

Cappellin, Riccardo

Conference Paper

The governance of regional networks in the process of European integration

41st Congress of the European Regional Science Association: "European Regional Development Issues in the New Millennium and their Impact on Economic Policy", 29 August - 1 September 2001, Zagreb, Croatia

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Cappellin, Riccardo (2001) : The governance of regional networks in the process of European integration, 41st Congress of the European Regional Science Association: "European Regional Development Issues in the New Millennium and their Impact on Economic Policy", 29 August - 1 September 2001, Zagreb, Croatia, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/115279>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

**THE GOVERNANCE OF REGIONAL NETWORKS
IN THE PROCESS OF EUROPEAN INTEGRATION**

Riccardo Cappellin
Department of Economics
University of Rome "Tor Vergata"
Via di Tor Vergata, 00133 Roma – Italy
cappellin@economia.uniroma2.it

Paper presented at the

41st Congress of the European Regional Association

Zagreb, Croatia

29 August – 1 September 2000

Introduction

The debate on global capitalism is polarized between the fear of globalization and the belief on virtues of free trade. Economists agree that countries tend to prosper when they open to trade and that foreign direct investment, which goes into long-term productive enterprises, brings similar benefits.

The belief, that open markets will magically produce prosperity in all conditions, is erroneous and the global economy is pretty much in the robber-baron age. The classical capitalist medicine can't avoid a long list of negative effects of globalization and it can be hardly denied that multinationals have contributed to labor, environmental and human rights abuses, such as the exploitation of woman and children work, the 16-hours days work, the no overtime pay, the limits to the freedom of movements of the workers, the use of toxic materials and lax safety standards, the spread of international sexual tourism, the trade of human being through massive immigration, the damages on the environment. The risk of recurrent international financial crisis, such as indicated by the cases of Mexico, the Far East and Russia, increases with the globalization process and the dependence on short term foreign capital. A model of development pushed in a cumulative way by foreign investments and often by speculative monetary flows from abroad, without any realistic evaluation of the fundamentals of the individual projects, such as many enormous investments in so called world cities, is inevitably increasing the macro-economic instability and the danger of financial collapse.

Multinationals should accept the local rules and local governments should enforce them on the multinationals. Multinationals should become embedded in the local system where they are localized. Thus, in countries where the rule of law is weak, international effort should aim to strengthen local institutions in a gradual process of institutional building.

On the other hand, the empirical evidence contradicts a traditional paradigm, according to which an increasing economic integration of the economic lagging regions within the most developed areas would be the cause of a cumulative process of increasing regional disparities. On the contrary, the changes occurred in the technologies and in the forms of the relationships between the firms seem to demonstrate, that a greater integration at the European level has been a factor, which has led to an higher development of various economic lagging regions.

The isolation of an individual region with respect to the contiguous areas hinders to achieve that critical threshold, which allows to become visible in the framework of an increasing global competition. Thus, each area should develop co-operative strategies at least with the most contiguous regions.

The experience of the last decades in the European Union demonstrates that the development of a local production system depends not only on the "endogenous" resources and capabilities, but also on the openness toward the global economy and on the capability to develop the relationships with other regional production systems in terms of exports, tourist flows, productive investments or financial acquisitions, transfers of technological know-how and access to external organisational and entrepreneurship capabilities.

In particular, the quality and level of the know-how is a major factor in promoting the competitiveness and the development of a region. A network approach underlines that the advancement of knowledge is promoted by the cultural diversity, by the synergy between local and external sources and by measures increasing the connectivity between the various local production systems. In fact, the receptivity to innovation depends on the circulation of information and on the capability to integrate the explicit external knowledge with the often implicit local production know-how.

This paper illustrates the model of territorial networks and it investigates the role of institutions in a bottom-up approach of integration aiming to tackle the negative impacts of the globalization process on the economic development. The first chapter illustrates in analytical terms the model of territorial networks and the multidimensional nature of the process of integration. The second chapter illustrates the concept of organizational/institutional distance and it analyses the various forms of interregional interdependence between developed and less developed regions. The third chapter analyses the impact of the European Union enlargement in the new accessing countries. Finally, the fourth chapter illustrates the role of institutions in the governance of the international relations in the European framework.

1. The nature of the process of integration and the evolving structure of networks

The model of industry that emerges at the thresholds of the 21st century is deeply different from the model of mass industrialization, on which the traditional economic theory is based. In a modern industrial economy, the model of industrial organization based on the concept of economies of scale has been replaced by a new organizational model based on an increasing integration, cooperation and competition between different firms that belong to the same wide sector of activity.

The traditional analysis of the globalization process emphasize a model of the multinational companies, based on strongly vertical integration and the control on the various foreign branch plants specialized in labor intensive productions. That model seems not to correspond to the actual organization of those firms, which are highly internationalized, at least in the case of the developed countries.

The creation of strategic alliance, joint-ventures, consortia and groups have become the almost current instruments in all sectors, such as those of production, distribution, finance and technological research. The prospects of development of the individual firm depend on the increasingly articulated and complex relations of integration with other firms, not only those belonging to the same financial group, but also many external firms.

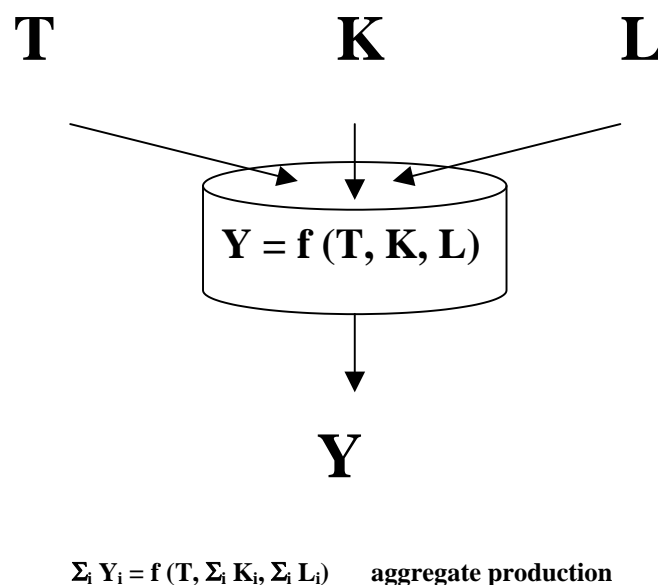


Figure 1: The model of the neoclassical production function

These complex relations between the different firms can not be encompassed in the traditional neoclassical approach. In fact, in a neoclassical model, the growth of the production in a regional or na-

tional economy is determined through the tool of the aggregate production function, which indicates the effect on the production level of the use of various production factors, such as capital (K) and labor (L), given the characteristics of the technology (T), as this latter is supposed constant among all firms, as indicated in figure 1.

