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The internationalization process – theory vs. two cases

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Abstract

Since the year 2000 the international growth of several Icelandic companies has been very fast (the FDI stock grew from 5% of GDP in 1999 to 135% of GDP in 2007) partly due to a fast international growth of several companies. In the paper we look at two of them, Marel and Össur, which have grown from being small companies with limited international presence in 1995 to being industry leaders and truly global companies. We compare the internationalization process of these companies to theories of internationalization.

Most of the theories considered in the paper explain the internationalization process of Marel and Össur marginally or not at all and in some cases the experience is on contrary to what the theory says. The theory which seems to explain the internationalization process best, at least the first part of the process, is the theory of born-globals.

Examples of aspects which do not fit to theories are that decisions to invest abroad have not been a complex social process in the companies but a part of the initial business plan and that the opening of subsidiaries in new countries does not seem to be in order of increased psychic distance.

Keywords: internationalization theories and foreign market entry; internationalization process; born globals; competitive advantage

INTRODUCTION

The international growth of Icelandic companies has been amazingly fast in the years 2000 to 2007. This crystallizes in the fact that the FDI (Foreign Direct Investment) stock grew from 5% of GDP in 1999 to 135% of GDP in 2007. This growth has been in many industries, such as banking, manufacturing, retail and transportation.

The economic recession hit Iceland extremely hard in the autumn of 2008 and has changed the situation. The banking system collapsed, causing big problems, especially since the banking system was extremely large compared to Iceland's economy. These changes are not subject to this paper of two reasons, the paper is about the time before these big changes and the two companies which we concentrate on are only marginally affected by the economic catastrophe of Iceland.

In 2006, a research project was established at the Institute of Business Research in the University of Iceland with the aim of describing this growth of Icelandic companies and analyzing the reasons making this possible. The research presented here is part of that project. Although several papers, books and cases have been written about the internationalization of Icelandic companies (see an overview in Olafsson, Gudlaugsson and Hermannsdottir, 2007) this is the first paper about the internationalization process of the two companies.

We start by giving a general picture of the Icelandic economy and the growth of Icelandic companies. Then we describe the internationalization growth of Marel and Össur. Following is a theoretical overview and then we compare the internationalization process of the companies to the theories. Finally we offer some discussion.

ICELAND

Iceland is an island of 103,000 km^2 in the middle of the Atlantic Ocean with just over 300,000 inhabitants. Due to its small population the Icelandic economy is the smallest within the OECD.

Due to the fact that Iceland is geographically isolated and located between the European mainland and North America, Iceland and Icelanders are unique in many ways. The culture in Iceland shows a blend of European and American influences, and on the average Icelanders travel abroad more than people of other nationalities, for example as students, professionally or as tourists. It should also be noted that Iceland is among the very few countries in the world where the number of tourists is higher than the population. For these reasons Iceland can be said to be a very international country and a very high portion of the Icelandic population has been exposed to foreign influences on numerous occasions. The level of education in Iceland is very high, and many Icelanders have achieved higher education from a foreign university. Compared to countries in the European Union (EU), the Icelandic labor market is quite flexible, and it has one of the highest participation rates among OECD countries. Hence, one may argue that Icelanders have diverse qualifications which are valuable for companies that are changing fast, and growing internationally.

Many changes took place in Iceland the last decade of the 20th century, among them several legal changes which increased the economic freedom, privatization of banks and decrease in the taxes on company profits. The result of all these changes has been the blooming of many Icelandic companies, both measured by profit and growth (until 2008).

Market liberalization, privatization, membership of the European Economic Area (EEA) and other structural reforms that were implemented in the late 1980s and 1990s have changed the Icelandic economy considerably. During this time the Icelandic economy was characterized by slow or negative output growth (Central Bank of Iceland, 2006). Since the beginning of the 21st century (at least until 2008) however, Iceland has ranked among the wealthiest countries in the OECD (OECD, 2006b), and the annual GDP growth has exceeded most countries.

Currently the Icelandic economy is transitioning to a more knowledge-based economy. A clear shift is underway from resource-based industries and traditional manufacturing sectors to more knowledge-intensive sectors, including higher technology manufacturing and service (OECD, 2006b). According to the GEM studies Iceland is among the most entrepreneurial countries in the world (Bosma and Harding, 2007).

Over the last years government intervention in business activities has diminished significantly, and the central government has aggressively pursued its program of increased privatization. Efforts have also been focused on reducing the corporate income tax, lowering it in a few steps from 50% in 1991 to 18% in 2002.

Due to the small economic size, exceeding growth of Icelandic companies is possible only through internationalization. In the last few years many Icelandic companies have decided on a strong growth strategy and pursued it aggressively, not only domestically but internationally.

MAREL

Marel’s history goes back to 1977 when two engineers at the University of Iceland began to examine the possibility of developing and manufacturing scales for the effective control of production in fish processing plants. The first scale was tested in 1979 and then sold prior to the formal foundation of the company which took place in 1983. Initially Marel’s activities were focused on the design and manufacturing of specialized electronic scales as well as its related monitoring equipment and information system.

From the beginning it was clear that due to the small market in Iceland the company would have to sell its products abroad as well. The first two countries, which the company exported its products to, were Norway (1983) and Canada (1985), and these countries were chosen because of the similarity of the fish processing methods to the ones practiced in Iceland. In Norway the company used agents, but opened a sales office in Canada. In 1985 the company started to sell marine scales that were used in fish processing on board of fishing vessels. Marel sold such scales to many countries (e.g. Russia and the USA) and these scales were for a long time one of Marel´s main product.

