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International delocalisation in the Italian fashion industry

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1. Introduction

Over the last two decades, a new model of labour division between firms and countries has emerged in the global economy. This international division of labour is mainly characterised by firms separating the phases of their activities (along the entire chain of production: from conception to design, manufacturing, distribution, sale, and post-sale services) into different modules (“tasks”), and localising these modules in different countries (thus separating production phases which were previously concentrated in one site) in order to take advantage of different local conditions. Among other things, these include first and foremost the different costs of production, particularly labour force costs, and their consequences – given productivity – on the unit cost of products and services ¹.

These decisions concern both multinational and medium-size firms. They do not necessarily imply that all productive modules should be under the control of the firm: some can be outsourced, through a vast range of relations, to other firms. Firms simultaneously decide which phases they want to outsource and where; which phases of the production chain must remain within the firms, and which can be entrusted to others, and where. International delocalisation occurs once some activities (mostly, but not exclusively, labour intensive ones) are transferred abroad. This can happen, as already mentioned, both within the confines of the firm, with direct investments in foreign subsidiaries (either wholly owned or in partnership with others), and through non-equity agreements with independent firms,

¹ This is a particular form of internationalisation defined in the literature as “international fragmentation of production”. For a theoretical overview of this phenomenon, see, among others, Deardorff (2001); Jones, Kierkowski (2001) and more recently Baldwin (2006).

typically through supplying agreements with a wide array of possible conditions and clauses².

Compared to the past, it is easier and more convenient for firms to pursue this option, thanks to two factors: (i) the gradual removal of barriers to international trade and (ii) technological progress (particularly new digital technologies), which leads to easier, faster, and cheaper coordination of the various phases of the production process, even when these are located in different countries (Baldwin 2006; Berger 2006; Grossman, Rossi-Hansberg 2006). More than ever before, economic globalisation and technology allow production to be subdivided into modules; furthermore, increasingly rapid and inexpensive transportation and exchange modalities drive firms to re-organize their production chains on a global scale.

Of course, this is one of the possible avenues for competing on the world market, but it is not the only one. There are successful cases involving “fragmented” firms, but also involving firms that keep many, or almost all, productive phases in-house. As convincingly argued by MIT’s Industrial Performing Centre’s extensive research (Berger 2006), an optimum organisational scheme does not exist, and this is valid for firms competing in highly technological sectors as well as for those engaged in traditional sectors. The best organisational scheme depends on the competitiveness of the firm in the various phases of the production chain; on the convenience of the various possible localisations of the different modules; on the relative convenience of fragmentation versus jointly carrying out the various phases.

There does not exist a single indicator that can univocally measure the delocalisation phenomenon, since delocalisation drives capital flows (direct investments); flows of information, technology, and productive knowledge; and, most importantly, flows of goods (components, semi-finished products, and finished products) both between branches of the same firm (intra-firm) and between different firms. Nevertheless, a plurality of indicators show that this phenomenon, which is certainly not new to the international economy, has greatly increased over the last few years.

Many studies have shown that the share of delocalised production has steadily increased over the last two decades (Feenstra, Hanson 1996; Hummels *et al.* 2001; Jones *et al.* 2005). For example, there are numerous cases of firms that have transferred all of their production abroad. Concurrently, and as a consequence of this phenomenon, the trade in intermediate goods, semi-finished products, parts, and components has grown³. According to some international trade theorists, this trend can be increasingly characterised as trade in modules rather than trade in finished products (Baldwin 2006; Grossman, Rossi-Hansberg 2006).

² Berger (2006) provides extensive evidence of this.

³ It should be stressed that the increase in trade due to the international fragmentation of production contributes to changing both the composition and growth rates of world trade (Yi 2003). For a survey on the scope of delocalised activities, see Kirkegaard (2006).

Table 1 illustrates, as an example, the scope of international fragmentation of production, measured using data on Outward Processing Trade (OPT) for the EU-15 ⁴. Instead of the general recourse to international delocalisation, customs data on outward processing trade accurately depict a precise re-organisation of the productive process, in which the firm decides to transfer one or more modules, one or more phases of its activities, and also establishes how products should be processed, abroad. Looking at the importance of temporary versus definitive traffic, it clearly emerges that the importance of re-imports has grown constantly until 1996, and has held steady in the first years of the current decade, after a having fallen in the late 1990s. This drop, however, depends on technical matters regarding the indicator, and does not contradict subsequent growth ⁵.

Table 1 – EU temporary and final trade with the rest of the world

Trade flows (mln ECU)											
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Outward processing											
Temporary exports	5941	7323	8319	9629	11032	12813	13973	15173	12186	11846	13600
Re-imports	7115	8624	9516	10019	11950	13209	14037	15380	13932	14326	14420
Inward processing											
Re-exports	56268	59188	62254	68771	77120	83705	87748	97262	106084	109028	127600
Temporary imports	28346	30656	29526	31627	37072	40292	44850	51138	55268	59996	69490
Final trade											
Final exports	357657	361268	369810	409149	453466	476758	524572	608694	615157	639319	800800
Final	428163	455970	451648	445782	489606	491752	522128	606049	641339	705503	949500

⁴ Outward Processing Trade measures, separately from definitive trade flows, the movements of good exiting the European Union and destined for further processing outside the Union's economic territory (temporary exports) and those of imports into the EU of the compensating products made from the exported products (re-imports). For the sake of completeness, Table 1 also reports data on Inward Processing Trade, i.e. the entry of goods destined for processing in the EU's economic territory (temporary imports) and the export of the compensating products made from the imported products (re-exports). The focus of this paper is the delocalisation abroad of the phases of a productive process that were formerly integrated in the home country, and thus we limit ourselves to commenting data on outward processing from the point of view of the buyer country.

⁵ The interpretation of data on processing trade must keep in mind that starting on January 1, 1997, the EU removed customs duties on final imports of manufactured goods from countries that had previously signed Association Agreements with the Union (ten Central and Eastern European countries, plus Cyprus and Malta). "It is evident that the removal of customs duties deprives EU firm from their main incentive to use the outward processing customs regime, and that consequently OPT, as a statistical phenomenon, underestimates the flows actually tied to the international fragmentation of production, while overestimating definitive trade by the same amount" (Baldone *et al.* 2002a).

imports											
Weight of temporary trade over the corresponding final trade flows (%)											
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Outward processing											
Temporary exports	1,66	2,03	2,25	2,35	2,43	2,69	2,66	2,49	1,98	1,85	1,70
Re-imports	1,66	1,89	2,11	2,25	2,44	2,69	2,69	2,54	2,17	2,03	1,52
Inward processing											
Re-exports	15,73	16,38	16,83	16,81	17,01	17,56	16,73	15,98	17,25	17,05	15,9
Temporary imports	6,62	6,72	6,54	7,09	7,57	8,19	8,59	8,44	8,62	8,50	7,32

Source: Eurostat, Comext database (table 1 in Baldone *et al.* 2006)

Furthermore, the OPT of European firms is concentrated both from a sector (in traditional sectors, automotive, and electro-mechanics) and geographic points of view. The economic transformations that took place in Eastern Europe were an important factor favouring the international fragmentation of production in Western Europe: in a rather limited timeframe, both intra-industrial exchanges between the EU Fifteen and transition countries and production agreements between firms from these two geo-economic areas intensified (Jones *et al.* 2005)⁶. Trade in parts and components was particularly intense (Kaminsky, Ng 2001).

Within this framework, Italy is a latecomer compared to other countries of a similar level of development, as we shall see in the next paragraph. Nevertheless, delocalisation of activities abroad has recently taken on a significant role here as well. In particular, it heavily impacts certain productive sectors (such as the fashion industry) in which Italy has historically been highly specialised.

In light of the above, we find it useful to retrace the delocalisation process of the Italian fashion industry; in particular, we shall attempt to (i) pinpoint the causes that led firms to transfer production (or phases thereof) abroad; (ii) “measure” the quantitative scope of the phenomenon; (iii) describe its evolution over time and its main changes; (iv) identify the geographical areas of origin and destination. Once we have defined the phenomenon, we shall discuss its effects on firms and local productive systems.

⁶ On the delocalisation of production towards Central and Eastern Europe on the part of EU firms, see Baldone *et al.* (2001).

