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**PRODUCTIVE INTERNATIONALISATION:
ANALYSIS OF THE POTENTIAL EFFECTS
ON VENETO'S TRADITIONAL INDUSTRIAL DISTRICTS**

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Abstract

The aim of our paper is to analyse the size and the quality of the productive internationalisation phenomenon of Veneto's firms and to assess short and long-term effects on both the native industrial district and the host system in which they delocalise. Some of the recent literature, in fact, tends to conclude that the internationalisation process has positive effects on the area of origin. According to this literature Veneto's districts would simply be propagating to areas of Romania or other East European countries and would not therefore face the risk of entering a phase of decline.

Our paper disputes this approach. Adapting the Rostow stages of development scheme we sketch a possible evolution of the development stages of an industrial district operating in a traditional sector (such as textiles, clothing, leather and leather products). After having described the internationalisation process of Veneto's districts towards Romania we turn to discuss possible consequences of this process both on the district of origin and on the recipient area. After having disputed the neoclassical approach towards technology acquisition we start from the technological capabilities approach to define the conditions under which local firms in the recipient economy may acquire and master new technologies. We then highlight how the productive internationalisation process may determine a progressive weakening of the network of linkages that characterise the native district, and a progressive transfer of know-how and technologies in the host system. Finally, we determine the conditions under which the delocalisation process of leader firms could lead in the medium term to the vanishing of the district of origin and the potential development of an industrial district in the recipient area. We conclude by suggesting the adoption of policy measures to amplify possible positive effects and counter negative consequences.

Key words: Internationalisation, Clusters, Industrial districts, Delocalisation, Organization of Production

JEL classification: L23

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.....particularly in the Italian experience, the industrial district has often proved to be rather a “ stage” in one of the possible different paths of industrialization
(Beccatini, 1987)

1. Introduction

The aim of our paper is to analyse the size and the quality of the productive internationalisation phenomenon of Veneto's firms and to investigate potential short and long-term effects on both the industrial districts of origin and the host system in which they delocalise.

Some of the recent literature, in fact, tends to conclude that the internationalisation process has positive effects on the area of origin. According to this literature Veneto's districts are simply propagating to areas of Romania or other East European countries and would not therefore face the risk of progressive impoverishment and decline (Savona e Schiattarella, 2004; Corò e Volpe, 2003)

Our paper disputes this approach. We start in section 2 by adapting the Rostow stages of development scheme to sketch a possible evolution of the development stages of an industrial district operating in a traditional low technology sector. We define 5 stages of development, starting from the birth of the district up to the age of industrial internationalisation. We then propose a potential sixth stage in which we outline the possible vanishing of the district as a consequence of the internationalisation process.

In section 3 we describe the internationalisation process of Veneto's districts towards Romania focusing in particular on the Timis province. In section 4 we then turn to discuss possible consequences of this process both on the district of origin and on the recipient area. After having disputed the neoclassical approach on technology acquisition, we start from the technological capabilities approach to define the conditions under which local firms in the recipient economy may acquire and master new technologies. We then highlight how the productive internationalisation process may determine a progressive weakening of the network of linkages that characterise the native district, and a progressive transfer of know-how and technologies in the host system. Finally, we determine the conditions under which the delocalisation process of leader firms could lead in the medium term to the vanishing of the district of origin and the potential development of an industrial district in the recipient area. Results will allow to define the effects of the productive internationalisation process of Veneto's firms on the native clusters and to suggest the adoption of policy measures to amplify possible positive effects and counter negative consequences.

2. Traditional industrial district: a proposal for a development paradigm

The theoretical literature on enterprise clusters² and industrial districts³ is now plentiful, hence any attempt here to review it would be insufficient⁴. The aim of this section within the present work is

² “Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs. Finally, many clusters include governmental and other institutions - such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations – that provide specialized training, education, information, research, and technical support.” (Porter, 1998)

to briefly examine the role of industrial districts in the Italian industrial system, stress their main characteristics and define possible stages of development of industrial districts operating in traditional low technology sectors.

2.1 The role of industrial districts in the Italian economy: a brief review

The industrial districts organisational model has had a fundamental role in the Italian economic development process over the last sixty years, and particularly during the last three decades. The crisis in Fordism together with a progressive change in the demand structure, directed more and more towards high quality consumer goods, and exchange rate policies based on competitive devaluations has contributed to the transformation to the Italian industrial system. The productive system that emerges was characterized by a large number of small firms (D'Antonio, 2002) and fundamental became the role of the industrial districts. This transformation in the Italian industrial environment has been well illustrated in a number of surveys aimed at evaluating the role and the diffusion of industrial districts in the country.

Sforzi (Sforzi, 1987), one of the first authors to deal with this task, identifies 199 industrial districts within 784 local working systems having both the same productive specialisation and similar social structures (Onida, 2004). Garofoli basing his study (Garofoli, 1996) on data from official statistics and data from field research identified 100 industrial districts. A further attempt to classify industrial districts was made by the "Club dei Distretti" in 1998 (Club dei Distretti, 1998), identifying 85 districts, and successively in 2003, together with Unioncamere (Club dei distretti-Unioncamere 2003) identifying 100 districts. Cannari and Signorini (Cannari and Signorini, 2000), among others, subdivided local working systems into 5 clusters, pointing out some limitations in the previous studies. Adding of these studies there are the works carried out by Baculo (Baculo, 1994, 1997) and Viesti (Viesti, 1995, 2000) analysing in depth for the first time the industrial district phenomenon in the Southern regions of Italy. Finally an extensive review of the studies on industrial districts has been elaborated by IPI in 2002 (IPI 2002).

In addition to the network of backward and forward linkages, in our opinion four aspects of Beccatini's definition (Beccatini, 1979) deserve particular attention that contribute to distinguish the concept of industrial districts to the one of cluster as discussed by Porter (Porter, 1998): the role of the institutions (Provasi, 2002; Di Giacinto V. and Nuzzo G., 2004), the role of local cultures and values (Marini 2000), the role social capital (Putnam, 1993; Scarlato, 2001) and the role of human resources (D'Antonio and Scarlato 2000).

In the opinion of many scholars, the main feature of an industrial district is the role of institutions, which can be defined as "a set of humanly devised behavioural rules that govern and shape the interaction of human beings, in part by helping them to form expectations of what other people will do" (Nugent and Lin, 1996), are almost always considered fundamental by economists in economic development processes (Solow, 1994). In order to understand their role better, we should perhaps make a distinction between formal and informal institutions. By formal institutions, we mean that a system of codified norms, rules, law, constitutions, and organisations. By informal institutions, on

³ "A limited geographical area with small and medium-sized firms specialising in the various stages of the same productive process, within a well-defined local culture and a network of local institutions that favour competitive and cooperative interaction, both among different firms and between firms and the working population" (Beccatini, 1979)

⁴ Among others: Beccatini 1998, 2000; Berger and Locke, 2000; Pyke et al. 1990

the other hand, we mean “norms and rules which have passed the test of the historical time” (Pejovich, 1999).

Local culture can be defined as “a system of homogeneous values” (Beccatini, 2000). A system of homogeneous values is composed of shared principles within the same community, such as work and family ethics. The well-rooted system of shared values is a priority in forming an industrial district and is fundamental for its reproduction. Once this system of values has taken root it must cohere uniformly by means of institutions and rules capable not only of providing uniformity but also of handing down the system itself from one generation to the next.

So-called social capital also has an important role in this sedimentation process; social capital indicates the degree of reciprocal trust, morality and ethics in business, which contributes among other things to the reduction of transaction costs (Arrighetti e Serravalli, 1999), to the increase of information exchange and reciprocal cooperation, thus reducing the likelihood of free-riding behaviour (Putnam, 1993).

The last aspect of this “rooting” process to be highlighted is the role of human resources in the development of industrial districts. In the districts so far described, a worker who moves from one firm to another helps to spread the so-called industrial environment that is a public good produced independently from the technical training or apprenticeship (Beccatini, 1987).

In other words, all these features within the particular Italian historical context serve to explain the rise and spread of industrial districts in Italy. It is only the particular combination of urban, cultural, artisan, technological and organisational factors that have enabled such a remarkable network of local productive systems and firms to emerge; they have generated “systemic economy of scale that are alternative to classical economy of scale in vertically-integrated firms” (Onida, 2004). In this perspective the Italian dualism can be interpreted not just a productive dualism featuring an agricultural South and an industrialised North, it is above all a dualism in the perception of formal and informal institutions and in holding social capital.

2.2. Rostow revisited: transferring the stages of development scheme from the national to the local economy

In the economic development literature we assume that historically various causes have facilitated or hindered the start of development processes, in particular in the shape of the industrialization processes. Such models (Vernon, 1966; Rostow 1960), conceived for analysis at the national level, are not simple to apply mechanically to understand local development processes. However, we think that a similar evolution scheme may be applied to the industrial district. A schematisation of the possible evolution stages of a district has already been proposed by Enright (Enright, 2002). Enright’s scheme, however, compares the stage of development of an area in respect to a fully developed cluster⁵. Here instead we will attempt to define the different evolution stages of a traditional low technology industrial district (i.e. textiles, clothing, leather and leather products) in order to describe its genesis and its consolidation. Hence, we synthesise the evolution of a district in five stages proposing then a possible sixth stage:

⁵ Enright distinguishes between working clusters, potential clusters, latent clusters, policy driven clusters and wishful thinking clusters.

