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CENTRO RICERCHE ECONOMICHE NORD SUD

THE EUROPEAN FIRMS' EXPORT ACTIVITY TO THE NEIGHBOURING COUNTRIES

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The European firms' export activity to the neighbouring countries

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Abstract

The main goal of this paper is to study empirically the export decisions of the European firms and to explore their international activities to the European Neighbouring Countries (ENCs).

We investigate what are the main characteristics, behaviour and strategies of European firms that export to and invest in one or more ENCs, in order to single out which are at the national level (data are not available at the regional level) the location determinants of European investments and trade patterns.

We concentrate our analysis on exporting flows for which data are very detailed, and starting from this, we explore which are the main European exporting destinations and investigate on the intensive and the extensive margin; we control for several firms' characteristics and if exporting firms are active in foreign markets.

To achieve our aims, we use the EFIGE dataset on firms from seven European countries and we isolate and compare exports to 16 neighbouring countries, with respect to all other possible world destinations.

Keywords: Trade flows; Export concentration; EU countries; European Neighbouring Policy.
Jel Classification: F13, F14, F15

1. Introduction

Globalised markets and production networks characterize the key challenges for firms which want to run in the international markets. The general outlook is represented by higher competitiveness, emerging economies, new technologies and lesser trade barriers; they are increasing so fast, forcing firms to correct and rearrange their activity in order to be able to operate on a global scale.[1] Adding the internal market integration and the introduction of the single currency, we depict the overall situation in which European Union firms have carried out their activities during the last decade. Moreover the economic crisis in recent years leads new efforts and challenges with which firms have to cope if they want to survive in the internal and global markets.

Firms' point of view is crucial to identify and to value in which way the increased worldwide integration of real and financial market has affected the overall economy.[2] In fact, firms perform international operations (exports, imports, foreign direct investments, international outsourcing) and their activity in the international markets lies at the core of competitiveness. It is clearly recognized in the literature that the firm perspective is the point of view more apt for formulating better policies which help national states' exporting capability and therefore growth.[3]

This paper aims at analysing and empirically examining the international activity of EU firms in the area interested by the EU neighbouring policy.

We well know that, at the country level, Mediterranean neighbouring countries in last ten years have made progress towards trade liberalization. Tariffs applied to goods have reduced as the implementation of Free Trade Agreements with the European Union, leading in 2000-2006 to growing volumes of trade flows between the Mediterranean region and EU partners and to growing exports to the EU. Exports from the EU to the Mediterranean countries have also grown but not at the same speed of MED exports. Trade in services and investments remained at a low level during the same period. Such as

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[1] Altomonte C., Acquilante T. (2012).

[2] The international trade literature has begun to devote attention to the activity of firms, which have been found systematically different according to their export status. Theoretical developments have followed Melitz (2003). From that point a rich empirical literature has stressed the importance of firm level determinants in explaining success in the international markets (Bernard and Jensen, 2007; Bernard, Jensen, Redding and Schott, 2007).

[3] Altomonte C., Acquilante T., Ottaviano G.I.P. (2012).

Mediterranean neighbouring countries, the EU's Eastern Neighbourhood have further opened up their economies to international trade and implemented liberal trade regimes with low average levels or tariff protection. During the 2000-2006 the EU was the single largest trading partner for almost all the countries of the region and for several years. FDI flows in some countries of the Eastern Neighbourhood were very limited, in other words FDI has remained low in absolute terms, but very significant as a share of GDP. In last period something seems to be changing, although cumulative FDI still remains modest.[4]

Regardless the several bilateral agreements signed and the relative proximity of neighbouring countries to the EU, the EU trade activity in the neighbouring area appears to be quite low with respect to other destinations.[5] The available evidence is based on disaggregated data by sector at the country level.

In this paper we want to use firm level data, which allow to control for several dimensions and which contribute to competitiveness and success in the international markets, in order to study the activity of EU firms in the neighbouring countries. We will investigate on the role that ENCs play in increasing the number of EU exporting firms and the volume of their exports. The data we use allow to ascertain how important are the ENCs in a wider area for EU exports. In fact we are going to evaluate whether the status of being in the 'neighbourhood' of Europe (clearly defined by the existing policy) makes more likely being a destination of EU products with respect to countries which are just at the border of neighbourings but are not covered by the Neighbourhood Policy. In a final part we will concentrate on characteristics of firms operating in the neighbouring area as main destination of their product. The analysis is aimed at isolating factors which contribute to the activity of the firms in our interest destination. The firms descriptive analysis let to identify factors important for competitiveness. Competitiveness, in fact, has a crucial importance on growth processes and exports. We also question whether exporters to the ENCs are internationally active in terms of foreign investments and outsourcing. The wide set of information available at the firm level allows us to compare exporters in competitive terms, identifying what level of productivity induces firms to export to the ENCs.

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[4] See *http://trade.ec.europa.eu/doclib/docs/2010/november/tradoc_146941.pdf* for and extend analysis for the EU-ENP analysis.

[5] See Pinna A.M. (2012) for more details.

The EFIGE dataset consists of about 15,000 firms. It is the first dataset in Europe, which comprises quantitative and qualitative information comparable across countries about six main categories on firms economic activity. Data refers to seven EU countries: six countries are from the Old Europe (Austria, France, Germany, Italy, Spain, UK) and one is from the New Europe (Hungary). Given the objective of the dataset (to study international operations of firms), firms included in the dataset have been selected using a sampling design that follows a stratification by sector and firm size. In fact, the reference population is composed by firms with more than 10 employees; this is the reason because internationally active firms are more numerous in EFIGE sample with respect to domestic firms. The truncation of the sample requires a weighting system in order to guarantee balance.

The paper will follow this structure. Section 2 will describe in detail the EFIGE dataset and how it is composed. Section 3 will look at firms' exporting activity, exploring the main European export partners at the country level, decomposing countries' manufacturing exports into the intensive and the extensive margin and investigating the differences on firms' characteristics between exporters to ENCs and exporters not to the neighbouring countries (also considering their TFP distribution). By merging EFIGE with Amadeus information on firms' spread sheet, in fact, we can further investigate on firms productivity and other factors which influence their competitiveness dynamics at the micro level. We will also explore if exporting firms are active in foreign markets carrying out international activities and how they decompose their investments across areas. Section 4 will provide some concluding remarks. The appendix provides a detailed list of all 193 countries included in our analysis and how are they allocated to several groups in order to test for the relative importance that the ENCs have with respect to destinations which are alternative for EU products.

2. The data[6]
The EFIGE dataset is a database recently collected within the EFIGE project (*European Firms in a Global Economy: internal policies for external competitiveness*) supported by the Directorate General Research of the European Commission through its 7th Framework Programme and coordinated by Bruegel.

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[6] See Altomonte C., Acquilante T. (2012) pages 4-5-6.

The dataset is focused on international operations combining information about firms' international activities (i.e. exports, outsourcing, FDI, imports) but also other different sets of firms' activities. Overall it includes quantitative e qualitative information on about 150 items divided into six section:

    1.structure of the firm;
    2.workforce;
    3.investment, technological innovation and R&D;
    4.export and internationalization processes;
    5.market structure and pricing;
    6.financial structure and bank-firm relationship .

Data consists of a representative sample (at the country level for the manufacturing industry) of almost 15,000 surveyed firms (above 10 employees) in seven European countries (Austria, France, Germany, Hungary, Italy, Spain and UK). Data was collected in 2010 and covers the years from 2007 to 2009.