On the contrary, according to a network perspective, the working of a national or regional economy is explained by the integration between the various firms (Cappellin 200b). These relationships may concern the same variables, which are considered in the neoclassical model of the production function, such as product (Y), labor (L), capital (K) and technology (T), as indicated in figure 2.

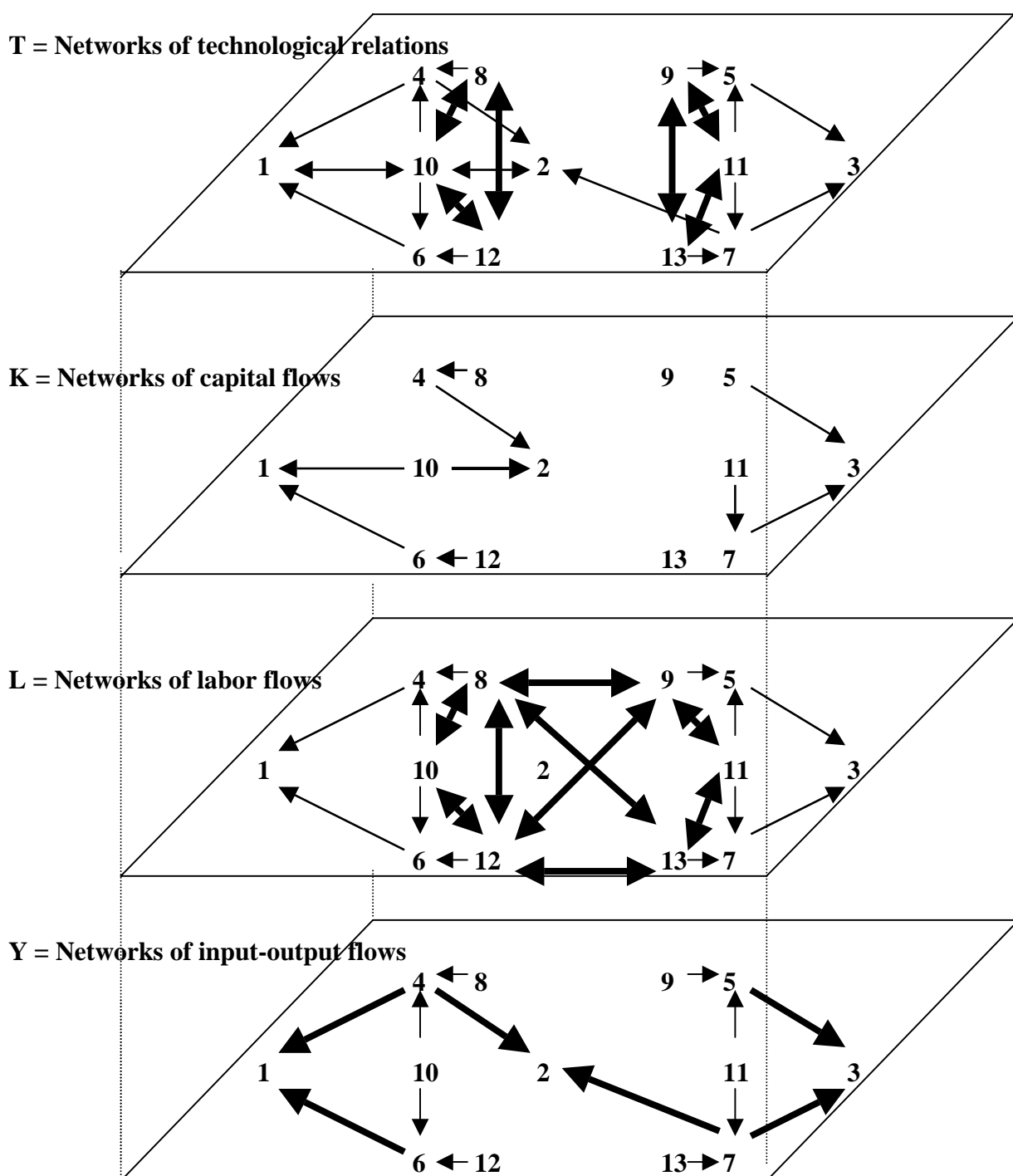


Figure 2: The connectivity between the flows of production factors, technology and productions

In fact, the firms of a given production system are linked between themselves and also with the firms belonging to other national or international production systems, which are not considered here for clarity, first of all through sale and buy relations of intermediate product and services, as indicated in the I-O model and by the subcontracting agreement which are common in modern corporate organisation. Secondly, they are linked by the flows of workers, characterized by different professional profiles, moving from one firm to another and changing their employment status. Thirdly, the firms are linked by credit flows and by financial control relations, which may lead to the creation of groups controlling various smaller companies. Finally, the firms are linked by the circulation of information, such as the technological exchange existing between the client and the supplier and between firms establishing a technological co-operation.

Thus the level of output of a firm depends not only on the output of its suppliers and the demand of its clients, but also on its endowment of production factors or on the flows of capital, labor and technological knowledge, which directly or indirectly link this firm with the other firms.

Network relations present four characteristics. First of all, the relationship between two networks is characterized by a precise direction, which identify a relationship of control or of dependence of a node with respect to another node. That implies that the relationships within a network usually have an hierarchical character.

Secondly, each node has a specific function, which depends not only on the relationship with another node, but also on its position in the overall network.

Thirdly, the relations existing in each space or network are normally linked to relations in other spaces or networks. Therefore, the relations of financial control between the firms within a financial group, as indicated in the figure 2, may be linked to the relations of subcontracting, existing between the same firms.

Fourthly, the relations existing in a specific space or network are normally affected by the relations existing in the previous period in the same space or network, due to the existence of cumulative processes of learning and of path dependence.

In particular, the process of networking at the local level has a complex character and it may be illustrated as the interaction of the firms and the local actors within different types of networks, each of which facilitates a different form of integration. Similarly, different types of networks between firms and actors may also characterize the process of international networking. For example, according to the approach of “territorial networks” a local production system may be characterized by the various types of integration relations indicated in table 1 (Cappellin 1998, Cappellin and Orsenigo 2000).

