality preferences than chain members further apart. Adjacent chain stages interact to a high degree with each other. This interaction will secure a better understanding of each other and serve to homogenize quality perceptions between adjacent chain stages. The interaction gives each firm in a dyad influence over the other (Anderson and Narus, 1990) and “each firm is gaining control of at least one part of its environment while giving away some of its internal control” (Anderson, Håkansson and Johanson, 1994, p. 2). Some researchers have gone even further by stating that “a channel dyad can be thought of as an ‘organization’ because the success of each organization is dependent on the success of the other” (Baker and Hawes, 1993 p. 85). This interconnectedness is believed to lead firms in a dyad to perceive quality requirements more similar than more distant chain members. Consequently, we assert that:
H2a: There is a systematic change of quality perceptions through the distribution chain, i.e. quality perceptions of producers are more similar to the quality perceptions of intermediaries than to the quality perceptions of the retailers. From this also follows that:

H2b: Quality perceptions in adjacent chain stages are more similar to each other than to those of chain stages that are further apart.

**Research methodology**

In order to examine the above hypotheses empirically we needed to capture quality perceptions of several chain stages as well as perceptions of both product quality and distribution quality. Due to the lack of secondary data, primary research was conducted to test the hypotheses. A survey design using four pre-selected chain stages was chosen. This was expected to give sufficient variation both in terms of chain stages and quality perceptions.

Most studies of marketing chain dyads have used one single key informant (Philips and Bagozzi, 1986) from one chain stage only (John and Reve, 1982). Recently researchers in marketing have put emphasis on the importance of studying dyadic business relationships (Frazier, 1983; Dwyer, Schurr, and Oh, 1987; Anderson and Narus, 1990; Hallén, Johanson, and Seyed-Mohamed, 1991). This study goes further in that it uses data from three consecutive dyads. The data was collected from key informants from the relevant chain stages. Informant data is quite reliable in the reporting of concrete, observable phenomena (Phillips 1981). One informant per organization was considered sufficient for relatively small organizations as studied here.

**Setting**

It was decided that a loosely aligned traditional marketing chain would be a better setting for testing the hypotheses than a vertical integrated marketing chain, because of the greater expected variance in the quality perceptions of individual chain stages. An international distribution chain for a perishable industrial product, fresh farmed salmon, was selected as an appropriate setting due to the traditional nature of this distribution chain. This loosely aligned distribution chain consists of four chain stages; producers, exporters, importers and retailers. Due to earlier research involvement in the salmon farming industry we knew that we would
be able to get access to the chain stages. A specific aspect of this setting was that it included several chain stages within one industry, spanning two countries with distinct cultural differences.

Fish farming gives a producer ample opportunity to design the product with respect to many quality parameters, such as, for example, texture of the flesh, fat content and size. Farmed salmon can therefore be adjusted to conform to consumer preferences. The product is exported fresh and is therefore subject to quality deterioration. Furthermore, the price is high enough (about US$3 per kilo) to warrant a relatively careful consideration of the quality aspects of the product at each stage of the distribution chain.

**Sample and data**

Samples were taken among producers and exporters in Norway and importers and retailers in Singapore. In Norway the populations for the study consisted of all producers of farmed salmon for Singapore and all exporters that sell farmed salmon to Singapore. In Singapore, the population consisted of all importers of farmed salmon and all retailers that sell farmed salmon.

Through contacts with the freight departments of several airlines and exporters, it was possible to identify six exporters shipping salmon from Norway to Singapore. The six export companies were contacted by phone with the request to speak to the person responsible for exporting farmed salmon to Singapore. After identifying ourselves, we informed them that we were conducting research on the export of salmon to Singapore and asked if it was possible to get a personal interview. Only one person declined to take part in the study. The five exporters represented about 80 percent of the salmon that are exported from Norway to Singapore. The exporters were informed that we would like to interview the producers that supply them with salmon, and were asked if they would provide the appropriate names and addresses, resulting in the names of 250 producers. Due to cost and time consideration, a mail survey was chosen for collecting the data. The questionnaire was first pretested by sending it to the manager of a trade organization for salmon producers. After having discussed the questionnaire with him and revised it slightly, the questionnaire was further pretested by mailing it to three producers. The questionnaire now seemed to work in a satisfactory way. After this pretesting of the questionnaire, the questionnaire was mailed to the managers of the
sample firms. After one reminder, 68 producers had returned the completed questionnaire; a response rate of about 27 per cent.

The exporters also provided the researchers with the names and addresses of eight importers of farmed Norwegian salmon in Singapore. Seven of them were personally interviewed. One importer declined to be interviewed. These seven importers purchased more than 80 per cent of the fresh salmon shipped into Singapore.

