Spanish SMEs and Family Firms export behavior: are there differences in their incremental approach?

La conducta exportadora de las Pymes y de las Empresas Familiares Españolas: ¿siguen una aproximación incremental?

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\textbf{RESUMEN}

Este trabajo explora en qué medida el comportamiento exportador de estas empresas puede ser explicado a través de modelos incrementales, siguiendo el modelo propuesto por Cavusgil (1980). Utilizando datos de la Encuesta de Estrategias Empresariales, se analiza un panel de empresas para el periodo temporal 1994-2005. Los resultados sugieren la aceptación del modelo incremental de Cavusgil para explicar la conducta exportadora de las Pymes españolas con ciertas limitaciones. Respecto de las empresas familiares, los resultados indican el bajo compromiso internacional de las Empresas Familiares frente a las no familiares, así como una conducta exportadora diferente a la de las Pymes. Se puede concluir que las Empresas Familiares manufactureras españolas no siguen un comportamiento en su proceso exportador que pueda ser identificado como un proceso incremental.

\textbf{ABSTRACT}

This paper analyzes the export process of Spanish Small and Medium Enterprises (SMEs) and Family Firms (FF), which is the most common internationalization stage characterizing this type of firms. It explores the degree of SME and FF adaptation to Cavusgil’s model (1980) in a broad sample of Spanish manufacturing companies over the years 1994-2005. Using data from the Strategic Business Survey, methodology is basically descriptive. SME’s results suggest that SMEs follow and incremental process as Cavusgil’s proposed to explain the export behavior of Spanish SMEs but with certain limitations. Regarding family firms, results show the low degree of export behavior of family over non family firms, so like a different export behavior from SMEs. As a consequence, Spanish family firms do not follow an incremental export process.

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1. Introduction

Few studies analyses small and medium enterprises (SMEs) and family firms (FF) internationalization, despite the importance of these types of firms.

The theoretical approaches used to analyze the internationalization process as a dynamic and evolving process suggest the general idea that Spanish businesses follow an incremental process of internationalization (Gutiérrez de Gándarilla and Heras, 2000; Valenzuela, 2000; Galán and González, 2001; Plá, 2001; Durán and Úbeda, 2003).

However, the empirical application of these theories is very limited, especially regarding the analysis of the export behavior of Spanish SMEs and FF. Most of these research studies are descriptive and cross-sectional, which means that longitudinal studies of how this behavior evolves are still needed.

The aim of this study is to find out whether SME and FF exporting behavior respond to the patterns defended by the theories that analyze internationalization as a process and to see if there are differences among them two. Specifically, we study whether the export process of a panel of Spanish industrial firms, from 1994-2005, is progressive or incremental according to Cavusgil’s Stage Theory (Cavusgil, 1980).

The contribution of our work therefore lies in adding knowledge of SME and FF internationalization, on the one hand, and second, in corroborating whether these types of firms effectively respond to a behavior pattern that is consistent with an incremental process of internationalization.

The paper is structured as follows. First we present the theoretical framework regarding the internationalization process of firms and formulate the hypotheses of the paper. In the second section, we present the methodology, the variables, and the sample, followed by a third section with the results and finally, in section four, we present the main conclusions and implications of the paper.

2. Theoretical framework

The internationalization of firms from a perspective of process, considers the internationalization strategy as a gradual process of learning over time. This strategy is based on the accumulation of knowledge and an increase in the assets and resources that a company commits to its foreign operations. If we consider the internationalization process as a gradual development in different stages, two fundamental schools of thought must be differentiated. The Uppsala or Scandinavian model (U-Model) and the I-Model (The Innovation-Related Internationalization Model) o Cavusgil’s Stage Theory. We focus in the I-Model as it’s more suitable for SME and to some FF.

The I-Model (the Innovation-Related Internationalization Model) o Cavusgil’s Stage Theory (Bilkey and Tesar, 1977; Cavusgil, 1980, 1984; Reid, 1981, 1983) internationalization is compared to an innovation process in which creative decisions are gradually taken in relation to external and internal factors and accumulated knowledge.

This model is based on the Vernon (1966) product life cycle and considered the different stages at the internationalization process as an innovation. This model measures the degree of firm’s compromise to international activities. The model measures it by the ratio of export sales over total sales.

