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# Internationalization and Performance: findings from a set of Italian SMEs<sup>\*</sup>

Antonio Majocchi\* and Antonella Zucchella\*

Keywords: SMEs, internationalization, exporting, foreign direct investment

#### ABSTRACT

The relationship between Internationalization and performance is a challenging topic for the agenda of researchers across the world, due to the complexity of the variables involved, to the difficulties in construct building and, last but not least, to the controversial results arising from the different studies that have been conducted on the matter in recent decades. This is particularly true in the case of SMEs, which represent a field still to be explored from this point view.

The fundamental hypothesis that has driven the present work is that the growing level of market integration has generated a framework of international competition for economic actors which has to be considered as the actual natural environment both for international and for domestic firms. As a consequence, being international is no more than a natural status for the enterprise, in the sense that firms which have not engaged yet in international markets are also part of a competitive international environment that influences strategic decisions and contributes to shaping business models and performances accordingly. This concept applies immediately to those regions where the integration process has gone further and deeper, for example the European Union area, where the domestic market for economic actors has gradually evolved from the former national base to a European one.

The empirical study, based on 220 Italian firms, suggests that firms' performance – measured by profitability ratios- is not determined by the degree of internationalization in terms of classical export intensity and number of international agreements, but depends mainly on the ability of firms to gain access to specific markets such as the American one. Moreover, SMEs which have grown in foreign markets through FDI show a lower profitability, showing the existence of a "liability of foreignness" effect at the beginning of their international growth. However this negative effect can be reduced when SMEs have already developed international competences and knowledge through an intense export activity.

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#### 1. Introduction

From a conceptual point of view, internationalization is a multidimensional construct (Sullivan,1994; Ramaswamy, Kroeck and Renforth, 1996; Nerth and Phene, 1998). The traditional distinction between export and FDI, as the two core expressions of the internationalization strategy, has been substituted by a wide range of entry-mode alternatives, generating a continuum of items from exports to interfirm non-equity and equity agreements to FDI, involving different levels of commitment and risk (Johanson J. and Vahlne J.E., 1977; Simyar and Argheyd, 1987; Beamish, 1999).

In the internationalization processes SMEs have been traditionally considered as a minor player, due to financial and managerial constraints (Jarillo, 1989; Golinelli, 1992; Oviatt and McDougall,1994). Notwithstanding these obstacles to geographic diversification, SMEs have revealed a high and growing propensity to internationalize along the various avenues of this multidimensional path.

Some studies have demonstrated that size of the firms and export intensity –as measured by the ratio of exports to sales- are not correlated (Bonaccorsi, 1992; Calof 1994; Moen 1999 Zucchella, 2001). This means that inside the world of SMEs it is not necessarily the smallest firms which are prevented from being strong exporters. We might thus observe medium-sized firms mainly focused on the domestic market together with small and micro-enterprises with very high export levels, thanks to the adoption of a niche strategy that makes small size and resources constraints compatible with a strong international commitment (Knight and Cavusgil 1996, Zucchella and Maccarini, 1999).

The case of deep-niche small firms, which are international and even global from the beginning, recalls the case of innovative new ventures. They not only provide another example of the fact that strong international commitment is found also in very small firms, but – just like niche firms - they give concrete form to the concept of the "international from the beginning" or "instant international" firm (Litvak, 1990; Oviatt and McDougall, 1994; Hordes, Clancy, and Baddaley, 1995; Preece, Miles and Baetz, 1998). These firms seem to challenge the traditional theory of internationalization as a gradual and sequential process (Johanson J. and Vahlne J.E., 1977).

Other studies have emphasized the role of alliances and network strategies for the geographic expansion of SMEs (Urban and Vendemini, 1992; Beamish, 1999): networking represents another strategic option that makes a small size and resource constraints compatible with a broad international base (Lipparini and Lorenzoni, 2000). Moreover, it challenges the concept itself of firm size by weakening the firm's boundaries (Velo, 1997).

The third approach to international expansion, represented by FDI, has seen a growing participation of SMEs in such flows, in particular starting from the '80s on (Buckley,1989). A possible interpretation of the phenomenon lies in the strategic imperative of upgrading the level of international commitment, in order to be rooted in the core world markets, close to key customers, and/or to have access to low cost resources in order to maintain cost competitiveness. Under such pressures SMEs may have channeled scarce resources with priority to foreign investments.