The Singaporean retailers consisted of supermarket chains and traditional food shops. Due to the large number of food shops and since they handled only a small portion of the imported fresh farmed salmon, we concentrated on collecting data from only supermarket chains which accounted for the major share of the fresh salmon imported into Singapore. Sales to the food service sector (hotels and restaurants) were excluded from this analysis.

The exporters and importers provided the researchers with the names and addresses of all the supermarket chains that purchased farmed Norwegian salmon in Singapore. Norwegian salmon were sold through eight supermarket chains. Five buyers in five supermarket chains were personally interviewed. Three buyers in three supermarket chains declined to be interviewed.

**Measurement**

**Quality perceptions**

Fresh salmon is a perishable product. Assessment of its quality is a somewhat complex issue as “salmon products … are composites of a large number of attributes” (Kusukabe, 1992, p. 55). To measure quality perception, we had to include sufficient quality characteristics to capture the variation in quality perception among chain stages. Four studies helped guide us. Haugland and Grønhaugs (1988) study of quality perceptions held by exporters and importers of fresh salmon, Kotengs (1992) investigation of quality perceptions of salmon among chain intermediaries, hotels/restaurants and supermarkets, Kusukabes (1992) analysis of characteristic preferences among Japanese salmon importers, and Anderson and Bettecourts (1993) study of preferences for characteristics for fresh and frozen salmon among wholesale buyers in New England. These four studies had considerable overlap in the characteristics investigated. Our study used a slightly revised version of the 25 quality characteristics investigated by Koteng (1992), as 18 product characteristics of product quality and 7 product
characteristics of distribution quality were used to describe the product (Table 1).

Table 1: Product characteristics used to describe quality

<table>
<thead>
<tr>
<th>Product quality</th>
<th>Product quality</th>
<th>Distribution quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product type</td>
<td>Texture of the flesh</td>
<td>Quality of salmon cases</td>
</tr>
<tr>
<td>Product form</td>
<td>Fat content of the meat</td>
<td>Weigh of salmon cases</td>
</tr>
<tr>
<td>Size (if whole)</td>
<td>Fat distribution of the meat</td>
<td>Documentation of temperature during transportation</td>
</tr>
<tr>
<td>Size (if fillet)</td>
<td>Quality of the skin</td>
<td>Additional marking on cases</td>
</tr>
<tr>
<td>Size (if steak-middle cut)</td>
<td>Appearance of the skin</td>
<td>Sorting of fish within cases</td>
</tr>
<tr>
<td>Smell of the fish</td>
<td>Color of (raw) flesh</td>
<td>Availability</td>
</tr>
<tr>
<td>Price whole salmon</td>
<td>Color distribution of flesh</td>
<td>Delivery</td>
</tr>
<tr>
<td>Appearance of the gills</td>
<td>Appearance of fish when received</td>
<td></td>
</tr>
<tr>
<td>Appearance of the eyes</td>
<td>Country of origin</td>
<td></td>
</tr>
</tbody>
</table>

The measurement of quality perceptions involved the rating of each product characteristic on a scale from 1 to 100, where 1 indicates “least important” and 100 indicates “most important.” The key informants could give two or more product characteristics the same rating. This scale was used to measure quality perceptions among exporters, importers and supermarkets.

During the pretest of the postal questionnaire for the salmon farmers we were advised to change the measuring instrument to make it more easy to use. This involved a change such that each product characteristic was rated on a scale ranging from 1 to 10, where 1 indicates “least important” and 10 indicates “most important.”[1]

Chain stages were measured according to their role, (i.e. being a producer, an exporter, an importer or a supermarket chain) in the distribution chain. There were no cases of overlapping roles. The chain stages of producer and exporter are classified as being upstream, while the chain stages of importer and supermarket are classified as being downstream. This division
between upstream and downstream chain stages was done based on theoretical interest and that the modest sample sizes would make more detailed analysis less viable.

A data set was constructed by putting the four chain stages in the columns of the data matrix and the twenty-five product characteristics in the rows. The data consists of the overall ranking of each product characteristic within each chain stage. Each product characteristic was thus ranked from one to twenty-five based on its score on the importance measure. The product characteristic with the highest score received the highest rank. If, for example, two product characteristics obtained the same score, (say 87 on the 100 point scale) within a chain stage, they were given an equal rank number.

The data were analyzed by using Spearman rank order correlations between the importance rankings of the chain stages. This allows a comparison of how each chain stage ranked the product characteristics. The consistency in quality perceptions was measured by comparing the relative perceptions held by the different chain stages. The measure itself is the extent of the convergence that exists, as measured by the correlation between the four chain stages.

