Why and where do firms export? Evidence from Spanish manufacturing firms.¹

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Abstract

In this paper we extend previous work on the effect of sunk cost on firms export behaviour by investigating first whether costs to switch to one market to another are the same as costs to enter the export market and, second, the link between diversification of exports markets and the probability of export to different. We use a sample of Spanish firms from the Encuesta sobre Estrategias Empresariales (ESEE) for the period 1991-2002. Our results confirm the relevance of those sunk costs and demonstrate that they differ not only depending on the market the firm exported to but also on the market the firm is currently exporting. Diversification also has a positive effect on the probability of export when firm is not decreasing the number of markets it is exporting to.

Key Words: sunk costs, heterogeneity of firms, regionalism.

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0. Introduction

A common finding in the recent empirical literature is the superiority, at any point in time, of exporters (either plants or firms) over non-exporters regarding productivity (see Wagner, 2005 for a survey and Mayer and Ottoviano (2008) for a cross country comparison). This may be due to the fact that productivity may be improved when accessing foreign markets because their exposure to useful technological innovations from international contacts makes easier the technological diffusion and fostering a more efficient organization of firms (learning by exporting). Alternatively, sunk costs at exporting may also explain this phenomenon since the most productive firms self select into the export markets because they are more likely to cope with the sunk costs of entry and survive in the international market (self selection). The empirical evidence to support either one or the two theories is mixed. Very few studies reject the self selection hypothesis except Yasar and Rejesus (2005) for Turkey while other studies tend to support the self selection theory and reject the other one, see Bernard and Jensen (1999). Most studies find that the two phenomenons apply like Clerides et al (1998) for Morocco, Hahn (2004) for Korea, Van Biesebroeck (2005) for 9 African countries, Girma et al. (2004) for UK.² A direct way to verify the existence of sunk exporting costs was proposed by Roberts and Tybout (1997). From a theoretical model with sunk costs, they derive an empirical model in which export status depends on the past of exports if the firm faces sunk costs at exporting. They find that the exporting experience of the Colombian companies has a positive impact on their capacity to remain in a market. Bernard and Jensen (2004) use a linear probit model with fixed effects and also find evidence of the existence of sunk costs bound to the exporting activity, in this case with a panel of manufacturing companies of the U.S.A. and for period 1984 to 1992.

Since each market has its own specificities regarding administrative and technical norms as well as other nonformal codes for businesses, the barriers for exporting may differ from one market to another. Eaton et al. (2004a) show that the majority of French firms do not export and those that do export do not diversify the destinations of their market. It seems that the integration of markets translated more in an increase of the number of firms than in an increase of the amounts sold by each of them. As shown by Eaton et al. (2004b), this evidence can be explained in a framework of strong demand for variety from the consumers and with the hypothesis of fixed exporting costs being specific to each market. For Spanish manufacturing firms, Mañez et al. (2008) and Campa (2004) showed that sunk exporting costs are important and Blanes et al. (2008)

 $^{^2}$ The learning by exporting scenario applies only in some cases: Aw et al. (2003) for Taiwan in some sectors, Delgado et al. (2002) for Spain for young firms. Focusing only on learning by doing effect, Castellani (2002) for Italia and Kray (1999) for China, find that only firms with a substantial involvement in exporting activity have a significantly higher rate of TFP growth. Fernandes and Isgut (2005) and Trofinenko (2005) demonstrate that exporting to advanced countries generates the highest productivity premium in the case of Columbian manufacturing plants.

found that sunk costs differ from one market to another. Castillo and Requena (2007) show that the destination choice of small firms are affected by the numbers of firms operating in the same market and same industry which suggest that information spillovers not only for exports in general but also for specific destinations. In this line, several studies suggest that learning-by exporting phenomenon or rentability of innovation may differ among markets³. Latouche et al. (2009) show that previous export experience in the EU and OECD impact both the decision to export and the level of exports in each market. Though they do not consider the effect of past experience in other markets on the actual status or volume exported to a specific market.

This paper investigates the exact role of diversification of markets on the probability of exporting and on the volume of exports since it hasn't been investigated in depth, as far as we know. In particular, we first investigate whether costs to switch to one market to another are the same as costs to enter the export market. We compare the costs to enter in three different markets (EU, OECD or ROW). and study how the experience in different combination of these markets influences the export status of the firm. In a second step, we also estimate the determinants of Spanish volume of exports, taking into account the selection bias evidenced in the first part. To this end, we use a panel probit approach to study the export behaviour of a sample of Spanish manufacturing firms. Moreover, we also investigate if that export's volume is related with the diversification of exports markets.

It is worthmentionning that both objectives are related. Sunk exporting costs may differ among firms depending on if exporting activities are considered as a further step after consolidation in the domestic market or if the first objective of the firm is to sell in international markets. The sequential approach (Johanson and Wiedersheim-Paul, 1975) considers that firms start exporting in those markets that are closer or similar to the domestic market in terms of language, culture, etc. because the uncertainty in these markets is smaller. As the firm acquires experience, one considers exporting towards more distant markets. From a macroeconomic point of view, the augmented gravity equations of trade also offer strong support for the fact that proximity among partners - as the existence of a common language, presence of bilateral agreements or cultural and geographical proximity - guarantees a larger volume of trade (see Trefler, 2003 for instance). It could be because the number of firms increases or because the volume traded by each firms increases. Nevertheless, other theories about the organization of

³ Fernandes and Isgut (2005) and Trofinenko (2005) demonstrate that exporting to advanced countries generates the highest productivity premium in the case of Columbian manufacturing plants. Esteve-Perez et al. (2004) find that firms exporting to closest markets export a longer time. Barrios et al. (2001) show that R&D activities exert a determinant effect on the decision to export and on the intensity of exports, as much for the companies that export to OECD countries. Fariñas and Martin-Marcos (2007) show that firms selling a high share of their exports in OECD markets have greater productivity than firms that mainly export to the ROW. Castillo and Requena (2007) found strong evidence of export spillovers among the 12 most popular destinations of Spanish exports in the earlier nineties.

firms, argue that the firms with multinational strategies base their organization on the information they acquired in foreign markets and do not look for a market that matches with their product or their organization. For this reason, they do not perceive the entrance in foreign markets as particularly dangerous and expensive (Brush, 1992).

