

The Prevalence and Characteristics of Domestic and International New Ventures.

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Abstract.

Based on the literature, the paper develops alternative classifications of New Ventures and contributes with new knowledge about their prevalence and characteristics. Evidence from a survey of almost 1000 Danish manufacturers demonstrates a strong increase in the number of internationally or globally oriented new ventures. Characteristics of founders, the founding process, and industry affiliation are shown to be associated with the international or global orientation of firms.

Keywords

International New Ventures, Born Global Firms, internationalization processes, international entrepreneurship

Introduction

The studies of internationalization processes often categorize firms by dividing them into different groups. Examples of such classifications are exporting vs. non-exporting firms (Bilkey and Tesar, 1977), highly experienced vs. limitedly experienced exporting companies (Cavusgil, 1980), Early starters vs. Late starters (Johanson and Mattsson, 1988). The purpose of these classifications has been to obtain homogeneity within groups and heterogeneity between groups. During the last decade there has been an increasing interest towards firms that do not initially expand on their national market but that expand internationally already during the first years of their operations or even right after their foundation. Such firms may enter very distant markets right away, enter multiple countries at once, or form international joint ventures without prior export experience. They have been labeled quite differently in various studies: Born Globals (Rennie, 1993; Knight and Cavusgil, 1996; Madsen and Servais, 1997; Moen, 2002), high technology start-ups (Jolly et al., 1992), international new ventures (Oviatt and McDougall, 1994, 1997). More recently also the term born-again global firms has been proposed referring to long-established firms that used to focus on their domestic markets, but suddenly change to rapid internationalization (Bell, McNaughton and Young, 2001).

Recent reviews of the development of such firms have been carried out by Coviello and Jones (2004) as well as Rialp, Rialp and Knight (2005). The explanation for this new picture of the internationalization of firms may be the increasingly global trade conditions, the developments in transportation and communication technologies, or the growing number of people with international experience. Some authors (e.g. Knight & Cavusgil, 1996; Oviatt & McDougall, 1994 and 1997) have presented these recent empirical observations as a challenge calling for a new theory, whereas others (e.g. Madsen & Servais, 1997) argue that even though firms engaging in new forms of international venture behave

differently at the manifest level, they do not necessarily differ from other firms with respect to more fundamental development processes. According to the latter argument, the observed phenomenon of early internationalization may not require new theories. Rather, it should be explained by further development of established theoretical constructs.

The classification of International New Ventures (INVs) by Oviatt and McDougall (1994) has been very influential in recent literature on early internationalizing firms, which was demonstrated by the fact that the article became the 2004 Palgrave Macmillan Journal of International Business Studies, Decade Award Winner. We therefore adopt the label of International New Venture/INV to denote this new form of internationalization in which the entrepreneur becomes very important because the firm's founding and internationalization processes are linked together. The *Academy of Management Journal* published a special issue on the topic of international entrepreneurship in 2000 (no. 5). The introduction to the issue pointed out that the study of this type of firms is a new promising field of research that represents the intersection of two well-established lines of research, international business and entrepreneurship (McDougall & Oviatt, 2000). The ability of the entrepreneur(s) to create and develop an international firm is apparently an increasingly important research topic.

Concerning INVs it is obvious that their manifest international development is different from that of traditional exporters. Zahra (2005) notes, however, that little attention has been devoted to the types of INVs proposed by Oviatt & McDougall (1994) and continues to state that: "Thus, we do not know a great deal about the prevalence of INVs under different combinations of industry, market, firm and entrepreneur-related conditions" (p. 22). The author calls for future research to fill this gap which might shed light upon reasons why some new ventures become international whereas others rely on domestic markets. A similar quest is expressed in a recent review article by Rialp et al. (2005) in which they urge that focus be

placed on efforts to establish a greater empirical base in order to confirm or reject previous findings regarding for example the industry affiliation of such firms.

This is exactly the intended contribution of the present article: Based on a survey among almost 1000 Danish manufacturers, it will explore the prevalence and characteristics of domestic as well as international new ventures. In addition, it will analyse how different classifications of INVs perform with respect to identifying groups of firms that are homogeneous within each group and heterogeneous between the groups, the intention being to recommend classification procedures in future research. The article explores two classifications based on Oviatt & McDougall (1994), supplemented with another classification proposed by Madsen & Knudsen (2003). The latter approach is compatible with the Oviatt & McDougall framework, but complements it with definition of Born Globals suggested by Knight (1997).

Definitions and operationalizations of Domestic and International New Ventures

There is a general lack of clarity and agreement in definitions of the concepts of International New Ventures or Born Globals (Coviello & Jones, 2004; Rialp et al., 2005). It is difficult to know whether this type of firm is worth studying as a distinct form of business enterprise, since there is no agreement in the literature with respect to the definition of the phenomenon and much less with its empirical operationalization. Most scholars refer to Oviatt & McDougall (1994) who define an INV as "... a business organization that, from inception, seeks to derive significant advantage from the use of resources and the sale of outputs in multiple countries" (p. 49). Interpretation as well as empirical operationalization of each of the involved concepts, however, differs widely between scholars. As a consequence the empirical knowledge gathered about these firms is very difficult to integrate because the firms studied exhibit a great diversity ranging from high-tech firms with activities all over the

globe to low-tech firms that are very much focused on neighbouring countries. This is a serious limitation of previous research of INVs, as pointed out in recent review articles (Coviello & Jones, 2004; Rialp et al., 2005).