The EFIGE dataset has been built to achieve three criteria:

• the availability of a representative target of firms in harmony with countries size: larger countries have more firms than smaller ones;

• a minimum response rate;

• a proper stratification of the sample in order to ensure representativeness of the collected data. The sample stratification has been made using three elements: industries (11-NACE classification), regions (NUTS-1 level of aggregation) and size class (10-19; 20-49; 50-250; more than 250 employees). Due their relevance in aggregate competitiveness dynamic, but their small weight in a standard stratification of the sample of firms, large firms have been oversampled (doubling their weight).

The EFIGE data have been complemented by balance-sheet data drawn from the Amadeus database managed by Bureau van Dyck and by the total factor productivity in 2008.

The data collection has been performed through a survey. Firms were asked several questions on exports, imports, foreign direct investments (FDI) and international outsourcing (IO), which includes international production carried out under arm-length contracts by third foreign companies. The EFIGE dataset has as main use to investigate the correlation patterns between the international activities of firms and their competitiveness.

First of all, we describe how the sample is composed focusing on export status (Table 1). Given our goals, we need to know how many exporting

firms are included in our sample and how many exporters to the neighbouring countries exist.

Table 1. The EFIGE dataset

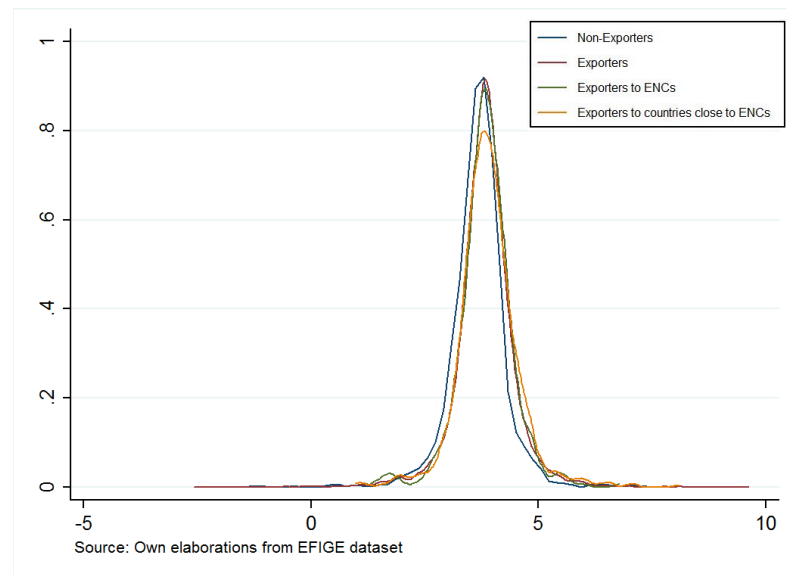| Country	Exporters	Non-Exporters	Exporters in ENCs	Exporters with ENCs as first destination	All firms
Austria	342	101	6	0	443
France	1861	1112	153	61	2973
Germany	1901	1034	37	13	2935
Hungary	342	146	9	4	488
Italy	2231	790	181	64	3021
Spain	1796	1036	143	24	2832
UK	1376	691	25	8	2067
TOTAL	9849	4910	554	174	14759

Source: Own calculations from EFIGE dataset

The observed firms are 14,759 belonging to seven different countries, which don't include the same number of observations: Italy, France, Germany and Spain include around 3,000 firms, UK more than 2,000 observations, Austria and Hungary just less than 500 firms. 67% of the sample is represented by exporters (9849 firms): firms are classified as exporters if they export directly from the home country or if they sold abroad some or all of their own product/services in 2008. 554 are exporters in the ENCs, this means that they have at least one neighbouring country in their top three export destinations; the survey asked firms to indicate the three top destinations of their export activities. 174 firms have an ENC as first export destination (i.e. these firms export the majority of their production in a neighbouring country). None of Austrian exporters have as main target one neighbouring country. In fact, speaking in percentage terms, it's easy to notice that the ENCs are not the main destinations of European firms: just 6% of firms decide to export in one or more neighbouring countries and when we look at the first export destination percentage is less than 2%.

Graph 1 shows the Kernel density distribution of labour productivity for four kind of firms: non-exporters, exporters, exporters to the ENCs and

exporter to countries which are not ENCs but are very close to therm. Plotting the Kernel density distribution of labour productivity we can see, for each type of firm, a normal distribution with a mean of 4 (logarithmic value); exporters seem do better than other firms, even if there are not significant differences across groups.

In Graph 2, we plot again the labour productivity distribution, but looking at nation states. We can notice that exporters firms do better than non-exporters for almost all countries (we have to remember that Austria and Hungary have a less number of observations, then we have not shown Austrian and Hungarian firms distributions): the productivity distribution of exporters is rightward-shifted with respect to that of non-exporters. Looking at exporters in neighbouring countries and exporters in close areas of ENCs we find differences across countries. In France there are not dissimilarities between the two distributions. In Germany and Spain firms which export to the ENCs do better than exporters in countries close to the ENCs, in Italy happens the contrary.

Graph 1. Kernel density of productivity by export status

Source: Own elaborations from EFIGE dataset

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Graph 2. Kernel density of productivity by export status and by country

Source: Own elaborations from EFIGE dataset

Legend:
- Non-Exporters
- Exporters
- Exporters to ENCs
- Exporters to countries close to ENCs
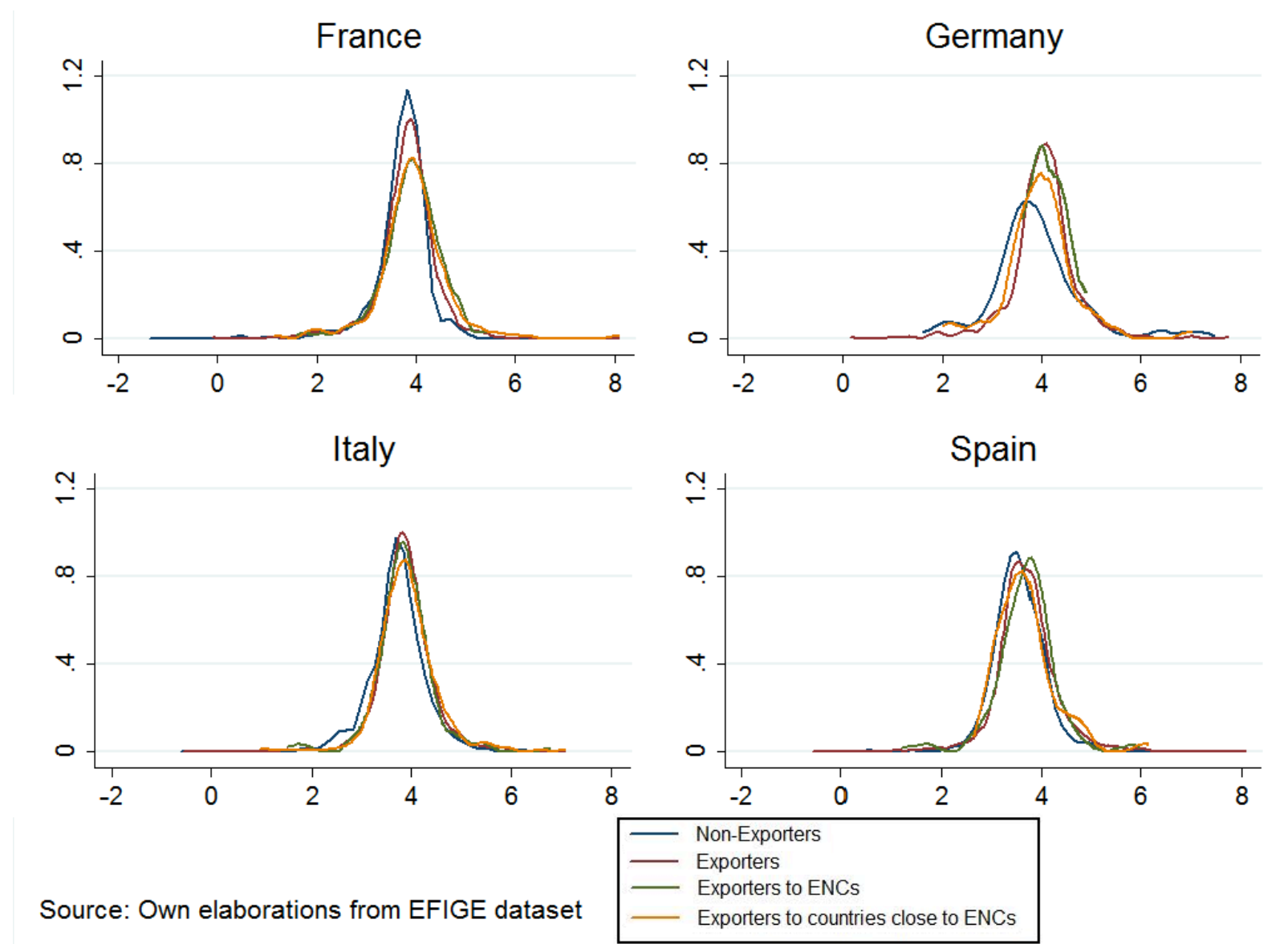
3. Exporting activity