Table 1: Different networks in a local production system

<p><i>Technological integration,</i> pointed out by the development of the local production know how, the sharing of knowledge and values promoted by learning processes on the job, the continuous education of the workers, the vocational education of young workers, the joint investments in R&D by local firms and the technological cooperation with external firms.</p>
<p><i>Integration of the local labor market,</i> related with the cooperation between the workers and the firms and the mobility of the workers between the firms of the same sector and also the capability to attract qualified workers from other regions and from other sectors.</p>

<p><i>Production integration between the firms,</i> through subcontracting relationships between the firms which play a crucial role in promoting the gradual diversification of the local productions.</p>
<p><i>Integration between the service sectors and the manufacturing firms,</i> related to the development of modern commercial distribution services, transport and logistic services and also qualified services in the certification of the quality of the productions and in the diffusion of modern technologies.</p>
<p><i>Financial integration of the firms,</i> as it is indicated by the creation of groups made by several firms belonging to the same entrepreneurial family and by pro-active bank-industry relationships, which promote the creation of spin-off and the capability to attract external investments or the investments of local firms in other countries and regions.</p>
<p><i>Territorial integration at the local level,</i> which requires an improvement in the infrastructure endowment and it is linked to an effective physical planning aiming to defend the quality of the territory.</p>
<p><i>Social and cultural integration,</i> which determines the existence of a local identity and the creation of the consensus within the local community on a shared developed strategy.</p>
<p><i>Relationships of institutional integration,</i> which are related to the development of local administrative capabilities and the capability of the local institution to interact with the regional and national institutions in the implementation of strategic development projects.</p>
<p><i>Territorial integration at the interregional and international level,</i> which leads to a greater openness in an interregional perspective, to the development of a local “foreign policy” or of a “territorial marketing” measures, which are crucial in attracting external investments and in promoting the internationalization of local firms.</p>

A matrix representation, such as table 2, allows to illustrate in a clearer way some crucial characteristics of a network and of the relationships between different networks. In fact, the elements in the matrices along the diagonal of table 1 indicate the existence or the absence of relations between the same nodes, which were considered in the networks of figure 2.

	1	2	3		1	2	3		1	2	3		1	2	3		
1																	
2	T				TK				TL				TY				
3																	
1																	
2	K				K				KL				KY				
3																	
1																	
2	L				LK				L				LY				
3																	
1																	
2	Y				YK				YL				Y				
3																	

Table 2: The connectivity between flows of goods, labor, capital and technology

In particular, these matrices may be used to represent two crucial dimensions of the relations between the nodes of a network, such as the intensity of the flows and the level of the reciprocal distance. Thus, the flows (x_{ij}) from a node (i) to a node (j) may consist of flows of goods, of financial flows, of information, of workers, or other. These flows may be measured in monetary or physical term according to their respective nature.

On the other hand, these matrices may represent the distance (d_{ij}) between two nodes or the obstacles which hinder the relation between the actors (i) and (j). The distance may be measured not only in a geographical perspective (e.g. transport costs), but also in an organizational or social (e.g. transaction costs) and technological (e.g. technology gap) perspective. Thus, it may be expressed according to different measurement units, which vary according to the nature of the relations represented in the specific network considered and the unit of measurement of the particular flows (x_{ij}). For example, the coefficient (d_{ij}) may represent the time required for transferring a unit flow from the node (i) to the node (j) or the speed of connection between these two nodes.

In particular, the distance (d_{ij}) depends on material infrastructures, such as the existence of transport, ICT and Internet connections, or on immaterial infrastructures, such as the existence of institutions, organizations and rules, which govern and coordinate the relations between the actors considered and, thus, decrease the transaction costs between them. The process of European integration and the more general process of globalization, which leads to a dramatic decrease of the distance and of the transaction costs and determine a decrease of the coefficients (d_{ij}).

On the other hand, the transition or interconnection matrices, which are off the diagonal in table 2, indicate first of all the correspondence between a node in a specific network and the same node in a different network. Moreover, they may indicate the costs in linking two nodes which belong to two different networks, such as two small firms belonging to two different local subcontracting networks, and which may be financially controlled by a larger firm. That certainly facilitate the future establishment of a direct subcontracting relations between these two small firms.

In particular, the coefficient ($_{AB}d_s$) allows to convert the cost of distance between two nodes, as measured in the network A, according to the measurement unit of the distance in a different network B. That may allow to calculate the total transportation or transaction cost between two nodes which belong to two different networks, but which are indirectly connected by one node, which perform the role of gateway by belonging to both networks considered.

The transition or interconnection matrices, which are off the diagonal, emphasize the role of the territory and of local institutions in establishing an indirect relation between different sectoral/functional networks. In fact, territorially embedded firms are linked to the various local actors through various relations and local institutions aim to integrate between them, for example, transport policies, labor market policies and technological and industrial policies.

Thus, given a particular network, where the flow (a_{ij}) indicates the element of the respective matrix A, the cost of the distance or the total transport or transaction cost of the link between two nodes (i) e (j), which are not directly linked between themselves, may be measured as:

$$c_{ij} = \sum_s \sum_z (A d_{is} a_{is} + A d_{sz} a_{sz} + A d_{zj} a_{zj})$$

when up to two consecutive intermediate nodes (s) and (z) are considered.

However, the indirect link between two nodes, which belong to two different networks, may occur through an intermediate node, which belong to both networks and has a direct link with both these nodes. Otherwise, the indirect link between these two nodes may occur through two intermediate nodes, which are directly connected between them within a different network, to which the previous two nodes do not belong.

In general terms, the cost of the relation between two nodes (j) e (z), which respectively belong to the networks A and B and are only indirectly connected through various intermediate nodes (s), may be measured as:

$$c_{iz} = \sum_s (A_{is} d_{is} + B_{sz} d_{sz})$$

where the coefficient $(A_{AB}d_s)$ indicates the element of the connection or transition matrix AB and the flows (a_{ij}) and (b_{ij}) respectively indicate the elements of the matrix A and B. The coefficient $(A_{AB}d_s)$ allows to convert the cost of distance between two nodes measured in the network A in the measurement unit of the distance in the network B, in order to compute the total transportation or transaction cost.

Therefore, the model of the networks allows to identify relations, which may be measured in quantitative terms, not only within the same network but also between different networks, such as the networks indicating respectively economic, geographical, institutional/organizational relations between various firms, either within a regional production system or in an international framework.

In particular, the model of the networks clarifies the tight complementarity between local networks, such as the subcontracting network, and international networks, such as the financial network, and it demonstrates the tight complementarity between external openness and local embeddedness.

However, the approach of territorial networks does not only recognizes the spatial dimension, such as indicated by the concept of distance, but also the time dimension. In fact, the structure of a network is continuously changing, due to the establishment of new links between couples of actors and the change or rupture of the existing bilateral links. Thus, the networks represented in figure 2 may represent the relations between the same actors in different time periods, rather than different functional networks in the same period. Indirect links (weak ties) may gradually transform into direct links (dyadic ties).