The international impetus of SMEs, parallel to that experienced by larger firms, raises the question that has guided the present study: has this process created value for the enterprises involved? This is not a new question for researchers, and it is actually a crucial one for managers, but we are still far from drawing clear-cut conclusions on the matter. The aim of this research is to contribute to a better understanding of the problem, through an analysis of the performance implications of the different internationalization modes on a sample of Italian SMEs. The choice of a national data set permits us to compare our results with those obtained by similar recent studies in other countries (Beamish and Lu, 2001). From this comparison we expect to get some insight on country specific factors influencing the international commitment and performance of SMEs, which are frequently more rooted in the domestic environment and consequently more subject to these potential effects (Bilkey andTesar,1977; Dichtl, 1984).

On the other hand it is important to verify whether the process of market integration has some influence on firms' internationalization and profitability. Europe is more and more an integrated macro-regional area (Europe), gradually turning into the true domestic market for local firms. European SMEs have in most cases addressed their internationalization effort to other countries of the same area: another crucial question that arises is whether firms mainly focused on the European market show different profitability levels than firms with a broader geographic scope. In particular, the answer to this question could permit us to highlight the consequences on the profitability of SMEs from the choice between a proximity and a global approach (Zucchella, 2001). In fact, under this conceptual framework, the fundamental options of international growth for small firms are represented by internationalizing in near markets (both from a geographic and from a psychic viewpoint) or by serving a global market niche. Both these strategies allow us to reduce or to completely avoid product adaptations. Thus, they are coherent with an organization that aims at reducing the complexities of foreign market commitment; i.e., they are compatible with the typical financial and organizational constraints of SMEs.

#### 2. Internationalization and performance: a review of the literature

The contribution of the various internationalization strategies to value creation has been the object of a number of empirical studies. International business literature has focused mainly on the performance implications of FDI, following the surge in the multinational expansion of large firms (Wolf, 1975). Although it is possible to argue that higher levels of international involvement would lead to better performance (Rugman, 1979; Daniels, Bracker,1989), the results of empirical studies do not reach definitive conclusions (Ramaswamy,1992).

Multinational operations frequently proved to be associated with higher performance (Beamish, daCosta, 1984; Shaked, 1986; Grant,1987; Kim, Hwang, Burgers,1989; Tallman, Li, 1996; Delios, Beamish, 1999). Some studies have evidenced the existence of a non-linear relationship, mainly due to a "liability of foreignness", beyond certain levels of foreign investments (Geringer, Beamish, daCosta, 1989; Hitt, Hoskisson, Kim, 1997), due to the rise in coordination and control costs, on the basis of Hymer's (1976) theory of FDI.

Some studies have shown a negative relationship between performance and FDI (Siddarthan, Lall, 1982; Kumar, 1984).

These findings were usually based on studies of large firms with a broad geographic scope and it is not possible to automatically apply their results to the case of SMEs

(Dana, Etemad, Wright,1999; Shuman, Seeger,1986). There is widespread consensus about the fact that the effects on profitability from the foreign expansion of SMEs have not been studied sufficiently, as well as the performance implications of the various internationalization strategies adopted by these firms (Covin and Slevin,1991; Coviello and McAuley, 1999).

Empirical studies on samples of SMEs have revealed the existence of a "liability of foreignness" at the beginning of the internationalization process via FDI (Beamish, Lu, 2001), while the prevailing form of internationalization for SMEs is represented by exporting (Bilkey, 1978). Export activity effects on profitability are expected to be positive, due to scale and scope economies (Kogut,1985, Grant, Jammine and Thomas, 1988) and increases in market power (Kim; Hwang, Burgers, 1993). However, empirical findings cannot be considered conclusive, due to scarce consistency in construct building and in the operational measures adopted (Shoham, 1998; Aaby and Slater, 1989). A recent research on a sample of Japanese SMEs has found a positive relationship between the two variables (Beamish and Lu, 2001). For Italian exporters, the few studies that have been carried out lead to controversial results (Mediocredito Centrale, 1998).