2. The delocalisation process in the Italian fashion industry: long-term overview

Historically, the productive internationalisation of Italian industry has been modest compared to the main European countries (Viesti 1985; Onida, Viesti 1987). Even today, the share of outward foreign direct investment as a percentage of GDP is limited compared to that of other industrialised countries of similar size and degree of development.

Some structural characteristics of the Italian economy help explain this situation (Federico 2006). The first factor is the small average size of firms. There is certainly a direct, positive correlation between firm size and the ability to organize firm activities on an international scale. This requires financial resources and substantial strategic, managerial, logistical, organisational, and control resources that are generally less available in smaller firms.

Actually, the degree of internationalisation of Italian firms could be much higher (and strategies adopted by firms more multifaceted) than emerges from the analysis of foreign investment data, since Italian firms mostly use non-equity forms of internationalisation (Balcet *et al* 1985; Schiattarella 1999a; Corò, Grandinetti 1999; Corò, Volpe 2003a)⁷.

A second important factor is linked to the potentially higher importance, in the Italian case, of “district-based” external economies. These make it less convenient to organize production on an international scale, since the presence of numerous specialised firms, services, and suppliers in a small area can significantly contribute to the competitiveness of a given firm.

This dovetails nicely with the well-known specialisation of Italian industry. In Italy, sectors with high economies of scale are less well represented compared to other major industrialised countries, where they normally account for the largest share of multinational investments and are tied to strong and increasing international fragmentation of production phenomena, starting with the automotive and consumer electronics sectors. Instead, “specialised producers” play an important role. Since they draw much of their competitiveness from their frequent interactions with specialised component suppliers, from close producer-user links, and from the incremental innovation arising from a wide array of goods in which design clients have a significant input (“customised goods”), they tend to internationalise through export channels or through acquisitions from abroad, rather than through the fragmentation of productive processes on an international scale.

The situation regarding traditional consumer goods, another sector in which Italy’s comparative advantages are concentrated, is more complex and ambivalent. How can we explain the low degree of internationalisation,

⁷ Even non-equity operations, which by definition do not require the availability of capital, nevertheless require significant managerial resources.

at least as recently as 15 years ago, of Italian firms in this sector, in which the high incidence of direct labour costs and the low product innovation rate in the narrow sense can make shifting production to cheap labour countries particularly convenient? Traditional explanations mention small firm size, district-based economies, close interaction with the suppliers of machineries (and thus process innovation) and specialisation in productive segments characterised by small production lots and subject to rapid change over time: all these elements make it less convenient to pursue the international fragmentation of production. The need to remain close to one's clients, respond rapidly to the market, and continually modify the array of production to keep up with shifting demand trends ("fashion effect") make producing abroad difficult and costly. The presence of specialised suppliers of components and services, as well as of highly professional firms specialised in specific phases of production, and the need for constant interactions often regarding technical aspects that are difficult to codify (the "feel" of silk fabrics produced in the Serico/Como district) instead make it convenient to fragment production within the district, or at most in Italy. As is widely known, starting in the 1970s, the main 'Made-in-Italy' companies quickly and massively fragmented and decentralised their production, especially in the north-east, in Tuscany, and along the Adriatic coast (Brusco, Paba 1997). Many districts were established and grew thanks to the existence of a stock of specialised, idiosyncratic knowledge, which can be accumulated and transmitted only through personal interaction and manual and analytical non-routine functions, which are difficult to codify and standardise, and thus difficult to copy or transfer over long distances.

As previously mentioned, however, everything is changing. Starting in the late 1980s, Italian firms experienced an increasing delocalisation of productive activities abroad. Medium (and small) firms, including some located in industrial districts, were the main protagonists of this phase.

The shift took place between the late 1980s and the early 1990s. During that period, the international context changed due to a series of factors that can be summed up as the progressive liberalisation of trade and increased competition from emerging countries. The combined effect of these two factors led firms to seek new solutions in order to remain competitive on the international market. For many (but not all) firms, delocalisation was the way to face competition from new international competitors, since it makes it possible to combine the high productivity and technological level at home with the lower labour costs abroad. Obviously, this is made possible by technical conditions that allow the productive phases in which labour – especially unskilled – is the main factor to be separated. New communication technologies make it possible to break down the various phases of production without prejudice to quality or efficiency, at least in theory.

All available analyses identify the reduction in labour costs, achieved by searching for areas where such costs are low, as the reason behind the decision to delocalize production (or parts thereof). Indeed, the areas where investments are destined are characterised by low labour costs, and firms transfer the most unskilled-labour-intensive phases of production (Barba Navaretti *et al.* 2001). These are thus mainly “vertical” investments that generate strong flows of intra-industrial trade with the parent companies.

While the main motivation is the reduction of production costs, other advantages include the opportunity to establish economies of scale (a few large foreign suppliers, or one large plant abroad, instead of many small domestic suppliers). Recently, many firms have begun to consider the countries where they have transferred their production as possible end markets for their products, or as possible bases to reach other markets (this is particularly true for investments in South-east Asian countries).

As already mentioned, measuring the international delocalisation process is not easy, due to both the variety of shapes this process can take and the lack of adequate statistical sources. To obtain adequate measurements, it would be necessary to look at the firm as the unit of analysis, calculate the extent of fragmentation processes more accurately, and quantify intra-firm international trade and trade between firms linked by non-equity relationships. However, statistics with this level of detail are currently unavailable.

In the literature, attempts to measure the delocalisation of Italian firms have used the following: data on foreign direct investments in countries with low labour costs; international trade data, particularly those on outward processing trade; and data on firms collected during field surveys.

The significant increase in the degree of productive internationalisation in Italy during the 1990s is highlighted by trends in foreign direct investment (FDI): in 1986, in traditional sectors, Italian companies had 101 associated companies abroad; ten years later, that number grew to 1,008 (Tab. 2).

Table 2 – Italian investments abroad in manufacturing industry, by Pavitt macro-sectors

	1.1.1986		1.1.1996		1.1.2005	
	No.	%	No.	%	No.	%
	<i>Participated firms</i>					
Traditional sectors	101	14,5	1.008	35,7	1.958	33,4
Scale intensive sectors	381	54,7	1.277	45,2	2.679	45,7
Specialized sectors	118	16,9	302	10,7	772	13,2
Science based	97	13,9	240	8,5	454	7,7

sectors						
Total	697	100,0	2.827	100,0	5.863	100,0
<i>Employees of the participated firms</i>						
Traditional sectors	19.188	7,9	123.466	20,3	201.465	23,7
Scale intensive sectors	183.233	75,0	379.853	62,5	471.402	55,4
Specialized sectors	17.802	7,3	55.283	9,1	82.664	9,7
Science based sectors	23.965	9,8	49.197	8,1	96.104	11,3
Total	244.188	100,0	607.799	100,0	851.635	100,0

Source: REPRINT database, Politecnico di Milano - ICE

Of course, not all investments are tied to delocalisation: there are direct investments - whose goal is market penetration, and some of which include acquisitions - in advanced countries, but the geographical distribution of FDI shows that it is highly concentrated in Central and Eastern Europe and in Asia. Three elements of this process are particularly important: it also involves medium and sometimes small firms; it regards final consumer goods from the Italian fashion industry; and it is directed towards Eastern European countries and, to a lesser extent, the Far East. These three elements are closely intertwined.

However, direct investments only show part of this phenomenon. A growing and persuasive body of literature, based on a plurality of data (Graziani 1998, 2001; Baldone *et al.* 2001, 2002a, 2002b, 2006; Bugamelli *et al.* 2000; Chiarvesio *et al.* 2003; Corò, Grandinetti 1999; Corò, Rullani 1998; Corò, Volpe 2003a; Schiattarella 1999b, 2003) for either the country as a whole, specific sectors, or specific districts and geographical areas (Conti *et al.* 2006; Corò *et al.* 2006; Mariotti 2003; Viesti, Prota 2007; Iapadre, Mastronardi 2007), documents the growth of this phenomenon and its characteristics.

OPT unequivocally documents the fragmentation of the productive process on an international scale; international fragmentation accounts for a significant share of total production. Especially in traditional sectors, there is evidence that delocalisation is very significant (Graziani 1998, 2001; Baldone *et al.* 2002b). Compared to other European countries, the delocalisation of Italian firms is more concentrated in certain sectors⁸.

