

Italy and the Maghreb Countries: The Role of Trade and Investment

Giancarlo Corò[§], Marco Giansoldati[§], Luca Salmasi* and Mario Volpe[§]

April 9, 2010

[§]Ca' Foscari University of Venice

*University of Verona

Abstract

This paper uses a multistage approach to investigate the role of Italy in the Maghreb countries, both in terms of trade and investment.

In particular, we show that Italian import flows for two typically Made in Italy industries, namely textile and clothing on one hand, and leather and footwear on the other hand, are strongly related not only to export flows of the same sector, but also to a set of variables capturing features of the Italian and the foreign country. In this way, we supply a first result supporting the hypothesis of an international fragmentation of production. To offer this outcome additional strength, we endow the present contribution with information on the attractiveness of the Maghreb countries, looking at the volume of inward FDI flows and stocks, but with no industry disaggregation, due to data unavailability. Although we start from a global perspective, we rapidly shift to consider only the Italian investments in the area, with a breakdown by outward region. Thanks to the availability of a detailed dataset made available by the Bank of Italy, we are able to provide further evidence on the Italian internationalisation in the Maghreb. Indeed, our second result highlights the remarkable heterogeneity across countries and the emergence of the major role played by Tunisia.

1 Introduction

Anecdotal evidence suggests that trade and productive integration between Italy and Northern African countries have become increasingly tighter during the last two decade or so.

This paper not only provides detailed data on trade flows between selected Italian regions and Northern African countries, but it also supplies information on the evolution of Italian FDI towards that area. Using a detailed data set on trade flows at Italian regional level, we demonstrate that there is a strong linkage between imports and exports within two different industries, namely textile and clothing on one hand, and leather and footwear on the other hand. Moreover, we also noticed that domestic imports for these two sectors show relevant and coherent relationships with both a number of Italian and foreign variables. Particular attention is paid to regional heterogeneity, in terms of trade partners and volumes, as well as in terms of trade elasticity to variations in productivity. We are able to supply not only some descriptive statistics on the volume of FDI net flows from selected Italian Regions to the Maghreb countries, but also to compare (although with some limitations due to data availability) the role of our country vis-à-vis that of other relevant partners active in the Region.

Results push to reconsider some of the Maghreb countries not only as mere source of localised comparative advantages but mainly as a strategic place where the bulk of Italian district firms manufacture the so-called Made in Italy goods.

2 Vertical Specialisation: Some Definitions

An element that seems to have played an important role in export performance over the past decade is the extent to which countries have participated in vertical supply integration processes. According to the findings of Miroudot and Ragoussis (2009 [4]), there seems to be a positive relationship between export performance and the share of vertical trade in each country's total trade. This may be useful to understand the role played by FDI in Eastern European countries as well as the substitution of locally-produced inputs by imported ones in Germany, similarly to what has taken place in Italy in the recent past. It can also partly explain the weaker export performance of countries such as France or Japan which have used a different strategy of exporting from third countries or producing locally, namely by using an export-platform FDI strategy.

Indeed, contrary to export-platform, 'vertical specialisation' is solely associated with vertical FDI, that is investment seeking to exploit cross-country productivity differentials. The term becomes relevant when firms exploit efficiency advantages at multiple stages of the value chain by linking sequentially facilities located in several countries. To be more precise, 'vertically specialised' production is the one using foreign inputs, but whose output is not to be used or consumed in the destination market.

We can easily notice the difference between vertical specialisation, and simple trade in intermediate goods: in the former case there is trade in intermediate goods bringing inputs inside the country but also trade in intermediate or final goods taking the outcome beyond the borders. The central element in defining 'vertical specialisation' is the fact that the outcome does not remain within the borders of the local market, but there are back-and-forth transactions (Ando, 2006 [1]) which may give rise either to vertical intra-industry trade or one-way trade. Kimura and Ando (2005 [3]) proposed a measure of two-dimensional fragmentation based on geographical distance and on uncontrollability. The former measure states that differences in location advantages are exploited when the service link costs due to the geographical fragmented production block is overcome, whereas the latter recalls the problems arising when fragmentation goes beyond the boundaries of the firm, such as weaker managerial control. In this case, the increase in service link costs derives from uncontrollability, whereas "the reduction of production costs is generated by de-internalisation advantages or the counterparts' ownership advantages" (Kimura and Ando, 2005 [3], p. 318).

The dimension of vertical specialisation not only depends on a country size, but also on its geography. Countries located nearby (such as in Central Europe and Northern Africa) are more likely to receive FDI for vertical specialisation as the exploitation of national comparative advantages at each production blocks comes at significantly lower transportation costs if compared to isolated nations.

3 From Vertical Specialisation to Value Chains: Some Sketchy Facts on the Propagation of Italian Firms in Northern Africa

This Section aims at providing some preliminary results on the geographic orientation of Italian trading partners in manufactures. Namely, we are interested in showing that a process of deep integration has been taking place so far between most Italian regions and some countries located in the North of Africa. Such a phenomenon shows a significant path of co-dependence between import and export flows, especially in textile, wearing and apparel, on one hand, and leather and footwear, on the other, although within broad industry classifications (the ATECO 2 digit level). As far as the first group is concerned, we notice that there has been a growing amount of raw textiles shipped overseas from some Italian regions to Tunisia and Egypt in order to be further processed at a lower cost than domestically. If looking, instead, at import composition but at a narrower level, we noticed that Italian regions often import finished product to be either

placed on the internal or on the external market. This is almost the same phenomenon which takes place within the leather and footwear industry, although such a fact is far more difficult to be isolated due to data availability. However, we may hypothesise that parts and components made of leather are produced in Italy, then exported abroad just to be further processed and finally re-imported.

What seems more striking is that the complex trade integration in consumer goods between Italian regions and the selected countries brings about a significant rise in the domestic export of machinery and equipment needed to perform technical transformation abroad. In other words, there is evidence supporting the view that fragmentation not only matters for low-tech goods, but also for related capital goods which are exported abroad to allow for operations to cope with buyers' specifications.

3.1 The Model: Empirical Specification

We will provide here our estimates for a panel made up of Italian regions, limited to the 'textile and clothing' and 'leather and footwear' industry, to study the evolution of import flows from some Northern African countries (Tunisia, Egypt, Morocco and Algeria¹). In order to perform our analysis we used a *two-way* static panel data approach with the following structure:

$$y_{i,t} = X_{i,t}\beta + \mu_{i,t} \quad (1)$$

where $y_{i,t}$ is the dependent variable (the level of import of a given region), $X_{i,t}$ is the $n \times K$ matrix of explanatory variables and β is a $K \times 1$ vector of parameters. It is assumed that $\mu_{i,t}$ follows a *two-way* error component model:

$$\mu_{i,t} = \mu_i + \lambda_t + v_{i,t} \quad (2)$$

where $v_{i,t} \sim IID(0, \sigma_v^2)$.

In particular μ_i denotes the regional-specific residual differing across partner countries, while λ_t the year-period effect. Indeed the levels of trade are very different among regions and also have different magnitudes for each partner country considered. Under these circumstances the estimated standard errors of the parameters and the variance-covariance matrix estimates are inconsistent for the presence of both heteroschedasticity and serial correlation. In order to account for these econometric issues we used the Newey-West (1987) covariance matrix estimator, consistent in the presence of both heteroskedasticity and autocorrelation, and a feasible Generalised Least Square (GLS) specification for our model.

The explanatory variables used in the analysis are the following:

- EXPORT represent regional exports towards the selected countries. The coefficient is positive and significant. This variable measures imports' elasticity on exports, i.e. how imports change if exports show a certain percentage variation, first for the textile and clothing industry and then for the leather and footwear sector.
- LNPRODROW represents the ratio between the industry and services productivity logarithmic growth rate.
- LNAVFOREIGN is the logarithm of the added value (expressed at current prices, base year 2000) of the foreign partner country. The coefficient is positive and statistically significant. The elasticity is less than one.

¹From the estimates concerning both the textile and clothing industry and the leather and footwear sector, we drop the case of Algeria as trade flows with the Italian regions were not statistically significant in the descriptive statistics we already provided.

- XRFOREIGN is the logarithm of the bilateral real exchange rate. This variable carries a positive sign and its elasticity is less than one.
- DISTANCE is the logarithm of the kilometric distance between the regional capital city and the partner country capital city. Obviously, this variable is a proxy of transportation costs.
- DPARTNER is a country dummy.
- DREGION is a regional dummy.
- DYEAR is a yearly dummy.