Export diversification is defined as the change in the composition of a country's existing export product mix or export destination (Ali, Alwang and Siegel, 1991), or as the spread of production over many sectors (Berthelemy and Chauvin, 2000).[7] To concentrate the whole export activity in a few destinations imposes risks for the continuity of the exporting activity, hence in this paragraph we want to study how diversified are European firms' exports.

We study European export diversification from two points of view. First of all, we look at geographical diversification in order to know and understand where European firms' exports are going. Second, we deepen the extensive and the intensive margin so as to investigate if European firms' exports are expanding to new destinations or to new products or are intensifying existing trade relationships. Third, we investigate on differences in firms' characteristics and determine what is the level of productivity which induces firms to export comparing firms with the ENCs as main export destination and firms which export, instead, mainly in the other countries. We complete the analysis providing some descriptive evidences on international activity of firms.

3.1 Main export destinations: ENCs or not?

EFIGE data are very detailed in terms of exporting activity listing for each firm its first, second and third main export destination.

Looking at the main neighbouring export destinations (Table 2), it's clear that proximity and colonial legacy affect firms export decisions and choices. Morocco, Algeria and Tunisia are, without surprise, the main export destinations for France. Hungary trades mainly with Ukraine; UK with Israel. In addition size - in terms of GDP - also matters. Moreover it's easy to observe that destinations are almost the same when we look at the first, second or third destination. We can say that Table 2 reflects what the gravity model says: bilateral trade flows directly depend on the economic sizes of countries and indirectly on the distance between nations.

To better understand European firms strategies and choices it's useful to analyze when their first export destination is a neighbouring country and when not (Table 3) taking into account just firms which their main destination is a country belonging to an area where the ENCs are included (Area 3, Area 5 and Area 8). In other words, to value the firms' export decisions to the ENCs, we consider just firms which export in

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[7] When measuring export diversification while horizontal diversification entails the adding of new products to the existing export bundle, vertical differentiation entails a shift from the primary to the secondary or tertiary sector.

those areas where ENCs are included in order to know when European firms export in a neighbouring country and when, instead, they decide to export in a country included in the same area. EFIGE data by destination are very aggregated, they consist in 193 countries divided into 8 areas:

- AREA 1 "15 UE COUNTRIES" (15 countries);
- AREA 2 "OTHER UE COUNTRIES" (12 countries);
- AREA 3 "OTHER EUROPEAN COUNTRIES NOT EU" (22 countries);
- AREA 4 "CHINA & INDIA" (2 countries);
- AREA 5 "OTHER ASIAN COUNTRIES" (42 countries);
- AREA 6 "U.S. & CANADA" (2 countries);
- AREA 7 "CENTRAL & SOUTH AMERICA" (33 countries);
- AREA 8 "OTHER AREAS" (65 countries).

Our 15 neighbouring countries are included in area 3, 5 or 8. For a detailed list of all countries included in each area see Appendix .

Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine are included in area 3; area 5 includes, inter alia, Jordan, Israel, Lebanon, Syria; Algeria, Egypt, Libya, Morocco, Tunisia belong to area 8.

To create Table 3 we have divided each area where the ENCs are included (3,5 and 8) in three groups: ENCs, countries close to the ENCs, countries far from the ENCs; this allows us to understand when firms, which export mainly in area 3, 5 or 8, export in a neighbouring country and when not. Appendix gives details on which countries we have considered as close to area 3 (5 or 8).

Table 3 tells us that just 16 Austrian firms, out of 342 total exporters (see Table 1), choose to export in area 3 (3 out of 16 export in close countries to the ENCs and 13 in countries which are far from the ENCs), 2 export in area 5 (but not in ENCs) and 1 in other countries included in area 8. These findings are important because they inform us that Austrian firms decide to trade with countries which are not the ENCs. More, they do not even share a border with them, therefore those countries are not a valid alternative. France has 1861 exporters, 153 (8%) export in ENCs and 61 have neighbouring countries as first export destination. 58 out of 61 have as main destination an ENC included in area 8. But Table 3 allows us to observe that 107 French firms export in area 3, but 0 export in neighbouring countries and 86 export in countries included in area 3 but far from ENCs. When we look at area 5, 48% of firms have as a main destination a country included in area 5 close to the ENCs, only 5% in one ENC e the rest (47%) in countries belonging to area 5, but not close to the ENCs. Germany, Italy and Spain condition look like the

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French one: in area 3 and 5 firms prefer to export not in neighbouring countries, but in area 8 our ENCs are the main destinations of German, Italian and Spanish exporting firms. Hungary firms don't export in area 5 and 8; in area 3 neighbouring nations represent 22% of export destination. English exporters choose to export much more in area 5, but not in the ENCs; looking at area 8 exports to the neighbouring countries are 13%.

Table 2. Main ENCs by top export destinations and by country

	Austria	France	Germany	Hungary	Italy	Spain	UK
First export destination in the ENCs	None ENCs as first top destination	Morocco Algeria Tunisia	Egypt Morocco Ukraine	Ukraine	Algeria Tunisia Egypt	Morocco Algeria	Egypt
Second export destination in the ENCs	Israel Egypt	Tunisia Algeria Morocco	Ukraine Egypt Israel	Algeria Moldova Ukraine	Ukraine Tunisia Egypt	Morocco Algeria Egypt	Israel Azerbaijan
Third export destination in the ENCs	Egypt Jordan Ukraine	Morocco Algeria Tunisia	Ukraine Algeria Morocco	Ukraine Israel	Ukraine Israel Algeria	Morocco Algeria Tunisia	Israel Egypt Azerbaijan