It is noteworthy that this phenomenon is spreading extremely rapidly. Until the mid-1980s, international delocalisation in traditional sectors was almost completely absent in Italy, unlike in Germany, for example (Graziani 1998). OPT data for the textile/clothing and footwear sectors clearly show

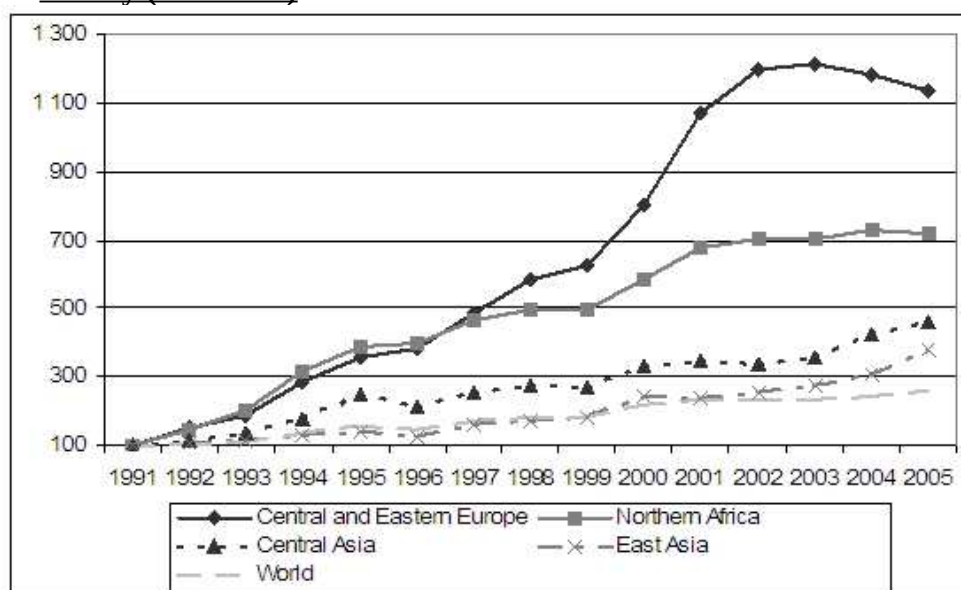
⁸ In other European countries, along with traditional sectors, the transportation, consumer goods, and mechanical sectors are also highly impacted by delocalisation.

an expanding phase until 1996, followed by a slight decline, which is however mostly due to statistical rather than economic factors⁹.

Delocalisation continued to grow after 1996 as well (in part due to the gradual expiration of the Multi Fibre Agreement). Data on foreign investment support this evidence (see Tab. 2). The volume of intra-industrial trade in the textile/clothing and footwear sectors between Italy and countries in Eastern and Central Europe and the Mediterranean basin is evidence of this (Schiattarella 1999a). The usefulness of this indicator in providing insights on the extent of delocalisation is shown below. This process indeed generates exports and imports flows, that are better observed within a production framework rather than within an international trade framework (Schiattarella 2003).

In 2005, the value of imports of textile and clothing products from Central and Eastern Europe was 11 times higher than in 1991 (Graph 1). This increase was even higher in the footwear sector (Graph 2). Obviously this trend cannot fully be attributed to finished products aimed at the domestic market. In 2003, re-imports accounted for 3% of value added in the textile/clothing sector and 6% in the footwear/leather goods sector, versus an average of 1.3% for the manufacturing sector.

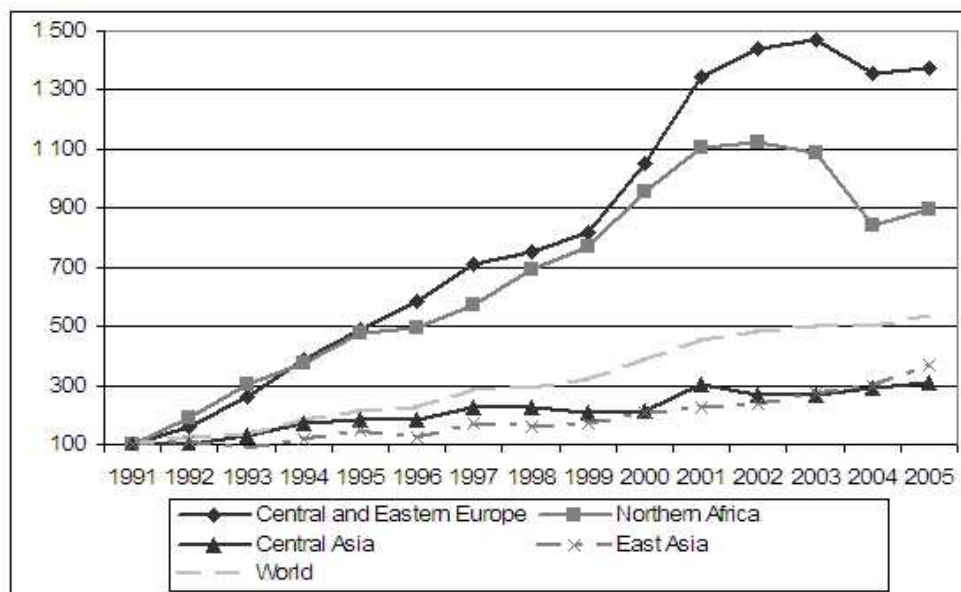
Graph 1 - Total import in the clothing and textiles sectors in Italy (1991=100)



Source: authors' calculations using Istat data

Graph 2 - Total import in the footwear sector in Italy (1991=100)

⁹ See note 6.



Source: authors' calculations using Istat data

The hypothesis that the increasing flow of imports from emerging countries is a signal of ongoing delocalisation phenomena is confirmed by the fact that goods from these countries are directed mainly to the provinces that are highly specialised in these goods, and strong exporters thereof. In the case of the sectors we are analysing, we find that this ability is highly concentrated in the provinces that host the main 'Made-in-Italy' districts, using an indicator that measures Italian manufacturing firms' ability to control the flow of imports from emerging countries (Banca Intesa 2006)¹⁰.

Delocalisation seems to be taking increasing importance in the production plans of manufacturing firms. This is confirmed by the surveys carried out by the *Osservatorio sulle Piccole e Medie Imprese* [Observatory on Small and Medium Enterprises]: between 2000 and 2003, the share of turnover from delocalised production increased significantly. Although delocalisation is more frequent in large firms, over 50% of the total turnover of the SMEs that delocalise production (30% of total SMEs) comes from abroad (Capitalia 2005).

According to the same source, trends for the coming years indicate that delocalisation will play an even greater role: 56% of manufacturing firms foresee that the share of delocalised production on total turnover will increase over the short and medium term, while 35% of firms expect delocalised production to remain stable. Significant growth in delocalised activities is especially part of the industrial strategies of firms operating in traditional sectors (along with those in the high technology sector); looking at geographical trends, a strong increase in the share of turnover realised abroad is expected for southern Italian firms (Capitalia 2005).

¹⁰ For a description of how the indicator is constructed, see Foresti, Trenti (2006).

The phenomenon is evolving qualitatively as well as quantitatively. Of course, qualitative aspects are harder to document, but there is evidence that many of the firms that initially transfer only the simplest productive phases will, over time, delocalise more complex phases as well, and in some cases the entire productive cycle. This goes hand in hand with the increase in the average quality of foreign suppliers, which takes place through similar (albeit perhaps slower) learning processes to those that many Italian suppliers went through. Furthermore, even though initially delocalisation mainly affected the production of mid-to-low quality goods, the production of high-quality goods was subsequently delocalised as well, due to the above-mentioned changes.

As a consequence, delocalisation, which arose mainly as a response to competitive pressures, is becoming part of a broader re-organisation strategy on a global scale, and is associated in some cases with the competitive repositioning process towards high-end products that many firms in industrial districts specialised in ‘Made-in-Italy’ sectors are undergoing.

The gradual broadening of the array of activities carried out abroad is associated with the tendency to consider the host countries of delocalised production (and their neighbours) as end markets for the goods produced there. Economic growth in these countries, particularly for some Eastern and Central European ones, led to higher incomes and standards of living, making them attractive not only as productive sites, but also as potential destinations for products made by Italian firms.

