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Employment and regional development policy: Market efficiency versus policy intervention

Studies in Spatial Development, No. 5

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STUDIES IN
SPATIAL DEVELOPMENT

Employment and Regional Development Policy

Market Efficiency Versus Policy Intervention

Helmut Karl, Philippe Rollet (Eds.)

DATAR

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Délégation à l'Aménagement
du Territoire et à l'Action
Régionale

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Akademie
für Raumforschung
und Landesplanung

No. 5

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Preface

By a joint initiative of the Akademie für Raumforschung und Landesplanung (Academy for Spatial Research and Planning, ARL) and the Délégation à l'Aménagement du Territoire et à l'Action Régionale (DATAR) a West-European Working Group was established with the objective to have a closer look at territorial development in Europe. Within that framework three special groups have been working during the last two years. One group dealt with the "Vision for Sustainable Rural Economies in an Enlarged Europe" another one dealt with "Spatial Implications of the European Monetary Union". The third group presents its results herewith under the title "Employment and Regional Development Policy: Market Efficiency versus Policy Intervention". The Working Group's contribution can be seen as a further effort to reflect on the prospects for the development of the European Union and its regional policy; concerns addressed by the Agenda 2000.

When the group started its activities it came soon to the conclusion that a deep reflection respect to the actual orientation of regional policy was required. Among the factors identified by the group demanding this revision were the challenges resulting from eastward enlargement and the key features driving regional development. On the one hand, with the European enlargement it is expected that the regional problems will not only increase but they will have own peculiarities due to the historical background of the accessing countries. On the other hand, central for regional development and competitiveness are the local entrepreneurial capabilities used for the foundation of new firms, network formation as well as the accumulation of knowledge in an interactive process. The Group believes that these aspects need to be considered by the European regional policy, above all if the regional policy pursuits the cohesion in economic, social and territorial sense.

To provide an efficiency framework through regional policy, the Group considered necessary to have a closer look into regional economic theory and empirical evidence. Both perspectives are crucial in order to gain a better understanding of the mechanism driving convergence as well as to have a clearer picture of the situation and the changes confronted by the European territory. Following the group's assessment the present publication is organised in two parts. In part one, policy response and the role of the EU, the major results of the working group are summarised. This section illustrates the essence of the Group's thinking and was endorsed by the whole Group. Especial attention is given to the direction, future and basic objectives of regional policy. The second part contains a series of individual papers dealing with specific issues of economic development and regional policy, thus providing the background for the discussion that resulted in the Group's "policy response". This second part is divided in three sections: 1) Regional inequalities in Europe, 2) Theoretical aspects and 3) Policies.

The Group started its activities in July 2001. It held five meetings at intervals of about four months. Papers on what the Group considered as major issues in the given context were prepared by members of the Group, distributed by e-mail, extensively discussed at the meetings and amended by the authors in the light of the discussion. On the occasion of a colloquium at the University of Lille in March 2003 the papers were presented to a broader audience and discussed. This led to the final elaboration of the publication on hand. All contributions were based on accumulated experience of the members of the Group. Unfortunately no funds were available for new research so that the Group had to be selective. All members of the Working Group served in their personal capacity.

The Group was co-chaired by Helmut Karl and Philippe Rollet. Ximena Fernanda Matus Velasco was the scientific secretary of the group. Evelyn Gustedt represented the ARL.

Préface

Suite à une initiative conjointe de l'Akademie für Raumforschung und Landesplanung (Académie pour la Recherche Territoriale, ARL) et de la Délégation à l'Aménagement du Territoire et à l'Action Régionale (DATAR) un groupe de travail Europe de l'Ouest a été mis en place dont la mission était d'observer le développement territoriale en Europe. Dans le cadre de ce groupe trois groupes spéciales travaillaient pendant les dernières deux années. Un groupe de travail international s'était consacré à la « Vision politique pour des économies rurales durables dans une Europe élargie », l'autre traitait « Répercussions territoriales de l'Union Monétaire Européenne » et la troisième présente par la suite ses considérations sous le titre « La politique de l'emploi et du développement régional: Efficacité du marché ou intervention politique ». La contribution du groupe de travail peut être vue comme un effort supplémentaire de réflexion sur les perspectives de développement de l'Union européenne et sur sa politique régionale, autant de sujets traités par l'agenda 2000.

Lorsque le groupe commença ses activités, il est rapidement abouti à la conclusion qu'une réflexion approfondie concernant l'orientation effective de la politique régionale était nécessaire. Parmi les facteurs identifiés par le groupe exigeant cette révision, figuraient les défis résultant de l'élargissement de l'Union européenne à l'est et les caractéristiques clés moteur du développement régional. D'une part, on s'attend à ce qu'avec l'élargissement européen les problèmes régionaux s'accentuent, mais on prévoit aussi qu'ils aient des particularités propres en raison de l'histoire des pays entrant dans l'Union européenne. D'autre part, les capacités entreprenariales utilisées pour la création de nouvelles entreprises, la formation de réseaux, de même que l'accumulation de connaissances dans un processus interactif sont capitaux pour la compétitivité et le développement régional. Le groupe est convaincu que ces aspects doivent être pris en considération par la politique régionale européenne, a fortiori si la politique régionale brigue l'objectif de la cohésion économique, sociale et territoriale.

Dans le soucis de fournir un cadre d'efficacité à la politique régionale, le groupe a considéré nécessaire d'étudier de manière plus approfondie la théorie économique régionale et les faits empiriques. Les deux perspectives sont d'une importance capitale pour mieux comprendre le mécanisme de la convergence, de même que pour se faire une idée plus précise de la situation et des changements auxquels le territoire européen sera confronté. Suivant l'évaluation du groupe, la présente publication s'articule en deux volets. La première partie, réponse de la politique et rôle de l'Union européenne, résume les résultats du groupe de travail. Cette section illustre l'essentiel des réflexions du groupe et a été avalisée par l'ensemble du groupe. Une attention particulière est donnée à la direction, aux objectifs futurs et primaires de la politique régionale. La seconde partie regroupe un ensemble de papiers traitant de points spécifiques du développement économique et de la politique régionale, et fournit donc la base de la discussion qui a abouti à la "réponse de la politique" du groupe. La seconde partie est divisée en trois sections: 1) Les inégalités régionales en Europe, 2) Les aspects théoriques et 3) les Politiques.

Le groupe a démarré ses activités en Juillet 2001. Il s'est réuni 5 fois dans un intervalle d'environ quatre mois. Les membres du groupe ont rédigés des papiers sur les sujets considérés comme centraux dans le contexte donné. Ils ont été distribués par courrier électronique, puis fait l'objet de discussions approfondies en réunion et ont été amandés par les auteurs à la lumière de la discussion. À l'occasion d'un colloque à l'Université de Lille en Mars 2003 les papiers ont été présenté et discuté avec d'autres invités. Cette événement mena à l'élaboration finale de la publication présente. Toutes les contributions étaient basées sur le cumul de l'expérience des membres du groupe. Malheureusement, aucun fonds n'était disponible pour d'autres recherches. Par conséquent, le groupe a dû prendre la décision d'effectuer une sélection. Tous les membres du groupe de travail ont apporté leur capacité personnelle.

Le groupe a été co-présidé par Helmut Karl et Philippe Rollet. Ximena Fernanda Matus Velasco était le secrétaire scientifique. Evelyn Gustedt y représentait l'ARL.

Executive Summary

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References

This document presents the policy recommendations of the working group. It should be mentioned that the theoretical framework is based on an interdisciplinary approach considering the theories relying on endogenous development (industrial districts, local development), international trade, new economic geography and endogenous growth theories, and innovation theory (network approach).

1. Regional Development in Europe

Due to a variety of reasons, economic development is accompanied with different regional performances in terms of income, employment, growth etc. According to the latest estimates of regional per capita GDP (PPS) for 2000, the 211 regions observed ranged between 10,643 PPS in the Greek region of Ipeiros and 54,565 PPS in Inner London. This means that the figures for the regions with the lowest and the highest per capita GDP differed by a factor of five: 47% and 241% respectively of the EU average. In April 2001, the unemployment rate in the NUTS-2 regions of the EU varied between 1.2% (Dutch region of Utrecht) and 33.3% (French region of Reunion).

Empirical studies and theoretical works in modern regional economics indicate that even in relatively homogeneous groups of countries like the EU economic convergence need time and this is certainly true after EU enlargement, because new member countries with a lower economic performance joint the community. In 2000 GDP per capita in 37 of the 42 level 2 regions of the candidate countries was below 75% of the EU-25 average, representing a total population of 69 million people. The ratio of income per head in the top and bottom 10% of regions in 2000 was 2.6 in the EU-15, while for EU-25 it is 4.4 and 6 for an EU-27.

Different reasons are responsible for a new pattern of uneven growth:

- Agglomeration externalities, economies of scale, the decline in transport costs and the existence of "footloose" industries might initiate a cumulative process that benefits central or core (metropolitan) areas. As transport costs decrease, due to economies of scale, firms have an incentive to concentrate their production on a few number of places. Low transport costs increase as well as the competition and the incentive to develop product differentiation. Therefore firms try to locate near the largest pool of customers. These regions are more competitive than lagging regions and their industries. The lagging regions together with areas dominated by agricultural production form the periphery of a territory.

- Human capital and social capital are not perfectly mobile. In particular less skilled workers are more immobile than skilled workers, employed in modern production directions and in the R&D sector. Social Capital develops according to cultural norms and social institutions. Because these factors are local in nature, it is difficult to replicate favourable social capital structures in regions with different conditions. Innovation and technological knowledge are also not perfectly mobile, because the tacit knowledge is difficult to transfer abroad. Therefore, the location pattern of modern sectors and R&D activities follow the core-periphery hypothesis.
- Differences in the quality of inputs (knowledge, skills, technological and managerial capacity) of networks, of public infrastructure (transport, telecommunications, education and health apparatus) and technological infrastructure (research institutes, universities), of services (insurance, business centres, financial institutions) and differences in cultural and social institutions are also considered in modern regional science as drivers of cumulative processes and therefore lead to uneven development. Because all these factors shape the economic environment and the standard of living in regions and cities, they influence investments location decisions, particularly of those activities involved in R&D and in financial services.

Urban costs may reduce the attractiveness of the areas where agglomeration forces dominate. However, these counteracting effects may not be enough to completely upset these concentration forces in some areas. These destabilising forces may favour some regions or cities more than others. In particular, it is considered that the European enlargement and the deepening of the integration probably increase the core-periphery pattern in Europe. This may happen because the competitive position of cities and regions within the European economic system will change. Thus while the allocation of local and external resources (FDI) goes where they are more efficiently used favouring the economic growth of certain areas (growth poles like rich urban centres, capital cities), this may go along with increases in regional disparities. Regional policy in its traditional orientation deals with this conflict between European and national growth and spatial equity.

At the European level spatial equity has become the prime policy objective due to the fears respect to the strengthening of the uneven distribution of economic activities, income and employment as economic integration proceeds. The objective of a harmonious, balanced and sustainable development through the promotion of social and economic cohesion, the conservation of the environment and competitiveness address the relevance of spatial equity.

Spatial equity has different dimensions, for example it can be seen in terms of localization decisions of public infrastructure and services or in the tax base of the regions. In both dimensions, spatial equity refers to the equal treatment of individuals. However, spatial equity has another dimension which in the case of the European integration and enlargement matters which is the equal treatment between territories.

Besides social and economic cohesion, this last dimension through the concept of territorial cohesion has become also a task. Territorial cohesion allows addressing the heterogeneous spatial configuration of the European Community. It emphasises also the spatial side effects that regional policy on the territory may have. Territorial cohesion (in a normative perspective) implies equality of the chances to develop or an equal opportunity for all territories (regions and nations). The territories should not be limited or blocked in their development by the absence of access to public and technological infrastructure, public and private services. Looking at the spatial typology of the European Union this would imply that a region independently, if it is located at the centre or at the

periphery, in an urban or rural area, in a border or coastal area, it should have the opportunity to compete with other regions.

Competitiveness plays a crucial role in the economic development of regions and cities. Obtaining competitiveness is a very complicated process, which takes time and enormous efforts from both the public and private sector. In general terms, the competitiveness of a country and of the entire European territory depends on how well the socio-economic institutional structure of each country is adjusted to the actual pattern of economic development.

Innovation and entrepreneurial capabilities (quality and the level of know-how) are crucial elements shaping the regions and cities competitiveness and their dynamism. Co-operation and active interactions (connectivity) by network formation are key mechanisms to increase the competitiveness and the economic development. A good network system allows increasing regional and local competencies since the access to external knowledge is facilitated.

Having access to information is relevant for the creation of knowledge. Synergies can be gained by using local and external sources of specialized knowledge and by close interactions with others regions. This is important because the generation of innovation requires a wide range of skills which goes beyond the local capabilities. The development of inter-regional and intra-regional networks as well as cross-border and transnational cooperation may help a country to adjust their economic and organizational structure to unexpected technological, political or economic changes. This also may help a country or a region to maintain its competitive position.