Marel has always put emphasis on research and development, using the latest technology, with the objective to fulfill the customer’s needs. Initially the company’s products were information systems and scales. Later on, the company developed products like graders, image processors and portion cutters. These products can both be sold as single units or as whole processing lines. Today Marel´s operation is mainly based on developing (in close cooperation with its customers) and producing food processing lines which are equipment with Marel’s own products. Some of these products were, at the time, revolutionary technology innovations, which opened up new markets for the company, e.g. the poultry industry.

The life span of Marel can be divided into two phases. During the first phase between 1984 and 1993 the sales of the company were of the same order of magnitude but fluctuated. Since 1994 however, the company has grown fast in terms of sales and other measures. Figure 1 shows the development of sales between 1994 and 2007. In 2008 Marel acquired Stork Food Systems and the expected sales in 2008 for the combined company is 650 million EUR. Figure 2 shows the development of the number of employees in Marel and Össur.

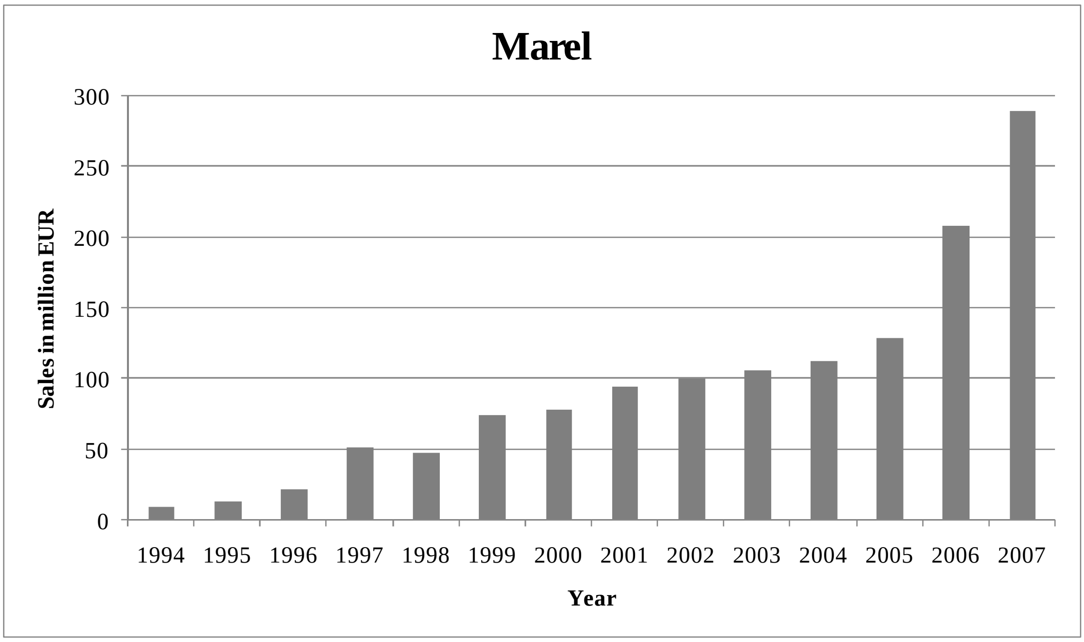

Figure 1 Marel’s sales in million EUR.

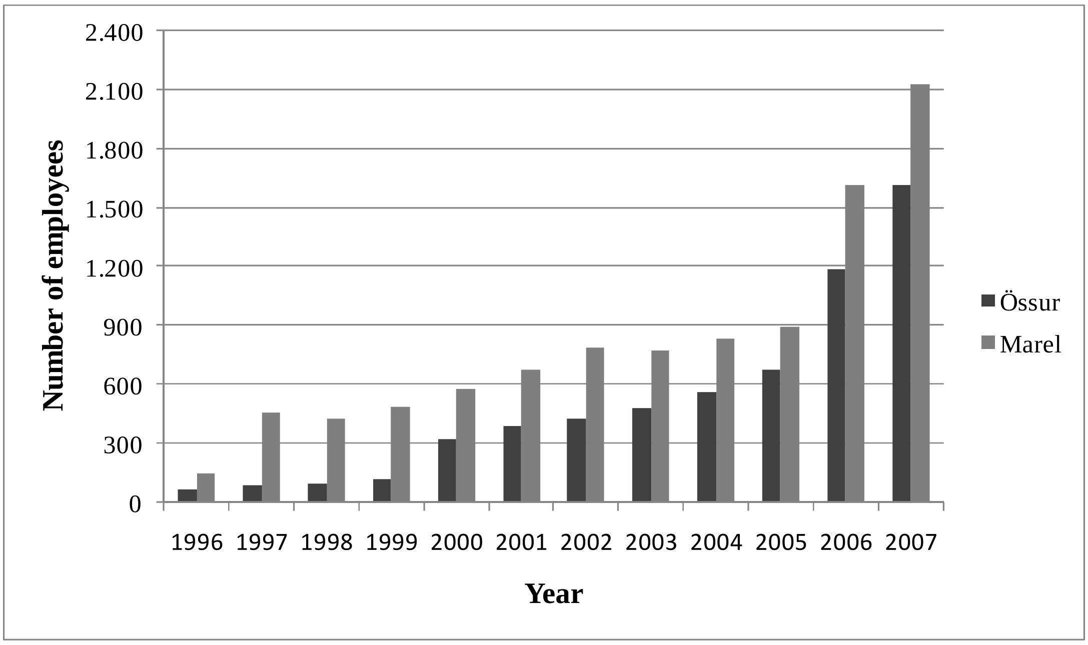

Figure 2 Number of employees in the two manufacturing companies.