In the literature, there have been attempts to quantify the delocalisation phenomenon through direct surveys. One such example is a study by Chiarvesio *et al.* (2003), which reports the results of a survey of twenty industrial districts operating in typically ‘Made-in-Italy’ sectors.

Other authors have tried to measure the intensity of production internationalisation in terms of “involved foreign workers” (Corò, Volpe 2006). This indicator measures the number of workers activated by the delocalisation of Italian firms. It has grown between 1996 and 2003 (Tab. 3). The countries of Central and Eastern Europe are the most affected areas, but the number of “involved foreign workers” also grew in the Mediterranean basin, China, and India during this period.

Tab. 3 – Employees induced abroad due to district firms’ intra-industry trade

	1996	2001	2003	Δ 1996-2003
<i>Clothing and textiles</i>				
Central and Eastern European Countries	38.612	103.889	117.054	203%
Mediterranean sea basin	9.227	14987	16.792	82%
China and India	24.975	50.005	69.802	179%
<i>Leather and shoes</i>				
Central and Eastern	15.169	34.713	37.745	149%

European Countries				
Mediterranean sea basin	11.225	24.933	24.877	122%
China and India	7.672	15.866	18.359	139%

Source: Corò, Volpe (2006)

Focusing solely on Romania, one of the countries in which delocalisation of Italian firms is strongest, an estimated 16% of workers in the country's textile/clothing and footwear sectors are directly linked with Italy, either through FDI or as suppliers (Banca Intesa 2006).

Both FDI and data on outward processing trade indicate a geographic "specialisation" of delocalisation. The countries with which Italy establishes close production and trade links are, first and foremost, those of Eastern Europe. The main reason is the low labour cost compared to Italy and other Western countries. Differences in labour costs are significant even when one considers these countries' lower productivity: it is estimated that during the first half of the 1990s (the period when delocalisation took root) the cost of labour per unit of product in Italy's textile/clothing sector was, on average, three times as high as in Central and Eastern Europe (Baldone *et al.* 2002b). Geographic and cultural proximity (which reduces transport and coordination costs) is another fundamental factor behind this choice of localisation ¹¹, along with a historical tradition of production in these sectors (making it easier to find local knowledge) in countries such as Poland, Hungary, the former Czechoslovakia, and Romania.

In most cases the process of transferring production abroad did not happen through direct investments, but rather through non-equity instruments, such as trade collaboration agreements and international supplying (Basile *et al.* 2003; Mariotti *et al.* 2004). Firms located in districts that were already part of domestic supplying networks organised their international activities along the same model as their local relationships (Corò, Rullani 1998; Corò, Grandinetti 1999). The fact that an industry is already characterised by a deeply fragmented productive cycle, in which individual productive phases have a high degree of independence, makes delocalisation easier. In many cases, therefore, delocalisation translates into the substitution of foreign suppliers for suppliers located within the district.

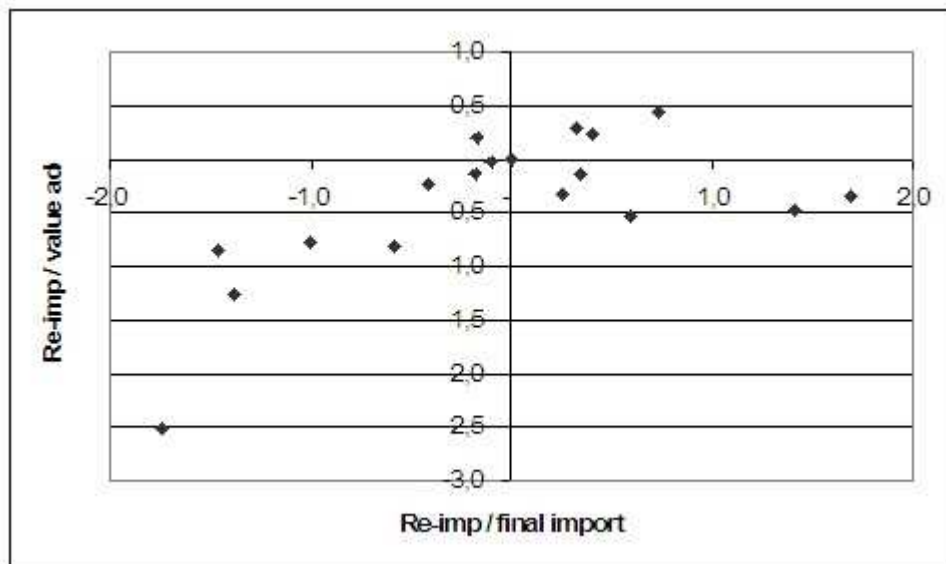
The relationships between buyer firms and suppliers are complex and difficult to distinguish into predefined categories. In many cases, they are based on informal agreements and take place through market exchange; the number of suppliers itself can vary according to demand. In other cases, the opposite is true, and relationships with suppliers are stable and exclusive (i.e., the supplier works for a single firm). The preference for non-equity relationships is usually due to the reduced need for capital, and the increased flexibility that stems from the possibility to change countries and suppliers

¹¹ This even took place, initially, for the delocalisation of US firms in Mexico (Feenstra, Hanson 1996) and Japanese firms in China (Fukao *et al.* 2003).

over time. Many different types of contract agreements are used by the contracting parties with regard to procurement and procurement/supply of machinery and raw materials; quality and process controls; destination of finished and semi-finished products.

The delocalisation of the Italian fashion industry is not equally intense everywhere: Graph 3 attempts to depict this ¹². In particular, the index measuring the value of re-imports as a percentage of total value added produced at the sector level tells us how much of the final value added is produced abroad. The graph immediately identifies the group of regions where delocalisation is higher than the national average.

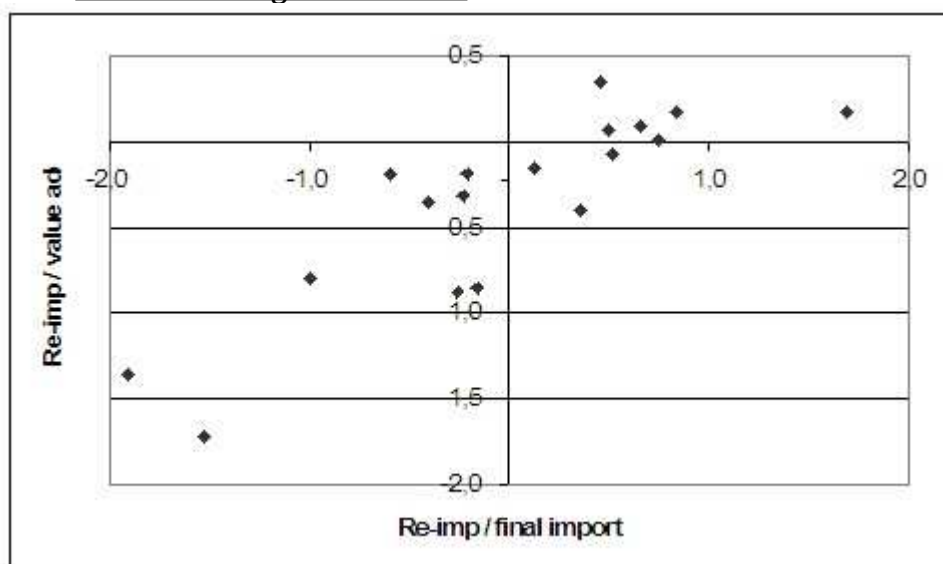
Graph 3 - The intensity of delocalization in the Italian regions
Textile-clothing sector - 1995



¹² In order to measure the degree of productive internationalisation in Italian regions, we use two indicators: the propensity to engage in processing trade related to the corresponding definitive flow, and the share of the value of re-imports as a percentage of value added. When interpreting this indicator, we do not take direct investment into account, which may underestimate the intensity of delocalisation in certain regions (particularly Lombardy and Veneto).