In particular, the incentive by a couple of actors to establish a new link or to change an existing link depends not only on the distance existing between them, but also on the existence of a cumulative learning process and on the respective perception of the other actors characteristics, such as its position within the overall network or its distance with respect to third actors.

It may be stated that the iterative adaptation of the direct and indirect links between a couple of actors or nodes depends on the various distances (d_{ij}) and $(A_{AB}d_{ij})$ between them and also with other nodes and it is stimulated by the gradual search by each actor of the most appropriate level and form of integration or co-operation with the other actors.

While the neoclassical model is based on the concept of equilibrium-disequilibrium, the model of the networks is based on an evolutive approach and it allows to establish relations between the structure of a network in a given period and the structure of the same network and of complementary networks in the previous periods.

Within the neoclassical model of perfect competition the firms are all equal and connected through the anonymous mechanism of the market, while in the model of the networks the firms are all different and integrated between them through different types of relations, which have an intentional character.

While the market model is based on the competition mechanism between firms which are all equal, within a network, a crucial role is performed by relations and processes of exchange, negotiation, conflict, agreement and integration between actors, which are different and potentially complemen-

tary. This model allows to interpret the relations of vertical integration between clients and suppliers, or the contracts between various firms collaborating in a joint investment or the joint creation of a new firm, to which other firms transfer particular resources for the achievement of a common aim.

Thus, the neoclassical model of the market may also be considered as a network, but a very simple one in which all actors are homogenous, with the exception of their respective supply or demand prices, and the distance or the transaction costs between actors are zero (Williamson 1981).

2. The concepts of distance and the different forms of international integration

A network model illustrates that distance plays an important role in explaining the different effects of the globalization process on the regional economic development or on the increasing internationalization of the firms.

In this perspective it seems useful to adopt the distinction between the three concepts of “geographical distance”, “organizational distance” and “institutional distance” elaborated by the French research group on the “economics of proximity” (Rallet and Torre 1998, Bellet et al. 1993). In fact, the territorial proximity is the intersection of these three different concepts of proximity.

In particular, the geographical proximity considers the links in terms of physical distance and it refers to the natural borders and to the effects of transport and telecommunication infrastructures.

On the other hand, the organization proximity considers the links in terms of production organization and it is based on the logic of organizational belonging and to the intrinsic similarity of the actors, which belong to the same organization.

Finally, the institutional proximity indicates the sharing of representations, models and rules of thought and policy by the various actors. It considers the development of relations of intentional nature, such as the relations of co-operation, thrust, exchange of information, of partnership, which determine the strategies of the actors. It also includes forms of collective action and the creation of formal and informal institutions, which often perform a crucial role in the mechanisms of interaction between the economic actors.

The geographical proximity allows knowledge interactions only whether it encompasses an appropriate organizational and institutional context. In fact, the experience accumulated in the international technological transfers has demonstrated that geographical distance is less important as an obstacle to international co-operation, when the organizational or technological distance is limited.

In particular, the transfer of the tacit knowledge, that is required by the innovation process, is above all influenced from the organizational and institutional proximity, on which it is possible to act with various tools also at the interregional level, like the interregional agreements between firms and the programs of interregional cooperation.

The joint consideration of the two concepts of "geographical" distance and of "organizational/institutional" distance may allow to illustrate four different cases of international and interregional integration and different forms of the relationships between the firms of different regions, as it is indicated in figure 3.

In fact, when strong geographical obstacles and strong organizational/institutional barriers exist, the prevailing form of international or interregional economic integration has only a commercial character. The quadrant II indicates the case traditionally considered by the classical and neoclassical

theory of international trade. In particular, at the international level, the physical exchange or the barter (“counter-trade”) is sometime the only alternative with those countries, where the risk is very high due to large differences in the institutional or organizational systems. In the case of the interregional relationships, the high organizational/institutional barriers may lead the external firms only to export toward the economic lagging regions, while maintaining and expanding their productions in the more developed regions. Otherwise, firms may proceed to greenfield investments within the economic lagging regions through traditional branch-plants, specializing in the production of standardized final goods or of raw material just for the export markets.