All variables are expressed in logarithms in order to interpret the coefficient as the response elasticity of the dependant variable to a percentage variation of the explanatory variables.

We divided the original sample of twenty Italian regions in two subsamples. The first, denoted as ‘TypeA Regions’², indicates those regions with higher trade flows, while the second, denoted as ‘TypeB Regions’³, those with lower trade volumes, finally the whole sample was labelled as ‘Type A+B Regions’. Such a distinction is primarily oriented to understand if the Regions which are the most involved in the imports of goods, are, at the same time, those showing higher export flows towards the selected partner countries. As a logic consequence we also expect ‘TypeA Regions’ import flows to be more sensitive to changes in the variables regarding macroeconomic condition of the counterpart.

Firstly, we focus on the textile and clothing industry.

If looking at Table 1 we noticed that the elasticity of imports’ due to a variation in exports is very different if looking at ‘TypeA Regions’ rather than to ‘TypeB Regions’. In both cases the coefficient is statistically significant, but it is more than double in the former group. If considering the whole sample the coefficient is significant and its value is fairly close to the one expressed by ‘TypeB Regions’.

‘TypeA Regions’ show a significant and positive sign for the variable that measures the variation in productivity, conversely to what takes place for the group of ‘TypeB Regions’, where the variable is not significant and carries a negative sign. If looking instead at the whole group of regions the variation on productivity carries again a positive and significant sign, whose value is strangely higher than the sole ‘TypeA Regions’.

Similarly, the coefficient expressing the added value of the foreign partner country is positive and significant for ‘TypeA Regions’, while it’s close to zero for ‘TypeB Regions’. If looking, again, at the whole sample the coefficient is again positive and largely significant. By considering these sketchy results we may suppose that trade relations with the Mediterranean area mostly depend on the ability of a partner country to supply competitive services for the manufacturing of raw materials (supposing the existence of an intra-industry relation). Indeed, a percentage variation in the added value of the foreign country is able to produce a proportional increase in the import flows from that areas. This phenomenon signals the presence of trade flows which are more likely to create commercial linkages with countries focusing on high value added functions (Gereffi, Humphrey and Sturgeon, 2005 [2]).

- Table 1 about here -

²‘TypeA Regions’ are Piedmont, Lombardy, Veneto, Emilia-Romagna, Tuscany, Lazio, Marche, Abruzzo, Apulia and Campania.

³‘TypeB Regions’ are all other regions.

Secondly, we focus on the leather and footwear industry.

There are striking differences between the results showed for the ‘TypeA Regions’, TypeB Regions’ and, especially, the whole sample.

The elasticity of imports to exports is significant all along the three sample, but the coefficient is higher for the ‘TypeA Regions’, actually four times higher circa than what takes place for the complete dataset, and ten times higher than the coefficient expressed for ‘TypeB Regions’.

Contrary to the textile and clothing industry, the coefficient for the variation of the productivity is not significant in this sector if the two regional samples are considered independently, but it becomes significant if looking at the entire one.

As far as the added value of the foreign country we find an expected positive sign, which is largest for ‘TypeA Regions’, and almost the double of the coefficient of the ‘TypeA Regions’ and of the overall sample. Different results emerge, instead, if considering the exchange rate and distance. In the former case, the value is negative and the coefficient is significant just only for ‘TypeA Regions’ and for the total sample. In the latter case, the coefficient is negative (as expected), and largely significant only for the case of ‘TypeA Regions’.

- Table 2 about here -

4 FDI in Northern Africa: From the European Dimension to the the Italian Regional Level

The second part of our paper aims at providing some detailed data on the both flows and stocks of inward FDI that involved some Northern African countries from 1996 to 2007⁴. In the first place we will only focus on inward FDI disregarding where capital comes from; then we shall move more in detail by considering the role of some EU countries (thanks to UNCTAD data) and to a deeper level by focusing on the role of Italy and of each region, compatibly with available data sources (again UNCTAD and Ufficio Italiano Cambi - Bank of Italy). We wish to put particular emphasis on a comparison between different Maghreb countries to understand their role not only in the Northern Africa region but also within the whole African continent.

4.1 Maghreb Countries: a Continental Comparison

The analysis we undertook on FDI starts by comparing inward and outward flows among Morocco, Algeria, Tunisia Egypt, but also with the total Northern Africa area⁵ and the entire African continent.

Flows are, for their nature, extremely volatile and this implies a complicated interpretation. Nevertheless it is possible to briefly compare the data, especially for the most recent years. We are thus able to note that Egypt is the most attractive among the selected countries, with more than 11 billion Dollar of inward FDI. This is almost half of all flows directed to Northern Africa and approximately one fifth of the capital directed to the whole continent.

- Table 3 about here -

Once provided the above descriptive data on inward FDI flows, we supply some additional information by computing the incidence of such flows on the gross capital formation. Clearly these data follow the erratic path shown by the flows themselves, but, nevertheless, we are able

⁴Sometimes the time span will be shorter, for example from 1996 to 2006 or from 1997 to 2007 due to the lack of data for the selected partner country.

⁵Please note that according to the UNCTAD nomenclature, the geopolitical area called ‘Northern Africa’ also includes Western Sahara, Sudan and Lybia.

to formulate some limited reflections. In particular, we notice that the digit for Algeria has never been higher than 10% so far, which is a similar level expressed by Egypt till the year 2003. A certain stationarity is expressed by Tunisia, whose percentage remains for most of the time under the 20% threshold. Eventually, Morocco shows a higher variability than the other cited countries with a peak in the year 2001 followed by declining values in the years after.

- Table 4 about here -

- Figure 1 about here -

Let us now look at the stock of FDI accumulated by each country, analysing them by a decreasing order of inward capital volumes. The remarkable value of FDI inward flows received by Egypt contributed to the built up of a notable stock of FDI, which is greater than that of the other selected countries since 1996. The digit showed an increase of more than 35 billion Dollars, soaring from 15 billions to 50 billions at the end of 2007, almost one third of all FDI stocks directed to Northern African countries and approximately 12.5% of the total stocks invested in the continent. Following Egypt we find Morocco, which shows a lower value of FDI stocks than Tunisia in the year 1996, but the digit then rises and overcomes Tunisia in 2003, experiencing later a steep increase from 2004 to 2007, reaching more than 30 billion Dollars. We then isolate Tunisia whose inward FDI stock is constant till the year 2001, then slowly rises till 2004 and shows a remarkable progress from the year 2005. Eventually, we find Algeria that shows an increase in its FDI stock but the registered value is always very low. This is presumably due, for a significant extent, to the political instability and the high terroristic risk that affect the country.

- Table 5 about here -

- Figure 2 about here -

Significant values can be obtained if looking at what is the incidence of FDI stocks on a country GDP.

- Table 6 about here -

- Figure 3 about here -

From 1996 onwards Tunisia is the country where the stock of inward FDI presented the highest incidence on GDP, soaring from values slightly lower than 60% to more than 75% at the end of 2007. These data are far higher than those expressed not only by all other selected countries but also by all macroeconomic aggregates we considered. Amongst other states we recorded a significant increase for the value attributable to Morocco, rising from 13% to 44%, but also for the digit concerning Egypt which showed a increase of almost twenty percentage points, from 19% to 38%.

The states we studied, show at the end of 2007 a ratio between inward FDI and GDP which is higher than the value expressed by North Africa as a whole and by the entire African continent. These latter aggregates do not show such a different path, as they both start from a percentage of 15% and reach 30% at the end of 2007 with no particular erratic movements along the time span.

Algeria shows a low stock of inward IDE, not only in absolute terms but also in terms of GDP. Digits show an increase from 4% circa to 10%, remaining stationary till the year 2007.

4.2 The Italian Firms in the Maghreb Countries

Thanks to the data provided by the ICE-Reprint database - Milan Politecnico, we are able to supply some descriptive indications on the role played by Italian firms in Morocco, Tunisia, Algeria and Egypt. In particular we will consider

- the number of foreign firms participated by Italian firms;
- the number of foreign firms' employees participated by Italian firms;
- the turnover of foreign firms participated by Italian firms and
- the turnover per employee of foreign firms participated by Italian firms.

Such information are provided for the country of interest and compared with both some European countries (with whom Italy has a strong economic linkage) and with the so-called BRIC countries (Brazil, Russia, India and China).