This paper compares the sunk costs for different combinations of export destinations. The primary goal is to provide a satisfactory answer to the following questions: does the diversification of exports provide lower or higher sunk costs? Are these costs higher or lower than the costs to enter an export market without any experience at exporting? In another step, we ask if the diversification of market destination is associated with lower volume of sales in each market or not. That is, this paper aims to evaluate whether there is anything in explaining the whole difference in choosing the destination market that must be attributed to characteristics of the markets, industry characteristics or firm's characteristics. If after controlling for relevant features that may affect export status, we find that the concentration in a specific market extends the probability of exporting and the volume of exports to this market. On the opposite, diversification should be seen as a strategy of the firm to adapt to international competition and to be more flexible what, in turn, could increase its probability to become an exporter and to export more.

To perform the analysis, we use data on Spanish manufacturing firms from the Encuesta sobre Estrategias Empresariales (ESEE, hereafter) for the period 1990–2002. We build balanced panel of firms and use the exhaustive information at the firm level provided by the dataset. The empirical work is carried out using panel probit techniques to estimate the probability of exporting controlling for the existence of unobserved individual heterogeneity (such as unobserved firms organizational capabilities, network contacts, access to specific assets, etc.). Ignoring unobserved individual heterogeneity may lead to strongly inconsistent estimates of the included covariates. We use a Heckman estimation method to estimate the volume exported to each market taking into account the export status by market.

To anticipate the results, we find that the costs to enter (and "to re-enter") are greater in developed markets than in those of the Rest of the World (ROW). Moreover, we find that having previous experience as exporter has always a positive effect, although if that experience is in the EU it increases the probability of exporting to that market and the OECD but not to the ROW. Another contribution of our paper is to explain, not only the participation, but also the volume of export taking into account this selection bias. It also raises the issue of more productive exporters into advanced countries.

The rest of the paper is organized as follows. In Section 1 we present the previous theoretical and empirical results. In section 2 we describe the data set. Section 3 includes the empirical model we use. Our findings are explained in Section 4. Finally, Section 5 concludes.

2. - Data

The Encuesta sobre Estrategias Empresariales (ESEE) is an annual survey of Spanish manufacturing firms carried out by the SEPI, Ministry of Industry. The ESEE is representative of the Spanish manufacturing firms classified by industrial sector and size categories⁴ and includes exhaustive information at the firm level. The ESEE allows for the inclusion of variables relative to the structural characteristics of the company⁵. It provides some information on the volume of exports and imports. Each four years, the survey indicates firms' trade disaggregated for three regions: EU 15 countries, other OECD countries and Rest of the World –ROW-⁶.

We use a panel of continuously operating firms from 1991 to 2002. After applying these criteria, we end up with a balanced panel of 756 firms (9070 observations for the period 1991-2002). Note that the period is larger than in other studies concerning Spain and most of the works studying sunk costs. From this database we picked up data for the years the survey offers information by export market that is 1994, 1998 and 2002.

2.1. Sample representativeness

In Table 1 we compare our continuous sample with the complete sample. Figures refer to the first and the last year in the sample period. We distinguish between exporter and non-exporter firms and consider some firms characteristics that are relevant in our econometrical analysis. Figures show that the sample representativeness of our continuous sample is very similar to the one of the complete sample from the ESEE regarding all the variables considered. There are some differences between both samples. For example, exporter firms seem to be slightly over represented in our continuous sample and the share of exports values on total sales is higher in our sample than in the complete sample. The same happens also for the percentage of firms with foreign capital but not when we consider that foreign capital participation is higher than the 25%. Differences in other variables, as average size– measured as the number of employees- , share in total sales and share in total R&D

⁴ Participation rate to the survey is about 70% for firms with more than 200 employees. Firms that employed among 10 to 200 (small firms) were randomly sampled by industry and size strata holding around a 5% of the population.

⁵ In particular, it contains information about: product differentiation (Advertising expenditure and R&D expenditure), size (number of employees, sales), quality of labour, participation of government or foreigners in capital, innovation (if the firm does any of the following activities: technical and scientific information services, quality normalisation and control, imported technology assimilation efforts or design activities, R&D results, patents or process innovations), and market's characteristics (as market share). ⁶ Since 2000, the disaggregation includes Latin America and Asia. We cannot take it into account here because the period is very short.

expenditures are less relevant and lower in 2002 than in 1994. Nevertheless, these differences are small and figures for other relevant firms' characteristics for our research, as R&D intensity or advertising intensity are not affected by the cleaning process that leads us to eliminate some observations. Moreover, observed differences between exporters and non exporters from the complete sample remain in the continuous sample. Hence, we can conclude that our sample is accurate to estimate both the probability of a firm to be an exporter in general and to a particular market. So, the following comments refer only to the continuous sample.

2.2 Exporters' characteristics

Table 1 shows that exporting firms are larger than non-exporting firms and that they concentrate a large share of sales and R&D expenditures. R&D and advertising intensities are also larger for exporters than for non-exporters. Exporter firms have a higher productivity – measured as value added by employee- than non-exporter firms. Another relevant characteristic of exporters is that the presence of foreign capital is larger than for non-exporter. A high share of firms participated by foreign capital in Spain is allocated in exporting firms and the share of firms controlled by foreign capital – percentage of foreign capital in total capital equal or large than 25% - is larger in exporters than in non-exporters.

Some firms' characteristics differ depending on target market⁷. Table 2 shows that the share of exports on sales, productivity and the presence of foreign capital are larger for those firms that export to more than one market. Firms that export only to the OECD or to the three markets present higher advertisement intensity. R&D intensity is larger for firms that export only to the ROW or combined with the other two markets, depending on the year considered.

2.3. Extensive and intensive margins and market diversification

Eaton et al. (2004a) used French data where fims' exports are disaggregated by countries. They show that the number of firms selling to multiple markets falls off with the number of destinations and that variation in French exports across destinations represents differences in the number of firms selling there more than the amount sells by each one. The comparison between their study and ours is complicate since Spanish data do not include the country to which the Spanish firms export but the region. So we can identify if they increase the number of regions to which they export but not the number of countries. Nevertheless we are able to study if the

⁷ Although we have three destination markets available, we have seven different markets since data in the ESEE refers to exports to any combination of these three markets. That is, some firms export in the same year to only one of the three markets, others to two of them and others export to the all three.

increase in the volume exported to each region in our sample is proportional to the increase of the number of firms or not and to compare the number of firms that diversify or not their export.