Source: Own calculations from EFIGE dataset

Table 3. First export destination in Area 3, 5 or 8

First export destination in Area 3, 5 or 8	Austria		France		Germany		Hungary		Italy		Spain		UK	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Area 3	**16**	**100**	**107**	**100**	**163**	**100**	**18**	**100**	**214**	**100**	**39**	**100**	**55**	**100**
ENCs in area 3	0	0	0	0	3	2	4	22	5	2	2	5	1	2
Area 3 close countries	3	19	21	20	43	26	9	50	113	53	24	62	17	31
Area 3 other countries	13	81	86	80	117	72	5	28	96	45	13	33	37	67
Area 5	**2**	**100**	**62**	**100**	**46**	**100**	**0**	**0**	**83**	**100**	**15**	**100**	**130**	**100**
ENCs in area 5	0	0	3	5	2	4	0	0	12	14	2	13	1	1
Area 5 close countries	1	50	30	48	14	30	0	0	37	45	8	53	85	65
Area 5 other countries	1	50	29	47	30	65	0	0	34	41	5	33	44	34
Area 8	**1**	**100**	**97**	**100**	**17**	**100**	**0**	**0**	**57**	**100**	**34**	**100**	**47**	**100**
ENCs in area 8	0	0	58	60	8	47	0	0	47	82	20	59	6	13
Area 8 close countries	0	0	33	34	6	35	0	0	5	9	14	41	21	45
Area 8 other countries	1	100	6	6	3	18	0	0	5	9	0	0	20	43

Source: Own calculations from EFIGE dataset

3.2 Intensive and extensive margin

Recent research on trade diversification distinguishes country's manufacturing exports into two 'margins': the intensive and the extensive one. The intensive margin refers to changes in diversification among a set of goods that are commonly traded over the period reflecting the inequality between the allocations of active export lines; in other words, it relates to higher volumes of existing products and destinations. The extensive margin, instead, takes account of the effect of newly traded (or disappearing) goods on diversification; simply it refers on new products and destinations.

Analysis on intensive and extensive margin have a key role because inform on the distribution of economic activity across existing products/sectors (the intensive margin) and on the potential for broadening the country's export portfolio to new sectors or destinations (the extensive margin).

As a first thing we provide a descriptive analysis computing the extensive and the intensive margin by country and by firm size class.

Table 4**Error! Reference source not found.** shows that the share of exporters increases with firm size. In absolute terms exporters in class 20-49 employees are more than any other class, this is because there are more firms in this class; but in relative terms it's clear that in each country propensity to export raises when firms are bigger. Table 4 informs also that there are not noteworthy differences across countries.

When we consider only firms which have the ENCs as main destinations (Table 5) it seems that the probability to export doesn't increase when firm's size increases. Looking at the main exporters to the neighbouring (France, Italy and Spain) we find that propensity to export is lower for big firms (> 250 workers) in France and Italy, but in Spain percentage is almost the same than other classes.

When we consider the intensive margin (Table 6) three points are evident: a) the amount of exports increases whit firm's size; b) exporters and exporters in ENCs don't show the same percentage by size class; c) differences across countries are relevant.

Table 2. The extensive margin by firm size class: exporters

Size class	Austria		France		Germany		Hungary		Italy		Spain		UK	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
10-19	97	73%	492	49%	337	48%	88	59%	688	66%	542	52%	370	58%
20-49	115	68%	711	62%	699	62%	117	66%	1036	74%	812	65%	519	64%
50-249	88	91%	470	77%	623	79%	93	79%	372	87%	313	77%	402	77%
more than 249	42	91%	188	88%	242	79%	44	98%	135	93%	129	88%	85	79%
Total	342	77%	1861	63%	1901	65%	342	70%	2231	74%	1796	63%	1376	67%

Source: Own calculations from EFIGE dataset

Table 3. The extensive margin by firm size class: exporters to the ENCs

Size class	Austria		France		Germany		Hungary		Italy		Spain		UK	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
10-19	2	2%	44	9%	4	1%	2	2%	63	9%	36	7%	3	1%
20-49	1	1%	64	9%	17	2%	4	3%	83	8%	66	8%	17	3%
50-249	2	2%	33	7%	14	2%	2	2%	28	8%	30	10%	3	1%
more than 249	1	2%	12	6%	2	1%	1	2%	7	5%	11	9%	2	2%
Total	6	2%	153	8%	37	2%	9	3%	181	8%	143	8%	25	2%

Source: Own calculations from EFIGE dataset

Table 4. The intensive margin by firm size class: exporters and exporters to the ENCs

Size class	Austria		France		Germany		Hungary		Italy		Spain		UK	
	Exp.	Exp. to ENCs	Exp.	Exp. to ENCs	Exp.	Exp. to ENCs	Exp.	Exp. to ENCs	Exp.	Exp. to ENCs	Exp.	Exp. to ENCs	Exp.	Exp. to ENCs
10-19	27%	33%	23%	23%	25%	14%	31%	43%	31%	30%	22%	21%	28%	34%
20-49	33%	63%	27%	28%	30%	39%	43%	51%	34%	41%	24%	31%	29%	31%
50-249	58%	75%	34%	32%	34%	46%	52%	84%	42%	39%	34%	23%	33%	58%
more than 249	62%	85%	42%	39%	37%	55%	72%	100%	53%	46%	41%	31%	35%	20%
Total	43%	60%	30%	28%	31%	40%	47%	62%	36%	37%	27%	27%	30%	34%

Source: Own calculations from EFIGE dataset

Secondly we analyze the export decisions, i.e. the extensive margin of export estimating a linear probability model where the dependent variable is a dummy which is equal to 1 if a firm exports and 0 otherwise. Exploring in a simple way the propensity of exporting at the national level, using country dummies as only regressors, we find that (results are not displayed in table), compared to Germany (benchmark country), Austria and Italy have a higher propensity to export, UK and Hungary have the same German propensity, France and Spain, on the other hand, have a smaller tendency to export. R^2 is however very low, hence country dummies are not able to explain what affects firms' propensity to export. Given these results, we estimate a linear probability model looking this time at the main destinations areas of EU firms' exports and investigating on the heterogeneity of countries within Area 3 (5 and 8). For this purpose, we employ in Table 7 area dummies and use an expedient for each area where neighbouring countries are present (3, 5 and 8), distinguishing them in three sub-groups: the ENCs, countries close to them and other countries. Dividing those areas in three sub-groups we can investigate on whether ENCs are more important since their neighbouring status by comparing them with the other countries in the groups.

Table 5. The extensive margin: linear probability model of export decisions

Dependent variable: Firm probability of exporting	(1) Country, Area & ENCs dummies (all sample)	(2) Area & ENCs dummies (Austria)	(3) Area & ENCs dummies (France)	(4) Area & ENCs dummies (Germany)	(5) Area & ENCs dummies (Hungary)	(6) Area & ENCs dummies (Italy)	(7) Area & ENCs dummies (Spain)	(8) Area & ENCs dummies (UK)
Austria	0.0285							
France	-0.0390***							
Hungary	0.0463**							
Italy	-0.0385***							
Spain	-0.0357***							
UK	-0.0631***							
Area 1	0.533***	0.412***	0.557***	0.466***	0.425***	0.525***	0.601***	0.568***
Area 2	0.177***	0.144***	0.151***	0.177***	0.258***	0.188***	0.175***	0.214***
Area 4	0.172***	0.102***	0.177***	0.149***	0.0544	0.164***	0.173***	0.224***
Area 6	0.155***	0.0805***	0.142***	0.147***	0.156**	0.147***	0.0968***	0.205***
Area 7	0.196***	0.0518	0.180***	0.183***	0.127***	0.193***	0.202***	0.179***
ENCs in area 3	0.195***	0.211***	0.282***	0.188***	0.284**	0.167***	0.171**	0.330***
Countries close to ENCs area 3	0.150***	0.146***	0.139***	0.139***	0.133***	0.166***	0.152***	0.143***
Other countries area 3	0.135***	0.0531***	0.182***	0.141***	0.0828	0.163***	0.128***	0.129***
ENCs in area 5	0.143***	0.0399	0.202***	0.101*	0.127***	0.133***	0.151***	0.206***
Countries close to ENCs area 5	0.240***	0.215***	0.241***	0.194***	0.0657	0.148***	0.224***	0.338***
Other countries area 5	0.167***	0.00806	0.178***	0.171***	0.0129	0.186***	0.145***	0.152***
ENCs in area 8	0.233***	0.110*	0.245***	0.241***	0.295***	0.242***	0.205***	0.153
Countries close to ENCs area 8	0.279***		0.310***	0.204***		0.207***	0.309***	0.270***
Other countries area 8	0.137***	0.0564**	0.125***	0.0973**	0.420***	0.0939***	0.106**	0.158***
Constant	0.373***	0.499***	0.322***	0.402***	0.447***	0.340***	0.312***	0.274***
Observations	14,759	443	2,973	2,935	488	3,021	2,832	2,067
R-squared	0.484	0.354	0.485	0.380	0.350	0.539	0.508	0.588