There was a shift in the growth and internationalization of Marel around the year 1994. A company’s development is complicated and a description like this can only be very limited, but three factors were certainly of high importance in this shift:

- Until 1992 the scales were Marel´s main source of revenues and profit. The management of Marel realized that this would not last and spent a lot of time and money to prepare for the future, among other things by developing many new products. The company continued to put emphasis on product development and invests approximately a fixed portion of 6% of revenues in research and development.

- Between the years 1993-1995 the company started to sell an increasing amount of whole processing lines. Until then the main products were information systems, scales and graders, which were usually sold as components of processing lines which were developed and manufactured by a third party.
- In 1992 the company reviewed its strategy, adding the goals to enter the poultry industry and that one third of the company´s revenues would come from USA. The company succeeded and opened a sale office in USA in 1995. At that time Marel had sold graders to the poultry industry for a few years and continually increased the product selection for the poultry industry.

Between the years 1995 and 2005 the organic growth of Marel was strong (approximately 15% per year). As a result of this internal growth and the investment in Carnitech in 1997 the company's revenue grew almost tenfold during this decade. Marel acquired three company's between 2006 and 2008 namely AEW Delford, Scanveagt and Stork Food Systems. Following these acquisitions Marel multiplied its size, widened its product range, and made its operation stronger. Table 1 gives an indication about the size of the acquisitions in relation to the size of Marel.

The result of the acquisition of Stork in March 2008 was that Marel became the largest company in the industry with approximately 16% market share. Today the company sells equipment and processing lines to companies which process fish, poultry and red meat. The company's most important markets are Europe and North-America, but other parts of the world are important as well. Marel designs, manufactures and sells high tech-products and the company spends more in research and development than its competitors, approximately 6-7% of sales.

Table 1 Some number related to the size of Marel and three acquired companies

	Marel 2005	Delford 2005	Scanveagt 2005	Stork 2007
Sales	130m€	20 m€	90 m€	300 m€
No. employees	890	260	710	1800
Acquisition prize*	141,6 m€	19,5 m€	109m€	415m€

(*Value of Marel at the stock market in the end of 2005)

At the end of 2007 (before the acquisition of Stork) the company operated sales offices in 24 countries, manufacturing plants in 7 countries, and research and development centers in 4 countries.

In table 2 we look at what countries Marel and Össur have opened sales (and service) offices and production plants and what year. This is both relevant in discussions about psychic distance and the discussion about international, regional and (truly) global companies.

Table 2 Establishment year of subsidiaries of Marel and Össur to the year 2007

	Marel		**Össur**	
	Sales units	**Production**	**Sales units**	**Production**
1971			Iceland	Iceland
1983		Iceland		
1985	Iceland, Canada			
1995	USA			
1996	Danmark		UK (1996-2000)	
1997		USA, Danmark	Luxemburg (1997-1999)	USA (1997-1998)
1998	England		USA	
1999				
2000	Germany		Holland, Sweden	USA
2001	France			
2002	Australia, Russia			
2003	Spain		Canada	Canada (2003-2006)
2004	Chile			
2005	Italy, Poland Thailand, Vietnam	Singapore, Slovakia	UK	UK (2005-2006)
2006	Brazil, Holland, Sweden Ireland, New Zealand Portugal, S-Africa	Brazil, England	China, France	France
2007	China, Norway			

ÖSSUR

Össur was established in Iceland in 1971 as a prosthetics workshop by Össur Kristinsson, a prosthetic, along with 5 different organizations of the disabled in Iceland. The company was fully owned by the Kristinsson family from 1984 until 1999, when it went public and was listed on the Iceland Stock Exchange. From the company’s founding until 2003, Össur’s primary operations were design, manufacturing, sale and distribution of prosthetic products.

Between 2001 and 2002, managers of Össur started to explore new opportunities in larger markets to exploit the technology that already existed in the company. As a result of that Össur entered the bracing and support market (orthopedics) in 2003 by acquiring the USA company Generation II Group Inc.

Currently Össur is a key player on that market. The market for braces and support products remains very fragmented and competitive.

Össur entered the market for compression therapy in 2006 with the acquisition of the France company Gibaud Group and now Össur operates in three markets: prosthetics, bracing and supports and compression therapy. Today Össur employs a staff of 1200 in 13 locations around the world. The company has extensive operations in North America, Europe and the Nordic region. See figure 3 for the growth in sales.