Romanelli (1991) argues that researchers must be able to identify a phenomenon when it appears in order to be able to know something about how it emerges and grows. So, in order to advance scholarly work about Domestic and International New Ventures, conceptual clarification of the phenomena could be supplemented by taking as its point of departure Romanelli's very broad definition of organizational form as "... those characteristics of an organization that identify it as a distinct entity and, at the same time, classify it as a member of a group of similar organizations" (p. 81-82). It remains to be discussed which characteristics should be used to identify a Domestic or International New Venture entity and why the resulting group of similar organizations is interesting to study. So far, the driving force behind empirical work has mainly been the observation (in business press as well as scholarly journals) that many newly established firms engage in international activities very early on, which is in opposition to the traditional observation that firms are established and grow on their domestic market for many years before they become international (Johanson and Vahlne, 1977; Cavusgil, 1980). Do such new observations, however, warrant the establishment of distinct categories of INVs?

Before answering that question, some difficult decisions have to be made regarding the definition of a new venture. It is well known that the exact time of inception of a business firm is often ambiguous. The foundation process is evolving from the initial idea through different stages, ending perhaps with the act of establishing a legal entity. To identify the time of birth is therefore not an easy task. The present study has chosen to apply the CEO's self-reported year of foundation (please refer to methodological section below). Obviously, this measure is neither completely reliable nor valid. We consider it to be the best

choice, however, since it reflects the judgement of a person who is very knowledgeable about the founding process (as reported in the methodology section, responding firms are small and medium-sized, and in many cases the CEO is also one of the founders). We have validated the answers of each single respondent by comparing the CEO's self reported foundation year with the year of the latest formation of a legal entity which is registered in a publicly available listing of all Danish private business firms. In almost all cases the self-reported year of foundation is prior to the publicly listed year of foundation which is as expected since a merger or acquisition would be interpreted as a new venture in the public listing.

Another basic question with regard to the definition of an INV concerns the number of years from inception to the first international activity. McDougall et al. (2003) claims that the entrepreneurship literature seems to adopt the convention of classifying a venture as new until it is six years old. This is in contrast to most studies in the area of international business. The convention here is to follow Knight (1997) in his limit of three years. The latter approach has been chosen in the present study since it makes most sense in the case of Danish firms who initiate international activities from a small domestic market (Denmark has a little more than five million inhabitants). Furthermore, a time horizon of three years seems most relevant in the present, very global market conditions. Consequently, a firm is classified as a Domestic New Venture if it reports no international activities within three years after its self-reported year of foundation.

Besides the two basic characteristics related to year of foundation and speed of first international activity, it is necessary to decide which variables to use when classifying International New Ventures into different categories. Oviatt & McDougall (1994) propose to distinguish between groups of INVs by the number of value chain activities that are coordinated in foreign markets and by the number of country-markets entered. We widen this perspective to include also Domestic New Ventures (DNVs). Knight (1997) supplements with

a criterion related to the amount of foreign sales. These classifying variables are used as the point of departure in the subsequent empirical work.

Classification of INVs based on Oviatt & McDougall (1994)

Oviatt & McDougall (1994; p.59) define four categories of INVs: Export/import Start-ups, Multinational Traders, Geographically Focused Start-ups, and Global Start-ups. The two first mentioned groups may be congregated into New International Market Makers, being more traditional importers and exporters. As noted by Zhara (2005) only little attention has been given to these four types of INVs which may be due to the fact that Oviatt & McDougall (1994) is somewhat vague with regard to the operationalisation of the dimensions suggested.

The first dimension suggested for classification by Oviatt & McDougall (1994) is related to the number of value chain activities that are coordinated by the firm across countries. They suggest two possible indicators, a) the number of such value chain activities and b) the type of activities (primarily logistics versus also other types of activities such as service and production). Reviewing Oviatt & McDougall's (1994; 58) original source Porter (1985) and the international business literature on entry modes, the present empirical study operationalizes value chain activities as being the following four types:

- Sourcing activities (raw materials, components, production equipment or processes)
- Production activities
- Sales and marketing activities
- Service activities (installation, maintenance, repair, training, and so on).

Regarding the number of value chain activities coordinated across countries, the present study categorizes firms coordinating only one or two activities within three years after inception as New International Market Makers. Firms coordinating three or four activities are categorized as Geographically Focused Start-ups or Global Start-ups. Below this classification is labelled the *OM Activity Number Classification*. Regarding the type of activities, a firm was categorized as a New International Market Maker if it only coordinated sales/marketing and/or sourcing activities (interpreted as being primarily logistics). If a firm coordinated either service or production activities across countries it was categorized as a Geographically Focused Start-up or a Global Start-up. We label this classification the *OM Activity Type Classification*.

The second dimension suggested for classification is the number of countries entered by the firm. This was operationalized in the following manner: if 1-3 foreign countries were entered within the first three years after inception, the firm was categorized as a Geographically Focused Start-up or an Export/Import Start-up; if a firm had entered 4 foreign countries or more it was categorized as a Global Start-up or a Multinational Trader. This cut-off point is somewhat arbitrary, but four foreign country-markets within three years after inception is a quite high number, even for a European firm,.

