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# ***The economic geography of the*** ***“Adria-Alp” Euroregion***

*Analysis of the manufacturing and service sector  
of the “Adria-Alp” Euroregion  
with relative application of Paul Krugman’s core-periphery model*

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## **INTRODUCTION**

Europe is moving from an international economy to a more and more interregional one (Krugman)<sup>1</sup>. We believe that the European enlargement of 1<sup>st</sup> May 2001 will give a further spur to this trend, especially through the unification of currency and customs and through the favouring of people's mobility.

These changes are very important especially within the Euroregion under discussion, as up to the end of the Cold War the Italian, Austrian, Slovenian and Croatian territories were part of two blocks, whose forms of government and economy, socio-political values and cultural references were extremely different, and in particular, they did not encourage exchanges and interaction among these peoples. The conflict that led to the disintegration of the Republic of Yugoslavia delayed even more the socio-anthropological, economical and political reconciliation among the peoples that inhabit this land where the Latin, the German and the Slav culture meet together.

Nonetheless, finally the now "only" mental wall dividing the territories of the Euroregion seems to be crumbling.

We will analyse with a comparative approach some of the processes that interest the area of the "Adria-Alp" Euroregion: Veneto, Friuli Venezia Giulia, Istria and Slovenia.

The "Adria-Alp" Euroregion has to be a new juridical subject aiming at coordinating and extending forms of collaboration among Carinthia, Slovenia, coast-mountain County, Istrian County, Veneto and Friuli Venezia Giulia, strengthening the cohesion and competitiveness of these territories.

In order to explain in more detail this concept, we may say that the "Adria-Alp" Euroregion aims at coordinating the legislative and governance activity in the field of transport, infrastructures, territorial planning, energy, telecommunications, university research, industrial districts and innovative clusters, technological and scientific parks, health, waste disposal and other public utilities<sup>2</sup>.

Notwithstanding the many efforts of the regional administration, the time necessary for the realization of the "Adria-Alp" Euroregion seems to be quite long.

Moreover, due to the absence of a clear normative framework that may explicitly define the roles and tasks of those who will govern the Euroregion, we decided, for the time being, to study the economic geography of this territory.

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<sup>1</sup> Krugman, P. (1991), *Geography and trade*, MIT Press, p. 90.

<sup>2</sup> Statements gathered during the meeting of the Euroregion Presidents at Villa Manin in Passariano, 17<sup>th</sup> October 2005.

Since the early Nineties of the last century, Paul Krugman gave a major contribution to this scientific discipline – economic geography precisely –, which studies the location of production within different countries.

In particular, Krugman combines the observation of industrial and service agglomerations with the analysis of economies of scale, growing returns to scale, transport costs and technology.

The combination of all these factors is part of the core-periphery model that tries to explain reasonably how the production and service localization will evolve.

Nonetheless, Paul Krugman underlines how the “long shadow thrown by history and casualty”<sup>3</sup> weighs on the localization of production and on industrial specialization.

It is therefore history, together with the cumulative processes connected to it, that determines the present geography of productive economies.

Our work is divided into nine subsections that may be referred to three main sections: localization of the manufacturing sector, localization of the service sector and core-periphery model in the "Adria-Alp" Euroregion.

## **ANALYSIS OF THE INDUSTRIAL SECTOR OF THE** **“ADRIA-ALP” EUROREGION**

### **Industrial localization according to number of employees and production units in the “Adria-Alp” Euroregion**

Table 1 shows the industries that form the manufacturing sector. Employees and local units are expressed in percentage on the total share of employees and enterprises *of each region*.

Table 1 Key EM=employees, LU=local units, C = data not supplied

Industries/Regions	Veneto		FVG		Carinthia		Slovenia		Istria
	EM	LU	EM	LU	EM	LU	EM	LU	EM
Food, beverage	7,1	8,6	7,8	12,3	11,2	17,3	9,2	5,5	8,1
Textiles	5,1	3,6	2	2,5	0,7	1,8	5,5	3,2	5,8
Clothing	7,9	8,4	0,7	2,3	0,8	3	5,8	6,8	9,2

<sup>3</sup> Krugman, P. (1991), *Geography and trade*, MIT Press, p. 20.

Leather	5,8	4,5	0,7	0,7	4,2	1,1	3	1,6	2,8
Wood	4	8,4	7	12,7	9,3	13	5	8,9	1,5
Paper	2	0,8	2	0,008	2,3	0,4	2,5	1,1	1,7
Publishing	3	3,3	2,4	4,2	3,2	4,1	4	8,6	2,0
Coke, oil	0,1	0,03	0,001	0,4	C	0,004	C	C	C
Chemicals	2,5	1,1	1,4	1,1	3,3	2,2	5,2	1,2	1,1
Rubber, plastic	4,2	2,5	4	2	4	2,3	6	6,5	3,3
Other non metallic minerals	5,3	5,3	4,4	4,2	9,1	5,6	4,3	2,7	10,6
Base metals	2	0,6	4,2	0,7	2,4	0,4	3,5	0,6	0,6
Metal products	15,4	18,7	15,2	17,2	9,8	14,8	13	24,5	6,2
Machines and equipment	13,2	9,3	18,9	8,5	20	9,2	10,3	8	7,8
Office machines, computers	0,1	0,3	0,3	0,5	C	0,2	0,3	0,6	1,2
Electric machines	4,1	3,6	3,5	2,7	1,5	2	6,2	4,3	2,8
Radio, television, other mediums of communication	1	1,3	2	2,5	9	1	3	1,8	0,4
Optical and precision devices	4	4,2	2	4,9	2	3,6	3	2,7	0,7
Motor vehicles	1	0,4	1,2	0,3	C	0,5	3	0,4	4,7
Other means of transport	1,5	0,9	3	1,6	C	0,04	1,4	0,5	25,9
Furniture	10,6	13,7	17	17,6	6,4	16,5	6,2	9,9	3,0
Recycling	0,2	0,3	0,2	0,5	0,3	0,4	0,4	0,5	0,6

Our elaboration of EUROSTAT data 2003

The table shows the specializations, if any, and their kind in each region forming the "Adria-Alp" Euroregion.

We can see straight away that in the Euroregion the sectors of activity that employ the highest number of workers and have the most enterprises are the same in Veneto, Friuli Venezia Giulia, Carinthia, Istria and Slovenia: metal products, machines and equipment, furniture and wood, food, textiles and clothing.

The first four industries have without any doubt very high and basically similar percentages of workers and enterprises for all the four regions; while textiles and clothing are mostly concentrated in Veneto, Istria and Slovenia, whereas Friuli Venezia Giulia and Carinthia occupy a more marginal position. In other industrial branches, always within the manufacturing sector, there are convergences, but they are smaller compared to the first five industries already mentioned, nonetheless they have a certain consistency as far as the number of employees and/or local units is concerned.