- 1) birth of the industrial district;
- 2) preconditions for take-off;
- 3) take-off;
- 4) drive to maturity;
- 5) internationalisation;
- 6) what next?

1) Birth of the industrial district.

Italian traditional manufacturing districts have a long tradition that in some cases go back for centuries. The previous diffused handicraft presence on the territory represent therefore one of the main reasons of rising of this organizational model. Districts, however, can develop also as a consequence of the establishment or growth of a leader firm or because of historical and geographical factors.

2) Preconditions for take-off

The second stage can be characterized by the progressive development of a network of linkages and of a first process of division of labour. In what may be regarded as a common definition, industrial districts are taken as forms of organisation governed by trust and co-operation⁶. Thus, the development of the district involves the establishment of a permanent network of backward and forward between the district firms.

3) Take-off

The third stage is characterized by the development and the strengthening of the local institutions: both formal and informal. It has been long established that intermediate governance structures play a vital role in the development of an industrial district. They act as key reference point for the firms within the system and for the system's external relationships. Their central role is achieved through a high degree of co-participation of firms in common initiatives. It is through these structures that firms have a sense of participation in the larger SME system eventually leading to the pooling of resources to meet the specific common needs.

4) Drive to maturity

The fourth stage is characterized by the strengthening of the process of inner and external division of labour. According to Garofoli (Garofoli, 1983) in his classification of the local industrial systems, an important component is represented by the greater and more complex division of labour among firms that allows increased flexibility. The process also determines phenomena of vertically integration comprising intermediate inputs and machine tools production. As a consequence a secondary district may arise producing capital goods (equipment and machinery) for the primary district.

5) Internationalisation

The fifth stage is characterised by the development of progressive internationalisation process. Leader firms of the district start to go international to expand their market or to confront increasing international competition by reducing their production costs. They internationalise their value chain through international contracting and subcontracting and in smaller degree through foreign direct investments (FDI). Leader firms establish linkages in the recipient area facilitating the birth of a

⁶ This also explains why the term is easily confused with the concept of network

favourable environment. These firms are then followed by other smaller district firms exploiting the experience and the linkages established by the former.

6) *What next?*

Internationalisation, however, hardly will be the end of the story. Many options are possible, and among these one in particular we think is worth discussing. The internationalisation process, in fact, progressively creates the conditions for the development of an embryo of an industrial district in the recipient area and simultaneously weakens the network of backward and forward linkages in the original district. Linkages are multiply in the recipient area; moreover leader firms tend to replicate the environment and the *modus operandi* of their original district, thus spreading the industrial district culture. There are also signs that institutional elements, both formal and informal, are developing, albeit slowly. The process could lead to a wider migration of firms from the original district to the recipient area and the impoverishment of the network of linkages. In the process leader firms become stronger and other might develop, but at the end the district might progressively vanish.



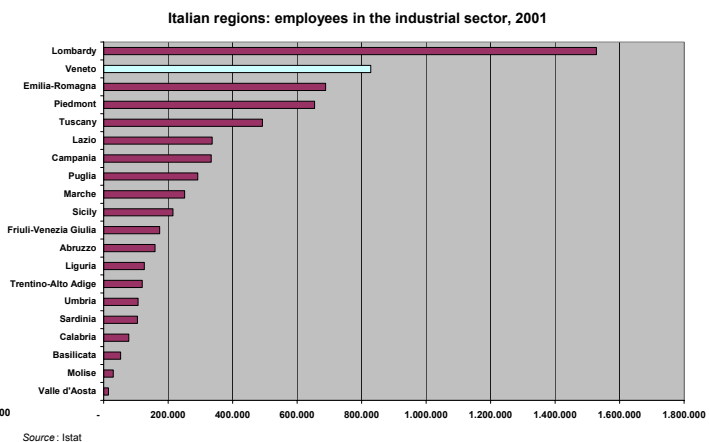
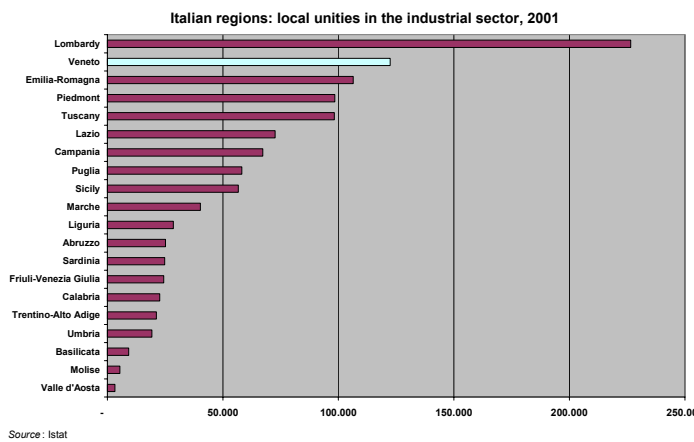
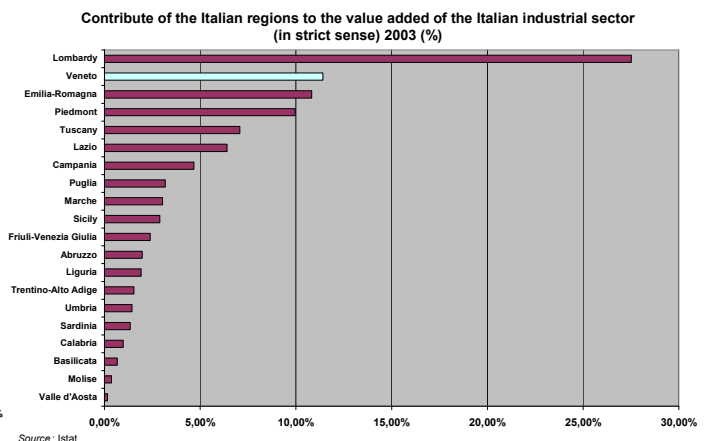
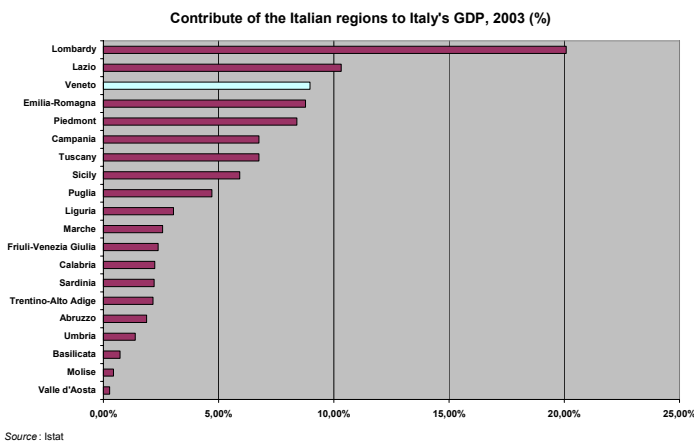
In the next section we proceed to describe the internationalisation process of Veneto's industrial districts towards Romania. In section four we then proceed to discuss how our sixth stage of development hypothesis might become reality for Veneto's industrial districts.

3. Industrial districts and internationalisation: the case of Veneto

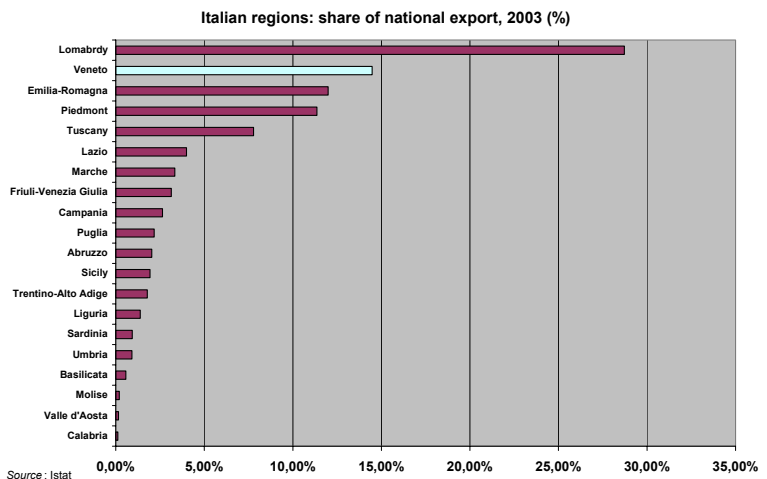
In analysing the internationalisation process of Italian industrial districts a case immediately comes up to mind, the region core of the so-called North-East phenomenon: Veneto. Veneto is the second exporting Italian region and hosts some of the most famous Made in Italy districts. Its manufacturing firms have started internationalising their activities in the 90's and represent now one of the most consistent Italian presence in Centre-East European countries.

3.1 *Veneto: Italy's second largest industrial region*

In 2003 Veneto accounted for 8.97% of Italian GDP, ranking third after Lombardy (20.08%) and Lazio (10.32%). However, it ranks second if we consider the industrial sector value added (thus, excluding constructing and building) accounting for 11.41% of the national figure, right after Lombardy (27.52%). Similarly, according to the 2001 census data the region ranks second both for local productive unities in the industrial sector (this time including constructing and building) with a total of 122,454 and for employees in the industrial sector with a total of 828,071. Finally, Veneto is Italy's second region in terms of export, with a share of 14.5% of Italian exports in 2003, again right after Lombardy (28.7%).