2. Basic Objectives and Strategies of European and National Regional Policy

The understanding of regional policy in the EU and their Member States follow the basic objective to reduce disparities across regions in terms of the capacity to provide opportunities of income, employment and growth. Through regional policy the European Community pursuits a more balanced development by avoiding over-concentration of economic activity. This is a distributive objective that concerns regional and spatial equity and it can be reached by two idealised strategies (Fujita; Thisse 2002: 421):

- First, agglomeration areas and cities will be supported by regional policy to create enough growth that periphery areas are more benefited under a core-periphery pattern than under dispersion. This strategy implies to enhance regional development by supporting the dynamics centres in which a region is inserted since they are seen as the engine of growth. The success of this strategy depends on the existence of a structure which allows the diffusion of development to the rest of the areas, particular based on the strength of the regional connectivity and cooperation.
- Second, regional policy tries to improve the performance of lagging regions by stimulating growth in the periphery. This strategy is relevant because the disadvantageous territories should also have the opportunity to develop. Lagging regions and cities need to improve their economic structure and create links with dynamic centres (cities, urban centres, metropolitan areas) close to them. This is important because the function taken by the lagging regions and cities will define their raking in the European spatial system.

Both strategies are based on region-level analysis to create region-specific solutions.

The social values behind the Amsterdam Treaty (Art. 130a) and behind the common practice of regional policy in Europe tend to improve the economic performance of lagging regions by stimulating their growth. This objective in modern regional policy does not consist in government protection or income transfer policies into lagging regions, but it tries to enhance their regional competitiveness. The reorientation of regional policy is explained by the factors relevant for economic development. Central to regional economic development are knowledge accumulation as an interactive process within the region considered, local entrepreneurial capabilities in the creation of new firms and network formation between local actors.

Therefore, in order to enhance the economic development of lagging regions and cities by fostering competitiveness, the focus of the modern regional policy goes towards the regional and local endogenous capacity to produce knowledge, the ability to adapt the knowledge coming from other regions (learning or absorptive capacity) and the quality of intra-regional, inter-regional networks (connectivity). All these actions require an institutional framework which set the basis for a favourable environment.

Nevertheless, modern regional policy should not only promote lagging regions via improving their competitiveness (entrepreneurial capabilities, productivity, innovation and skills), but the development of growth poles needs support as well. This objective tends to move to a much broader perspective of regional policy, associated with the spatial development of the whole territory. It suggests that the aim to reduce interregional development disparities (social cohesion) should go along with the promotion of interregional integration (territorial cohesion).

To enhance efficiency and reduce disparities across regions, different approaches have been proposed as a framework for regional development policy; among them are the growth pole concept, spatial economic corridors, and recently, spatial economic networks. This last one emphasizes the role of cooperation among regions and provides a new spatial policy framework. Instead of considering the individual problem regions (as the traditional approach does) transnational networks and European macro-regions constitute the new typology of the spatial policy framework. Within this new paradigm of regional policy there is a greater tendency to see regions in terms of spatial economic networks and to see the EU as a part of a global competitive innovation system.

3. Institutional Dimension of EU and National Regional Policies

The actual European design of responsibilities for regional policy in Europe should be reworked. In most of the countries, the design and implementation of regional policy have been in charge of governmental institutions, particularly central governments. The prime role of the State is to provide an overall framework for a policy that assures equity and promotes overall growth and competitiveness. Against this background the EU regional policy tries to harmonise national regional policies and incorporates their own structural fund budget (EERDF, CF) and regional policy activities into national regional policy. However, the EU regional policy should be seen as an action of coordination more than a policy of harmonisation aiming to enhance the coherence between the different national strategies.

To develop appropriate regional strategies it is on the first step necessary to identify the strengths and weakness at the regional level. Suitable instruments and an adequate incentive design are as well necessary as evaluation mechanism. These tasks overtax the EU, not at least because of the transaction costs. It is more or less impossible for the EU to operate on a regional level in each member state and therefore the EU cannot

approach basic requirements for regional policy. Against this background the EU should concentrate their attention

- on the economic disparities between the EU-Member States,
- on improving the opportunities of Member States to build up an institutional framework of national and regional responsibilities for regional development policies,
- improving the capability of the Member States to stimulate regional and local authorities to co-operate with each other, in particular in cross-border areas, and
- on the spatial side effects of their policies[1] like infrastructure policy, CAP, R&D-Policies transnational networks etc.

The spatial impact (spatial side effects) that the European and national regional policies may have on the territory needs special attention. In particular, it is crucial to consider the effects that improvements in infrastructure facilities (roads, airports, ports, high-speed trains, telecommunications) may have on the international and interregional trade, industrial location and convergence process. Since all these improvements modify the spatial economic structure by influencing the allocation of labour and capital, they may change the competitive position of cities and regions within the European territory. And contrary to the general view, measures that are thought to improve the economic environment in lagging regions may in reality lead to even more concentration of economic activities and therefore to an increase of regional divergences.

To avoid this pattern of development, it is necessary to harmonise the regional development and the regional and spatial planning in each country. This can be done by the design of a spatial framework which advises investment decisions and helps to coordinate and integrate the different regional strategies and programs.

Concerning the economic disparities between EU-Member States the EU should be responsible to collect financial resources from the Member States and reallocate these resources according to the needs defined by the common EU regional policy. The financial resources should be distributed with the help of easy and simple schemes (like the Cohesion Fund) to promote economic growth and the European integration. A few sets of conditions should guarantee that financial resources are only spent for growth incentives in lagging regions of the Member States. Otherwise the lagging Member States should be responsible on how to incorporate EU resources into their regional policies.

The transfer of financial resources to lagging Member States creates different incentives. On one hand they might be used to stimulate and increase regional growth. On the other hand, in particular financial aid decreases the self interest of regions to increase their competitiveness by own measures and make industries in lagging areas dependent from European aid. Therefore financial support should be limited and rearranged and checked after a certain support period. Today EU provide ex-ante subsidies to the Member States and their regions. However, the economic theory of mechanism design demonstrates that ex-post subsidies are superior. That means lagging Member States should be benefited for an increase in terms of growth. Instead, or at least additional, to the ex-ante approach, it could be better to install a competitive system for the allocation of resources since it is fundamental to have a mechanism which creates incentives to

[1] In particular the EU should keep the product life cycles and their consequences for the rise and decline of specialised regions in mind. That means that subsidising old industries gives regions no long term perspectives.

compete for the resources. However, within this system, it should also be considered the provision of technical assistance for structurally week regions since these areas will probably need support to present competitive projects.

Henceforth the funds should be assigned on a competitive basis and the projects should go in accordance with the priorities defined by the EU regional policy. At least the EU must be responsible for the control of the financial supports to firms by the national regional policies in the Member States. In the interest of free market competition in Europe financial aid to firms and regions should be limited and in particular limited in economic leading Member States

The question which government level should be responsible for reducing regional disparities is still being debated. Following the subsidiarity principle which provides the framework to define the boundaries in political space, the European Regional policy should intervene in those cases which have clearly a European dimension. In particular, it should pursuit to reduce the transaction costs which impede the integration of the Member States (the integration of the territory) as well as to foster the openness of the regions by increasing the access and the connectivity across them. The European regional policy should intervene when disparities between large areas (Euro regions or macro-regions) appear. This implies that the task to reduce the disparities between the Southern Europe and Central and Eastern Europe respect to the European core should be a responsibility of the European regional policy.

The national level together with the political actors in its regions should be responsible for any policy concerning the regions. However, if financial resources from the EU are utilised, the Member States have to respect simple EU rules which guarantee that financial aid is only spent for growth incentives in lagging regions. As well the EU should pay attention on the institutional framework for the national and regional division of responsibilities in regional development policies, because this framework is the most important factor for regional policy and their ability to increase the competitiveness of lagging regions.

The responsibility to reduce disparities between regions of the same country should be a task of national governments. The National regional policy should promote interregional integration or cohesion in the entire country. If a decentralization perspective of regional policy is adopted, the national government should enhance the coordination of policies followed by the different regional and local actors. At the same time, national regional policy should help particularly lagging regions to overcome external shocks since their effects are normally asymmetric.

Development policy should be responsible for disparities between certain areas within a region. With the ongoing process of regionalisation in most of the Member States, local and regional governments get a more active role. This is because the success of a region is related to the competences of local actors, their innovative behaviour and entrepreneurship. Thus the traditional top-down approach, in which the promotion of regional development is lead only by central governments, goes together with the bottom-up approach base on the endogenous capabilities of regions and individuals in the modern perspective of regional policy.

Because of the relative recent involvement of local government in regional issues, in most of the countries in the European Union there is a lack of an institutional framework and competencies at this level of intervention. If regional policy strategies are to be implemented by local authorities, their administrative capacities need to be improved. They should have the according skills and competencies otherwise it will be difficult to guarantee an efficient administration of the funds.

4. Regional Policy in the EU-Member States: Approaches and Instruments

With the aim to improve the regional economic environment, the Regional policy in the EU-Member States has a wide range of different instruments and incentive schemes. The role of these instruments has changed in the curse of the years. Among the traditional instruments are:

- Disincentives to location in congested areas or controls on location in such areas: this covers both cost penalties and permit systems introduced to encourage firms to consider moving to less congested, problem region locations.
- Location decisions of the State: these are policies which cause State-owned companies to invest in or move to problem region locations; more generally, it covers measures which aim to influence the location of public sector jobs, including those in the civil service.
- Regional incentives: these are financial aid schemes to support the development of private-sector firms in designated aid areas. These grants in support of fixed capital investment are the most popular measures by far, though subsidised loans are also found as well as fiscal concessions (increasingly rare), labour-related subsidies and transport concessions.
- Infrastructure provision: this refers to improvements in the physical infrastructure in the problem regions including major road and rail links, improvements in water supply and distribution networks and telecommunications facilities.

From these instruments, the emphasis on the first two has declined significantly in recent decades. The impossibility to overcome regional problems through them explains the shift away from these two instruments. On the contrary, due to the financial support the promotion of private commercial investments and public infrastructure investments are dominating the instruments of regional policies. Financial aid for commercial investors reduces capital user costs in supported areas and tries to attract national and foreign investment into lagging regions. With new capital also new technologies etc. are incorporated into supported regions.

As well the provision of infrastructure has been a traditional response to regional problems over the years, with the aim of bringing infrastructure standards (roads, rail links, water supply improvements, distribution networks and telecommunications) in the problem regions up to national levels. However, metropolitan areas and growth poles also need support and sufficient infrastructure equipment, while leading areas do not need financial aid that supports private investment.

With the change in orientation of regional policy a new set of policy instruments have been adopted to enhance regional economic development. Among the most widely implemented instruments are:

- Enhancement of the business environment: this form of assistance does not involve direct support to individual firms but rather focuses on ‘framework measures’ to improve business conditions in problem regions: it includes local infrastructure provision (e.g. incubator units) as well as measures to enhance information, advice and consultancy, education and training and innovation support. This instrument of R&D-policy plays a crucial role since it sets the basis for firm formation and new business initiatives.

- Planning instruments/development of regional strategies: this involves the use of regional plans and programmes to analyse regional strengths and weaknesses and develop appropriate regional strategies in response.

Concerning lagging regions the effectiveness of public and private investments support compared with other instruments is still discussed. In any case the approach of national regional policy should be enlarged. Deregulation and wage flexibility are necessary to attract capital and investments. However flexible labour markets and a business friendly environment alone are not sufficient. Regional policies

- must go beyond physical infrastructure/private investment promotion to the quality of links, the encouragement of intangible investment, human and environmental resources as factors determining the attractiveness and dynamism of regions;
- should promote the power to innovate, because innovation has a key role to promote competitiveness and in determining output growth. In particular, lagging regions are characterised by a low public research expenditure, insufficient involvement of the industrial sector in research, insufficient human capital dedicated to research activities, and low levels of co-operation among innovative actors. The process of innovation is very complicated, it involves social interaction, and it requires constant communication, team-working and co-operation. Therefore it is also fundamental to increase the capabilities and capacities of individuals for a successful collective learning (ability to renew, enhance and adjust its core competencies over time). Firms and individuals need to be open to gain knowledge from diverse sources.
- They should promote the power to adapt innovations. To assimilate and to apply the external knowledge, it is indispensable that regions have own competencies. In particular, the learning capability (absorptive capacity) is a crucial element for a successful assimilation of the external knowledge.
- They should promote regional network formation. The ability of lagging regions to get access to national and international networks should be increased. In particular regional policy should try to open lagging regions, because access to new products, access to networks and cooperation partnership improve in the long run their competitiveness.

In the interest of effectiveness regional policy in lagging areas should be concentrated on the growth poles.

All the instruments mentioned above have been developed according to the reality of the actual Member States. They are based on the weakness and necessities of the lagging regions of these countries. Taking into account the process of European enlargement and particular the reality of the new Member States and the Candidate Countries, some of these instruments may not be adequate to enhance the regional development of this new area. Therefore, the EU regional policy needs to be reworked; especially a reorientation of the Structural and Cohesion Funds is necessary.

Among the main features of the regional development in the Central and East European countries which need to be considered by regional policy are the metropolitan – non metropolitan divide as well as the east-west divide. The eastern regions have a disadvantage since they do not share a border with the European countries. These regions have poor infrastructure and an unfavourable economic, organisational and institutional structure, factors which hinder their endogenous development. With these regions distant from the European core, the peripheral zone within the European Union will increase notoriously. Attention needs also to be paid to the old industrial areas of the

accessing countries. Alternative employment opportunities, modernisation of the production and technology structures will be required in these regions. The relative development deficit of urban centres represents another challenge of regional policy, in particular if the strategy to support the growth poles is in consideration.