These models limit their analysis to the export activity of the firms, which makes them more suitable for studying the internationalization process of SMEs (Andersen, 1993) or of family firms, due to the fact that exportation is the most common international activity empirically reported for family firms. Specifically, in Cavusgil’s Stage Theory (1980) five stages of internationalization are differentiated: domestic marketing, pre-export, experimental involvement, active involvement and committed involvement.¹

¹Domestic and pre-export stages are characterized by an export propensity of zero or close values to zero respectively. Experimental involvement stage is characterized by a ratio between 0-9% and close cultural markets. Active involvement stage is characterized by an export

Empirical evidence on this model comes from Crick (1995). For an England sample of firms concludes arguing that the I-model must be followed to explain SME internationalization. In the same line, Bell (1995) confirms the I-model when analysing the export decisions and to explain the internationalization process of 98 SMEs of the software sector in Finland, Ireland and Norway.

Regarding to the Spanish empirical evidence, among the scarce studies that analyze the international behavior of Spanish firms, we can highlight papers from Gutiérrez de Gandarilla and Heras (2000), Valenzuela (2000), Merino and Salas (2002), Olivares (2005), and Olivares and Suárez (2007). All of those studies follow the Uppsala model not the I-model.

The Uppsala model is confirmed in the latter two. Specifically, Olivares and Suárez (2007), from a sample of 87 firms making foreign direct investment, concluded that most of the firms (73.5%) followed the process of internationalization described by the Uppsala school. They also found that these firms are characterized by being small and medium enterprises, with up to 250 employees, belonging to the industrial sector, whose incremental process had begun before Spain’s entry into the European Community. Nevertheless, in most of the cases these studies do not use the correct methodologies as they don’t use longitudinal data. Under our point of view the use of longitudinal data and panel data analysis is vital to consider the incremental approach.

Additionally, the Resource Based View of the firm (RBV) is a theoretical perspective widely used in the international literature. According to this perspective, the core fact in explaining a firm’s internationalization is that firms have certain specific resources that may give products or services more potential in other markets (Habbershon and Williams, 1999; Peng, 2001; Westhead, Wright, and Ucbasaran, 2001).

Under this framework, corporate strategies as internationalization are fostered or constrained by the bundle of actual strategic resources the firms have.

SMEs disadvantages in terms of resources and capabilities due to their lower average size, may partially explain why they are characterised by a low level of internationalization. Empirical studies of Spanish firm’s behavior (Campa and Guillén, 1999; Rialp 1999) suggest that internationalization decisions and foreign market entry modes for high level of international commitment are sustained on specific or intangible assets. In this case, size and the international experience are less relevant.

Therefore we consider that the resources and capabilities approach serves to support or defend the incremental models as explanatory models of the international behavior of these firms, thus highlighting the complementarities that exist between these contributions and incremental theories (Sullivan and Baurerschmidt, 1990; Rao and Naidu, 1992; Crick, 1995; Wolff and Pett, 2000, 2004; Westhead, Wright, and Ucbasaran, 2001, Graves and Thomas, 2006).

This suggests that different degrees of internationalization need different resources and capabilities. In light of the considerations described above, we state the following hypotheses:

H1a: At early stages of the internationalization process, due to the low level of resources needed, the export behaviour of SMEs can be explained as an incremental or a gradual process.

H1b: Larger levels of international commitment of SMEs may not be explained as an incremental or a gradual process.

As Kontinen and Ojala (2010) suggest, there are very few papers devoted to the internationalization of family firms. The resources and capabilities framework is one of the most common theoretical models used nowadays to explain why and how family firms internationalize. In the Spanish arena, many studies within this framework focus their
attention on which family firm resources foster access to new markets (Claver, Rienda, and Quer, 2006; Buisán and Aceña, 2007; Quintana, 2007). But most of these papers compared family firm’s resources and capabilities with those of non-family firms (Ariño et al., 1991; Gallo and Sween, 1991; Gallo and García, 1998; Fernández and Nieto, 2005; Fuentes, Vallejo, and Martínez, 2007; Quintana, 2007).

As family firms are fundamentally small and medium sized, the above arguments can also be extended to this type of firms and therefore they can explain their international growth strategy. Moreover, the lack of financial resources that characterized family firms, the inflexibility and resistance to change on the part of family leaders, the differences between firm and family as regards objectives and values, together with the conflicts among the successors, are all reasons that can explain the lower international growth of these firms.

Thus, the problems involved in centralizing decision-making processes may worsen owing to a lack of qualification or international experience on the part of family members, together with the existence of little formalized organizational structures. On the one hand, the lack or scarcity of resources and capabilities that give rise to competitive advantages that are exploitable or transferable at an international level are causes of the low international presence of Spanish FF, even more so than those of smaller size (Gallo and Sween, 1991; Gallo and García, 1998; Nieto, 2003).

Empirical evidence that confirm the Uppsala model are papers from Graves and Thomas (2004, 2008), Casillas and Acedo (2005), and Claver, Rienda, and Quer (2007). These studies suggest that some family firms have a very fast internationalization process to several countries after the next generation has incorporated to the firm, being this type of firms called “born-again globals”. Again there is a lack of empirical evidence of family firm’s internationalization under the I-models.