*** p<0.01, ** p<0.05, * p<0.1

Source: Own calculations from EFIGE dataset

From Table 7 it's clear that Old Europe has in all regressions the highest influence on export probability. ENCs in area 3 prevail over countries close to the ENCs and over other countries in the area. Considering area 5, countries close to the ENCs are leading in this area. When we take account area 8 in some countries (like Hungary) exports decisions are drawn by countries distant from the ENCs, in others (i.e. Germany and Italy) the ENCs have a stronger effect, in the remaining (like France, Spain and UK) countries close to the ENCs have the main influence.

Table 7 highlights and confirms what found in the previous analysis about FDI and IO: intra Europe trade is visibly developed, in fact Old Europe has a strong effect on export decisions. ENCs are not more important than other countries in some areas, even if southern ENCs have a key role on European firms' export patterns.

In Table 8, we repeat the same regressions as in Table 7, but now we look at export shares (intensive margin) and we investigate on which countries and which export destinations have the higher influence on the amount of exports.

Table 6. The intensive margin: estimates of export shares, only exporters

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Amount of exports	Country, Area & ENCs dummies	Area & ENCs dummies	Area & ENCs dummies	Area & ENCs dummies	Area & ENCs dummies	Area & ENCs dummies	Area & ENCs dummies	Area & ENCs dummies
	(all sample)	(Austria)	(France)	(Germany)	(Hungary)	(Italy)	(Spain)	(UK)
Austria	13.87***							
France	-2.050**							
Hungary	21.01***							
Italy	3.788***							
Spain	-3.364***							
UK	-5.402***							
Area 1	6.737***	11.57*	4.413*	3.089	24.22***	8.496***	8.090***	1.329
Area 2	-3.785***	-17.90***	-0.0524	-1.413	-19.16***	-3.647**	6.477**	-4.240*
Area 4	15.42***	22.56***	15.81***	10.04***	-18.97	16.66***	15.58***	16.31***
Area 6	14.11***	19.25**	9.076***	9.238***	22.07**	16.91***	16.58***	13.82***
Area 7	3.594***	-0.720	-3.841	8.205**	-48.64***	3.932	1.147	20.07***
ENCs in area 3	9.383***	27.11***	-4.684	11.28	25.46*	8.011**	15.75	-7.096
Countries close to ENCs area 3	8.369***	13.94**	11.14***	5.561**	10.50**	6.832***	14.41***	9.127**
Other countries area 3	-2.307***	-11.91**	-3.551**	-4.209***	14.29	-4.261**	2.168	6.716**
ENCs in area 5	2.093	-2.068	8.558	2.854	36.36***	-8.689**	12.91**	4.126
Countries close to ENCs area 5	11.19***	8.092	12.54***	11.93**	0.227	14.88***	11.46**	5.693**
Other countries area 5	12.77***	-0.575	10.37***	11.57***	-9.839	12.13***	15.30***	14.93***
ENCs in area 8	1.700	16.90	-0.929	4.614	54.74***	4.767*	0.483	7.327
Countries close to ENCs area 8	6.402***		0.0874	18.34**		2.100	1.222	13.32***
Other countries area 8	3.590*	15.55	-0.431	15.03**	-42.92***	4.293	5.203	1.255
Constant	20.77***	36.85***	22.07***	25.02***	34.43***	23.01***	15.10***	18.60***
Observations	7,885	257	1,439	1,314	254	1,978	1,426	1,217
R-squared	0.119	0.217	0.080	0.104	0.250	0.117	0.087	0.160

*** p<0.01, ** p<0.05, * p<0.1

Source: Own calculations from EFIGE dataset

If we consider all sample (column 1) Austrian, Hungarian and Italian firms confirm their higher propensity to export also in quantitative terms (taking Germany as benchmark); it's clear that area 4 (China and India) and area 6 (U.S. and Canada) have the highest influence on the quantity exported. The ENCs don't play a crucial role on the amount of exports. R^2 are low compared with those one in Table 7. At the country level (of the columns 2-8) we observe some heterogeneity. ENCs are quite important destinations for Austrian and Hungarian exports (in terms of quantity). French firms export more to China and India; German firms, instead, export more in Area 8, but less to the ENCs in the area. Italian and Spanish firms export more to China and India and to U.S. and Canada. For UK firms, Central and South America nations are the main destinations in terms of quantity exported.

3.3 How different are firms which export to the ENCs?

In this subsection we investigate if firms which export mainly to the ENCs are characterized by qualities that allow them to export in a profitable way. To better understand which are the characteristics of those firms, we firstly distinguish firms in three groups (exporters, non-exporters, exporters to the ENCs) and we compare them along different characteristics. Then, we reduce and change our field of view, considering again exporters to the ENCs, but comparing them with exporters NOT in the ENCs in order to investigate if the inclination to export to specific countries is due to particular firm's features. Finally, considering a probit model, we evaluate if it does exist a minimum performance threshold of productivity above which firms find convenient to export. We question if this threshold varies across exporters: exporters to the ENCs have a different cut-off level than exporters with main destination other countries?

In Table 9 we describe, for each country, the firms' characteristics in employment, foreign ownership and innovation distinguishing them, as said above, in three groups: exporters, non exporters, exporters with the ENCs as main export destination. Exporters in the ENCs are a subgroup of exporters. The sampling design used for the EFIGE dataset consists of a stratification by sector and firm size that oversamples large firms. This weighting scheme based on sectors and size classes has been carried out to make sure sample representativeness and to guarantee balance. It divides the sample in 30 cells by sector/size defining 3 firm size classes (10-49 employees, 50-249 employees, more than 249 employees) and 10 Nace sector groups (Nace Rev1.1 Sections: DA, DB+DE, DC+DI+DL, DD, DF, DG, DJ, DK, DM, DN).[8]

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[8] See Barba Navaretti G., Bugamelli M., Schivardi F., Altomonte C., Horgos D., Maggioni D. (2011) to know in detail how the weighting scheme has been built.