Due to the economic and political structure of the accessing countries regional policies should

- concentrate on infrastructure, human and social capital, network formation to facilitate the transfer of innovation technology, on areas affected by industrial conversion and on the role played by interregional, international and trans-border cooperation.
- They should support the modernisation of the institutional system in Central and Eastern Europe. The short tradition of regional policy and the weakness of central governments responsible for regional development need to be overcome in the accessing countries. The institutional system in accessing countries needs to be adjusted to EU standards.
- They should support the process of decentralization not only institutional, but also financial. The creation and the consolidation of regional policy institutions are fundamental for the integration of the local and regional authorities. Mechanisms which foster the exchange of experiences in regional development, close and continuous interaction between national and local actors and between local actors of different regions may help to foster the process of decentralisation.
- They should enhance local administrative competencies. The local and regional levels have no experience in regional policy issues. The lack of local authorities involved in regional development is critical for the efficient implementation of regional policy instruments. Training programs to civil servants can be an option to overcome the lack of administrative capacity.
- They should promote the periphery of the accessing countries and increase the cross-border cooperation.

These measures together with a substantial reform of EU regional policy and their funds are necessary to make the enlargement to a success story.

References

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Récapitulatif

Contenu

1. Développement régional en Europe
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Ce document présente les recommandations du groupe de travail sur la politique à suivre. Il convient d'indiquer que le cadre théorique est basé sur une approche interdisciplinaire prenant en considération les théories reposant sur le développement endogène (zones industrielles, développement local), le commerce international, la nouvelle géographie économique et les théories de croissance endogènes, ainsi que la théorie de l'innovation (approche réseau).

1. Développement régional en Europe

Pour diverses raisons, le développement économique s'accompagne de disparités entre les régions au niveau des performances, en terme de revenus, d'emploi, de croissance, etc… Selon les estimations les plus récentes du PIB par habitant (en SPA) des régions établies pour l'année 2000, les 211 régions observées avaient un PIB situé entre 10.643 SPA pour la région d'Ipeiros (Grèce) et 54.565 SPA pour le centre de Londres. Cela signifie une divergence d'un facteur de cinq (47% et 241% respectivement de la moyenne de l'UE) entre les chiffres des régions enregistrant le PIB le plus bas et celles enregistrant le PIB le plus élevé. En avril 2001, le taux de chômage dans les régions NUTS-2 de l'Union européenne variait entre 1,2% (région d'Utrecht au Pays-Bas) et 33,3% (Ile de la Réunion, territoire français).

Les études empiriques et les travaux théoriques en économie régionale moderne montrent que même au sein de groupes de pays relativement homogènes comme l'Union européenne, la convergence économique nécessite du temps, ce qui s'appliquera sans doute également à l'élargissement de l'Union européenne car de nouveaux pays-membres enregistrant des résultats économiques moins performants entreront dans la Communauté. En 2000, le PIB par habitant de 37 des régions de niveau 2 des pays candidats à l'adhésion se chiffrait à moins de 75% de la moyenne de l'UE25, représentant une population totale de 69 millions de personnes. Le pourcentage de revenu par tête était de 2,6 pour les 10% du haut et du bas de l'échelle des régions en 2000 dans l'UE-15, alors qu'il se montait à 4,4 dans l'UE-25 et à 6 dans l'UE-27.

Les raisons expliquant l'apparition d'un nouveau modèle de croissance hétérogène sont multiples:

- L'externalité des agglomérations, les économies d'échelle, la baisse des frais de transport et l'existence d'industries incontrôlées pourraient entraîner un processus cumulatif qui profiterait aux zones centrales (métropolitaines). Parallèlement à la baisse des coûts de transport du fait d'économies d'échelle, on constate une moti-

vation des entreprises à concentrer leur production sur un nombre réduit de sites. Les bas coûts de transport accroissent également la concurrence et la motivation de développer la stratégie de différenciation du produit. Ainsi, les entreprises tentent de s'installer à proximité des grands centres où se trouvent les clients. Ces régions sont plus compétitives que les régions en retard de développement et leurs industries. Les régions en retard de développement constituent, avec les régions où prédomine la production agricole, la périphérie d'un territoire.

- Le capital humain et le capital social ne sont pas totalement mobiles. Les travailleurs peu qualifiés en particulier sont moins mobiles que les personnes qualifiées employées au niveau de la direction d'unités de production modernes ou dans le secteur de R&D. Le capital social se développe en fonction de normes culturelles et d'institutions sociales. Ces facteurs étant locaux par nature, il est difficile de reproduire des structures de capital social fonctionnant bien dans un secteur à d'autres régions présentant des conditions différentes. L'innovation et les connaissances technologiques ne sont pas parfaitement mobiles non plus, car les connaissances tacites sont difficiles à transférer à l'étranger. Ainsi, le modèle de localisation des entreprises modernes spécialisées en R&D correspond au schéma centre/périphérie.
- Les divergences au niveau de la qualité des entrées (connaissances, qualifications, capacité technologique et capacité de gestion) des réseaux, de l'infrastructure publique (transport, télécommunications, système éducatif et système de santé) et de l'infrastructure technologique (instituts de recherche, universités), des services (assurance, centres d'affaires, institutions financières) et les différences au niveau des institutions culturelles et sociales sont également considérées comme des moteurs de processus cumulatifs dans la science régionale moderne, et conduisent donc à un développement hétérogène. Étant donné que ces facteurs façonnent l'environnement économique et le niveau de vie dans les régions et les villes, ils influencent les décisions locales en matière d'investissements, en particulier dans le domaine de R&D et des services financiers.

Les coûts urbains pourraient réduire l'attractivité des régions où dominent les forces d'agglomération. Toutefois ces effets néfastes ne suffisent pas toujours à décourager totalement les forces de concentration dans certaines zones. Ces forces déstabilisantes peuvent favoriser certaines régions ou villes au détriment d'autres. On considère en particulier que l'élargissement de l'Europe et l'approfondissement de l'intégration accentueront probablement le modèle géographique de type centre-périphérie en Europe, notamment car la position de concurrence des villes et des régions au sein du système économique européen changera. Par conséquent, considérant que l'allocation des ressources locales et externes (IDÉ, Investissement Direct Étranger) va aux régions les utilisant le plus efficacement, favorisant la croissance économique de certaines zones (pôles de croissance tels que les centres urbains riches, les capitales), cette tendance pourrait s'accompagner d'une exacerbation des disparités régionales. L'orientation traditionnelle de la politique régionale s'attache à ce conflit entre la croissance nationale et européenne et l'équité territoriale.

Au niveau européen, l'équité territoriale est devenue l'objectif politique prioritaire, motivé par les craintes d'une accentuation de l'hétérogénéité de la distribution de l'activité économique, des revenus et de l'emploi en tant que produit de l'intégration économique. L'objectif d'un développement durable, équilibré et harmonieux à travers la promotion de la cohésion sociale et économique, la préservation de l'environnement et la compétitivité nécessitent de se pencher sur la question de l'importance de l'équité territoriale.

L'équité territoriale revêt diverses dimensions. Elle peut être vue par exemple sous l'angle des décisions relatives à la localisation des infrastructures publiques et des services, ou du point de vue de la base fiscale des régions. Pour les deux dimensions, l'équité territoriale se réfère au traitement égalitaire des individus. Toutefois, l'équité territoriale a une autre dimension importante dans le cas de l'intégration européenne et de l'élargissement: l'égalité de traitement entre les territoires.

Au-delà de la cohésion économique et sociale, cette dernière dimension est également devenue une mission à accomplir à travers le concept de cohésion territoriale. La cohésion territoriale permet de se pencher sur la question de la configuration territoriale hétérogène de la Communauté européenne. Elle souligne également les effets territoriaux secondaires que la politique régionale peut avoir sur le territoire. La cohésion territoriale (dans une perspective normative) implique l'égalité des chances de développement ou une opportunité égale pour tous les territoires (régions et nations). Les territoires ne devraient pas être limités ou bloqués dans leur développement par le manque d'accès à l'infrastructure publique et technologique, aux services publics et privés. Considérant la typologie territoriale de l'Union européenne, cela impliquerait que toute région, qu'elle soit localisée au centre ou à la périphérie, dans une zone urbaine ou une zone rurale, une zone frontalière ou côtière, doit avoir l'opportunité d'être en concurrence avec les autres régions.

La compétitivité joue un rôle crucial dans le développement économique des régions et des villes. La réalisation de la compétitivité est un processus très complexe, de longue haleine nécessitant d'énormes efforts de la part du secteur publique et privé. D'une manière générale, la compétitivité d'un pays et celle de l'ensemble du territoire européen dépend de l'ajustement plus ou moins réussi de la structure socio-économique institutionnelle de chaque pays au modèle réel de développement économique.

L'innovation et la capacité de gestion (la qualité et le niveau de compétences) sont des éléments capitaux dans le façonnage de la compétitivité des régions et des villes et leur dynamisme. Les coopérations et interactions actives (connectivité) par la mise en place d'un réseau sont des mécanismes clés pour accroître la compétitivité et le développement économique. Un bon réseau permet d'augmenter les compétences locales et régionales car il facilite l'accès aux connaissances externes.

L'accès à l'information est important pour la création de connaissances. L'utilisation de sources locales et externes de connaissances spécialisées, de même que les interactions avec d'autres régions peuvent permettre de générer des synergies. Ceci est important car le déploiement de l'innovation requiert une gamme de compétences tellement large qu'elle s'étend au-delà des capacités locales. L'élaboration de réseaux inter- et intra-régionaux, tout comme la coopération transfrontalière et transnationale peut aider un pays à adapter sa structure économique et organisationnelle aux changements économiques, politiques et technologiques inopinés. Elle peut permettre également à un pays ou une région de maintenir sa position concurrentielle.

2. Objectifs et stratégies fondamentaux de la politique régionale européenne et de la politique régionale nationale

La politique régionale de l'UE et de ses États-membres entend poursuivre l'objectif fondamental de réduire les disparités entre les régions, en terme de capacité à créer des opportunités de revenus, d'emploi et de croissance. Par le biais de la politique régionale, la Communauté européenne brigue un développement plus homogène en évitant la surconcentration de l'activité économique. Il s'agit là d'un objectif de distribution con-

cernant l'équité régionale et territoriale qui peut être atteint par la mise en oeuvre de deux stratégies optimales (Fujita; Thisse 2002: 421):

- D'une part, les zones d'agglomération et les villes obtiendront le soutien de la politique régionale pour créer suffisamment de croissance, de manière à ce que les zones périphériques bénéficient davantage d'un modèle « centre-périphérie » que d'un modèle de dispersion. Cette stratégie implique la mise en valeur du développement régional en soutenant les centres de dynamismes dans lesquels les régions sont insérées, étant donné qu'ils sont considérés comme des moteurs de croissance. Le succès de cette stratégie dépend de l'existence d'une structure permettant la diffusion du développement vers les autres zones, en s'appuyant en particulier sur les atouts que représentent la connectivité et la coopération régionales.
- Par ailleurs, la politique régionale tente d'améliorer les performances des régions en retard de développement en stimulant la croissance en périphérie. Cette stratégie est importante car les territoires défavorisés devraient avoir également la possibilité de se développer. Les régions et les villes en retard de développement ont besoin d'améliorer leur structure économique et de créer des liens avec les centres de dynamismes (villes, centres urbains, zones métropolitaines) à leur proximité. Ceci est important car la fonction des régions et des villes en retard de développement définira leur classement dans le système territorial européen.

Ces deux stratégies reposent sur une analyse réalisée au niveau régional dans le but de mettre au point des solutions spécifiques à chaque région.

Les valeurs sociales évoquées dans le traité d'Amsterdam (Art. 130a) et celles de la pratique commune de la politique régionale en Europe tendent à améliorer les performances économiques des régions en retard de développement en stimulant leur croissance. Cet objectif de la politique régionale moderne ne saurait consister en une protection gouvernementale ou une politique de transfert des revenus vers les régions en retard de développement. Elle brigue, au contraire, la promotion de leur compétitivité sur le plan régional. La réorientation de la politique régionale s'explique par les facteurs clés du développement économique. Les éléments essentiels du développement économique régional sont la capitalisation des connaissances comme processus interactif au sein de la région considérée, les capacités locales à entreprendre pour créer de nouvelles sociétés et la mise en place de réseaux entre les divers acteurs locaux.

Par conséquent, pour promouvoir le développement économique des régions et des villes en retard de développement en encourageant la compétitivité, la politique régionale moderne met l'accent sur la capacité locale et régionale endogène à produire des connaissances, la capacité à adapter le savoir en provenance d'autres régions, (capacité d'apprentissage ou capacité à absorber) ainsi que la qualité des réseaux intra- et interrégionaux (connectivité). L'ensemble de ces actions requiert un cadre institutionnel qui constituerait la base d'un environnement favorable.

Néanmoins, la politique régionale moderne ne doit pas se contenter de stimuler les régions en retard de développement uniquement par l'amélioration de leur compétitivité (capacités d'entreprise, productivité, innovation et qualification). Elle se doit de soutenir également le développement de pôles de croissance. Cet objectif tend à évoluer vers une perspective élargie de la politique régionale, englobant également le développement territorial de l'ensemble du territoire, ce qui implique que l'objectif de réduction des disparités de développement interrégionales (cohésion sociale) devrait aller de pair avec la promotion de l'intégration interrégionale (cohésion territoriale).

Diverses approches ont été proposées pour servir de cadre à la politique de développement régional dans le but d'encourager l'efficacité et d'atténuer les disparités. Parmi ces approches on peut mentionner le concept de pôle de croissance, les couloirs économiques territoriaux et récemment les réseaux économiques territoriaux. La dernière approche souligne le rôle de coopération entre les régions et fournit un nouveau cadre de politique territoriale. Au lieu de considérer des régions individuelles posant problème (comme le fait l'approche traditionnelle), la nouvelle typologie du cadre politique territorial se réfère aux réseaux transnationaux et aux macro-régions européennes. Ce nouveau paradigme de la politique régionale comporte une tendance croissante à considérer les régions en termes de réseaux économiques spatiaux et à considérer l'UE comme partie d'un système global d'innovation.