The Italian presence in Northern African countries has slightly increased from the beginning of 2002 to the beginning of 2008, soaring from 528 to 618 units. Such a dynamic is a common feature of all the selected nations, although there is surely a certain degree of heterogeneity amongst them in terms of 'weight'. By looking at Table 6 we notice that the Italian presence is highest in Tunisia, with almost 300 units at the beginning of the year 2008, which is approximately half of all Italian firms operating in North Africa.

The number of foreign firms participated by Italian companies in the three remaining countries is quite the same, although Morocco precedes Egypt and eventually Algeria.

- Table 7 about here -

- Figure 4 about here -

By looking at Table 7 and Figure 6 we are able to retrieve some remarkable information on the evolution of the number of employees working for foreign firms participated by Italian companies.

The four countries all together showed an increase of about 7,000 employees, especially from the beginning of 2005 and 2006, reaching more than 42,000 units.

As far as each country is concerned, we notice immediately the small role played by Algeria, a country always showing a level lower than 2,000 units. Opposite, we notice the significant position of Tunisia with more than 20,000 units at the beginning of 2008, registering a slight upsurge from the year 2002.

It is also remarkable the number of employees working in Morocco, approximately 11,000, higher than the digit recorded by Egypt. In this case, there has been a very slow increase from 2002 to 2005, followed by a jump of 4,000 units in the year 2006, thus leading to more than 8,000 employees at the beginning of 2008.

- Table 8 about here -

- Figure 5 about here -

The turnover realised by foreign firms participated by Italian companies is, in the year 2008, higher not only than that recorded in China, but also than that registered in Russia and India as well. Such data does not mean that Italy has no economic linkages with the so-called BRICs, but it may emphasise that trade linkages do not go hand in hand with equity investment, contrary to what has taken place so far in the Maghreb countries.

In this latter area the turnover more than doubled along the time span, with a value rising from 3,700 million Euros to 8,000 circa mostly due to the upsurge in the years 2005 and 2006.

In absolute terms Egypt showed the highest turnover value (more than 3,200 million Euros in 2008), followed by Algeria (2,000 millions), then by Tunisia (1,700 billions) and Morocco (1,000 billions circa).

All selected countries experienced an increase in turnover, although Algeria and Egypt showed the major rise, just between 2005 and 2006.

- Table 9 about here -
- Figure 6 about here -

An additional measure we decided to analyse is the amount of turnover per employee. Such data grew for all the selected countries, rising from 105,000 Euros to almost 190,000, but it is the result of national heterogeneous patterns sometimes. Morocco and Tunisia present at the beginning of 2008 a very similar value, approximately 80,000 Euros, whilst different are the cases of Egypt and Algeria. In this latter case there has been a significant rise between 2005 and 2006, and a slower growth afterwards, overcoming the 1,000,000 threshold. As far as Egypt is concerned the pattern is much more unstable, with periods of rapid rises followed by slowdowns.

- Table 10 about here -
- Figure 7 about here -

4.3 The Italian Regions in the Maghreb Countries

The picture we are able to draw by looking at all tables allows us to note that outward flows from Italian regions to the selected Maghreb countries are extremely low.

By looking, in more detail, to each of the nations, we noticed the limited relevance of Algeria whose attractivity is extremely low, especially for the political instability that affects the country.⁶

By comparing, instead, all the regions, to look for the highest and persistent FDI outward flows we are able to isolate the leading region, namely Lombardy, who has a strong linkage with Egypt, but it also expresses remarkable links with Tunisia and Morocco. The second place is occupied by Veneto with a significant outward flow towards Tunisia, which is the preferred destination also for capital coming from Piedmont (standing at the third place). In such two cases the presence of areas traditionally specialised in the textile and clothing industry seems to support our previous findings on trade linkages with Tunisia. This is indeed the most involved country in both imports and exports of intermediates and final products pertaining to a broad range of textile goods.

Emilia-Romagna follows in the fourth place, showing a special relation with Egypt.

Lower values are then expressed by the other regions. Nevertheless, it is worth citing Lazio with approximately 20 billion Euros directed mostly to Tunisia, then Marche with 17 millions circa and eventually Sicily an Abruzzo, with 14 and 10 millions respectively, most of them directed again toward Tunisia.

- Tables from 11 to 24 about here -

4.3.1 The Italians in the Maghreb Countries: Evidence from a Measure of Flow per Employee

As official statistics do not always provide the stock of outward IDE from Italy to other countries, included those of our interest, we decided to proxy it with the number of Italian employees abroad and compute the volume of trade flow per employee.⁷

Elements supporting the consistency of our measures emerge from Table 25, where we can compare the data of the Maghreb countries with those that are tightly link with Italy as well as with the so-called BRICs.

⁶Marche is an exception as we recorded a flow of FDI which is, however, not followed by further flows in the years after.

⁷Data are expressed in US Dollars at current prices.

- Table 25 about here -

Data are mostly growing during time, with higher digits for Germany, France and Spain, countries where the Italian presence in terms of employees is able to generate higher trade volumes if compared to other nations. In other words, there is a greater leverage effect the greater is the reported value, justifying, in the case of Europe, the presence of persistent and solid economic linkages with Italy.

In this sense, there might be some reasonable doubt if looking at the Russian value for the year 2007, as it is higher than that of France and Spain. Such a result depends on the structural differences between partner countries, for some of them, such as Germany, there is a remarkable process of commercial and productive integration with Italy. Conversely, in the relationship between Italy and Russia we detect a relevant volume of Italian import of oil and gas but a comparatively low value of Italian outward FDI flows to Russia, and of employees as well.

Setting aside from these specifications, we are also able to define some peculiarities for the African countries we are interested in.

Within the Maghreb area, Egypt shows the highest value, a country that already in the year 2001 showed a remarkable level. Much more lower are the digits presented by Tunisia and Morocco, with a steady rise all along the time span.

It is quite hard to provide a comparison between the Maghreb countries and the so-called BRICs, that present an enormous economic power and are extremely different one from the other.

5 Conclusions

The present paper provides a little but significant advancement in the study of Italian internationalisation. In particular, it first supplies econometric evidence on the internationalisation of two Made in Italy industries, namely textile and apparel on one hand, and leather and footwear on the other, towards a specific area, i.e. Northern Africa. The estimates of the gravity model generally support the idea of an international fragmented production system. Indeed, we noticed that there has been a growing amount of raw textiles shipped overseas from some Italian regions to Tunisia and Egypt in order to be further processed at a lower cost than domestically. If looking, instead, at import composition but at a narrower level, we noticed that Italian regions often import finished product to be either placed internally or abroad. This is almost the same phenomenon which takes place within the leather and footwear industry. More strikingly, the complex trade integration in consumer goods between Italian regions and the selected countries brings about a significant rise in the domestic export of machinery and equipment needed to perform technical transformation abroad. Secondly, the paper contributes to the analysis of FDI flows and stocks directed to the Maghreb countries. Although such a part is mostly descriptive, we were able to isolate some significant facts concerning the linkages between Italy and its regions with selected partner countries. Sometimes regions which trade more with a country are also more inclined to invest. This is not always the case, and further research is needed to shed some light on this topic.

Table 1: Estimates for the model on the textile and clothing industry

	TypeA Regions Coefficient	TypeB Regions Coefficient	TypeA+B Regions Coefficient
Constant		4.94**	
EXPORT	0.72***	0.31***	0.38***
LNPRODGROW	0.6***	-0.22	0.64**
LNAVFOREIGN	0.78***	0.04	0.63***
XRFOREIGN	-0.46	-0.84	-0.37**
DISTANCE	-0.53**		
Country Effects			
MOROCCO	-4.06***	-3.48***	-4.4***
EGYPT	-2.27***	-0.94***	-2.8***
TUNISIA			
Regional Effects			
PIEDMONT	1.34***		3.46***
LOMBARDY	1.38***		3.69***
VENETO	1.9***		4.18***
EMILIA-ROMAGNA	0.99***		2.85***
TUSCANY	0.81***		2.98***
ABRUZZO	0.83***		2.97***
MARCHE	-0.01		1.86***
UMBRIA		1.62***	1.41***
AOSTA VALLEY		0.48	0.75
TRENTINO-ALTO ADIGE		-0.71*	-0.47
LIGURIA		0.73*	0.49*
FRIULI-VENEZIA GIULIA		0.55	-0.01
LAZIO			1.61***
APULIA			2.1***
CAMPANIA			1.92***
CALABRIA		-0.77***	-0.77**
SICILY		1.62***	1.21***
SARDINIA		0.94**	0.66
Time Effects			
DYEAR02	0.08*	-0.03	
DYEAR03	-0.07	-0.21	-0.07
DYEAR04	-0.2**	-0.2	-0.11***
DYEAR05	0	-0.45**	-0.05*
DYEAR06	-0.03	-0.41**	-0.06
DYEAR07	-0.1	-0.14	
R-squared	0.72	0.71	0.82

Note: ***, ** and * indicate significance at 1%, 5% and 10% respectively.