**FINDINGS**

The first hypothesis focuses on the role function of distribution. Hypothesis 1 indicates that chain stages upstream emphasize distribution quality, while chain stages downstream emphasize product quality. Table 2 shows the rank ordering of all quality characteristics by chain stage.
<table>
<thead>
<tr>
<th>Quality Characteristic</th>
<th>Producers</th>
<th>Exporters</th>
<th>Importers</th>
<th>Supermarkets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product type</td>
<td>18</td>
<td>9</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Product form</td>
<td>23</td>
<td>15</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Size (if whole)</td>
<td>13</td>
<td>4</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Size (if fillet)</td>
<td>4</td>
<td>4</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Size (if steak-middle cut)</td>
<td>12</td>
<td>18</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Smell of the fish</td>
<td>20</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Price whole salmon</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Appearance of the gills</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Appearance of the eyes</td>
<td>24</td>
<td>21</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Texture of the flesh</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fat content of the meat</td>
<td>10</td>
<td>23</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Fat distribution of the meat</td>
<td>11</td>
<td>24</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Quality of the skin</td>
<td>18</td>
<td>19</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Appearance of the skin</td>
<td>14</td>
<td>20</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Color of (raw) flesh</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Color distribution of flesh</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Appearance of fish when received</td>
<td>3</td>
<td>10</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Country of origin</td>
<td>25</td>
<td>25</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Quality of salmon cases</td>
<td>9</td>
<td>14</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Weigh of salmon cases</td>
<td>16</td>
<td>13</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Documentation of temperature during transportation</td>
<td>21</td>
<td>15</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Additional marking on cases</td>
<td>22</td>
<td>7</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Sorting of fish within cases</td>
<td>17</td>
<td>22</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Availability</td>
<td>7</td>
<td>2</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Delivery</td>
<td>6</td>
<td>2</td>
<td>11</td>
<td>19</td>
</tr>
</tbody>
</table>
Fisher’s exact test was used (Table 3) to test the difference between how upstream and downstream chain stages perceived the 10 highest ranked quality characteristics. This cut-off point was chosen because no systematic variation in ranking was found for the low ranked characteristics. This is also consistent with findings show high degree of random variation among lower ranked alternatives when the alternatives are multiple.

Table 3: The effects of role function on quality perception.*

<table>
<thead>
<tr>
<th></th>
<th>Distribution quality</th>
<th>Product quality</th>
<th>Row total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream stages</td>
<td>6 (30%)</td>
<td>14 (70 %)</td>
<td>20</td>
</tr>
<tr>
<td>Downstream stages</td>
<td>1 (5%)</td>
<td>21 (95 %)</td>
<td>22**</td>
</tr>
<tr>
<td>Column total</td>
<td>7</td>
<td>35</td>
<td>42</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 4.887, \]
\[ df = 1, \]
\[ p < .05 \]

* The number of the ten highest ranked product characteristics categorized according to type of quality.
** This row consists of more than 20 product characteristics due to ties in the data.

As hypothesized, there was a statistically significant relationship between role function and quality perception. Downstream chain stages (importers and supermarkets) emphasize product quality more than upstream chain stages (producers and exporters). Conversely, upstream chain stages emphasize distribution quality relatively more than downstream chain stages.

Table 4 reports the Spearman rank order correlations between the importance rating of the chain stages. The table shows that the correlation coefficient between quality perceptions among upstream chain stages is .52 (p < .05) and the correlation coefficient between quality perceptions among downstream chain stages is .45 (p < .05). Both correlation coefficients are statistically significant.
Table 4: Spearman rank order correlations between importance rankings of the chain stages

<table>
<thead>
<tr>
<th></th>
<th>Producers</th>
<th>Exporters</th>
<th>Importers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exporters</td>
<td>.52**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importers</td>
<td>.36*</td>
<td>.39*</td>
<td></td>
</tr>
<tr>
<td>Supermarkets</td>
<td>.27</td>
<td>.04</td>
<td>.45**</td>
</tr>
</tbody>
</table>

** p < .05
* p < .10

Four correlation coefficients show relationships between quality perceptions of an upstream chain stage (producers and exporters) and a downstream chain stage (importers and supermarkets). The highest correlation between quality perceptions in two such chain stages is .39 (exporters and importers), while the lowest correlation is .04 (exporters and supermarkets). Two out of these four correlation coefficients are not statistically significant, while the other two only are statistically significant at a ten per cent stage.

The average correlation coefficient within upstream (producers and exporters) and downstream (importers and supermarkets) chain stages is .49, while the average correlation between quality perceptions of upstream and downstream chain stages is .27. This indicates that upstream and downstream chain stages have different quality perceptions.

The correlation coefficient between producers and exporters is .52, which is substantial higher than the correlation between producers and supermarkets (.27). As predicted, in moving from producers to exporters to importers to supermarkets, the pattern of correlation coefficients shows a steady decrease in the size of the respective correlation coefficient. For example the correlation coefficient between the quality perceptions of the producers and the supermarkets is noticeably smaller than the correlation between the producers and the importers.