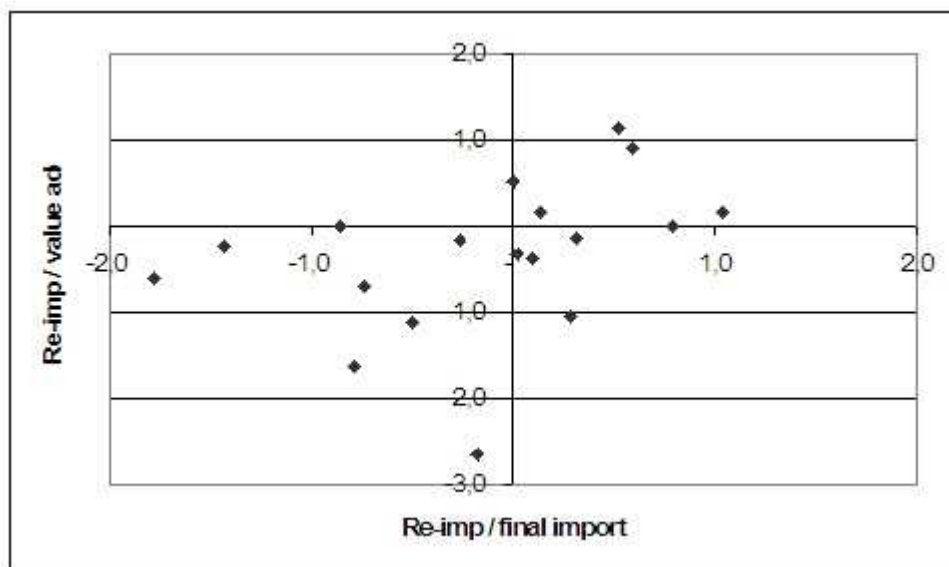
	Re-imp / final import		Re-imp / value added	
Piemonte	-	0,18	-	0,14
Lombardia	-	0,10	-	0,02
Trentino - Alto Adige	-	0,17		0,20
Veneto		0,33		0,30
Friuli - Venezia Giulia	-	0,42	-	0,24
Liguria	-	1,47	-	0,85
Emilia - Romagna		0,41		0,24
Toscana		0,60	-	0,53
Umbria		0,35	-	0,14
Marche		1,42	-	0,48
Lazio	-	1,01	-	0,78
Abruzzo		0,73		0,44
Molise		0,26	-	0,32
Campania	-	1,38	-	1,26
Puglia		1,69	-	0,35
Basilicata		-		-
Calabria	-	1,74	-	2,52
Sicilia	-	0,58	-	0,81

Textile-clothing sector - 2003



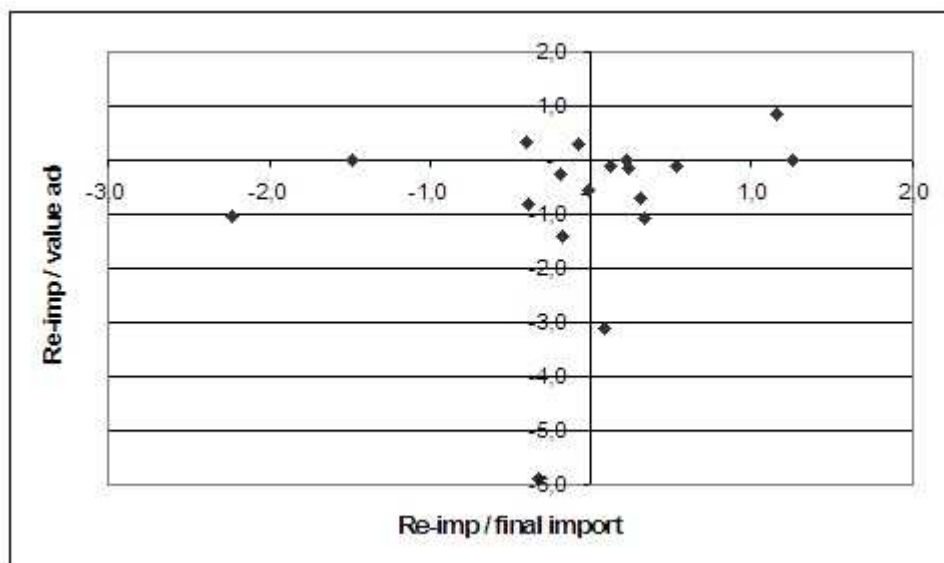
	Re-imp / final import	Re-imp / value added
Piemonte	- 0,21	- 0,19
Lombardia	0,52	- 0,08
Trentino - Alto Adige	- 0,60	- 0,19
Veneto	0,46	0,35
Friuli - Venezia Giulia	- 0,23	0,32
Liguria	- 1,91	1,36
Emilia - Romagna	0,66	0,09
Toscana	0,36	- 0,40
Umbria	0,50	0,07
Marche	0,84	0,18
Lazio	- 1,00	0,79
Abruzzo	0,75	0,01
Molise	- 1,53	1,73
Campania	- 0,41	0,35
Puglia	1,69	0,17
Basilicata	- 0,16	0,85
Calabria	- 0,26	0,87
Sicilia	0,13	- 0,15

Leather and shoes sector - 1995



	Re-imp / final import	Re-imp / value added
Piemonte	- 0,26	- 0,17
Lombardia	0,02	- 0,33
Trentino - Alto Adige	0,10	- 0,36
Veneto	0,14	0,16
Friuli - Venezia Giulia	- 0,79	- 1,62
Liguria	- 1,43	- 0,23
Emilia - Romagna	0,29	- 1,06
Toscana	- 0,51	- 1,12
Umbria	0,53	- 1,15
Marche	0,31	- 0,14
Lazio	- 1,79	- 0,61
Abruzzo	1,04	0,15
Molise	0,80	-
Campania	- 0,75	- 0,70
Puglia	0,59	0,91
Basilicata	-	0,51
Calabria	- 0,86	-
Sicilia	- 0,17	- 2,64

Leather and shoes sector - 2003



	Re-imp / final import	Re-imp / value added
Piemonte	- 0,40	0,33
Lombardia	- 0,01	0,56
Trentino - Alto Adige	- 0,18	0,25
Veneto	- 0,07	0,31
Friuli - Venezia Giulia	- 0,32	5,89
Liguria	- 2,23	1,03
Emilia - Romagna	0,13	0,11
Toscana	- 0,17	1,40
Umbria	0,54	0,11
Marche	0,31	0,69
Lazio	- 0,38	0,80
Abruzzo	0,22	0,01
Molise	- 1,49	-
Campania	0,34	1,08
Puglia	1,16	0,86
Basilicata	0,24	0,14
Calabria	1,26	-
Sicilia	0,09	3,12

Note: normalized values by national average and expressed as logarithm

Source: authors' calculations using Istat data

In the case of the textile/clothing sector, these regions include: Veneto, Emilia-Romagna, Umbria, Marche, Abruzzo and Apulia; for footwear, they are Veneto, Marche, Abruzzo and Apulia.

Thus, this phenomenon is more prevalent in certain parts of the country (the north-east and the south-east). We can thus conclude on the existence of a sort of “Adriatic connection”, with a significant local dimension to integration, and geography playing an important role (Viesti 2002). Veneto is responsible for the lion’s share, but data from Marche and Apulia are also important, especially if one takes their economies’ relative size into account.

3. Delocalisation in the “Adriatic connection”

Where in Italy are delocalisation processes most intense? In order to identify these areas, we analyzed historical data series on imports and exports at the provincial level in the textile/clothing and footwear sectors. By cross-referencing provincial and sector data, calibrating our analysis on the basis of the districts’ productive specificities, and taking OPT and field data into account, we can estimate these phenomena. In this regard we refer to a series of studies on the international integration of the Italian fashion industry which have analysed the commercial flows related to the various productive phases of the industrial chain (Schiattarella 1999a, 1999b, 2003).

The elements that can help identify productive integration include: (i) the extent of export and import flows to/from individual developing or

transition countries as a percentage of the total flows of the sector in which the province is specialised; (ii) similarities between historical import and export series (in particular, the existence of a statistical correlation between imports of products needed for advanced phases of the productive cycle and exports of products needed for previous phases of the same cycle).

Given the importance of what we call the “Adriatic connection”, we shall focus here on case studies from Veneto, Marche, Abruzzo and Apulia.