Table 2: Estimates for the model on the leather and footwear industry

	TypeA Regions Coefficient	TypeB Regions Coefficient	TypeA+B Regions Coefficient
Constant			
EXPORT	0.82***	0.09***	0.21***
LNPRODGROW	-0.41	-0.09	-0.07***
LNAVFOREIGN	1.20**	0.52***	0.53***
DISTANCE	-1.66***	-0.01	-0.50***
XRFOREIGN	-1.67***		
Country Effects			
MOROCCO	-6.31***	-1.38***	-3.46***
EGYPT	-4.01***	-1.88***	-2.49***
Regional Effects			
PIEDMONT	2.05**		2.66***
LOMBARDY	1.99**		3.76***
VENETO	2.72***		4.96***
EMILIA-ROMAGNA	2.09***		4.40***
TUSCANY	2.12**		5.03***
ABRUZZO			0.21
UMBRIA			3.87
MARCHE	1.70**		-0.20***
LAZIO			0.68
APULIA	0.40		0.10***
CAMPANIA	2.30***		-0.52***
LIGURIA		-0.38	4.56***
TRENTINO-ALTO ADIGE		0.15***	0.54
FRIULI-VENEZIA GIULIA		-0.30	-0.20**
CALABRIA		-0.08	-0.11
SICILY		0.86***	0.51**
SARDINIA		-0.01	0.10
Time Effects			
DYEAR01	0.77***	-0.09	0.23***
DYEAR02	0.54***	0.10	0.24*
DYEAR03	0.16***	-0.12**	-0.05***
DYEAR04	0.22***	-0.06**	-0.15***
DYEAR05	0.84***	-0.05	-0.25***
DYEAR06	0.20***	-0.13**	-0.14***
R-squared	0.76	0.86	0.91

Note: ***, ** and * indicate significance at 1%, 5% and 10% respectively.

Table 3: FDI flows - Comparison between some Maghreb countries, North Africa and Africa - values in million Dollars at current prices

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Morocco	Inward	322	1,207	400	1,364	422	2,808	481	2,314	895	1,653	2,450	2,577
	Outward	28	9	20	18	59	97	28	12	31	74	445	652
Algeria	Inward	270	260	607	292	438	1,196	1,065	634	882	1,081	1,795	1,665
	Outward	0	0	1	47	18	9	100	14	258	23	35	290
Tunisia	Inward	351	365	668	368	779	486	821	584	639	782	3,312	1,618
	Outward	2	9	2	3	0	6	7	5	4	13	33	20
Egypt	Inward	636	887	1,076	1,065	1,235	510	647	237	2,157	5,376	10,043	11,578
	Outward	5	166	46	38	51	12	28	21	159	92	148	665
North Africa *	Inward	1,468	2,749	2,973	3,332	3,408	5,461	3,873	5,262	6,441	12,235	23,155	22,415
	Outward	99	468	364	331	226	-50	26	115	166	329	134	1,159
Africa **	Inward	5,957	11,033	9,610	12,063	9,671	19,905	14,592	18,719	18,020	29,459	45,754	52,982
	Outward	1,779	3,566	1,662	2,668	1,518	-3,031	270	1,245	2,050	2,282	7,829	6,055

Source: FDIStat, World Investment Report, 2008

Note: * Includes Algeria, Morocco, Western Sahara, Egypt, Sudan, Lybia, Tunisia.

** Includes Angola, Benin, Botswana, Burkina Faso, Cameroon, Capo Verde, Congo, Democratic Republic of Congo, Ivory Coast, Djbuti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Reunion, Ruanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe, Algeria, Morocco, Western Sahara, Egypt, Sudan, Lybia, Tunisia.

Table 4: Percentage of FDI flows on gross capital formation - Comparison between some Maghreb countries, North Africa and Africa

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Morocco	Inward	3,82	14,73	4,28	13,67	4,39	29,96	4,72	18,41	5,95	9,83	12,99	n.a.
	Outward	0,33	0,11	0,22	0,18	0,61	1,04	0,28	0,10	0,20	0,44	2,36	n.a.
Algeria	Inward	2,31	2,35	4,89	2,46	3,87	9,57	7,64	3,88	4,30	4,73	6,27	n.a.
	Outward	0,00	0,00	0,01	0,40	0,16	0,07	0,72	0,09	1,26	0,10	0,12	n.a.
Tunisia	Inward	7,73	7,84	13,56	6,95	15,42	9,28	15,35	9,98	9,96	12,07	48,63	n.a.
	Outward	0,05	0,20	0,04	0,05	0,01	0,11	0,12	0,09	0,07	0,19	0,49	n.a.
Egitto	Inward	4,51	5,92	6,37	6,22	7,28	3,40	4,37	1,79	16,85	32,67	46,49	n.a.
	Outward	0,03	1,11	0,27	0,22	0,30	0,08	0,19	0,16	1,24	0,56	0,69	n.a.
North Africa	Inward	3,37	6,27	6,15	6,77	6,90	11,38	7,78	9,83	10,06	16,23	24,89	n.a.
	Outward	0,23	1,10	0,78	0,70	0,48	-0,11	0,06	0,23	0,28	0,47	0,14	n.a.
Africa	Inward	6,10	10,91	9,19	11,83	9,55	20,34	14,51	15,18	11,78	16,35	21,30	n.a.
	Outward	1,91	3,72	1,69	2,82	1,65	-3,33	0,29	1,08	1,47	1,40	3,89	n.a.

Source: FDIStat, World Investment Report, 2008

Table 5: FDI Stock - Comparison between some Maghreb countries, North Africa and Africa - values in million Dollars at current prices

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Morocco	Inward	5,448	6,655	7,056	8,419	8,842	11,649	12,131	17,106	19,883	20,752	29,939	32,516
	Outward	297	306	326	344	402	499	453	560	676	666	1,350	2,002
Algeria	Inward	1,901	2,161	2,768	3,059	3,497	4,693	5,758	6,392	7,274	8,355	10,151	11,815
	Outward	183	183	184	231	249	258	358	372	630	652	687	977
Tunisia	Inward	11,181	10,629	12,237	11,432	11,545	11,520	13,861	16,229	17,844	16,840	21,853	26,223
	Outward	29	32	34	33	33	32	37	43	47	52	89	118
Egypt	Inward	15,326	16,578	17,654	18,719	19,955	20,465	21,112	21,349	23,506	28,882	38,925	50,503
	Outward	355	521	566	604	655	668	696	716	875	967	1,116	1,781
North Africa	Inward	34,676	36,874	40,787	42,945	45,688	50,637	56,029	65,736	75,035	84,700	116,293	141,460
	Outward	1,902	2,365	2,729	3,056	3,282	3,224	3,175	3,385	3,636	3,874	4,243	5,400
Africa	Inward	90,157	100,194	108,657	152,668	152,614	149,561	164,652	202,233	240,887	270,984	335,435	393,429
	Outward	32,884	32,722	36,007	43,391	44,156	29,194	34,066	40,384	52,655	52,487	66,762	72,752

Source: FDIStat, World Investment Report, 2008

Table 6: Percentage of FDI stock on GDP - Comparison between some Maghreb countries, North Africa and Africa