In addition to export performance, it is crucial nowadays to focus also on the profitability effects of other strategic options for the international growth of SMEs, since they have proven capable of engaging also in the direction of strategic alliances and international networking. Strategic alliances permit SMEs to overcome many of the above-mentioned resource constraints to international growth (Jarillo,1989; Zacharakis 1997). In addition to the opportunities of sharing risks, alliances give access to complementary resources, like capital and information (Gulati, 1998; Gulati, Nohria and Zaheer, 2000) and reduce the time span necessary for a broad international expansion. On the other hand, engaging in strategic alliances involves organizational complexities and implementation difficulties (Hamel, 1991). According to the survey conducted by Beamish and Lu (2001) the effect of alliances on profitability is positive only when the small firm chooses a local partner, i.e. a partner of the country to which the firm wants to expand geographically. This can be explained by the fact that an alliance with a local partner provides valuable resources in terms of foreign market knowledge (Makino, Delios, 1996), which tends to overcome its implementation costs.

#### 3. Hypotheses

Grant (1987) classifies the empirical studies on the relationship between internationalization and performance into comparative and control studies. The first examines the positioning of international firms over the domestic ones, while control studies explore performance benefits associated with different levels of internationalization, explicitly controlling the influence of extraneous factors such as size, research intensity, and so on. Our studies follow this second path of research. More specifically we try to test whether or not internationalization can be viewed as a crucial factor in explaining firm performance. With this goal in mind we distinguish different kinds of internationalization starting from the more simple way i.e. from exporting to the most complex form of presence in international markets: FDI.

Literature on the effect of exports on firms' profitability is quite large and most of it concludes that, thanks to scale and scope economies gained through larger volumes of sales and thanks to increased international experience (Grant Jammine e Thomas 1988, Cooper and Kleinschmidt, 1985), a high export intensity leads firms to better performance. Hence we first test the following hypotheses:

# *Hypothesis 1. A positive relationship exists between SME's financial performance and its level of export intensity measured by the ratio of exports to total sales*

However it can be argued that the definition of export within the European Union is not so clear from the managerial point of view as it was before the European economic integration process reached its recent advanced stage. With the creation of the Internal market and the fixing of the rate of exchange among the currencies of the area it is possible to affirm that selling goods and services in other UE countries cannot strictly be defined as a form of internationalization. According to this view, we split the sample by distinguishing firms with an access to markets outside the UE, mainly the US, and firms operating only on a European scale. Specifically, we concentrate our attention on the SMEs exporting to the North American markets. The idea underlining this investigation is that the greatest advantage for SMEs arising form exports is due to the increase in international experience (Johanson and Vahlne 1977, 1990), which leads to increasing market commitment. According to this view only firms operating outside the EU are really exporters, while Italian firms selling in the EU markets are still domestic firms. Moreover, the American market still seems from many points of view the most advanced market in the world. Therefore only the more competitive firms among the SMEs can have the chance to enter in this market.

Consistent with these arguments, we hypothesized that:

#### *Hypothesis 2. SMEs exporting in the US are consistently more profitable than SMEs operating in the EU domestic market*

Then we consider the classical thesis that dates back to Hymer (1976), which states that firms in the early phase of internationalization through FDI are subject to the "liability of foreignness" due to the necessity of facing high fixed costs in terms of both fixed investments and of experience to be gained on international markets. Some scholars (Beamish and Lu, 2001) show that this negative relation between performance and FDI is typical of the early stage of internationalization, while as firms gain in experience their international efforts are rewarded by higher profits. Because the firms in our sample are all in the early stage of internationalization through FDI we could not test this "S"-shaped relationship between FDI and performance. We limited our analysis to the following classical Hypothesis:

#### Hypothesis 3. The relationship between FDI and profitability is negative

Given the widespread use by Italian SMEs of a network of alliances on a local basis (Lazerson and Lorenzoni, 1999), a natural way to expand internationally for SMEs could have been the enlargement of the network on a wider scale. The use of alliances allow SMEs to save on resources which for them are scarce: capital, international information and, last but not least, managerial resources (Penrose, 1959). Unfortunately, our data set does not allow us to significantly test this hypothesis (we could not reject the null hypothesis); therefore we turn to the information gap that SMEs face when facing internationalization. If this gap is one of the main hurdles for the SMEs when they take the internationalization path, we can assume according to the classical hypothesis put forward by the Swedish school that a step by step approach allows firms to progressively overcome the gap.

According to this view firms engaging in FDI and which have a high export intensity are better equipped to face the internationalization process thanks to the better knowledge of the international area that they have already developed through export activities. Therefore we suggest the following proposition to test:

Hypothesis 4. The relationship between FDI and profitability is positive, thus overcoming the "Liability of foreignness", if FDI follows a high level of export activities by firms.