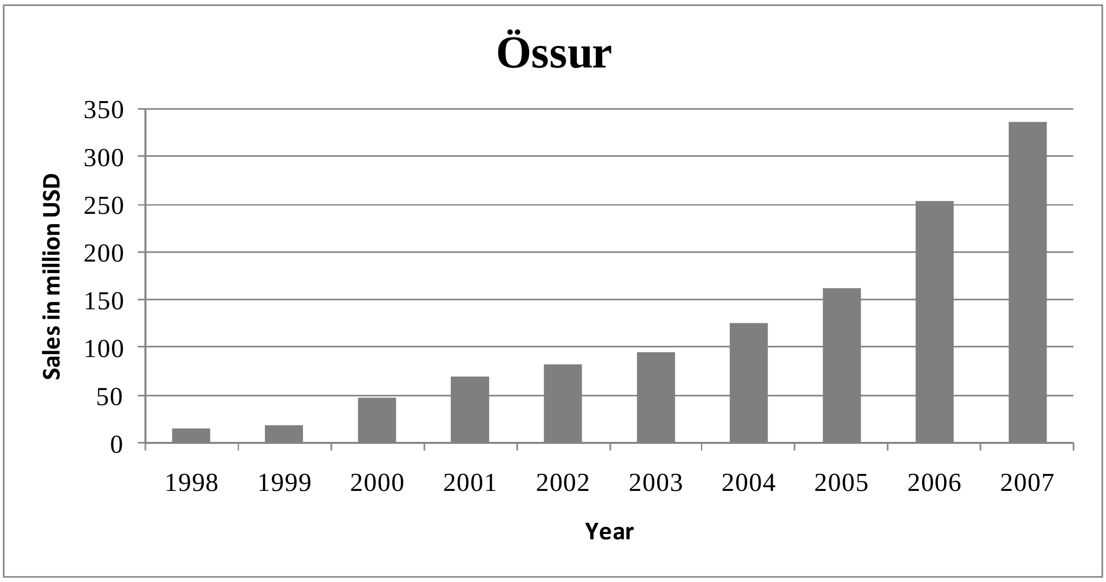

Figure 3 Össur's sales in million USD.

Initially, the company emphasized on development and production for the domestic market. Össur Kristinsson, the pioneer, started early on to work on development of silicon socket; the development was both expensive and time-consuming. From the beginning Mr. Kristinsson´s vision was clear and he believed that investment in research and development would pay off. The company was granted its first patent for the silicon socket in 1986 and the silicon socket was in fact an innovation which enabled the company to sell its products globally.

At Össur, R&D has always been seen as essential to future development and the company is determined to maintain its technological competency through investment in research and development activities. The company goal is to invest 6-8% of total sale annually in R&D.

In 1996, Jón Sigurðsson became the CEO of Össur and a new management team was recruited with international experience. An increased emphasized on international markets followed and it can be said that a second phase of the internationalization process of the company started.

In 2000, Össur made its first acquisition, and since then the company has acquired 13 foreign companies. Companies which have complimenting product offering and/or distribution networks are potential acquisition targets for Össur.

When Össur entered the prosthetic market most of the competitors were family owned and the market was highly fragmented. Recently the market has been consolidated, mainly due to Össur's acquisitions. Össur is the technical leader in the prosthetic market; only one company is considered bigger, the German company Otto Bock.

In recent years Össur has experienced rapid grown. Even though there has been an emphasis on organic growth the main driver for the high growth rate external. Figure 2 shows the development of the number of employees of Össur.

THEORY

The literature on the internationalization process of firms can broadly be divided into two streams of theories; the economic approach to theory and the behavioral approach to theory (Andersson, 2000; Benito and Gripsrud, 1992; Mort and Weerawardena, 2006).

The economic approach has its base in mainstream economics, and focuses on the company and its environment (Andersson, 2000). The fundamental assumption of the economic approach is that firms are quasi rational in their choice of investments and that the decision maker has access to perfect information (Andersson, 2000; Buckley, Devinney and Louviere, 2007; Seifert and Machado-da-Silva, 2007). According to this tradition, the choice of location for foreign investment is a deliberate decision, it is efficiency led and made with the primary goal of profitability (Buckley et al., 2007; Glückler, 2006).

Theories following the behavioral approach treat individual learning and top managers as important aspects in understanding a firm's international behavior (Andersson, 2000). In the behavioral approach the focus is on the impact of international experience on the pace and direction of subsequent internationalization. An important theme in this approach is the role of organizational knowledge in the internationalization process (Clercq, Sapienza and Crijns, 2005).

Among the best known theories following the economic approach are Dunning's eclectic theory, the International Product Life Cycle Model and the Transaction Cost Approach. Among the best known models following the behavioral approach are Ahroni's Decision Making Model, the Uppsala Model and the Innovation-Related Internationalization Models. Each of these theories and models will now be discussed.

The concept of the **eclectic paradigm** of international production was put forward by John H. Dunning. According to the model the concrete form of international operation that a foreign firm takes in a particular target market is the result of a combination of three advantages. First, a firm must have a specific Ownership advantage that compensates for the general "liability of foreignness" that comes from operating at a distance as well as the generally superior competitive position of rival domestic firms in the target market. Second, the Location advantage of the target market has to be identified and to be evaluated with respect to its fit with the firm's strategy. Third, the firm has to assess whether the O-advantage can best be realized through Internalization, e.g. to retain assets and skills within the firm, rather than renting them out to external parties in the form of licensing agreements or franchising (Dunning, 1988).

Raymond Vernon's (1966/2004) **International Product Life Cycle Model** (IPLC Model) conceives the internationalization process to be a systematic, incremental, and predictable sequence (Kwon and Hu, 1995; Sikorski and Menkhoff, 2000) where the form of entry into foreign markets depends on the life stage of the traded products (Galán and González-Benito, 2001), passing through the phase of introduction, growth and maturity (Almor, Hashai and Hirsch, 2006). The introduction stage is domestic and innovators locate production activities at home where the product was developed (Almor et al., 2006; Lou, Zhao and Du, 2005; Melin, 1992). The firm is primarily engaged in exporting and that will continue until the firm has acquired enough knowledge about the foreign market to shift production abroad (Kwon and Hu, 1995; Melin, 1992; Sikorski and Menkhoff, 2000). During the growth phase export activities increase and the demand for products expands into additional markets. Over time the innovators locate production activities in proximity to consumers in these countries (Almor et al., 2006; Galán and González-Benito, 2001; Lou, Zhao and Du, 2005; Melin, 1992). At the maturity stage major markets are saturated and a certain degree of standardization of the product has usually taken place (Melin, 1992). Concerns about production cost begins to take the place of concern about product characteristics. At this stage there is likely to be considerable shift in the location of production facilities (Vernon, 1966/2004) where the production will be located in less developed countries where costs are lower (Almor et al., 2006; Lou, Zhao and Du, 2005; Melin, 1992; Sikorski and Menkhoff, 2000). At the end, the firm will export its product from the less developed countries back to the original innovating country (Sikorski and Menkhoff, 2000).