If a firm had no value chain activities outside Denmark within the first three years after inception, it was categorized as a Domestic New Venture. Figure 1 provides an overview of the classification criteria based on Oviatt & McDougall (1994).

Insert Figure 1 here

The dimensions/criteria proposed by Oviatt & McDougall (1994) seem to be a good starting point for the delineation of the phenomenon in question, suggesting to classify firms according to the number of countries in which they operate and according to the degree of coordination of value chain activities. This definition does, however, not incorporate neither the scale/level nor the geographical scope of international selling and sourcing. In fact, a Danish manufacturer selling its products in Norway, Sweden, the UK, and Germany and sourcing components as well as installing its products in just one of these countries would be classified as a Global Start-up. Practitioners as well as researchers would probably find this classification somewhat questionable. We therefore suggest and test an alternative definition and operationalization as mentioned below.

Classification based on scale and geographical scope of selling and sourcing

Knight (1997) belongs to the international business research tradition in which the term Born Global has been used for INV types of firms. He defines a Born Global as a firm established after 1976 having a share of foreign sales of at least 25% and having foreign operations within three years after inception. As demonstrated by empirical research carried out by for example Madsen et al (2000) and Moen (2002) this definition is, however, difficult to use in a European setting. In small countries too many firms meeting this definition are quite small and have international activities in a limited number of neighbouring countries.

In order to overcome this problem, we follow the suggestion made by Madsen & Knudsen (2003) to use the proportion of foreign activities outside the firm's own continent (and not just outside its own country) as a more valid measure of the firm's international or global scope, at least for European firms. Considering today's market conditions involving

easy and inexpensive transportation as well as communication, many firms sell products or source input from neighbouring countries. A new Belgian firm sourcing input from France and selling its product in the Netherlands is probably more the rule than the exception. Following Oviatt & McDougall (1994), we further supplement Knight's (1997) focus on the selling side with the inclusion of the sourcing of input as a dimension in the categorization of International New Ventures.

We propose to classify firms according to the scale of foreign activities, operationalized as three levels of sales as well as sourcing: one group with no foreign activities, a second group having less than 25% of activities outside own continent, and a third group with more than 25% outside own continent. The cut off point (25%) is somewhat arbitrary, but it is in accordance with the definition suggested by Knight (1997).

Figure 2 shows the resulting nine categories of new ventures as well as the names we suggest representing them when grouping them into five categories. We have chosen to apply the same number of categories as in the Oviatt & McDougall based classifications. In accordance with Oviatt & McDougall (1994) we have chosen to define a Born Global Firm according to selling as well as sourcing, in a symmetric manner. The names of the remaining categories should be self-evident. The group of Born International Sourcers did not indicate the number of foreign countries from which components, etc. are sourced. In the ensuing, these firms are assumed to source from a maximum of three foreign countries within the first three years. Because of its original inspiration we label this classification the Born Global Classification.

Insert Figure 2 about here

The only category that is identical across all classifications is the Born Local Firm/ Domestic New Venture since these firms have no international activities at all within the first three years after inception. By including the scale as well as the scope of two value chain activities (sales and sourcing) the Born Global Classification represents an alternative to the two above mentioned classifications based directly on Oviatt & McDougall (1994). Combined, the three methods of classification reflect the most important types of classification used in the literature. Before testing the three methods with regard to their ability to classify firms into useful categories, we will give an overview of the methodological approach used to collect the empirical data.

Methodology

The empirical study was carried out in 2004/2005, the unit of analysis being the business firm. The population includes Danish firms in the industries with NACE codes 15-37 (manufacturing), 72.21 (development of software), and 73.1 (high-tech firms). Bakeries (NACE 15.81.20) and the graphic industry (NACE 22) were excluded as they have primarily very small and locally oriented business firms in Denmark. The population of business firms was identified by means of CD-Direct, published by Købmandstandens Oplysnings-Bureau and listing all Danish private business firms.

Since the primary interest is the study of International New Ventures, newly established firms are particularly interesting. Therefore, business firms established in 1982-2001 were the main focus of the study. Firms established in 2002 or later are not taken into account since the definitions operationalized above require knowledge about the international sales or sourcing within the first three years of a firm's lifetime. Since the project has no

interest in studying quite small firms, only firms with a minimum of 10 employees in February 2004 were included. In order to be able to compare enterprises founded earlier, firms established before 1982 and having 50 employees or more in February 2004 were also included.

On the 1st February 2004 we selected business firms from the CD-Direct according to the criteria mentioned above. A total of 3048 firms in Denmark met the criteria. Most of the firms are small and medium-sized which is a well known feature of the Danish business community. More than 30% have 10-19 employees, and more than 25% have 20-49 employees. Around 20% fall in the group having 50-99 employees, and a similar share of firms have more than 100 employees. More than 70% of the firms were founded after 1982.

In total, 91 duplicates (e.g. same firm registered at two addresses or two firms being mother and daughter registered at the same address) were identified, leading to a revised population of 2957 firms. In the process, a total of 49 wrong registrations were identified (closed firms, further duplicates, firms with wrong NACE code, etc.) which reduced the population to 2908 firms. Because of budget and time constraints it was decided to contact each firm only five times. If it was not possible to reach the CEO after five phone calls, the firm was defined as unreachable and thus as not belonging to the final population. This was the case of a total of 381 firms which lead to the final population size of 2527 firms.