Table 3 present data to analyse if the number of exporting firms – extensive margin – and the average exports by firm – intensive margin – is related both to the number of markets and to which markets firms export. Our data show that there is an increase in the number of exporters (column 1). This increase is higher for the group of firms that export to three markets than for the rests of firms. Hence, in column 2, we observe how in 2002 the group of firms that has increased market diversification represents a higher share in total exporter firms than in 1994. That is, we observe an increase in the extensive margin, we also observe an increase. The average value of exports by firm increases for all destination markets with few exceptions. This increase seems to be related, although not in a linear way, with market diversification since the share in exports of firms exporting to the three markets increases while it decreases for firms that export only to one market⁸.

2.4. Persistence of exporting

We now focus on the entry and exit in the export market of Spanish firms. As exporters may face sunk costs when they enter the foreign market and since we guess these sunk costs differ among markets, we analyse the dynamic of firms' behaviour by market. This information is shown in table 4 and 5. Each one of the entries in these tables gives the proportion of firms in each of the year *t* status (exporter versus non-exporter) that choose each of the two possible statuses in year t+4. If the firm remains in the same status, this ratio is called persistence ratio and if the firms changes its status, the ratio is called transition ratio⁹. The difference between both tables relies on the fact that table 4 refers to the persistence and transition firms' ratio on the same market in *t* and in t+4 and table 5 shows disaggregates transition ratios. That is, it allows us to disentangling if firms that remain as exporters in t+4 exports to the same market than in *t* or if they export to other markets. Table 5 also shows to which markets non-exporters in *t* export in t+4 if any.

⁸ For firms exporting to two markets, this share increase between 1994 and 1998 and remains almost constant between 1994 and 1998.

⁹ For example, in the four first cells in the first column on Table 4, we can observe that a 95.8% of Spanish firms that were exporters in 1994 remain as exporters in 1998 while a 4.2% stop to export. A 25.2% of the firms that do not export in 1994 became exporters in 1998 while a 74.8% remain as non-exporters.

The bottom lines of Table 4 show us the transition ratios when markets are not disentangled. Spanish firms show high persistence ratios, especially as exporters, since the exit transition ratio is always lower than the ratio of firms that remains in the same status. The share of non-exporters that switches to the export market is also higher than the share of exporters that exit the foreign markets. Thus, the share of exporter firms on total firms increases during the period 1994-2002¹⁰. Those previous results are in line with Máñez et al. (2005) found also for the Spanish economy. However, when we compute these ratios by export market in year t, figures show differences among export markets (top part of Table 4). These points out that sunk exporting costs might differ by market. The export persistence ratio to the same market is higher, first, when firms' export to all the three markets, second when firms exports only to the EU and, finally, when firms export to the EU and to OECD or the ROW. The entry rates are also higher for those markets. On the contrary, firms that export only to the OECD, only to the ROW and to both markets present a higher exit ratio and a lower entry ratio as exporters. So, we observe that the probability of remaining as exporter as well as the transition ratio from non exporter to exporter is positively related with partner proximity and with market diversification - if the EU is one of the markets.

However, firms that exported to market k in year t but do not in year t + 4 could now be exporting to another market. The same situation could occur for firms that did not export to market k in t and neither does it in t+4 but now export to other markets. Table 5 shows this information¹¹. We first focus on the persistence of exporters by market. The higher persistence ratios as exporters are found when firms remain exporting to the same market. Nevertheless, those persistence ratios vary among market, being higher when the firm exports to the three markets. A striking result shown in table 5 is that having experience in export to a market facilitates the entry in another market. This is shown by the fact that transition ratios as exporter to whatever market is not zero for firms that exported to a different market in the previous year¹². Persistence ratios seem to be also related with market diversification. In general, apart for export to the same

¹⁰ As can be seen in table 1, the number of exporters was 450 in 1994, 508 in 1998 and 511 in 2002. The number of non-exporters was 306 in 1994, 248 in 1998 and 244 in 2002.

¹¹ For example, in the second column, we can observe that a 50.8% of firms that export only to the EU in 1998 remain exporting only to the EU and that from the 49.2% that do not (see Table 3) 1.7% exports to only the OECD, 0.8% to only the ROW, 9,3% to the EU & OECD, 10.2% to the EU & ROW, 10.2% to the three markets and 16.9% stops exporting at all. Equally, for the 92.3% of firms that do not export to only the EU in 1998 neither in 2002, 0.6% export to only the OECD, 2.7% to only ROW, 7.1% to EU & OECD, 12.7% to EU & ROW, 0.3% to OECD & ROW, 33.8% to the three markets and only a 35.2% of firms that do not export to only the EU in 1998 are not exporters in 2002.

¹² For example, in column 1 we observe that the transition ratio between 1994 and 1998 to export to the EU & Rowal is 0.248 for firms that in 1994 export only to the EU.

market, persistence ratios are higher when firms increase in t+4 the number of markets they were exporting to in t. This is especially clear for firms that in t exported to the EU and another market and in t+4 switches to export to all three markets. Concerning firms that did not export (bottom part of table 5), costs to enter the markets seem to be relevant and also differ among markets. Export experience to any market seems to affect positively the entry in other markets since the higher persistence ratios as non-exporter in t+4 are shown by firms that do not export to any market in t (last row of table 5). Finally, the EU is the main destination market in t+4 for firms that did not export to any market in t. For firms that did export to any market in t, the higher transition ratio is found for firms that become exporter to all the three markets. So, we can conclude that firms seem to diversificate gradually their destination markets and use the EU as the first step.

3.- Empirical Model

We closely follow Roberts and Tybout's (1997) approach to model a multi-period export decision for entry and exit with sunk costs. To enter (re-enter) the export market or to exit a firm has to incur in sunk costs. Entry costs in the export market are usually presented as a consequence of imperfect information and presence of formal or informal barriers to trade. Actually, to entry in a foreign market, firms have to adapt their products to foreign demand and technical and administrative standards and have to find distribution networks. These costs could be reduced by the presence of other exporting firms in the same country of regions or public or private institutions organising information access like harmonisation of administrative and techniques standards among trading partners.

Roberts and Tybout (1997) consider that in each period *t* a firm decides to export if the increment to the expected gross profits associated with exporting is positive. That is, export decision is a dynamic discrete choice that depends on previous decision of the firm. Normally in this literature, a reduce form is estimated, that is, it is assumed that the expected gross profits depend on exogenous firm characteristics (X_{it}), macro conditions (μ_t) and passed exports. More specifically, firm *i* exports in year *t* if its profit abroad is positive.