The roots of the **Transaction Cost Approach** go back to Ronald Coase (1937) who argued that there are conditions under which it is more efficient for a firm to create an internal market rather than enter foreign ones. Such conditions are the transaction costs of foreign activities. This approach assumes that a MNE has developed a firm-specific advantage in its home market, usually in the form of internally developed intangible assets, primarily some form of know-how. The market for know-how, however, under the assumption of economic approach, is characterized by imperfections which can create complications in its pricing and transfer and consequently increase the associated costs of transacting with a partner. A high level of transaction cost results in a preference for internalizing the transaction (Johanson and Mattsson, 1987; Madhok, 1997). Firms therefore decide to produce abroad if they perceive that the reduction in transaction costs resulting from the replacement of the external imperfect markets will be greater than the cost of organizing such activities internally. Otherwise, foreign markets will be supplied by exports, licensed sales, or some other form of international activity (Anastassopoulos and Traill, 1998). Internalization does have associated administrative and risk-taking costs. These costs will be lower the less different the foreign market is from the home market. Thus, this approach predicts that international expansion will start in nearby markets (Johanson and Mattsson, 1987).

Yair **Aharoni's Decision Making Model** (1966/2004) characterized the foreign investment decision as a complex social process that is influenced by social relationships both within and outside the firm. He provided a rich description of individual and organizational behavior over time and showed the crucial effect of perception and uncertainty in the course of this process (Buckley and Ghauri, 2004). According to Ahroni, the first foreign investment decision is to a large extent a trip to the unknown. There is some strong force, some drastic experience, that triggers and pushes the organization into this new path. This trigger creates a situation that leads the decision maker to feel that an investment abroad may help him solve some urgent problem, carry on some activity that he has committed himself to maintain, or simply that such an investment may fulfill some important needs. Ahroni stated that the decision to look abroad is a decision to look at the possibilities of a specific investment in a specific country, not a general resolution to look around the globe for investment opportunities. When the first venture abroad is considered, the organization has had no experience in the complicated field of foreign investment, although it often has had export experience. No standard operating procedure exists to give some guidelines in dealing with the problem. When subsequent foreign investment decision processes are carried through, the company will benefit from its experience in previous investments. In any specific case it is generally very difficult to pin down one reason for a decision to look abroad, or to find out precisely who was the initiator of a project. The decision results from a chain of events, incomplete information, activities of different persons and a combination of several motivating forces. The impact of any one of these forces depends on the social system it encounters. It depends on various feelings and social and organizational structures, on previous events in the company's history and on other problem areas facing the company at the time this force is encountered (Aharoni, 1966/2004).

The Uppsala Model is probably the most cited model of internationalization process. Johanson and Wiedersheim-Paul (1975/2004) found that when internationalizing, the firm progresses through a distinct and rigid pattern of steps; from no exports to exports, to independent representatives (agents), to the establishment of sales subsidiaries and, finally, to the establishment of owned or shared production facilities. In their framework, the flow of information between the firm and the market are crucial in the internationalization process and they put heavy emphasis on the concept of “psychic distance”; that cultural distance between spatially separated units of the firm. Johanson and Wiedersheim-Paul’s initial article served as the basis of subsequent research that has been encapsulated in what we know today as the “Uppsala Model” of the internationalization process (Buckley and Ghauri, 2004). Perhaps the seminal article in this tradition was by Johanson and Vahlne (1977) who conceived a firm’s internationalization as a process embodying a gradual increase in commitment to a foreign market. They argued that local experiential knowledge causes incremental advances in market knowledge and thus provokes an establishment chain of international organization. The process of internationalization unfolds as a sequence of stages, where firms stepwise gain experience, build management competence and reduce uncertainty in order to incrementally increase investments in target market (Glückler, 2006). The internationalization process as represented by the Uppsala model is evolutionary, where organizational and managerial learning dominate the path taken. It puts emphasis on the “within firm” characteristics as dictating the structure and course of internationalization.

Models of innovation-related internationalization were developed on the basis of the Uppsala model (Andersen 1993, Reid, 1981). Among the best known models are from Bilkey and Tesar (1977), Cavusgil (1980) and Reid (1981). These models focus on the learning sequence in connection with adopting an innovation and the internationalization decision is considered an innovation for the firm. The Innovation-related Models regard internationalization as a process, where each new stage represents more experience and/or involvement than the earlier stages (Andersen, 1993; Vissak, 2003) and each stage is considered an innovation for the firm (Gankema, Snuif and Zward, 2000). The view states that the decision-maker’s attitude, experience, motivation, and expectations are primary determinants in firms engaging in foreign market activity (Reid, 1981) and therefore the entry into exporting is considered to be traced to an innovator inside the firm. That individual possesses aggressive and competitive traits, with greater tolerance of risk than his/her counterparts in the firm and motivated by perceived rewards stemming directly from exporting as a strategy of its growth (Vissak, 2003).