Our findings show that five of the six correlation coefficients support the hypothesis of systematic change. The only exception is that the correlation coefficient between the quality perceptions of supermarkets and exporters is lower than the correlation coefficient between the quality perceptions of supermarkets and producers.
The analysis shows that the quality perceptions in adjacent chain stages are more similar than those of chain stages that are further apart. For all four adjacent chain stages, there is a statistically significant relationship between quality perceptions for adjacent chain stages, while in only one case, there is a statistically significant relationship between quality perceptions among non-adjacent chain stages (producers and importers). All the correlation coefficients between the adjacent stages are higher than the highest correlation coefficient between non-adjacent chain stages. This lends further support for the hypothesis of similar quality perceptions in adjacent chain stages.

**Discussion**

Our findings show that producers and exporters emphasize distribution quality, while importers and supermarkets emphasize product quality. We believe this is due to a division of labor in distribution, where chain stages undertake activities according to their role in the distribution chain. In the case of production and distribution of quality, chain stages roles and activities influence their perceived quality perceptions.

Our findings reveal that upstream members of the distribution chain put more emphasis on distribution quality, while firms that are located downstream tend to emphasize product quality more. This is consistent with the finding that organizational roles influence informant reports in a systematic way (Houston and Sudman, 1975).

The results show there to be a systematic change in quality perceptions through the distribution chain. This is most likely due to the variation in roles and activities through the distribution chain. Quality perceptions in adjacent chain stages are more similar than those of chain stages that are further apart. This may be due to two reasons. The various distribution stages partly focus on different activities, and the background needed to perform the various activities may differ as well. The role functions and activities of adjacent chain stages have more in common with each other, than with chain stages that are further apart. Also, consecutive chain stages interact with each other. Over time interactions and reciprocal experience may lead to diminishing perceptual differences.
Our findings have theoretical and managerial implications as well. First, this research shows that chain stages have different quality perceptions based on their roles in the distribution chain. Their role determines their goals and activities, which through interaction between adjacent chain stages influences their quality perceptions.

Moreover, this research has indicated mechanisms that make chain stages emphasize different quality perceptions. To counteract these differences, distribution chains should be co-ordinated in a conscious way by some or all of its members. Such co-ordination is of prime importance when distributing a perishable product, especially when unanticipated delays can have a significant adverse effect on product quality and the product itself has only a limited life.

Traditional marketing uses market research studies as well as sales results to monitor the success of marketing activities. However, many small companies use very little formal marketing research. This is particularly true for companies working in an international setting (Benito et al., 1993; Hart et al., 1994). The reported findings indicate that since the various stages in this distribution chain emphasize somewhat different quality perceptions, formal marketing research can be of great value. This is particularly true if the findings are communicated to all actors in the distribution chain in order to create a unified goal, i.e. customer satisfaction.

The reported findings also suggest that it may be useful to research quality perceptions of all stages in a chain and communicate the results between them. This may lay a foundation for better understanding of each other’s roles, functions and perceptions. Shared perceptions among chain stages can facilitate interaction and lead to better communication and increased efficiency in the whole chain system rather than having the individual chain stage optimise only its own operation.

Future research will probably benefit by extending the focus from dyadic business relationships to a study of whole distribution chains or extended parts of entire chains. Such research will allow for the study of new phenomena such as how product and information flows move through a distribution chain.
This study took place in a relatively young distribution chain. Of interest is whether the difference in perceptions among distribution chain members becomes smaller as the distribution chain develops over time, or if Haugland and Grønhaug (1988) are right when they propose that differences in the roles between market intermediaries increases with the length of the relationship. Such differences should lead to increased differences in activities, followed by clear perceptual differences among members at different stages in the distribution chain.
References


Notes

[1] Salmon farms are very small firms, consisting of from two to five employees. The managers are typically production oriented with relatively low administrative and managerial skills. They are occupied with all aspects of running the business and have a very low propensity for taking part in mail surveys. Since data from the other chain stages were to be collected via personal interviews we kept the 100 point scale for the three other chain stages.
Chapter 5
Quality assessment in a turbulent environment: The case of the stockfish industry

Abstract
Quality assessment is frequently applied in business-to-business marketing. It is usually assumed that quality assessment builds on the use of “objective” rules and criteria, but is this true? In a longitudinal study it was found that an institutionalized practice of quality assessment bases its work on “objective” product characteristics, as well as more subjective supply/demand considerations, making quality assessment much more complex than usually assumed. Theoretical and managerial implications are highlighted.