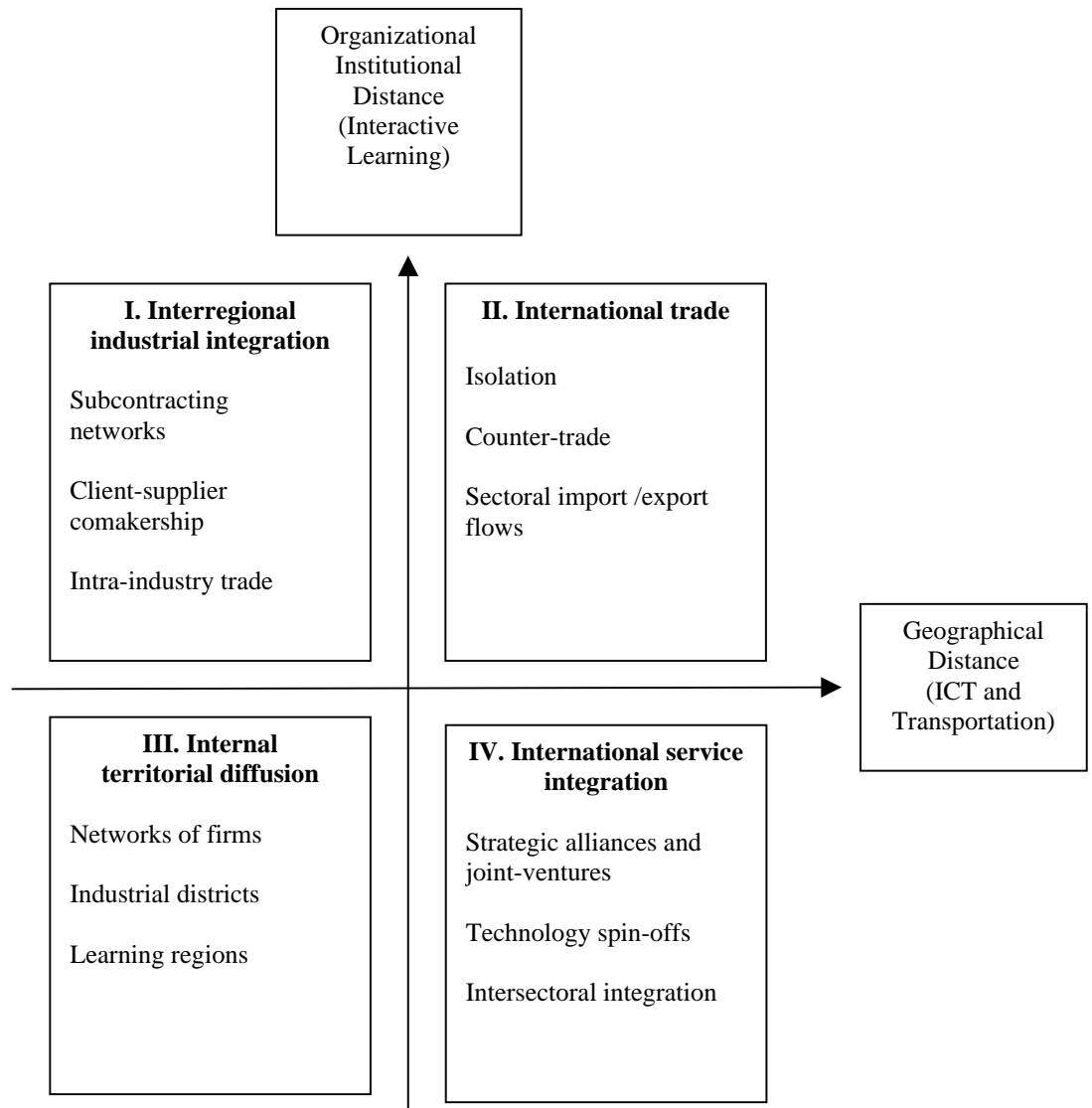


Figure 3: Concepts of distance and forms of interregional/international integration

If instead both the geographical distance and the organizational/institutional distance are very limited (quadrant I), modern forms of “network integration” become possible and convenient, as within the internal market of the most developed countries. Among these relations are commercial and production partnerships between the firms belonging to the same filiere or production cluster, financial groups encompassing various firms and the acquisitions or the minority financial participation in external firms. These network relationships characterize the modern model of industrial organization and they are especially diffused in the industrial districts of the most developed regions (Cappellin 1998, Maillat and Kebir 1999). However, they have started to develop also at the interregional level between contiguous regions and even at the international level (Vazquez Barquero

1999) especially in the case of the large firms and between the regions, which are leaders at the European level.

Particularly interesting are two intermediary cases, where the two concepts of geographical distance and of organizational/institutional distance do not correspond. In fact, if the geographical distance can be decreased, through investments in transport and communication costs, while a strong organizational/institutional distance persists, a tight technological and financial cooperation between the local and the external firms is not possible. In this case, at the interregional level, the existence of low transport and transaction costs allows a tight production integration between the various regions (Cappellin 1991), through the specialization of the most developed regions in the final phases and the outsourcing of intermediate productions to the less developed regions.

Thus, quadrant I represents the case of regions which are strongly specialized in the production of intermediate products and which are strongly embedded in the networks of commercial and production co-operation (co-makership) with other regions, such as in the case of subcontracting relations or in the decentralization of the productions toward directly controlled branch plants. In these regions, the production costs represent the most crucial factor of competitiveness, due to the high labor and capital content of the intermediate productions considered and their rather limited innovative technological content.

This case is very important for the regions of South Europe and of East Europe, which are very close to the most industrialized regions of the European Union and may benefit from the process of decentralization of intermediate productions from these regions. It may also be important for the areas in Mexico, which are close to the USA border. At the international level, these forms of very tight production integration determine the so-called "intra-industry trade".

In particular, a tight integration of the industrial firms of the economic lagging regions in South Europe within the interregional networks of subcontracting is enhanced by the construction of highways and more recently by the improvement in logistic services, the use of containers and the integration of road transport with railway and maritime transport. It may also be strengthened by a wider use of Internet, which is promoting the "business to business" electronic commerce and an easier exchange of technological and organizational information, which allows a tight integration of the supply-chain.

However, even more interesting for the prospects of the economic development of the peripheral regions is another type of intermediary case, which occurs when the organizational/institutional distance has been reduced in a crucial manner, while a high geographical distance still persists. At the interregional level, this is the case pointed out by various very dynamic areas in Europe, like Ireland, Scotland and Wales and also the Italian regions of the Center-North, which have been very successful in attracting non European qualified investments. At the international level this case may be represented by the Far East countries, which are certainly distant from the European and American markets, but are tightly embedded in the networks of international alliances between firms and are clearly characterized by a strong openness to international relations.

Thus the case indicated in quadrant IV represents a challenge for the traditional theory of international trade, as the concepts of production costs and of economies of scale become less relevant with respect to the factors explaining the pattern of international technological co-operation in the so-called "knowledge economy" (Lundvall and Johnson 1994, Cooke and Morgan 1998, Cappellin 2000a and 2000b). This case indicates that the process of international trade integration is increasingly overcome by a wider process of internationalization, which is affecting not only the industrial productions but also the tertiary sectors.

In fact, when the geographical distance is high, a tight intrasectoral specialization and the forms of just in time subcontracting and co-makership indicated in the quadrant I become unfeasible. However, a low organizational/institutional distance facilitates the investments by foreign firms in joint ventures together with local firms and also the acquisitions or the financial participation in local firms. This process facilitates the creation of technological spin-offs or a specialization of the local firms, which are externally controlled, in innovative productions, which may be integrated with those done by other firms of the same group at the international level. These forms of international technological, production and marketing collaboration do not require a strong geographical proximity, since the information flows and the financial flows could be managed at large distance, when a strong organizational and institutional proximity exist.

The process of internationalization of the firms is different from the growth of exports and it is based on a tight integration not only of the product markets, but also of the internal organization and the internal production processes of the various firms. The internationalization process of firms requires a high decentralization of the operative functions and the creation of flexible alliances with foreign firms. That allow large industrial groups to become articulated according to a strategy, which may be defined of "localization" or of "local-but-global" (Cappellin 1998).

In this case, the local firms may maintain a considerable level of autonomy, due to their different sectoral specialization and the existence of a large geographical distance. The international groups may decentralize to the local firms even the R&D activity. They may also assign to them the responsibility for a market area that could be much wider than just the respective regional or national market and that could encompass a wide regional basin at the transnational level, such as South Europe or the Mediterranean countries or the Far East region.

3. The interaction between the regional policy and the enlargement policy

The model of the relationships between different regions described above may represent an useful framework for the analysis of the impact on the economic lagging regions in the EU Mediterranean countries of the enlargement of the European Union to the countries and regions in Central and Eastern Europe (Cappellin 1993).