Attitude towards risk becomes another important factor. In this sense, family firms differ from non-family firms in that the former are more conservative and risk-adverse, since in general, a significant part of the family wealth is tied up in the firm (Nieto, 2003; Fernández and Nieto, 2005).

Specifically, the greater risk-aversion and a lower tendency towards diversification (Gómez-Mejía, Makri, and Larraza, 2010) can give rise to incremental processes that affect both the firm’s commitment to international operations and the choice of geographical areas or countries for internationalization (Claver, Rienda, and Quer, 2008). This greater risk aversion may explain the lower family-speed of internationalization.

In light of the considerations described above, we state the following hypotheses:

H2a: At early stages of the internationalization process, due to the low level of resources needed, the export behaviour of family firms can be explained as an incremental or a gradual process.

H2b: Larger levels of international commitment of family firms may not only be explained as an incremental or a gradual process sustained on international experience.

3. Methodology and data

3.1. Methodology

Our objective is to analyze whether the export behavior of Spanish manufacturing SMEs and FF follow an incremental pattern in line with Cavusgil’s Stage Theory (1980). Since the international strategy of Spanish SMEs is basically an export strategy, in which foreign direct investment decisions are scarce, the choice of this model is the most suitable one for

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3Seventy-nine point three percent of family-run SMEs in Spain have fewer than 25 employees and 46.7% have fewer than 9. According to data from the Business Strategies Survey for 2005, 93.6% of Spanish family firms have fewer than 200 employees.

3Spanish direct investment is associated with large firms, especially in the case of productive type direct investment (Durán, 2006, 2008).
the study of the internationalization process in these types of firms (Andersen, 1993).

Empirical research carried out with objectives similar to those posed here has employed different statistical tools: case studies, survival/duration analysis, analysis of variance, multiple discriminant analysis, structural equations, factor analysis, Univariate F ratio, or DEL analysis (a cross-classification analysis)\(^4\).

The DEL analysis is a technique for studying relationships between categorical variables in the field of management and organization. The DEL-technique has been proposed for analyzing bivariate and multivariate categorical data in which a dependent variable’s state is predicted from an independent variable’s state.

Among the main limitations associated with incremental approaches are the empirical ones, either owing to the object of study -focused on large firms or using case studies (Gankema, Snuif, and Zwart, 2000)- or owing to methodological deficiencies -a lack of longitudinal studies, sampling problems and bias, few studies using multivariate analysis techniques (Leonidou and Katsikeas, 1996). Also, must mention the scarce attention given to analysis of the temporal dimension of the process, that is, the duration of each stage or phase (Andersen, 1993).

The methodology used here is one that allows us to measure the evolution of the export activity of a set of firms throughout the period studied in order to determine whether the export behavior of Spanish firms fits Cavusgil’s theory of export by stages or not. Methodology is a parametric test for the differences of means to confirm statistically that there exist differences in the export propensity of the different groups considered, and two non-parametric tests: contingency tables to test the independence of the variables from each other, and the test of signs to test the differences in the export propensity at different periods of time.

### 3.2. Sample

The data were obtained from the Spanish Business Strategies Survey (SBSS). The SBSS has been used by many other Spanish researchers to study the exporting activity of Spanish firms (Merino, 2001; Merino and Salas, 2002; Nieto and Fernández, 2005). For our study, the period considered was from 1994 to 2005.

The initial sample -4,050 firms- was refined to obtain a sample of firms that simultaneously fulfilled all the conditions of the study. Since we required the firms in the sample to have activity throughout all the years of the study period, their export propensity had to be equal or greater than 0 during the whole study period. We thus excluded those firms that were either created or had disappeared during the period. With this condition the initial sample was reduced from 4,050 to 778 firms.

To study how the SMEs or FFs export activity evolves along the time, we need to select a subsample of firms that match the criteria (being FF or SME) along all the years of the study. As firms grow or evolve along the time, this is a very restrictive condition that makes the sample narrow.

Subsequently, when we chose the set of firms that were SMEs during the whole period considered, the sample of 778 firms was further reduced to 688, 528 of which were SMEs and 160 non-SMEs. Finally, upon selection of a group of firms which were family-run for the whole study period, the sample was reduced to 378 firms, 75 of which were family firms and 303 which were not. All sample’s firms are SMEs\(^5\).

### 3.3. Variables and Measures

The variable export propensity (EXPORTP) indicates the percentage of exports in the total sales of the firm each year. Based on Cavusgil’s model, four intervals were identified that

\(^4\)In this sense, to conduct more differences among subsamples –i.e. to see if there are differences between family SMEs and non family SMEs is not possible. This is because the number of observations that meet these conditions along the whole period of study is small and methodology does not work with so little observations.