Following the method used by these authors but considering the possibility to export to different markets k^{13} , we define an indicator function I_{it}^k that takes value 1 if firm *i* exported to *k*

¹³ k stands for different markets but alternatively also for the number of markets firms exports to in order to identify the effect of market diversification on the probability of exporting and on exports' volume.

in year t. Because the fixed cost is not observed, we include the lagged export status in the explanatory variables as in Roberts and Tybout (1997) and Bernard and Jensen (2004). Both firm characteristics and macro conditions are assumed to be observable to the firm in the period. Therefore the equation for the decision to export is

$$I_{it}^{k} = \begin{cases} 1 & \text{if } 0 \le \mu_{t} + \beta X_{it} + \sum_{k} \sum_{h=1}^{H} \gamma^{h} I_{it-h}^{k} + \varepsilon_{it}^{k} \\ 0 & \text{otherwise} \end{cases}$$
(1)

where \mathcal{E}_{it}^{k} is an error term, *k* is the market considered and X_{it} is a set of characteristics of the firm. We also consider a set of dummies for years and for the 20 industries.

We alternatively consider the decision to export to all markets (k=ALL) or to export at least to one of the three markets we are able to distinguish: EU (15), Other OECD countries and ROW. Thus, since some firms whether export simultaneously to several markets or not, we also disentangle all possible excluding cases that are we consider the following destinations: only EU, only OECD, only ROW, EU and ROW, EU and OECD, OECD and ROW or ALL. Actually, the decision to diversificate or not may be explained by different type of organisation, characteristics and experience of the firm, reason why it covers especial relevance for our purpose.

We study two different decisions of the firms: why it exports and where it exports. If we assume that international markets are more competitive than the domestic one and that firms face sunk costs at exporting, exporters should be the most productive firms and the largest ones. Actually, since most firms operate under increasing returns to scale, large firms are more able to reduce unit cost and cope with additional trade costs like sunk costs. We include the size of the firms (in logarithms) to capture this effect. We also include the firm's labour productivity in logarithm terms (*lprod*) and expect it to have a positive impact on export status. The relationship between productivity of labour and the orientation of exports is not so clear. If developed markets are more competitive, it may be the case that productivity matters to export to those destinations but if competition is based on quality or diversification of products, other characteristics of firms like organisation, innovation, insertion in networks, multinational strategy and managerial capabilities may explain better the options they choose. To take into account the fact that some firms base their competitiveness on innovation, we include the R&D intensity calculated as the share of R&D expenditures in sales and expect it to play a positive role on the probability to export in general and in particular on the probability to export to the EU and OECD countries. We also take into account the situation of the firm regarding internationalisation in general. We include the share of firm's capital owned by foreigners (lfdi) and a dummy that takes the value 1 if this firm has participation in firms located abroad. These two variables reflect if the firm has an international strategy or not. The impact of these two variables may differ depending if exports are whether considered as substitute or complement of FDI. Actually, foreign investment in Spain may have several objectives: to produce for the domestic market or to export to the EU avoiding restrictions the EU imposed on its imports. In the first case, FDI may reduce the probability to export and in the second case it may increase the probability to export to the EU. Concerning outward investments, they probably are an alternative to exports since they allow to reduce production costs, avoid transportation costs and/or to be closer to consumers. We try to control for another important feature. Ellis (2000) shows that "knowledge of foreign market opportunities is commonly acquired via existing interpersonal links rather than collected systematically via *market research*". Though, the choice of the destinations may be more irrational than rational. Rationality will be that the manager only decides to export if he thinks that foreign markets represent a good opportunity for his firm. We use two questions of the survey in which firm is asked if its first market is mainly national or international and another one where they must indicate if they consider this market as increasing, stable or decreasing. We build a variable that takes the value 1 if the respondent indicates that is market is international and considers it as increasing. If rationale, this view should increase its probability of exporting.

Since most of the other characteristics that may influence the choice of the destinations are intangible they are difficult to quantify. But these intangible assets are accumulated by the firm to reduce uncertainty and information costs. Their effects are mainly included in the variables reflecting their previous experience at exporting. The parameters γ_i reflect the role of sunk costs in the decision to export or the role of the experience in one specific market. If significant, these coefficients should be interpreted as the rate of depreciation of export market experience and accumulated knowledge in foreign markets on the exporting likelihood. We expect the lagged export status to affect the export-decision positively when explaining the export in general.

Following several studies like the work of Mañez et al. (2005), we include time-specific effects to capture macro-level changes in export conditions (business cycle, exchange rate movements, trade-policy conditions, world demand for Spanish products, etc). The industry dummies control for unobservable characteristics of the markets where firms compete (market concentration, technology, etc...).

4. Econometric results

We first estimate the probability of exporting regardless of the market (table 6). We use different specifications depending on whether we consider the past experience in the export market regardless of the destination or we distinguish the past export experience by market. Second, we explain the probability to export to a specific market or combination of markets and compare the effects of the different experiences and characteristics of the firms for each of the destinations considered (table 7). All models are estimated using a random effects probit model and marginal effects are reported¹⁴. We finally estimate the determinants of the export volume after controlling for the self-selection into exporting implied by the exporting participation, using Heckman techniques (Table 8).

4.1 Do the experience in different markets and characteristics of firms explain why some firms export?

Table 6 presents the results of estimating the probability of being an exporter to at least one market. We report 4 specifications. The first one uses as independent variables the past export status without disentangling the experience by market – as in the previous literature. The second one considers the experience in each of the three markets considered: EU, OECD, ROW, regardless to the fact that they may export at the same time to other destination. The third one considers the experience in each of the seven combinations of markets we are able to identificate with our data: exports only to EU, only to OECD, only to ROW or combinations of these three markets. In the last specification, we consider the number of exporting markets (one, two or three) of the firms rather than the destinations per se, in order to test for the effect of market diversification.

Beginning with firm's characteristics, we find that the largest firms display higher probability of exporting. This result is consistent with the hypothesis of increasing returns and with other empirical studies. Technological framework and innovation process are also important features for exports, since the intensity in R&D expenditure does have a significant and positive effect. Concerning productivity, it has a positive and significant effect, as expected from the Melitz model and confirms a presence of self-selection effect. Foreign participation has the expected positive and significant effect - more obvious when experiences in each market is included – while participation in firms located abroad is not significant. These two strategies of internationalisation do not seem to be linked. Foreign investment in Spain is complementary with export activities while Spanish outward investments seems to be more addressed to avoid production and trade costs in foreign markets and are, hence, substitute of Spanish exports. Finally, firms that consider its market as mainly international and consider that it is not decreasing have a higher probability of being exporters. Thus, Spanish firm's managers seem to choose

¹⁴ As pointed out in Bernard and Jensen (2004), the linear probability model, the random effects model and the GMM estimator for first differences lead to similar results. Although we are conscious of the advantages and disadvantages of each one of the methods, we adopt the linear probability model.

foreign markets on the basis of a certain knowledge of the destinations markets and rational economic concerns which confirms the fact that exporting activities imply a specific preparation.