In fact, the relationships between the two European "macro-regions" of Southern Europe and of Central and Eastern Europe are often interpreted according to a competitive approach, where the lower labor costs in the new accessing countries would attract foreign capital investments and thus reduce the development potential in the economic lagging regions in the Mediterranean area.

However, when the problem is analyzed in a broader perspective, it is possible to identify various positive effects of the enlargement of the European Union on all regions and countries. In fact, the enlargement of the European Union implies the creation of an economic integrated area which would account almost 500 million people and this would strengthen the international role of the European currency and further isolate the European economy from the real and financial cycles and crisis of the international economy. Moreover, the new accessing countries would represent an important market for the production of the existing members of the EU.

Even the process of the decentralization of some industrial productions to the Central and Eastern Europe countries, related to the increasing deverticalization of the production processes and outsourcing of specific production phases, would benefit the competitiveness of the European firms, as they would have access to the cheaper labor in the new countries. Moreover, in the actual EU member countries, this decentralization process represents an alternative with respect to the further increase of the immigration of foreign workers and it avoids a further increase of the social tensions

and the economic costs related to foreign immigration. The decentralization of these production phases would also induce the other firms to restructure their organisation, to increase their efficiency and to reconvert to more qualified productions. That would lead to an increase of the productivity and of the wages of the workers in the existing EU member countries.

Finally, the risk of an increasing competition, due to the lower labor costs in the new accessing countries, is to a large extent compensated by the much lower productivity levels in these countries. Thus, the evolution of the relative production costs basically depends in the medium term on the expected rate of productivity increase in the accessing countries. It may also be expected that an increase of the integration process will rather soon imply an increase of the wage levels in the Eastern and Central European countries, as in fact it has occurred in the East German regions, after the German reunification. Thus, the risk of lower wage levels should not be overstated.

The Mediterranean regions in the actual EU member countries are characterized by profound economic differences with respect to the regions in the accessing countries in East and Central Europe. That may be illustrated with the model of figure 3, as the accessing countries may be located in the quadrant II, where both the geographical and the organizational/institutional distance are high. While, the economic lagging regions of the actual EU member countries seem to be characterized by a lower geographical distance and also by lower organizational/institutional distance with respect to the most developed regions of the EU. Thus, they may be located either in the quadrant I or in quadrant IV. As indicated above the case of quadrant II is only compatible with the development of export-import flows of final products or raw materials, while the other two quadrants are characterized by the importance of the interregional relationships of tight production or technological cooperation. Thus, a direct competition between these two European "macro-region" will be most probably rather limited.

In fact, the problems of the development process in the Central and East Europe are profoundly different from those in South Europe. The collapse of the command economy has been due to the long lags in the adoption of modern technologies and the insufficient growth of productivity, related to the lack of political and economic freedom. Thus, the transition countries are characterized by the heritage of a system of institutions and management models which should gradually and profoundly changed.

In fact, the prospects of economic development in these countries depend on a variety of reforms and policy measures, which are tightly linked and often imply complex trade-offs, such as:

- the further extension of the process of privatization and restructuring of large firms, which are still absorbing great flows of public expenditure,
- the process of deregulation and creation of new rules of corporate governance to decrease the risks of foreign investors,
- the increase of the quality of existing productions and their competitiveness in the international markets, thus reducing the actual deficit of the trade balance,
- the need to modernize the banking sector and the financial services,
- the capability to increase the actual low level of productivity due to inadequate machinery and internal organization,
- the capability to control the internal pressure of wage and price increases,
- the increase of the limited buying power of the workers, which limits the size of the internal market and the development of service activities,
- the still very low quality of public services,
- the enlargement of the fiscal base in order to allow the decrease of the tax pressure on the firms,
- the need to reduce the public deficit and to increase the fiscal base, which may reduce the disposable income of the households,

- the instability of the governments, linked to the internal political conflicts, which may slow down the process of economic reform,
- the risk of political tensions, due to the unresolved problem of ethnic minorities and the need to promote the international integration with bordering countries.

It clearly appears that the traditional measures of regional policy adopted in the economic lagging regions of the actual EU member countries, such as for example financial subsidies to private investment, the decrease of production costs through lower taxes on labor costs or higher labor flexibility and the transfer of public finances to local authorities would even create conflicts with respect to the aims of the above indicated policy measures aiming to macroeconomic convergence and to microeconomic integration.

On the contrary these various policy issues seem to underline that the most appropriate objectives for an European policy addressed to promote a long term selfsustained development in the Central and East Europe countries are those of the promotion of technological and organizational innovation and of a tighter economic and institutional integration of the firms and the public institutions of these countries with similar firms and institutions in the actual EU member countries. In fact, there is the need to focus the financial aid on the aim to modernize the institutional system, to promote the technological and organizational change and to increase the productivity of the economic system.

Thus, the most crucial form of help to the Central and East European countries are not the transfer of financial resources, which may conflict with a limited absorption capability and create a leverage on a further increase of public expenditure and deficit, but rather the enhancement of the gradual adoption of the Community “*acquis*”.

Moreover, an automatic extension to the new countries of the existing regulations of the European Regional Development Fund would determine the collapse of the traditional regional policy of the European Union (Cappellin 1999), as its strategic axis have been developed on the analysis of the priorities of peripheral mainly rural regions in South Europe and little correspond to the actual problems of the accessing countries.

The size of the public financial resources needed to reduce income disparities of the Central and Eastern European countries with respect to the actual EU average would be enormous and hardly sustainable within the actual EU budget. Moreover, the eventual benefits could hardly compensate the damage determined in the actual EU members, where the abolishment of the financial transfers to the actual economic lagging regions would imply the rupture of the social and political contract, which links the most developed with the less developed regions according to the principle of solidarity, which represents the base of national unity.

On the other hand, the enlargement of the European Union to the Central and East Europe countries is inevitable and positive, in order to be capable to manage the almost automatic effects of the process of globalization. In fact, it seems to correspond to the interest of the economic lagging regions in the actual EU member countries, that the regions and countries in Central and East Europe do not only trade with the EU and attract foreign investments, but gradually adopt the same rules or harmonize their internal institutions.

It is better to have these countries in the European Union in order to cope in more consistent way with an increasing economic international integration which is inevitable. Whether they would be obliged to stay outside the European Union, not only their political stability would be in danger, but also the risk would be high, that they adopt policies of “social dumping”, or that they would avoid to respect to environmental regulations or that they will adopt competitive devaluations of their cur-

rency. These events could severely damage the productions in the economic lagging regions of the actual EU member countries.

