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## 8 Internationalization in Italian medium-sized firms

### Does stage theory explain the observed patterns?

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#### 1 Introduction

This chapter examines the extent to which internationalization strategy theories explain the patterns of internationalization observed in Italian medium-sized firms in recent years.

We focus on stage theory because it seems the most appropriate to explain the patterns of internationalization in small- and medium-sized enterprises (SMEs). Stage theory assumes that the process of internationalization follows a prescribed path from the lighter mode of entry (based on indirect export) to more intensive investment (in the form of foreign direct investments – FDI). Although this assumption has been challenged on both theoretical and empirical levels, some authors (Gankema *et al.* 2000) have found that stage theory can be applied to explain SMEs' behavior. More information about the validity of this explanation would be of interest to both firms and policy makers.

In view of the lack of empirical evidence on the internationalization of Italian SMEs and theoretical models explaining their international activities, this chapter aims to analyze the characteristics and recent evolution of patterns of internationalization in Italian medium-sized firms and to assess the extent to which the observed patterns are compatible with the predictions of stage theory.

The empirical analysis refers to 242 manufacturing companies and groups located in the North-East-Center of Italy (the so-called NEC regions or “third Italy”). By medium-sized firms we mean firms with 250–2,500 employees. The focus on these companies is justified by their increasing role in the Italian manufacturing system (Brioschi *et al.* 2002; Balloni and Iacobucci 2004; Coltorti 2004). The NEC regions were chosen because of their peculiarities in terms of the organization of manufacturing activities, which is based on industrial districts: i.e. local systems of SMEs specialized in the same sector (Cainelli and Zoboli 2004). The SMEs located in these regions have demonstrated remarkable ability to penetrate international markets through export (Menghinello 2004), but found it difficult to develop stable forms of internationalization through productive or commercial units abroad. One of the aims of this chapter is to assess whether medium-sized firms can change the internationalization patterns observed so far in Italian SMEs, from export to FDI.

We find that size does not affect average export intensity, but is important for FDI-based strategies. Size affects the “magnitude” and intensity of investment in foreign markets, but not the willingness to develop internationalization activities abroad: indeed, smaller companies have experienced faster growth in terms of the number of foreign subsidiaries in the period considered. In general, investing abroad, within a gradual approach to internationalization, tends to be complementary to and not a substitute for export. In terms of the geographic span of operations, over time, FDI activities have moved from closer to more distant locations, confirming a “process approach” to internationalization driven by knowledge acquisition.

Overall, the evidence accords with the propositions based on stage theory; however, we found some conflicts. When we looked at companies that in 2001 had not embarked on the process of internationalization, we found that the majority jumped directly to an FDI approach, rather than starting with a less intensive mode of internationalization, such as export. We did not expect the internationalization strategies of these firms, which we refer to as “Pioneers”, to be successful. However, this was only partially confirmed by the data as the majority of these Pioneers had survived, in the same stage, at the end of the period.

The chapter is organized as follows. Section 2 reviews the current literature on the internationalization strategies of firms, with a specific focus on the stage theory hypothesis. We highlight the predictions of different approaches and discuss the problems emerging from empirical work. Finally, we list and discuss the hypotheses relating to firm behavior that can be deduced from stage theory. Section 3 describes our empirical methodology, providing information on the data, the sample and the variables considered in the quantitative analysis. Section 4 discusses the results of the empirical analysis, and Section 5 provides some conclusions.

## 2 Background: theory and hypotheses

### 2.1 Theoretical approaches to SMEs' internationalization

Since 1990 a growing body of literature has focused on the specific role of SMEs in international competition. The internationalization of SMEs is of particular scientific interest because such firms have specific features that affect their attitude to global expansion, compared to that of multinational enterprises (MNEs), the traditional subject for study. Their managerial styles, the role of the entrepreneur, relational social capital, and scale and scope of activities are completely different from those of big firms. Moreover, SMEs usually have to cope with constraints on (or more difficult access to) key resources: financing, management capabilities, skilled labor, information (Erramilli and D'Souza 1993; Lu and Beamish 2001). It has been suggested that new paradigms and multi-theoretical frameworks are required to understand SMEs' behavior (Malhotra *et al.* 2003).

The literature focusing on the internationalization of SMEs takes different theoretical positions, which have been mapped and analyzed by numerous authors.<sup>1</sup> These contributions can be categorized mainly within the theoretical

perspectives stage theory (Cavusgil 1980), network theory (Coviello and McAuley 1999) and FDI theory.

We provide a brief review of the literature related to the three main internationalization theories (stage, network, and FDI), with a specific focus on stage theory.

### *Stage theory*

The argument in stage theory is that internationalization is a gradual strategy, behaviorally oriented, and developed in successive phases (Melin 1992). The main models with this approach are the *Uppsala Internationalization model (U-M)* and the *Innovation-related internationalization model (I-M)*. The *U-M* (Johanson and Vahlne 1977) focuses on managerial competencies: international expansion is driven by the gradual acquisition of competences and experience in foreign markets. Nearby markets are explored through indirect exporting in the early stage of the process, and more physically distant markets are approached through more complex modes of entry, in an incremental way. Four stages have been proposed: no regular export activity; export via independent representatives; establishing an overseas sales subsidiary; establishing overseas production/manufacturing units (Andersen 1993). In the *I-M*, internationalization is seen as a firm innovation strategy (Cavusgil 1980) in which the different stages are linked to different exporting trends and dynamics. Five stages of international commitment are proposed (Cavusgil 1984): preinvolvement, reactive/opportunistic, experimental, active, and committed involvement.