We refer here to the publishing activities, to rubber and plastic, to the manufacturing of products obtained from non metallic minerals, to the realization of electric machines, to the production of radios, televisions, other mediums of communication and to the operating of optical and precision devices. In the remaining activity branches the percentages of employees and enterprises of each region are extremely low, therefore also in this case there is sufficient correspondence among the percentages to be able to list the industries: paper, coke working, oil refining and use of nuclear material, chemicals, manufacturing of base metal products, office machines and computers, motor vehicles, other means of transport, activities connected to recycling.

### **Industrial demography of the “Adria-Alp” Euroregion**

Looking at Table 2 we see that the industrial demography is characterized by a considerable heterogeneity inside the Euroregion.

TABLE 2 Key EM = variation of employees between 1996 and 2003, LU = variation of local units between 1996 and 2003, // = zero balance, C = data not supplied by EUROSTAT

Industries/Regions	Veneto		FVG		Carinthia		Slovenia		Istria	Balance	
	LU	EM	LU	EM	LU	EM	LU	EM	EM	LU	EM
Food, beverage	300	4000	300	C	//	-400	C	C	256	600	3856
Textiles	-420	-7692	20	-2240	//	-178	-328	-1244	-780	-728	-12134
Clothing	-1775	-21487	-164	-500	-19	-120	-715	-3000	444	-2673	-24663
Leather	-664	-9384	-70	-400	//	-1300	-236	-1200	-18	-970	-12302
Wood	213	200	53	400	//	-100	-784	-400	-5	-518	95
Paper	12	1500	//	800	5	-140	-95	-100	-7	-78	2053
Publishing	11	-400	-13	190	35	-180	-394	-100	-184	-361	-674
Coke, oil, nuclear	-26	-100	42	-14	//	C	C	C	C	16	-114
Chemicals	231	20	23	20	18	80	-137	-1000	13	135	-867
Rubber and plastic	120	4000	50	1600	12	400	-300	2200	-297	-118	7903
Products of non metalliferous minerals	25	-1700	//	600	23	-300	-170	60	-442	-122	-1782
Base metals	46	-1700	//	700	//	200	-72	300	-71	-26	-571
Metal products	2320	16000	-32	4000	100	600	-1278	3000	208	1110	23808
Means and machines	800	6000	100	5000	50	1700	-300	1500	-348	650	13852
Office machines,	110	350	24	56	//	C	-79	-200	5	55	211

computers											
Electric machines	400	//	40	300	14	-500	-350	3000	-77	104	2723
Radio, TV and other mediums of communication	138	-300	-40	-400	7	900	-250	100	1	-145	301
Optical, medical, precision devices, watches	-500	1000	-160	-1200	15	100	-120	100	20	-765	20
Motor vehicles	90	1300	23	1000	//	C	-60	300	145	53	2745
Other means of transport	50	-1500	70	-400	//	C	-10	500	838	110	-562
Furniture	-800	-2000	40	-1000	50	-1000	-962	-200	37	-1672	-4163
Recycling	60	400	35	230	5	50	-35	100	30	65	810
Regional balance	741	-11493	341	8742	35	-188	-6675	3716	-232		

Our elaboration of EUROSTAT data 1996-2003

In the space of eight years, the manufacturing sector in Carinthia has remained almost unchanged, in fact many industries are characterized by a zero or a slightly positive balance of enterprises and the local units have increased altogether by 35 firms. Also the number of employees is almost unchanged: there is a negative balance of only 188 units. In Friuli Venezia Giulia we see a substantial increase both of local units (+341) and of number of employees (+8742), which is in clear contrast with the fall in occupation in Veneto, that registers a negative balance of 11493 jobs, and with the closing down of 6675 local units in Slovenia.

On the whole, it has to be underlined how in Veneto the number of enterprises has anyway risen (+741) and in Slovenia, notwithstanding the fact that many firms have closed down, there is a positive balance of new employees. Also Istria presents a negative balance referred to the employees, unfortunately we do not have any information on local units at our disposal.

We will now analyze the data of the various industries at Euroregional level more in detail, that is, summing up algebraically the results concerning local units and employment for each region in each branch of activity.

The results regarding 22 industries are equally distributed: a third witnesses an increase both of employees and enterprises, another third shows contrasting balances, where one of the items rises while the other diminishes.

The remaining 33% of the activity branches is characterized by a reduction both of the number of employees and of the number of local units. The industries with both total values positive are the food, metal products, machines and means, office machines and computers, electric machines, motor vehicles and recycling ones.

Among these, metal products, the realization of means and machines and the food and beverage industry register a particularly high increase; as seen in the previous analysis these activity branches

are also three of the five in which the industries of the “Adria-Alp” Euroregion are mostly specialized.

Remaining in the subject-matter of the specialization of the Euroregion, we notice in particular that in the textile, clothing and leather activity branch the fall is extremely significant concerning both the operating local units (-4317) and the employees (-48745).

Also in the fifth field of specialization of the Euroregion, wood and furniture, the negative balances are predominant, as many as 2190 local units have been closed down and the positive value of employment in the wood branch (+100) is not enough to counterbalance the cut of 4200 jobs in the furniture sector.

Other industries with a double negative sign are publishing, products deriving from non metallic mineral and from base minerals. Also the activity branch of optical, medical and precision devices does not lie in a better position, in fact 765 local units have left the market, while employment remains unchanged.

In the other industries the total values are discordant: the rubber and plastic industry registers a strong rise in the number of employees (+8200), but also a fair number of firm closures (-118). The other activity branches do not show such relevant disproportions, the figures are more moderate, but they still show opposite final balances.

### **Localization of clusters and production districts**

Before tackling the issue of the localization of clusters and production districts, we would like to define both of them, in order to make the reader understand which criterion we have used to distinguish the ones from the others.

A cluster is a group of interrelated industries (research centres, universities...) that strengthens itself mutually and increases its competitive advantage. A geographical concentration of interconnected enterprises, specialized suppliers, suppliers of services and firms of connected industries and associated institutions (e.g. development agencies and commercial associations) in particular fields, which compete but also cooperate with one another<sup>4</sup>.

A district, on the contrary, is a group of small and medium sized industrial enterprises specialized in one or more phases of a same productive process and concentrated in a territory originally limited to few townships but non invariable in time. The family contribution to the entrepreneurial activity of the district is strong and consolidated.

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<sup>4</sup> Porter, M. E. (1990) *The Competitive Advantage of Nations*. New York: Free Press.