#### 4. Data and Research methodology

#### 4.1 Data source and sample characteristics

A list of 220 small and medium sized firms was selected from a list supplied by the regional Chamber of Commerce of manufacturing enterprises operating in the Northwestern part of Italy. The selection was made according to different criteria. A first screening was made according to firms' dimensions and international engagement. We considered as small- and medium-sized firms all those firms in the list that had less than 250 employees at the time when the data collection was conducted. Among this group of firms, we selected all those that declare to the Chamber of Commerce that they have some kind of international activities, either export or international alliances or FDI. Given the lack of information on the kind of international activities of Italian firms, we directly contacted the firms' management in order to select a list of companies available to co-operate with the research. A final list of 220 firms was selected at the beginning of 2000. All the firms are manufacturing firms, with less than 250 employees, and operate in seventeen different sectors according to the two-digit industry code. The data on international activities were consequently collected through direct interviews with management in charge of international operations. All interviews were carried out following a draft questionnaire that had been previously tested with 5 firms. Unfortunately, due to confidentiality reasons many firms refused to supply in-depth information, thus limiting the possibility of widening the scope of the analysis.

Balance sheet information on the firms were extracted from Aida Database produced by the publisher Bureau Van Dijk. All data refer to the year 1998, the most recent year available at the time the investigation was carried out.

#### 4.2 Variables

The goal of the research is to analyze the impact of international expansion on SMEs profitability; therefore profitability is our *dependent variable*. We compute two different measures of profitability: Return on sales (ROS) and Return on Assets (ROA). Given the high level of correlation between the two variables (r= 0.78), results in the regression are very similar, and we produce tables in this paper only regarding results for ROA, a measure that has been used in many of the previous studies in this research area (Gomes and Ramaswamy, 1999 Hitt et al., 1997).

Unfortunately, due to flaws in backwards data in the original data set, we could not compute any measure for the volatility of return for the firms. A measure of volatility of returns would have allowed us to test whether the rise of profitability was associated or not with an offsetting increase of risk as measured by volatility. Internationalization is a risky option and it is possible to affirm that if a higher level of profitability is followed by a higher level of volatility of the results, the final outcome of the process could be a destruction of value.

In order to test the effect of internationalization on firm profitability we define some independent variables that measure internationalization under different definitions; then we introduce some control variables in order to gauge for other aspects influencing firm performance.

The first independent variable we introduce is *Export intensity*, i.e. the ratio of exports to total sales, a typical measure of the degree of internationalization (Ramaswamy, Kroeck and Renforth, 1996). We take this information from the management interviews. In order to have another measure of the exporting activities we counted the number of countries (*n. of countries*) to which the firm exports, transferring to exports a common approach generally used for FDI (Tallman and Li, 1996).

The second measure of internationalization is FDI, which defines whether or not firms have foreign direct investments. Because some firms refuse to supply the exact number of FDIs, we realized we had to transform this variable into a dummy variable, taking the value of 1 when FDIs exist and 0 when the firm declares it does not have any foreign direct activities.

The same approach was taken in order to gauge the existence of *Agreements*. Due to the difficulties in identifying non-equity agreements we consider only the alliances which involved some kind of equity engagement by firms. This choice was mainly due to the indeterminacy in management's answers concerning these kind of agreements. In this way we lost the richness of the informal agreements developed by the firms interviewed, but we obtained a higher level of accuracy.

Then we define three other dummy variables which try to differentiate according to the export destination. We divide exports into three main areas: the Europan Union (UE), the United States and Canada (*North America*), and the *Rest of the world*.

Finally, we define another variable made up by multiplying the export intensity times the value of the dummy variable FDI (*Export\*FDI*). This variable gauges the contemporary use of FDI and exports.

According to previous studies (e.g. Gomes and Ramaswamy, 1999; Buckley, Dunning and Pearce, 1984) control variables have been introduced in the models.

Firm size was measured as a logarithmic function of the number of employees (*N. employees*); industry effect was measured by a set of industry dummies based on 2-digit industry codes. Then two other control variables were controlled. The first variable is the ratio of the level of debts to total assets (*Leverage*) and measures the capital structures of the SMEs. The second variable (*Intang. Intensity*) is a measure of the level of R&D and advertising intensity and has been calculated as the ratio of the sum of these items to total sales.

#### 5. Results and discussion

Data were analyzed using the cross-section OLS regression method. With the exception of the variables n. of countries and export intensity, table 1 shows that the level of correlation among variables is quite low, thereby suggesting that multicollinearity is not a problem. The variable n. of countries was included only in the first model and was excluded by all the other sets of regressions, because it was not statistically significant.