Though somewhat different in their theoretical bases, from an empirical point of view the two approaches reach similar conclusions: i.e. in their internationalization strategies firms are expected to follow a sequence of stages characterized by an increasing degree of resource investment and commitment in foreign operations.

Some recent studies (Gankema *et al.* 2000) demonstrate that, within certain limits, Cavusgil's stage theory holds: i.e. internationalization occurs in stages in European manufacturing SMEs. However, stage theory has encountered growing criticism from both the theoretical and empirical perspectives (Hurmerinta-Peltomaki 2003). First, the model is time dependent and assumes a predetermined path of development. It is therefore unsuitable for firms with extensive international experience, and firms in high-technology, knowledge intensive or service sectors (Bell 1995; Ibeh *et al.* 2004). Firms in these sectors usually “jump” directly to complex stages of internationalization. Leapfrogging the predetermined stages could also be because SMEs are focused on global market niches or because of decreases in transportation and communication costs (McDougall *et al.* 1994; Oviatt and McDougall 1994). Internationally experienced management could also help SMEs to jump the first stages of internationalization (Fischer and Reuber 1997; Belso-Martines 2006). Finally, some SMEs seem born to be global and follow an internationalization strategy from the time they start up (Bell *et al.* 2001; Moen and Servais 2002; Andersson and Victor 2003; Rialp *et al.* 2005).

Some authors have underlined that the sequential approach is not suited to explaining the internationalization strategies of emerging global firms which are

seeking to acquire high value resources (technology, know how, brands) through rapid expansion; in most cases, such firms are supported by government policy (Buckley *et al.* 2007). In these contexts, a different view of time should be adopted, that is “cyclical time with no fixed directions” (Hurmerinta-Peltomaki 2003).

Another criticism of stage theory is related to the fact that the model emphasizes organizational learning, but fails to explain how the knowledge developed over time affects organizational behavior. In this learning process, the role of key individuals in firms is not taken into account (Anderson 2000). Moreover, if the leaders of the internationalization strategy change over time, the acquisition of experiential knowledge could be interrupted, with unknown consequences for the stage patterns (Bjorkman and Forsgren 2000).

#### *Network model*

The idea underlying the network model is the increasing role of network relationships in firms’ strategic activities. Network alliances are supposed to determine the success or failure of internationalization and the pattern adopted (Coviello and Munro 1997; Coviello and McAuley 1999). This approach focuses on the importance of organizational and social links, based on formal and informal relationships. Network members’ relations and interactions can influence both the decision to export and the mode of entry into different markets.

Case study analyses demonstrate the importance of relationships with foreign markets in explaining the internationalization strategies of firms (Johanson and Vahlne 1992). These relations might be business or personal in origin: social and cognitive ties in the business context are important for explaining firm behavior and contrast with the strategic or strictly economic perspective.

The main criticism directed to the network model is that it supports less precise conclusions than stage theory on both the empirical effects of a “going abroad” strategy and on the pattern of internationalization. Moreover, as network theory is focused on the presence of a web of multiple relationships (among different firms and social actors) in the business context, it is difficult to use it for predictive purposes (Bjorkman and Forsgren 2000). It also does not explain internationalization by firms that do not belong to a network (Malhotra *et al.* 2003).

#### *FDI approach*

The main body of FDI theory is underpinned by various theoretical approaches. Based on the seminal works of Coase and Williamson, internationalization is seen as a decision that is affected by transaction costs, in a context of monopolistic advantage and market imperfections. Internationalization strategy and mode of entry are defined in order to resolve the trade-off between control costs and integration costs (Erramilli and Rao 1993).

In the eclectic paradigm (Dunning 1988) attention is drawn to the specific advantages that firms want to acquire by investing abroad: ownership, location and internalization (OLI). An updated version of OLI theory was proposed by

Dunning (2000) which takes account of the economic and political changes that occurred in the 1990s by considering the new costs and benefits arising from relationships in the business context, knowledge intensive assets, global alliances, trading blocks, innovation, technological standards, etc.

The main weakness to this view is that it is considered too static (Malhotra *et al.* 2003). Also, the transaction costs view takes account of the fact that costs cannot be measured very accurately. The FDI approach finds some support in the empirical literature, although it mainly focuses on large firms; the internationalization strategies of SMEs seem to be heavily influenced by individual bias, which is unexplained (Apfelthaler 2000).

#### *Combined approaches*

Many studies have tried to combine several different approaches, but the results are often mixed and inconsistent.

Studies that try to combine stage theory and the network model (Bell 1995) find little support for either explanation of internationalization in small software firms. Other studies try to integrate all three approaches as none, in isolation, explain SMEs’ expansion abroad: thus, a comparative approach is suggested (Coviello and Martin 1999).