A district is furthermore characterized by a rich material (building areas, industrial buildings, transport networks) and immaterial (services to enterprises, local banks, commercial networks and “territorial trade marks”) infrastructural network, which increases the competitiveness and market power of local productions.

In TABLE 3 we have listed the districts and the clusters present in each region belonging to the “Adria-Alp” Euroregion.

TABLE 3

Region	Clusters	Districts
<b>Friuli Venezia Giulia</b>		
S. Daniele del Friuli	Ham Consortium	
S. Daniele del Friuli		Preserves, meat based products
Natisone – Manzano	Promosedia	
Natisone – Manzano		Furniture
Brugnera		Furniture
Maniago	Knife maker Consortium	
Maniago		Machine tools, production of iron and steel
Triest	Molecular Biomedicine Technology	
Triest	Environment	
Triest	Materials and Nanotechnologies	
<b>Veneto</b>		
Padua	Veneto Nanotech	
Schio		Textile products
Cavarzere - Piove di Sacco		Clothing
Castelnuovo del Garda		Clothing
Porto Viro		Clothing
Cornedo Vicentino- Tiene		Clothing
Noventa Vicentina		Clothing
Arzignano – Campo		Leather and shoes
Fossò – Fiesso d’Artico – San Mauro Pascoli		Leather and shoes

Montebelluna – Maser		Leather and shoes
Bussolengo – Sona		Leather and shoes
Buon Albergo		Paper and publishing
Venice		Glass manufacturing
Cerea- Bovolone Quarrata – Serravalle		Furniture
Casale di Scodosia – Urbana		Furniture
Vicenza – Monticello Conte Otto		Jewellery
Trissino		Jewellery
Bassano del Grappa – Romano d'Ezzellino		Jewellery
Dolcè – Grezzana Civita Castellana		Pottery and products for building
Chiampo		Pottery and products for building
Nove		Pottery and products for building
Oderzo – Motta di Livenza		Rubber and plastic
Schio		Electronics
Montecchio Maggiore		Electronics
Domegge di Cadore		Electronics
Longarone		Electronics
Schio		Machine tools
Campodarsego		Machine tools
<b>Carinthia</b>		
Klagenfurt		Renewable energy & Environment
Klagenfurt		Wood
Klagenfurt		Plastic
Klagenfurt		Health and wellbeing
Klagenfurt	Software	
Villach	me <sup>2</sup> c microelettronics	
<b>Slovenia</b>		
Velenje	Plasttechnics- Plastic	Industrial mechanical technology
Ljubljana	Economic Interest Association	Biotechnology and pharmacy

	of Geodetic Service Providers	
Ljubljana	Automation	Materials
Idria	Extractor fans, conditioners	ICT
Velenje	Environment	
Ljubljana	Building	
Ljubljana	Slovene tourist association	
Pivka	Wood industry	
Koper	Logistics and transports	
Celje	Components	
Velenje	e-Aliansa information technology	
<b>Primorsko Goranska</b>		
Rijeka	Wood	

Our elaboration of data of the Banca d'Italia (2001), European Commission (2004), The Competitiveness Institute (2006)

TABLE 4

Province	District degree
Padua	0,99
Treviso	0,98
Vicenza	0,93
Udine	0,73
Rovigo	0,54
Verona	0,37
Belluno	0,26
Pordenone	0,15
Venice	0,06
Gorizia	0,00
Triest	0,00

Source: Banca d'Italia (2001)

The most evident feature is the strong concentration of districts in Veneto and, more in general, in the two Italian regions that belong to the "Adria-Alp" Euroregion.

In fact, out of 37 productive districts located in the territories of the Euroregion, 29 are distributed between Friuli Venezia Giulia and Veneto, which alone counts 25 districts.

In Veneto the districts are scattered all over the regional territory and involve a very high number of towns; nonetheless it is evident that some areas, such as for example the one of Schio which counts three districts, have towns with a multiple specialization. Moving towards the East, we see that in Friuli Venezia Giulia there are less districts compared to Veneto and especially that they are more distant from one another on the regional territory. Only the area of Triest, presents a higher

concentration, but concerning the clusters. An agglomeration of a certain importance can be seen in Carinthia and in Slovenia. Here, as a matter of fact, we find some towns that act as district and cluster poles.

In Carinthia this role is played by Klagenfurt, the regional capital, which is the main agglomeration centre, while in Slovenia the concentration revolves around Ljubljana and Velenje.

On the contrary, there are no production districts neither in the Istrian County nor in the mountain-coast County.

This is why in the last years plans have been drawn up to clone Italian districts in the fields of wood/furniture (wood manufacturing and furniture factories) and of leather/shoes in specific Croatian areas, among which the same coast-mountain County. In fact, these are the two industry branches that are mostly widespread as agglomerations especially in Veneto and also in Friuli Venezia Giulia .

The impression given by TABLE 3 is that it confirms the results of TABLE 1, that is, the industries with the highest number of employees and local units are the richest as far as industrial districts and clusters are concerned, but in particular, they follow a trend which is shared by the whole of the “Adria-Alp” Euroregion. Wood-furniture, textiles, shoes and leather, electronics, machine tools are precisely the activity branches that give work and count the majority of the enterprises in the Euroregion and, therefore, more districts and clusters.

It is also interesting to observe how the districts operate mainly in sectors that are not advanced and highly technological. Without any doubt one of the things that hits the eye is the extremely high number of districts that deal with textiles, furniture in Veneto and Friuli Venezia Giulia... The districts begin to show more marked technological characteristics in Carinthia, and especially in Slovenia. The clusters show even more the change from industries with a low technological content to more advanced ones. But we would not like to be misunderstood. We do not want to say that the high-tech industries are scarcely localized. It is surely true that at this stage in the Euroregion the low technology activity branches are the most localized. What pushes industries to concentrate in a place cannot be defined only and exclusively as technological spillovers, as is shown by the higher number of districts compared to that of clusters.

## *Gini coefficient of industrial localization in the “Adria-Alp” Euroregion*

As last localization indicator in the “Adria-Alp” Euroregion we would like to use the Gini coefficient. We will use this tool to see in which areas of the Euroregion the various industries are mostly localized.

The various coefficients are given by the quotient between the number of employees of each industry *in each region* and the total share of employees in the manufacturing sector in the whole Euroregion (1,067,408 people).

We remind that the Gini coefficient goes from a minimum of 0, that represents the absence of localization, to a maximum of 1 that, on the contrary, represents the maximum level of concentration.