Out of the final population of 2527 firms, 1456 firms refused to participate in the survey (see Table 1). Lack of time was by far the most common reason for not participating. 1071 firms participated in the survey. This corresponds to a response rate of 42,4 %. Most of these firms, however, only answered seven questions attached to an initial letter to the CEO (these questions asked for information about activities during the first three years after inception of the firm). A total of 791 CEOs promised to answer a more detailed CEO questionnaire, but only 385 CEOs actually returned a usable questionnaire which

corresponds to a response rate of 48,7%. The response rate for the CEO questionnaire is 15,2% if calculated on the basis of the 2527 firms in the final population.

Insert Table 1 here

It was tested whether the respondents were representative for the population with respect to founding year, number of employees, pre-tax profits, return on assets, geographical location in Denmark, and industry affiliation. The conclusion is that the 2527 firms in the final population are representative of the total population of 3048 firms. The 1031 firms that answered the seven questions concerning the activities within the first three years after inception are significantly younger (average year of establishment 1982) than the 1496 firms that did not answer the questions (average years of establishment 1978-79). Furthermore, the 686 firms that only answered the seven questions were significantly smaller (70 employees on average) than the 345 firms answering both the seven questions and the CEO questionnaire (129 employees on average). Except for that, no significant differences were found at the .05 level. No significant differences (at the .05 level) could be identified between respondents and non-respondents to the CEO questionnaire.

Most of the firms answered the seven questions about the activities within the first three year during the telephone interview. Interviewers were instructed to assure that the responding person (the CEO) only answered the questions if (s)he had actual knowledge about the founding process of the firm. Except for that, it is not possible to check the reliability of the answers to the question. However, having supervised the process, we feel comfortable that the answers reflect the actual situation of the firms.

Hypotheses

It is generally claimed in the literature, that the phenomenon of INVs/BGs has become more widespread (Coviello & Jones, 2004; Rialp et al, 2005). The classifications outlined above involve categories of firms that are different with regard to their international/global orientation. We therefore hypothesis that:

The number of internationally/globally oriented new ventures has increased over time. (H1)

So, the first hypothesis relates to the prevalence of the phenomenon. The remaining four hypotheses focus on the characteristics of the firms in different categories, including their prevalence in high- and low-tech industries.

During the last decade, several authors have reported an increase in the phenomenon of high-tech start-ups having an international perspective right from their inception (Ganitsky, 1989; Rennie 1993; Jolly et al, 1992; McAuley, 1999; Autio, Sapienza & Almeida, 2000; McNaughton, 2003; Andersson & Wictor, 2003). Such firms are often reported to be knowledge intensive which is useful in accelerating foreign growth and overcoming their traditional resource constraints (Knight, 2000). However, empirical studies of High-tech start-ups have revealed mixed results. Autio et al. (2000) found knowledge intensity to be associated with faster international growth, but also firms with more imitable technologies grew faster. Crick et al (2001) point out that the phenomenon of INVs is not restricted to high-tech sectors. So, findings must still be regarded as inconclusive with regard to industry affiliation (Burgel & Murray, 2000). However, since the phenomenon has often been associated with high-tech industries, we hypothesize that:

The international/global scope is higher among new ventures in high tech industries than in low tech industries (H2)

Exporting firms are often larger than domestically oriented firm. For Danish firms this may be a mere consequence of the size of the domestic market: In order for a traditional, manufacturing firm to grow it has been necessary to enter foreign markets. Therefore, it should be expected that the size of a firm is positively correlated with its international/global orientation or activities. However, size has also been shown to be irrelevant for INV types of firms (McAuley, 1999). It has been argued that the effects of globalisation processes on businesses materialize at a different pace and with different intensity in different industries and regions. The idea that not only large companies, but also Small and Medium-Sized Enterprises (SMEs) could compete in the global market was gradually brought to the attention of academics and practitioners (Rennie, 1993). So, evidence differs with regard to size. We propose, however, to formulate the hypothesis that:

Internationally/globally oriented firms are larger than locally oriented firms
(H3)

Many studies have pointed out that the founding team of the firm has a decisive impact on its path of development, including its international/global scope (Hisrich, Honig-Haffel, McDougall and Oviatt, 1996; Sharma & Blomstermo, 2003; Bell, Crick & Young, 2004). Bloodgood et al (1997) bring evidence that the international experience of the management team is a significant antecedent to international orientation. McDougall et al (2003) compare domestic and international start-ups and report empirical evidence that

international experience is of great importance. The experience of the founding team also has importance because it represents a resource in terms of networks in the industry or the geographical market area (Andersson & Wictor, 2003; Sharma & Blomstermo, 2003). So, we hypothesize that the combined resources of the founder(s) and their network relationships are important for the initial international/global scope of the firm, and therefore that

The number of founders and active non-founders is higher in new ventures that are internationally/globally oriented. (H4)

And furthermore, that

The international experience of founders is higher in new ventures that are internationally/globally oriented. (H5)

Below, we report the empirical findings that test the hypotheses formulated.

Results regarding the prevalence of different types of new ventures

As noted by Zahra (2005) no studies have so far been able to provide comprehensive knowledge about the frequency with which new ventures are international, nor the extent to which they follow different types of internationalization paths. The present study offers a sample of about 1000 firms that are highly representative for the population of manufacturing firms in Denmark. The data therefore represent a unique possibility for analyzing the prevalence of DNVs and INVs in a highly developed, small European country.