Veneto's productive system is based on a multitude of Small and Medium Enterprises (SME's) operating in the manufacturing sector and particularly in the traditional Made in Italy sectors (textile and clothing, leather, leather products and shoes, wood and furniture, industrial machinery, gold and jewels, inox products, glass products and lenses). SMES often operate inside industrial districts, many of which are among the most dynamic and famous in Italy. Districts' number, borders and extension varies depending on the source: the Regione Veneto locates 15 industrial districts plus 4 "secondary specialization" districts (i.e. districts located inside "primary specialization districts" whose firms produce machineries or other goods used by the firms of the original district); Istat on the base of its research on Local Labour Systems on data from the 1991 census locates 34 districts; finally, the Club dei distretti (2003) in its research presented together with Unioncamere locates 17 districts. Discrepancies, however, are more a matter of regrouping or not different areas. This is



particularly true for Istat, while we don't find particular differences between the districts located by the Regione Veneto and the ones located by the Club dei distretti, as shown in table below.

Industrial districts in Veneto	
Club dei distretti	Regione Veneto
Arzignano-Valle del Chiampo	Concia e Elettromeccanico di Arzignano
Montecchio Maggiore-Arzignano	Legno e mobile della Bassa Pianura Veronese
Bassa Pianura Veronese	Materiali per l'arredamento di Bassano del Grappa*
Bassano del Grappa	Occhialeria Bellunese e Trevigiana
Belluno	Metalmecanico di Conegliano*
Conegliano	Agroalimentare-ittico (Delta el Po-Chioggia)*
Delta del Po	Calzatura di Montebelluna
Montebelluna	Vetro di Murano
Murano	Ceramica di Nove
Nove	Legno e mobile della Sinistra Piave
Opitergino-Mottense	Giostra del Polesine Occidentale
Polesine Occidentale	Calzatura del Brenta
Riviera del Brenta	Tessile e abbigliamento dell'Area Pedemontana
Schio-Thiene-Valdagno	Marmo Veronese
Valpolicella	Calzatura della Collina Veronese
Verona	Oreficeria e Metalli di Vicenza
Vicenza	Tessile e abbigliamento dell'Area Meridionale
	Lagunare-costiero Opere marittime
	Metalmecanico di Schio-Thiene*

* Secondary specialization districts

Source : Club dei distretti, IPI

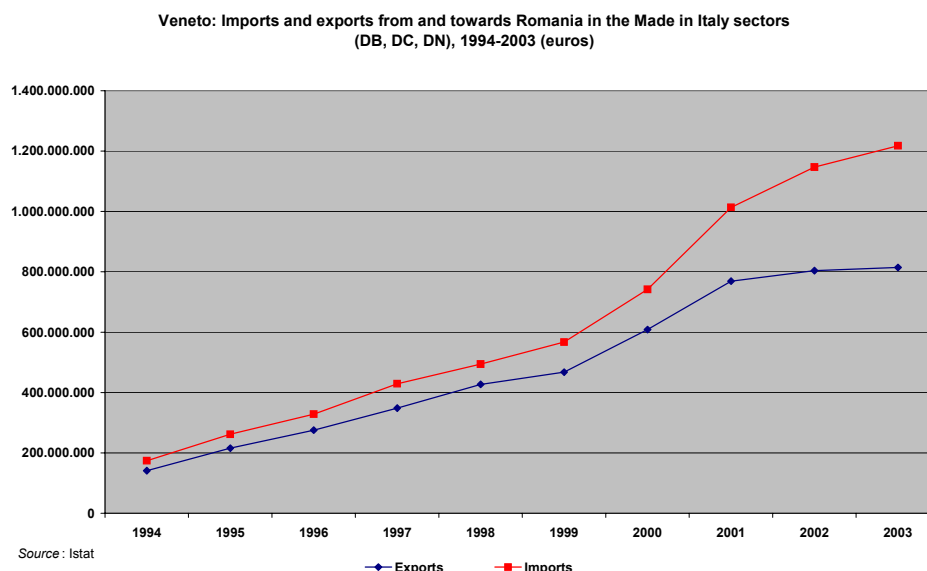
Here we will consider the classification made by the Club dei distretti, since it is the more up-to-date and provides more data. Though it is important to note that figures are to be considered with some caution and therefore provide an indication of the dimension of each district more than effectively describe their dimension. In the table below we report for each of the 17 districts: number of firms, employees and, where possible, turnover, share of exported production and value of exports.

Industrial districts in Veneto according to the Club dei distretti, 2003							
Industrial district	Province	Firms	Employees	Turnover (mln of euros)	Exp/ production	Export (mln of euros)	Specialization
Belluno	Belluno	930	11.200	1.420	75%	1.300	Lenses and glasses
Delta del Po	Rovigo	200	2.000				Food and fish
Polesine Occidentale	Rovigo	100	1.500	150	90%		Merry-go-rounds
Conegliano	Treviso	1.000	10.000				Inox and domestic appliances
Montebelluna	Treviso	428	8.608	1.542	70%	1.300	Shoes and sportswear
Opitergino-Mottense	Treviso	1.200	18.000	950			Wood and furniture
Murano	Venezia	260	1.200	100	35%		Glassworks
Riviera del Brenta	Venezia, Padova	965	14.176	1.698	89%		Shoes
Valpolicella	Verona	527	4.815	2.000	18%	360	Marble
Verona	Verona	670	7.000	1.250	48%	1.152	Shoes
Bassa Pianura Veronese	Verona, Padova	1.700	6.000	500	59%		Artistic furniture
Montecchio Maggiore-Arzignano	Vicenza	381	9.301		60%		Electromechanics
Nove	Vicenza	600	4.400	242	65%		Ceramics
Schio-Thiene-Valdagno	Vicenza	759	23.598	2.872	50%		Textiles
Vicenza	Vicenza	1.150	12.000	3.600	90%		Gold and Jewellery
Arzignano-Valle del Chiampo	Vicenza	800	9.000	3.000	60%		Leather
Bassano del Grappa	Vicenza, Treviso	350	2.400				Furniture
Totale		12.020	145.198	19.324		4.112	

Source : Club dei distretti

3.2 A strongly internationalised economy

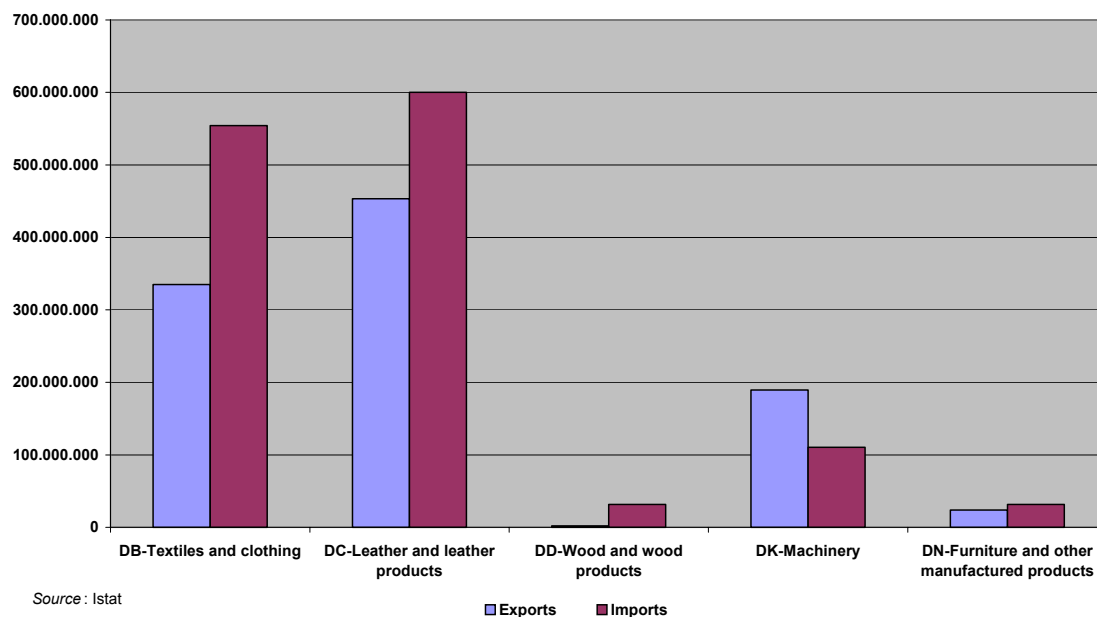
Veneto's firms have been among the first to exploit the opportunities offered by the opening of the former socialist Centre-east European countries and progressively internationalised growing parts of their production in an increasing number. Since the second half of the 90's Veneto's manufacturing firms have progressively transferred the lower stages of their production processes to the Centre-Eastern European countries and in particular to Romania. Firms substituted in-house production or supply relationships with local firms with supplies from Romanian firms developing a buyer-driven value chain. To this aim, Veneto's manufacturing firms directly acquire raw or processed materials and then export them to Romania, importing then back the semi-finished or finished products. To give an indication of the phenomenon we here report the trend of Venetos' imports and exports from and towards Romania in the traditional Made in Italy sectors: textile and clothing (CPATECO code DB), leather and leather products (DC), wood and wood products (DD), furniture and other manufactured products (DN).