\(^5\)For a more detailed analysis, see the studies by Leonidou and Katsikeas (1996) and Olivares and Suárez (2007).
represent the different levels of international commitment as a function of the value of the export propensity: pre-export (0%), experimental involvement (0.1% – 10%), active involvement (10.1% - 40%) and committed involvement (40.1% - 100%).

To classify the firms as SMEs or non-SMEs we used the definition approved by the European Commission in 2003 which entered into force in January, 2005. Thus, the SME variable adopts a value of 1 for each firm in each year analyzed if the number of employees is less than 250 and 0, otherwise.

Regarding family firm definition (FF), there are several papers concerning the problem of its definition (Sharma, 2004).

Frequent literature assumptions suggest that family firms are those based on family ownership, the presence of a family member on the management team, operational involvement of family members and family member involvement across generations.

Grave and Thomas (2008) for instance, define a family business as “one that is majority family owned and has at least one family member on management team”. Based on this, our family firm definition is linked to the data base we are using.

We define family firms (FF) as those firms that are owned and managed by the same group of persons. In order to do that, we used a dummy variable that adopts a value of 1 if in each firm, for each year analyzed, owners are involved in the management of the firm and 0, otherwise.

Being conscious of its limitations, this definition has also been used by other family firm researchers that work with this database in question (Fernández and Nieto, 2001, 2005; Nieto, 2003; Menéndez, 2005; Ortega, Moreno, and Suriñach, 2005).

4. Analysis of the export process of SMES and Family Firms

4.1. Descriptive Analysis

The aim of this analysis is initially to describe the export behavior of SMEs and FF to then subsequently be able to justify why it is necessary to carry out a study of the export behavior in different groups of firms: the group of SMEs and the group of FF.

Table 1 shows the distribution of the number of firms according to size by year studied.

The SMEs comprised 74% of the firms considered, with the non-SMEs accounting for the other 26%. Moreover, this table presents the distribution by years of the export propensity of Spanish firms, comparing SMEs and non-SMEs.

It can be seen that throughout the period studied the mean export propensity of the non-SMEs was much greater than that of the SMEs. On average, the SMEs annually export 14% of their sales. This evidence is corroborated by the Z test for differences of means of independent samples for each of the years considered.

Table 2 shows the distribution of the number of firms provided by the databases differentiating between family firms and non-family firms throughout the period studied.

The results show that the average number of family firms throughout the study period was 40% as opposed to 60% non-family firms. The export development of family firms in Spain as compared to non-family firms. Family firms have an export propensity of 6.97% as opposed to 32.07 % for non-family firms.

The Z statistic values for the testing of differences of means were under 15 for all the years considered. That is, it is accepted that there are significant differences in the export propensity of the groups considered. If we compare these results with those obtained for the SMEs we also observe the lower mean export propensity of FF as opposed to SMEs.

Although Cavusgil’s original model identified five stages. For our study the first of these, domestic marketing, was not taken into consideration owing to our research objectives. The first stage implies that the firm is only interested in the domestic market and shows no interest whatsoever in exporting.
Table 1
Number of SMEs and Mean Export Propensity per year over the period of study.

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<td>Number of SMEs firms</td>
<td>1.368</td>
<td>1.240</td>
<td>1.287</td>
<td>1.490</td>
<td>1.347</td>
<td>1.336</td>
<td>1.338</td>
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<tr>
<td>Percentage</td>
<td>72.9</td>
<td>22.9</td>
<td>75</td>
<td>77.6</td>
<td>75.8</td>
<td>76.2</td>
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<td>508</td>
<td>462</td>
<td>429</td>
<td>430</td>
<td>429</td>
<td>418</td>
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<td>27.1</td>
<td>25</td>
<td>22.4</td>
<td>24.2</td>
<td>23.8</td>
<td>28.4</td>
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<td>11.98</td>
<td>13.00</td>
<td>14.27</td>
<td>14.63</td>
<td>14.45</td>
<td>14.92</td>
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<td>37.97</td>
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<td>Mean Difference (Z Statistic)</td>
<td>8.7***</td>
<td>8.7***</td>
<td>8.8***</td>
<td>8.7***</td>
<td>9.8***</td>
<td>9.3***</td>
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<td>1.253</td>
<td>1.000</td>
<td>1.005</td>
<td>1.438</td>
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<tr>
<td>Percentage</td>
<td>72.3</td>
<td>73.4</td>
<td>72.5</td>
<td>73.1</td>
<td>75.2</td>
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<tr>
<td>Number of NON-SMEs firms</td>
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<td>455</td>
<td>380</td>
<td>369</td>
<td>473</td>
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<tr>
<td>Percentage</td>
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<td>26.6</td>
<td>27.5</td>
<td>26.9</td>
<td>24.8</td>
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<td>Mean export propensity NON-SMEs</td>
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<td>8.9***</td>
<td>9.0***</td>
<td>9.3***</td>
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</table>

(*) non-applicable due to the small sample size. (p-value)

***p<.01

Table 2
Number and Mean Export Propensity of Family and Non-Family Firms per year over the period of study.