Concerning the parameters for export experience variables, we find that there is a significant difference between the re-entry cost of a firm that has exported previously and a firm that never exported, since the experience of having exporting, regardless of the market, has a positive effect on the probability of export (specification 1). However, we do find also differences on this positive effect depending on to which market firms have exporting experience. Results for specification 2 show that a previous experience in the EU market has a greater impact in current export status than a previous experience in any of the other two markets, OECD and ROW. Results for export experience for the seven market combinations available – specification 3 – confirms this finding, since the largest impact on current export status comes from a previous experience in exporting to the EU, alone or combined with exporting also to the OECD or the ROW, while previous experience exporting only to the OECD or to the OECD and ROW has no effect on the probability of being an exporter currently. Having exported only to the ROW also has a positive effect on the probability of export but lower than the experience on the other markets that have also a positive effect.

Market diversification also increases the effect of previous export experience on the probability of being an exporter currently (specification 4). Experience exporting to three markets has a higher effect on the probability of export than experience in exporting to two markets and, likewise, experience exporting to two markets has a higher effect on the probability of being and exporter than experience in only one market.

4.2 Do the experience in different markets and characteristics of firms explain where some firms export?

Previous export experience to different markets has a different effect on the probability of exporting in general. Nevertheless, it could be the case that having exported could affect in a different manner the probability to export to different markets. Estimations presented in table 7 aims at testing this hypothesis. Now we use as dependent variables the export status to a specific market or combination of markets rather that the export status in general¹⁵. So, we explain the probability of exporting to each of four different markets. We estimate two different specifications that differ on if previous export experience to each market or the number of export markets is included as explanatory variables.

¹⁵ We do not estimate for being or not an exported to only the OECD, only the ROW and export to the OECD and the ROW due to the small number of observation for the dependent variables.

Beginning with firms' characteristics, results show that they have an effect on the probability of exports – as seen in Table 6 – but the effect is not so clear concerning its effect on export market selection. Bigger firms and firms with higher R&D intensity have a higher probability to export to the three markets and to the EU and the OECD. Productivity has a positive effect except on the probability to export to the EU and ROW. Foreign participation is not significant except when exporting to the three markets which is negative. In general, firms participation in firms located abroad is not significant as well as the dummy for firms that consider that its market is mainly foreign and it is stable or increasing. However, we find a positive effect of previous exporting experience for most destination markets. This points out to the fact that market selection may depend on less tangible variables that the ones usually offer by base data, as manager experience, sunk costs or even diversification.

Table 7 shows that sunk costs clearly differ among markets. Previous export experience has different effects on the probability to export to different markets. The recent experience in the same market has, as expected, a positive effect on the current export status. More striking is the result that, although in different intensities for each case, having exported to some market also has a positive effect on the probability of export to other markets. For example, having exported to the EU increases the probability of exporting to any other market. If firms have exported to only the OECD or only the ROW, it increases the probability of exporting only when the firm exports to the EU together with those markets. Experience exporting to the EU and OECD and to the EU and ROW increases the probability of export to any market but only the EU. Finally, experience in exporting to the three markets has a positive effect on the probability of exporting except when the market is only the EU, which is negative. In general, we observe that the positive effect of export experience on the probability of exporting is somewhere related with diversification. It is never positive when previous experience is applied to export activities to a number of markets that is lower that the number the firm has experience in. This impression is confirmed by the results obtained in the last four columns which shows result when directly testing for the effect of diversification. Experience in exporting to one market increases the probability of exporting to any market of market combination, as aggregate result in table 6. However, regression results show that experience in exporting to more than one market do not has a positive effect on the probability to export to only one market. Firms that have experience in exporting to two markets have a higher probability of continue exporting to more than one market. Moreover, experience in exporting to all 3 markets has a negative effect on the probability of export only to one market in the next period.

5. Concluding remarks

This paper has extended previous work on the effect of sunk cost on firms export behaviour by investigating both whether costs to switch to one market to another are the same as costs to enter the export market and the link between diversification of exports markets and the probability of export to different markets.

We use a panel of continuously operating Spanish firms from 1991 to 2002. Our descriptive analysis shows that exporting firms as compared with non exporter are larger, concentrate large share of sales and of R&D, present a high R&D and advertising intensities and productivity and a larger presence of foreign capital. Some firms' characteristics differ depending on target and on the number of markets. We observe and increase in the extensive margin and in market diversification. Both are directly related. We too observe an increase in the intensive margin also positively related, although not in a lineal way, with market diversification. Spanish firms show high persistence ratios, especially as exporters. The share of non-exporters that switches to the export market is also higher than the share of exporters that exit the foreign markets. Thus, the share of exporter firms on total firms increases. However, when we compute these ratios by export market in year t, figures show differences among export markets. This points out that sunk exporting costs might differ by market. We observe that the probability of remaining as an exporter as well as the transition ratio from non exporter to exporter is positively related with partner proximity and with market diversification - if the EU is one of the markets. If we control by the fact that firms exporting to a market in t can export to other markets in t+4, we observe that persistence ratios as exporters are found when firms remain exporting to the same market although those persistence ratios vary among markets. A striking result is that having experience in export to a market facilitates the entry in another market. Persistence ratios seem to be also related with market diversification. For firms that did not export in the previous year, we observe that firms seems to diversificate gradually their destination markets and use the EU as the first step.

Our econometrical analysis shows that sunk costs are relevant for the probability of export, regardless of the export market experience and the current market. Differences are found in the probability to export depending on which market the firm exported: experience exporting to the EU has a greater effect, alone or combined with any of the other two markets. The effect on continuing exporting to the same market is the largest. The effect on export to a larger number of markets than in the previous period is positive whiles the effect on exporting to a smaller number if smaller or even negative.