Glückler (2006) stated that today, firms internationalization has become a more complex phenomenon than initially theorized in the mainstream approaches. This is so for two reasons. First, the international expansion of firms has not only grown in traditional manufacturing-based business, but also in services, particularly in knowledge-intensive services. Second, firm internationalization is no longer a phenomenon of large firms, but increasingly involving medium, small and even micro businesses, a factor implying that smaller scale economies, such as Iceland, no longer play at a disadvantage. Most research on internationalization is based on the experience of large MNEs and the applicability of this to smaller firms has been questioned (Alon, 2004; Collinson and Houlden, 2005; Coviello and Martin, 1999; Glückler, 2006; Jones, 1999; Mort and Weerawardena, 2006; Mtigwe, 2006; Zhao and Hsu, 2007). Alternative frameworks developed within the small and medium sized enterprises' (SME) sector suggest the process is more innovative and entrepreneurial in the smaller firms environment and is strongly influenced by managerial variables (Reid, 1981). According to Johanson and Vahlne (2003) there is a need for models that can capture the early phase of internationalization better than current models. This reflects a general agreement among both businessmen and academics that global competition and accelerating technological development are now forcing firms to internationalize more rapidly than some decades ago. Johanson and Vahlne (2003) state that the old models of incremental internationalization are no longer valid. In the last decades academics have made attempts to fill this theoretical void regarding the internationalization process of small and medium sized companies. There are mainly two theoretical approaches that have gained considerable support in the field; the Born globals and the Network Theory.

Born globals are highly entrepreneurial small firms that quickly internationalize without the time or need to develop firm-specific internalized advantages in their home nation (Contractor, 2007; Jones and Coviello, 2005; Mort and Weerawardena, 2006). These firms challenge the conventional theories of incremental and gradual internationalization (Mort and Weerawarden, 2006; Rialp, Rialp, Urbano and Vaillant, 2005) and use a range of market entry modes in multiple markets (Jones and Coviello, 2005). These firms lack resources compared to large international firms, but their advantage rests on learning derived from abroad, from their ability to coordinate and arbitrage across national borders, and from alliance network relationships (Contractor, 2007; Mort and Weerawarden, 2006). These rapidly internationalizing smaller entrepreneurial firms increasingly view the world as their arena of operations and avail of opportunities in many markets, irrespective of the psychic or geographic distances involved (Loane and Bell, 2006). Owner and/or manager characteristics is a key factor distinguishing Born globals from non-Globals. These characteristics include global mindset, proactiveness, innovativeness and risk taking (Mort and Weerawardena, 2006).

Even though an increasing number of firms are active in international markets shortly after establishment, research that gets at the heart of this phenomenon is limited and the literature remains fragmented, still lacking a comprehensive theoretical explanation and causal models (Mort and Weerawarden, 2006; Rialp et al., 2005). There is for example limited empirical evidence as to whether this actuality indicates simply a reduced time factor in the pre-export phase or an important change in the export behavior of firms (Moen and Servais, 2002). Today's empirical research seems to be far ahead of the theoretical developments in this field. Both further theory building efforts and new empirical support for this emerging Born global phenomenon have to be provided (Rialp et al., 2005).

Another attempt to explaining the rapid internationalization includes **the Network Theory**, which emphasizes the impact of business relationships, both informal and formal, upon the growth and internationalization of firms (Collinson and Houlden, 2005; Coviello and Munro, 1995; Mort and Weerawardena, 2006). Networks and relationships are important for firms of all sizes because they enable firms to link activities and tie resources together, but networks seem to be particularly important for born global firms and other SMEs, given their resource constraints (Mort and Weerawardena, 2006). Networks contribute to the success of the firms by helping to identify new market opportunities and contribute to building market knowledge (Coviello and Munro, 1995). In the Network Theory, markets are viewed as a system of relationships among a number of players including customers, suppliers, producers, competitors and private and public support agencies (Coviello and Munro, 1995; Glückler, 2006). Thus, strategic action is rarely limited to a single firm and the nature of relationships established with others in the market influences and often dictates future strategic options (Coviello and Munro, 1995). Network relationships, as opposed to strategic decisions, play an essential part in a firm's international market entry. The firm's entry mode decisions and choice of markets are influenced by their network partners (Coviello and Munroe, 1995; Glückler, 2006; Mtigwe, 2006). The approach argues that international market entry is more dependent on a network position than on institutional, economic or cultural conditions of the host market (Glückler, 2006). Foreign market entry may be the result of initiatives taken by a partner, and the firm itself may not have formally and consciously decided to internationalize (Ellis, 2000; Mtigwe, 2006). Therefore, within the Network Theory, entry problems are not associated with country markets, but with specific customer or supplier firms. Instead of foreign market entry and foreign market expansion the focus is on managerial problems associated with establishment and development of relationships with suppliers and customers (Johanson and Vahlne, 2003). The Network Theory brings a recognition that firm's internationalization is never a solo effort, but that it is a product of network relationships that are both formal and informal. There is always a third party contribution to an internationalization effort (Mtigwe, 2006).

With increased individual economic freedom, more open product and service markets, and the expansion of global capital liquidity, overseas opportunities are now available to smaller entrepreneurial firms in ways never envisioned. Icelandic companies have taken advantage of these developments with many of them having internationalized in dramatic fashion in recent years. Some of them had no international presence a decade ago but are now among the leading global players in their markets. Whether or not the rapid internationalization process of many of the Icelandic firms fits into the traditional internationalization theories is unclear. A detailed analysis of the process is required, which will lead to an understanding of why and how this has occurred, and whether or not the internationalization process of the Icelandic companies is truly “unique”.