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<td>Number of Family Firms</td>
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<td>725</td>
<td>766</td>
<td>799</td>
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<td>41.8</td>
<td>42.7</td>
<td>44.6</td>
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<td>33.1</td>
<td>38</td>
<td>30.5</td>
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<tr>
<td>Number of Non-Family Firms</td>
<td>1092</td>
<td>973</td>
<td>950</td>
<td>1121</td>
<td>1188</td>
<td>1087</td>
<td>1300</td>
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<td>Percentage</td>
<td>58.2</td>
<td>57.3</td>
<td>55.4</td>
<td>58.4</td>
<td>66.9</td>
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<td>6.04</td>
<td>6.47</td>
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<td>7.09</td>
<td>6.86</td>
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<td>Mean Export Propensity Non-Family Firms</td>
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<td>28.99</td>
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<td>7.0***</td>
<td>7.5***</td>
<td>7.7***</td>
<td>7.6***</td>
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<tr>
<td>Number of Family Firms</td>
<td>595</td>
<td>581</td>
<td>571</td>
<td>573</td>
<td>859</td>
</tr>
<tr>
<td>Percentage</td>
<td>34.5</td>
<td>34</td>
<td>41.4</td>
<td>41.7</td>
<td>45</td>
</tr>
<tr>
<td>Number of Non-Family Firms</td>
<td>1129</td>
<td>1127</td>
<td>809</td>
<td>508</td>
<td>1052</td>
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<td>58.6</td>
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<td>7.97</td>
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(*) non-applicable due to the small sample size. (p-value)

***p<.01

4.2. Analysis of the Export Process

4.2.1. Fit of Spanish SMEs to Cavusgil’s Model

Table 3 shows the distribution of SMEs for the different export intervals identified in Cavusgil’s model for each year of the period considered. The sample includes the set of firms that are SMEs and are active throughout the entire period of study (n=528 firms).

Most of the firms considered have a null export propensity for all the years analyzed, the second largest number of firms come under the second interval, the one with an export propensity in the interval between 0.1% 10%, and the least number of firms are located in the last two intervals, comprising between 10.1-40% and 40-100%, respectively. Analysis of the variation in the percentages of the number of firms every two years shows that the decrease in the number of firms in the pre-export stage involves an increase in the subsequent stages, even though the greatest gains as regards the number of firms are found in the stage of experimental involvement, that is, in the 0.1-10 interval, in almost all the years of the period, with some exceptions, even though the intensity of the variation is not constant throughout all the years of the period analyzed.

Table 3
Number of SMEs and Percentages of Changes following Cavusgil’s Stages.

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<tr>
<td>0</td>
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<tr>
<td>0.1-10.0</td>
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<td>10.1-40.0</td>
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<td></td>
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<tr>
<td>40.1-100</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>n=528</td>
<td></td>
<td></td>
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</tbody>
</table>

Cavusgil’s theory of export by stages requires that the dependence between the years and the four export stages proposed be statistically significant. To test this we use the independence test (H0: the stages and the years are independent, as opposed to H1: the stages and the years are dependent). Based on Table 3, the test was applied to the entire study period and three different situations were considered: 1) the firms change stages every year 2) the firms change stages every two years, and 3) the firms change stages every three years.

Table 4 shows the results of the test, which indicate that when considering a one year transition time the null hypothesis of independence can not be rejected, i.e. there is no significant relationship between changing stages and a one year transition period; there is, on the other hand, a significant relationship between changing stages and the two and three year periods of transition periods because the Chi-squared statistic is large enough to reject the null hypothesis.

With this information we can state that there is significant evidence to say that Spanish SMEs’ export ratio follow an incremental process with stages that are at least two years long, but no transition periods of one year long.

A break down of the variation in the export propensity every two years (Table 5) shows that the passing of time does not mean an increase in the export activity. The variations in the mean occur in the first two years of the study period (1994/98), and after this the variations are almost imperceptible. Twenty-five percent of the firms had no export activity in the whole period. Only slight variations can be observed in the mean and the 75th percentile, which indicates that what varied over the years, was the export propensity of firms that already had some kind of contact outside Spain.