Veneto: CAGR of imports and exports from and towards Romania 1994-2003			
	CAGR Imp	CAGR Exp	CAGR Imp+Exp
DB-Textiles and clothing	23,23%	29,86%	26,94%
DC-Leather and leather products	20,39%	19,88%	20,09%
DD-Wood and wood products	28,14%	35,42%	34,83%
DK-Machinery	18,35%	46,53%	23,42%
DN-Furniture and other manufactured products	20,32%	36,36%	26,98%
Total DB, DC, DD, DK, DN	21,49%	24,12%	23,05%

The internationalisation process regards mainly textiles and clothing (DB) and leather and leather products (DC), with the former registering the wider gap between value of export and value of imports. Coherently with the process described above, we register a positive trade balance in the machinery sector determined by exports of industrial machinery to be used in the manufacturing process.

Veneto: imports and exports from and towards Romania broken down by sector, 2003 (euros)



The growing process of internationalisation may be registered also from the growth of Italian participations in the manufacturing industry in Romania. At the 31st of May 2004 there were 15,302 Italian-Romanian firms registered in Romania with investments for nearly 560 millions of euros positioning Italy at the first place among investing countries for number of firms but only at the fifth place for amount of capital invested. The gap between the two rankings highlights the average low dimension of investments⁷. Around 1,000 new Italian-Romanian firms are established each year. However, in many cases these firms are very small or nothing more than a name on a register. There are also a consistent number of companies that have shut down but are still registered. According to the Italian Institute for Foreign Trade (ICE-MAE 2004) the real number of effectively operating Italian companies is around 4,000 (26% of the total). According to ICE these 4,000 firms employ directly or indirectly around 500,000 people. A major part of this figure is consequence of investments made by large firms such as Agip, Alitalia, Ansaldo, Fiat, Finmeccanica, Zoppas and Merloni.

⁷ To give an idea the average investment of a Dutch company in Romania was in 2002 of 960,000 euros, while the same figure for an Italian company was of 42,000 euros.

According to a survey carried out by Antenna Veneto Romania (2003), a joint structure created by the Foreign Centre of the Chambers of Commerce of Veneto and the Chamber of Commerce of Timisoara in Romania, at the end of 2002 firms participated by Veneto's subjects (firms or single persons) were 2,038, 16% of the total Italian companies at that date. Supposing the ratio has not changed much in the following year and a half, in 2004 Veneto's firms may have reached the number of around 2,450. However, only a half of them might be effectively operating. A more specific survey made by Antenna Romania on a set of 192 firms, in fact, has found that only 49% of the firms were effectively active. A percentage that nearly doubles the estimate made by ICE, which however considered the whole number of Italian companies in Romania. The higher figure may be explained by the stronger relationship established by Veneto's companies in respect to companies coming from other regions that might still be in the exploration phase or might have given up. Veneto's companies particular interest in Romania is confirmed by the fact that 8 of

Location of companies from Veneto and Italy in Romania, 2002					
N.	Province	N. of companies from Veneto	%of total companies form Veneto	% of Italian companies in the province	N. of Italian companies
1	Timis	392	19,23%	27,07%	1.448
2	Arad	364	17,86%	38,93%	935
3	Bihor	209	10,26%	34,04%	614
4	Bucuresti	206	10,11%	5,34%	3.861
5	Cluj	134	6,58%	17,96%	746
6	Maramures	62	3,04%	27,80%	223
7	Alba	56	2,75%	19,51%	287
8	Brasov	53	2,60%	14,44%	367
9	Sibiu	53	2,60%	25,00%	212
10	Hunedoara	50	2,45%	22,94%	218
11	Caras-Severin	36	1,77%	24,49%	147
12	Mures	35	1,72%	14,71%	238
13	Satu mare	34	1,67%	25,19%	135
14	Bacau	32	1,57%	16,24%	197
15	Bistrita nasaud	23	1,13%	25,84%	89
16	Salaj	22	1,08%	28,57%	77
17	Braila	19	0,93%	25,68%	74
18	Olt	19	0,93%	22,35%	85
19	Prahova	19	0,93%	6,44%	295
20	Arges	16	0,79%	9,82%	163
21	Neamt	16	0,79%	9,25%	173
22	Calarasi	15	0,74%	34,88%	43
23	Galati	15	0,74%	12,82%	117
24	Constanta	14	0,69%	6,39%	219
25	Buzau	13	0,64%	18,84%	69
26	Dambovita	13	0,64%	13,27%	98
27	Ifasi	13	0,64%	9,42%	138
28	Tulcea	12	0,59%	28,57%	42
29	Valcea	12	0,59%	16,22%	74
30	Gorj	11	0,54%	22,00%	50
31	Suceava	11	0,54%	11,11%	99
32	Dolj	10	0,49%	3,92%	255
33	Vrancea	9	0,44%	7,96%	113
34	Botosani	7	0,34%	11,48%	61
35	Harghita	6	0,29%	15,38%	39
36	Ifov	6	0,29%	4,35%	138
37	Mehedinti	6	0,29%	12,00%	50
38	Ialomita	5	0,25%	12,20%	41
39	Vaslui	4	0,20%	10,26%	39
40	Covasna	3	0,15%	13,64%	22
41	Giurgiu	3	0,15%	7,32%	41
42	Teleorman	0	0,00%	0,00%	34
	Total	2.038	100,00%	16,48%	12.366

Source: Antenna Romania, 2003

the 40 major investments are made by companies from Veneto. Firms are for the major part SMEs investing a small capital. Companies created are nearly all LTD companies (95%).

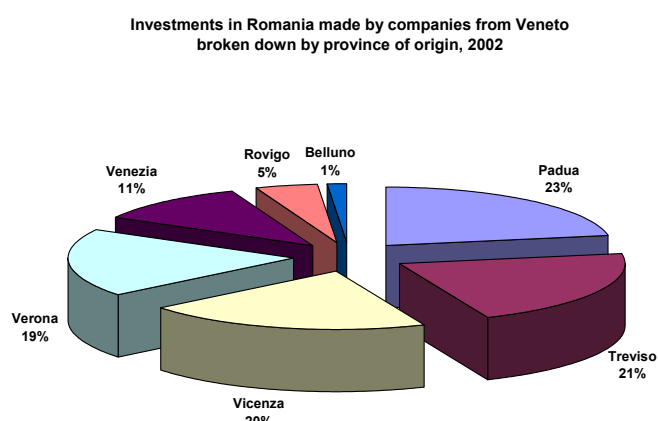
Companies are located mainly in the following provinces: Timis (392 firms), Arad (364), Bihor (209), Bucuresti (206) and Cluj (134). It worth noting that the provinces of Timis, Arad and Bihor are the nearest to Veneto; together with the provinces of Caras-Severin (36 firms) and Hunedoara (50) they constitute the region of Banato-Crisana that accounts for the 51.6% of Veneto's companies in Romania.

Not surprisingly, major investing manufacturing sectors are represented by the traditional Made in Italy sectors: textiles and clothing (10.55%), wood and furniture (8.98%), agriculture and agrifood (8.83%) and leather and shoes (6.97%). Textile and clothing and leather and shoes are concentrated in the provinces of Bihor and Arad (in particular textile and clothing) and Timis (in particular leather and shoes). It is also worth noticing that in the provinces of Timis and Arad there is a growing trend of investment in the agrifood sector, a trend however that is due more to the low cost of the land and is thus often determined by speculative reasons than by strategic objectives. Finally, the western provinces of Timis, Arad and Hunedora are the destination of investments in the engineering sector (30% of the companies operating in this sector are localised in these three provinces).

Veneto's companies investing in Romania are evenly distributed among the four main manufacturing provinces: Padua (23%), Treviso (21%), Vicenza (20%) and Verona (19%); the remaining three provinces account altogether only for 17% of the total. Treviso's companies are particularly present in the provinces of Timis and Bucuresti, while companies from Verona have a strong presence in the provinces of Arad and Bihor (with most of them operating in the shoes sector).

Investments in Romania made by companies from Veneto broken down by sector, 2002		
Sector	N° of companies	%
Wholesale	322	15,80%
Services	235	11,53%
Textiles and clothing	215	10,55%
Wood and furniture	183	8,98%
Agriculture and agrifood	180	8,83%
Leather and shoes	142	6,97%
Retail	119	5,84%
Building	104	5,10%
Engineering	103	5,05%
Real estate services	87	4,27%
Hotels and Restaurants	64	3,14%
Transports	62	3,04%
Import/export	58	2,85%
Not specified	46	2,26%
Various	37	1,82%
Electronics and electric components	32	1,57%
Plastics/paper	27	1,32%
Chemicals	22	1,08%
Total	2.038	100,00%

Source: Antenna Romania



Source: Antenna Romania

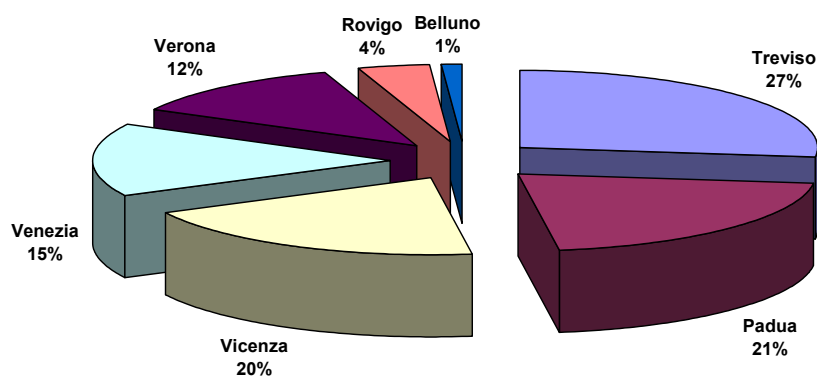
3.3 The Timis Province

In 2002 the number of Italian-Romanian companies in the Timis province was 1,448, 392 of these (27%) were established by companies coming from the Veneto region. Companies coming from Treviso had the biggest share (27%), followed by companies from Padua (21%), Vicenza (20%) and Verona (12%). Coherently with the national data firms are mainly LTD companies (97% of the total). Main sectors of activity are: wholesales (14%), agrifood (14%), services (13%), shoes and leather (8%), real estate services (8%), textile and clothing (7%), building (7%) and wood and furniture (7%). Thus, the main manufacturing sectors are shoes and leather and textiles and clothing.