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Morocco	Inward	13.31	17.82	17.63	21.18	23.86	30.85	29.97	34.34	35.26	35.2	45.8	44.09
	Outward	0.72	0.82	0.81	0.86	1.09	1.32	1.12	1.12	1.2	1.13	2.06	2.71
Algeria	Inward	4.05	4.49	5.74	6.29	6.38	8.51	10.11	9.4	8.55	8.16	8.75	8.96
	Outward	0.39	0.38	0.38	0.48	0.45	0.47	0.63	0.55	0.74	0.64	0.59	0.74
Tunisia	Inward	57.08	56.25	61.76	54.96	59.38	57.69	65.85	64.93	63.23	58.56	71.24	75.62
	Outward	0.15	0.17	0.17	0.16	0.17	0.16	0.17	0.17	0.17	0.18	0.29	0.34
Egypt	Inward	19.91	19.52	19.46	19.57	20.04	21.67	23.44	27.69	28.52	28.49	35.36	38.11
	Outward	0.46	0.61	0.62	0.63	0.66	0.71	0.77	0.93	1.06	0.95	1.01	1.34
North Africa	Inward	15.72	15.99	17.29	17.53	17.8	20.23	22.99	25.47	25.02	23.91	28.59	29.84
	Outward	0.9	1.07	1.21	1.3	1.34	1.36	1.39	1.4	1.29	1.18	1.04	1.14
Africa	Inward	16.07	17.19	18.91	26.24	25.21	25.63	28.28	29.13	29.15	27.92	30.64	31.27
	Outward	6.21	5.98	6.66	8.03	7.94	5.34	6.27	6.18	6.88	5.88	6.45	6.09

Source: FDIStat, World Investment Report, 2008

Table 7: Number of foreign firms participated by Italian firms

	1.1.2002	1.1.2003	1.1.2004	1.1.2005	1.1.2006	1.1.2007	1.1.2008
Algeria	86	87	91	94	95	95	97
Morocco	104	107	110	113	114	115	120
Tunisia	251	253	260	267	269	283	295
Egypt	87	91	97	99	100	103	106
Total Maghreb	528	538	558	573	578	596	618
France	1,869	1,890	1,950	1,992	2,004	2,061	2,123
Spain	1,193	1,218	1,287	1,325	1,342	1,394	1,633
Germany	1,462	1,527	1,557	1,608	1,619	1,683	1,743
Brazil	620	635	657	654	659	665	710
Russia	235	245	254	266	301	317	334
India	195	204	217	226	238	256	269
China	614	654	698	774	851	923	975

Source: ICE - Reprint Milan Polytechnic

Table 8: Employees of foreign firms participated by Italian firms

	1.1.2002	1.1.2003	1.1.2004	1.1.2005	1.1.2006	1.1.2007	1.1.2008
Algeria	1,612	1,632	1,748	1,788	1,832	1,855	1,887
Morocco	10,061	10,271	10,654	11,102	10,940	11,447	11,548
Tunisia	18,592	18,990	19,128	19,094	19,193	20,034	20,844
Egypt	5,080	5,261	5,356	5,370	9,923	8,555	8,302
Totale Maghreb	35,345	36,154	36,886	37,354	41,888	41,891	42,581
France	156,562	133,585	132,619	134,176	134,354	136,871	137,642
Spain	68,479	64,433	65,960	66,078	57,226	58,577	73,971
Germany	79,913	92,659	92,307	94,987	94,263	99,420	95,248
Brazil	90,363	84,788	79,832	65,042	68,296	67,420	76,748
Russia	28,597	28,446	27,875	29,364	30,316	28,087	32,372
India	13,150	13,320	14,396	14,237	14,112	14,495	15,154
China	31,477	36,894	40,042	45,806	52,622	59,166	61,023

Source: ICE - Reprint Milan Polytechnic

Table 9: Turnover of foreign firms participated by Italian firms (data expressed in million of Euros)

	1.1.2002	1.1.2003	1.1.2004	1.1.2005	1.1.2006	1.1.2007	1.1.2008
Algeria	442	707	693	825	1,671	1,931	2,050
Morocco	635	654	628	685	767	937	1,030
Tunisia	1,046	1,334	1,365	1,440	1,512	1,607	1,748
Egypt	1,652	1,744	1,448	1,707	2,629	3,027	3,234
Total Maghreb	3,774	4,439	4,135	4,658	6,578	7,503	8,063
France	48,101	41,654	43,207	46,901	48,458	50,104	53,336
Spain	20,135	17,907	20,602	23,066	23,367	26,864	52,295
Germany	36,687	34,928	35,230	39,205	42,547	46,922	49,693
Brazil	16,885	12,774	12,713	11,772	13,875	16,542	22,062
Russia	1,736	1,832	2,036	2,257	2,558	4,691	4,321
India	951	981	1,025	1,082	1,178	1,250	1,419
China	2,465	2,816	2,883	3,354	4,123	20,512	4,959

Source: ICE - Reprint Milan Polytechnic

Table 10: Turnover per employee of foreign firms participated by Italian firms (values in Euros)

	1.1.2002	1.1.2003	1.1.2004	1.1.2005	1.1.2006	1.1.2007	1.1.2008
Algeria	273,883	433,272	396,625	461,633	912,118	1,041,132	1,086,486
Morocco	63,095	63,645	58,907	61,701	70,082	81,856	89,228
Tunisia	56,272	70,253	71,382	75,427	78,758	80,234	83,837
Egypt	325,098	331,572	270,407	317,952	264,920	353,840	389,593
Total Maghreb	106,776	122,789	112,091	124,699	157,040	179,103	189,345
France	307,233	311,816	325,796	349,546	360,672	366,064	387,497
Spain	294,032	277,912	312,339	349,066	408,327	458,603	706,964
Germany	459,082	376,947	381,658	412,739	451,369	471,961	521,720
Brazil	186,856	150,652	159,252	180,992	203,154	245,362	287,458
Russia	60,692	64,392	73,055	76,853	84,368	167,017	133,470
India	72,327	73,679	71,221	75,999	83,503	86,202	93,619
China	78,324	76,321	72,009	73,215	78,349	346,684	81,268

Source: ICE - Reprint Milan Polytechnic

Table 11: Investment and Disinvestment flows - Veneto Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	
Veneto	Algeria	Disinvestment	0	0	0	0	-128	0	0	0	0	0	0	-128	
		Investment	0	54	40	0	0	0	198	15	0	0	0	307	
	Total Algeria	0	54	40	0	-128	0	198	15	0	0	0	179		
	Egypt	Disinvestment	0	0	-27	0	0	0	0	0	-242	-53	-18	-340	
		Investment	114	227	405	424	733	221	725	728	2,191	263	6,174	12,205	
	Total Egypt	114	227	378	424	733	221	725	728	1,949	210	6,156	11,865		
	Morocco	Disinvestment	0	0	0	0	0	0	0	0	-15	0	-15	-30	
		Investment	180	20	461	39	1,464	343	1,018	285	4,142	656	6,059	14,667	
	Total Morocco	180	20	461	39	1,464	343	1,018	285	4,127	656	6,044	14,637		
	Tunisia	Disinvestment	0	0	0	-129	0	-68	-34	-80	-51	-20	-53	-435	
		Investment	864	504	200	777	1,709	533	4,141	736	2,680	5,477	2,593	20,214	
	Total Tunisia	864	504	200	648	1,709	465	4,107	656	2,629	5,457	2,540	19,779		
	Total Veneto			1,158	805	1,079	1,111	3,778	1,029	6,048	1,684	8,705	6,323	14,740	46,460

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 12: Investment and Disinvestment flows - Veneto Region - values in thousand Euros at current prices

Region	Country	Type of flow	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Campania	Egypt	Disinvestment	0	0	0	-44	0	0	0	0	0	0	-44
		Investment	20	4	0	0	229	0	0	305	723	336	1,617
	Total Egypt	20	4	0	-44	229	0	0	305	723	336	1,573	
	Morocco	Disinvestment	0	0	0	0	0	0	0	-49	0	0	-49
		Investment	0	31	0	15	83	0	0	275	93	265	762
	Total Morocco	0	31	0	15	83	0	0	226	93	265	713	
	Tunisia	Disinvestment	0	0	0	0	0	0	0	-1,138	0	0	-1,138
		Investment	112	33	62	0	55	259	113	80	356	1,044	2,114
	Total Tunisia	112	33	62	0	55	259	113	-1,058	356	1,044	976	
	Total Campania			132	68	62	-29	367	259	113	-527	1,172	1,645

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 13: Investment and Disinvestment flows - Veneto Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total of period	
Apulia	Egypt	Disinvestment	0	0	0	0	0	0	0	0	-85	0	-85	
		Investment	0	106	136	103	115	49	81	89	103	120	902	
	Total Egypt	0	106	136	103	115	49	81	89	18	120	817		
	Morocco	Disinvestment	0	-26	0	0	0	0	0	-685	0	-40		-751
		Investment	0	0	11	151	487	91	126	20	61	358		1,305
	Total Morocco		0	-26	11	151	487	91	126	-665	61	318		554
	Tunisia	Disinvestment	-25	0	0	0	0	0	-20	0	0	-30		-75
		Investment	74	0	0	12	114	0	149	257	0	130		736
	Total Tunisia		49	0	0	12	114	0	129	257	0	100		661
	Total Apulia			49	80	147	266	716	140	336	-319	79	538	2,032