4. Federalism as a model of a bottom-up process of international integration

It is well known and it can be hardly debatable that the globalization process has various negative impacts, especially in the less developed countries, such as the disequilibria between the world of the financial speculations and the world of the “real” economy, the exploitation of children and woman work, the extremely low wages and long working hours, the increase of the social inequalities, the loss of national identities, the loss of jobs, the massive migrations in large metropolis and toward foreign countries, the damages on the natural environment and the increasing risks for the consumers (Cappellin 2001).

Two major facts should be acknowledged. First of all, these negative aspects of the market mechanism either do not exist or are much minor within the individual industrialized countries, which have enacted all sorts of workers, consumers and environmental safeguards. In fact, the design and the enforcement of these rules have pushed the firms to increase their productivity and have contributed to a greater economic wealth and better living standards at the national level.

Secondly, the process of globalization and of international interdependence between the most developed and the less developed countries has certainly not yet achieved the same deepness and scope as the process of economic, territorial, social and institutional integration, which actually exists between the most developed countries.

In fact, the experience in the most developed countries indicates that the process of globalization does not have only an economic dimension, as the result of the market mechanism, but it has also a political and institutional dimension. The economic development at the international level is linked to the creation of institutions, both within each country and at the international level, or to the development of the so called “institutional thickness”. Thus, there is the need to design new rules and new institutions, which may represent the most appropriate environment at the international level, within which the individual actors, firms and private and public organizations may discuss, learn and take the most appropriate initiatives.

The need for a key role to be played by the institutions in the process of international integration can be demonstrated on three major reasons. First of all, the decrease of the “organizational/institutional distance” is a prerequisite for the development of the networks of technological co-operation and the financial networks between different countries, but that requires a gradual and time consistent effort of institutional harmonization through joint bodies created by the governments or even by the private actors.

Secondly, the process of international interdependence has a clear intersectoral dimension. New common institutions, such as a permanent transnational political “council”, are required in order to exploit the clear complementarity between the different policy issues. The production, technological, financial and social networks are tightly connected and the various sectoral problems can not be solved individually and in different times, in order to avoid bottlenecks and missing links.

Finally, international co-operation (Cappellin 1993 and 1995) can not develop in these different sectors separately, without being supported by the sharing of common values and by the sense of belonging to a common institution, such as an international association, which defines a long term perspective to the co-operation between two or more countries.

Thus, the crucial difference between interregional and international trade is due to the existence of the State. Differently from international relations, regional and interregional economic relations are subject to the rules of law and are managed by a complex set of powerful institutions, such as a central bank, antitrust and other regulatory authorities, industry associations, trade unions, consumer associations and various other councils, committees, foundations and associations.

These institutional mechanisms explain the profound differences between the working of the international relations in the European context and that occurring between the countries of other world areas, where international relations are only governed by the rules of the market mechanism. The process of international integration in Europe is explicitly aiming to avoid those negative effects, which may occur in the process of international openness and integration and which are clear in the case of the impact of the globalization process on the less developed countries.

In fact, in the European framework, countries jointly cooperate in order to promote:

- the development of democratic rules, to insure the respect of civil rights,
- a common social policy, to insure the respect of human rights,
- the harmonization of the education systems, to insure the international mobility of professionals,
- the free movement of workers and the design of common rules aiming to regulate external immigrations,
- the coordination of police, to increase the effectiveness of the fight against organized crime,
- a common currency and the coordination of economic policies, to avoid financial instability and crisis,
- the limits to public aids to industry, to avoid a zero-sum competition between countries and regions in attracting external industry,
- the harmonization of tax rates on the firms, to prevent the outflows of capitals to fiscal heavens,
- the harmonization of the civil codes and of the corporate constitution, to allow a greater transparency and to defend the interest of investors and workers,
- the enforcement of anti-trust regulations, to defend the consumer interests,
- the harmonization of industry standards, which has allowed a leadership role in mobile telecommunication,
- the promotion of research and development, to stimulate internal technological co-operation and external competitiveness,
- the adoption of new ethic and environmental codes, to prevent abuses by multinational firms in the development of biotechnology, such as genetic modified cultures,
- the adoption of environment impact evaluation for any major investment,
- the design of transnational transportation networks, to allow the development of intermodal transport,
- the self government and regional decentralization, which are a prerequisite for an endogenous development strategy,
- the development of a European regional policy, to reduce the income inequalities among the regions.

These examples indicate that the development of international rules to govern the international economic relations requires the harmonization of national regulations and the joint development of new regulations into new fields as required by the evolution of technology and the demand of the citizens.

All these regulations and institutions allow the gradual shift from the perspective of the international market to that of an internal market. In fact, the forms of the process of networking and integration at the international scale tend to become gradually similar to the forms of networking and

integration, which exist within an internal market at a regional or national level and have been indicated in table 1.

The process of enlargement of the European Union to the Central and Eastern European countries adopt a similar approach. Various funds have been created in order to promote co-operation with external countries, such as the Phare regulation and the Intas fund with Eastern Europe, the Tacis regulation with the Russian federation, the Cards regulation and the Stability pact with the countries of the Balkan area, the Meda program with the Mediterranean countries.

All these regulations and funds are based on the principle of negotiation of strategic plans with national institutions and of the partnership in the individual projects with private actors, intermediate bodies and local institutions. They, thus, aims to the creation of new institutions and the strengthening of existing national institutions. In fact these regulations have been designed as an instrument to adjust the internal institutions of the third countries to the rules adopted within the European Union in the organization of the Structural Funds.

In particular, these regulations and funds aim to traditional objectives in the development policies, such as the creation of new firms and the restructuring of existing firms, the development of transport and communication networks, a better organization of the territory, the fostering of technology and the investment in human potential. However, differently from the approach of international institutions, such as the IMF, which are only interested in the objective of macroeconomic convergence, the European Union is tightly linking these development programs with the timely adoption of major institutional reforms by the accessing countries, such as the establishment of democratic rules, the support to the civil society and the regional decentralization of centralist national states. Thus, the strengthening of the national and local institutions and the modernization of national regulations should accompany the progress in the international economic integration, in order to define the institutional and social framework, which is required by a modern market economy.

This greater emphasis on the role of institutions in the process of European economic integration is also explained by the fact that European Union aims also to political integration. In this perspective, the process of economic and political integration in Europe represents perhaps the most significant effort, which has ever taken place in order to overcome in a wide or continental framework the national barriers and the borders and to create a set of common rules and institutions, between countries which have different languages, different and very old traditions and different and among the most consolidated economic and institutional structures.

The European Union actually includes 15 countries and it represents 370 millions inhabitants and it will extend within the next few years to 27 countries, so that it will count 480 million of inhabitants. In a medium term it may also be extended to all countries in the Balkan area and to Turkey and in the long term it is possible to some Mediterranean countries and to Russia.