Investments in the Timis province made by companies from Veneto broken down by sector, 2002		
Sector	N° of companies	%
Wholesale	53	13,52%
Agriculture and agrifood	53	13,52%
Services	52	13,27%
Real estate services	31	7,91%
Leather and shoes	30	7,65%
Textiles and clothing	28	7,14%
Building	28	7,14%
Wood and furniture	26	6,63%
Retail	17	4,34%
Engineering	13	3,32%
Import/export	12	3,06%
Hotels and Restaurants	11	2,81%
Not specified	11	2,81%
Electronics and electric components	10	2,55%
Transports	8	2,04%
Various	6	1,53%
Plastics/paper	2	0,51%
Chemicals	1	0,26%
Total	392	100,00%

Source : Antenna Romania

Investments in the Timis province made by companies from Veneto broken down by province of origin, 2002



Source : Antenna Romania

4. Over the threshold

Veneto's firms are increasingly transferring their production in Romania both through FDI and through subcontracting with the latter form still prevailing on the former. They have developed what in the literature is referred to as buyer-driven value chain. In these type of global value-chain buyers with core competencies in branding and marketing act as the driving actors in setting up the value chain, increasingly organizing, coordinating and controlling the production, designing and marketing activities to target consumer markets (Unido 2005). As anticipated in section 2, however, this process, while convenient for the single firm, might involve some concrete risks for Veneto's districts.

In a typical industrial district, and all the more in the districts of Veneto, firms are not all at the same level. Usually, as the district evolves, some companies grow more than others acquiring a leading role. They grow in dimension, sometimes passing from small to medium-sized enterprises, developing their product, creating a brand and adding value to their product through immaterial factors such as design. Growing in size they strengthen and multiply their backward and forward linkages. They buy more raw materials or semi-manufactured goods and outsource through subcontracting some of the lower stages of productions. They become a pivotal element for other smaller firms.

These leader firms are the ones that go international both to sell and to buy or produce. They are the ones that have first gone in Romania looking for cheaper workforce. As they transfer stages of production outside the district, however, they weaken the web of linkages that are essential for the industrial district to thrive. Small firms progressively lose their local clients and have to face the choice between downsizing their activity, and eventually go out of business, or look outside the district for new clients.

Can the district sustain a similar prolonged trend? According to a school of thought (Schiattarella, 2003; Savona e Schiattarella, 2004; Corò, 2000; Corò e Volpe 2003; Rullani, 2002) not only a similar process is sustainable, it also makes the district stronger. The idea is that, by internationalising or delocalising the lower stages of the production, district firms become more profitable, grow stronger and have more resources to devolve to the higher stages of the production process such as design, product and process innovation and marketing. Thus, internationalisation offers the opportunity to climb higher on the quality ladder and face and sustain increasing competition in the sector. All well, except for the fact that what is true for the firm might not be true for the district as a whole. It seems reasonable, and there is increasing evidence supporting it, that firms that internationalise are in better position to compete at the international level, thus being able to maintain their market share or even grow bigger and stronger. But what about the other smaller firms? They get no returns from the process, bearing instead all the costs. They lose important clients and have no alternatives for them except that to look for new ones out of the boundaries of the district. If they are lucky or capable, or both, they might succeed in finding them, otherwise they might end up closing. In both cases what happens is that more and more backward and forward linkages inside the districts are weakened or disappear. A similar trend has been observed by Rabellotti (Rabellotti 2002). In her study she reports that as a consequence of growing integration of Veneto's industrial district of Brenta in the global value chain "Brenta enterprises are now attributing less importance to relationships with other local firms than before. Backward and forward local linkages are weakening while external linkages with buyers and top brand companies have recently assumed a major role."

Eventually the process may lead to a progressive rarefaction of the network of linkages that constitutes a vital part of the district, jeopardising the existence of the district itself. As stated by Beccattini (Beccattini, 1998): “After a certain threshold, bankruptcies of firms prime a chain reaction and workers that have been laid off and whose skills are highly requested begin to emigrate from the district to other industrial districts or to large companies. When this happens the patrimony of skills and know-how acquired through time (the real productive base of the district) begins to disperse and, as a consequence, both the system of values and the network of local institutions tend to dissolve”.

Thus, the internationalisation process of relatively larger firms in the industrial district might lead to the weakening of the network of linkages that are the essence of the district. As a result smaller firms might be forced to close in such a number that the districts cease to exist. Where there was a multitude of firms there could remain only a handful of larger and stronger companies.

Naturally, this is just one of the possible scenarios, or, in our scheme, of the possible sixth stages of development. But is not completely improbable and it might be worth investigating it a little more.

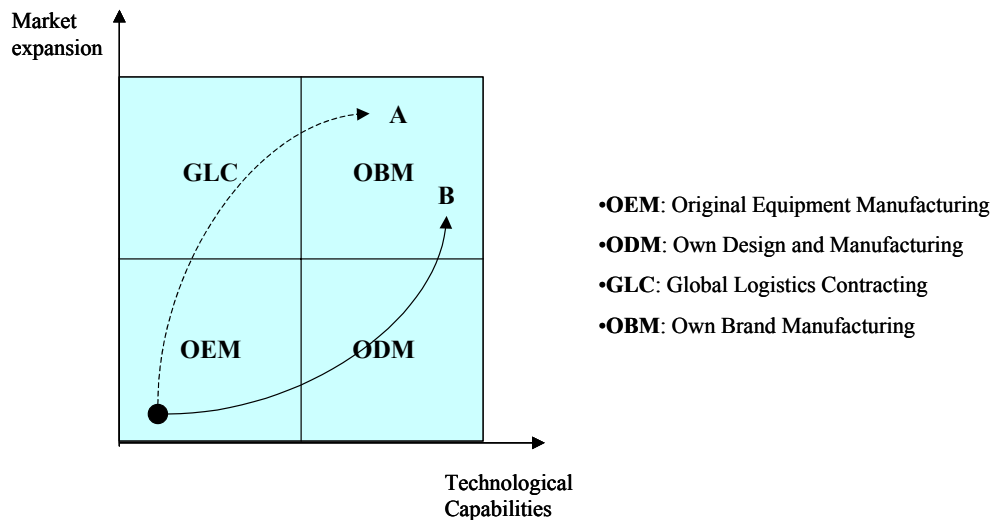
The process we have outlined above is filled with “ifs”. One condition in particular is critical and that is that in the medium term the internationalisation process of the district’s larger firms pushes out of business (or simply out of the district) a consistent number of smaller firms that are unable to react effectively to the changed environment.

Is that really a viable hypothesis? To answer that question let us consider the case that the internationalisation process of the larger district firms is not dispersed in different regions or countries, but is directed to a specific area, as it is the case of Veneto’s firms internationalising in the Timis province in Romania. These firms establish links with local firms through subcontracting, joint-ventures or partnerships, or create new companies through direct investment. As a result local firms gradually grow and acquire know how while the local workforce acquires specific skills. As time goes by and linkages between foreign firms and local firms become stronger and stable, foreign firms may find convenient to subcontract other and more complex stages of production, moving them from their original district. Linkages between local firms may then develop and strengthen. This could prime a virtuous process in which, thanks to their linkages with foreign companies, local firms grow in dimension and know-how inducing foreign firms to outsource other stages of production leading to further growth of local firms and so on. Following this process Romanian firms could develop from being subcontractors to producing their own products and finally to creating brands for the lower segments of the consumer market. The process would be analogue to the second of the two development paths outlined in a recent Unido study on global value chains (Unido 2005) drawing from the work of Matthews and Cho on the semiconductor industry in East Asia (Matthews and Scho 2000).

According to this scheme innovating in global value chains moves along two pathways: market expansion and technological capabilities. Path A represents a trajectory that starts with process innovation of original equipment manufacturing (OEM) and then develops, exercising market expansion through global logistics contracting (GLC), providing the product at many locations⁸, to

⁸ As described by Unido: “The essence of global logistics contracting (GLC), which was initiated by the East Asian firms in the 1970s and 1980s, is that global buyers place their orders with the manufacturers they have sourced from in the past; those manufacturers then outsource some or all of the requested production to affiliated offshore factories in

reach own brand manufacturing (OBM) as a final point. More interesting for our case is path B. This path focuses on capability enhancement through expanding functional responsibilities, from OEM to own design and manufacturing (ODM), driving then the firm to market its own designs under its own brand and reach the OBM position.