COMPARING THE GROWTH TO THE THEORIES

In this chapter we compare the internationalization process of Marel and Össur to the theories previously discussed. The objective here is to evaluate which theories explain the companies' internationalization processes, at least partly, and which theories or part of theories contradict the processes.

As described before, the internationalization process of Marel and Össur can be divided into two phases. The first phase, from inception until approximately 1995, both companies were small with little international presence and a rather slow international growth. The second phase, from approximately 1995 to 2008, is characterized by a very fast growth where acquisitions played an important role and which resulted in the companies becoming industry leaders. In fact, the theories discussed in this paper can first and foremost be used to explain the first phase. Probably, in order to explain the second phase, we need to study other theories, e.g. growth theories.

First we look at the theories following the economic approach, Dunning's eclectic theory, the International Product Life Cycle Model and the Transaction Cost Approach.

The eclectic paradigm of international production states that the concrete form of international operation that a foreign firm takes in a particular target market is the result of a combination of three advantages. First, a firm must have a specific Ownership advantage that compensates for the general “liability of foreignness” that comes from operating at a distance as well as the generally superior competitive position of rival domestic firms in the target market. Second, the Location advantage of the target market has to be identified and to be evaluated with respect to its fit with the firm's strategy. Third, the firm has to assess whether the O-advantage can best be realized through Internalization, e.g. to retain assets and skills within the firm, rather than renting them out to external parties in the form of licensing agreements or franchising.

These advantages can be identified to some degree but they don't go far in explaining the process. The main O-advantage for the both companies are superior products (technically advance3d and of high quality) they offer and the competence to constantly develop new superior products. The L-advantage is of two kinds. In most of the entered countries there is an important market and some countries were entered simply because an acquired company happened to be there. Finally, both Marel and Össur have almost entirely chosen to keep production and product development within the company, but this is the core competence of the companies. In most big markets the companies operate sales (and service) unit, but in some smaller markets the companies use agents.

As previously discussed the **International Product Life Cycle Model** assumes companies' products to pass through three stages; introduction, growth and maturity. Marel's and Össur's first years of operation could be said to fit to the description of the first two stages; the introduction stage and the growth stage. Both of the companies started production in the home country and within few years started to export their products in to other industrial markets, Marel sooner than Össur. Exporting continued for both of the companies, as assumed in stage two, and finally the production activities were located in proximity to consumers in developed countries, Marel opened a production facility in US and Denmark and Össur in US, both in 1997.

As mentioned the first two stages can be said to apply to the first years of the companies' operations and their products at that time. This does not, on the other hand, apply to products developed later in the companies' life cycle. The maturity of the products does not seem to guide the market they are sold, but are basically sold at all of the companies markets.

Description of the third stage, the maturity stage, does not fit well to Marel's and Össur's products. For example it does not apply that concerns about production cost begins to take the place of concern about product characteristics. The main explanation could be that the companies' products are to high technical for the third stage of the Model to apply.

The **transaction Cost Approach** does not explain much of the internationalization process of the companies, although the companies surely take transaction costs into consideration in many decisions. In fact, some of the theories in this realm seem to contradict what happened.

Now we look at models following the behavioral approach, Ahroni's Decision Making Model, the Uppsala Model and the Innovation-Related Internationalization Model.

Like in other theories, some of **Ahroni's decision making model** states the obvious, such that the first time you do something it is a trip to the unknown and that you learn by experience. Except for the obvious, Aharoni's model does not fit well to the internationalization process of Marel and Össur.

Aharoni characterizes the foreign investment decision as a complex social process that is influenced by social relationships both within and outside the firm. There is some strong force, some drastic experience that triggers and pushes the organization into this new path. This trigger creates a situation that leads the decision maker to feel that an investment abroad may help him solve some urgent problem, carry on some activity that he has committed himself to maintain, or simply that such an investment may fulfill some important needs. In any specific case it is generally very difficult to pin down one reason for a decision to look abroad, or to find out precisely who was the initiator of a project. The decision results from a chain of events, incomplete information, activities of different persons and a combination of several motivating forces. This description does not fit to the case of Marel and Össur. These companies had developed products for which the domestic market was very small and it had been clear since before the product was fully developed (approximately 1980 and 1986 respectively), that the main market was abroad. The decision to invest abroad was not a complex social process and it was part of the initial business plan. Probably, this can be argued to characterize firms in countries with small population.

According to **the Uppsala model** the internationalization as a process embodying a gradual increase in commitment to a foreign market and firms stepwise gain experience, build management competence and reduce uncertainty in order to incrementally increase investments in target market. Surely the internationalization of Marel and Össur did not happen in one step and the management competence has been increasing as the companies have grown.

The model can be understood in such a way that a firm would incrementally increase investments in each country (or a given market). Some of the acquisitions of Marel (e.g. Stork) and Össur (e.g. Gibaud Group) can be said to contradict this, since in several cases these companies have entered a country or market in one big step, basically from non-existence to having R&D, production and sales in that market.

The Uppsala model puts emphasis on the concept of "psychic distance"; that cultural distance between spatially separated units of the firm. Companies are expected to first enter markets (countries) with small psychic distance and then gradually enter markets with greater psychic distance. Table 2 shows clearly that this does not apply to Marel and Össur. It seems that two factors are dominant of what country to enter namely the size of the (possible) market for the companies' products in the country and in what country the acquired companies are.