13 Co-authored with Pål A. Pedersen and Kjell Grønhaug. This article is in review in Industrial Marketing Management. A previous version was presented at Fagkonferanse i Bedriftsøkonomiske Emner, FIBE XXII, Norges Handelshøgskole, Bergen, 6-7 januar 2005.
Introduction

Quality assessments are frequently applied and play an important role in business life. A key purpose of quality assessment is to secure the presence of specific product characteristics. It is commonly believed that quality assessment is based on the use of “objective” rules and criteria, but is this really true? This is both an interesting and important question. If quality assessments are influenced by factors other than the object to be assessed, e.g. a product, the classification into quality categories may be unstable. In this paper we examine whether quality assessment may be influenced by variations in supply and demand conditions. This is in particular relevant in raw materials markets such as in the fishing industry where catch – and thus supply is uncertain (Prochaska 1984).

Product quality, relative to that of competitors, is one of the most important factors affecting business performance (Buzzell & Gale, 1987). Quality allows a firm to increase its market share and to earn higher profits (Qualls & Rosa, 1995; Bigwood, 1997). Quality is primarily a strategic concept (Calantone & Knight, 2000), and according to Mohr-Jackson (1998) it is one factor that a firm can have considerable control of. As globalization leads to more firms being located further away from their customers, it becomes more important to investigate the role of quality for firm performance in an international setting (Korneliussen & Grønhaug, 2003). Quality has in fact been described as “the single most important force leading to economic growth of companies in international markets” (Feigenbaum, 1982, p. 22).

This paper contributes to the literature of quality and quality assessment by examining whether an institutionalized quality assessment practice is influenced by variations in supply and demand in its classification into various quality categories.

The remaining part of the paper is organized as follows: In the next section we clarify the concept of quality assessment. Here we also address whether and how variations in supply and demand may influence actors embedded in a vertical value creating system in their quality assessment. This is followed by the research methodology and our empirical findings. Finally, implications are discussed.
Quality and quality assessment

Quality assessment implies classifying products into classes of products with homogeneous product quality, and is used in order to reduce variations in the quality of the final product. Quality assessments may be based on more or less formalized criteria and procedures. Where established procedures and criteria in quality assessment exist, they (procedures and criteria) should intuitively be applied in the same way by the same quality assessors applying these criteria and procedures. But is this the case?

There are literally hundreds of studies of quality (See e.g. Oakland, 1999; Sila & Ebrahimpour, 2002 for recent reviews). There is, however, much less research on quality assessment, and there is a serious lack of research on how practice of quality assessment is institutionalized (Carson, Dowling, & John, 1999). This is surprising given that such an institutionalized practice is the foundation of quality assessment in many industries. We investigate quality assessment and examine the forces that create and sustain it. In particular we question whether there is any systematic variation between volume of supply and quality assessment.

Products (and services) are produced and bought. Most products are inspected by at least two parties, producers and buyers. Often a product is sold and distributed via intermediaries, such as exporters and importers, who also inspect products, as most actors in a vertical value system evaluate products (Håkansson & Snehotta, 1991; Porter, 1985). Such evaluations are usually based on multiple criteria. One aspect of utmost importance is “product quality” (Batt & Morooka, 2003). The notion of product quality is, however, an ambiguous one and has been defined in multiple ways (Oakland, 1999). Product quality has, for example, been defined as conformance to specifications (Gilmore, 1974; Levitt, 1972), conformance to requirements (Crosby, 1979) and as conforming to or exceeding customers’ expectations (Buzzell & Gale, 1987; Zeithaml, Parasuraman, & Berry, 1990).

Environmental uncertainty
Firms are embedded in ever changing environments. Here we ask whether primary uncertainty, i.e. uncertainly related to states of nature, may influence quality assessment.
Many industries are characterized by large variation in their macro-environments including variations in conditions offered by nature. Variations caused by natural conditions are difficult – if not impossible to predict and control (Prochaska, 1984; Sutcliffe & Zaheer, 1998). For example, in some industries both the volume of supply of raw materials and the final product quality to a large degree depend on external factors, such as weather conditions. Such variations influence product quality and product volume from season to season and from year to year. Under such conditions it is difficult to optimize production. Typical examples are agricultural products, such as coffee, tea, cocoa, fruit, vegetables, grains, flowers and seafood.

Variation in output creates problems for producers, in particular for those who are expected to deliver a relatively stable volume of particular qualities to their customers. At the same time it is problematic for buyers/customers to evaluate products when the quality of the supply varies over time. This is because quality assessment presumes specific competence and skills, and because unpredictable variations in quality and supply may create uncertainty. This demands considerable skills in interpretation of sight, smell and tactile signals. Furthermore, it would lead to large transaction costs if every batch of production were to be inspected by buyers. International trade of such products would then become even more costly and difficult to carry out. One way to alleviate a problem of quality variation and securing a consistent product quality is through the implementation of quality assessment (quality rating), i.e., determining whether products confirm to a standard, and thereby whether the product should be accepted (Juran & Gryna, 1993).