3. Dimension institutionnelle de l'UE et politiques régionales nationales

La conception européenne réelle des responsabilités en matière de politique régionale en Europe devrait être retravaillée. Dans la plupart des pays, l'élaboration et la mise en œuvre de la politique régionale est prise en charge par les institutions gouvernementales en particulier par les gouvernements centraux. Le rôle premier de l'État est de fournir un cadre global pour la politique, assurant l'équité et encourageant la croissance et la compétitivité globales. Dans ce contexte, la politique régionale de l'UE tente d'harmoniser les politiques régionales nationales et y incorpore son propre budget de fonds structurels (FEDER, FC) ainsi que les activités de politiques régionales dans la politique régionale nationale. Toutefois, la politique régionale de l'UE devrait être considérée davantage comme une action de coordination que comme une politique d'harmonisation visant à promouvoir la cohérence entre les différentes stratégies nationales.

Pour mettre au point de stratégies régionales appropriées, il est tout d'abord nécessaire d'identifier les atouts et des faiblesses sur le plan régional. Il est tout aussi indispensable de disposer d'instruments et de mesures incitatives appropriées que de mécanisme d'évaluation. Ces tâches sont une surcharge pour l'UE, en particulier en raison des frais de transaction. Il est plus au moins impossible à l'UE d'opérer au niveau régional dans chaque pays membre. Par conséquent, l'UE est loin de remplir les critères fondamentaux pour la politique régionale. Dans ce contexte, l'UE devrait concentrer son attention sur

- les disparités économiques entre les différents États-membres de l'UE,
- l'amélioration des opportunités des États-membres à construire un cadre institutionnel de responsabilités régionales et nationales pour les politiques de développement régional,
- l'amélioration de la capacité des État-membres à inciter les autorités locales et régionales à coopérer les unes avec les autres, en particulier dans les zones transfrontalières et
- les effets secondaires territoriaux de ses politiques[1] comme la politique d'infrastructure, CAP, les politiques en matière de R&D et les réseaux transnationaux, etc.

[1] L'UE devrait en particulier garder à l'esprit les cycles de vie des produits et leurs conséquences quant à la montée ou le déclin des régions spécialisées. Cela signifie que le subventionnement d'industries anciennes n'offre pas de perspectives à long terme aux régions.

Les retombées territoriales (les effets secondaires territoriaux) que les politiques régionales européennes et nationales peuvent avoir sur le territoire méritent une attention particulière. Il est essentiel notamment de prendre en considération les effets que les améliorations de l'infrastructure (routes, aéroports, ports, trains à grande vitesse, télécommunications) peuvent avoir sur le commerce international et interrégional, les sites industriels et le processus de convergence. Étant donné que toutes ces améliorations modifient la structure économique territoriale en ayant une influence sur l'allocation du travail et du capital, il est possible qu'elles modifient la position de certaines villes ou régions par rapport à la concurrence sur le territoire européen. Et contrairement à l'opinion générale, certaines mesures dont on pense qu'elles amélioreront l'environnement économique peuvent en réalité entraîner une concentration accrue des activités économiques et aboutir en fait à une exacerbation des divergences entre les régions.

Pour éviter cette évolution, il est nécessaire d'harmoniser le développement régional et la planification territoriale dans chaque pays, en élaborant un cadre territorial donnant des recommandations en matière de décision d'investissement et aidant à coordonner et intégrer les différents programmes et stratégies sur le plan régional.

Pour ce qui est des disparités économiques entre les États-membres, l'UE devrait avoir la responsabilité de collecter des fonds auprès de chaque État-membre à réallouer en fonction des besoins définis par la politique régionale commune. Les ressources financières devraient être distribuées à l'aide de schémas simples (comme le fonds de cohésion) pour promouvoir la croissance économique et l'intégration européenne. Un assortiment de quelques conditions devrait garantir que les ressources financières ne seraient dépensées que pour financer des mesures d'incitation à la croissance dans les régions en retard de développement des États-membres. Dans le cas contraire, les États-membres en retard de développement seraient responsables de l'incorporation des ressources de l'UE dans leurs politiques régionales.

Le transfert de ressources financières vers les États-membres en retard de développement crée diverses incitations. D'une part elles pourraient être utilisées pour stimuler et accroître la croissance régionale, et d'autre part, l'aide financière diminue notamment l'intérêt propre des régions à accroître leur compétitivité par des mesures propres et elle place l'industrie des régions en retard de développement en situation de dépendance de l'aide européenne. C'est pourquoi il convient de limiter le soutien financier, de le réorganiser et de le contrôler au bout d'une certaine période. Actuellement, l'UE distribue ex ante des subventions aux État-membres et à leurs régions. Toutefois, la théorie économique de la conception de mécanisme montre que les subventions ex-post sont préférables. Cela signifie que les États-membres en retard de développement devraient avoir droit d'améliorer leur croissance. En alternative à l'approche ex-ante ou en complément à celle-ci, il pourrait être éventuellement préférable de mettre en place un système basé sur la compétition pour l'allocation des ressources, car il est fondamental de disposer d'un mécanisme encourageant la concurrence pour percevoir des ressources. Toutefois, ce système devra comporter une mesure d'assistance technique pour les régions faibles du point de vue structurel car ces régions auront sans doute besoin d'un soutien pour pouvoir présenter des projets concurrentiels.

Les fonds devront être désormais assignés sur la base d'une sélection et les projets devront être en accord avec les priorités définies par la politique régionale de l'UE. L'UE doit être au moins responsable du contrôle des aides financières que perçoivent les sociétés dans le cadre de la politique régionale nationale des États-membres. Dans l'intérêt de la libre concurrence en Europe, l'aide financière aux sociétés et aux régions devrait être limitée, en particulier dans les États-membres économiquement forts.

La question de savoir quel niveau gouvernemental devrait être responsable de la diminution des disparités régionales fait encore l'objet de débats. Selon le principe de la subsidiarité qui fournit le cadre permettant de définir les frontières de l'espace politique, la politique régionale européenne devrait intervenir dans les cas ayant clairement une dimension européenne. Elle devrait en particulier s'attacher à poursuivre un objectif de réduction des coûts de transaction qui empêchent l'intégration des États-membres (l'intégration du territoire), de même qu'elle devrait favoriser l'ouverture des régions en améliorant leur accès et la connectivité entre elles. La politique régionale européenne devrait intervenir lorsque des disparités entre de larges zones (zone de l'euro ou macro-régions) apparaissent. Ceci implique que la mission d'atténuer les disparités entre l'Europe du sud et l'Europe centrale et occidentale par rapport au centre européen relève de la responsabilité de la politique régionale européenne.

Le niveau national, avec les acteurs politiques dans ses régions devrait être responsable de toute politique concernant les régions. Toutefois, dès lors que des ressources financières en provenance de l'UE sont utilisées, les États-membres se doivent de respecter certaines règles simples édictées par l'UE garantissant une utilisation de l'aide financière que pour des mesures d'incitation à la croissance dans les régions en retard de développement. De même, l'UE devrait veiller au cadre institutionnel quant à la division régionale et nationale des responsabilités en matière de politique de développement régional car ce cadre est le facteur le plus important de la politique régionale et sa capacité à accroître la compétitivité des régions en retard de développement.

La responsabilité de réduire les disparités entre les régions d'un même pays est une tâche qui devrait incomber aux gouvernements nationaux. La politique régionale nationale devrait promouvoir l'intégration ou la cohésion interrégionale dans l'ensemble du pays. Dans le cas où la décentralisation de la politique régionale serait adoptée, le gouvernement national devrait mettre la coordination des politiques suivies par les différents acteurs locaux et régionaux en valeur. Parallèlement, la politique régionale nationale devrait aider en particulier les régions en retard de développement à surmonter les chocs externes car leurs effets sont normalement asymétriques.

La politique de développement devrait être responsable des disparités entre certaines zones au sein d'une région. Le processus continu de régionalisation dans la plupart des État-membres confère un rôle plus actif aux gouvernements locaux et régionaux. Car le succès d'une région est lié aux compétences des acteurs locaux, à leur attitude en matière d'innovation et leur esprit d'entreprise. Ainsi l'approche traditionnelle du sommet vers la base dans laquelle la promotion du développement régional n'est conduite que par les gouvernements centraux s'accompagne de l'approche de la base vers le sommet fondée sur les capacités endogènes des régions et des individus dans une perspective moderne de politique régionale.

Du fait de l'implication récente relative du gouvernement local sur les questions régionales, on constate dans la plupart des pays de l'Union européenne l'absence d'un cadre institutionnel et de compétences à ce niveau d'intervention. Si les stratégies de politiques régionales doivent être mises en œuvre par les autorités locales, leurs capacités administratives nécessitent d'être améliorées. Elles doivent disposer des qualifications et des compétences correspondantes, sans quoi il sera difficile de garantir une gestion efficace des fonds.

4. Politique régionale dans les États-membres de l'UE: approches et instruments

Dans le but d'améliorer l'environnement économique régional, la politique régionale dans les États-membres de l'UE dispose d'un grand nombre d'instruments différents et de programmes d'incitation. Le rôle de ces instruments a évolué au cours des années. Parmi les instruments traditionnels, on trouve:

- des mesures dissuadant la localisation dans les zones congestionnées ou de contrôle de tels sites: elles couvrent les pénalités financières et les systèmes de permis introduits pour encourager les sociétés à envisager de se déplacer vers des sites problématiques moins congestionnés.
- Décisions de l'État concernant la localisation: il s'agit de politiques poussant les sociétés d'état à investir dans des sites régionaux problématiques ou à s'y installer; cela couvre plus généralement des mesures visant à influencer la localisation d'emplois du secteur public, y compris des emplois dans la fonction publique.
- Les mesures d'incitation régionales: il s'agit de programmes d'aide financière visant à soutenir le développement des entreprises du secteur privé dans certaines zones d'aides déterminées. Les mesures les plus appréciées sont de loin les subventions destinées à soutenir l'investissement de capitaux fixes, bien que les prêts subventionnés soient également perçus comme des avantages fiscaux (de plus en plus rares), les subventions liées au travail et des concessions de transport.
- Mesures concernant l'infrastructure: il s'agit des améliorations apportées à l'infrastructure physique dans les régions problématiques, y compris les principales liaisons routières et ferroviaires, l'amélioration de l'approvisionnement en eau et les réseaux de distribution ainsi que les installations de télécommunication.

Parmi ces instruments, l'accent autrefois placé sur les deux premiers a considérablement diminué au cours des dernières décennies. L'impossibilité de surmonter les problèmes régionaux à l'aide de ces instruments explique qu'ils avaient été délaissés. En revanche, du fait du soutien financier, la promotion des investissements commerciaux privés et les investissements dédiés aux infrastructures publiques prédominent parmi les instruments de politiques régionales. L'aide financière aux investisseurs commerciaux réduit les frais d'utilisation du capital dans les zones bénéficiant d'un soutien et vise à attirer des investissements nationaux et étrangers vers les régions en retard de développement. L'apport de nouveaux capitaux entraîne l'apport de nouvelles technologies etc. dans les régions bénéficiant des aides.

De même, les mesures d'infrastructure furent pendant des années la réponse traditionnelle aux problèmes régionaux. Elle visait l'objectif d'élever les standards d'infrastructure (liaisons routières, ferroviaires, amélioration de l'approvisionnement en eau, réseaux de distribution et télécommunications) dans les régions problématiques aux niveaux nationaux. Toutefois, les zones métropolitaines et les pôles de croissance ont également besoin de support et d'équipements d'infrastructure suffisants, alors que les zones 'Leaders' n'ont pas besoin d'une aide financière pour soutenir l'investissement privé.

Avec le changement d'orientation de la politique régionale, un nouvel ensemble d'instruments politiques a été adopté pour favoriser le développement économique régional. Parmi les instruments les plus souvent mis en œuvre, nous pouvons citer:

- La mise en valeur de l'environnement des centres d'affaires: cette forme d'aide n'implique pas directement le soutien d'entreprises individuelles mais met plutôt

l'accent sur les mesures cadres visant l'amélioration des conditions d'affaires dans les régions problématiques: elle inclut les dispositions d'infrastructure locales (ex. incubateur) ainsi que les mesures visant à promouvoir l'information, le conseil et la consultation, l'éducation et la formation, ainsi que le soutien à l'innovation. Cet instrument de la politique de R&D joue un rôle crucial car il crée une base pour la création d'entreprises et pour de nouvelles initiatives commerciales.

- Les instruments de planification/le développement des stratégies régionales: ceci implique l'utilisation de plans et programmes régionaux pour analyser les points forts et les points faibles et mettre au point les stratégies régionales appropriées en réponse.