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	Comple	te Sample	Continuous Sample		
		Non-		Non-	
	Exporters	exporters	Exporters	exporters	
		1	994		
# of firms	1008	794	450	306	
% in sample	55.94	44.06	59.52	40.48	
Average size (employees)	440	62	331	69	
% of employment	89.95	10.05	87.59	12.41	
Exports / Sales (average)	26.86		28.40		
% of Total sales	92.79	7.21	89.06	10.94	
% of Total R&D	96.13	3.87	88.23	11.77	
% Foreign Capital ⁽¹⁾	89.43	10.57	91.38	8.62	
R&D intensity (% sales)	1.00	0.27	0.98	0.36	
Advertising Intensity (% sales)	1.95	0.72	1.98	0.72	
VA by employee ⁽²⁾	100	60.17	100	64.50	
Foreign capital > 25% (% of firms)	32.94	5.16	32.44	4.58	
		1	998		
# of firms	1086	619	508	248	
% in sample	63.70	36.30	67.20	32.80	
Average size (employees)	357	48	312	54	
% of employment	92.88	7.12	92.17	92.17	
Exports / Sales (average)	29.12		30.74		
% of Total sales	95.66	4.34	93.09	6.91	
% of Total R&D	98.74	1.26	97.32	2.68	
% Foreign Capital ⁽¹⁾	93.04	6.96	92.06	3.87	
R&D intensity (% sales)	0.94	0.25	1.01	0.28	
Advertising Intensity (% sales)	1.80	0.72	1.98	0.73	
VA by employee ⁽²⁾	100	59.93	100	61.89	
Foreign capital > 25% (% of firms)	30.94	3.88	31.89	2.42	
		2	002		
# of firms	1038	591	511	244	
% in sample	63.72	36.28	67.68	32.32	
Average size (employees)	295	56	335	51	
% of employment	90.28	9.72	93.20	6.80	
Exports / Sales (average)	30.19		32.59		
% of Total sales	93.14	6.86	94.59	5.41	
% of Total R&D	98.32	1.68	98.53	1.47	
% Foreign Capital ⁽¹⁾	92.15	7.85	95.86	4.14	
R&D intensity (% sales)	0.82	0.25	0.93	0.32	
Advertising Intensity (% sales)	1.62	0.23	1.83	0.88	
VA by employee ⁽²⁾	1.02	53.54	100	57.46	
Foreign capital > 25% (% of firms)	29.48	3.38	30.72	2.05	

Table 1: Sample representativeness: exporters and non-exporters.

Notes: (1) % of firms with foreign capital; (2) Exporters=100.

	1994								
Market	Exports/ Sales R&D intensity ⁽¹⁾		Advert intensity. ⁽¹⁾	Value Added by employee ⁽²⁾	Foreign capital > 25% ⁽³⁾				
Non-exporters		0.36	0.72	65	4.58				
Exporters	0.28	0.99	1.99	100	32.51				
EU	0.16	0.88	1.53	100	29.20				
OECD	0.02	0.00	3.70	122	0.00				
ROW	0.13	1.53	1.34	89	13.64				
EU & OECD	0.35	0.56	1.82	114	45.61				
EU & ROW	0.19	1.21	2.04	111	33.71				
OECD & ROW	0.00	0.00	0.00	0.00	0.00				
EU,OECD & ROW	0.43	1.02	2.40	120	32.52				
			1998						
Non-exporters		0.28	0.73	62	2.42				
Exporters	0.31	1.01	1.98	100	31.89				
EU	0.18	0.44	1.21	100	31.36				
OECD	0.01	0.00	0.74	35	0.00				
ROW	0.08	0.31	1.27	68	0.00				
EU & OECD	0.39	0.45	2.37	109	44.00				
EU & ROW	0.22	1.31	1.97	104	32.73				
OECD & ROW	0.57	1.79	0.25	105	100.00				
EU,OECD & ROW	0.43	1.38	2.42	119	31.25				
			2002						
Non-exporters		0.32	0.88	55	2.05				
Exporters	0.33	0.93	1.83	100	30.72				
EU	0.17	0.45	1.21	100	20.18				
OECD	0.29	0.86	2.27	68	33.33				
ROW	0.10	0.61	1.39	76	5.56				
EU & OECD	0.36	0.60	2.05	121	35.71				
EU & ROW	0.22	0.63	2.00	121	32.26				
OECD & ROW	0.04	0.00	1.26	36	0.00				
EU,OECD & ROW	0.46	1.40	2.04	108	36.12				

Table 2: Firms	' characteristics b	by export market	(continuous sample)
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Notes: (1) as percentage of total sales; (2) Exporters = 100; EU =100; (3) % on total firms. Source: Own calculations from ESEE data

Market	Num	ber of	Share in	Ext	orts by	Share in
	fir	ms ⁽¹⁾	exporters	fir	$m^{(1)(2)}$	exports
To 1 market	1	37	30.7%		6493	16.3%
EU	1	13	25.3%		6539	13.6%
OECD		2	0.4%		94	0.0%
ROW		22	4.9%		6842	2.8%
To 2 markets	1	46	32.7%		9213	24.7%
EU & OECD		57	12.8%	1	3570	14.2%
EU & ROW	8	39	20.0%		6423	10.5%
OECD & ROW		0	0.0%		0.000	0.0%
To 3 markets		63	36.5%		9684	58.9%
Total exporters	4	-46	100%		2204	100.0%
				998		
To 1 market	138 0.7%		27.2%	8319	28.1%	14.8%
EU	118 4.4%		23.2%	9677	48.0%	14.7%
OECD	1	-50.0%	0.2%	4	-95.3%	0.0%
ROW	19	-13.6%	3.7%	318	-95.4%	0.1%
To 2 markets	162	11.0%	31.9%	12110	31.4%	25.3%
EU & OECD	50	-12.3%	9.8%	16598	22.3%	10.7%
EU & ROW	110	23.6%	21.7%	9673	50.6%	13.7%
OECD & ROW	2		0.4%	33935		0.9%
To 3 markets	208	27.6%	40.9%	22356	13.6%	59.9%
Total exporters	508	13.9%	100%	15275	25.2%	100.0%
		•	=	002		
To 1 market	133	-3.6%	26.0%	8019	-3.6%	11.6%
EU	109	-7.6%	21.3%	9299	-3.9%	11.0%
OECD	6	500.0%	1.2%	7589	172956.9%	0.5%
ROW	18	-5.3%	3.5%	412	29.6%	0.1%
To 2 markets	151	-6.8%	29.5%	15478	27.8%	25.4%
EU & OECD	56	12.0%	11.0%	23889	43.9%	14.6%
EU & ROW	93	-15.5%	18.2%	10744	11.1%	10.9%
OECD & ROW	2	0.0%	00.4%	103	-99.7%	0.0%
To 3 markets	227	9.1%	44.4%	25473	13.9%	62.9%
Total exporters	511	0.6%	100%	17977	17.7%	100.0%