Source: Matthews and Scho 2000, cit. in Unido 2005

This is the path followed by many firms operating in the Italian Adriatic and, in some cases, Southern industrial districts, that have managed to evolve from mere subcontracting to manufacturing and selling their own products on the market and eventually to creating their own brands. And it might be the road ahead for Romanian firms in the Timis Bihor and Arad provinces.

As a result of this process in the medium term a new industrial district may develop. A district that is in direct competition with the district of origin of the first internationalising companies, but has lower labour costs and similar product quality. This may induce other companies to leave the original district crowding-out the smaller contractors in the original district.

For this to happen, however, a crucial condition has to be realised. Local firms have to be successful in acquiring and mastering the necessary knowledge to climb higher in the production process.

5. Acquiring knowledge

According to the neoclassical approach acquiring technology and technical know-how should not be a particular problem. Technology is there ready for anyone who is intentioned to get it. It is just a matter of paying the right price. As recalled by Lall (Lall,1996) “The neoclassical depiction of industrial development assumes that technology is freely available from a known ‘shelf’, from

low-wage countries (e.g. China and Indonesia). The triangle is completed when the finished goods are shipped directly to the overseas buyer. This triangle manufacturing changes the status of OEM manufacturers from established suppliers for retailers and designers in developed countries to middlemen with strong capabilities in logistic and management and that can include as many as 50 to 60 exporting countries in the buyer-driven value chains” (Unido 2005).

which firms choose according to their factor and product prices. This technology is then absorbed costlessly and risklessly and used at ‘best-practice’ levels.”

The idea of a worldwide technology supermarket where a firm can go and choose the most suitable state of the art technology derives from the neoclassical assumptions of efficient markets and perfectly informed maximising agents. In this panorama firms have perfect knowledge of the available technologies and of their production function, can access the given technology with no difficulty, acquire it and use it with no particular obstacle and have a learning curve that is fairly short and predictable. There are no problems in mastering technologies. In this scenario firms that realise they have a competitive advantage in a given market and that to exploit it need to acquire a certain technology can simply buy it, apply it and go for it. In our specific case that means that Timis’ textile or leather firms could exploit their lower labour cost by simply acquiring the necessary industrial equipment. After a short time they would then be able to complete on the same level with Veneto’s firms. Just a matter of having the necessary financial resources. According to the same approach there would also be no problems in acceding the consumers market. If the product is cheaper and has the same characteristics of the original product the market would be there for it. Immaterial factors like brand would still make a difference, but only for the higher segment of the market.

However, in the world we live things are not this simple. Markets are not always efficient. On the contrary, the presence of some sort of market failure seem to be the rule rather than the exception. Information is not a free commodity: acquiring it bears some costs (time, money, “shoe cost”, opportunity cost) and moreover it is not always accessible even if one is willing to pay. Therefore agents are not perfectly informed and maximise their behaviour on the basis of a limited set of information. In our particular case firms have limited knowledge regarding their production function, the available technologies and the one that they could use with profit, their market and so on. The shortcomings of the neoclassical approach have been highlighted by the work of Nelson and Winter (1982) on an evolutionary theory of economic change and the branch of research that it followed⁹. Building on this theory a new approach has emerged: the technological capabilities approach.

5.1 Technological capabilities

This approach starts from the assumption that the firm might have a clear idea of where it stands but it has only a fuzzy perception of where it can go and of the possibilities that lie ahead. Namely, it has the perception of a small part of the production curve rather than of the complete curve. The technological capabilities approach highlights the fact that technology has many “tacit” elements and cannot be transferred like a physical product (Lall 1996; 2003). Once a technology has been targeted by the firm and acquired, a process that by itself is already far from immediate and simple, it has to be adapted to the firm. Investments have to be made in new skills, technical information, organisational methods and external linkages. The process is not a once-for-all jump. It continues over time and varies by technology. It might be short, cheap and predictable in “easy technologies” or prolonged, costly and risky in complex ones. That said, technological capabilities in manufacturing might be described as “the skills, technical knowledge and organisational coherence required to make industrial technologies function in an enterprise” (Lall 1996). As Lall puts it, technological capabilities are not the technology itself, nor the education possessed by the

⁹ Interesting in this respect is the interdisciplinary work on the dynamic relations among organization, corporate strategy innovation and competitiveness (Dosi, Teece and Chytry 1998).

employees, nor the skills of the individuals. They are “the way in which institution like a firm combines all the above to function as an a organisation” (Lall, 1996).

Lall (1992) describes the technological capabilities at the firm level composed of three factors: investment capabilities, production capabilities and linkage capabilities. Investment capabilities are the skills related to the investment decision such as project selection and assessment of costs and benefits; production capabilities are the one related to the adoption and mastering of the technology and its insertion in the productive process; finally, linkage capabilities are the capabilities to transfer skills, technology and know how from other subjects linked to the firm.

Turning back to our case, in the preceding section we have identified as a crucial condition for the birth of an industrial district in the host area to occur the capability of local firms to acquire and master the necessary technologies. However, if what we have discussed above is true, firms cannot go out and simply buy the technology needed. A more complex process has to take place that includes: the acquisition of knowledge (including in this expression technology, skills and technical know-how) and the development of technological capabilities. In both these elements a crucial role is played by foreign firms that have internationalised their production.

5.2 The role of foreign firms

There is an extensive literature on the role played by foreign firms in transferring and contributing to the diffusion of technologies, skills and know-how in host countries. Attention has been focused in particular on the role played by Multinational Corporations (MNC) through Foreign Direct Investments (FDI) in developing countries (Unctad, 1999, 2003; Lall 1996, 2003; Streeten 1995; Chen 2000). However, here we are interested in a different and less investigated kind of relation between foreign companies and host recipient economy. In particular two are the elements that distinguish our case:

- 1) Our foreign companies are not multinationals in the classic meaning of the term. Rather, except for a few cases, they are companies that are going international for the first time; that have strong exporting experience, but in most cases through intermediaries of various sort and thus have no direct presence or even stable relationships in foreign markets; that are experiencing for the first time the internationalisation of their production process; we are talking of SMEs that have been somewhat “forced” to look outside for cheaper workforce because of increasing foreign competition and are doing it with no specific knowledge or experience, proceeding in a “homecooking” manner.
- 2) While relevant, FDI is not the main element of this internationalisation process. The main form of internationalisation is international subcontracting. Moreover, in many cases the establishment of local companies in Romania by Veneto’s firms is only a way of managing the subcontracting process. Thus, linkages between Veneto’s firms and local Romanian firms are stronger and deeper than in the classic FDI case.

What we are looking into here is the role played by SMEs internationalising their production through subcontracting, rather than a medium-large company establishing a productive plant to serve the local market or as a part of a global value chain strategy.

There is another characteristic that makes our case particular and that is the fact that the companies we are considering produce traditional products (textiles, clothing, leather products) that involve a

low technology-intensive productive process. Surely, they use industrial equipment and machinery that might even be sophisticated, but there is not much more about it. In the large majority of cases there are no high-technology and complex stages of production, no patents or blueprints to protect, no exclusive technological knowledge giving the firm a particular competitive advantage.

The fact is relevant. One of the issue debated in the literature on technological transfer from foreign companies to the recipient economy in fact regards exactly the opportunity costs for investing firms of letting their knowledge exit their plants and spreading through local firms. Foreign investing firms face the trade-off between protecting their specific knowledge to maintain their technological edge and transferring it to local firms to increase the efficiency of their contractors. Naturally, the more advanced or exclusive is the technology and know-how of the foreign company the less it will be inclined to let it out of its domain.

In our case, as mentioned above, firms have little to protect in terms of exclusive technology, their advantage is more on the side of technological capabilities, i.e. the choice of technology, its mastering in the productive process, the skills needed to use it and the organisation best suited to exploit it efficiently¹⁰.

To summarise, we are considering the case of SMEs that have chosen an internationalisation process that tends by its nature to create linkages with local firms and that have little incentive in keeping their environment close to the outside. There is more to it. These firms are used to operate in a cooperative/competitive environment, the industrial district, where the ability to create efficient and stable backward and forward linkages constitutes an essential characteristic of the firm and of its *modus operandi*. These firms are prone to create linkages with local firms through partnerships and subcontracting and might be tempted to replicate in the new environment the kind of backward linkages they had in their original district. A trend that has indeed been reported by Majocchi (2004) in his paper on the experience of Italian firms in Timisoara.

Thus, not only the characteristics of the foreign companies pose few obstacles to the transfer of technology, and more in general of knowledge, to local firms; adding to that there is the fact that facilitating a certain degree of knowledge transfer might be in the interest of the foreign firm if not part of its strategy.