An analysis of data on exports of textiles and imports of textiles and clothing shows a strong productive relationship between the textile/clothing sector in the Vicenza province and Bulgaria, Romania, Morocco, Tunisia, Croatia and Slovakia (Corò, Volpe 2003b). Furthermore, the Vicenza district appears to have established more complex forms of integration compared to the classic international decentralisation of productive phases with another group of countries (Macedonia, Hungary, Slovenia, Czech Republic, Serbia, Montenegro, Poland, Turkey, Portugal, Hong Kong). In the case of this second group of countries, there may be productive platforms that operate directly on a foreign country to foreign country basis, thus establishing types of internationalisations that are more evolved than pure delocalisation (Corò, Volpe 2003b). Framing the process in historical terms, we can see that delocalisation phenomena in Hungary, Romania, Slovenia, Croatia and Morocco are the oldest ones; commercial flows were already intense in the early 1990s. Later on, productive and commercial relations were established with the Czech Republic and Tunisia, and, more recently, with Slovakia, Bulgaria, Macedonia, Albania and Ukraine. It is difficult to say whether these successive waves replace each other, or whether they all add up. What we can say is that starting in 2002, certain countries (including some, such as Slovenia, where delocalisation established earlier on) became less important, while others established closer relations with the Vicenza district¹³. Over time, the types of activities subject to decentralisation also changed. Currently, delocalisation regards the entire industrial cycle, and finished products are re-imported in order to be subject to quality control and sorting. The productive activities that remain in the district are those related to model creation, “flash” productions, and products made with precious materials, for which labour cost has a limited impact on the final price (Crestanello, Dalla Libera 2003).

In the case of Veneto’s footwear districts, delocalisation has been significant since the early 1990s and concentrated in Romania. Especially since the second half of the 1990s, productive relations with other Eastern European countries have also been established: Bulgaria, Bosnia Herzegovina, Croatia, Ukraine. In the Montebelluna (Treviso) district, some leading firms delocalised labour-intensive activities to Eastern European

¹³ Albeit with caution, we can thus talk about a “waterfall effect” of delocalisation, in that firms tend to transfer (or rather, transfer the production of less strategic activities) repeatedly towards countries where costs are lower.

countries (Slovenia, Romania) starting in the early 1980s. The productive internationalisation strategy chosen by these “pioneer” firms was based both on direct investment and on third-party suppliers (Mariotti 2003). In the 1990s, some firms transferred labour-intensive activities to other areas (other Central and Eastern European countries and China) in order to enjoy once again the competitive advantages that were no longer available in the countries where they initially delocalised; others entrusted the entire productive cycle and sales to firms in the Far East (China, Vietnam, Cambodia) while high-value-added activities (research and development, design) and highly qualified production activities remained in the parent company. Along with these types of firms, three additional types can be identified within the Montebelluna district (Mariotti 2003). These include: firms that were “born delocalised”, which delocalised productive activities abroad from the very beginning ¹⁴; firms that delocalised late, at the end of the 1990s, and that transferred only a limited part of their productive activities; small local firms (laboratories) that supply labour-intensive activities, which delocalised to the same countries as the leader firms in order to continue producing for them, and closed their factories within the district.

In the north-east, we may be dealing with a change in the productive delocalisation model. In the case of larger firms that delocalised a long time ago, strategies may no longer be exclusively aimed at cutting production costs, but rather also at becoming rooted and expanding in the markets where production has been delocalised. A new, more complex and longer-term phase thus seems to have emerged, which, rather than leading to further delocalisation, involves the creation of suitable partnerships for developing mid- and long-term production and trade policies aimed at consolidating the firm’s position in the end market ¹⁵.

In the case of footwear districts in Marche, it was not until the late 1990s that recourse to international supplying led to a systematic productive delocalisation process, as a consequence of increasing competition from developing countries. In the first half of the 1990s, firms decentralised significant phases of production within the district, and only occasionally abroad (Conti *et al.* 2006) ¹⁶. This is a significant difference with other areas where delocalisation began earlier. Compared to other footwear districts, the Fermo-Macerata district also delocalised a smaller share of production

¹⁴ Firms that were “born delocalised” include those that entrust processing phases to foreign firms, in which case the processed goods are re-imported by the home office; and those that outsource the entire productive cycle, in which case the finished products is sold directly on the market (both local and international).

¹⁵ As a consequence of this, there are flows of goods from one foreign country to another (without transiting through Italy), and thus the export of finished products from foreign countries to third countries.

¹⁶ During the first half of the 1990s, decentralisation mainly met the need to increase productive capacity to face the expanding demand for footwear (Conti *et al.* 2006).

abroad. Productive decentralisation mostly targeted Eastern Europe (Romania first and foremost, but also Bulgaria and Slovakia) as well as, Tunisia. Nevertheless, the last few years have seen additional decentralisation abroad of the initial phases of the productive process (cutting and hemming) but also a tendency for the final phases (assembly, finishing, and packaging) to return within the district. The drop in demand for footwear in the early 2000s led many firms to re-position at the higher end of the market. In order to recover competitive (not price) advantages, these firms decided to bring the final phases of the productive process back to the district, since these are the most important phases in terms of quality and brand prestige (Conti *et al.* 2006).

Productive systems in the clothing sector in Abruzzo (Teramo and Chieti) saw delocalisation processes towards Tunisia and Romania during the second half of the 1990s, which seem to have diminished in importance in the early 2000s, at the same time as relations with Albania were intensifying. The geography of productive networks seems to be changing. There is growing interest towards Asian countries, which implies a change in the form of delocalisation and the motives behind it. In India, unlike in other countries, the advantage in labour costs is combined with the availability of skills. In China, trends are shifting away from the supply of semi-finished goods towards the import of finished goods, leaving the local system in charge of services and distribution functions and very little else (Iapadre, Mastronardi 2007).

In the case of Apulian productive systems in the provinces of Bari and Lecce, strong productive integration with certain Eastern European countries result.

Textile and clothing firms in the province of Bari began delocalising certain phases of the productive cycle abroad since the first half of the 1990s; the phenomenon remained limited until 1996, but it has steadily and significantly grown since 1998¹⁷. An analysis of the clothing sector in the Bari province reveals significant productive delocalisation towards Albania and Romania. Albania was targeted first, while delocalisation to Romania has rapidly grown in recent years (particularly after 2000)¹⁸. It should be noted that there is no evidence of any subsequent significant delocalisation efforts towards other Eastern European countries or towards North Africa (with the recent exception of Tunisia, where delocalisation has nevertheless been limited)¹⁹. Firms from the Barletta footwear district began to delocalise some production phases abroad starting in the early 1990s, but

¹⁷ The intensity of this phenomenon is different in the province's two productive poles: it is much more intense in northern Bari province in terms of the number of firms involved; in the south of the province, much fewer firms are delocalising, although they include some of the sector's most important in terms of employees and turnover (Viesti, Prota 2007).

¹⁸ It is interesting to note that in 1997, as Apulian firms were disengaging from Albania due to the political crisis there, relations with Romania peaked for the first time. In following years, relations with both countries grew steadily.

these links, especially with Albania, did not grow significantly and steadily until 1998.

The footwear industry of the Lecce province had close ties with Albania already in 1993. More recently, significant, stable productive and commercial relations have also been established with Serbia and some North African countries (Egypt and Tunisia), while relations with Romania and Bulgaria have diminished.

4. The effects of delocalisation

The fear that accompanies delocalisation processes, especially when production is transferred to countries where the cost of labour is very low, is that this phenomenon will lead to increased unemployment in the country of origin, both in the firms that are delocalising and their suppliers, and that this will increase the de-industrialisation process. However, empirical studies carried out at the international levels do not seem to confirm this widespread fear (Feenstra, Hanson 1996, 1999; Riess, Uppenberg 2004).

The continuous decline of the share of people employed in industry as a percentage of total employment certainly does seem to be accelerated by the effects of globalisation; de-industrialisation, however, is mostly a natural consequence of the evolution of modern societies, and it is driven, above all, by factors internal to industrialised economies (Rowthorn, Coutts 2004). Competition from emerging economies is thus responsible for only a minimal share of the de-industrialisation process affecting Western economies (Boulhol, Fontagné 2006).