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 14: Investment and Disinvestment flows - Apulia Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1999	2005	2006	2007	Total
Calabria	Egypt	Investment	0	1	0	0	133	134
		Total Egypt	0	1	0	0	133	134
	Morocco	Investment	0	0	15	0	0	15
		Total Morocco	0	0	15	0	0	15
	Tunisia	Investment	169	77	0	50	73	369
		Total Tunisia	169	77	0	50	73	369
	Total Calabria		169	78	15	50	206	518

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 15: Investment and Disinvestment flows - Sicily Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Sicily	Algeria	Investment	0	0	0	0	0	0	0	0	0	0	107	107
		Total Algeria	0	0	0	0	0	0	0	0	0	0	107	107
	Egypt	Investment	12	0	23	0	0	0	91	84	121	73	105	509
		Total Egypt	12	0	23	0	0	0	91	84	121	73	105	509
	Morocco	Disinvestment	0	0	0	0	0	-35	0	0	0	0	-55	-90
		Investment	0	81	0	325	307	123	0	130	0	944	1,729	3,639
	Total Morocco		0	81	0	325	307	88	0	130	0	944	1,674	3,549
	Tunisia	Disinvestment	-49	-19	0	0	0	0	0	0	0	-20	0	-88
		Investment	838	474	248	1,489	665	290	138	238	346	2,023	3,317	10,066
	Total Tunisia		789	455	248	1,489	665	290	138	238	346	2,003	3,317	9,978
Total Sicily			801	536	271	1,814	972	378	229	452	467	3,020	5,203	14,143

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 16: Investment and Disinvestment flows - Abruzzo Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total of period
Abruzzo	Algeria	Investment	0	0	0	0	0	0	0	0	0	0	34	34
		Total Algeria	0	0	0	0	0	0	0	0	0	0	34	34
	Egypt	Investment	0	58	0	0	0	0	17	14	91	0	121	301
		Total Egypt	0	58	0	0	0	0	17	14	91	0	121	301
	Morocco	Disinvestment	0	0	0	-27	0	0	0	-99	0	0	0	-126
		Investment	0	0	20	103	0	0	20	114	16	125	140	538
	Total Morocco		0	0	20	76	0	0	20	15	16	125	140	412
	Tunisia	Disinvestment	0	-31	-913	0	-1,061	0	0	0	-45	-50	-110	-2.21
		Investment	309	1,263	974	36	0	222	0	371	15	8,308	512	12.01
	Total Tunisia		309	1,232	61	36	-1,061	222	0	371	-30	8,258	402	9,800
Total Abruzzo			309	1,290	81	112	-1,061	222	37	400	77	8,383	697	10,547

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 17: Investment and Disinvestment flows - Basilicata Region - values in thousand Euros at current prices

Region	Country	Type of flow	1999	2002	2005	2006	2007	Total
Basilicata	Egypt	Investment	18	0	15	0	0	33
		Total Egypt	18	0	15	0	0	33
	Morocco	Investment	0	217	0	0	0	217
		Total Morocco	0	217	0	0	0	217
	Tunisia	Investment	0	0	0	54	50	104
		Total Tunisia	0	0	0	54	50	104
Total Basilicata			18	217	15	54	50	354

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 18: Investment and Disinvestment flows - Lazio Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	
Lazio	Algeria	Disinvestment	0	0	0	0	0	0	0	0	0	-16,147	-2,128	-18,275	
		Investment	0	12	0	0	0	710	0	165	3,500	0	0	4,387	
	Total Algeria	0	12	0	0	0	710	0	165	3,500	-16,147	-2,128	-13,888		
	Egypt	Disinvestment	0	-44	0	-13	0	0	-103	-50	0	-1,206	0	-1,416	
		Investment	176	0	488	1,666	194	439	2,052	3,054	991	1,570	2,267	12,897	
	Total Egypt	176	-44	488	1,653	194	439	1,949	3,004	991	364	2,267	11,481		
	Morocco	Disinvestment	0	0	-93	0	-168	0	0	0	0	-29	0	-290	
		Investment	0	273	13	229	315	26	0	325	269	2,386	545	4,381	
	Total Morocco	0	273	-80	229	147	26	0	325	269	2,357	545	4,091		
	Tunisia	Disinvestment	0	0	0	-15	-178	0	0	0	0	-27	-320	-540	
		Investment	192	0	1,089	870	621	336	356	1,115	9,451	2,697	2,971	19,698	
	Total Tunisia	192	0	1,089	855	443	336	356	1,115	9,451	2,670	2,651	19,158		
	Total Lazio			368	241	1,497	2,737	784	1,511	2,305	4,609	14,211	-10,756	3,335	20,842

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 19: Investment and Disinvestment flows - Liguria Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	
Liguria	Algeria	Disinvestment	0	0	0	0	-1,181	-90	0	0	0	0	-39	-1.31	
		Investment	0	70	138	0	0	0	193	0	0	231	0	632	
	Total Algeria	0	70	138	0	-1,181	-90	193	0	0	231	-39	-678		
	Egypt	Disinvestment	0	0	0	-81	0	0	0	0	0	0	0	-81	
		Investment	0	0	20	0	0	0	101	13	199	218	516	1.067	
	Total Egypt	0	0	20	-81	0	0	101	13	199	218	516	986		
	Morocco	Investment	67	27	0	0	77	27	143	0	49	2,120	1,675	4,185	
	Total Morocco	67	27	0	0	77	27	143	0	49	2,120	1,675	4,185		
	Tunisia	Disinvestment	0	0	0	0	0	0	-51	-20	-26	0	0	-97	
		Investment	14	190	21	59	51	15	0	301	60	1,470	822	3,003	
	Total Tunisia	14	190	21	59	51	15	-51	281	34	1,470	822	2,906		
	Total Liguria			81	287	179	-22	-1,053	-48	386	294	282	4,039	2,974	7,399

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 20: Investment and Disinvestment flows - Marche Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	
Marche	Algeria	Investment	0	0	9,659	0	652	0	0	0	0	0	235	10,546	
		Total Algeria	0	0	9,659	0	652	0	0	0	0	0	0	235	10,546
	Egypt	Disinvestment	0	0	0	0	0	0	0	0	0	0	0	-15	-15
		Investment	0	21	27	11	0	0	255	340	1,445	1,181	126	3,406	
	Total Egypt	0	21	27	11	0	0	255	340	1,445	1,181	111	3,391		
	Morocco	Disinvestment	0	0	0	0	0	0	0	0	0	0	0	-31	-31
		Investment	0	41	52	0	0	116	40	20	207	118	674	1,268	
	Total Morocco	0	41	52	0	0	116	40	20	207	118	643	1,237		
	Tunisia	Disinvestment	0	-188	0	0	0	0	-50	0	0	-27	0	-265	
		Investment	16	0	18	20	207	775	76	89	56	0	1,467	2,724	
Total Tunisia	16	-188	18	20	207	775	26	89	56	-27	1,467	2,459			
Total Marche			16	-126	9,756	31	859	891	321	449	1,708	1,272	2,456	17,633	

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 21: Investment and Disinvestment flows - Tuscany Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Tuscany	Algeria	Investment	12	0	0	0	10	12	0	0	0	0	0	34
		Total Algeria	12	0	0	0	10	12	0	0	0	0	0	34
	Egypt	Disinvestment	0	-45	0	0	-117	0	-52	0	-25	0	0	-239
		Investment	32	25	273	139	1,260	167	364	304	842	543	682	4,631
	Total Egypt	32	-20	273	139	1,143	167	312	304	817	543	682	4,392	
	Morocco	Disinvestment	0	0	0	0	0	0	-276	0	-20	0	0	-296
		Investment	444	283	164	455	387	197	113	125	137	165	686	3,156
	Total Morocco	444	283	164	455	387	197	-163	125	117	165	686	2,860	
	Tunisia	Disinvestment	-105	0	-103	0	-187	0	0	-67	-2,728	-630	-30	-3.85
		Investment	138	317	150	129	468	1,045	83	114	1,063	300	252	4,059
Total Tunisia	33	317	47	129	281	1,045	83	47	-1,665	-330	222	209		
Total Tuscany			521	580	484	723	1,821	1,421	232	476	-731	378	1,590	7,495