5.3 Closing the knowledge gap

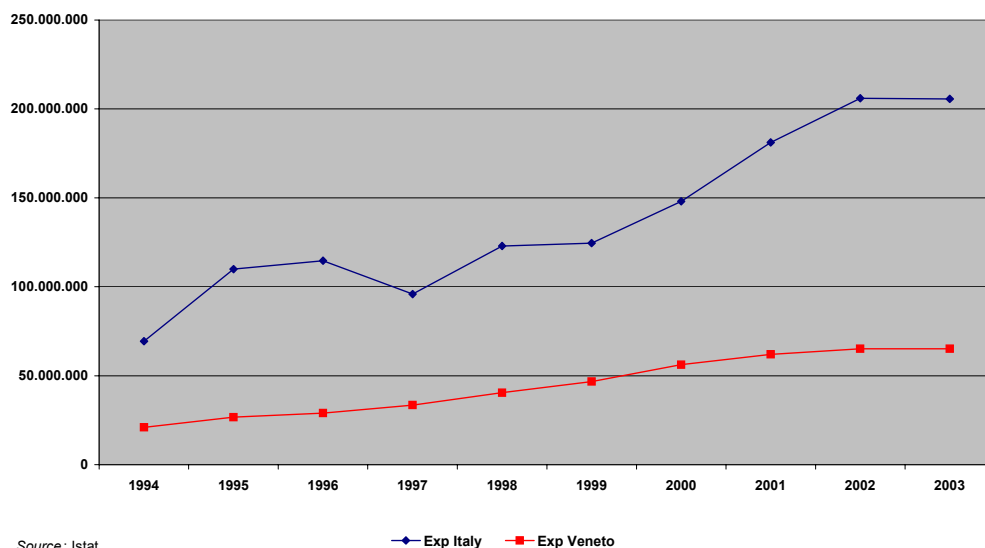
As discussed at the end of section four, for Romanian firms to develop and grow, acquiring the necessary knowledge and technological capabilities is crucial. Knowledge may be bought through equipment (embodied), or specialised or highly skilled labour and consulting (disembodied), while technological capabilities may be acquired from other firms operating in the same sector, consulting, learning by doing and through all the relationship and phenomena that characterise an industrial district (circulation of ideas and labour, spin-offs, acquisition of used equipment, etc.).

Let us start with embodied knowledge. Since we are focusing on low technology sectors we leave aside patents and blueprints and focus on industrial equipment, an extremely relevant factor in determining the successful performance of Made in Italy firms. By working together with Veneto's

¹⁰ Naturally their competitive advantage derives also from other factors such as their brand, and their consolidated position on the market, but this is less relevant for our purposes.

companies Romanian firms have the opportunity to learn what technologies the former use. In another context this might not be enough to understand what equipment to buy, all the more how to use it. But there is an element that makes this case different. The success of Italian industrial districts has determined the development of a highly successful and specialised equipment and machinery industry. In many cases along to the so-called primary districts specialised in textiles, clothing, leather, pottery and so on, secondary districts have developed producing specialised machinery for the primary districts. When firms in the primary districts have begun to internationalise, equipment and machinery producing firms have followed them foreseeing the opening of a new market. A market made not only by Veneto's firms in Romania, but also by local contractors and subcontractors. Below we present Italy's and Veneto's exports of specialised industrial machinery (CODE ATECO DK295) towards Romania for the 10 year period from 1994 to 2003. Italy's export have nearly tripled going from nearly 70 millions of euros to more than 205 millions of euros, while Veneto's exports have more than tripled going from 21 millions to 65 millions of euros. The corollary of this process is that, with the due time considered, it is technology that is going to local firms rather than local firms going out to seek the technology they need.

Italy and Veneto: exports of specialised industrial machinery towards Romania (DK295)
1994-2003 (euros)



Turning to disembodied knowledge, the main factor to consider here is skilled or highly specialised labour. While originally this might have been scarce, after more than 10 years of growing Italian concentrated presence in particular areas of Romania (North-west provinces) it is reasonable to presume that a certain amount of skills and know-how have been developed and that they are spreading across the local economy. Workers circulate and eventually might end up in Romanian firms or setting up their own business. It has worked this way in the industrial districts in Italy and might well function the same way in the Timis province, albeit more slowly.

Linkages with Italian firms also represent the channel through which technological capabilities are transferred to local firms. As discussed above this might not take place only as a spill over of subcontracting, but might as well be determined by the necessity for Italian firms to efficiently integrate subcontractors in their production process. For this to happen, in fact, quality and delivery standards have to be respected, and Italian firms have all the interest in helping subcontractors to improve their capabilities. Again it is the industrial district mechanism. As local firms work

together with foreign firms the capacity to absorb know-how, understand the tacit element of technology and adopt technologies increases. So increase other equally important capabilities such as organisational and linkage capabilities. A research carried out by Majocchi (2000) in 1999 on a sample of 22 companies located in Romania with Italian capital or that are subsidiaries of Italian firms found that there are cases where these “leader companies” supply technical consulting to local contractors by sending staff on the spot for certain periods of time; they also offer marketing outlet and can supply technology by leasing machinery and equipment. Majocchi also finds that the leader companies tend to put suppliers in reciprocal competition on both prices and quality, but that this competition takes place within a context of “strong collaboration”. Another classic district mechanism.

The number of linkages among Veneto’s and Romanian firms is increasing thanks to a sort of “imitation effect” for which more and more firms in Veneto’s industrial districts are following the firms that have already internationalised. Adding to this imitation effect there is also a “district effect” for which firms that are linked to larger firms that have internationalised follow the leader company to maintain their links and relations and also to exploit the reduction in uncertainty that comes from being part of a network. As highlighted by Majocchi (2004) some of these smaller companies, once settled in Romania, find the way of expanding their production and become leader companies themselves.

The result of this process is that in Timisoara an industrial district is already in its embryonic stage: there is a concentration of firms and linkages are developing. The latter however are still not numerous, deep and consolidated enough. Moreover the institutional element that characterise an industrial district is still lagging behind. Institutions and policies, both public and private, are developing but are still not adequate. The same can be said for the cultural element. But things are proceeding. As the knowledge gap between Romanian and Veneto’s contractors narrows, more and more stages of production will be transferred or outsourced to firms in Timisoara. That in turn will contribute to the transferring of more knowledge and technological capabilities to local firms which in turn may induce Veneto’s leader firms to further transfer or outsource their production and so on.

6. “Closed due to delocalisation”...?

The final outcome of this process might be that a real industrial district (in the Beccattini’s sense) or simply a cluster (in the Porter’s sense) might eventually develop in Timisoara, a district able to provide everything the Italian companies were used to find in their original district. Products will perhaps not be of the higher quality, but they will be good enough in a time when competition is getting tougher as ever before.

This might lead to the progressive weakening of linkages inside the original districts and eventually, as anticipated in the previous sections, to the dissolving of the district itself. “Closed due to delocalisation in Romania”. The scenario seems a grim one, but it might have its positive sides. As mentioned above, the process sketched in the previous sections allows Italian leader firms to grow or at least to maintain their position and gives the possibility to smaller firms to become leader themselves. These leader firms tend to maintain the higher stages of production in their home territory. Moreover, by outsourcing the lower and middle stages of production and by increasing their margins, they focus more on design, marketing, innovation and even some R&D. From the flower of the district may bloom the fruit of stronger medium sized enterprises. A fruit that is highly valuable for the Italian industrial economy. The net balance for local district economies, however,

would nevertheless be negative at least in the short to medium term. Hardly the loss of employment deriving from the vanishing of the industrial district could be absorbed by the stronger leader firms. Moreover labour demand will change, shifting towards different and higher qualifications and skills, while the supply remains the same.

The scenario sketched above, that could represent the sixth stage of development of an industrial district in the scheme we presented in paragraph 2, is just a possibility, albeit a realistic one. On the future to become reality linger various factors. The first is that labour cost in Romania is set to rise, shrinking the convenience for Italian firms to localise there. Labour demand will increase in areas like Timisoara, that already registered an unemployment rate of 3.6% in 2003, putting pressure on wages. Future entrance in the EU will probably push wages further up. Thus, local firms have to develop their knowledge and technical capabilities fast to induce Veneto's firms to outsource higher and more complex stages of production, consolidating the district development process. A larger shadow also lingers on both Romania and Veneto: China. China's competition might render even Romanian labour cost too high both for Italian and Romanian firms. Companies might then decide to take the road from Timisoara to Guangdong or be forced out of business. In this latter case however, the future of Veneto's and more in general Italian traditional districts will remain grim.

In this context what is the role for public policy? Certainly it is useless to try to contrast the internationalisation process of Italian firms towards Romania. It is their only way of surviving in an increasingly competitive environment and it set to take place one way or the other. The only way to avoid it would have been to set in place long ago policies to promote a shift in the industrial economy from low to higher technology sectors and a growth of firms' average dimension.

The birth and development of innovative and high-tech sectors has been limited and conditioned by many factors: the lack of a clear industrial strategic policy, a public research system that, except for few cases of best practices, is underfinanced, bureaucratic and inefficient, an almost non-existent private research sector, the lack of ties between research institutions, venture and private equity capital and firms, and the small dimension of the venture and private equity industry. All issues that for decades have not been addressed in the illusion that the Made in Italy bonanza of the 80's and of the early 90's could last indefinitely and that the Italian industrial model, based on low-tech clusters, was valid independently of the external circumstances.