En ce qui concerne les régions en retard de développement, l'efficacité du soutien des investissements publiques et privés comparée à d'autres instruments fait encore l'objet de discussions. Dans tous les cas, l'approche d'une politique régionale nationale devrait être élargie. La dérégulation et la flexibilité salariale sont nécessaires pour attirer les capitaux et les investissements. Toutefois, un marché du travail flexible et un environnement favorable aux affaires ne suffisent pas à eux seuls. Les politiques régionales

- doivent aller au-delà de la promotion de l'investissement privé et de l'infrastructure physique. Elles doivent s'étendre à la qualité des liaisons, à la promotion de l'investissement immatériel, aux ressources humaines et environnementales, qui sont des facteurs déterminant l'attractivité et le dynamisme des régions.
- Elles devraient promouvoir le pouvoir d'innover car l'innovation joue un rôle clé dans l'incitation à la compétitivité et dans la détermination de la croissance de la production. Les régions en retard de développement se caractérisent en particulier par un bas niveau de dépenses dans le domaine de la recherche publique, une implication insuffisante du secteur industriel dans la recherche, un capital humain dédié aux activités de recherche insuffisant et de bas niveaux de coopération entre les acteurs participant à l'innovation. Le processus d'innovation est très complexe et implique l'interaction sociale, et il requiert une communication constante, un travail en équipe et de la coopération. Il est donc essentiel d'accroître la capacité et l'aptitude des individus à un apprentissage collectif réussi (capacité à renouveler, encourager, et adapter ses compétences de base sur le temps). Les entreprises et les individus ont besoin d'être ouverts pour acquérir des connaissances en provenance de diverses sources.
- Les politiques régionales devraient promouvoir l'aptitude à adapter les innovations. Pour assimiler et utiliser les connaissances externes, il est indispensable que les régions aient leurs propres compétences. En particulier la capacité d'apprendre (capacité à absorber) est un élément crucial pour une assimilation réussie des connaissances externes.
- Elles devraient promouvoir la formation d'un réseau régional. La capacité des régions en retard de développement à accéder aux réseaux nationaux et internationaux devrait augmenter. En particulier, la politique régionale devrait tenter d'ouvrir les régions en retard de développement car l'accès aux nouveaux produits, l'accès aux réseaux et le partenariat dans le cadre de coopérations améliorent leur compétitivité à long terme.

Dans l'intérêt de l'efficacité, la politique régionale dans les régions en retard de développement devrait se concentrer sur les pôles de croissance.

Tous les instruments mentionnés précédemment ont été développés selon la réalité des États-membres actuels. Ils sont basés sur la faiblesse et les besoins des régions en

retard de développement de ces pays. Lorsque l'on considère le processus de l'élargissement européen et en particulier la réalité des pays candidats à l'adhésion, certains de ces instruments pourraient s'avérer ne pas être adéquats pour favoriser le développement régional de cette nouvelle zone. Ainsi, la politique régionale de l'UE a besoin d'être revue, il est en particulier nécessaire de procéder à une réorientation des fonds structurels et du fonds de cohésion.

Parmi les caractéristiques principales du développement régional dans les pays de l'Europe centrale et de l'Est, il convient de noter le clivage entre les régions métropolitaines et non métropolitaines, ainsi que le fossé est-ouest. Les régions de l'Est ont un désavantage car elles ne partagent pas de frontières avec les pays européens. Ces régions ont une infrastructure faible et une structure défavorable quant aux institutions, à l'organisation et à l'économie, facteurs empêchant un développement endogène. Avec ces régions situées à distance importante du centre européen, la zone périphérique de l'Union européenne s'agrandira notoirement. Il convient également de s'intéresser aux régions des pays candidats à l'adhésion spécialisées dans les industries anciennes. Ces régions auront besoin d'opportunités alternatives d'emploi, de modernisation de leur production et de leurs structures technologiques. Le déficit relatif du développement des centres urbains constitue un autre défit de la politique régionale, en particulier si la stratégie consistant à soutenir les pôles de croissance est considérée.

En raison de la structure politique et économique des pays candidats à l'adhésion, la politique régionale devrait

- se concentrer sur l'infrastructure, le capital social et humain, la formation en réseau pour faciliter le transfert des technologies innovatrices vers les zones affectées par la conversion industrielle et sur le rôle que joue la coopération interrégionale, internationale et transfrontalière.
- Elle devrait soutenir la modernisation du système institutionnel en Europe centrale et de l'Est. Les pays candidats à l'adhésion devront surmonter la tradition récente de leur politique régionale et la faiblesse du gouvernement central responsable du développement régional. Les institutions des pays candidats à l'adhésion devront être adaptées aux normes.
- la politique régionale devrait soutenir le processus de décentralisation pas seulement sur le plan institutionnel mais aussi financier. La création et la consolidation des institutions de politique régionale sont fondamentales pour l'intégration des autorités locales et régionales. Les mécanismes favorisant l'échange d'expériences dans le domaine du développement régional, l'interaction étroite et continue entre les acteurs locaux et nationaux et entre les acteurs locaux de différentes régions peuvent contribuer à la promotion des processus de décentralisation.
- Elle devrait encourager les compétences administratives locales. Les niveaux locaux et régionaux n'ont pas d'expérience en matière de politique régionale. Le manque d'autorités locales impliquées dans le développement régional est critique pour la mise en œuvre des instruments de politique régionale. Des programmes de formation des fonctionnaires peut être une mesure pour surmonter le manque de capacité administrative.
- Elle devrait promouvoir la périphérie des pays candidats à l'adhésion et accroître la coopération transfrontalière.

Ces mesures, accompagnées d'une réforme substantielle de la politique régionale de l'UE et de ses fonds sont nécessaires pour que l'élargissement soit un succès.

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I. Regional Inequalities in Europe

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Overview about Regional Inequalities in Europe

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1. The Economic Cohesion: Convergence of the Nations, Great Disparities of the Regions

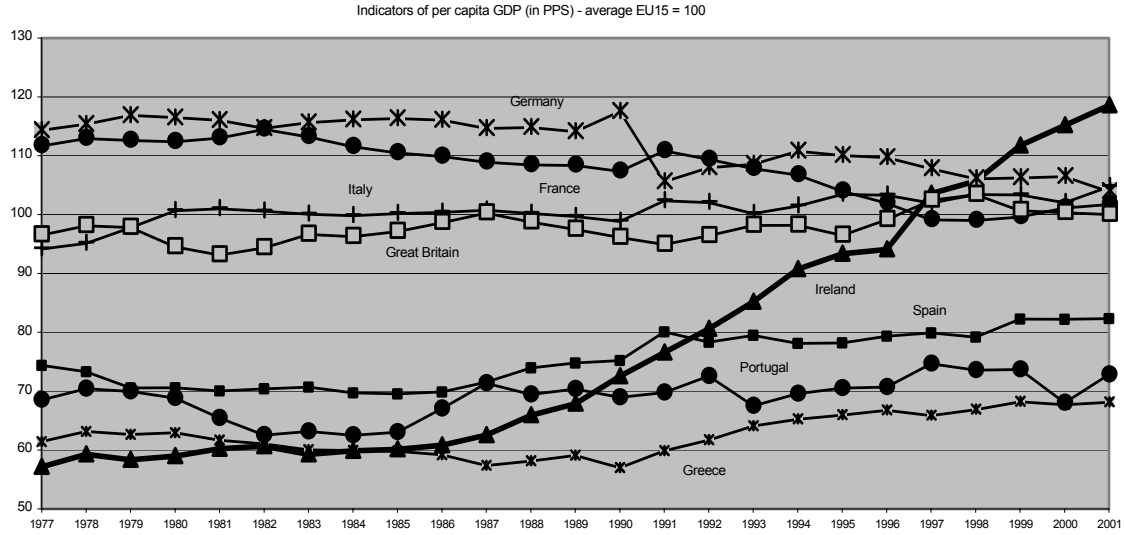
If during the last decade the differences of the levels of development have strongly decreased between the Member States of the European Union, they have, on the contrary, noticeably increased within the majority of the nations. The result is a stability or even a slight progression of regional disparities in Europe since the beginning of the 1990s, which has clearly slowed down the convergence movement initiated during the 1960s.

1.1 The Convergence of the Member States of the Present Union

Although the economic disparities between the present Member States continue, they have been notably decreased for a decade. The main change concerns the nations of cohesion (Spain, Portugal, Ireland, Greece), the per capita GDP of which clearly approached the average of the EU (see chart 1).

Ireland is the most striking example for this, as its per capita GDP, which was 68% of the average of the EU in 1988, i.e. the lowest level of the nations of the Union, achieved 119% in 2001, which allows Ireland to occupy the second position of the 15 nations of the Union in future, behind Luxembourg (indicator of 196) and at the same position with Denmark (Barcellan 2002).

Chart 1: The convergence of the nations of the European Union 1977-2001



The initial backlog in cohesion of three other nations has also been noticeably reduced since a decade: Spain, in 2001, had an indicator of 82 compared to 75 in 1991, Portugal of 73 compared to 60 and Greece of 68 compared to 49. This evolution may be attributed, at least partially, to the politics initiated in these nations (support of the Structural Funds within the scope of objective 1, EU initiatives, subsidies by the Cohesion Fund).

Contrary to that, the big nations of the Union saw their relative situation degrading for ten years: the per capita GDP of Germany passed, between 1991 and 2001, from the indicator of 106 to 104, that of France from 115 to 102 and that of Italy from 106 to 105. Only the United Kingdom saw its position improving: its per capita GDP made slight progress, from the indicator of 98 to the indicator of 100. You will remark a clear regrouping of these four countries in the range comprised between the indicators of 100 and 105 (see chart 1).

These opposite evolutions, the improvement of the situation of the least developed nations and the relative degradation of the position of the most developed nations (except for Luxembourg), allowed a great reduction of the disparities between the Member States, which are measured, for instance, by means of a weighted standard deviation (by population) of the national per capita GDP: this passed from 13.1 in 1991 to 12.5 in 1995 and 11.4 in 2000 (European Commission 2003, 2002, 2001).

We can add, however, although this convergence movement of the per capita GDP depends mainly on differences in growth rates between the nations, that it may also result from different evolutions of the national price levels. In this connection, let us remember that, if for instance the per capita GDP of Luxembourg amounts to the indicator of 209 for the year 2000, if expressed in Euro, it falls back to the indicator of 195 if expressed in Purchasing Power Standard (PPS), and contrary to that, the per capita GDP of Greece passes from the indicator of 52 in Euro to the indicator of 68 in PPS.

1.2 Great Disparities between the Regions

The reduction of the regional disparities in Europe is confirmed, but to a lesser degree than on the national level (Behrens 2003-4). Moreover, if we have a distant look on them, the differences in diversity even show a tendency for aggravation within certain Member States.

In 2000, it was the region Ipeiros in Greece that had the weakest per capita GDP (10,643 Euro in PPS), i.e. 47% of the average of the EU, and the region of Inner London in the United Kingdom that had the highest per capita GDP (54,565 Euro in PPS), i.e. 241% of the average of the EU (see table below). Thus, the difference between these two extreme regions is about 1 to 5.

Among the poor regions, after Ipeiros, it is La Réunion (France) that is located in the penultimate position with 11,401 Euro in PPS (50% of the EU average). It is followed by the Dytiki Ellada in Greece (indicator 51), the Azores in Portugal (indicator 52) and the Extremadura in Spain (indicator 53).

In total, in 2000, 48 regions of the 211 level NUTS-2 regions showed a per capita GDP (en PPS) of less than 75% of the EU average (in 1999, they were 46). This particularly concerns ten of the thirteen regions of Greece, six of the seven regions of Portugal, four French overseas departments as well as seven of the eighteen Spanish regions. The other regions are located mainly in Germany (eight regions of the new Länder) and in Italy (five regions). This group also includes two Belgian regions, one Austrian region and three regions of the United Kingdom. Almost 68 millions inhabitants live in these 48 regions, equal to 18% of the total population of the European Union.

Contrary to that, it is Inner London that, as we already mentioned, has registered the highest per capita GDP (indicator of 241). On the next position we find, still very much above of the average of the EU, regions like Hamburg, Darmstadt and Upper Bavaria in Germany, the Grand Duchy of Luxembourg, Brussels in Belgium and Vienna in Austria.

Their per capita GDP lies between 149% and 218% of the average of the EU (see table 1 below). This applies generally for large urban zones, often capital cities (London, Paris, Brussels, Vienna, etc.), that concentrate numerous activities with great value added, in the industry or in the service sector.

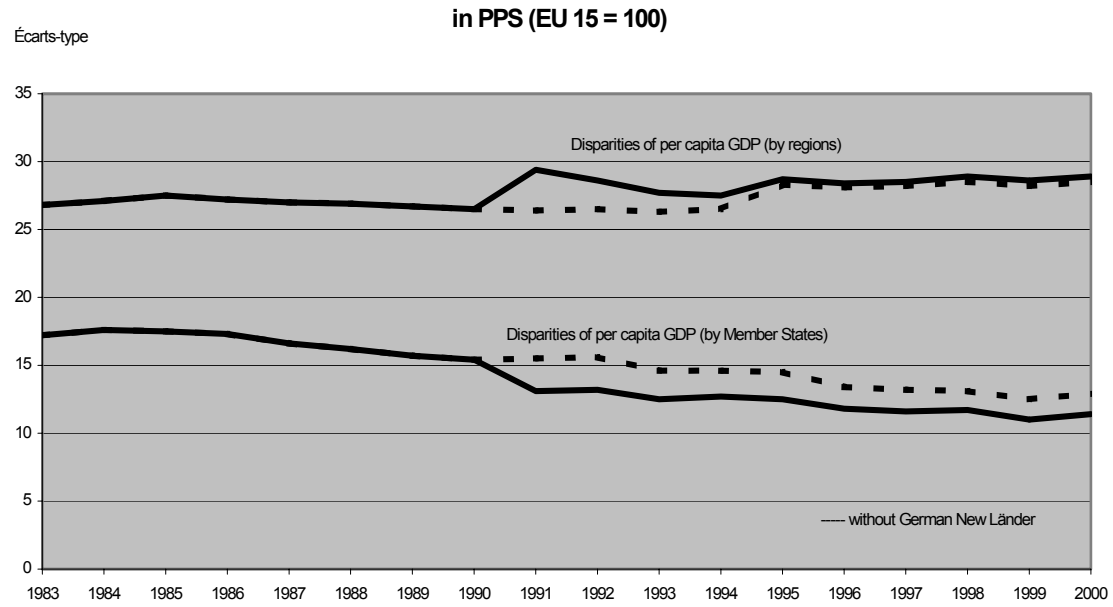
Let us also precise that in a certain number of cases, the per capita GDP could be over-assessed, particularly for the small regions, due to commuting. Thus, the per capita GDP of Hamburg is overestimated by about 20% to the disadvantage of the neighbouring regions.