TABLE 5 Key C = data not supplied by EUROSTAT, Yellow = industry with low degree of technology, blue = low-medium technology, green = medium-high technology, red = high technology

Industry/region	Veneto	FVG	Carinthia	Slovenia	Istria	Total
Food, beverage	0,04254	0,00998	0,00401	C	0	0,05653
Textiles	0,03049	0,00257	0,00025	0,01244	0,00257	0,04831
Clothing	0,04741	0,00095	0,00028	0,01321	0,00112	0,06297
Leather	0,03496	0,00092	0,00150	0,00637	0,00034	0,04409
Wood	0,02408	0,00886	0,00330	0,01128	0,00018	0,04771
Paper	0,01122	0,00250	0,00080	0,00558	0,00020	0,02031
Publishing	0,01560	0,00305	0,00116	0,00906	0,00025	0,02912
Chemicals	0,01522	0,00181	0,00118	0,01173	0,00013	0,03007
Rubber and plastic	0,02502	0,00514	0,00132	0,01295	0,00041	0,04484
Other non metallic mineral products	0,03168	0,00558	0,00326	0,00972	0,00129	0,05153
Base metals	0,01191	0,00542	0,00084	0,00804	0	0,02622
Metal products, except machines and means	0,09254	0,01938	0,00349	0,02928	0,00076	0,14546
Machines and means	0,07947	0,02414	0,00713	0,02320	0,00095	0,13490
Computers and office machines	0,00092	0,00045	C	0,00080	0,00015	0,00232
Electric machines and devices	0,02469	0,00452	0,00000	0,01410	0,00035	0,04366
Radio, televisions, other mediums and devices of communication	0,00549	0,00250	0,00317	0,00596	0	0,01713
Optical, medical, precision devices, watches	0,02490	0,00273	0,00071	0,00692	0	0,03526
Motor means of transport, trailers and semitrailers	0,00596	0,00151	0	0,00662	0,00058	0,01467
Other means of transport	0,00943	0,00370	0	0,00309	0,00316	0,01938
Furniture	0,06334	0,02149	0,00230	0,01401	0,00037	0,10152
Recycling	0,00107	0,00029	C	0,00083	0	0,00219

Our elaboration of EUROSTAT data 2003

The results of TABLE 1 and TABLE 3 appear confirmed, that is the “Adria-Alp” Euroregion presents, at the moment, industrial localizations in the field of metal products, machinery and means, furniture, food and clothing.

The Gini coefficients are quite high for these production branches while they are lower and lower for the others.

We said “at the moment” for a special reason.

As a matter of fact, we believe that these data have to be read also with reference to TABLE 2 because it is in the historic series that it is possible to identified the trends that will most probably continue in the medium-long term.

The textile, clothing, leather and shoe industry holds a predominant position in manufacturing that we have defined in the light of the tables analyzed up to now; but the dynamics of TABLE 2 does not give us grounds to be very optimistic for the future. In seven years in the whole Euroregion almost 50,000 jobs and over 4,500 local units have been lost in this industry branch.

And this trend appears to be still continuing. With the progressive integration of European (and surely also global...) economy, textiles will be one of the branches subject to adjustment phenomena in the manufacturing sector. The same can be said for the wood and furniture industry: from Veneto to Slovenia various thousands of employees and local units have been lost.

This negative balance does not reach the dimensions of the textiles one, but it is likely that the deindustrialization of these production branches will continue in the medium-long term. The present and possible future loss of weight of the textiles-clothing and wood-furniture branches can be counterbalanced by the growth of industrial aggregations in the “Adria-Alp” Euroregion mainly in the medium-high tech activity branches.

TABLE 2 clearly shows how the device and machinery industries are growing strongly; we refer here to machine tools for the production and manufacturing of metal products, electric machines, office machines, computers and, more in general, to that category that EURTOSTAT calls “means and machines”. So for the future we might think of a Euroregion that witnesses the rise of its specialization in the most technological sectors and loses or de-localizes its expertise in the less advanced sectors.

Anyway, we think that such a process might be advantageous for both the parties, the Euroregion and the places where this de-localization will take place, which can be peripheral areas of the Euroregion itself or locations situated in other areas of Eastern Europe or even more eastwards towards Asia.

We can summarize this phenomenon by thinking of a productive cycle where the enterprises are initially established and strengthen themselves inside the industrial district, but then spread with their progressive maturation, with the exception of those that close down if a similar evolution is not completed.

To be even more precise, we would also like to analyze the possible exceptions to the “Go-East” phenomenon just described.

Looking carefully at TABLE 2, we see that a sector with a low technological content like the food and beverage one has considerably increased both its employees (+600) and its operating enterprises (+3600), while advanced industries such as the realization of complex machines like televisions, radios, optical, medical and precision instruments have lost employees and local units. We may think of this event as a part of an adjustment/allocation process of manufacturing that has been taking place for decades.

Only adopting a point of view according to which this dynamic process has been taking place for a long time, can we think that the States of Northern Europe, in parallel with agglomeration and specialization phenomena in Central and Southern Europe in the traditional sectors (e.g. food), have reached industrial concentrations in the high-tech sectors like components in the microelectronics field.

Therefore, this “anomalous” trend of the “Adria-Alp” Euroregion, positive in food and negative in high-tech devices, may only be the effect of a dynamic allocative process which has been under way for a long time.

To give a possible answer we have to consider an even more general, or better, global, point of view. In the book “Geography and trade” Paul Krugman compares the Gini coefficients of the USA with those of the European Union. The United States have a more marked, that is, localized productive specialization. As a matter of fact, Krugman says that in Europe the adjustment dynamics of productive allocations have to take into consideration this lower specialization of the manufacturing sector.

In short, “it is possible to have multiple balances, that differ for the degree of localization as well as for the specific choices of location”.

Due to this more dispersed economic geography of the manufacturing sector in Europe, various localizations can be kept up and flourish in time, mitigating the productive adjustment phenomenon described above. Krugman underlines also the fact that in the USA knowledgeable recourse was and is still made to the de-localization of enterprises. And this is the issue we will tackle in the next paragraph.

# **DE-LOCALIZATION PHENOMENON INSIDE OF** **THE “ADRIA-ALP” EUROREGION**

## **Production delocalization within the “Adria-Alp” Euroregion**

“...Production is slowly moving abroad; in the parent company, here in Montebelluna, there will always be a production phase, but it will always be limited as the operative margins are smaller and smaller... *production is a historical cycle, it moves*, it follows labour according to the lowest cost. Here we will keep the planning phase...”

Textile entrepreneur of the Province of Treviso operating in Timisoara (Romania)

This statement is one of the many expressed in the interviews made and elaborated by Fabio Turato in his work entitled “Il ruolo delle PMI del Nord Est nei Balcani (The role of SME of the North East [of Italy] in the Balcans)” published by Fondazione Nord Est (North East Foundation)<sup>5</sup>.