Quality assessment can be undertaken using both mechanic and human sensors. Human quality assessors must be used when there is a lack of mechanical measuring instruments for characteristics or stimuli or when mechanical measuring instruments may not be able to do the assessment in a satisfactory way due to the complexity of the task. They (human quality assessors) are trained to understand the products, the standards, and the instruments of various industries, and are extensively used to assess products, such as wine, perfume, cheese, eggs, beef and seafood.

Development of appropriate practices and routines for rating of quality is a response to the problem of large variation in product volume and product quality on an industrial level. This has been done for products such as coffee, tobacco, spices, and wine (The Economist, 1999). Intuitively such institutionalized practices of quality assessment should be particularly
successful when demand is relatively stable, both in terms of preferred product characteristics and volume demanded, as this makes it easier to adjust the supply side to the demand side.

Practices and routines that have become institutionalized really “count”. How practices and routines have become institutionalized and “taken for granted” (e.g. North, 1991) have, however, so far only to a modest extent been applied to marketing phenomena (see Handelman & Arnold, 1999 for an exception). It should be noted, however, that rules and norms, and thus actors’ behavior may deviate from what is assumed in the idea of rational choice (for excellent discussion see March, 1994).

Key characteristics of institutionalized practices are as stated by Abercrombie, Hill, & Turner (1988) that they are “regularly and continuously repeated, are sanctioned and maintained by social norms, and have a major significance in the social structure” (p. 124). North (1991) also claims that such taken for granted practices and rules work as “the rules of the game in a society, or more formally: .. the humanly devised constraints that structure political, economic and social interaction” (p. 97). Such constraints are both informal, e.g. tradition and codes of conduct, and formal, e.g. laws and constitution. In institutional theory(ies) actors are assumed to behave rationally, i.e. goal-directed within the actual context, where institutions (e.g. laws and norms) “define and limits the set of choices of individuals” (North, 1991, p. 4). Such practices, rules and norms guide and direct. They also reflect values, i.e. appropriate, accepted – and worthwhile pursuing.

Industries develop and change. The way in which quality assessment is carried out within industries is frequently institutionalized, i.e. which rules and practices are considered appropriate for classification of products. The actual rules and practices develop and will be adjusted according to the context in which they are practiced and are influenced by characteristics of the industry.

**Perspective and hypotheses**

Based on the above discussion we introduce the perspective underlying our study. Our perspective is shown in Figure 1.
Figure 1: Perspective for analyzing the impact of supply on quality classification

Supply (volume, quality) \( \rightarrow \) Quality assessment \( \uparrow \) Quality classification

Criteria

Figure 1 is to be read in the following way. Starting from the left we see that variation in quantity and quality is assumed to influence the criteria underlying the quality assessment and thus the assessment, which in turn impacts the actual classifications into various quality categories. The stippled lines indicate possible direct links between variations in supply and quality assessment, and between criteria applied and actual classifications.

The “objective” quality of products is important, and provides the basic foundation for quality assessment. We suggest in addition to this “objective” quality, that a factor influenced by variations in quality and volume of supply are used to help “fine-tune” the quality assessment. In our view quality assessment is a mechanism primarily used to secure a stable product quality in the market, as well as to achieve stable volumes of particular product qualities. We believe so, because it is part of a producer’s responsibility to produce a satisfactory volume of the various quality types the customer demands, and also an aspect of what is expected and considered appropriate in some markets (as the one to be studied here). In addition, in volatile business-to-business markets as will be studied here, both sellers and buyers may implicitly take profit conditions into account. For example, through experience both sellers and buyers know that the per unit price decline (increase) with increasing (decreasing) supply. By applying a flexible and established practice for quality assessment, both sellers and buyers may moderate variations in profit due to unpredictable variations in supply.

**Hypotheses**

Here we believe that the volume of supply will influence the criteria used for quality assessment such that when the volume of supply is low there will be a tendency towards relaxing the “objective” criteria used for quality assessment, while they are being applied more strictly when the volume of supply is high. The result of this adjustment in the criteria used for quality assessment is that a larger fraction of the supply will be classified to higher quality categories when the volume of supply is low, than when the volume of supply is high.
We, therefore, expect a negative covariation between volume of supply and the fraction of supply that is classified to be of high quality. Thus we hypothesize:

The percent classified as the highest quality categories covaries negatively with the volume of supply to the market, i.e. when the volume of supply is low, a higher percent of the products will be classified to be of high quality.

Research methodology

The aim of this study imposes specific design requirements. The selected industry must be in an environment with large variation in supply, and data must be obtained at industry level in order to map and measure factors of variation in the competitive environment. To test the stated hypothesis we need data that spans over time capturing variation in supply as well as data on quality assessment.