Adding to this there are the strong cultural limitations that characterise the great part of Italian SMEs. Italy's SMEs, but in some respect also Italy's larger firms, are a sort of "closed autarchic system" extremely reluctant to open itself to the outside both for what regards governance and ownership. A system in which control is exercised completely by the founder-owner and its family. More often than not there are no external managers, or, if there are, they have a limited decisional role. Family ownership represents a sort of imperative that cannot be weakened: thus, external capital, investors, mergers and acquisitions are often an unviable option. Finally, these firms are very little prone to invest. They prefer to cash higher profits rather than to invest them. All this has resulted in a lack of professional managing competencies, the necessity to recur to a rigid and inefficient bank system for financing and a lack of investment, that altogether have strongly limited the firms' capability to grow.

All these problems need to be addressed urgently to avoid the risk of decline and progressive marginalization of Italy's industrial system in the global economy. But even if they will, the process that we have tried to describe in this paper will probably not be reversed. It is far too late.

What can be done now is to help the industrial districts' leader firms to grow and thrive, and to soften the consequences on the local district economies easing the transition from one industrial model (the industrial district) to the other (a medium sized firm based economy).

References

- Antenna Veneto Romania-Centro Estero delle Camere di Commercio del Veneto (2003), “Indagine sulla presenza imprenditoriale veneta in Romania”.
- Arrighetti, A. e Seravalli G. (a cura di) (1999), Istituzioni intermedie e sviluppo locale, Roma, Donzelli.
- Baculo L (1994) Impresa forte, politica debole, ESI, Napoli
- Baculo L. (1997) “Segni di industrializzazione leggera nel Mezzogiorno”, Stato e Mercato, (51)
- Becattini, G., (1979) “Dal “settore” industriale al “distretto” industriale. Alcune considerazioni sull’unità d’indagine dell’economia industriale”, in Rivista di economia e politica industriale, 1.
- Becattini, G., (1987) “Mercato e forze locali: Il distretto industriale”, Bologna il Mulino.
- Becattini, G., (1988) “Il Distretto industriale marshalliano come concetto socio-economico”, in Becattini G., “Il distretto industriale”, Torino, Rosenberg & Sellier.
- Becattini, G., (1998) “Distretti industriali and made in Italy. Le basi socioculturali del nostro sviluppo economico, Bollati Boringhieri, Torino.
- Becattini, G., (2000) Il distretto industriale, Torino, Rosenberg & Sellier.
- Berger, S. and Locke, R.M. (2000) “Il caso italiano and globalization” MIT industrial performance Center Working paper, n. 00-011, Cambridge, MA
- Cannari e Signorini (2000) Nuovi strumenti per la classificazione dei sistemi locali, in L.F. Signorini in Lo sviluppo locale. Un indagine della Banca D’Italia sui distretti industriali, Donzelli, Roma.
- Club dei distretti (1998) Quanti sono i distretti industriali italiani? In Newsletter,9 in <http://www.clubdistretti.it>
- Club dei Distretti-Unioncamere (2003) “Guida ai distretti industriali italiani”, Roma, pubblicato anche su <http://www.distretti.org/cgi-db/portale.htm>.
- Chen, J. (edited by), (2000) “Foreign Direct Investment”, MacMillan Press, London.
- Corò, G. e Volpe, M., (2003) “Frammentazione produttiva e apertura internazionale nei sistemi di piccola e media impresa” in Economia e Società regionale, 1-2003.
- Corò, G., (2000) “La delocalizzazione: minaccia, necessità o opportunità”, in Nord Est 2000. Rapporto sulla società e l’economia, Fondazione Nord Est.
- D’Antonio, M. (2002), “La piccola impresa italiana: una formazione ancora vincente?”, in Economia Italiana n.3, pp. 619-645.
- D’Antonio, M. and Scarlato, M (2000) “Capitale umano e sviluppo economico un modello di equilibrio economico generale per il Centro-Nord e il Mezzogiorno d’Italia” Dipartimento di Economia, Università degli Studi di Roma Tre, Collana di Economia, Working Paper, n.16
- Di Giacinto V. e Nuzzo G.(2004) “Il ruolo dei fattori istituzionali nello sviluppo dei distretti industriali in Italia” Manoscritto in: http://www.bancaditalia.it/ricerca/statist/ecoloc/Digiacinto_Nuzzo.pdf
- Dosi, G., Teece, D.J., Chytry, J., (1998), “Technology, Organization and Competitiveness”, Oxford, Oxford University Press.
- Enright M. J., (2002) “Regional clusters: What we know and what we should know”, paper prepared for the Kiel Institute International Workshop on Innovation Clusters and Interregional Competition.
- Garofoli, G. (1983) Industrializzazione diffusa in Lombardia, IreR, Franco Angeli, Milano
- Garofoli, G. (1996) I distretti industriali in Il libro della piccola impresa, AdnKronos Libri.
- ICE-MAE, (2004) Rapporto Paese sulla Romania.
- IPI, “L’esperienza italiana dei distretti industriali”, 2002.
- Lall, S. (1992) “Technological capabilities and industrialization”, World Development, 20(2), pp. 165-186.
- Lall, S. (1996) “Learning form the Asian Tigers”, London, MacMillan Press.
- Lall, S. (2003) “Reinventing industrial strategy: The role of government policy in building industrial competitiveness”, QEH Working Paper QEHWPS111, Queen Elizabeth House, University of Oxford.
- Marshall, A. (1896) “Principles of Economics. Macmillan, London
- Majocchi, A. (2000) “Are industrial clusters going international? The case of Italian SMEs in Romania”, Università degli Studi dell’Insubria.
- Majocchi, A., (2004) “Developing a favourable business environment: lessons from the experience of Italian firms in the region of Timisoara, Romania”, background paper for the OECD conference on “Clusters of Enterprises and the Internationalisation fo SMEs: The Case of the Romanian Region of Timisoara”.
- Marini, M. (2000) “Le risorse Immateriali. I fattori culturali dello Sviluppo economico” Carocci Editore, Roma
- Mathews, J.A., Cho, D.S. (2000), “Tiger Technology: the Creation of Semiconductor Industry in East Asia”, Cambridge University Press, MA.

- Nelson, R., Winter, S.J., (1982) “An evolutionary theory of economic change”, Cambridge (Mass.), Harvard University Press.
- Nugent J.B. e Lin J.Y. (1996) Institutions and Economic Development“ cap.38 in “Handbook of Development Economics” Edited by H. Chenery and T.N. Srinivasan, Jere Behrman, North Holland.
- Onida, F. (2004) “Se il piccolo non cresce – piccole e medie imprese in affanno”, Bologna il Mulino contemporanea
- Provasi G.(2002) (a cura di), Le istituzioni dello sviluppo economico, Roma, Donzelli.
- Pejovich, (1999) The Effects of the Interaction of Formal and Informal Institutions on Social Stability and Economic Development, Journal of Market and Morality, Volume 2, Number 2.
- Porter, M.E., (1998) “Clusters and the new economics of competition”, Harvard Business Review, Vol. 76, Issue 6, pp. 77-90.
- Putnam R. (1993) “Making Democracy Work: Civic Traditions in Modern Italy” Princeton University Press, Princeton
- Pyke F, Becattini, G Sengenberger W (1990) Industrial districts and inter firm cooperation in Italy, International institute of labour studies, ILO, Geneva.
- Rabellotti, R. (2002) “The effect of globalisation on industrial districts in Italy: The case of Brenta”, Università del Piemonte Orientale.
- Rosenfeld, S (1995) Overachievers: Business Clusters that Work, Regional Technology Strategies Inc.
- Rostow W.W. (1960), “The Stages of Economic Growth: A Non-Communist Manifesto”, Cambridge: Cambridge University Press
- Rullani, E., (2002), “Dallo sviluppo per accumulazione allo sviluppo per propagazione: piccole imprese, clusters e capitale sociale nella nuova Europa in formazione”, Paper for the OECD East West Cluster Conference.
- Savona, M. e Schiattarella, R., (2004) “International relocation of production and the growth of services: the case of ‘Made in Italy’ industries”, Transnational Corporations, Vol. 13, No. 2.
- Scarlato M, 2001, “Capitale sociale e sviluppo economico: un’analisi empirica per le province italiane”, Economia Pubblica, anno XXXI, n.1
- Schiattarella R., (2003) “Analisi di sistema e delocalizzazione internazionale. Uno studio per il settore del ‘made in Italy’, manoscritto.
- Sforzi, F. (1987) “l’identificazione spaziale” in Beccatini “Mercato e forze locali: Il distretto industriale” 1987
- Solow R. (1994) Il mercato del lavoro come istituzione sociale, Bologna il Mulino
- Streeten, P., (1995) “The Judo Trick: The Role of Direct Private Foreign Investment in Developing Countries”, in “Thinking About Development”, Raffaele Mattioli Lectures, Cambridge University Press, Cambridge (UK).
- Unido, (2005) , “Inserting Local Industries into Global Value Chains and Global Production Networks: Opportunities and challenge for Upgrading”, Vienna 2005
- Unctad, (1999), World Investment Report, New York.
- Unctad, (2003) “Investment and Technology, Policies for Competitiveness: Review of successful country experiences”, Technology for Development Series.
- Vernon (1966) “International Investment and International Trade in the Product Cycle”, "Quarterly Journal of Economics", n. 80, 1966, 190-207.
- Viesti G (1995) “Lo sviluppo possibile. Casi di successo internazionale di distretti industriali nel Sud Italia”, Rassegna Economica,
- Viesti, G. (2000), Come nascono i distretti industriali, Bari, Laterza.