Table 0. Made to discussification and the automotive and interaction meaning	- (
Table 3: Market diversification and the extensive and intensive margin	s (continuous sample)

Notes: (1) For 1998 and 2002 figures show also, increase rate between actual and previous year. (2) in 1994 constant €. Source: Own calculations from ESEE data.

by foreign market	Year t+4 status with respect to	0	
Year t status	the same market as in t	1994-98	1998-02
To any market's o			
Exporter	Exporter	0.958	0.937
	Non-exporter	0.042	0.063
Non-Exporter	Exporter	0.252	0.145
	Non-exporter	0.748	0.855
Only to EU			
Exporter	Exporter	0.513	0.508
	Non-exporter	0.487	0.492
Non-Exporter	Exporter	0.093	0.077
•	Non-exporter	0.907	0.923
Only to OECD		1	1
Exporter	Exporter	0.000	0.000
	Non-exporter	1.000	1.000
Non-Exporter	Exporter	0.001	0.008
•	Non-exporter	0.999	0.992
Only to ROWAL	· · ·		
Exporter	Exporter	0.182	0.316
•	Non-exporter	0.818	0.684
Non-Exporter	Exporter	0.020	0.016
•	Non-exporter	0.980	0.984
To EU & OECD			
Exporter	Exporter	0.404	0.300
	Non-exporter	0.596	0.700
Non-Exporter	Exporter	0.039	0.058
	Non-exporter	0.961	0.942
To EU & ROWAL			
Exporter	Exporter	0.404	0.400
	Non-exporter	0.596	0.600
Non-Exporter	Exporter	0.111	0.076
	Non-exporter	0.889	0.924
To OECD & ROW	AL		
Exporter	Exporter		0.000
	Non-exporter		1.000
Non-Exporter	Exporter	0.003	0.003
	Non-exporter	0.997	0.997
To all markets			
Exporter	Exporter	0.791	0.749
	Non-exporter	0.209	0.251
Non-Exporter	Exporter	0.133	0.131
	Non-exporter	0.867	0.869

Table 4: Firms' transition rates in the export market (1994-1998-2002), by foreign market in year t.

Note: Figures in each cell are the ratio of firms in each status in year t (exporter/non-exporter to certain market or market's combination) that choose each of the status in year t+1 with respect to the same market as in t.

			Export market in t								
		Only	Only to UE		OECD	Only to ROWAL		EU & OECD			
Year t status	Year t+4 status	1994-98	1998-02	1994-98	1998-02	1994-98	1998-02	1994-98	1998-02		
Exporter	Exporter to only EU	0.513	0.508	0.000	0.000	0.045	0.211	0.105	0.120		
	Exporter to only OECD	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.040		
	Exporter to only ROWAL	0.018	0.008	0.000	0.000	0.182	0.316	0.000	0.000		
	Exporter to EU & OECD	0.018	0.093	0.500	0.000	0.000	0.000	0.404	0.300		
	Exporter to EU & ROWAL	0.248	0.102	0.000	0.000	0.364	0.158	0.123	0.100		
	Exporter to OECD & ROWAL	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000		
	Exporter to all markets	0.115	0.102	0.000	0.000	0.091	0.105	0.351	0.420		
	Non-exporter	0.088	0.169	0.500	1.000	0.273	0.211	0.018	0.020		
Non-exporter	Exporter to only EU	0.093	0.077	0.156	0.145	0.159	0.143	0.160	0.146		
	Exporter to only OECD	0.002	0.006	0.001	0.008	0.001	0.008	0.001	0.006		
	Exporter to only ROWAL	0.026	0.027	0.025	0.024	0.020	0.016	0.027	0.026		
	Exporter to EU & OECD	0.075	0.071	0.065	0.074	0.068	0.076	0.039	0.058		
	Exporter to EU & ROWAL	0.128	0.127	0.146	0.123	0.139	0.122	0.147	0.125		
	Exporter to OECD & ROWAL	0.003	0.003	0.003	0.003	0.001	0.003	0.003	0.003		
	Exporter to all markets	0.303	0.338	0.276	0.301	0.281	0.306	0.269	0.292		
	Non-Exporter	0.370	0.352	0.328	0.322	0.330	0.326	0.353	0.345		

Table 5: Firms' transition rates in the export market (1994-1998-2002), by foreign market in year t and in year t+4.

Figures in each cell are the ratio of firms in each status in year t (exporter/non-exporter to certain market or market's combination) that chooses each of the status in year t+1.

		Export market in t								
Year t status		EU & F	EU & ROWAL		ROWAL	ALL		Non-exporter		
	Year t+4 status	1994-98	1998-02	1994-98	1998-02	1994-98	1998-02	1994-98	1998-02	
Exporter	Exporter to only EU	0.135	0.136	0.000	0.000	0.018	0.024			
	Exporter to only OECD	0.000	0.000	0.000	0.000	0.000	0.005			
	Exporter to only ROWAL	0.034	0.036	0.000	0.000	0.000	0.000			
	Exporter to EU & OECD	0.067	0.091	0.000	0.000	0.074	0.097			
	Exporter to EU & ROWAL	0.404	0.400	0.000	0.000	0.110	0.116			
	Exporter to OECD & ROWAL	0.000	0.000	0.000	0.000	0.006	0.000			
	Exporter to all markets	0.360	0.300	0.000	1.000	0.791	0.749			
	Non-Exporter	0.000	0.036	0.000	0.000	0.000	0.010			
Non-exporter	Exporter to only EU	0.159	0.146	0.156	0.145	0.194	0.190	0.123	0.077	
	Exporter to only OECD	0.001	0.009	0.001	0.008	0.002	0.009	0.003	0.004	
	Exporter to only ROWAL	0.024	0.022	0.025	0.024	0.032	0.033	0.032	0.028	
	Exporter to EU & OECD	0.066	0.071	0.066	0.074	0.064	0.066	0.019	0.000	
	Exporter to EU & ROWAL	0.111	0.076	0.146	0.124	0.155	0.126	0.042	0.020	
	Exporter to OECD & ROWAL	0.003	0.003	0.003	0.003	0.002	0.004	0.000	0.008	
	Exporter to all markets	0.264	0.301	0.275	0.299	0.133	0.131	0.039	0.008	
	Non-Exporter	0.372	0.372	0.328	0.324	0.418	0.442	0.742	0.855	

Table 5: Firms transition rates in the export market (1994-1998-2002), by foreign market in year t and in year t+4 (cont.).