The results of the statistical analysis are shown in table 2. All the models were significant with quite a good explanatory power (R square in all the models is higher than 0.23).

The first model is the one that includes all the variables. Some of them (n. of countries, Rest of the world, employees, agreements) were not statistically significant and therefore were subsequently excluded from other models. Among the control variables Intangible Intensity and Leverage are the most significant. The first shows a negative relationship with firm performance, while leverage has positive relationship. The first result is quite uncommon in the literature. Firms with higher R&D and marketing expenditures present lower final results. On the other hand, the second result seems in line with finance theory. Firms with higher levels of debt, being more subject to interest rate volatility, must produce higher financial returns in order to balance the risk of the financial structure. This result is even more interesting taking in account that none of the firms in our sample is a listed company, as all of them are small-sized firms.

Contrary to many other previous studies we did not find any support for our first hypothesis that firm performance is positively correlated to export intensity. According to our analysis the null hypothesis cannot be rejected. On the other hand, the financial results of the Italian SMEs seem strongly related to their presence in the North American market. The relation is positive and statistically significant in all the models. It must be noted that the variable North America is a dummy variable and so does not depend on the size of the export activities realized by the firms in the North American market. This relationship seems to confirm that in order to access the American market SMEs must develop high capabilities that finally lead to higher financial performance. In this respect it may be argued that this superior financial performance could be due to exchange rate effect. Our analysis, being based on a cross-section, does not allow us to single out the effect of exchange rate on firm profitability. In any case it must be noted that during 1998 the US dollar devaluate against all the Italian Lira so depressing the results of the Italian firms exporting in the American market.

Hypothesis 3 predicts a negative relationship between FDI and firms' returns. Our models seem to confirm this negative relationship. Once again the liability of foreignness is confirmed. This relationship is more significant in models 3 and 4, when the Export times FDI variable is introduced.

Models 3 and 4 were introduced in order to test hypothesis 4. According to this hypothesis when FDI is associated with a high level of exports the negative relationship between FDI and firm performance is reversed. This result is in line with the view that considers internationalization as a learning process. This view may not be correct in the case of big firms, where large resources can be devoted in order to rapidly learn about the different cultures, consumer tastes, distribution and legal systems that firms have to face when moving abroad. For SMEs this knowledge gap remains a big obstacle to internationalization. However when a large export intensity is associated with FDI this knowledge gap seems to be overcome by the process of progressive familiarity and understanding allowed by the export performance. Assuming that exports to the foreign market anticipate FDI, it seems that export activities are the best way for SMEs to get acquainted with new markets, thereby paving the way for successful FDI.

Finally, some limitations concerning the results of this study should be stressed. First, as we stated before, the SMEs financial performance has not been weighted for the higher level of risk involved in international expansion. Whether or not higher financial performance is associated with higher risk is an item worth investigating, but one our data does not allow to be tested. Further, our sample data refers only to one year. The pooling of data across different years not only increases the degrees of freedom, but would also have allowed an examination of variations among cross-section units and within individual units over time. Therefore in our analysis the important aspect of the temporal component of the relationship has not been addressed. Further, pooling would have allowed us to take into account another variable, the exchange rate, which we have not considered in our one-year analysis but which is important for its impact on longer-term profitability.

With all these limitations in mind, we think that our study shows some interesting results by analysing some features of SMEs which it would be interesting to develop further.

First of all, the research poses the question of the fading distinction between domestic and international markets. Other empirical tests made on the relationship between firm internationalization and performance are based on the assumption of a clear- cut separation between domestic and foreign markets. Our study – being centred on the a sample of Italian SMEs located in the integrating European market- permits to point out the phenomenon of these evolving regional spaces which are gradually turning out to be new domestic arena for the former "national" enterprises.

Consequently, we did not observe any relevant profitability difference between national (i.e. the former domestic) and regional (i.e. European) players. One might observe that an integrated internal market should provide beneficial effects on the firms' performance due to better exploitation of scale economies. These effects are not observed in our survey, but this may be due to a number of reasons, among which the research limitations previously discussed, but also our sample structure based on SMEs, typically operating in industries where scale effects are not predominant and focused on

serving narrow market niches. In addition to this, it is likely that a single European market together with better opportunities provides also stronger competition, so that eventual cost reductions are converted into customer advantages (lower prices, additional services) and not into profitability gains.