Other studies reject the idea of a systematic approach to the internationalization strategies of SMEs (Yip *et al.* 2000), and Chetty and Campbell-Hunt (2003) suggest that internationalization is not generally a process that is pre-planned in absolute detail. Other findings only partially confirm stage theory, suggesting that entrepreneurial behavior seems to be a key factor in explaining a firm’s internationalization strategy, especially in the early stages (Anderson *et al.* 2000). Even studies that provide direct support for the stage model do not claim that it is the only mode of internationalization followed by SMEs (Jones 1991). Firms often seem to follow quite different and individual paths to entry to overseas markets, where constraints related to tangible and intangible resources are less important than stage and network theory approaches would suggest (Coviello and Martin 1999; Autio *et al.* 2000). The lack of consistency in the results of these empirical analyses is underlined (Coviello and Martin 1999; McDougall and Oviatt 2000). Poor sample selection, incorrect methodology and, above all, the mixed effects of different strategic actions/ growth strategies developed simultaneously by firms, can cloud the interpretation of SMEs’ internationalization activity.

Despite these criticisms, we believe that stage theory is a useful approach, from which testable propositions related to the internationalization process of SMEs can be derived; moreover, it encompasses a gradual approach to foreign markets, which seems to apply to many Italian SMEs.

## **2.2 Hypotheses**

The main aim of this chapter is to assess whether the predictions of stage theory are useful for describing the general pattern of evolution of the internationalization

process in Italian medium-sized firms. Our empirical analysis uses secondary data from annual reports, thus, the stage theory model we adopt is the U-M because the different steps in the firm's internationalization strategy (regular export activity; export via independent representatives; establishing an overseas sales subsidiary; establishing overseas production/manufacturing units) are measurable using such data (see the discussion in Section 3).

In what follows, we discuss some research hypotheses related to the stage theory approach.

### *Exporting*

Stage theory considers exporting to be the first step in the internationalization process: a sort of platform from which to evaluate further international expansion and to enable international experience and practice (Zahra *et al.* 1997). This mode of entry is regarded as particularly suitable for SMEs, which often lack financial and managerial resources (Dalli 1995; Zahra *et al.* 1997).

Several studies have focused on the relationships between firm size and attitude to export, but results are somewhat contradictory (Wickramasekera and Oczkowski 2004), due to the different measures used to assess size (number of employees, sales, firm's age) and the different features of the samples analyzed. Some studies find that firm size, measured by number of employees and sales is positively related to export activity, others find no association, while some find a weak link between these features (Bonaccorsi 1992). Calof (1994) found that firm size does not necessarily affect the ability of the firm to enter into exporting activity. Because the smallest firms are excluded from our sample, we can propose the following hypothesis.

#### Hypothesis 1

Firm size does not affect export activity or its intensity

### *FDI*

Stage theory considers FDI to be a complex mode of entry to foreign markets, to be seen as a more mature step in an internationalization strategy, especially for SMEs.<sup>2</sup> Investment abroad requires managerial skills, intensive capital expenditure, and a good knowledge of foreign markets. On the other hand, the more strategic and appropriable the firm's assets (know how, brand equity, trademarks, patents) become, the more FDIs are essential to avoid distributors' opportunistic behavior and asset appropriation (Lu and Beamish 2001).

As firms acquire knowledge and expertise from international markets, they tend to expand and diversify their FDIs to different locations to take advantage of the different resources and opportunities available (Shan and Song 1997; Deeds and Hill 1998).

One aspect specific to FDIs is choice of geographic location. The geographical spread of the markets in which foreign subsidiaries are located is an

important variable in decisions about foreign investments. In general, for a variety of reasons, SMEs tend to make their FDIs in nearby, developed countries or in wide-selling markets. First, SMEs are inclined to follow a market-seeking approach (Shatz and Venables 2000) in which cost competitiveness is generally less important than it would be for big firms. Their competitive advantage is focused on specialization, differentiation, adaptation to customer needs, and close relationships with customers. Therefore, investment in other countries is usually based on market-seeking reasons, rather than cost or asset motives (Svetlicic *et al.* 2007). Moreover, physical distance has much more influence on SMEs' choices of foreign markets (Dunning 1993).

Although these reasons apply in general, there can be considerable differences among sectors. SMEs in highly competitive and volatile products/ markets (Ibeh *et al.* 2004), such as those operating in short life-cycle or high technology sectors, tend to use more complex modes of entry (FDIs), for market reasons and for knowledge seeking motives (Burgel and Murray 2000; Ibeh *et al.* 2004).

From the above discussion we can derive the following hypotheses.

#### Hypothesis 2

As companies become more confident about operating in foreign markets, they tend to develop more complex internationalization strategies: from indirect to direct exports and from a single to a multiple presence abroad through increasing numbers of foreign subsidiaries.

#### Hypothesis 3

SMEs' FDIs tend to follow a market-seeking approach. Thus, in the early stages of internationalization they choose to locate foreign subsidiaries in nearby or mature markets. Over time, firms developing an FDI-based strategy will tend to diversify and to increase the number of countries in which foreign units are located, and to choose more distant locations.