We think this is a very important work, as it analyses in depth many aspects and situations which entrepreneurs are confronted with when they invest abroad. The main problem for the quantitative analysis of de-localizations appears immediately clear, in fact when looking for statistical data concerning the number and sector of Italian enterprises investing abroad, we discover, or better crash against, the fact that production units in Italy are not held by law to declare if, where and how much they de-localize.

The enquiry of Fabio Turato is based on interviews with 37 entrepreneurs from Veneto and Friuli Venezia Giulia, who have been operating in the Balcans for at least 5 years (ca. 50%), while the other half of the sample has been de-localizing for 6 to 10 years.

We will summarize very shortly Turato’s work, in order to highlight the main issues of the publication.

The first issue tackled in the enquiry regards the reasons that pushed these entrepreneurs to de-localize. The answers are mainly, and obviously, three: lower labour costs (50%), search for new outlet markets (32%) and higher labour availability and flexibility (15%).

The second topic concerns the company strategy. A good half of the entrepreneurs interviewed assert they have moved abroad all the production phases, this is the answer given in particular by those who have been working abroad for a longer time. As far as the other half is concerned, in particular the entrepreneurs who have been operating in Easter Europe for six years or less, it is

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<sup>5</sup> This paper is on-line: [http://www.fondazione Nordest.net/uploads/media/PMI\\_Balcani\\_03.pdf](http://www.fondazione Nordest.net/uploads/media/PMI_Balcani_03.pdf)

only the cheapest and less qualified productions that have been implemented in Slovenia or in Croatia.

In line with the statements of the entrepreneur from the Province of Treviso reported above, many of his colleagues chose to move abroad the whole manufacturing processes, keeping in Veneto or in Friuli Venezia Giulia only the output planning and design stages.

Only a few people interviewed (5 out of 37) declared themselves ready to further transfer their activity to other countries.

There are in fact other factors that set difficulties in making the choice of de-localizing elsewhere, even if this would anyhow be worthwhile from an economic point of view.

First of all, the first reason concerning the difficulties of enterprises to internationalize themselves lies in the irrecoverable costs to access foreign markets.

This initial and fundamental problem, though, is not taken into consideration in Turato's publication, but it is the result of Buganelli and Infante's paper entitled "I costi irrecuperabili per l'accesso ai mercati esteri: un ruolo per i distretti industriali? (The irrecoverable costs for accessing foreign markets: a role for industrial districts?)".

The irrecoverable fixed costs are associated to the retrieval of information: so the enterprises that can gather information more easily should have less barriers to access.

At this point there rises a question: are there any differences between small and large enterprises? Caves<sup>6</sup> states that if the irrecoverable costs are connected to the gathering of information, organizational aspects and other, then they should be more or less fixed and therefore remain fairly unchanged, regardless of whether the de-localization is carried out by a small or large sized enterprise. We believe, especially in the light of the analysis on localizations in the Euroregion previously carried out, that Caves' conclusion may be subject to some criticism. In the "Adria-Alp" Euroregion at the moment the prevailing enterprises and districts are mainly specialized in industry branches such as textiles, clothing, leather and shoes.

These local units are of clearly small dimensions, given that the technology that these activity branches use is not characterized by growing returns to scale. If we make a very probable parallelism between technology used and recourse to product marketing and distribution policies, we reach the conclusion that the irrecoverable costs will be higher for smaller enterprises.

This conclusion is further confirmed if we consider that, if the North East of Italy wants to remain competitive abroad in traditional sectors, it has to invest in qualitative improvements too, which means that communication strategies have to be more aggressive and therefore more onerous.

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<sup>6</sup> Caves, R.E., 1996, *Multinational enterprise and economic analysis*, Cambridge University Press.

But there is a point that the authors manage to substantiate through strong statistical results, which helps Caves in the attempt to set fixed costs at the same level for SME and large enterprises. It is the informative spillovers.

The industrial district, characterized by many small production units, appears as an environment where information circulates informally but efficiently and this affects the competitive capacity of enterprises inside this agglomeration. As the enterprises of a district share decisions that are in most respects similar, it is probable that they are used to learning from one another, thus reducing significantly the fixed costs for information connected to the access to foreign markets.

In this direction there is also the fact that in the last years the legislative initiatives aiming at diminishing the incidence of these irrecoverable fixed costs for accessing foreign markets have been growing.

The first law concerning cost reductions was passed by the Foreign Affairs Commission of the Senate in March 2001, after it had remained stuck for a year in the Foreign Affairs Commission of the Parliament. It allocated 50 million euro for 2001 and the same amount for 2002.

Further 60 million euro were paid out in the years 2001 - 2003; the recipients were Simest, ICE, Informest, Unioncamere, Finest, the regions and local bodies.

The second law concerns the convention between the Italian Ministry of Foreign Affairs and the Region Friuli Venezia Giulia for the implementation of the reconstruction plan for the Sub-Danube area of Croatia and implied technical assistance, training and pilot projects for the reconstruction of the productive network through SMEs, fostering also the creation of mixed companies.

Going back to the factors that block further de-localizations discovered by Turato in his enquiry, we can list the excessive geographical distance, organized criminality and the same competitiveness among enterprises from Veneto and Friuli Venezia Giulia in the Slovene and Croatian territory.

The fourth issue concerns the anthropological-cultural and economic problems that exist between the entrepreneurs of the North East of Italy and the workers of the Eastern Countries.

These differences between an Italian worker and one from the East are due to the different cultural formation, to historical poverty in many areas where de-localization takes place and to the socio-cultural changes under way.

Young people and women are indicated as those subjects that have proved to be more open to change - the changeover from planned economy to free market and from regime to democracy -; in fact these categories are witnessing a growth both in education rates and in the manifestations of correctness and sense of belonging towards the enterprises that have carried out the de-localization.

## **Financial requirements of de-localizing enterprises and Italian banks**

The great majority of the entrepreneurs interviewed reveal their difficulties in obtaining credit in order to finance the implementation and the development of their production activity abroad. Very often the entrepreneurs admit that they had recourse to self-financing, a mechanisms used since the appearance of Arnaldo Bagnasco's "Third Italy", of which Veneto and Friuli Venezia Giulia are historical members. It is interesting to notice how this cultural behaviour survives, or better thrives in time!

Nonetheless, it is necessary to underline how the banking system in Slovenia and Croatia is opening up to competitors, especially through the take-over of Slovene and Croatian banking firms on behalf of foreign banks; in particular the presence of take-overs carried out by Italian banks is becoming more and more important.

In Croatia, for example, the take-over on behalf of Unicredito and Banca Intesa respectively of Zagrebacka Banka and Privredna Banka has enabled these two banking firms to control 48% of the credit offer in the Croatian Republic. Also in Slovenia Italian banks are more and more present and active in the field of joint-ventures and participations.