In fact, the process of institutional integration within the European Union is almost inevitably leading to the gradual development of a sort of federal or confederal constitution, which implies both the design of a coherent architecture of common institutions and also the common recognition of some fundamental legal principles, such as those indicated in the Chart of the fundamental citizen rights, which has been approved in Nice by the heads of States in December 2000 and which may later evolve into the adoption of a formal European Constitution.

In particular, federalism (Cappellin 1997a and 1997b) is based on the acknowledgment by each government level of a common set of shared values and of a common perspective of development. Political unity in a federal state implies the existence of ideological attitudes, which are based on a common perception of reality and a common view of fairness and justice of institutional arrange-

ments. Moreover, the sense of common belonging and of interregional transnational solidarity justifies the existence of interregional transfers, as in the case of the European regional policy in the economic lagging regions.

5. Conclusions

The perverse effects of the globalization process in the less developed countries should not be blamed to the policies of the multinationals, neither they can be effectively changed through the benevolent adoption by various individual companies of internal codes of social responsibility. The size of the world economy and the complexity of a modern industrial system would make these individual actions similar to mere window dressing exercises. These effects seem in fact due to the automatic effect of the market mechanism and they require a much more systematic and gradual effort based on the design of common institutions and the enforcement of common regulations.

On the contrary, the European Union has clearly been an effective model in tackling the problem of the negative impact of the internationalization process on the European economies and in the promotion of economic development, at least in the case of already industrialized countries.

In particular, the adoption of a federalist or of a regional approach in the governance of the globalization process suggests to tackle the problem gradually according to a “bottom-up” model, rather than to wait for the improbable establishment of supranational institutions. That may imply, first of all, the development of multilateral agreements, as in the case of the transnational “macro-regions”, aiming to define common rules and to promote a common identity. In fact, a greater economic integration and institutional and social cohesion within a macro-region would certainly decrease the zero-sum competition between neighboring states in attracting foreign investments and create a defense against the economic powers of multinational companies.

Secondly, international integration may require a consistent effort both within each country and through common programs within each macro-region (i.e. a common regional policy), aiming to reinforce the national and the local institutions. As indicated above, these are a crucial factor in promoting endogenous development, the integration in local networks and the development of productivity and of new productions.

The major obstacles to a regional or federal approach in the governance of the globalization process seem however to be the existence of old-fashioned nationalistic ideologies and of a shortsighted defense of the national autonomy, which is often leading to political tensions and military conflicts, especially between countries, which only recently have achieved their independence or regained their freedom, such as in the Balkan area. Moreover, weak, corrupt and authoritarian governments or also the insufficient development of the civil society and the lack of various “intermediate institutions” certainly facilitate the power and the abuses of multinational companies in many less developed regions and countries.

Thus, the approach to international integration, which during the last half century has been gradually extended to almost all European countries, even those with a percapita income which is half or even a quarter of that of the European Union average, may represent a model for the management of the international relations in other world areas, as it is demonstrated by the development of various schemes of international co-operation at the macro-regional level, in North America, South America and Asia.

However, the institutions which regulate and promote the transnational interregional integration should arise from an historic and evolutive process, which is specific of each area, as the “institu-

tional thickness” has a precise evolutive character and the building of an institutional framework is the result of a long and gradual process of institutional learning.

5. References

Bellet, M. Colletis, G. and Lung, Y. (1993), *Economie de proximites*, Numero Spécial, Revue d’Economie Régionale et Urbaine, n. 3.

Cappellin, R. (1991), The European Internal Market and the internationalisation of small and medium size enterprises, in D.E. Boyce, P. Nijkamp and D. Shefer (eds.), Regional: Retrospect and Prospect. Berlin: Springer Verlag.

Cappellin, R. (1993), Interregional co-operation in Europe: an introduction, in R. Cappellin and P. Batey (eds.) Regional Networks, Border Regions and European Integration. London: Pion, European Research in Regional Science.

Cappellin, R. (1997a), Regional policy and federalism in the process of international integration, in K. Peschel (ed.), Regional growth and regional policy within the framework of European integration. Heidelberg: Springer-Physica Verlag.

Cappellin, R. (1997b), Federalism and the network paradigm: guidelines for a new approach in national regional policy, in M. Danson (ed.), Regional Governance and Economic Development. London: Pion, European Research in Regional Science.

Cappellin, R. (1998), The transformation of local production systems: interregional networking and territorial competitiveness, in M. Steiner, editor, *From agglomeration economies to innovative clusters*. London: Pion, European Research in Regional Science.

Cappellin, R. (1999), The enlargement of the European Union and the future of the European and national regional policies, in Regional Contact, XIII, 14.

Cappellin, R. (2000a), Urban agglomeration and regional development policies in an enlarged Europe, in Bröcker J. and Herrmann H. (eds.), Spatial Change and Interregional Flows in the Integrating Europe - Essays in Honour of Karin Peschel. Heidelberg: Physica-Verlag.

Cappellin, R. (2000b), Learning economy, tecnologie dell’informazione e sistemi produttivi regionali, Economia e Diritto del Terziario, n. 3,.

Cappellin R. (2001), The governance of regional networks and the process of globalization, in M. Chatterji (ed.) Globalization and economic reforms. Edward Edgard Publishing Inc.

Cappellin, R. and Orsenigo, L. (2000) The territorial dimension of modern industry and the scope of regional industrial and labour market policies, in Klemmer, P. and R. Wink (eds.), Preventing unemployment in Europe. A new framework for labour market policy, Cheltenham, UK, Northampton, US: Elgar.

Cooke, P. and Morgan, K. (1998), The associational economy. Firms, Regions and Innovation. Oxford: Oxford University Press.

Lundvall, B.A. and Johnson, B. (1994), The learning economy, Journal of Industrial Studies, v. 1, n. 2.

Maillat, D. and Kebir. L. (1999), "Learning region" et systemes territoriaux de production, Revue d'Economie Regionale et Urbaine, n. 3.

Rallet A. and A. Torre (1998), On geography and technology: proximity relations in localised innovation networks, in M. Steiner (ed.) From agglomeration economies to innovative clusters. Pion Editor, European Research in Regional Science, London, 41-56.

Vazquez Barquero, A. (1999), Inward investment and endogenous development. The convergence of the strategies of large firms and territories ?, Entrepreneurship & Regional Development, 11, 79-93

Williamson O.E. (1981), The modern corporation: origin, evolution, attributes, Journal of Economic Literature, 19.