Because of missing data we were not able to classify all 1031 firms. A total of 867 were included in the OM Activity Number Classification and 866 firms were classified

according to the OM Activity Type Classification. The corresponding number of firms is 896 firms in the Born Global Classification. Out of these firms 349 were classified as Domestic New Ventures/Born Local Firms (DNVs/BLFs) because they did not have sales or sourcing activities outside Denmark within three years after their inception.

The two Oviatt & McDougall based classifications differ only with regard to two categories. A total of 26 firms are Global Start-Ups according to the OM Activity Type Classification, but Multinational Traders according to the OM Activity Number Classification. An example of such a firm is a manufacturer that has sales and service activities abroad (i.e. only two value chain activities, but one of them is service which is not merely logistics). For similar reasons a number of 28 firms are classified as Geographically Focused Start-Ups by the former classification but as Export/Import Start-Ups by the latter. Larger differences exist between the Oviatt & McDougall inspired classifications and the Born Global classification. Table 2 shows a cross tabulation of the Born Global classification with the OM Activity Type Classification.

Insert Table 2 here

As it appears, a particular firm may fall into classes that have quite different names. For example, a number of 13 Global Start-Ups are classified as Born International Sellers whereas 11 Born Globals are classified as Export/Import Start-Ups. Clearly, the names convey quite different ideas of such a firm. This is not satisfactory, since we would like to

obtain more stable classifications. However, such disparities are an inherent drawback of any attempt to classify firms.

According to the Born Global Classification, the share of DNVs/BLFs has fallen dramatically over the years. As Table 3 shows, they amounted to almost 55% of all manufacturing firms established before 1982 whereas their relative share of firms established 1992-2001 had fallen to just above 15%. In other words, almost 85% of all Danish manufacturers established between 1992 and 2001 have international activities within the first three years of their existence (the limit set in the questionnaire). Some of them have international activities from day one, and in fact the data show that on average they have such activities within the first year of existence.

Insert Table 3 here

Table 3 reveals a highly significant development over the years (Pearson Chi-Square = 132,063; df = 8; sig. less than .000). As expected, the fall in the share of DNVs/BLFs) is contrasted by the strong rise in the share of Born Global Firms in particular, but of Born International Sellers and Born European firms as well. The Born International Sourcers experience a declining share which indicates that especially the selling side of the firms has been the driver in firms' internationalization processes over the past decades. It is interesting to observe that the Born International Sellers experience their highest growth in the decade 1982-1991, whereas the Born European firms and especially the Born Global

Firms have high growth rates in the decade 1992-2001. The launch in 1992 of the European Single Market within the European Union may partly explain the rise in the category of Born European Firms since it motivated (Danish) firms to focus on the European market. The global scope and strategy become pervasive over that decade, meaning the almost 20% of all new ventures are classified as Born Globals.

The classifications based on Oviatt & McDougall (1994) reveal parallel pictures. Table 4 is based on OM Activity Number Classification and also reveals significant differences (Pearson Chi-Square = 134,838; df = 8; sig. better than .000) over time.

Insert Table 4 here

The differences between firms established before 1982 and firms established between 1982 and 1991 are interesting. The internationalization process mirrored by the stages models (Johanson & Vahlne, 1977) is obvious for firms established before 1982 since most of them are established on the domestic market, and only very few of them go beyond the first international steps during the first three years. During the next decade the extent of internationalization increases, but mainly in the traditional form of limited export/import activities in relatively few countries. A more truly international or global scope is not seen until the most recent decade, especially marked by the steep rise in the share of Global Start-Ups.

Table 5 which is based on the OM Activity Type Classification tells a very similar story with a similar level of significance (Pearson Chi-Square = 143,728; df = 8; sig. better than .000). According to that classification, the share of Global Start-Ups reaches the same level as Born Global Firms in the Born Global classification.

Insert Table 5 here

In conclusion, H1 is strongly supported since all three classifications show a dramatic development, especially in the latest decade included in the study. Regardless of the actual operationalization of the phenomenon, the number of internationally or globally oriented firms has been increasing dramatically, based on this sample among survivors. During the decade 1992-2001 almost entirely internationally oriented entrepreneurs in manufacturing firms have been able to survive and grow to a level of at least 10 employees. A highly increasing share of the Danish survivors have established their firms with an international or even global outlook, resulting in the coordination of more value chain activities as well as higher proportions of sales and sourcing in and outside Europe. The credibility of this finding is improved by the fact that three different operationalizations of the phenomenon support this conclusion.

In the ensuing we will explore whether it is possible to identify other factors that can help us choose between these competing classifications of firms, or perhaps modify them. In accordance with the call made by Zahra (2005) we will examine the possible association of the prevalence of INVs with industry, firm and entrepreneur-related factors. The basic idea of these analyses is to examine whether one or more of the three classifications are able to classify firms in such a manner that the variance within groups is small and variance between groups is large. Such a classification might be instrumental for policy makers as well as managers.

Results regarding differences in characteristics between types of new ventures

All three classifications show statistically significant differences between categories of firms with regard to the share of firms belonging to a specific industry (Chi Square test with significance level better than .000). As an illustration Table 6 shows the results based on the OM Activity Number Classification.