It is possible that this growing presence of Italian banks, that have to face more and more often the competition of German, Austrian and French banks (the other three nations that have carried out important take-overs of Slovene and Croatian banks), will give entrepreneurs the possibility of availing themselves of credit and technical-financial assistance in their de-localization projects under better conditions compared to some years ago.

The stronger presence of Italian, but also German, French and Austrian, banking groups will allow better assistance and consulting to overcome the information asymmetries we mentioned in the previous paragraphs.

TABLE 6

Nation	Slovene/Croatian bank	Percentage controlled by Italian bank
Slovenia	Koper Bank	62% San Paolo Imi
Slovenia	Centurion Financial Service	Joint venture Banca Friuladria (IT) and AMEX (SLO)
Slovenia	Volksbank - Ljudska Banka	10% each for Banca Agricola Mantovana, Banca Popolare dell'Emilia-Romagna, Veneto Banca, Banca Popolare di

		Vicenza
Slovenia	ProBanca	There is Italian capital, but the firm does not allow the disclosure of other information which is kept reserved
Slovenia		UNICREDITO/Representative Office in Koper
Slovenia		FINEST/Representative Office
Croatia	Privredna Banka	Banca Intesa
Croatia	Zagrebacka Banka	Unicredito
Croatia	Podravska Banka	There is Italian capital, but the firm does not allow the disclosure of other information which is kept reserved
Croatia	Primorska Banka	There is Italian capital, but the firm does not allow the disclosure of other information which is kept reserved

Source: Italian Trade Commission ICE (July 2005)

***Is there a relation between reduction of employees and enterprises in certain production sectors and de-localization?***

It is natural to wonder whether, especially in the activity branches where there has been a greater loss of enterprises and employees, there has been a rush towards de-localization in the most eastern territories of the “Adria-Alp” Euroregion, in particular Slovenia and Croatia. The main problem to be able to answer such a question concerns, as already said, the lack of legal obligations for the enterprises regarding the declaration of possible investments abroad. We have tried to find alternative ways of retrieving information on the de-localizing enterprises. For example, the website of the Croatian Ministry of Economy has a section on foreign enterprises registered in the registers of the Croatian productive units.

Unfortunately this is not an exhaustive list (not in the least!) of all the Italian and foreign enterprises that from 1991 to 2005 have de-localized in Croatia, nonetheless it is possible to infer that it was

especially during the period of the terrible conflict that saw the dissolution of the Republic of Yugoslavia, that many enterprises of Friuli Venezia Giulia and Veneto de-localized in Croatia.

The statistics tell us of dozens of enterprises in the year 1992, while in the following years only a few units were registered, indeed in some years like 2000 and 2003 no Italian enterprises are officially registered in the company registry of the Ministry of Zagreb.

For completeness of exposition we would like to point out the strong presence of Austrian and Slovene enterprises listed in the Croatian register; this presence, though, has ceased being so considerable in the last years. In fact, since the end of the Nineties the data of the Croatian Ministry show an increase in the investments coming from the USA and from northern Europe.

Also the Italian Trade Commission ICE supplies data concerning de-localization, warning, though that “this list does not want to be exhaustive with regard to the Italian presence in Croatia”. Both the ICE and the Croatian Ministry of Economy register in particular the larger enterprises. In this way we see that no sector has de-localized more than others, but there is a good homogeneity, ranging from cars, to electric machines, from furniture factories to pottery, from motor shows to travel agencies and to real estate, insurance and banking groups...

It is evident that if we had more precise statistics at disposal we might quantify exactly the presence of SME in Slovenia and Croatia. As a matter of fact, it is the small and very small sized enterprises from Veneto and Friuli Venezia Giulia producing in traditional sectors (textiles, clothing, wood, furniture...) that are registering a strong contraction in the motherland. It is surely plausible that a certain number of these enterprises will close down without continuing their activity abroad, that is, they will stop production in Veneto, Friuli Venezia Giulia or in Carinthia but will not open up their activity again in Slovenia or in Croatia or elsewhere.

Essentially, we believe that a phenomenon of de-industrialization is taking place especially in the mature and more traditional sectors. It is surely possible that during the Nineties also a part of the SME from Veneto and Friuli Venezia Giulia de-localized and acquired, thanks to the competitive advantages the East offered, slices of the market and the possibility of developing and growing. This can be clearly seen in particular thanks to the work done by Turato, of which we have outlined the main guidelines.

But starting with the first years of the new Millennium, the enterprises (especially the micro-enterprises) that closed down in traditional and scarcely advanced technical sectors did not de-localize, but simply found themselves in a situation of mere re-collocation on the labour market.

In the next paragraph of this work we would like to analyze the reasons and the economic calculations that are at the basis of the moving of productive localizations in the "Adria-Alp" Euroregion, with reference to Paul Krugman's core-periphery model.

# **LOCALIZATION OF SERVICES IN THE “ADRIA- ALP” EUROREGION**

In the last decades of the Twentieth Century, a growing major part of the labour force produced services instead of goods. It is fairly useless to calculate the Gini coefficients for many services as they follow the geographical collocation of the population that produces goods: hotels, free-lance professionals, family doctors shall have a localization tending to 0!

It is anyway possible to export some kinds of services, for example, in the ICE list of firms that have de-localized in Croatia there is a branch of the Assicurazioni Generali insurance group in Zagreb.

Triest is without any doubt a city with a financial-commercial vocation that possesses a traditional specialization in the insurance field which, as seen in the previous example, is an exportable utility. Remaining in the regional capital of Friuli Venezia Giulia, it is important to underline how the clusters specialized in nanotechnologies, molecular biomedicine and physics are mainly places that offer services to citizens and productive enterprises, more than real centres of industrial production. It is our opinion that it will be the technology present inside the "Adria-Alp" Euroregion to determine, in a more and more consistent way, the localization of services inside the Euroregion itself.

TABLE 7 shows the services registered by EUROSTAT, in particular we have expressed the variation of services in the period 1996-2003 both concerning employees and local units, exactly as we did for the manufacturing sector.