Table 7. Descriptive statistics by export status (weighted statistics)

	Austria			France			Germany			Hungary			Italy			Spain			UK		
	Exp.	Non exp.	Exp. in ENCs	Exp.	Non exp.	Exp. in ENCs	Exp.	Non exp.	Exp. in ENCs	Exp.	Non exp.	Exp. in ENCs	Exp.	Non exp.	Exp. in ENCs	Exp.	Non exp.	Exp. in ENCs	Exp.	Non exp.	Exp. in ENCs
Number of firms	342	101	6	1861	1112	153	1901	1034	37	342	146	9	2231	790	181	1796	1036	143	1376	691	25
Employment	72	39	98	70	35	63	73	40	63	76	36	61	43	27	40	49	30	77	69	40	75
Labour Productivity	137	332	-	55	46	57	71	98	65	22	27	47	53	49	54	51	40	48	132	47	53
Blue-collar share	59.24	66.45	38.30	57.16	57.69	46.35	59.20	57.75	52.07	68.72	63.02	65.14	65.01	71.25	60.48	75.84	80.81	78.09	66.77	69.22	80.89
Graduate share	4.04	2.59	1.20	9.59	4.69	13.25	10.10	7.74	15.79	15.86	15.43	19.16	6.70	4.06	7.45	10.62	8.46	11.10	8.17	4.39	11.20
Age	43	47	50	43	33	42	46	45	43	19	15	14	31	26	32	29	24	30	39	33	39
Group	27.05	10.01	69.98	37.06	21.52	42.52	16.84	5.31	7.07	20.00	13.01	29.17	15.38	11.51	11.74	17.52	10.71	17.05	32.81	14.63	33.90
Foreign ownership	16.28	3.60	23.44	13.56	3.66	14.37	7.75	1.58	2.70	21.43	9.77	29.17	4.76	0.99	3.25	6.31	1.08	4.86	14.52	4.93	14.97
Product innovation	78.53	62.59	76.56	66.13	47.70	72.21	72.65	47.40	74.23	57.17	48.76	80.49	72.60	50.53	82.47	74.87	59.06	84.92	74.83	48.48	80.59
RD share	5.41	14.63	4.57	6.29	5.86	5.91	8.10	7.13	5.60	6.23	4.17	14.71	7.47	7.30	6.46	7.02	8.26	6.87	6.84	5.63	6.18
Bank debt share	89.63	73.23	100.00	74.25	75.49	74.09	84.27	87.74	95.19	81.50	86.11	63.94	88.32	85.18	87.18	86.85	85.73	89.72	62.18	62.74	81.92
Venture capital	0.64	0.00	0.00	0.64	0.43	0.00	0.64	0.25	0.00	0.00	0.00	0.00	0.01	0.11	0.00	1.00	0.95	1.63	0.33	0.29	4.47

Source: Own calculations from EFIGE dataset

Table 9 describes firms' characteristics using weighted values. By looking at employment (i.e. the total number of employees of each firm in the home country, excluding free lancers and occasional workers) is clear that non-exporters have smaller numbers workers than exporters. Moreover, Table 9 shows also that Italian and Spanish firms are on average smaller than those in the remaining countries. Labour productivity performance, computed as added value per employee, and blue collar share (which includes skilled and unskilled blue collar workers and apprentices) vary across nations and across groups and there is not clear evidence about these two variables; it is evident that German, and especially, Austrian non-exporter firms are more productive than exporters; Spanish firms have a higher percentage of blue collars employees than other countries. Looking at graduate workers, exporters in ENCs have a higher percentage of graduate employees. Furthermore, we notice that Hungarian firms have more graduate workers than any other country and firms are younger, with an average age of about 15 years. Firms which carry out exporting activities belong much more to groups (national or foreign), they are characterized by foreign ownerships (at least 50% of their capital is owned by foreign shareholders) and they make much more product innovations. R&D seems to not depend on exporting activities. Bank debt, over the total external financing, is around 80% for almost all countries, except UK exporters and non-exporters differ with a share of 60%. None or a very low share of firms have increased their external financing through venture capital.

In Table 10 we provide a detailed analysis on firms' characteristics, comparing this time just exporters to the ENCs and exporters to other destinations. Unlike Table 9, where we compared three type of firms (non-exporters, exporters and exporters to the ENCs) and where exporters included also exporters in the ENCs in order to provide a simple descriptive analysis by export status, Table 10 compares exporters to the ENCs with exporters NOT in the ENCs to investigate if this two kind of firms are prone to differences. As we can see, exporters to ENCs are a small share of total exporters (9849 firms). A general look give us the sense that there are not great and significant differences between these two kind of firms. Firms which export to the neighbouring are slightly younger and operate mainly in the machinery sector; in the other group, the exporting firms produce principally metal products. Firms with the neighbouring countries as main destinations had a higher turnover in 2008, less employees (even if the difference is very low) and made more product innovation. Looking at the other characteristics,

dissimilarities are really low: both kind of firms seem to perform their production activity in a similar way when adopting a production technology, selling innovative products, investing in R&D, purchasing services or intermediate goods. None differences also when we consider international activities, like exports, FDI, contracts and arms length agreements and intermediate goods purchased from abroad.

Table 8. Descriptive statistics: comparing exporters not to the ENCs and exporters to the ENCs

	Firms with ENCs as main export destinations (554 firms)	Firms with ENCs as **NOT** main export destinations (9295 firms)
Firm's age	35	38
Core business	Machinery (24%)	Metal products (21%)
Turnover of 2008 (thousands of euro)	36002.54	29605.69
Number of employees	67	77
White collars (%)	27%	25%
Skilled blue collars employees (%)	38%	40%
Unskilled blue collars employees (%)	17%	21%
Graduate workers (%)	11%	9%
Labour Productivity (thousands of euro)	56.55	60.76
Unit cost of labour (thousands of euro)	38.03	41.50
Investments in plants, machines, equipment and ICT (% of turnover)	8.61%	9.72%
Product innovation (% of firms)	66%	57%
Process innovation (% of firms)	49%	48%
Innovative products sales in 2007-2009 (%turnover)	23%	22%
Investments in R&D (% of turnover)	6%	7%
Exports (% of turnover)	33%	32%
Number of export destinations	11	12
Total purchased services (% of turnover)	12%	11%
Services purchased from abroad (% of total purchased services)	24%	19%
Total purchased intermediate goods (%of turnover)	33%	30%
Intermediate goods purchased from abroad (% of total purchased intermediate goods)	28%	29%
Number of firms which make FDI	39	626
FDI (% of turnover)	26%	27%
Production activities through contracts and arms length agreements with local firms (% of turnover)	36%	29%

Source: Own elaborations from EFIGE dataset

In Table 11 we provide other descriptive statistics comparing again exporters to the ENCs with exporters to other destinations but taking into account their exporting activity in their three main export destinations. Once more, there are not noteworthy differences across firms and there are not important dissimilarity across nations, even if UK firms exports a higher number of product lines than any other firm in any other country. Firms export a mean of 2-5 lines in their destinations, a good share of them (about 70%) have started their activity before 2004 and exports to their three main destinations account for about 20%.