Insert Table 6 here

As it appears, however, all types of new ventures are present in all industries. In the industries Machines and equipment (NACE code 29) as well as in the Electrical & optical industry (NACE codes 30-33) there is an overrepresentation of Global Start-Ups. Food and textiles (NACE codes 15-19) have relatively more Multinational Traders; Chemicals, plastic,

etc. (NACE codes 20-26) more Export/Import Start-Ups; Metal products, etc. (NACE codes 28-28) more Domestic New Ventures. The industries Furniture, transport, etc. (NACE codes 34-37) and Software & Research (NACE codes 72.21 and 73.1) exhibit more mixed results. These findings are quite similar to those found according to the OM Activity Type Classification as well as the Born Global Classification. However, according to the latter the Food and textile industry has an overrepresentation of Born European Firms as well as Born Global Firms in the sample; in the Chemicals & plastic industry the Born International Sourcers are overrepresented; in the Machines & equipment industry the Born International Sellers are abundant which is also the case for Born Global Firms in the Software & research industry.

In conclusion, H2 is partly supported, but findings based on the present study are not unequivocal. There is evidence that industry affiliation is associated with the international/global orientation of firms. New ventures seem to be more globally oriented in high tech industries. This is most clearly evidenced by the Born Global classification in which the Software & research industry as well as the Electrical & optical industry have relatively more Born Global Firms in the sample. On the other hand, the present study demonstrates that all types of new ventures are present in all industries. Therefore, no new venture seems to be restricted on beforehand with regard to its international or global opportunities.

The average size of the firms investigated is 81 employees, ranging from 10 to 4200 employees. None of the three classification methods show evidence of significant differences between the different types of firms. In the Born Global classification the Born International Sourcers and the Born European Firms tend to be larger (around 95 employees) whereas the average Born International Seller in the sample is smaller (47 employees). However, variance within groups is so high that the differences are far from being significant statistically. Both classifications inspired by Oviatt & McDougall identify the Global Start-

Ups as the largest firms in the sample (an average of 116 employees in the classification based on types of activities and 158 employees in the classification based on number of activities). However, the variance within groups is so high that the differences are not statistically significant. In conclusion, H3 is not supported. The present study does not reveal significant differences between the firms with regard to size measured by the current number of employees. This finding is supported by the answers to another question in the study. Respondents were asked to report the growth ambitions of the founders at the time of foundation, but no significant differences between categories could be identified. So, a global orientation is apparently not correlated very much with growth orientation.

Since all types of new ventures are present in all manufacturing industries, it might be true that the visions and strategic choices of the founder(s) determine the path of international development of a new venture as pointed out as a general feature by Geletkanyez & Hambrick (1997) and by McDougall, Oviatt & Shrader (2003) specifically for INV types of firms. In order to shed more light on such issues we have tested for differences between categories of firms with regard to the foundation process as well as the characteristics and experience of the founders of the ventures.

The data from the CEO questionnaire (around 240 respondents) reveal that the number of persons involved during the founding process is rather limited in Domestic New Ventures/ Born Local Firms (on average 1.67 founders and 2.04 active non-owners). A Born Global Firm has an average of 2.58 founders and 6.88 active non-owners. Similarly, the Oviatt & McDougall inspired classifications reveal that the founding of a Global Start-Up has an average of around 2.5 founders and 7.5 active non-owners involved. All other categories have around 2.0 founders and 3.2 active non-owners involved.

The number of non-owners involved in the founding process of Born Globals or Global Start-Ups is significantly higher than in any other category of firms (better than .05 or .01 level, depending on classification method). Also the number of founders (owners) tends to be higher, but not significantly so. On average, however, 9-10 persons have been actively involved in the founding process of the most globally oriented firms. This result is consistent across classification method. At the other end of the scale, less than four persons have been actively involved in the founding process of Born Local Firms/ Domestic New Ventures. So, the international/global orientation of the firms seems to be associated with the combined competences activated during the process of foundation. In conclusion, H4 is supported by the present study.

Depending on the classification method, between 227 and 249 firms have answered questions concerning the previous experience of the founders. Depending on the classification method, founders of Global Start-Ups have previous export experience in 70% or 92% of all cases, whereas founders of Born Global firms have previous export experience in 67% of all cases. In the other end of the scale, founders of Domestic New Ventures/ Born Local Firms have previous export experience in only 13% of all cases. Firms classified as Born International Sourcers or as Export/Import Start-Ups are close to the latter (previous export experience in 13%-22% of all cases), and Multinational Traders come close to the globally oriented firms (previous export experience in 61%-67% of all cases). All other categories lie between 40% and 50%.

In conclusion, H5 is supported with regard to the most globally oriented firms. All three classifications identify Born Global Firms or Global Start-Ups as having founders with very high export experience prior to foundation. This experience has mainly been achieved through export management positions in other firms, but also via other types of work or education in foreign countries. In the study we have investigated also the present

international orientation of management. A battery of 11 items, mainly taken from Knight & Cavusgil (2004) were answered by 286 firms. The items tapped into motivation, proactiveness, dedication, and investments in international activities (Cronbach's Alpha = .878). Regardless of classification method this measure of international orientation show significant differences between categories of firms (better than .000 level). The globally oriented firms are the most internationally oriented firms, followed by the Multinational Traders and the Born European Firms.