#### Hypothesis 4

SMEs belonging to high-tech sectors tend to establish foreign subsidiaries in countries where high value assets are available, with physical distance being of less importance in their selection of foreign markets.

### *Interaction between export and FDI*

We focus our analysis on the two main modes of entry within stage theory – export and FDI – and their interaction. Exporting and FDI can be seen as substitutes or as complements, depending on factors such as the stage of development of the host country/market, industry structure, firm strategy, type of FDI (vertical or horizontal), and firm productivity (Helpman *et al.* 2004). Empirical results vary widely, depending on the level of data aggregation. Some studies

using industry trade data find strong evidence of complementarity (Clausing 2000; Graham 2000), while studies using product-level data for specific industries, find evidence of a substitution effect (Blonigen 2001).

Although the literature is not conclusive, within stage-theory FDIs are not seen as a substitute for foreign sales, while export activity is seen as a precondition and support for an FDI strategy. Hence we can hypothesize that:

#### *Hypothesis 5*

FDI strategy follows export expansion; moreover, when embarking on an FDI strategy export intensity is maintained, i.e. the two modes of internationalization support one another.

### 3 Methodology: sample, data sources and variables

The empirical analysis considers 242 manufacturing companies and groups located in the NEC or "third Italy" regions. This geographic area was chosen for its peculiarities in the organization of manufacturing activities, based on local systems of SMEs specialized in the same sector ("industrial districts").

Our sample consists of medium-sized firms defined as companies or groups, with 250–2,500 employees and a turnover of €50–1,000 million. These data refer to 2001, the start year of our observations. Values refer to single companies if they are not members of a group, or to whole groups.<sup>3</sup> We excluded companies owned by foreign or domestic groups that exceeded the above employee and turnover limits. We decided on a minimum size of 250 employees because of the increasing role of medium-sized companies in the Italian industrial system, and especially in the internationalization of industrial districts (Mariotti and Mutinelli 2004). In addition, internationalization activities based on FDIs were significant only for companies above this minimum size (Bugamelli *et al.* 2000). The list of companies was taken from Bureau Van Dijk's AIDA database, which provides data from the annual reports of about 700,000 Italian joint-stock companies. The coverage of this dataset allowed us to consider the population of companies within the size limits mentioned above.

In our analysis we consider data referring to 2001 and 2005. A five year period was chosen for two reasons: to verify the predictions of the stage theory hypothesis we need to observe the evolution of internationalization strategies over time, and some of the phenomena under observation, such as number of foreign subsidiaries, are fairly stable over shorter periods of time. Thus, for variations to emerge we need to consider a sufficiently long period of time. The period 2001–2005 is particularly interesting because the Italian economy was encountering increasing difficulties in global markets. In fact, some authors found that the internationalization of Italian companies slowed during this period compared with the 1990s (Mariotti and Mutinelli 2005).

The main sources of the data and information are companies' annual reports, which provide information on company size, performance, asset values, export intensity, and foreign subsidiaries.

The population is divided into two sub classes based on number of employees: 250–499 employees and 500–2,500 employees. Companies are also categorized using the Pavitt (1984) classifications to identify differences related to sectors/typologies of production.<sup>4</sup>

Table 8.1 shows the distribution of companies by sector and size. Almost half of the companies in our sample belong to the traditional industries (supplier dominated in Pavitt's classification) and only 5 percent of them to the science-based sectors.

As proxies for internationalization we chose two variables based on the information available from annual reports. The first is export intensity, i.e. the ratio of foreign to total sales, which is frequently used in the literature as a measure of export intensity.<sup>5</sup> The second is related to foreign subsidiaries and branches, i.e. investments in greenfield or non-greenfield operations in which the company has a total or partial stake. We consider the number of foreign subsidiaries (Delios and Beamish 1999; Lu and Beamish 2004), the value of capital invested in them, and their geographical location.<sup>6</sup>

In contrast to other studies based on stage theory, in our analysis we do not consider firm age. This is justified by our sample being constituted of medium-sized firms which have already passed through the initial stages of growth and transformation. For this reason the information in the dataset relating to age is not completely reliable; in many cases, set-up date refers to the transformation from a partnership to a joint-stock company. Also, in our study we consider firms which by definition have already reached a sufficient degree of organizational structuring; for this reason, age difference is assumed to be less relevant than for small and newborn firms.

In the next section we discuss the results of our empirical analysis. The analysis is based mainly on descriptive statistics and comparison of internationalization patterns observed in the first and last years of the period considered. The use of descriptive statistics instead of appropriate econometric techniques reduces the possibility of testing the theoretical hypotheses proposed in Section 2. Nevertheless, the methodology used is of value as a first characterization of the evolution of the internationalization patterns of medium-sized firms and its accordance with stage-theory predictions. Note also that we consider the

Table 8.1 Companies by sector (Pavitt) and size, 2001

	<i>Class of employees</i>		<i>Total</i>
	<i>250–499</i>	<i>500–2,500</i>	
Scale intensive	51	10	61
Science based	5	6	11
Specialized supplier	41	16	57
Supplier dominated	86	27	113
Total	183	59	242

population of firms within the defined size limits and for this reason descriptive statistics give a reliable picture of the actual size of the internationalization strategies carried out by those firms.