Table 1: Per capita GDP (in PPS) in % of the EU average (2000)

Regions with the lowest per capita GDP		Regions with the highest per capita GDP	
Ipeiros (EL)	47	Darmstadt (D)	149
La Réunion (F)	50	Upper Bavaria (D)	154
Dytiki Ellada (EL)	51	Vienna (A)	157
Azores (P)	52	Île-de-France (F)	158
Extremadura (E)	53	Hamburg (D)	182
Guyana (F)	54	Luxembourg (Grand Duchy)	195
Centro (P)	55	Brussels (B)	218
Alentejo (P)	56	Inner London (UK)	241

Measured by means of a weighted standard deviation (by population) of per capita GDP, the regional disparities (σ-convergence) seem relatively stable since a decade with a slight rise since the middle of the 1990s (see chart 2 below): the standard deviation passed from 26.8 in 1983 to 29.4 in 1991 with the entry of the German New Länder into the European Union, in then diminished progressively until 1995, before starting a slight augmentation and achieving 28.9 in 2000 (European Commission 2003).

Chart 2: The regional and national disparities of the per capita GDP (1983-2000)



The strong convergence between the nations that has been observed for a decade did not entail any reduction of the regional disparities in Europe, as it was largely compensated by a process of divergence between the regions within the majority of the European nations.

1.3 Regional Disparities Increasing within the Nations

The contrast between the strong diminution of the disparities between the nations, on the one hand, and the stability or rather the slight increase in regional disparities on the European level, on the other hand, may be explained by the augmentation of the disparities of the development levels within the nations themselves.

Let us first state that the differences in levels of development may be considerable between the regions of one and the same nation. In seven of the thirteen Member States including regions with NUTS-2 level (without Luxembourg and Denmark), the highest regional per capita GDP exceeded twice and even three times the lowest regional per capita GDP in 2000. This was true, for instance, for Belgium (Brussels: 218% of the average of the EU, Hainaut: 71%), in Germany (Hamburg: 182%, Dessau: 64%), in France (Île-de-France: 158%, La Réunion: 50%), in Italy (Trentino-Alto Adige: 136%, Calabria: 62%) and in Austria (Vienna: 157%, Burgenland: 73%).

Since 1995, the regional disparities within the Nations, measured by means of a weighted standard deviation, increased in the great majority of the nations (Table 2). They have aggravated in nations like Germany, Spain, France, Ireland, the Netherlands, Portugal, Finland, Sweden and the United Kingdom. They have decreased in Belgium, in Greece, in Italy, and in Austria.

Table 2: The regional disparities of the per capita GDP (PPS) within the Member States (1995-2000) (standard deviation of the indicator EU-15 = 100)

Member States	1995	1996	1997	1998	1999	2000
Belgium	40.8	41.6	41.4	41.6	40.2	39.2
Germany	25.6	24.9	25.1	25.3	25.5	26.2
Greece	10.4	10.3	9.5	9.5	9.5	9.6
Spain	16.8	17.1	17.4	17.4	18.1	18.1
France	28.2	27.9	27.3	26.6	27.5	28.3
Ireland	13.7	12.9	15.8	16.7	18.2	18.8
Italy	28.5	28.9	27.7	28.1	27.8	27.2
Netherlands	13.5	14.6	15.3	15.7	15.8	15.5
Austria	25.4	24.8	23.6	22.7	22.5	23.9
Portugal	15.2	15.4	17.3	17.9	17.6	16.6
Finland	19.5	21.2	20.8	23.9	24.2	25.0
Sweden	12.0	13.0	15.2	16.3	20.1	20.9
United Kingdom	31.5	32.0	34.0	35.6	34.2	24.2
EU-15 (per region)	28.7	28.4	28.5	28.9	28.6	28.9
EU-15 (per Member state)	12.5	11.8	11.6	11.7	11.0	11.4
Source: European Commission (2003)						

But the intranational disparities follow cyclic evolutions that are largely determined by the movements of the economic situation. Thus, in France the standard deviation of the per capita GDP has diminished from 1995 to 1998 before rising in the last two

years. The same applies to the majority of the other nations, however, with different cycles of amplitudes and phases: in Germany, the regional disparities are progressive since 1996, whereas in Italy and in the United Kingdom, they have decreased since 1998.

1.4 Convergence or Divergence?

What are, finally, the fact on the evolution of the regional disparities in Europe? Do we face a movement of convergence, certainly strongly slowed down in the last time, as certain approaches of neo-classical inspiration insist? Or, on the contrary, did the economic and monetary integration provoke a movement of divergence, with the most developed regions growing ever faster than the other?[1]

To this purpose, it is necessary to analyze, over a long period, the capacities of recovery of the least developed regions (β-convergence). Do they grow faster than the other ones? Or, on the contrary, do the differences tend to persist in the long run, despite periods of a reduction of the disparities? However, we must distinguish between absolute convergence and relative convergence. There is an absolute convergence (or non-relative), if all of the regions tend towards the same stationary situation, thus, in the long term, leading to a disappearance of disparities in the levels of development. In case of a relative convergence, the regions tend towards different stationary situations and the regional disparities persist in the long term.

Numerous studies have tried to verify and measure the process of convergence. From the beginning of the 1960s until the middle of the 1980s, you may observe two clearly distinct periods:

- from the beginning of the 1960s to the first oil crisis: following most of the studies (Molle et alii 1980, Boltho 1990, Dunford 1994), this period is characterized by a strong convergence movement of the per capita GDP and of the productivity of work, on the national as well as on the regional level. This convergence has been achieved, for a large part, due to the migration of the populations between the regions or to the exchange of workers within the sectors of activity. But the process of recovery (convergence β) seems, during this period, relatively slow: hardly 2% a year, following the calculations by Barro and Sala-y-Martin (Barro, R.; Sala-y-Martin X. 1991, 1992, Sala-y-Martin X. 1996), about 1% following other studies (Armstrong 1995). Even with 2%, 35 years are required to reduce half the backlog of the least developed regions.
- from the first oil crisis to the middle of the 1980s: the previous convergence is stopped, and a process of divergence appears. The fall of the growth rates, the slowdown of the migrational movements, the increase in unemployment, explain, for a large part, this situation. The economic and social disparities advance strongly.

For the most recent period, the studies seem to draw the conclusion that the movement of convergence is taking up again, but with a much slower rhythm than before. This in particular applies to the study concerning 109 European regions in 12 nations of the European Union for the period 1977-1994 (Cuadraro-Roura 2001). Over the whole of this period, the coefficient β is equal to 1.7%, i.e. with very weak rates of absolute convergence. The convergence for the period 1986-1994 is even slower, the coefficient β does not exceed 0.9%. In fact, the convergence seems essentially *relative*. This means that specific factors affect, positively or negatively, as the case may be, the process of

[1] For this discussion see also Akademie für Raumforschung und Landesplanung (2004).

convergence of the different regions. The regional evolutions seem largely determined by their national affiliation. The regions belonging to the same nation can be classed into a relatively homogenous group distinct from that formed by the regions of the other nations.

Thus, the Portuguese regions, which had in 1977 the lowest levels of per capita GDP, have seen the highest growth rates (except for Alentejo). They are followed by the Italian regions, which made faster progress than the average of the EU. The same applies to the United Kingdom, but the differences in growth of the British regions seem very limited. The Greek and Spanish regions, which would have per capita GDP below the European average in 1977, have experienced growth rates near to the average of the EU. For the regions of the most developed nations, the regional situations seemed much more dispersed. This is true in particular for Germany, for Belgium and, to a lesser degree, for France.

One of the conclusions you may draw from these results is that the regional disparities in Europe will not be reduced unless the disparities between the nations will become weaker and weaker. This implies that the European politicians must, at first and above all, take care of the improvement of the competitiveness of the national economies, the regional development remaining mainly the task of the nations and of the territorial communities.

1.5 The Consequences of the Enlargement

Which would be the situation of the regional disparities within the Union if one takes into account the nations that are new Member States and candidates for the membership?

Let us first note that, while over of the period 1995-1999 the average growth rates of the new Member States and candidate nations has been higher than that of the Member States, 3.2% a year compared to 2.4%, the levels of development of the future Member States remain in total relatively low: the 10 nations to enter the European Union in 2004 globally have a per capita GDP equal to 45% of the average of the 15 nations of the present Union (Pasanen 2002).

Even if Cyprus has an indicator of 80 of the average of the present EU, i.e. the level of Spain, and Slovenia an indicator of 68.3, the per capita GDP of the majority of the new Member States and candidate nations does not exceed half the average of the EU: thus Latvia has an indicator of 28.6 and Lithuania of 32.8. The nation the most populated, Poland, has an indicator of 38.9.

After the enlargement, three groups of nations could be distinguished:

- the first group, consisting of 8 of the new Member States, will include 21% of the total population of the Union (of 25). The average per capita GDP of these nations would be around 42% of the new average of the EU (EU-25).
- the second group, which includes three of the present Member States (Greece, Spain and Portugal) as well as two new Member States (Cyprus and Slovenia), would be at 87% of the future average of the Union.
- the third group includes all the other present Member States, with an average per capita GDP by 15% higher than that of the Union as a whole.

This distinction between three groups runs the risk to persist for a long time. In fact, if the new Member States would experience growth rates identical to those of the nations of the cohesion during the last decade, they should at least require two generations

in order to arrive at the average per capita GDP level of the present EU. Even with the growth rates which Ireland experienced during the last ten years, twenty years should be required in order to achieve 90% of the per capita GDP of the present European Union.

On the regional level, the disparities should increase in a spectacular manner by the expansion (Behrens 2002-2). Within the expanded Union, the ratio between the per capita GDP in PPS of the 10% (in terms of populations) of the richest regions and the 10% of the least developed would pass from 2.6 in the present Union to 4.4 (6, if you add Romania and Bulgaria). The 25% richest regions will have a per capita GDP 2.7 times higher than that of the 25% poorest regions compared to a ratio of 2 in the present European Union.

With the present data the entry of the 10 new Member States will result in an average reduction of the per capita GDP of about 18%. This means in particular that 18 of the regions of the present European Union with almost 21 million inhabitants will pass above the threshold of 75% of the new average of the EU, without, however, their problems of diversity being solved. Their relative position will improve due to the mere fact that the expansion will have included even more disadvantages regions into the Union. In a Europe enlarged to 27, only 18 regions of the present Member States would have a per capita GDP of more than 75% of the average of the EU.

In total, in a Europe of 25, there would be 85 regions, including about 137 million inhabitants, i.e. 36% of the population of the expanded Europe, that will have a per capita GDP of less than 75% of the average of the present EU (22,603 Euro per inhabitant in 2000), or 67 regions, including 26% of the population of the EU, that will have a per capita GDP of less than 75% of the new average of the EU (19,661 Euro per inhabitant in 2000). In a Europe of 27,99 regions will have a per capita GDP of less than 75% of the present average of the EU (68 regions with the new average of the EU).

The expansion will have no effect on the list of the regions with the highest per capita GDP. One will even have to add Prague, which will occupy the 23rd position with an indicator of 136.6. Contrary to that, the poorest regions will consist exclusively of regions belonging to the new member nations, the bottom of the classification now being occupied by the Lubelskie in Poland, which has an indicator of 29.9 (EU-25). The 10% of the regions at the lower extreme of the scale consist exclusively of the Eastern regions of Poland, of Lithuania and of Latvia and some regions of Hungary or Slovakia.

1.6 Less Important Disparities for the Income of the Households

The nations or regions that benefit of the highest per capita GDP are not necessarily the ones where the available income of the households is the highest. The difference can be explained by the depreciation of the capital, the flux of daily migrations of the workers, the flux of income abroad and by the internal redistribution done by the Government. For the first time, a study allows to verify this for the whole of the nations and regions of the enlarged European Union (Behrens 2002-1).

At the national level, one will state that the situation of certain nations improves noticeably if one retains the income available of the households rather than the per capita GDP. Thus France passes from the indicator of 116 (EU-25) in terms of per capita GDP to 122 for the available income per inhabitant, Germany from the indicator of 124 to 129. For other nations, the degradation of their situation seems spectacular: thus Ireland passes from the indicator of 130 in terms of per capita GDP to 93 in terms of available income per inhabitant. An identical phenomenon may be observed for Finland, the Netherlands and Sweden.

On the regional level, important differences exist between the situations in terms of per capita GDP and income available per inhabitant. This is true in particular for the regions suffering from an important daily flux of workers (shuttle service). Thus, Inner London passes from the indicator 282 (EU-25) in terms of per capita GDP to only 146 for the income available per inhabitant, Hamburg passes from 213 to 138, Île-de-France from 180 to 148.

Contrary to that, the regions with a weak per capita GDP will see their situation improve, thanks to the redistribution performed by the public authorities: the Greek region of Ipeiros passes from 60 to 85 and that of Dytiki Ellada from 62 to 74. This also applies, in France, for the overseas departments.

If one compares the thirty weakest regions of the EU in terms of per capita GDP in PPS to the thirty regions registering the weakest income available per inhabitant, only 18 regions appear in both of the groups, which shows again the favourable effect by the redistribution in certain European regions.