Finally, we have attempted to measure the entrepreneurial orientation at the time of foundation of the firm. The results are almost parallel to those reported above concerning the present international orientation of the firm. So, the most globally oriented firms report the most aggressive, innovative, proactive and risk-taking behaviour at the time of foundation. This is true according to all three classifications.

The empirical study attempted to measure several other characteristics at the time of foundation. Respondents were asked to evaluate the importance of the founders' personal contacts and experience with the particular product and market. Such aspects were seen as very important in all firms, and hence no differences could be identified between the different categories. Respondents were also asked whether knowledge from key customers, suppliers, knowledge institutions, and public support activities were important for the foundation of the firm. However, no significant differences between categories of firms could be identified.

Concluding remarks

The present article offers an attempt to operationalize the phenomenon of International New Ventures. Indicators are developed based on the most influential contributors in the literature in order to respond to the quest for comprehensive empirical data

that could confirm or reject previous findings reported in the literature. A large scale survey has demonstrated a strong and statistically significant increase over time in the number of firms that are internationally or globally oriented right from inception. The increased prevalence of the phenomenon is independent of the classification method used in the empirical study. This multi method approach applied on a large and highly representative sample of firms from a European country is an important contribution of the article.

The article has also brought evidence that supports the notion of the strong impact of founders and the founding process on the path of development of a firm. It has been demonstrated that the number of persons involved in the founding process differs significantly between the categories of firms. A high number of founders and supporting persons seem to be important to establish an international or global scope, probably due to the breath and depth of competences involved. Also the previous international experience of founders is shown to have strong association with the path chosen for the new venture. Finally, a strong association between international/global scope and entrepreneurial orientation of the founders has been evidenced.

Findings are more dispersed with regard to other characteristics of firms in the different categories. An important question is, whether globally oriented firms belong to certain industries. According to our study the answer is: not necessarily. The present empirical study has focused entirely on manufacturing firms. We found evidence that more globally oriented firms are overrepresented in high-tech industries, but they are present in all industries. Likewise, all industries embrace all categories of firms. So, industry affiliation matters, but highly globally oriented firms are found in all industries.

Another important question is whether globally oriented firms perform better than other firms. The answer according to our study is: perhaps. In terms of size, we found no significant differences between the categories of firms. So, a global strategy is not necessarily

equal to growth and large size. We have information about the profitability of the firms, but no significant differences are present. On the other hand, an increasing number of survivors are globally oriented. So, it seems to be more and more difficult for locally oriented entrepreneurs to survive and grow to a size of at least 10 employees.

In conclusion, can it be argued that INVs represent a distinct form of business enterprise that is worth studying? The answer is mixed.

For public policy decision makers it is obviously of interest to obtain knowledge about the number of internationally/globally oriented firms, and likewise it is of interest for them to know more about the speed and form of internationalization of these firms. This is necessary in order to improve the quality of export promotion programmes. Public policy decision makers have to consider whether such programmes should focus more on supporting the ability of SMEs to develop contacts and contracts with a few business partners in each country – rather than the traditional focus on more general information about different country markets. They also have to realize that export promotion programmes and entrepreneurship programmes have to be aligned since a very high and increasing number of entrepreneurs in manufacturing firms have an international or global scope when founding a firm.

From a managerial point of view, it is less obvious that INVs are worth studying as a distinct group of firms. Apparently, they do not differ much from other firms with regard to industry affiliation, size, and performance. It has yet to be demonstrated that they organize their activities differently or build on other employee qualifications or competences. So, it would be interesting to know whether globally oriented firms organize activities in a unique manner or whether their portfolio of employees have other qualifications and competences compared with that of other firms. From a management point of view such issues are clearly highly relevant. The answer according to our study is, however: We do not know. We have

not examined these issues since we do not have the data to do so. We do propose, however, that future research attempts to examine that question more deeply.

From an academic or theoretical point of view it also remains to be demonstrated that INVs represent a distinct form of business as defined by Romanelli (1991). The immediate and rapid internationalization seems to take place in almost any firm in the present environmental conditions. Furthermore, it has not been demonstrated anywhere in the literature that INVs as a phenomenon require new theoretical constructs or new theories in order to be analyzed and comprehended. The final question to be discussed relates to classification procedures in case INVs are studied as a distinct group of firms. Is it possible to give recommendation for classification procedures in future research of that kind? Based on the present study, it is not possible to recommend one classification procedure rather than others. All three classification procedures applied lead to quite similar results. As demonstrated, there are differences between the classification methods, but the literature does not provide any criteria for evaluating whether one of them is better than the others.

Perhaps it would be better to apply other criteria for classification. Instead of using the number or type of activities, the number of markets and the scale or scope of international activities, it might lead to more useful results to use criteria related to the way of organizing exchange processes with the market. As argued above, this may lead to more useful findings from a managerial point of view, and perhaps also from an academic or theoretical point of view.