## 4 Results

### 4.1 Export and FDI intensity

The following tables present some descriptive statistics on export intensity (Table 8.2) and the importance of foreign subsidiaries, in terms of weight in total fixed assets (Table 8.3). Both tables use the Pavitt (Pavitt 1984) categories and size classes.

The sample is characterized by a high and growing export intensity. In both 2001 and 2005, the highest level of export activity is among smaller companies in the specialized supplier sector, and bigger companies in the scale intensive sector. Table 8.2 shows that 250 employees is a sufficient size to eliminate any disadvantages in export performance; in fact, when the whole sample is considered, there are no significant differences in the export capacities of these two sub-classes of companies. However, Table 8.2 also shows that there are significant differences across sectors, in terms of export intensity and in the relationship between size and export performance. In the scale intensive and supplier dominated sectors we observe a positive relationship between size and export intensity, while in the science based and specialized supplier sectors this relationship is negative. Overall, it can be seen that there is no simple direct relation between firm size and export intensity, confirming Hypothesis 1.

However, firm size becomes important when we consider the capacity of firms to invest abroad and there are significant differences in both the importance of the value of foreign investments in total fixed assets (Table 8.3) and the average value of investments per unit abroad (Table 8.4) between the two size classes.

The exception is firms in the scale intensive sector which show the lowest level of FDI in total assets and no significant difference in this indicator by size

Table 8.2 Export intensity (exports on sales) by sector and size (percentage values)

	2001		2005			
	Class of employees		Class of employees		Total firms	
	250-499	500-2,500	250-499	500-2,500	Total firms	
Scale intensive	33.5	44.7	35.3	32.7	45.2	34.8
Science based	42.5	38.0	40.0	43.5	34.7	38.7
Specialized supplier	45.9	28.4	41.0	45.2	33.3	41.9
Supplier dominated	29.2	34.8	30.5	33.5	37.3	34.4
Total	34.5	35.0	34.6	36.2	37.3	36.4

classes. Comparing with the data in Table 8.2 on export intensity, it seems that firms in the scale intensive sector base their expansion on penetration of foreign markets through exporting rather than direct investment. This strategy is coherent with the exploitation of scale economies by concentrating production activities in one location and selling products in foreign markets. A further indication of this strategy is that firms in the scale intensive sectors have the lowest average value for unitary foreign investment (see Table 8.4); this means that foreign subsidiaries are devoted mainly to commercial rather than production activity.

Specialized suppliers and science based firms in both size classes show the highest tendency to invest abroad, but with significantly lower values of foreign assets in total investments for smaller firms. However, over the period the differences between the two groups reduce slightly, based on higher and faster growth in the number and value of foreign investments by the smaller companies. The high values of unitary investments by firms in the science based and specialized supplier sectors (see Table 8.4) confirms the first part of Hypothesis 4, that high-tech firms tend to follow a resource seeking approach by establishing foreign subsidiaries in countries where high value assets are available.

For total number of foreign subsidiaries, there is a noticeable increase in the period in terms of both units (from 529 units in 2001 to 707 units in 2005) and capital invested (from €1,488 million in 2001 to €2,231 million in 2005). This

Table 8.3 Value of foreign subsidiaries in total fixed assets (percentage values)

	2001		2005			
	Class of employees		Class of employees		Total firms	
	250-499	500-2,500	250-499	500-2,500	Total firms	
Scale intensive	5.8	4.9	5.6	7.4	5.1	7.0
Science based	7.4	17.6	13.0	15.9	20.2	18.3
Specialized supplier	7.9	19.3	11.1	9.4	21.9	12.9
Supplier dominated	6.3	10.3	7.3	9.4	11.3	9.8
Total	6.5	12.7	8.1	9.0	14.0	10.2

Table 8.4 Average value of foreign subsidiaries by sector and size (million euros)

	2001		2005			
	Class of employees		Class of employees		Total firms	
	250-499	500-2,500	250-499	500-2,500	Total firms	
Scale intensive	1.5	1.7	1.7	1.9	2.0	2.0
Science based	3.0	4.2	3.6	4.0	4.7	4.4
Specialized supplier	2.1	5.3	3.0	3.2	6.3	4.1
Supplier dominated	1.7	2.9	2.0	2.5	3.5	2.7
Total	1.8	3.5	2.2	2.5	4.2	2.9

confirms the second research hypothesis that, over time, SMEs become more confident in foreign markets and develop more complex internationalization strategies based on a multiple presence abroad.

If we look at size classes, we note an interesting phenomenon. While smaller firms show lower values of assets invested abroad, their increased presence in foreign markets is remarkable: +42 percent (from 325 to 462 units) compared to +20 percent for bigger firms (from 204 to 245 units). In general, this demonstrates the attitude and high propensity of medium-sized companies to invest actively abroad, and their increasing role in globalization. Size affects the "magnitude" and intensity of investments in foreign markets, but not the willingness to develop internationalization activities.