In the new Member States, the differences between the per capita GDP and the income available per inhabitant seem, on the national as well as on the regional level, generally more moderate than in the nations of the present Union. The extreme case seems to be the one of the Czech Republic, which passes from the indicator of 68 in terms of per capita GDP to 56 for the income available per inhabitant. Add to this that all of the regions of the new Member States would have incomes available but also per capita GDP that would be lower than those of the quasi-totality of the 30 weakest regions of the EU.

2. The Social Cohesion in the Present Union and in the Enlarged Union

At present, the regional disparities in terms of employment and of unemployment seem to be considerable in Europe. If they are strongly connected to the movements of the economic situations, they also and above all depend on the local structural factors. The expansion should even accentuate these disparities.

2.1 The Disparities in Terms of Employment in the Present Union

The improvement of the economic situation allowed, during these last years, a strong progression of the number of employments in all of the nations of the Union. At the end of the year 2000, the effective number of the persons in an employment exceeded that of 1999 by three millions and the number of persons employed five years earlier by ten millions. However, in the course of the year 2001, with the slowdown of the activity economic stated since the second half-year of 2000, the increase in the number of employments was only 2.2 millions.

On the national level, the employment rates are higher in all countries than that of the beginning of 1990s, except for Germany, Sweden and Finland.

The disparities in terms of employment rates kept on decreasing (very slightly) in the Union, this evolution partially being attributed to relatively important progressions of the employment in Spain, a nation where the proportion of persons with an employment among that in working age is below average. In 2001, the employment rates were below 61% in Greece, Spain and Italy, whereas in Denmark, in the Netherlands, in Sweden and in the United Kingdom, it exceeded 70%, the target assigned to the Union by the European Council of Lisbon for the horizon of 2010.

On the regional level, the disparities in the area of the employment remain more clearly displayed between the regions than between the Member States. In 2001, the employment rate registered in the regions with the best ranking to this respect (that is, those displaying the highest rates and amounting to 10% of the population of the Fifteen) was at a mean value of 76.7% for an average of 64.3%, whereas the employment rates registered in the regions with the worst ranking (that is, displaying the lowest rates and also amounting to 10% of the population) was about 48.2%.

2.2 Very Strong Regional Disparities in Terms of Unemployment

Between April 1999 and April 2001, the unemployment rate in the European Union fell from 9.1% to 7.6%. In total, some 14.5 million persons were unemployed in 2000, i.e. 1.5 million persons less than the year before. That is the greatest regress in the number of unemployed persons for ten years. At the end of the year 2002, it had increased again to 7.8%.

At the national level, if all Member States saw their unemployment rate regress in 2000, the most important decrease having been registered in Belgium, Spain and France, the years 2001 and 2002 were marked, in proportion to the slowdown of the growth, by a more limited decrease of the unemployment rate, and it has even risen from that during the year 2002.

In this context, the unemployment rate settled down, in December 2002, at only 2.7% in Luxembourg, whereas it was 12% in Spain, the figure that remains the highest of the Union, despite of the impressing decrease of the number of unemployed persons in these nations during these last years.

The regional disparities in terms of unemployment remain to be considerable. In April 2001, the most recent period for which there are data available (Behrens 2002-4). The unemployment rate varies from 1.2% in the Dutch region of Utrecht to 33.3% for La Réunion in France. Of the 209 NUTS-2 regions, 53 have shown an unemployment rate of less than 3.8% (half the unemployment rate of the whole EU). They are located in 11 Member States; whereas Greece, Spain and France as well as Denmark have no region with an unemployment rate below or equal to 3.8%.

At the other end, 16 regions displayed an unemployment rate exceeding twice that of the whole of the European Union. The regions with very high unemployment rate are located in France (La Réunion, 33.3%, Guadeloupe, 29%, Martinique, 26.3%), in Italy (Calabria, 24.8%, Campania, 22.4%, Sicily, 20.8%), in Spain (Andalusia, 22.3%, Estremadura, 22.1%, Ceuta and Melilla, 21.9%) as well as in some German regions (Dessau and Halle, 16.9%).

The regions where the unemployment rate was the weakest in the European Union were practically the same in 2001 as ten years before, likewise the ones where the unemployment rate was the highest. The same is true within the Member States, where the differences between the regions can sometimes be very important (chart 5). It's Italy where they are the most accentuated, the unemployment rate registered in Calabria being 8.3 times higher than that observed in the Trentino-Alto-Adige (24.8% compared to 3%). In France, between Alsace (4.8%) and La Réunion (33.3%), the ratio is 6.9, in Germany, between Upper Bavaria (3.2%) and Dessau or Halle (16.9%), it is equal to 5.2, and in Spain, between Navarra (6.1%) and Andalusie (22.3%), it has settled down at 3.6. Even in a small nation like Belgium, the difference seems considerable between the region with the lowest unemployment rate, Flemish Brabant (2.6%), and that with the highest rates, Hainaut (12.8%).

Concerning these evolutions, the regional disparities in terms of unemployment within the present European Union have diminished in the course of the second half of the 1980s with the revival of the growth economic and the strong augmentation of the employment. The have expanded during the first part of the 1990s before falling back slightly since 1995. The evolution of the economic situation, by its effects on the employment, constitutes the main factor of aggravation or attenuation of the regional disparities in terms of unemployment, in the interior of the nations as well as between these.

2.3 Regional Disparities even more marked for the Women and the Young People

The regional disparities in terms of unemployment seem even more marked if one examines the situation of different social categories, in particular of the women and of the young people.

If the unemployment rate of the women has strongly decreased in the whole of the European Union (9.9% in April 2001 compared to 10.9% in April 2000), it varies considerably between the regions. It ranges between 1.1% (regions of Utrecht in the Netherlands and Aland in Finland) and 36.4% (Calabria), i.e. an extreme ratio of 1 to 33.

The unemployment rate of the young people under the age of 25 also continued to decrease during the last years. In 2001, it settled down in the Union at 15.1% compared to 16.1% in 2000 and 17.9% in 1999. The unemployment of the young people is clearly higher in the regions displaying an important global unemployment rate. It has settled down at 2.1% in the region of Utrecht (Netherlands) and at 59.9% in Campania (Italy). In April 2001, 7 regions had an unemployment rate of more than 40% of the active population of less than 25 years. All of them are located in the Mediterranean zone (5 in Italy, 1 in Greece) or overseas (La Réunion).

The 82 regions with unemployment rates for young peoples of less than 10% are in Germany (25 NUTS-2 regions), in the United Kingdom (17 regions), in the Netherlands (12 regions), in Austria (9 regions). Whereas the regions with increased rates are almost all of them in the Mediterranean zone: Italy (5 regions), Greece (1 region), and a French overseas department.

2.4 The Regional Disparities in Terms of Unemployment in the new Member States and Candidate Nations

During the last years one states opposite tendencies in the nations of the EU and the nations of Central Europe. The unemployment rate in the EU Member States passed from 9.2% in 1999 to 8.3% in 2000, in order to fall back to 7.6% in 2001. On the other hand, the rates in the nations of Central Europe passed from 10.4% in 1999 to 12.5% in 2000, in order to achieve finally 14.5% in 2001 for the 10 new Member States (13% if you take into account Romania and Bulgaria). The rate is 19.4% in Slovakia, 18.4% in Poland and 16.5% in Lithuania. On the other hand, it remains moderate in Cyprus (4%), Hungary and Slovenia (5.7%), Malta (6.1%) and Romania (6.6%).

Within the new Member States and candidate nations, important differences could be stated between the regions (Behrens 2002-3). If one observes the NUTS-2 level alone, one will state that the unemployment rate has varied from 2% in the Hungarian region of Közép-Magyarország to 32.8% in the Bulgarian region of Severozapaden.

Of the 53 observed regions, 6 have shown an unemployment rate of less than 5%. 16 other regions have registered an unemployment rate of less than 10%. These regions are

located in Romania, in the Czech Republic, in Hungary and in Slovenia. The regions of the Slovak and Bulgarian capitals have also shown rates of less than 10%. At the other extreme, 13 regions in Poland, in Bulgaria and in Slovakia have registered rates of more than 20%. This represents a slight rise compared to the previous year, in which only ten regions exceeded 20%. Thus, the entry of these nations into the European Union should even aggravate the regional disparities in terms of unemployment, which are already very strong today. Add to this that the slowdown of the economic growth since 2001 should even more accentuate this phenomenon.

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Regional Disparities in the United Kingdom

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1. Introduction

In an EU context, the United Kingdom has the most extreme economic disparities of any current or new Member State. According to the Second Cohesion Report (CEC 2001) and more recent Eurostat data, the UK has the most prosperous NUTS II region in the EU, with a GDP per capita approaching three times the level of the EU-26 average. At the other end of the scale, the UK has one of the poorest EU regions – Cornwall & the Isles of Scilly – which, even in an enlarged EU, would have Objective 1 status by virtue of its GDP per head being less than 75% of the EU-26 average. As an indicator of regional problems in an EU context, the UK receives almost five percent of Objective 1 funding and is one of the largest recipients of Objective 2 and 3 support in the EU.

Within the UK, regional disparities have several key features. First, there are long-standing, deep-seated inequalities in prosperity and employment between regions, characterised by the dominance of south-east England (centred on London) over the rest of the UK. More generally, there are differences between southern regions (South East, South West, East Anglia, parts of the Midlands) and most other parts of the country – frequently termed a 'north-south divide'. Second, industrial restructuring over the past 30 years has led to more complex intra-regional patterns of disparity, with greater localised differences in wealth and employment. It has been claimed that differences within regions are as great as differences between regions. Third, since the 1980s, the 'regional problem' has been partly eclipsed by the growing attention given to the problems of the inner city areas of the major conurbations – London, Liverpool, Manchester, Glasgow, Newcastle, Leeds. Of greatest concern are areas characterised by so-called 'social exclusion' – low rates of economic activity, generational unemployment, low levels of skills and qualifications, poverty, fragmented families, and high rates of crime, delinquency, alcoholism and drug dependency. Lastly, in recent

years, the policy debate has focused on differences in the relative economic competitiveness of the regions and localities in the UK.

This chapter reviews regional disparities in the UK, a country illustrative in many aspects of regional dynamics in other parts of the EU. The chapter begins by reviewing the historical context and long-term trends in regional disparities, before examining current spatial patterns and contemporary policy debates on the regional problem.

2. Historical Context

Economic historians and geographers have recognised a 'dualism' in the economic development of the UK – a divide between the northern and southern parts of the country - dating back over several centuries. The Industrial Revolution of the late 18th and 19th centuries began in the Midlands and North West of England. It was based initially on textiles and then other sectors such as coal-mining, iron and steel, heavy engineering and shipbuilding, with manufacturing coming to dominate the employment structure across much of Northern England, Western Scotland and South Wales. The south of England (with the exception of London) tended to be more reliant on agriculture, subject to cyclical fluctuations in prices, and was generally less affluent.

The industrial prosperity of the 'north' began to change markedly in the 1920s and 1930s. This was the start of a long-term decline in the fortunes of major manufacturing sectors, and a shift in location patterns to favour the Midlands and southern regions of the country among growing light industries and service sector firms. It was also during the 1930s that regional policy measures first began to be introduced with the 'Special Areas Act' providing assistance for the high-unemployment areas of South Wales, North East England and Western Scotland. In effect, there was a reversal of the relative prosperity of northern and southern regions of Britain which has persisted to the present day.

However, there are two caveats to this picture (Martin 1988).

1. The leading position of London has dominated the economic geography of the country for over 500 years. The pre-eminent role of London originated in its role as the seat of the monarchy and national government, geographical proximity to Continental Europe and, in particular from the 17th century, its importance as a financial, trading and distribution centre. London was a pivotal location in the growth of Britain's international trade, with an increasing concentration of service employment, especially associated with banking and financial services. Even over the 1840-1920 period, when 'northern' prosperity was at its greatest, South East England was performing much better in terms of manufacturing employment growth (as well as growth in service sector jobs).
2. There were some important differences in employment trends among northern regions of the UK. It is possible to distinguish between the so-called 'manufacturing heartland' of the West Midlands, North West England and Yorkshire-Humberside, and a so-called 'industrial periphery' of Wales, Scotland and the North/North East England. Although there were significant increases in manufacturing employment in all regions (spectacularly so in the big cities), employment growth in the 'industrial periphery' was about half that of the 'industrial heartland', and indeed the periphery actually experienced a relative decline in its share of manufacturing employment dating back to the 1840s.

A further historical factor of note is the degree of urbanisation of Britain. This originated in a combination of 'push' factors associated with agriculture (technology, prices), notably changes in landownership from the 17th to 19th centuries which led to the enclosure of land and the effective disappearance of a small-scale, land-owning class of farmers. The large population of landless labourers were therefore easily attracted by the huge demand for industrial work in the big cities. By the early 20th century, England and Scotland were the two most urbanised countries in the world, and agriculture accounted for a relatively small share of employment by comparison with other European countries. Historically, regional policy in the UK has been primarily associated with urban/industrial areas; with some exceptions, rural areas have featured much less prominently as a target of regional policy than in France or Germany, for example.

3. Trends in Regional Disparities

A striking feature of UK regional problems is their persistence. In the 1960s, McCrone (1968) noted that regional policy had been in operation for over 30 years, yet the problem regions were approximately the same ones as in 1934. More than two decades later, it could be argued that the United Kingdom was almost the only developed country where historical regional unemployment rates would serve as good predictors of contemporary regional disparities (Bachtler 1994).