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Table 1. Participation in the survey

	Frequency	Percentage
Answered seven questions	686	27,1
Answered CEO questionnaire + the seven questions	345	13,7
Answered the CEO questionnaire only	40	1,6
Non-respondents	1456	57,6
Total	2527	100

Table 2. Crosstabulation of Born Global Classification and OM Activity Type Classification

	Born Local Firm	Born International Sourcer	Born International Seller	Born European Firm	Born Global Firm	Total
Domestic New Venture	349	0	0	0	0	349
Export/import Start-Up	0	86	64	93	11	254
Multinational Trader	0	0	24	51	36	111
Geographically Focused Start-Up	0	2	16	22	6	46
Global Strart-Up	0	0	13	31	28	72
Total	349	88	117	197	81	832

Table 3. Born Global Classification

Year of foundation	Born Local Firm	Born International Sourcer	Born International Seller	Born European Firm	Born Global Firm	Total
-1981	230 (54,4%)	73 (17,3%)	37 (8,7%)	65 (15,4%)	18 (4,3%)	423 (100%)
1982-1991	85 (33,3%)	38 (14,9%)	42 (16,5%)	69 (27,1%)	21 (8,2%)	255 (100%)
1992-2001	34 (15,6%)	29 (13,3%)	38 (17,4%)	75 (34,4%)	42 (19,3%)	218 (100%)
Total	349 (39,0%)	140 (15,6%)	117 (13,1%)	209 (23,3%)	81 (9,0%)	896 (100%)

Table 4. OM Activity Number Classification

Year of foundation	Domestic New Venture	Export/import Start-Up	Multinational Trader	Geograph. Focused Start-Up	Global Start-Up	Total
-1981	230 (56,1%)	120 (29,3%)	38 (9,3%)	7 (1,7%)	15 (3,7%)	410 (100%)
1982-1991	85 (34,3%)	104 (41,9%)	41 (16,5%)	8 (3,2%)	10 (4,0%)	248 (100%)
1992-2001	34 (16,3%)	71 (34,0%)	68 (32,5%)	9 (4,3%)	27 (12,9%)	209 (100%)
Total	349 (40,3%)	295 (34,0%)	147 (17,0%)	24 (2,8%)	52 (6,0%)	867 (100%)

Table 5. OM Activity Type Classification

Year of foundation	Domestic New Venture	Export/import Start-Up	Multinational Trader	Geograph. Focused Start-Up	Global Start-Up	Total
-1981	229 (56,0%)	117 (28,6%)	32 (7,8%)	10 (2,4%)	21 (5,1%)	409 (100%)
1982-1991	85 (34,3%)	92 (37,1%)	34 (13,7%)	20 (8,1%)	17 (6,9%)	248 (100%)
1992-2001	34 (16,3%)	59 (28,2%)	55 (26,3%)	21 (10,0%)	40 (19,1%)	209 (100%)
Total	348 (40,2%)	268 (30,9%)	121 (14,0%)	51 (5,9%)	78 (9,0%)	867 (100%)

Table 6. Industry affiliation of categories according to OM Activity Number Classification

	Domestic New Venture	Export/import Start-Up	Multinational Trader	Geograph. Focused Start-Up	Global Start-Up	Total
Food, textiles, etc.	26 (28,9%)	35 (38,8%)	24 (26,6%)	1 (1,1%)	4 (4,4%)	90 (100%)
Chemicals, plastic, etc.	64 (38,3%)	71 (42,5%)	22 (13,2%)	5 (3,0%)	5 (3,0%)	167 (100%)
Metal prod., etc.	113 (57,6%)	54 (27,6%)	19 (9,7%)	3 (1,5%)	7 (3,6%)	196 (100%)
Machines, equipment	54 (33,1%)	61 (37,4%)	31 (19,0%)	3 (1,8%)	14 (8,6%)	163 (100%)
Electrical, optical	43 (33,0%)	33 (25,4%)	31 (23,8%)	9 (6,9%)	14 (10,7%)	130 (100%)
Furniture, transp., etc.	40 (43,0%)	33 (35,4%)	12 (12,9%)	2 (2,1%)	6 (6,5%)	93 (100%)
Software, research	9 (32,1%)	8 (28,5%)	8 (28,5%)	1 (3,6%)	2 (7,1%)	28 (100%)
Total	349 (40,3%)	295 (34,0%)	147 (17,0%)	24 (2,8%)	52 (6,0%)	867 (100%)

Figure 1. Classification based on Oviatt & McDougall, 1994

3-4 value chain activities coordinated (OM Activity Number Classification) OR Production or service activities coordinated (OM Activity Type Classification)	Export/Import Start-Up	Multinational Trader
1-2 value chain activities coordinated (OM Activity Number Classification) OR Only sales/marketing/sourcing activities coordinated (OM Activity Type Classification)	Geographically Focused Start-Up	Global Start-Up
<i>NO FOREIGN ACTIVITIES WITHIN THREE YEARS: DOMESTIC NEW VENTURE</i>	1-3 foreign markets entered (both classifications)	4 or more foreign markets entered (both classifications)

Figure 2. The Born Global Classification of New Ventures

Classification of New Ventures	<i>No foreign sales within three years after inception</i>	<i>Less than 25% of foreign sales outside own continent within three years</i>	<i>More than 25% of foreign sales outside own continent within three years</i>
<i>No foreign sourcing within three years after inception</i>	Born Local Firm (Domestic New Venture)	Born International Seller	Born International Seller
<i>Less than 25% of foreign sourcing outside own continent within three years</i>	Born International Sourcer	Born European Firm	Born Global Firm
<i>More than 25% of foreign sourcing outside own continent within three years</i>	Born International Sourcer	Born Global Firm	Born Global Firm