The variations in export propensity every two years were tested using the Signs test adapted to paired samples with asymmetric distributions and high dispersion. The median was thus used as the measure of the progress in export propensity of Spanish SMEs.

The null hypothesis tested is that the median of export propensity in year “i-th” (with i=1994, 1996,...,2004) is equal to the median of the export propensity in the year “i-2”, as opposed to the alternative hypothesis that there are differences between the export propensities of the two periods (Table 6). According to the results, the null hypothesis is rejected in the first case, that is, the test detects changes in export propensity between 1994 and 1996, with 1% significance. In the rest of the study period there are no statistically significant changes in the Spanish SMEs’ export propensity when considering a two year transition period. This indicates changes every two years from the pre-export stage to the experimental involvement stage and as a consequence we can accept hypothesis one.

Table 4
Chi-Square Tests for SMEs (n=528).

<table>
<thead>
<tr>
<th>Time involved in changing stages</th>
<th>1 YEAR</th>
<th>2 YEARS</th>
<th>3 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square (Degrees of freedom)</td>
<td>39.48</td>
<td>25.19</td>
<td>20.10</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.20270049</td>
<td>0.04740064**</td>
<td>0.01726405**</td>
</tr>
</tbody>
</table>

Note: In all cases the expected frequency is >5
**p<.05

Table 5
Descriptive Statistics of SMEs’ Mean Export Propensity every Two Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Firms</th>
<th>Mean</th>
<th>Stand.Deviation</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>50 (median)</td>
<td>75</td>
</tr>
<tr>
<td>1994</td>
<td>528</td>
<td>11.77</td>
<td>22.48</td>
<td>0.00</td>
</tr>
<tr>
<td>1996</td>
<td>528</td>
<td>13.00</td>
<td>22.93</td>
<td>0.00</td>
</tr>
<tr>
<td>1998</td>
<td>528</td>
<td>14.63</td>
<td>23.73</td>
<td>0.00</td>
</tr>
<tr>
<td>2000</td>
<td>528</td>
<td>14.92</td>
<td>23.78</td>
<td>0.00</td>
</tr>
<tr>
<td>2002</td>
<td>528</td>
<td>14.87</td>
<td>24.31</td>
<td>0.00</td>
</tr>
<tr>
<td>2004</td>
<td>528</td>
<td>14.90</td>
<td>24.39</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Table 6
Results of Signs Tests for SMEs.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Valor Z</td>
<td>-4.116</td>
<td>-1.625</td>
<td>-1.127</td>
<td>-0.855</td>
<td>-0.872</td>
</tr>
<tr>
<td>Asymptotic Sig. (bilateral)</td>
<td>0.000***</td>
<td>0.104</td>
<td>0.260</td>
<td>0.393</td>
<td>0.383</td>
</tr>
</tbody>
</table>

(*) non-applicable due to the small sample size. (p-value)
**p<.01

The same analysis was carried out considering a transition period of three years (see Tables 7 and 8). Table 7 again shows the scarce export activity of Spanish firms: small variations in the mean export propensity that point to a change in stage and very slight changes in the median and the 75th percentile. Application of the signs test yields results similar to the ones obtained for the two years transition period. In both cases statistical significance was detected in the variations in the export propensity during the first years of the studied period. According to Table 8, the export propensity in 1997 is significantly different from that of 1994, with a significance of 1%. The rest of the comparisons did not provide changes in this variable that could be accepted as statistically significant.
4.2.2. Fit of Spanish Family Firms to Cavusgil’s Model.

As regards the analysis of how Spanish family firms fit Cavusgil’s model, Table 9 indicates their export propensity distributed by years and stages. Most FF are located in the non-export stage followed by those found in the 0.1-10% stage. The least number of firms are found in the third stage, 10.1-100%.

Table 7
Descriptive Statistics of the SMEs’ Mean Export Propensity every Three Years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Mean</th>
<th>Stand. Deviation</th>
<th>25</th>
<th>50 (median)</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>528</td>
<td>11.77</td>
<td>22.48</td>
<td>0.00</td>
<td>0.00</td>
<td>11.32</td>
</tr>
<tr>
<td>1997</td>
<td>528</td>
<td>14.24</td>
<td>22.94</td>
<td>0.00</td>
<td>0.55</td>
<td>19.78</td>
</tr>
<tr>
<td>2000</td>
<td>528</td>
<td>14.92</td>
<td>23.78</td>
<td>0.00</td>
<td>1.20</td>
<td>20.50</td>
</tr>
<tr>
<td>2003</td>
<td>528</td>
<td>14.77</td>
<td>24.41</td>
<td>0.00</td>
<td>0.70</td>
<td>18.00</td>
</tr>
</tbody>
</table>

Table 8
Results of Signs Tests for SMEs.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Valor Z</td>
<td>-5.344</td>
<td>-1.626</td>
<td>-0.396</td>
</tr>
<tr>
<td>Asymptotic Sig. (bilateral)</td>
<td>0.000***</td>
<td>0.104</td>
<td>0.692</td>
</tr>
</tbody>
</table>

(*) non-applicable due to the small sample size. (p-value)
***p<.01

Observation of their evolution by export propensity stages shows that their situation is clearly different from that of the SMEs subsample.