Summarising the available evidence, we can claim that, according to the studies at hand, the transfer of production (or phases thereof) to countries with low labour costs has not generally had a negative effect on the domestic firms. Firms are driven to re-organise their activities and substitute tasks that require low skill levels with others that require highly skilled labour. Furthermore, effects on total employment and productivity are generally positive, or at least not negative²⁰. This is coherent with theory: since productive tasks are performed where it is most convenient to do so, and where the unit cost is lowest, the overall productivity of the firm increases (Baldwin 2006).

¹⁹ There are again differences between the two poles of production when it comes to activities decentralised abroad. The firms of northern Bari province working in the undergarment, coat, and shirt-making sectors mostly delocalize the assembly phase. Firms from southern Bari province generally transfer the entire production line abroad for a given product; the product itself, however, is designed in-house, and is then imported to Italy and marketed. This modality is mostly applied to products made in China; in the case of delocalisation to Albania and Romania, the products are not only designed, but also cut in Apulia, while they are put together abroad.

²⁰ For analyses of delocalisation in the service sector, see: Amiti, Wei (2004); Bhagwati *et al* (2004); Arora, Gambardella (2004).

The available empirical evidence, albeit with some exceptions (for example, Geishecker 2006; Marin 2004), does not seem to back up the fears expressed above. The absence of negative effects (better yet, the presence of positive effects) is even clearer when compared with the hypothetical scenario of keeping the entire chain of production in the country of origin.

It must be said right away that discussing the effects of delocalisation is not simple. Indeed, one must distinguish between the effects on the delocalising firms and those on the productive system as a whole; in addition, between short-term and long-term effects. Besides this, an accurate analysis of the effects on domestic firms must take the appropriate counterfactual scenario into account: what would have happened had these processes been absent? Simply looking at output dynamics in the country of origin is not sufficient for an accurate evaluation. It is not necessarily true that without delocalisation, production and employment levels in the firms that chose this strategy would have remained the same; on the contrary, it would be possible to assume a reduction in these levels, due to difficulties in facing increased international competition without the advantages arising from the transfer of some activities in countries where labour costs are lower. In these cases, maintaining all production in the home country may no longer be a viable alternative, as it could lead to complete ousting from the market.

In Italy, outward investment linked to delocalisation processes may have contributed to strengthening productive activities at home, with positive effects on the turnover and productivity of delocalising firms, which have enjoyed better performance compared to firms that have not delocalised (Barba Navaretti, Castellani 2004). This evidence is coherent with theoretical predictions on “vertical” investments. Furthermore, delocalisation does not seem to translate into employment losses in the concerned firms.

In the short run, the fragmentation of production would bring about an increase in total factor productivity and value added; in the long term, the increased efficiency arising from this would strengthen the competitiveness of firms, leading to increased turnover and employment in the home country (Castellani *et al.* 2006)²¹.

The analytical data we just reported regard foreign direct investment and its effect on the profitability of the investing firms; however, as already mentioned, internationalisation activities are broader and more complex.

²¹ The mechanism that explains these positive results can be explained as follows. The international fragmentation of production modifies the structure of the delocalising firm, bringing about a new composition of factors at home: low-skill labour intensive activities are transferred in the countries with the lowest labour costs, while high-skill and technology-intensive activities remain in the home country. In the short-term, this new mix brings about an increase in productivity and value added. In the long run, the improved efficiency that results from this translates into an increase in the competitiveness of the firm, with positive effects on levels of production and employment (Castellani *et al.* 2006).

An analysis of some Veneto clothing and footwear firms that have transferred shares of production abroad attempted to quantify the advantages of this strategy. It shows that the value added per employee and, even more, gross operating profit, have been positively impacted by this choice; and that an increase in the share of production transferred abroad is associated with a net increase in both indicators (Gianelle, Tattara 2006). Productive delocalisation thus seems to have a strong impact on firm profitability, as if it represented an important “process innovation” rather than a mere temporary response to competitive pressure.

In the long run, the re-organisation of productive processes on an international scale inevitably leads to organisational innovations that can translate into improved company efficiency and can increase demand for skilled labour and high-value-added services (such as logistics). The international re-organisation of the company value chain is a process that is closely linked with the improvement of the qualitative profile of the human resources employed by the company (Corò, Grandinetti 1999). There seems to be a correlation between the intensity of delocalisation processes at the international level and changes in the composition of the workforce: the component of skilled labour (office workers and specialised factory workers) increases in firms that transfer part of their production abroad (Schiattarella 2003; Conti *et al.* 2006).

A particularly interesting effect that emerges when analyzing the effects of delocalisation on domestic employment is whether or not the composition of domestic employment has changed in terms of skill upgrading (Head, Ries 2002). Transferring the most labour-intensive phases of the production process abroad leads to a loss of manufacturing jobs, but it also creates new skill-intensive job opportunities in the management and coordination of remote activities. Furthermore, the outsourcing of strictly productive activities allows (or forces) the firm to concentrate on other activities that were previously thought to be less relevant. These activities, which require new and higher-level skills lead to an increase in employees with higher-level professional skills, and, more generally, to a redistribution in the labour force in favour of skilled labour (Conti *et al.* 2006).

In the Italian case, there is evidence of a strong, positive link between international fragmentation and an improved skilled-to-unskilled worker ratio in the traditional sectors; part of this shift is apparently caused by the international re-organisation of production (Helg, Tajoli 2005). As expected, skill upgrading is significant for “initiatives [...] undertaken in [Central and Eastern European countries], supporting the hypothesis that the transfer of labour intensive production activities [...] leads to an increase in skilled workers at the parent company level, where other production phases and coordination and control phases are concentrated” (Castellani *et al.* 2006). It is significant that, according to Eurostat data, between 1997 and 2005, in Italy’s textile/clothing sector, blue-collar and secretarial staff decreased by

30%, while technical and managerial staff increased by 40% (Banca Intesa 2006).

Delocalisation is an important phenomenon not just because it leads to changes within the firm that transfers part of its production abroad, but also because it transforms the structure of local productive systems, particularly in the case of 'Made-in-Italy' districts. The transfer of productive activities abroad leads to the re-organisation of relationships along the production chain, with consequences on the skill levels and composition of the workforce and the structure of the local productive system. Market and non-market relations subsequent to foreign investments impact domestic suppliers and, more generally, the labour market.

It is thus important to extend the analysis of the impact of delocalisation to the productive system as a whole. However, it is very difficult to obtain strong evidence on these aspects.

For example, we have little empirical evidence on the causal link between delocalisation and employment trends by sector. Focusing on an analysis of the impact of FDI on employment in Italian provinces, a recent paper by Federico and Minerva (2006) did not find any evidence of a negative relation between outbound FDI in traditional sectors and increased employment at the local (provincial) level ²². However, the study did not consider other types of non-equity delocalisation. If we look at employment trends in the textile/clothing and leather goods sectors in 1995-2003, we can see that regions with a high degree of delocalisation do not perform below the national average.

It is undoubtedly striking to observe an increase in the share of Romanian workers employed by Italian textile, clothing, and footwear companies and simultaneously a fall in employment in Italy, as in the Romanian case cited above. It looks like an obvious case of substitution effect. But this data does not address to most important question: what would have happened to employment in Italy without delocalisation?

A case study analysis can provide useful insights. In the Marche footwear sector, the reduction in employment seems to have differently affected the firms and productive phases that are most sensible to competitive pressure (producers of components and small producers of leather footwear). Vice versa, employment in larger firms held steady overall (at least between the two Census), but with different dynamics in each sub-sector: employment fell among specialised producers of footwear parts and accessories and grew in rubber footwear manufacturers (Conti *et al.* 2006).

²² With regards to certain capital-intensive sectors and direct investment towards advanced countries, the authors find that FDI has a positive and statistically significant effect on local employment. This result suggests that, compared to the national average, provinces where firms invest more abroad perform better in terms of employment (Federico, Minerva 2006).

These results lead us to formulate a plausible hypothesis, which nevertheless requires additional confirmation: the effect of delocalisation on firms is selective. It can be positive for the leaders and negative for domestic suppliers who are replaced by foreign ones; evidence of this may come from both the significant differences among district-based firms performances in Italy, even within the same district (Banca Intesa 2006), and from the reduction in the overall number of firms, at least in some of the provinces and sectors most affected by delocalisation (Viesti, Prota 2007).