The **Innovation-Related Internationalization Models** state that the decision-maker's attitude, experience, motivation, and expectations are primary determinants in firms engaging in foreign market activity and therefore the entry into exporting is considered to be traced to an innovator inside the firm. That individual possesses aggressive and competitive traits, with greater tolerance of risk than his/her counterparts in the firm and motivated by perceived rewards stemming directly from exporting as a strategy of its growth. This description seems to fit well to Marel from the inception, but one might want to replace *exporting* in the last sentence to *internationalization*. For Össur this view fits well to the increased speed of internationalization process after the renewal of the top management team in 1996.

Finally we discuss the theories of born globals and network theories.

The description of **Born globals** seems to fit rather well to both Marel and Össur. Marel and Össur have been highly entrepreneurial firms from the inception to the current day. They view the world as their arena of operations and avail of opportunities in many markets, irrespective of the psychic or geographic distances involved. Owner and manager characteristics include global mindset, proactiveness, innovativeness and risk taking (Olafsson and Hermannsdottir, 2008; Hermannsdottir and Olafsson, 2008).

The theory of born globals does though not fit completely to the internationalization of Marel and Össur and does first and foremost regard the first year of growth. Both companies have grown from being SMEs since many years. Formal definitions of born globals are usually based on the percentage of foreign earnings (e.g. at least 25%) within a given time (e.g. 3 years) from inception. Marel would certainly fit to that but Össur not at all. Finally, it seems that the importance of network relationships, which is typical for born globals, has not been so much for Marel and Össur.

The Network Theory emphasizes the impact of business relationships, both informal and formal, upon the growth and internationalization of firms. Of course, no company lives in isolation and all companies are in many informal networks. Still, the study of Marel and Össur strongly indicate that the network theory does not explain the internationalization process of these companies.

Nothing of the following applies to Marel and Össur: Network relationships, as opposed to strategic decisions, play an essential part in a firm's international market entry. The firm's entry mode decisions and choice of markets are influenced by their network partners. The approach argues that international market entry is more dependent on a network position than on institutional, economic or cultural conditions of the host market. Foreign market entry may be the result of initiatives taken by a partner, and the firm itself may not have formally and consciously decided to internationalize. Therefore, within the Network Theory, entry problems are not associated with country markets, but with specific customer or supplier firms. Instead of foreign market entry and foreign market expansion the focus is on managerial problems associated with establishment and development of relationships with suppliers and customers.

DISCUSSION

The internationalization process of Marel and Össur can be divided into two phases, the first phase from inception (Marel 1983 and Össur 1977) until around 1995 and the second phase from that time until 2008. The internationalization process was rather slow in the first phase but very fast in the second phase. We describe this phases in the paper.

Both companies have multiplied in size since 1995 and become industry leaders. Marel is a truly global company and Össur according to some definitions. The internationalization process during that period is interesting of numerous reasons. For example, both companies foresaw a consolidation in their industry and decided to lead that process. A series of acquisitions was a mean to that end. Another example is that many countries were entered by accident, one may say, since an acquired company happened to have an operation (e.g. a sales office or a production facility) in that country. Also, in several acquisitions the acquired company was bigger that the Icelandic company.

A comparison of the internationalization process of Marel and Össur and theories about internationalization process is not an easy task and will be highly debatable however it is done. The aim of the paper is to get an overall picture of how different theories fit to this reality, but not look in any depth at a particular theory. Some of the main findings are the following.

The economic approach does not seem to explain much of the internationalization process of the companies. Surely, we can use the terminology of these approaches to study the companies. It is for example clear that the O-advantage for the both companies is the competence to constantly develop and produce new superior products, but that does not explain the internationalization process. Attempts to use transaction costs to explaining something have not been successful. The international product life cycle model also fits badly to the story of Marel and Össur, perhaps mainly because the model's view of products (e.g. standardization) fits badly to the products of Marel and Össur.

One aspect of the Ahroni's decision making model seems to fit badly with the two companies. For example the decision to invest abroad was not a complex social process and it was part of the initial business plan.

The Uppsala model states (the obvious) that internationalization happens in stages and companies tend to, in a given country, first use agents, then establish a sales office and then possibly a production plants. The first step, in the case of Marel and Össur, has sometimes been to use agents but sometimes they have skipped that step. In some cases the companies have entered a country in one big step, basically from non-existence to having R&D, production and sales in that country. The Uppsala model also states that companies would tend to first enter countries with short psychic-distance. This seems not to fit well to Marel and Össur. These companies seem to have had two main reasons to enter a country, either because there is a big marked for the products or because an acquired company happens to be located there.

Both Marel and Össur seem to fit well, at least partly, to the description of born globals although only Marel fits to most formal definitions of born globals. Theories about born globals do, though, only explain some aspects of the first phase of the growth, but not the second phase. Both companies are production companies but have put great emphasis on technology and product development. Like typically in born globals, the company culture still is characterized by entrepreneurial orientation. The network theory does on the other hand not seem to explain the internationalization process of the two companies.

We have described the internationalization process of two companies, identified some characteristics of the growth and compared to the theories of internationalization process. Some questions have been answered but more questions remain open. At least two paths of further research are obvious. Firstly, we might look for other theories than theories about internationalization process to explain the internationalization process of Marel and Össur, e.g. growth theories. Secondly, we might choose one or two theories and make a more thorough comparison with the story of the two companies. That might include attempts to improve or add to some of the theories.

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