A higher profitability characterises forms that export in extra-European markets and, in particular, in the US one. The latter represents the biggest non-EU market space for European firms; moreover it is a very complex one, in terms of customers' needs, market segments features, market structures (distribution channels, competition), regulatory issues. SMEs that are capable of facing such challenges and complexities obtain higher profitability levels.

When SMEs follow the avenue of non export entry modes in foreign markets (in particular FDI) a liability of foreignness effect is found, but this effect is overcome when FDIs are associated with high export intensity levels. The latter result is consistent with the hypothesis that the biggest obstacle in SMEs international expansion is the knowledge gap. Firms that have intensely exported in distant markets (both form a physical and psychological point of view) generated a value creation process not only due to the profitability contribution of such export activity, but also due to the beneficial effects of the cumulated knowledge on other internationalisation modes.

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	Mean	S.D.	ROA	ROS	Export intensity	Intang Intensity	N. employees	n. of countries	Leverage	Exp Int.*FDI
ROA	7.11%	8.88%	=	0.78	0.06	-0.27	-0.03	0.08	0.36	0,02
ROS	5.41%	7.96%		=	0.11	-0.11	0.03	0.19	0.29	0,02
Export intensity	36.55%	31%			=	0.15	0.27	0.70	0.01	0,43
Intangible Intensity	1.17%	0.02				=	0.13	0.16	-0.09	0,06
N. employees	58.58	88.69					=	0.37	-0.01	0,29
n. of countries	16.81	16.81						=	0.03	0,24
Leverage	29%	30%							=	0,02
Exp Int.*FDI	8%	23%								=

## Table 1:Descriptive Statistics and correlation

All descriptive statistics reported for non-transformed value

## Table 2: Regression of Return on Assets (ROA) on international activities<sup>a</sup>

	Model 1			Model 2		Model 3			Model 4			Model 5			Model 6			
	Parameter estimate	t - value	P-value	Par. est.	t - value	P-value	Par. est.	t - value	P-value	Par. est.	t - value	P-value	Par. est.	t - value	P-value	Par. est.	t - value	P-value
Intercept	0.09	3.36	0.00	0.09	3.46	0.00	0.08	4.07	0.00	0.08	3.77	0.00	0.09	4.08	0.00	0.09	4.00	0.00
Export intensity	0.01	0.28	0.78	0.02	0.79	0.43				0.01	0.69	0.49						
FDI	- 0.03	- 1.58	0.12	- 0.23	- 4,84	0.00	- 0.22	- 4.98	0.00	- 0.03	- 1.88	0.06	- 0.03	- 1.76	0.08			
Agreement	- 0.01	- 0.53	0.60	0.00	0.02	0.25												
Intang Intensity	- 0.90	- 3.74	0.00	0.95	4.15	0.00	- 0.96	- 4.32	0.00	- 0.93	- 3.94	0.00	- 0.91	- 3.90	0.00	- 0.92	- 3.91	0.00
N. employees*	- 0.00	- 0.61	0.54	0.00	0.60	0.55												
Leverage	0.10	5.62	0.00	0.10	6.03	0.00	0.10	6.09	0.00	0.10	5.66	0.00	0.10	5.67	0.00	0.10	5.66	0.00
n. of countries	0.00	0.60	0.55															
UE	- 0.00	- 0.07	0.94	0.01	0.50	0.62												
North America	0.03	1.81	0.07	0.03	1.74	0.08	0.03	2.42	0.01	0.03	2.28	0.02	0.03	2.93	0.00	0.03	2.56	0.01
Rest the world	- 0.00	- 0.03	0.98															
Export*FDI				0.31=	4.55	0.00	0.29	4.62	0.00									
	Model Indices (N=220)			Model Indices (N=220)		Model Indices (N=220)		Model Indices (N=220)		Model Indices (N=220)			Model Indices (N=220)					
	R-square 0.24		0.249	R-square 0.318		R-square 0.314		R-square 0.246		R-square 0.244		R-square 0,233						
	Ad. R-Square 0.201		0.201	Ad. R-Square 0.271		Ad. R-Square 0.288		0.288	Ad. R-Square 0.217		Ad. R-Square 0.219		Ad. R-Square 0.212					
	F= 5.249**		F= 6.82**		F=12.05**		F =8.60**			F= 9.78**			F = 10.79**					

<sup>a</sup> Dummy variable for industries are included in the models but have not been shown in the table \* = Log \*\* = p < 0.001