Figures in each cell are the ratio of firms in each status in year t (exporter/non-exporter to certain market or market's combination) that chooses each of the status in year t+1.

	exm	exm	exm	exm
Size	0,055***	0,011*	0,038***	0,038***
	[0,01]	[0,004]	[0,009]	[0,009]
Share of foreign capital	0,138**	0,054	0,153***	0,159**
	[0,067]	[0,023]	[0,055]	[0,055]
Labor productivity	0,063***	0,012	0,061***	0,062***
	[0,019]	[0,007]	[0,015]	[0,016]
R&D intensity	0,007	0,001	0,004*	0,004*
	[0,003]	[0,001]	[0,002]	[0,002]
1 if firm has participation in firms located abroad	-0,002	0,001	-0,003	-0,003
	[0,006]	[0,003]	[0,005]	[0,005]
1 if market is mainly foreign and increases or stable	0,132***	0,056***	0,119***	0,122***
	[0,019]	[0,01]	[0,016]	[0,016]
1 if firm exported at least to one market	0,362***			
	[0,018]			
1 firm exported at least to the EU		0,135***		
		[0,016]		
1 firm exported at least to the OCDE		0,022***		
•		[0,006]		
1 if firm exported at least to the ROWAL		0,028***		
<u>.</u>		[0,007]		
1 firm exported ONLY to the EU			0,044***	
<u>^</u>			[0,004]	
1 firm exported only to the OCDE				
* · ·				
1 firm exported only to the ROWAL			0,004***	
· ·			[0,001]	
1 firm exported ONLY to the EU and OECD			0,03***	
▲			[0,004]	
1 firm exported ONLY to the EU and ROW			0,047***	
▲			[0,004]	
1 firm exported ONLY to the ROW and OECD			0,003	
k			[31864,27]	
1 firm exported to all three markets			0,144***	
*			[0,013]	
One destination				0,049***
				[0,004]
Two destinations				0,087***
				[0,007]
Three destinations				0,146***
				[0,013]
Constant				
Observations	2190	1632	2263	226
Number of ide	756	741	756	756

 Table 6 Estimation of the probability of being an exporter (marginal effects)

Standard errors in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 7: Estimation of the probability of being an exporter considering different export (marginal effects)

	1 if firm	1 if firms exports at least to the 1 if		1 if firms	1 if firms exports ONLY to the EU and EU and		1 if firms exports to	1 if firms	s exports ON EU and	LY to the EU and	1 if firms exports to
por mercados	EU	ROWAL	OCDE	EU	ROW	OECD	all three markets	EU	ROW	OECD	all three markets
Size	0,079***	0,026	0,07***	0,002	0,009	0,009***	0,046***	0,002	0,007	0,008***	0,047***
	[0,013]	[0,017]	[0,012]	[0,006]	[0,005]	[0,003]	[0,009]	[0,006]	[0,005]	[0,002]	[0,009]
Share of foreign capital	0,113	-0,155***	-0,043	0,03	0,004	0,013	-0,092***	0,035	-0,001	0,013	-0,092***
	[0,072]	[0,067]	[0,047]	[0,027]	[0,021]	[0,011]	[0,035]	[0,026]	[0,019]	[0,009]	[0,036]
Labor productivity	0,117***	0,027	0,032	0,021*	0,044***	0,011*	0,017	0,018	0,037***	0,008*	0,018
	[0,024]	[0,034]	[0,024]	[0,012]	[0,011]	[0,006]	[0,019]	[0,012]	[0,01]	[0,005]	[0,019]
R&D intensity	0,003	0,012***	0,005***	-0,001	-0,001	-0,002***	0,008***	-0,001	-0,001	-0,002***	0,009***
	[0,003]	[0,004]	[0,003]	[0,002]	[0,001]	[0,001]	[0,002]	[0,002]	[0,001]	[0,001]	[0,002]
1 if firm has participation in	-0,006	0,014*	-0,002	-0,006*	0,001	-0,002	0	-0,006*	0,001	-0,001	0
firms located abroad	[0,007]	[0,007]	[0,005]	[0,003]	[0,002]	[0,001]	[0,003]	[0,003]	[0,002]	[0,001]	[0,003]
1 if market is mainly foreign	0,086***	0,01	0,033***	0,005	0	0,002	0,02***	0,005	0	0,002***	0,02***
and increases or stable	[0,012]	[0,009]	[0,007]	[0,004]	[0,003]	[0,002]	[0,005]	[0,004]	[0,003]	[0,001]	[0,005]
1 firm exported only	0,072***	-0,011	0,017***	0,022***	0,014***	0,004***	0,012***				
to the EU	[0,005]	[0,008]	[0,006]	[0,003]	[0,002]	[0,001]	[0,005]				
1 firm exported only	0,001	-0,002	0,001***	0	0	0***	-0,008				
to the OCDE	[0,001]	[0,001]	[0,001]	[0]	[0]	[0]	[25610,04]				
1 firm exported only	0,003***	0,006***	0,001	0	0,003***	-0,006	0,001				
to the ROWAL	[0,001]	[0,002]	[0,002]	[0,001]	[0,001]	[7015574]	[0,001]				
1 firm exported only	0,047***	0,006	0,037***	-0,002	0,004***	0,005***	0,017***				
to the EU and OECD	[0,005]	[0,004]	[0,003]	[0,002]	[0,002]	[0,001]	[0,002]				
1 firm exported only	0,065***	0,029***	0,034***	-0,001	0,017***	0,004***	0,025***				
to the EU and ROW	[0,005]	[0,007]	[0,004]	[0,002]	[0,002]	[0,001]	[0,003]				
1 firm exported only	0,005	0,006	0,001	-0,002	0^{***}	-0,001	0,001*				
to the ROW and OECD	[0]	[0]	[0]	[0]	[0]	[0,806]	[0]				
1 firm exported to	0,178***	0,094***	0,123***	-0,034***	0,011***	0,007***	0,082***				
all three markets	[0,013]	[0,012]	[0,007]	[0,006]	[0,004]	[0,002]	[0,005]				
One destination								0,018***	0,014***	0,004***	0,013***
								[0,003]	[0,002]	[0,001]	[0,005]
Two destinations								-0,003	0,015***	0,006***	0,042***
								[0,003]	[0,002]	[0,001]	[0,005]
Three destinations								-0,033***	0,01***	0,006***	0,085***
								[0,006]	[0,003]	[0,001]	[0,005]
Observations	2263	1461	2262	2267	2267	2267	2267	2267	2267		2267
Number of ide	756	552	756	756	756	756	756	756	756		756