Table 9. Descriptive statistics by country: comparing exporters not to the ENCs and exporters to the ENCs

		Austria	France	Germany	Hungary	Italy	Spain	UK
Number of firms	Exporters NOT to the ENCs	336	1708	1864	333	2050	1653	1351
	Exporters to the ENCs	6	153	37	9	181	143	25
Number of product lines exported	Exporters NOT to the ENCs	2-5	2-5	2-5	2-5	2-5	2-5	6-10
	Exporters to the ENCs	2-5	2-5	2-5	2-5	2-5	2-5	6-10
Activity started before 2004 (% of firms)	Exporters NOT to the ENCs	60%	69%	76%	67%	69%	60%	71%
	Exporters to the ENCs	77%	79%	79%	68%	79%	72%	77%
% of total export	Exporters NOT to the ENCs	20%	22%	21%	27%	22%	25%	21%
	Exporters to the ENCs	26%	23%	21%	28%	23%	25%	21%

Source: Own calculations from EFIGE dataset

Finally, we compare exporters and exporters to the ENCs in competitive terms. As stated above firms' competitiveness has a crucial role on understanding macroeconomic challenge and on finding the correct policy that will create growth and exports. The best indicator that predicts firms' capability to perform successfully in global markets is its total factor productivity (TFP). At the firm level, TFP is a measure of firm's productive efficiency, that is how much output a firm can produce for any given amount of input. A higher level of TFP means that the

firm is able to produce more output with the same amount of input than any other firm.[9]

Using TFP as a proxy of firm performance, we test in Table 12 what is the level of productivity that generates exports running a probit model which regress the propensity to export of each firm against a set of dummies. Dummies place each firm in its deciles of TFP. The EFIGE dataset allows

to calculate TFP for around 50% percent of the firms present in the sample. TFP has been computed assigning observational units to sectors (at NACE 2 digit levels), pooling firm-level data across countries and years, and then running for each sector the Levinsohn and Petrin (2003) semi-parametric production function estimation algorithm, controlling for country and year fixed-effects.[10]

As we can see from in Table 12 the level of TFP which induces firms to export is different. Exporters to the ENCs have a significant probability to export if they are at least in the 8th deciles in the TFP distribution, on the other hand exporters which have other countries as main destinations export if they are in the 7th deciles.

Table 10. Critical cut-off of TFP

	Exporters to the ENCs	Exporters NOT to the ENCs
Ho	Pct_8=0, Pct_9=0, Pct_10=0	Pct_7=0, Pct_8=0, Pct_9=0, Pct_10=0
chi2	20.89	151.56
Prob > chi2	0.0001	0.0000

Source: Own elaborations on EFIGE dataset

3.4 Firms' international activity

As stated by literature, exporting firms are not a random sample of the population of firms in an industry, and neither are firms engaged in FDI. Only a small fraction of firms export and only a small fraction of firms engage in FDI, and these firms are larger and more productive than exporting firms. [11]

As the importance for firms to be active in global markets, we compare firms from an international point of view, by looking at different types of firms' internalization structures: foreign direct investments and contracts

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[9] Altomonte C., Aquilante T, Ottaviano G.I.P. (2012).
[10] Altomonte C., Aquilante T, Ottaviano G.I.P. (2012).
[11] Helpman E. (2006).

and arms length agreements. Internationalization of manufacturing activities allows firms to reduce their production costs, to improve their technologies (catching the foreign ones) and to increase their sales. Firms can internationalize their activity in three different ways: a) importing inputs and components for use in home production; b) making international outsourcing (IO), which consists in creating arms length agreements with companies in foreign markets; c) increasing productivity through foreign direct investment (FDI).[12]

Table 13 gives for each European country three type of information: 1) the number of firms which make FDI or IO; 2) where firms address their international activities; 3) the incidence of global activities on turnover. By observing the tables, we notice a very low number of firms active on foreign markets, running their production activity through direct investments or contracts and arms length agreements; it seems that in our sample a good number of firms export abroad but just few firms decide to combine exporting activity with internationalization of their production. Firms who carry out global activities on foreign countries are, without surprise, exporting firms. But Table 13 and Table 14 are particularly important because show where firms concentrate their investments. As we can see, Old Europe is still the main destination where European firms prefer to carry out their foreign production activities. It's interesting to observe that exporters in the ENCs not necessarily direct their investments in the neighbouring countries. Unfortunately, EFIGE data on FDI and IO are not detailed and we cannot investigate in which countries are focussed international investments.

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[12] Barba Navaretti G., Bugamelli M., Schivardi F., Altomonte C., Horgos D., Maggioni D. (2011).

Table 11. Total Foreign Direct Investments (FDI) carried out in each area (%)

	Austria			France			Germany			Hungary			Italy			Spain			UK		
	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. In ENCs	Exp.	Non Exp.	Exp. In ENCs	Exp.	Non Exp.	Exp. In ENCs
AREA 1	47%	0%	4%	34%	42%	34%	36%	39%	100%	17%	25%	-	31%	48%	20%	36%	40%	34%	35%	38%	0%
AREA 2	34%	20%	5%	14%	8%	4%	20%	20%	0%	47%	25%	-	15%	0%	25%	7%	10%	9%	9%	10%	50%
AREA 3	7%	80%	5%	4%	0%	0%	9%	11%	0%	37%	50%	-	10%	51%	50%	2%	0%	0%	3%	5%	0%
AREA 4	2%	0%	1%	14%	0%	17%	13%	5%	0%	0%	0%	-	21%	1%	3%	24%	50%	15%	18%	20%	17%
AREA 5	1%	0%	0%	2%	0%	0%	3%	6%	0%	0%	0%	-	5%	0%	0%	2%	0%	3%	8%	6%	0%
AREA 6	1%	0%	0%	7%	0%	6%	11%	16%	0%	0%	0%	-	7%	0%	0%	9%	0%	8%	13%	6%	0%
AREA 7	0%	0%	1%	1%	0%	1%	4%	1%	0%	0%	0%	-	4%	0%	3%	10%	0%	6%	3%	0%	0%
AREA 8	8%	0%	84%	24%	50%	38%	4%	2%	0%	0%	0%	-	7%	0%	0%	9%	0%	26%	11%	15%	33%
% turnover	20%	40%	20%	25%	18%	28%	26%	20%	15%	31%	28%	-	25%	30%	19%	25%	19%	23%	34%	41%	37%
No. of firms	37	1	1	129	12	21	211	13	1	8	2	0	100	2	4	93	3	12	113	22	3

Source: Own calculations from EFIGE dataset

Table 12. Total contracts and arms length agreements carried out in each area (%)

	Austria			France			Germany			Hungary			Italy			Spain			UK		
	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. in ENCs	Exp.	Non Exp.	Exp. In ENCs	Exp.	Non Exp.	Exp. In ENCs	Exp.	Non Exp.	Exp. In ENCs
AREA 1	39%	100%	0%	34%	35%	33%	32%	29%	50%	53%	50%	-	34%	53%	12%	54%	50%	20%	31%	16%	0%
AREA 2	37%	0%	50%	7%	3%	8%	22%	10%	50%	33%	50%	-	19%	15%	28%	1%	1%	5%	7%	18%	0%
AREA 3	6%	0%	0%	4%	4%	3%	9%	27%	0%	0%	0%	-	8%	6%	15%	1%	0%	0%	2%	0%	0%
AREA 4	12%	0%	0%	22%	16%	22%	22%	1%	0%	0%	0%	-	24%	8%	22%	30%	9%	10%	33%	53%	100%
AREA 5	2%	0%	0%	7%	9%	1%	6%	23%	0%	0%	0%	-	6%	1%	1%	0%	3%	0%	12%	6%	0%
AREA 6	1%	0%	0%	7%	1%	5%	4%	0%	0%	0%	0%	-	1%	3%	0%	2%	0%	0%	6%	0%	0%
AREA 7	0%	0%	0%	2%	0%	0%	1%	0%	0%	0%	0%	-	1%	3%	0%	4%	13%	20%	0%	0%	0%
AREA 8	4%	0%	50%	18%	31%	27%	4%	9%	0%	13%	0%	-	7%	12%	22%	9%	25%	45%	9%	8%	0%
% turnover	18%	30%	13%	30%	27%	41%	24%	18%	13%	36%	22%	-	27%	28%	36%	31%	43%	45%	44%	38%	20%
No. of firms	27	1	2	153	25	19	110	11	2	8	3	0	123	8	13	36	8	1	86	13	1

Source: Own calculations from EFIGE dataset

Conclusions

During the last fifteen years the EU has enhanced its relations with its neighbouring countries signing or going to sign with them several association agreements.