One aspect regards the quality of relations with district-based suppliers and is related to their reduced number: namely, the changing nature and quality of intra-district productive relations (Corò, Grandinetti 1999). With regards to the supplying relations that remain within the district, the firm that controls the final market would tend to select and retrain its network of suppliers, to promote skills and the ability to actively take part in innovative processes, and to develop stable collaborative relationships.

Skill upgrading does not necessarily concern the individual firm only; it can also concern the economic context in which the delocalising firm is located. Savona and Schiattarella (2004) showed that the international delocalisation of production by 'Made-in-Italy' firms has a significant effect on the growth of the service sector in the areas (provinces) of origin; in particular, the higher the level of productive internationalisation, the faster employment grows in service sectors.

Studies on the labour markets of the industrial districts that are affected by delocalisation have found limited effects on employment, and significant capacity to absorb the demand for labour. Overall, the phenomenon's impact on the national labour market still appears to be limited. Nevertheless, even though the negative effects are generally small, they disproportionately strike unskilled workers (especially in traditional sectors). This is particularly true for women, who are often unable to re-enter the labour market after losing their job.

Another channel through which the decentralisation of productive phases can contribute to strengthening the local economic context is the "demand for instrumental goods in target areas of decentralisation, [which can] benefit the districts affected by delocalisation processes if they have developed an adequate internal sub-system of technologies to support the production of the district's characteristic goods [...] or, more generally, the national instrumental mechanics sector" (Corò, Grandinetti 1999).

In the long run, one could expect to observe substitutions between investment in Italy and investment abroad. In other words, the fall in investment should be larger in regions in which delocalisation has been more extensive. This is the result of a study by Schiattarella (2003), who compared the average value of investment in 1994-1997 versus 1988-1990. However, variable trends result if we look at the growth rate of investment in the textile/clothing and leather goods sectors at the regional level in 1995-

2001. Once again, a clear distinction between areas where delocalisation is strong and those where it is weak (or absent) does not seem to emerge.

Another important long-term trend regards productivity. At the regional level, between 1995 and 2003, productivity in the delocalising regions increased faster than in other regions in the textile/clothing sector, but it decreased in the leather goods sector. This confirms the results of previous studies that showed that while no clear trends emerged in the 1980s, productivity growth increased hand-in-hand with the propensity to delocalise in the 1990s. Productivity increase seem to be accompanied by a strengthening of innovative capabilities which appear to be linked to the development of international delocalisation. Firms that delocalize also innovate; their international nature seems to affect the capacity to innovate more than size does (Schiattarella 2003).

5. Delocalisation and industrial districts

Delocalisation is causing significant changes in the organisation of labour and in the relationships between firms, especially within industrial districts. Is there a real possibility that massive productive delocalisation could lead to impoverished skills, since the fall in blue-collar employment has a strongly negative impact on the body of knowledge held by the local workforce? Can delocalisation cause de-industrialisation? By producing increasingly less in Italy, and exerting direct control over a smaller number of productive phases, will firms still be able to achieve product innovation and maintain their competitive advantage? How important is it for “Made-in-Italy” products to actually be made in Italy?

The success of such products was certainly based in past decades on the innovations arising from the close contact between producers and designers. The spatial division between design and production can, in theory, create problems: a loss of information about the productive process, a reduction in the capacity for incremental innovation. By delocalising, do firms run the risk of losing the technical skills and innovative capabilities that have so far been the main advantage of Italian district-based production? By transferring their productive activities abroad, district-based firms may no longer have any interest in investing in professional training at the local level (Mariotti 2004). The international delocalisation process might greatly increase uncertainty within the districts, thus making it less attractive for young people to pursue a career in Made-in-Italy sectors. Journalistic evidence suggests that technical schools in Veneto (which were, until a few years ago, a major supplier of specialised workers) are closing due to the lack of students. District-based firms are starting to complain about their difficulties in locally recruiting qualified workers. These shortcomings may reinforce decisions to transfer production abroad, thus perpetuating a vicious circle.

Can delocalisation lead to a loss of competitiveness due to the constant transfer of specialised knowledge and strategic skills away from the local production system? Local production systems are repositories of tangible and intangible resources held by local firms; the so-called localised capabilities are built around such resources. Can the transfer of production to geographically distant areas threaten these capabilities and thus the factors upon which the competitive advantages of local economies are based?

Uncertainties regarding the volume of orders of larger firms (which increasingly tend to shift production abroad) could discourage smaller local suppliers from investing in the modernisation of plants, with an adverse effect on productivity. The increase in value added produced by the delocalisation of end firms may no longer directly impact on employment at the local level (Gianelle, Tattara 2006): the destinies of firms and their workers, long considered indivisible, may come unbound. The breaking of the link between the firm and its local territory may have disaggregating effects on industrial districts, where a cooperative socio-economic climate has been considered as one of its main distinguishing feature.

Are our districts losing their “district” nature?

All these questions must be seriously taken and reflected upon over the long term, as difficult as that may be. The evidence presented in the preceding sections seems to allay these fears – at least partially – in Italy’s case. It should be kept in mind that the same MIT group that published the famous report *Made in America* (Dertouzos *et al.* 1989), which referred mostly, but not exclusively, to the U.S. experience, now reaches conclusions that are far from pessimistic (Berger 2006): firms can maintain their competitive advantage even when they delocalize parts (even significant parts) of their chains of production, especially with regards to manufacturing phases.

Delocalisation leads firms to re-organize their production, distribution, and logistics on an international scale. Firms can thus successfully face the difficulties arising from an increasingly flexible and differentiated demand and from stronger international competition. The international decentralisation of production allows them to strengthen their presence in markets where they were already present and gain a foothold in new, rapidly expanding markets. They can concentrate on activities tied to marketing and distribution. They can fund new commercial strategies and invest in sales points located and managed abroad. Delocalisation allows firms to achieve “functional advancement” within the chain of production, to gain experience, and to learn.

Delocalisation can thus provide an important opportunity for Italian firms to remain competitive in mature sectors. It can install important skills at the local levels, which are vital to ensure competitiveness and develop additional skills. It should also be kept in mind that while delocalisation is

an increasing trend, it does not concern all firms. Many firms continue to keep their entire production chain in Italy, either in-house or through district-based suppliers: these include firms that produce highly differentiated goods or a very broad array of goods; firms producing high-end goods or goods that require highly qualified workers; and firms producing goods with a very brief “time to market” or with frequent collections and re-orders.

Delocalisation is not an obligatory choice, nor is it a simple one, since savings in the cost of labour must be compared with increased control, coordination, and transportation costs.

Nevertheless, as the evidence presented here seems to show, this phenomenon is quite broad. It is difficult to interpret it as a temporary matter; rather, it seems to indicate a structural change in the competitive behaviour of many Italian firms.

It must thus be taken seriously. In its analytical aspects, it must be the focus of new studies with a broader outlook on what is currently happening within firms and district, paying attention to differences – significant as they may be – in terms of both conduct and performance, and aiming to understand the short-term and long-term effects of delocalisation. Such studies are not simple. Unlike in the past, employment data are no longer a univocal indicator of performance at the firm or local level: a district can lose employment at the same time as profits and value added increase. Data on exports are no longer a univocal indicator of sales to foreign markets, since such sales can originate directly from delocalised production. The very borders between industrial and tertiary activities become blurred: is a firm that designs and distributes clothing while outsourcing its production an “industrial” firm or a “commercial” firm?

A fundamental component of the Made-in-Italy industry is at stake. However, the economic policy implications are very interesting as well. One need only think of the current and future consequences of this phenomenon on firms’ demand for labour, and thus on the most suitable training policies and social safety nets, especially at the local level. If, as it seems, delocalisation is selective regarding firms and phases of the chain of production; if this selectivity is difficult to predict on the basis of simple parameters (sector, size), since it is caused by more complex factors; if delocalisation is rapid and intense; then the ability of the labour force to change duties and not just jobs, and thus modify their professional skills, becomes crucial.

One must also keep in mind the crucial importance of medium- and long-range transportation and logistics for the competitiveness of a significant portion of Italy’s industry, since for every product unit sold, the transfer costs of parts and components – of the finished product – increase. This structural transformation must be analysed, understood, and tackled very carefully.

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