TABLE 7 Key EM = variation of employees, LU = variation of local units, C = data not supplied in EUROSTAT statistics

Services/Regions	Veneto		FVG		Carinthia		Slovenia		Balance	
	LU	EM	LU	EM	LU	EM	LU	EM	LU	EM
electricity, gas and water	75	-6939	14	-251	28	-453	-51	227	66	-7416
building	12341	30511	2584	7178	262	3687	-1191	2680	13996	44056
motor vehicle sale	275	2369	87	264	89	282	-339	1037	112	3952
motor vehicles repairs	-132	-855	-129	-171	129	42	-537	655	-669	-329
motor vehicle accessory sale	18	229	71	-179	32	71	-80	470	41	591
motorcycle and similar sale and repair	135	186	-1	43	9	53	-3	70	140	352
oil retailing	-264	-976	-10	44	46	179	-219	-1205	-447	-1958
professional service trade	1644	2719	-159	-116	246	377	-6109	1223	-4378	4203
trade of agricultural products and living	541	530	116	-54	28	295	-52	298	633	1069

animals										
food and beverage trade	1029	-1341	-40	-389	36	-25	-277	415	748	-1340
house product trade	1525	6371	308	530	5	339	-188	982	1650	8222
trade of non agricultural products	1395	4136	181	863	177	-95	-404	-1173	1349	3731
trade of machines and devices	996	2070	121	316	39	27	35	494	1191	2907
other trade	-548	-1363	-140	-132	37	48	-2444	-1276	-3095	-2723
trade in specialized shops	-945	13879	-446	894	38	730	-3325	3502	-4678	19005
food, beverage and tobacco trade in specialized shops	492	2129	-166	-15	-10	344	-1061	750	-745	3208
trade of medicines and cosmetic products at the chemist's	120	2313	6	719	128	747	-225	-655	29	3124
other trade of new goods in specialized shops	884	7287	979	-471	417	1574	-2385	8610	-105	17000
trade in second hand shops	-3	3	7	3	-7	2	-19	-21	-22	-13
street trade	513	1929	92	134	76	148	66	626	747	2837
repair of products	-130	-64	-68	-154	14	48	-368	-136	-552	-306
hotels and restaurants	4272	88172	863	22536	788	4047	-4543	4087	1380	118842
land transport	208	-919	-79	-3463	313	-272	-2720	-5099	-2278	-9753
water transport	230	-2191	4	51	-22	28	-16	21	196	-2091
air transport	-7	1801	7	21	11	18	-7	-5	4	1835
other transport, travel agencies	1074	17294	352	399	117	440	-848	4756	695	22889
post offices and telecommunications	71	-5367	-3	-2718	6	-521	120	781	194	-7825
brokers	C	201	C	29	C	3495	C	C	C	3725
insurances and pension funds	C	514	C	86	C	197	C	C	C	797
real estate activities	8847	12567	1352	2801	424	1009	-27	938	10596	17315
machine and device hiring	595	1525	166	304	72	181	-101	38	732	2048
computers and connected activities	5051	13830	1066	2282	343	907	241	2610	6701	19629
research and development	362	607	94	244	14	43	-382	-1383	88	-489
other activities	22444	122618	3637	11196	1248	5655	-3262	8436	24067	147905

Our revision of Eurostat data 1996-2003

Exactly as the manufacturing sector, also the service sector presents branches that show highly positive historical trends and others, on the contrary, where the variations in the last years have been characterized by the “-“ sign.

Without any doubt there are also branches of activity where the sign is discordant, nonetheless we see how the large majority has a double positive sign (19 out of 34) and much fewer an opposing sign (9 out of 34) or both negative signs (6 out of 34).

The driving sectors in the Euroregion are the following: building, trade of house goods, machinery and devices, hotels and restaurants, transport and travel agencies, brokers and insurances, real estate activities, machine and device hiring and computers. The fact that hotels and restaurants have risen

with such high figures shows how tourism is an extremely important element in the economy of the “Adria-Alp” Euroregion.

It is necessary to lay down common strategies to valorise all the territories that are part of this region, given that the whole Euroregion is the destination of millions of tourists every year. The causes that push tourists to go on holiday in the Euroregion vary in each territory, but it is evident that with a bit of creativity and common sense, it is possible to find methods of valorising a territory that welcomes cities of art of international fame such as Venice and charming alpine and seaside landscapes.

Also the building sector witnesses an uninterrupted growth. The positive trend connected to housing has seemed to be for a long time without an end. The expansion in the building sector is associated also to tourism, especially in Istria. In parallel to the rise of the building sector there is also the boom of real estate agencies, that register a rise of demand in particular on behalf of university students, tourists and immigrants.

The fact that financial brokers and insurance brokers are increasing sharply is very important, especially because it is an exportable sector not only within the Euroregion but also abroad.

The results of trade are very unstable. Besides the trade sectors already mentioned above, it has to be said that positive performances are registered by local units that sell motor vehicles, motorcycles and accessories; the shops selling specialized products register a reduction, even if paradoxically the number of employees of such branch has risen.

Land transport, shops that repair motor vehicles and oil retailers have sunk considerably both in the number of employees and in that of local units.

This net reduction in many trade sectors shows how a strong transfer to organized large distribution is under way.

More and more often new hypermarkets open, offering a very large quantity of products generally at lower prices compared to the ones of shops of smaller dimensions with limited offer.

In the ICE statistics it is interesting to notice how some Italian names of the organized large distribution have de-localized with success in Slovenia and in Croatia; this means that the phenomenon of “commercial aggregation” is becoming more and more homogeneous and widespread in the whole territory of the “Adria-Alp” Euroregion. This event is probably connected to the very considerable rise in street trade.

The most advanced and the most traditional trade forms are developing!

We are convinced that this development of the organized large distribution will continue in future, an indicator in this sense is given by the Bersani bill that should favour, in Italy, the sale in supermarkets and hypermarkets of products considered up to recently sellable only in specialized

shops (for example, medical products without prescription buyable only and exclusively at the chemist's).

TABLE 8 Percentage of number of employees in each sector held by each region.

Sector/region	Veneto	FVG	Carinthia	Slovenia	Istria	Coast- mountain
Electricity	27,7%	12,7%	9,9%	42,7%	2,4%	4,6%
Building	56,9%	12,5%	6,3%	21,5%	1,2%	1,6%
Trade	56,5%	12,8%	6,3%	20,4%	1,7%	2,3%
Hotels, restaurants	55,2%	13,4%	9,6%	15,8%	3,4%	2,7%
Transport	49,1%	12,4%	6,8%	26,6%	1,3%	3,8%
Financial services	58,1%	15,19%	26,7%	C	0,001%	0,01%
Real estate activities	60,2%	15,4%	4,9%	16,7%	1,3%	1,5%

Our elaboration of EUROSTAT data 2003

TABLE 8 makes us understand that inside the Euroregion, Veneto has the highest number of employees in services. The percentages of each region in services are more or less stable, with the exception of some variation in certain sectors.

On the whole, Veneto appears as the production centre of manufacturing and services of the Euroregion, but also other factors have to be analyzed which in time might lead to a re-allocation of manufacturing and services in percentages that might be better distributed on the entire territory of the Euroregion.

## **THE CORE-PERIPHERY MODEL IN THE “ADRIA-ALP” EUROREGION**

The economy of the “Adria-Alp” Euroregion shows a growing level of interrelation. It is sufficient to look at TABLE 9 to notice how the volume of exchanges is rising constantly, without forgetting that this integration reaches even higher levels at national level.