The promotion and strengthening of EU relationships with the ENCs has as main objectives to drive to a deeper economic integration and to foster greater prosperity in order to increase stability and security as well as to cope with a globalised economy. The ENCs are highly different and each country has a particular condition and situation, then the EU has stipulated with them specific agreements.

On this basis, the main goal of this paper has been to study the European exports decisions: if they are directed to the ENCs, which countries, within the ENCs group, are predominant as export partners and how much of total exports are represented by exports in the ENCs. Our main aim is essentially understand if the neighbouring nations are gaining points in the international trade with the European countries.

Unlike common studies on trade flows between countries we used data at the microeconomic level (firms level) using the EFIGE dataset including international information about 15,000 firms from seven European countries on 150 items. Since detailed data by destination on exports, we have tried to study in depth European firms' decisions to export in the neighbouring countries concentrating our analysis on export flows. We also have provided some elaborations on foreign direct investments and international outsourcing carried out by European firms in order to investigate where they are directed and how they are dived across areas.

First of all, our analysis highlights that a good share (about 70%) of European firms are exporters; out of those less than 6% have the ENCs as main export destination (first, second or third export partner) and just 2% decide to have a neighbouring state as first export target. Looking at countries it's clear as geographical and cultural proximity are fundamental on explaining where European trade flows are addressed. French exports are mainly concentrated on Southern ENCs (Algeria, Morocco and Tunisia), Hungarian flows, instead, focus their, trade flows essentially to Eastern ENCs (Ukraine and Moldova). Leaving aside geographical e cultural characteristics, the analysis reveals that Southern countries predominate as European export target

At the second stage of our analysis, we compared exporters and exporters to the ENCs looking at a set of several characteristics, like employment, labour productivity, age, group, etc., and at their level of

competitiveness. There is not an evidence by export status or across countries; an overview of all features seems to tell us that there are not significant and large differences between exporters and firms which choose to export mainly to the ENCs. When we look at countries, differences are higher: in some countries exporters to the ENCs are on average younger, make much more FDI, employ more graduate workers, etc., but in other countries the opposite occurs and we see that positive traits alternate with negative aspects.

Least but non last, exploring on intensive and extensive margin, exporting areas affect differently firms probability to export and firms amount of exports. When we look at extensive margin, intra Old European trade has still the key role on explaining firms' propensity to export and it keeps and preserves its main position on influencing trade flows; in other words, the decision to export or not is primarily affected by intra European trade. If we consider the quantity exported, instead, exporting flows to other areas are the principal predictors. The analysis on intensive and extensive margin reveals that European firms countries trade mostly with countries included in the EU, but in size terms (quantity) exports to the extra EU countries are much more consistent.

Our findings provide some important implications, identifying some areas of vulnerability and weakness, but also some qualities. First of all, the descriptive analysis gives essential information for the political agenda of the European Union that aspires to create an environment of security, stability and prosperity in its neighbourhood and to promote preferential trade relations. It reveals that the ENCs are not the principal trade partners of the EU firms and the EU continues to be the main destination of European investments. The attempt to create a single market is not so far in volume terms: extra European countries predominate the EU exports. Even more, to foster political and economical relationships with Mediterranean countries seems to be the right path to achieve ENP goals.

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APPENDIX

EFIGE data consist of 193 divided into eight areas, which we list below. Our 15 European Neighbouring Countries, included in area 3,5 and 8, are underlined.

- **Area 1 "15 EU countries"**: Austria, Belgium, Denmark, Finland, France, Germany, United Kingdom, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden;

- **Area 2 "Other EU countries"**: Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Poland, Czech Republic, Romania, Slovakia, Slovenia, Hungary;

- **Area 3 "Other European countries not EU"**: Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia Herzegovina, Croatia, Georgia, Iceland, Liechtenstein, Macedonia, Moldova, Monaco, Montenegro, Norway, Russia, San Marino, Serbia, Switzerland, Turkey, Ukraine, Vatican;

- **Area 4 "China and India"**: China, India;

- **Area 5 "Other Asian Countries"**: Afghanistan, Bahrain, Bangladesh, Bhutan, Brunei, Myanmar, United Arab Emirates, Philippines, Japan, Jordan, Indonesia, Iran, Iraq, Israel, Cambodia, Kazakhstan, Korea DPR, Korea Rep. (South), Kuwait, Kyrgyzstan, Laos, Lebanon, Maldives, Malaysia, Mongolia, Nepal, Oman, Pakistan, Palau, Qatar, Yemen Rep., Saudi Arabia, Singapore, Sri Lanka, Syria, Thailand, Taiwan, Tajikistan, Timor - Leste, Turkmenistan, Uzbekistan, Vietnam;

- **Area 6 "U.S. and Canada"**: U.S., Canada;

- **Area 7 "Central and South America"**: Antigua, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Grenada, Guatemala, Guayana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Rep., St. Kitts-Nevis, St. Lucia, St. Vincent, Suriname, Trinidad Tobago, Uruguay, Venezuela;

- **Area 8 "Other Areas":** Algeria, Angola, Australia, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Comoros, Congo, Cote d' Ivoire, Djibouti, Egypt, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Equatoral Guinea, Kenya, Kiribati, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Marshall, Mauritania, Mauritius, Micronesia, Morocco, Mozambique, Namibia, Niger, Nigeria, New Zealand, Papua New Guinea, Central African Republic, Rwanda, Samoa (West), Sao

Tome+Principe, Senegal, Seychelles, Sierra Leone, Solomon, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tonga, Tunisia, Tuvalu, Uganda, Vanuatu, Democratic Republic of the Congo, Zambia, Zimbabwe.

For some analysis we have distinguished area 3, 5 and 8 in three sub-groups: a) ENCs; b) countries close to the ENCs; c) and other countries included in those areas. More in detail we list below which countries we have considered close to the ENCs for each area:

• **Countries close to the ENCs in area 3**: Albania, Bosnia-Herzegovina, Croatia, Macedonia, Montenegro, Serbia, Turkey, Russia;

• **Countries close to the ENCs in area 5**: Afghanistan, Bahrain, United Arab Emirates, Iran, Iraq, Kazakhstan, Kuwait, Kyrgyzstan, Oman, Qatar, Yemen, Saudi Arabia, Tajikistan, Turkmenistan, Uzbekistan;

• **Countries close to the ENCs in area 8**: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Comoros, Congo, Cote d' Ivoire, Djibouti, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Equatorial Guinea, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Central African Republic, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Democratic Republic of the Congo, Zambia, Zimbabwe.

To know the other countries included in area 3, 5 or 8 it's necessary subtract from the full list above for each area 3, 5 and 8 the ENCs and the close countries included in those areas:

• **Other countries in area 3**: Andorra, Iceland, Liechtenstein, Monaco, Norway, San Marino, Switzerland, Vatican;

• **Other countries in area 5**: ": Bangladesh, Bhutan, Brunei, Myanmar, Philippines, Japan, Indonesia, Cambodia, Korea DPR, Korea Rep. (South), Laos, Maldives, Malaysia, Mongolia, Nepal, Pakistan, Palau, Singapore, Sri Lanka, Thailand, Taiwan, Timor - Leste,, Vietnam;

• **Other countries in area 8**: Australia, Fiji, Marshall, Micronesia, New Zealand, Papua New Guinea, Samoa (West), Sao Tome & Principe, Solomon, Tonga, Tuvalu, Vanuatu.

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