Setting

In order to study an institutionalized practice for quality assessment, we chose to focus on quality assessment in the Norwegian stockfish industry. This industry based on renewable natural resources was selected since it is characterized by large variations in environmental factors and volume of supply and a relatively stable demand.

Norwegian stockfish has been exported more or less continually since the eleventh century. The earliest stages of practice of quality assessment in this industry is unknown, but from the names of quality types, such as “Bremer” and “Lübecker”, we can assume that these particular quality types were used already during the times of the Hanseatic League (1100-1400), when Bremen and Lübeck where important centers of international trade.

Italy is the only major market for Norwegian stockfish. This market developed at least partly due to the catholic tradition of eating fish every Friday. This was problematic in a time before refrigeration and freezers. Stockfish proved to be a solution to this problem, because once the cod is dried and prepared the quality of this product can remain stable for years. Due to history, tradition and food culture there is still a stable preference for this product and there is no direct substitute. Furthermore, due to industry characteristics such as the availability of
fresh cod and satisfying conditions for drying, there is almost no competition from firms outside of Norway.

The quality assessment in this industry operates within an environment characterized by large external uncertainty, as catches of wild fish can be seen as natural events with a highly uncertain outcome (Flaaten, Vea Salvanes, Schweder, & Ulltang, 1998), i.e. the primary uncertainty is high. The volume of raw material fluctuates significantly due to problems in managing commercial fish stocks and biological variation (Dreyer & Grønhaug, 2004), and uncertainty related to supply is the largest source of uncertainty in the processing sector, as both quantity, size of fish and quality may vary (Prochaska, 1984).

**Quality assessment**

Quality assessment within this industry consists of classifying stockfish into about 25 categories. The assessment (grading/rating) consists of comparing products to specification along with more subjective judgments. Important criteria are length, thickness, weight and qualitative properties. The sorting and grading takes place according to a business standard; Sorting and Grading of Stockfish (NBS 30-01). The relevant criteria and categories have developed over the centuries.

**Data**

Export companies within the Norwegian stockfish industry finance their export through bank guarantees. As part of an application for a bank guarantee, the individual export firm has to provide the bank with a copy of the contract with the importer. This contract contains information about export volume, quality classification and price.

This research builds on applications for bank guarantees (and copies of the attached export contracts) from 26 independent export firms during the time period from 1992 to 1997, encompassing 156 observations regarding sales volume and quality classification. These firms constitute about 50 percent of the exporting firms within this industry\(^{14}\) and represent slightly more than 40 percent of the export volume, and are assumed to be representative for the industry. The time period was chosen because of its variation in the volume of supply to the market. The quantitative data used in this research is based on archival data and hence on

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\(^{14}\) Due to location-specific advantages the industry is localized in the Norwegian archipelago of Lofoten in the northern part of Norway.
the use of unobtrusive measures (Webb, Campbell, Schwartz, & Seechrest, 1966; Webb & Weick, 1979).

**Measurement**
Quality assessment was measured by classifying the 22 quality types in our material into three main categories of quality, prima (first-rate), secunda (second-rate), and tertia (third-rate). This was done according to a well established business standard; Sorting and grading of Stockfish (NBS 30-01).

To measure the relative amount of stockfish classified into the three quality categories, we computed three variables; the product qualities of prima, secunda and tertia. Each product category consists of the percent of stockfish within this category that was exported from the firms constituting the sample during a particular year.

Catch quantity. The quantity of raw materials (the catch of fresh cod) sold at market is measured through the use of secondary data, based on a thorough public system for measuring and keeping track of the volume of cod landings.

Volume of supply. This variable is measured through the use of yearly Norwegian export statistics, showing the volume of stockfish exported to Italy. The export volume of stockfish from the firms in this sample was calculated by adding up their individual export volumes.

In order to test the above hypothesis, we calculated the correlation coefficients between the export volume and the relative volume of the three main quality categories.

**Findings**

This section reports the findings. Table 1 shows the pair-wise correlations between the landed volume of fish in Lofoten, volume of supply of stockfish to Italy and the relative volume of stockfish in the three quality categories.
Table 1: Catch, export volume and quality assessment

<table>
<thead>
<tr>
<th></th>
<th>Catch</th>
<th>Export</th>
<th>Prima</th>
<th>Secunda</th>
<th>Tertia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catch</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>.537</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prima</td>
<td>-.623</td>
<td>-.664</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sekunda</td>
<td>.220</td>
<td>.418</td>
<td>-.680</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Tertia</td>
<td>.682</td>
<td>.621</td>
<td>-.905</td>
<td>.303</td>
<td>1.000</td>
</tr>
</tbody>
</table>
(n=6)

Table inspection shows a strong correlation (.537) between the landed catch and the export volume of stockfish indicating that growing landings lead to increasing export volume. Table 1 reveals a strong negative correlation (-.623) between the export volume and the share of prima stockfish. As hypothesized, this shows that when the export volume decreases, a higher percent of the volume is exported as prima quality. There are strong positive correlations between volume of supply and the shares of secunda and tertia quality. This indicates that when the volume of supply decreases, a lower percent of the export volume is of secunda and tertia quality. As hypothesized, the volume of supply covaries negatively with quality assessment. To examine whether this is a “true” correlation, we systematically examined alternative explanations, such as variation in quality of raw materials, handling, and variations in climatic conditions. These alternative explanations were, however, ruled out.