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 22: Investment and Disinvestment flows - Lombardy Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Lombardy	Algeria	Disinvestment	-36	0	0	0	0	-491	0	-17	0	0	0	-544
		Investment	0	115	0	62	38	187	0	366	51	65	414	1,298
	Total Algeria	-36	115	0	62	38	-304	0	349	51	65	414	754	
	Egypt	Disinvestment	-12	-371	-1,205	-144	-212	-85	-57	-53	-426	-7,383	-177	-10,125
		Investment	8,364	5,871	23,377	17,809	1,553	802	11,594	4,488	2,375	5,324	6,700	88,257
	Total Egypt	8,352	5,500	22,172	17,665	1,341	717	11,537	4,435	1,949	-2,059	6,523	78,132	
	Morocco	Disinvestment	0	0	-253	-310	-48	-108	-633	-31	-3,076	-943	0	-5,402
		Investment	188	268	1,980	1,009	953	1,185	1,035	1,222	5,309	4,178	2,694	20,021
	Total Morocco	188	268	1,727	699	905	1,077	402	1,191	2,233	3,235	2,694	14,619	
	Tunisia	Disinvestment	0	0	-390	-111	-266	-446	-358	-210	-63	-197	-581	-2,622
Investment		1,614	4,502	4,142	3,829	5,682	1,391	3,299	2,999	1,653	2,754	6,421	38,286	
Total Tunisia	1,614	4,502	3,752	3,718	5,416	945	2,941	2,789	1,590	2,557	5,840	35,664		
Total Lombardy			10,118	10,385	27,651	22,144	7,700	2,435	14,880	8,764	5,823	3,798	15,471	129,169

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 23: Investment and Disinvestment flows - Piedmont Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Piedmont	Algeria	Disinvestment	0	0	0	0	-387	0	0	0	0	0	0	-387
		Investment	0	0	0	46	0	4,500	270	0	0	15	0	4,831
	Total Algeria		0	0	0	46	-387	4,500	270	0	0	15	0	4,444
	Egypt	Disinvestment	-379	0	0	-41	0	0	-43	-120	-51	0	-116	-750
		Investment	233	0	224	129	288	60	42	1,944	201	969	770	4,860
	Total Egypt		-146	0	224	88	288	60	-1	1,824	150	969	654	4,110
	Morocco	Disinvestment	0	0	0	0	0	0	-81	0	0	-90	-20	-191
		Investment	1,523	120	169	452	97	2,258	408	458	2,792	2,269	1,365	11,911
	Total Morocco		1,523	120	169	452	97	2,258	327	458	2,792	2,179	1,345	11,720
	Tunisia	Disinvestment	-245	-20	-15	-1,110	0	0	-155	0	-250	-44	-28	-1,867
Investment		1,176	845	2,234	1,486	177	4,156	210	1,524	694	2,405	3,593	18,500	
Total Tunisia		931	825	2,219	376	177	4,156	55	1,524	444	2,361	3,565	16,633	
Total Piedmont			2,308	945	2,612	962	175	10,974	651	3,806	3,386	5,524	5,564	36,907

Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 24: Investment and Disinvestment flows - Emilia-Romagna Region - values in thousand Euros at current prices

Region	Country	Type of flow	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Emilia-Romagna	Algeria	Disinvestment	0	0	0	0	0	0	0	0	0	-26	0	-26
		Investment	64	79	31	27	58	135	230	341	116	175	2,550	3,806
	Total Algeria		64	79	31	27	58	135	230	341	116	149	2,550	3,780
	Egypt	Disinvestment	0	0	0	-32	-71	0	0	-150	-108	0	0	-361
		Investment	210	481	510	183	56	435	430	1,450	847	618	11,457	16,677
	Total Egypt		210	481	510	151	-15	435	430	1,300	739	618	11,457	16,316
	Morocco	Disinvestment	0	0	0	0	0	0	0	0	0	-178	-2,125	-2,303
		Investment	10	0	431	139	645	309	179	182	461	860	584	3,800
	Total Morocco		10	0	431	139	645	309	179	182	461	682	-1,541	1,497
	Tunisia	Disinvestment	0	-100	-35	0	0	-39	0	0	0	0	-380	-554
Investment		105	87	515	581	501	961	346	442	610	1,790	1,667	7,605	
Total Tunisia		105	-13	480	581	501	922	346	442	610	1,790	1,287	7,051	
Total Emilia-Romagna			389	547	1,452	898	1,189	1,801	1,185	2,265	1,926	3,239	13,753	28,644

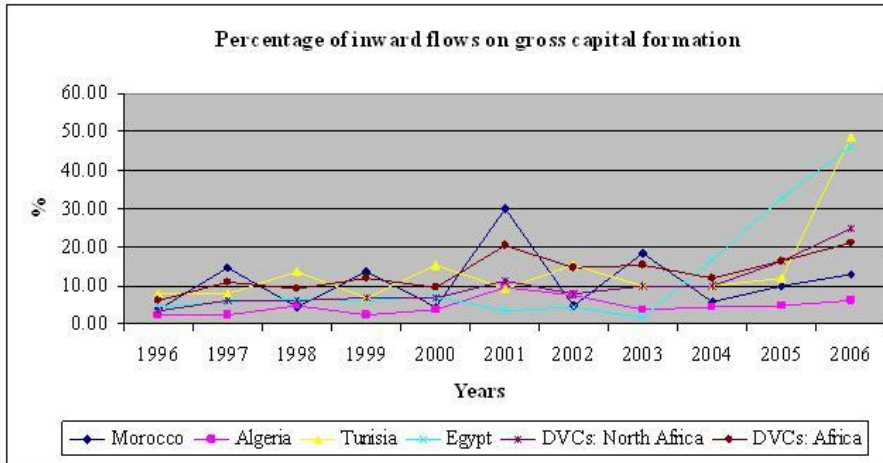
Source: Surveys and Elaborations Service - Department on Foreign Statistics - Bank of Italy

Table 25: Flow per employee of foreign firms participated by Italian firms - values in million Dollars at current prices

	Flow per employee of foreign firms participated by Italian firms							
	2001	2002	2003	2004	2005	2006	2007	
Egypt	0.455	0.419	0.464	0.61	0.334	0.544	0.655	
Morocco	0.125	0.124	0.144	0.158	0.171	0.185	0.245	
Tunisia	0.182	0.177	0.212	0.264	0.278	0.294	0.352	
France	0.362	0.446	0.537	0.617	0.627	0.659	0.757	
Spain	0.368	0.432	0.543	0.641	0.774	0.846	0.807	
Germany	0.977	0.858	1.039	1.18	1.229	1.301	1.597	
Brazil	0.049	0.046	0.053	0.086	0.09	0.106	0.113	
Russia	0.378	0.389	0.49	0.622	0.73	0.948	1.023	
India	0.184	0.186	0.218	0.288	0.342	0.445	0.577	
China	0.306	0.316	0.379	0.442	0.443	0.501	0.628	

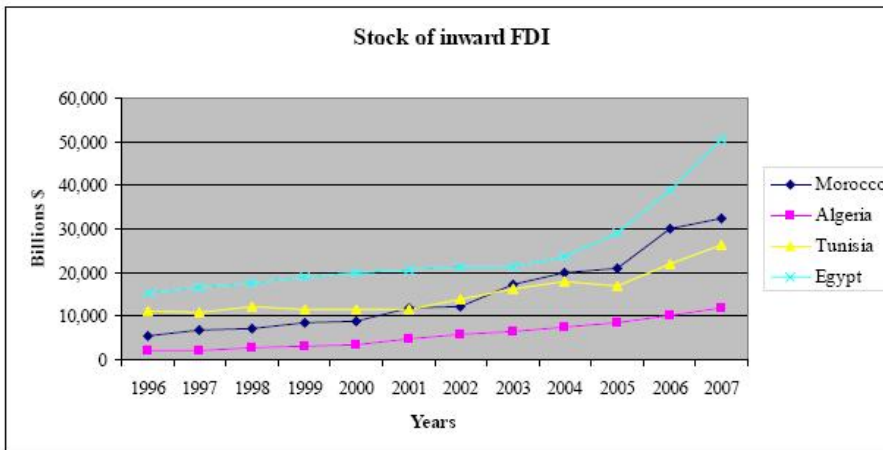
Source: our elaboration on ICE - Reprint Milan Polytechnic, Comext and World Bank data