#### 4.2 Internationalization patterns

To examine the patterns of internationalization among the firms in our sample, we classified them according to the different possible phases in their internationalization process by combining the two main variables used in the analysis: export intensity and the presence of foreign investment. The typologies of internationalization strategies followed by firms are illustrated in Table 8.5.

Domestic firms are those that focus only or mainly on the national market to sell their products: they have at maximum an export intensity of 30 percent of their turnover. Export intensive firms on the contrary are extremely focused on an exclusively export based strategy, selling more than 30 percent of their turnover abroad. These companies do not own overseas units. Pioneer firms are so called because their internationalization strategy focuses on production or on commercial units abroad: they have spent abroad through FDIs, but have a reduced level of exports (less than 30 percent of turnover). In their case, FDIs have replaced exports. Internationalized firms are those that have maintained high export intensity alongside involvement in production and/or commercial units abroad. They adopt both modes of entry: FDIs support selling activities abroad.

Table 8.6 presents the distribution of companies according to the above classification for 2001 and 2005.

At the beginning of the period a quarter of companies can be considered to be domestic oriented, with low export intensity and no investments abroad, while almost a third can be classified as internationalized according to our typologies.

Table 8.5 Typologies of internationalization strategy and patterns

Export intensity	Foreign investment	
	No	Yes
Low ( $\leq 30\%$ )	Domestic	Pioneer
High ( $> 30\%$ )	Export intensive	Internationalized

Table 8.6 Distribution of companies by type and size (percentage values)

	2001		2005		Total	Total
	Class of employees		Class of employees			
	250-499	500-2,500	250-499	500-2,500		
Domestic	26.2	20.3	24.8	24.0	18.6	22.7
Export intensive	22.4	15.3	20.7	16.4	11.9	15.3
Pioneer	20.2	27.1	21.9	21.3	27.1	22.7
Internationalized	31.2	37.3	32.6	38.3	42.4	39.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

This is depicted in the transition matrix in Table 8.7. The transition matrix is constructed by relating the typology of internationalization patterns observed in 2005 to those obtaining in 2001. The diagonal of the matrix identifies those firms whose pattern has not changed during the period; cells outside the diagonal identify firms whose internationalization patterns changed during the period.

The most dynamic typology is export intensive, where 36 percent of companies moved to the internationalized category. In the case of the other typologies, the dynamics during the period of observation are less relevant, with some 80 percent of firms remaining in the same class.<sup>7</sup> This suggests that investing abroad tends to complement, not substitute for, export, which is in line with our fifth hypothesis based on stage theory.

A significant percentage of firms moved from the domestic to the pioneer category, which contradicts the stage theory hypothesis that this class of firms will adopt an export intensive strategy before embarking on foreign investment.

We should highlight the transition pattern for pioneer firms between 2001 and 2005. The large majority of these companies (83 percent) remained in the same typology while those changing status were split between domestic and fully internationalized. This seems to suggest that the "pioneer" strategy does not identify a transient status (as stage theory would suggest) but a specific mode of entry for a specific class of firms.

These results are also confirmed when we consider only the smaller firms (250-499 employees). Also, it is interesting to note that the dynamics of internationalized firms are determined exclusively by this size class, while larger

Table 8.7 Transition matrix of types between 2001 and 2005 (percentage values)

2001	2005 →				
	Domestic	Export intensive	Pioneer	Internationalized	Total
Domestic	78.3	5.0	11.7	5.0	100
Export intensive	8.0	56.0	0.0	36.0	100
Pioneer	7.6	0.0	83.0	9.4	100
Internationalized	0.0	7.6	5.1	87.3	100

companies (500–2,500 employees) remain fairly stable when they become internationalized. This means that size is relevant to explaining not only the propensity to invest abroad, but also the probability of this strategy succeeding.

This result is in line with the fundamental hypothesis in stage theory (Hypothesis 2) that firms are not expected to develop complex forms of internationalization (such as FDI) before they have adequate experience of foreign markets, acquired through exporting.

#### 4.3 Location of foreign subsidiaries

Table 8.8 shows the number of foreign subsidiaries and the amount of capital invested in them, in 2001 and 2005. Two points emerge from this table: a) the great importance of the EU as an FDI location, in terms of both number of subsidiaries and capital invested; and b) the growth of foreign investment generally (in terms of both number and amounts) in all areas, and especially the countries of Eastern Europe, East and South Asia (China in particular) and North America (specifically the USA).

The increase in the number and amount of FDI (from 529 subsidiaries and €1.5 billion in 2001 to 707 subsidiaries and €2.2 billion in 2005) is significantly higher than the growth in export activity. This is coherent with Hypothesis 2 that, as time passes, firms tend to develop FDI based strategies.

The concentration of investment in EU countries is in line with Hypothesis 3, which states that SMEs tend to invest in nearby mature markets, following a market-seeking strategy. It also reveals a “globalization gap” in Italian medium-sized companies (and Italian companies in general) (Mariotti and Mutinelli 2005). Considering the geographical and cultural proximity of the EU countries and, even more importantly, the absence of any kind of barriers to trade and capital movements, the EU should be categorized as a domestic rather than a foreign market.