Furthermore, we see a strong negative correlation between the share of prima and the shares of secunda (-.680) and tertia (-.905) stockfish. As we see, the percent of prima stockfish is inversely related to the percent of secunda and tertia stockfish.

**Discussion**

We have shown that there is a strong covariation between export volume and quality classification. Our findings demonstrate that during years with a low volume of export, the stockfish is assessed to be of higher quality, while the quality is assessed to be of lower quality during years with a high volume of export. This indicates that the criteria used for quality assessment are relaxed during years of low volume of supply to the market, while they are applied more strictly during years with a high volume of supply. We therefore conclude
that the volume of supply to the market is negatively related to quality assessment through an institutionalized practice of quality assessment.

Quality assessment in this industry based on renewable natural resources appears to be more complex than in many other industries. Quality seems to consist of two components, one based on “objective” product characteristics, which is consistent with a “conformance to specification” view of quality. The other component of stockfish quality is more subjective as it consists of adjustment in the criteria used for quality assessment. The ruling out of alternative explanations demonstrates the presence of this subjective adjustment. This component can partly be explained by an accepted and institutionalized practice “taken for granted” by the actors involved in this industry. As discussed above, the adjustment of quality allows for smoothing variations in income due to variation in volume (supply), and thus taking the interests of the producers, local community and the buyers (importers) into account. The institutionalized practice of quality assessment apparently has the wisdom to take into account factors that are “difficult to quantify into management of quality” for the individual firm and its management (Reeves & Bednar, 1994, p. 433).

The rationale for this more complex view of quality assessment is the need to balance variation in supply (quality, volume) with expectations. It is part of producers’ and exporters’ implicit contract with its customers to supply a sufficient volume of specific assortments/product qualities in order to satisfy the demand from the final customer. Due to the relatively large variations in terms of volume of supply and in the “objective” quality, industry actors are using the practice of quality assessment as a vehicle to adjust quality classification, taking both the degree and types of uncertainty in the industry’s macro-environment and the customers demand and willingness to pay into account. Furthermore, this is also a way to be market oriented (e.g. Jaworski & Kohli, 1993), as managers embedded in turbulent environments consider supply of raw materials to be extremely important in order to be market oriented (Ottesen & Grønhaug, 2002).

**Conclusions and implications**

This research shows that quality assessment in the stockfish industry is linked to environmental uncertainty. There is empirical evidence that the volume of supply to the market covaries negatively with quality assessment. Here quality assessment is used as a
vehicle to moderate the effect of uncertainty in the supply sector and at the same time be considered accountable, as is demonstrated throughout this industry’s history. The research indicates that product quality within this industry consists of the ability to balance the sometimes conflicting views of conforming to specifications, and taking the various actors interests into account.

**Implications**

This study has important theoretical and practical implications. First, our research shows that the studied institutionalized practice of quality assessment is capable of moderating the effects of unpredictable variations in supply and at the same time taking the interests of the various actors involved into account. It is also a way of being considered accountable. This helps maximize joint value across the marketing value system. Moreover the institutionalized practice of quality assessment is flexible in that it is able to adjust for the environmental uncertainty that creates variation in both the “objective” product quality and the volume of supply.

One swallow does not a summer make, neither does one study tell the whole truth. This research should be replicated. Such a replication should first be undertaken in other industries where there are large variations in input factors. Future research should benefit from investigating boundary conditions, i.e. conditions influencing variations in quality assessment.

Since both quality assessment and the importance of institutionalized practices have been largely neglected in the marketing literature, there should be ample opportunity to contribute within this area. It would also be interesting to investigate whether this research problem can be turned around, i.e. whether an emphasis on institutionalized practices can be used to study the relationship between variation in demand and a stable supply. Such a variation in demand can for example come about due to variation in the supply of young people and variation in preferences due to new trends among youth.

This research shows how the old problems of natural variation in quality and volume of supply to the market is alleviated through the use of an institutionalized and taken for granted practice of quality assessment. This practice moderates the profit effects due to unpredictable variations in supply, while at the same time taking the interests of the actors within the
industry into account. We believe that this type of quality assessment is much used in practice, although it has seldom been systematically investigated.
References