There are few FF that surpass the 10% export stage. They maintain a more or less constant export propensity and no substantial changes are detected in the number of firms by stage or year, as corroborated by application of the independence test (see Table 10).

The results shown in Table 10 indicate that in the situations initially proposed (one year, two year, and three year transition periods) we can not reject the hypothesis of independence.

We could argue that Spanish family manufacturing firms do not show an incremental export propensity in stages of one, two and three years. However, the characteristics of these firms suggest the possibility that the transition period from one stage to another could be longer than the three year period found for the SMEs.

We therefore extended the analysis to all possible situations within the study time period (each four, five, six, seven, or eight years).

The independence hypothesis could not be rejected in any of the cases, that is, in all the situations proposed the moving from one stage to another does not depend on the passage of time, that is, of the firm’s international experience.

Summing up, we can accept partially 2b hypothesis, but the reduce number of observations (between 11-16 firms) that belong to those stages suggest that we need more data to accept the statistical significance of the hypothesis.

---

Spanish SMEs are characterized by a high percentage of firms that do not export or either export very little. It can also be seen that the export commitment of the Spanish manufacturing SMEs is lower than that of large enterprises. Analysis of the number of firms with international activity by intervals of export propensity shows that most SMEs are still in the pre-export stage, followed, in order of importance, by the experimental involvement stage.

On the other hand, the lower export commitment of family firms as opposed to non-family firms was observed, as well as the fact that they show a different export behavior than the SMEs. Family firms’ export propensity, on average, show much lower values for each year than those obtained by the SMEs.

Our paper adds empirical evidence from an I-model apply to SMEs and FFs. The results of the study suggest that Cavusgil’s Stage Theory should be accepted as the explanation of the export behavior of Spanish manufacturing SMEs, with certain limitations. The SMEs firms show two types of behaviors: on the one hand, those firms that start from null export propensity and need at least two years to increase their international commitment, which then reaches a point where it stops growing and does not reach the third stage. On the other hand, those that show a high export propensity from the beginning, corresponding to the committed involvement stage, and remain stable throughout time. As regards the SMEs, our results are in line with those obtained for the

Table 9
Number of Family Firms per Cavusgil’s Stage and Year (n=75).

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>51</td>
<td>44</td>
<td>-9.33</td>
<td>42</td>
<td>41</td>
<td>-1.33</td>
<td>43</td>
<td>43</td>
<td>0.00</td>
</tr>
<tr>
<td>0.1-10.0</td>
<td>13</td>
<td>16</td>
<td>+4.00</td>
<td>17</td>
<td>21</td>
<td>+3.33</td>
<td>19</td>
<td>18</td>
<td>-1.33</td>
</tr>
<tr>
<td>10.1-100.0</td>
<td>11</td>
<td>15</td>
<td>+5.33</td>
<td>16</td>
<td>13</td>
<td>-4.00</td>
<td>13</td>
<td>14</td>
<td>+1.33</td>
</tr>
<tr>
<td>2000-2001 Var.%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2002-2003 Var.%</td>
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<tr>
<td>2004-2005 Var.%</td>
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</tr>
</tbody>
</table>

Note: Only three stages are considered in the case of family firms. The last two were grouped to be able to apply the independence test since it requires the expected frequency to be above 5.

Table 10
Chi-Squared Results for Family Firms (N=75).