Table 8.8 Number of foreign subsidiaries and amount of capital invested (million euros), by area

	2001		2005		2001		2005	
	No.	%	Capital invested	%	No.	%	Capital invested	%
European Union	337	63.7	1,215	81.6	397	56.2	1,649	73.9
Eastern Europe	13	2.4	10	0.7	38	5.4	18	0.8
Other European Countries	21	4.0	7	0.5	26	3.7	12	0.5
Middle East	1	0.2	0	0.0	6	0.8	1	0.0
Africa	11	2.1	53	3.6	16	2.3	80	3.6
North America	55	10.4	106	7.1	73	10.3	199	8.9
Centre and South America	37	7.0	35	2.4	45	6.4	128	5.8
East and South Asia	47	8.9	60	4.0	96	13.5	136	6.1
Oceania	7	1.3	2	0.1	10	1.4	8	0.4
Total	529	100.0	1,488	100.0	707	100.0	2,231	100.0

According to stage theory (Hypothesis 3), we would expect the size of firms to be related to their geographical span of operations. We would also expect that firms investing in far off markets to have some experience of foreign investment in less distant destinations (Hypothesis 2). To test these hypotheses we divided the foreign country destinations into two areas: *near*, including the EU, Eastern Europe, Africa and Middle East; and *far*, including North and South America, Australia, East and South Asia.<sup>8</sup>

Table 8.9 shows the distribution of companies in 2001 according to the presence of foreign subsidiaries in the above defined two areas. The low percentage of firms (in both size classes) with subsidiaries only in the more distant areas compared with those with investments in both areas, demonstrates that it is unusual for firms to start their internationalization process by investing in far off markets. For small firms the problems involved in investing abroad are related to distance; for larger firms the disadvantages of distance are significant only in the case of far off countries.<sup>9</sup>

Table 8.10 shows the transition matrix for the span of internationalization between 2001 and 2005. Overall, the movements recorded in the table confirm the stage theory hypothesis that, over time, foreign investment will move from near to more distant locations as companies acquire the knowledge and capabilities required to manage internationalization. The biggest movements are from domestic to near areas, and from near areas to other near and to far off areas. In fact, 25.5 percent of non-internationalized companies in 2001 appear to be in

Table 8.9 Companies by geographical span of subsidiaries and size, 2001 (percentage values)

	Class of employees		Total
	250–499	500–2,500	
Non internationalized	49.2	33.9	45.5
Near areas	25.1	27.1	25.6
Far off areas	4.4	3.4	4.1
Both near and far off areas	21.3	35.6	24.8
Total	100.0	100.0	100.0

Table 8.10 Transition matrix in the geographical span of internationalization between 2001 and 2005 (percentage values)

2001	2005 →	Non-internation	Near areas	Faraway areas	Both near and faraway areas	Total	Absolute value
Non-internationalized	74.6	13.6	3.6	8.2	100	110	
Near areas	12.9	58.1	3.2	25.8	100	62	
Faraway areas	20.0	–	60.0	20.0	100	10	
Both near and far off areas	–	6.7	5.0	88.3	100	60	



foreign markets in 2005, moving to near or/and far off areas. In the meantime, 25.8 percent of companies focused on near areas in 2001 expanded their activities in other geographical areas in 2005.

In the case of East Asian countries, and China in particular, we should take into account that during the period considered, there was a strong pull effect, due to the high rates of growth experienced by those countries and the policy incentives designed by their governments to attract foreign investments.

## 5 Discussion and conclusions

We have examined the process of internationalization in a sample of medium-sized firms in the NEC “third Italy” regions. In the empirical analysis we compared the evolution of the internationalization patterns observed in medium-sized firms with hypotheses derived from stage theory. Our main findings are as follows.

### 5.1 Export intensity

Although there are significant differences among sectors, we found no simple direct relation between firm size and export intensity. Within the size limits considered in our sample (250–2,500 employees) size does not affect average export capacity (which is particularly high in our sample): we found high values for sales abroad for both smaller (250–499 employees) and bigger (500–2,500 employees) companies.

### 5.2 FDI

The size of firms becomes important when considering the capacity to invest abroad. In fact, values of FDI on total fixed assets, and average value of investments per unit abroad are considerably higher for bigger firms. Specialized suppliers and science based firms show the highest average values of foreign investments. As demonstrated by other empirical studies, high-tech companies are more prone to invest worldwide, seeking strategic resources.

In terms of the total number of foreign subsidiaries, we found a noticeable increase in the period for all classes and sectors, in both units and capital invested, which is in line with stage theory, which states that as time passes, companies become more confident in foreign markets and tend to develop a more complex internationalization strategy based on a multiple presence abroad.

Smaller companies show faster growth in the number of foreign subsidiaries. Although size affects the magnitude and intensity of investments in foreign markets, small firms seem to play an increasing role in internationalization.

### 5.3 Patterns of export and FDI

We found that, in general, investing abroad tends to complement, not substitute for, export. The strongest dynamics between 2001 and 2005 are observed in

firms that were export intensive in 2001 and that became fully internationalized during the period through significantly increased FDI. This confirms that FDI is the next step in an international strategy based initially on export (first stage in the internationalization process) and then on FDI as well. This is coherent with the hypothesis in stage theory, according to which firms are not expected to develop complex forms of internationalization (such as FDI) before acquiring good experience of foreign markets through exporting.