Figure 1: Percentage of inward flows on gross capital formation



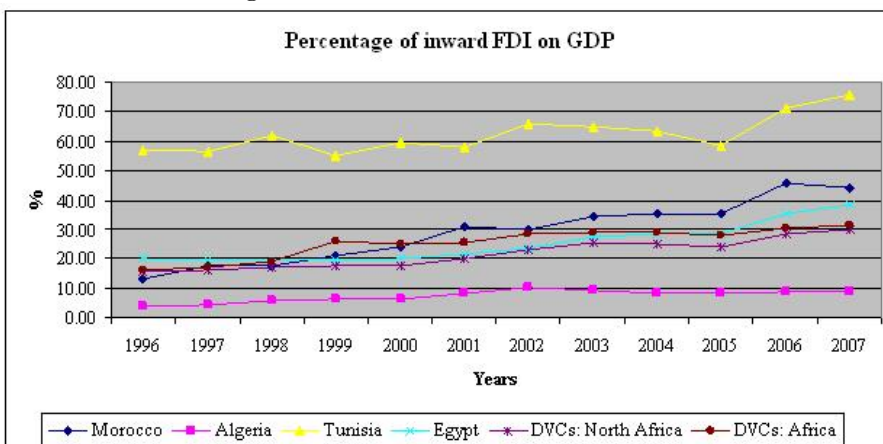
Source: FDIStat, World Investment Report, 2008

Figure 2: Stock of inward FDI: a Comparison



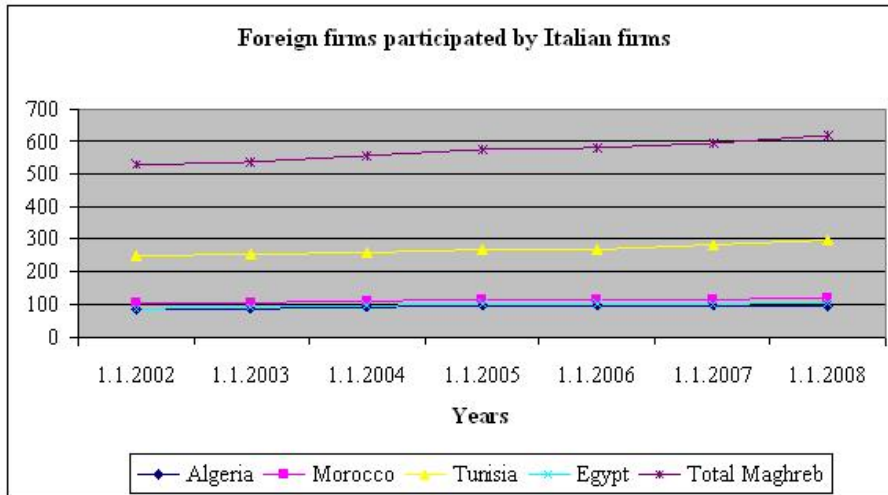
Source: FDIStat, World Investment Report, 2008

Figure 3: Percentage of inward FDI on GDP



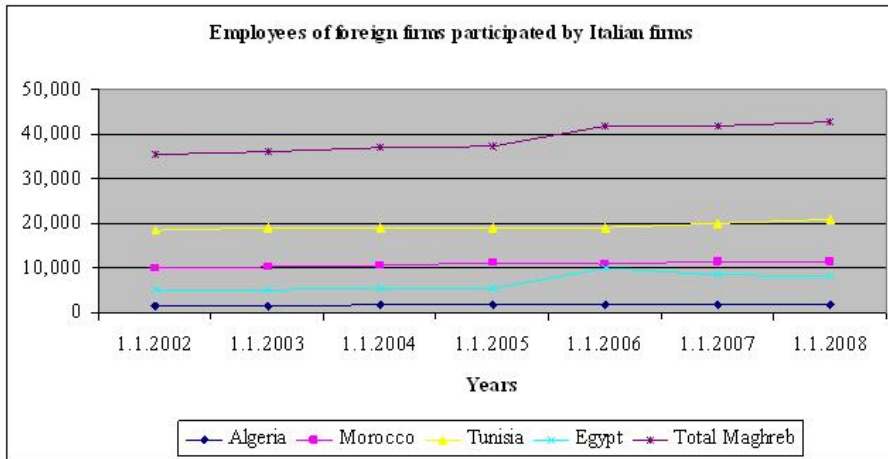
Source: FDIStat, World Investment Report, 2008

Figure 4: Foreign firms participated by Italian firms



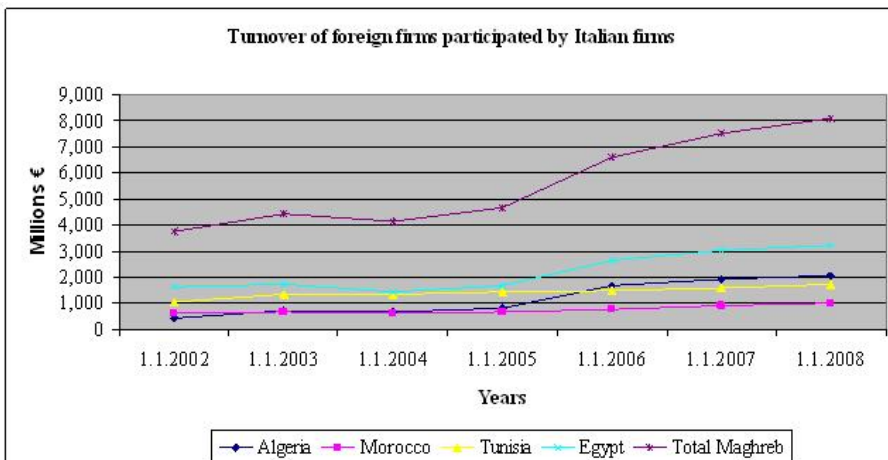
Source: our elaboration on ICE – Reprint Milan Polytechnic data

Figure 5: Employees of foreign firms participated by Italian firms



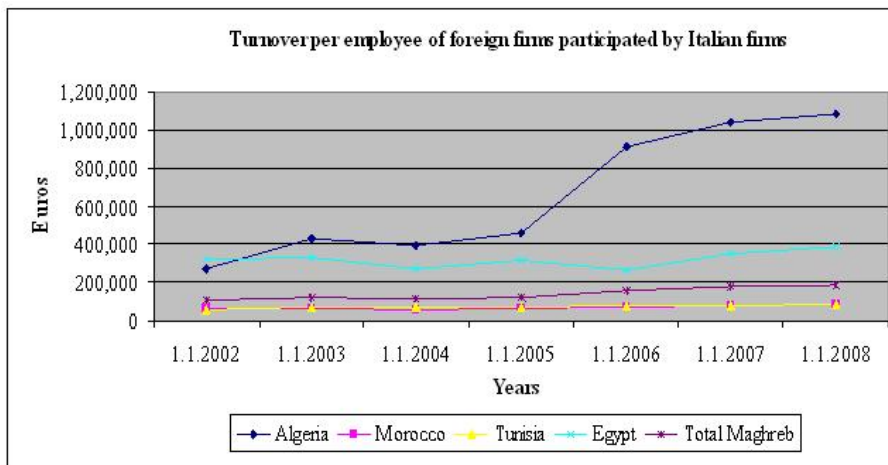
Source: our elaboration on ICE – Reprint Milan Polytechnic data

Figure 6: Turnover of foreign firms participated by Italian firms



Source: our elaboration on ICE – Reprint Milan Polytechnic data

Figure 7: Turnover per employee of foreign firms participated by Italian firms



Source: our elaboration on ICE – Reprint Milan Polytechnic data

References

- [1] M. ANDO, *Fragmentation and Vertical Intra-Industry Trade in East Asia*, North American Journal of Economics and Finance, 17 (2006), pp. 257–281.
- [2] G. GEREFFI, J. HUMPHREY, AND T. STURGEON, *The Governance of Global Value Chains*, Review of International Political Economy, 12 (2005), pp. 78–104.
- [3] F. KIMURA AND M. ANDO, *Two-Dimensional Fragmentation in East Asia: Conceptual Framework and Empirics*, International Review of Economics and Finance, 14 (2005), pp. 317–348.
- [4] S. MIROUDOT AND A. RAGOSSIS, *Vertical Trade, Trade Costs and FDI*, OECD Trade Policy Working Papers, 89 (2009).