Italy is the first commercial partner of Croatia and the second of Slovenia and Austria. Slovenia is the third commercial partner of Croatia, while Austria is the sixth and the third respectively of Croatia and Slovenia (ICE 2005).

Countries/data	Export	Share of total export	Import	Share of total import	Year
Slovenia	406	4,4%	351,8	7,2%	2005
	393,1	4,4%	404	8,4%	2004
	373	4,1%	337	7,3%	2003
	383	4,6%	481	10,8%	2002
	386	3,9%	406	8,1%	2001
Croatia	381	3,9%	386	7,3%	2000
	185	2,1%	102	2,1%	2000
	218	2,4%	119	2,5%	2001
	246	2,7%	127	2,8%	2002
	250	3,0%	158	3,6%	2003
Austria	257	2,6%	143	2,9%	2004
	251	2,6%	168	3,2%	2005
	379,6	4,2%	341,3	7,1%	2000
	368	4,0%	324,3	6,7%	2001
	359	4,0%	377	8,2%	2002
	363	4,4%	366	8,2%	2003
	418	4,2%	415	8,3%	2004
	449	4,7%	414	7,8%	2005

Source: Banca d'Italia

TABLE 9 Interchange among FVG, Slovenia, Croatia and Austria. The figures are expressed in millions of euro.

If the economy in the “Adria-Alp” Euroregion will become more and more interregional, this may lead to a growing localization of industries, a phenomenon that is already taking place, as we have seen; but in particular, this adjustment should be compensated by a higher degree of efficiency.

The risk, though, might be that Veneto, together with some very localized areas in manufacturing and services of Friuli Venezia Giulia and Carinthia, may become the core while the other parts of the Euroregion may form the periphery.

## **CONCLUSIONS**

In the introduction we said that for historical reasons the “Adria-Alp” Euroregion and, more in general, Europe, was in the past century and up to the beginning of the present one, very scarcely integrated in terms of mobility of factors and exchange; but with the enlargement towards the East starting from 1<sup>st</sup> January 2007 we will have a common currency and a complete mobility of factors and exchange inside Europe.

Observing the situation from this point of view we might be led to think that the Eastern regions that are part of the “Adria-Alp” Euroregion, with lower wages and now finally also the possibility of being much more accessible compared to the past, will become the advanced core inside the Euroregion and Europe.

Fundamentally the core would move towards the periphery.

Nonetheless Krugman and Venables in “Integration and competitiveness of peripheral industry”<sup>7</sup> assert the contrary; according to these authoritative economists a better access to the market may damage the peripheral industry, instead of favouring it. After reading this book we realized how Slovenia, as a matter of fact, is the only territory of the Euroregion that has a terribly negative record in its recent industrial demography: all its industries have assisted to a reduction, some even to a very significant one, of their local production units. Only a coincidence, perhaps.

But we have to consider that Slovenia, differently from Croatia, is already an official member of the European Union and from 1<sup>st</sup> January 2007 will benefit from the common currency and the end of custom duties for products coming from other member countries... In short, if this is the situation

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<sup>7</sup> Krugman P., and Venables, A. (1990) , Integration and the competitiveness of peripheral industry, on C. Bliss and J. Braga de Macedo, Unity with diversity in the European Community, Cambridge, Cambridge University Press, pp 56-76.

approaching the enlargement, it means that the considerations of Krugman and Venables are correct almost beforehand!

Following the reasoning developed by Krugman and Venables we must imagine an industry that is able of localizing itself in one or two locations. Let us assume that the choice is between Verona and Pazin in Istria, but the same would apply to Klagenfurt and Velenije or Pordenone and Poreč.

In short, we have coupled a half of the hypothetical core with the other half of the ideal periphery. Verona will surely have much higher wage rates and therefore production costs compared to the Istrian ones, but it can count on a better access to the market.

With the 1<sup>st</sup> of January 2007 the transport costs will sink in Europe and therefore also within the “Adria-Alp” Euroregion, so we are led to think that it would be worthwhile to transfer the production activity from Verona to Istria, that is, to pass from the core to the periphery. We quote Krugman because he is only too clear: “the reason is that the reduction of transport costs has two effects: it facilitates production localization where it costs less, but it also facilitates the concentration in a location, in order to create a economy of scale. And when production is concentrated, it may be convenient to concentrate it in the place that has higher costs, but better access”. It is therefore possible that the enterprises that will move towards Slovenia and Istria, and more in general towards Eastern Europe and the Eastern part of the World, will be those that benefit less from economies of scale, that is, those for which there are few incentives to concentrate their production in a limited number of places.

The enterprises belonging to sectors such as textiles, clothing, leather and shoes are on average smaller and more widespread on the territory, because their technology is not characterized by growing returns to scale.

In the first paragraphs of this research we saw how precisely these sectors have lost the highest number of enterprises in the last years. It is possible that such haemorrhage will continue in time and will imply also the gradual transfer of these enterprises towards the periphery of the Euroregion and of Europe.

Besides, it must not be forgotten that, due to distance transaction costs, the favourite localizations are those where the demand is high or the productive input offer is particularly convenient. A footwear factory of Verona having to choose between this town and Pazin or even Timisoara or China, might transfer the production towards the East exactly because the main productive input, labour, is much cheaper in the periphery than in the core.

An enterprise from Trieste specialized in research in the field of nanotechnologies, or an enterprise from Padua in the forefront in biomedicine, might make a very different decision. It is most

probable that these innovation and research centres will attract excellent graduates from the periphery, favouring agglomeration in the centres already existing, in this case Trieste and Padua.

In the light of the data analyzed in the research, we think that the service sector is likely to undergo very similar agglomeration phenomena to the ones of the manufacturing sector.

Coming back to the core and periphery issue.

In conclusion we feel like saying that the agglomerations in the “Adria-Alp” Euroregion, based on technology or on advanced sectors of research and development, are likely to grow, given the natural trend of concentrations to self-perpetuate themselves and act as pole of attraction.

We have in fact seen how the activity branches that are part of technologically advanced localizations have grown both in manufacturing and in services. The real problem is that, as seen above, there are not many of them in terms of quantity, that is, the present agglomerations in the "Adria-Alp" Euroregion mostly concern enterprises and services with a low technological content.

As far as the mature sectors are concerned, they will carry on the trend begun, which will probably be accelerated by the enlargement of the European Union: they will continue to diminish and only the bigger local units that have invested more both in R&D and abroad will survive, because in this way they will manage to satisfy more markets and obtain real competitive advantages for products that otherwise would be too scarcely differentiable.

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