Some of our evidence does not accord with the stage theory hypotheses. Firms that from the start embarked on more complex forms of internationalization (here called “pioneers”) are not expected to have a successful internationalization strategy according to stage theory. This is only partially confirmed by our data, which show that the majority of pioneers remain in this stage. Also, we found that among companies that were not internationalized in 2001, the majority had changed their status and jumped directly to FDI in 2005, apparently contradicting stage theory.

### 5.4 Geographical localization of FDIs

Most FDIs are in the EU countries, i.e. in nearby, mature markets. As observed in other studies of Italian companies, our sample confirms the presence of a sort of “globalization gap”, as the EU should more accurately be considered a unique “domestic” market.

Analyzing the geographical span of operations, we found that FDI moved through time from closer to more distant locations as companies acquired the knowledge and capabilities to manage these more complex internationalization strategies, confirming a “process approach” to internationalization.

Overall, our results provide only partial support for the stage theory of internationalization. This could be due to our methodology, which does not allow us to control for structural variables influencing the behavior of firms. On the other hand, it could be that the acceleration in technology and market changes, together with a more unstable global environment, require a more complex and eclectic model to predict the behavior of firms in terms of their internationalization strategies.

Compared to other empirical studies on the Italian situation, our empirical analysis has some distinctive features: we use different measures of internationalization that take account of both export activity and FDI. In examining FDI, we analyze the number of foreign subsidiaries and also their value and geographical location. We consider a five year period to evaluate the evolution of internationalization patterns.

However, this study also has some limitations, which we intend to address in future work. Our sample was defined based on specific size measures (number of employees and turnover). As there is no consensus on *what* constitutes a medium-sized company, our findings are influenced by the range we chose. We based our measures of internationalization on data available from companies’ annual reports. We therefore do not include measures of internationalization that

are not "accounting" sensitive, such as non-equity joint ventures or other types of strategic alliances. This is a major limitation, as these modes of entry are becoming increasingly common for small- and medium-sized companies. Direct interviews with firms would be the only way to overcome this problem. The empirical analysis is based on descriptive statistics; we need to increase the number of our observations as well as the number of internal and structural variables in order to test the same hypotheses using multivariate analysis.

## Notes

- 1 See the literature reviews in Malhotra *et al.* (2003) and Cumberland (2006).
- 2 "Outward FDI by SMEs generally occurs after successful experience gained in exporting and/or forming alliances. The ENSR 2003 survey showed that only 3% of SMEs in Europe have subsidiaries, branches or joint ventures in other countries" (Wilson 2007: 52).
- 3 A group is a set of companies legally independent, but belonging to the same owner.
- 4 Pavitt (1984) classifies industries into four sectors according to the innovation regimes characterizing them: supplier dominated, scale intensive, specialized supplier, and science based.
- 5 Use of the foreign to total sales ratio is widespread (Czinkota and Johnston 1983; Grant 1987; Grant *et al.* 1988; Geringer *et al.* 1989; Calof 1993; Tallman and Li 1996; Wolff and Pett 2000; Yu-Ching *et al.* 2006). Some authors (Tallman and Li 1996) point out that it does not capture the influence of internal (intra-corporate) transfers. Bartlett and Ghoshal (1989) suggest using it specifically to map the initial stages of internationalization of firms located in developed countries. Other studies adopt different measures for internationalization strategy, such as: ratio of foreign assets to total assets (Daniels and Bracker 1989); number of foreign countries in which a firm has an operating subsidiary (Tallman and Li 1996) (Lu and Beamish 2004); number of overseas employees to total number of employees (Kim *et al.* 1989); number of foreign investments and number of countries in which FDI are located (Delios and Beamish 1999); entropy index weighted by foreign sales (Kim *et al.* 1993) (Hiitt *et al.* 1997). Some authors use more than one measure (Gomes and Ramaswamy 1999). Sullivan (1994) built a single multidimensional indicator but was criticized (Ramaswamy *et al.* 1996) for lack of validity.
- 6 In addition to number of foreign subsidiaries, Lu and Beamish (2004) used the number of countries in which firms had overseas subsidiaries. They combined these two measures as suggested by Sanders and Carpenter (1998), to build a complex measure of internationalization. They divided each of the two count measures by either the maximum number of FDIs or the maximum number of FDI countries in the sample, to transform them from counts to ratios. They then computed the average of the two ratios to give a final measure of internationalization in the range 0 to 1, with 1 being the highest level of internationalization.
- 7 We also classified companies by the same typologies, using a different indicator for foreign investment, i.e. the weight of foreign investment in total fixed assets, considering a cut off of 5 percent. We obtained substantially the same results in terms of company distribution and evolution over time.
- 8 The division is mainly based on geographic distance. This does not always equate to cultural distance or other types of barriers to trade. Thus, it is a rough approximation of the complex concept of "distance" in stage theory. We also made a distinction between EU and non-EU countries and obtained the same results.
- 9 We should also remember that the majority of the companies in nearby countries are in EU countries, which, as already mentioned, for Italian firms should realistically be considered domestic markets.

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