<table>
<thead>
<tr>
<th>Transition period needed to change stages</th>
<th>1 year</th>
<th>2 years</th>
<th>3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-squared (Degrees of freedom)</td>
<td>7.49</td>
<td>6.59</td>
<td>4.39</td>
</tr>
<tr>
<td>Asymptotic Sig.</td>
<td>0.99828155</td>
<td>0.82288276</td>
<td>0.62313841</td>
</tr>
<tr>
<td>Transition period needed to change stages</td>
<td>4 Years</td>
<td>5 Years</td>
<td>6 Years</td>
</tr>
<tr>
<td>Chi-squared (Degrees of freedom)</td>
<td>3.42</td>
<td>1.99</td>
<td>3.57</td>
</tr>
<tr>
<td>Asymptotic Sig.</td>
<td>0.48969415</td>
<td>0.73803505</td>
<td>0.16762740</td>
</tr>
<tr>
<td>Transition period needed to change stages</td>
<td>7 Years</td>
<td>8 Years</td>
<td>9 Years</td>
</tr>
<tr>
<td>Chi-squared (Degrees of freedom)</td>
<td>2.36</td>
<td>3.13</td>
<td>1.49</td>
</tr>
<tr>
<td>Asymptotic Sig.</td>
<td>0.30789888</td>
<td>0.20846418</td>
<td>0.47499364</td>
</tr>
<tr>
<td>Transition period needed to change stages</td>
<td>10 Years</td>
<td>11 Years</td>
<td></td>
</tr>
<tr>
<td>Chi-squared (Degrees of freedom)</td>
<td>0.76</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td>Asymptotic Sig.</td>
<td>0.68366001</td>
<td>0.48638273</td>
<td></td>
</tr>
</tbody>
</table>

5. Conclusions and discussion

Spanish SMEs are characterized by a high percentage of firms that do not export or either export very little. It can also be seen that the export commitment of the Spanish manufacturing SMEs is lower than that of large enterprises. Analysis of the number of firms with international activity by intervals of export propensity shows that most SMEs are still in the pre-export stage, followed, in order of importance, by the experimental involvement stage.

On the other hand, the lower export commitment of family firms as opposed to non-family firms was observed, as well as the fact that they show a different export behavior than the SMEs. Family firms’ export propensity, on average, show much lower values for each year than those obtained by the SMEs.

Our paper adds empirical evidence from an I-model apply to SMEs and FFs. The results of the study suggest that Cavusgil’s Stage Theory should be accepted as the explanation of the export behavior of Spanish manufacturing SMEs, with certain limitations. The SMEs firms show two types of behaviors: on the one hand, those firms that start from null export propensity and need at least two years to increase their international commitment, which then reaches at a point where it stops growing and does not reach the third stage. On the other hand, those that show a high export propensity from the beginning, corresponding to the committed involvement stage, and remain stable throughout time. As regards the SMEs, our results are in line with those obtained for the
Spanish market when the Uppsala model was applied.

Our research sheds a bit more light on our knowledge of the export behavior of Spanish manufacturing SMEs as it verifies the temporal duration or time needed for a change to occur between stages of international commitment. Stages’ changes require at least two to three years to occur. These results are also consistent with those obtained in other studies with the same theoretical framework in the European context (Gankema, Snuif, and Zwart, 2000) that suggest that European Manufacturing SMEs tend to go through the stages proposed by Cavusgil considering a time frame in favor of a two-year period.

The analysis of the evolution of the export propensity of family firms indicates that they behave differently from SMEs and fitting less the Cavusgil’s model. Even by altering the originally proposed stages or by verifying the model for time periods up to eleven years, we don’t obtain statistically significant dependence between the years and the export stages.

In all the proposed situations, moving from one stage to another doesn’t depend on the passing of time and of the international experience of the firm. In accordance with these results it can be affirmed that Spanish manufacturing family firms do not follow an incremental export process. In stages with a low international commitment, we haven’t observed, contrary to SMEs, an evolutive approach.

Perhaps the small size of the sample’s family firms affects the results obtained. This reason would be supported by the authors that argue that this theoretical model is more valid for larger SMEs. Nevertheless, there is still a need to go deeper into the family firms’ internationalization process considering their specific resources and capabilities. For family firms with more international commitment, a non incremental process may be argued. Nevertheless we need more empirical evidence to support this idea.

Main paper limitations are due to the way we define family firms. Due to the availability of data, with our database we only can identify family firms by looking at those firms that were owned and managed by the same group of people. We had no data about ownership, or no data about how many members of the family are employed in the firm. As large family firms could not always be only family managed, our sample is composed by non large family firms.

With respect to the implications of the study, we believe that it adds to our knowledge of the export behavior of Spanish manufacturing SMEs and family firms, as opposed to studies that have focused more on large enterprises.

The results show that the incremental model proposed by Cavusgil requires certain adaptations in order to be considered explanatory of the exporting behavior of Spanish manufacturing SMEs and family firms. This implies the need to adjust the models to different types of firms or institutional contexts and the need to explore new explanatory models of the international behavior of family firms.

This study should therefore be rounded off with the exploration of which resources and capabilities are basic for the international growth strategy of SMEs and family firms. Future studies should consider that different levels of international commitment may require different types of resources and to separate these two groups as they have a different behavior.

Evolutive models should also be applied to study different cultural contexts. Future studies should develop a panel data methodology taking into account the year effect, conducting a longitudinal study, and to discover more effective intervals that differentiate different stages of internationalization.

References