3.1 Regional Problems pre-1945

The analysis of UK regional problems frequently takes the 1930s as a starting point. The early part of the decade was a period of severe economic and social problems for the United Kingdom, notable for the high level of unemployment throughout the country. Unemployment levels exceeded one million during the 1920s and reached three million in the 1930s; unemployment rates ranged from around 10 percent in the 1920s to 23 percent in January 1933. The depression originated from the UK's export dependence on traditional industries (textiles, iron and steel, ships and coal) during much of the 19th century and the early 20th century. Several factors contributed to the recession in these industries – overvaluation of the pound, technological change, protectionism among developed countries and competition from developing, lower wage economies.

It was during this period that the need for government intervention in response to the difficulties of particular parts of the country was recognised much more explicitly than was previously the case. Three types of regional problem were identified: depressed industrial areas; under-developed, rural areas; and congestion in densely populated areas.

The first and clearest category of problem regions comprised the depressed industrial areas where the effects of the depression were most severe. In general, the northern parts of the country were most affected. While unemployment rates in London and the South East were 5-6 percent in the 1920s, rising to 15 percent in 1932-3, Scotland, Wales, Northern England and Northern Ireland had rates of 12-15 percent in the 1920s, increasing to 25-35 percent in 1932. The rise in unemployment reached its height in the regions dominated by the 'staple industries' – coal, ship-building, iron and steel and textiles - such as the coastal areas of North East England, West Cumbria, Central Scotland, South Wales and Northern Ireland as well as parts of Merseyside and Lancashire. In these areas, unemployment averaged 40 percent of the employed labour force in 1933 and, in individual towns, ranged from 50 to 90 percent (McCrone 1968).

In some respects, the depression represented an intensification and widening of long-standing problems. Although they were the source of national prosperity, the 'staple industries' were associated with unstable regional economies subject to periodic, prolonged and widespread unemployment during the 19th century. Subsequently, the collapse of these industries resulted in acute economic distress and unemployment.

The problems of the depressed industrial areas during the inter-war period were compounded by geographical and structural disadvantages. Most areas were peripheral relative to the centres of economic growth (in southern England) and the shift in trading patterns away from the Atlantic to Europe. Further, the industrial areas were disadvantaged by their economic structure. The growth of manufacturing employment in new engineering and consumer goods industries favoured locations in the south and east of the United Kingdom, the area which also predominated in service activities such as commerce, banking, finance and government (Martin 1989).

The second type of problem region comprised areas of rural depopulation and underdevelopment, in particular the Highlands and border areas of Scotland, Mid-Wales, South West England and parts of Northern Ireland (and, prior to 1922, the whole of Ireland). This was a much more long-standing regional problem, already evident in the early and mid 19th century, but which was only accorded occasional special legislation.

Lastly, a regional problem that was evident before the Second World War, but which grew in importance after 1945, was social and economic congestion in densely populated areas, especially in the South East, where the London metropolitan region was the largest urban concentration in Western Europe. The congested South East and the Midlands were seen as excessive concentrations to the detriment of the depressed areas.

3.2 The Long Boom: 1945-1973

Following the Second World War, reconstruction and the promotion of exports encouraged a period of exceptional economic growth. By 1955, the British economy was, in employment terms, one of the most highly industrialised economies in the world. However, even during the post-war period, there were frequent balance of payments problems based on fundamental economic weaknesses of poor competitiveness, inadequate profitability and slower growth, together contributing to lower productivity increases in comparative international terms.

In spatial terms, the Second World War and the immediate post-war period were associated with a reduction in regional inequalities in economic activity. It is estimated that, over the period 1939-47, there was an 'accidental or planned' redistribution of industry involving a loss of 350,000 jobs from South East England and the Midlands to other parts of the United Kingdom, particularly to the North West, the North, Wales and Scotland.

The period following post-war reconstruction, from 1947 onwards, was extremely favourable, economically, for the most parts of the United Kingdom. The repeat of severe regional distress, characteristic of the inter-war years, was prevented by 'demand management' to maintain full employment, and nation-wide social welfare policies to reduce the effects of unemployment. The period 1951-73 has been referred to as the 'Long Boom', when inter-regional imbalance was less important and the UK unemployment rate remained at a very low level, rarely exceeding three percent. Indeed, with national unemployment (at times) as low as one percent, it was argued that the higher levels of unemployment in certain regions provided a significant labour reserve. This

was a factor of considerable importance to UK governments concerned with potential UK growth constraints resulting from insufficient labour supply.

Although minor by comparison with the pre-1939 period, regional disparities in unemployment and income continued. Even between 1945 and 1947, London and the South West had begun to regain some of the industrial employment lost during the War. During the 1950s and early 1960s, much of the economic growth in manufacturing was concentrated in the central and southern parts of the United Kingdom, notably the industrial conurbations of London and Birmingham and the surrounding regions (South East and Midlands). By contrast, many other regions declined in relative terms, particularly Scotland, the North West, Yorkshire, Northern Ireland, Wales and parts of the South West, although only ten of the country's 62 sub-regions recorded absolute decline during this period. In relative terms, the differential rate of growth represented a clear shift southward, and by the mid-1060s, the south and west of Britain had emerged as the country's major concentration of manufacturing (Martin 1989).

The year 1966 is generally seen as a 'watershed' for UK industrial employment (manufacturing, mining and construction) at which time employment in industry was at a record level of 11.5 million people, of which manufacturing accounted for 8.97 million employees. Over the preceding 1959-66 period, manufacturing employment had increased by 400,000 jobs, whereas subsequently manufacturing employment declined by 580,000 jobs between 1966 and 1971 and by a further three million up to 1984. After 1966, the pattern of spatial employment change in manufacturing was characterised by the dispersion of employment and a reversal of pre-1966 trends. The five major industrial conurbations – London, the West Midlands, Manchester, West Yorkshire and Clydeside - lost some 540,000 manufacturing jobs during the second half of the 1960s; nearly all the declining sub-regions were clustered along the London-Lancashire industrial belt. Most peripheral sub-regions, however, experienced net manufacturing employment growth.

3.3 Deindustrialisation and Tertiarisation: 1973-1980s

During the 1970s and 1980s, the UK economy can be characterised by two major trends in employment. First, the period was marked by a decline in manufacturing jobs. Manufacturing employment fell from 7.6 million to 4.9 million between 1972 and 1991 (a fall of 35 percent), with most of the jobs being lost over the 1979-87 period.

Second, there was a major rise in service employment. Service industry employment rose by two million between 1971 and 1984, increasing the service share of total employment from 53 to 65 percent, particularly with respect to female and part-time jobs. Three groups of services were mainly responsible for this growth: services related to the growth of leisure and recreation; public services such as education, notably during the 1970s; and private producer services such as banking, finance and business services.

The importance of these changes in industrial structure is deemed highly significant: "What has been underway for the past decade and a half [1973-88] is not some mere inflexion or disturbance of the 'post-war norm', nor simply a major recessionary crisis, albeit a particularly prolonged one, but arguably a transition to a new phase of economic development" (Martin 1989). This structural shift to a new phase of economic development has been labeled as 'deindustrialisation', implying negative features such as job losses in manufacturing industry, lack of international competitiveness and deficits in the balance of trade. Others refer to 'post-industrial change' denoting a more positive

structural progression towards more efficient knowledge and technology based industries, greater productivity and predominance of professional and technical employment.

Third, technological change had a great impact on virtually every industry: "the wave of technological innovation, based primarily on micro-electronics and information processing, that began in the early 1970s and which is generating a number of new industries and transforming the operation of existing ones" (Martin, 1989). Technological ability, rather than productive capacity, became a key factor in determining business competitiveness, with significant implications for the nature of both manufacturing and service employment within industries.

These processes of deindustrialisation, tertiarisation and technological innovation together contributed to major changes in the economic, social and spatial organisation of the United Kingdom. Industrial decline affected not just individual industries but virtually the whole manufacturing sector in the older industrialised regions, especially in the North West and West Midlands. More than one-quarter of manufacturing jobs were lost nation-wide, a figure rising towards one-third in the North West, North Yorkshire-Humberside, Scotland and Wales. Job loss in the manufacturing sectors was far lower in some of the southern regions. Equally important, the regional distribution of new employment creation in the service sector was very uneven: nationally, service employment increased by an average of 6.4 percent, but with figures in excess of 10 percent in East Anglia, the South West and Scotland.

Lastly, a further spatial issue began to be recognised during the 1970s: the plight of the inner city areas of the major conurbations. Environmental dereliction, poor quality housing and infrastructure and social deprivation were combined with an eroding manufacturing base reflecting a prolonged period of out-migration of both people and businesses. Indeed, there was a widespread perception that the United Kingdom suffered from an 'urban problem' rather than a 'regional problem'.

4. Recent Trends: 1980s to 2000

The decade of the 1990s was characterised, initially, by recovery from the fluctuating economic cycles of the 1980s and early 1990s, involving two major recessions and a period of very high growth in the mid/late 1980s, and then a period of prolonged, almost unbroken economic growth from 1993 with relatively stable economic conditions.

4.1 Employment

In 2002, the UK civilian labour force was 29 million, comprising around half of the UK population. The employment rate constituted 74.1 percent. In recent years, employment growth for the country as a whole has averaged about six percent per year.

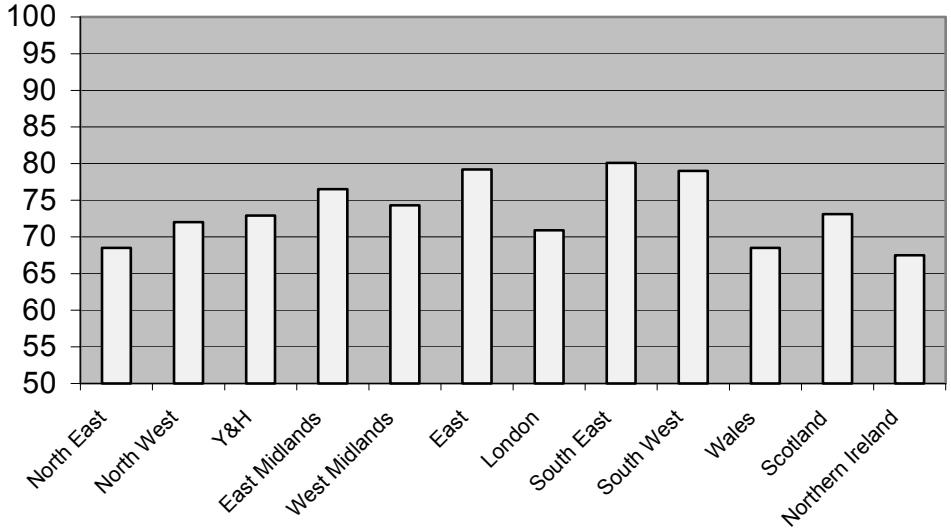
Among the UK regions, regional employment change has been highly differentiated. Employment growth has consistently been higher in southern regions (especially the South West and Eastern region) than in northern regions (such as the North East, the North West and the West Midlands). The principal exceptions to the trends were: the South East and East Midlands during the 1986-94 period, when employment growth temporarily slumped before resuming again from 1994 onwards; and Northern Ireland, where the labour force has generally grown faster than the UK average across the period. Similarly, employment rates have remained highest among southern regions (see Figure 1) – notably the South East (80 percent of the available workforce in 2002), the

South West and Eastern regions (79 percent) and East Midlands (77 percent) – while lowest in Wales (69 percent), North East England (69 percent) and Northern Ireland (68 percent).

The regional differences have largely been related to industrial structure. The southern regions have a much higher proportion of employment in the fast-growing business and financial services sectors, initially in the South East but spreading during the 1980s and 1990s to neighbouring regions such as the South West and Eastern region. In contrast, several northern regions have been marked by a continued, unrelenting decline in traditional industries over the last two decades, especially in coal and steel production as well as many other manufacturing sectors. There has, however, been some convergence of sectoral employment structure over the last decade, as the regions previously dependent on the declining, traditional industries have at least partially restructured.

All regions have experienced common trends in the changing sectoral structure of employment. A significant loss of manufacturing jobs was felt throughout the country during the 1980s and 1990s, although the impact was disproportionate in some areas. For example, the Midlands and northern regions had a greater dependence on manufacturing in the industrial structure – consequently, in areas such as the West Midlands, the loss has been particularly severe, with the result that the region no longer has the UK's highest share of manufacturing in the regional labour force. This loss of manufacturing jobs in the northern regions was further compounded by the loss of public service employment, a process that initially began by central government cuts but was accelerated in the late 1980s and early 1990s following the reorganisation of local government and the pressure to cap local spending. Since 1999 there has been a reversal of the decline in public sector employment, as the increases in public expenditure in health and education have started to feed through into the labour market.

Figure 1: Regional employment rates in the UK, 2002 (%)



Source: Office for National Statistics, Regional Trends 37. Table 5.18. Based on Labour Force Survey.

At the same time, positive growth has taken place in private services in all regions, nearly doubling the share of regional labour force in some regions, such as the North East. Job creation in services has been more marked in southern than northern regions,

largely as a result of the diffusion of service sector employment from the South East. Nevertheless, the combined effect of declining secondary and expanding tertiary employment has been to make the employment structure within regions more similar than was the case two decades ago (see Table 1). The division into a manufacturing-based 'north' and a services-dependent 'south' is no longer applicable. Consequently, the East Midlands has a considerably higher share of manufacturing employment than Scotland and Northern Ireland, and the North East is equal to the South East in terms of the importance of private services as a source of regional employment.

Where regional differences are more visible is in terms of dependence on specific sectors. For example, many southern regions account for the majority of advanced manufacturing and producer service jobs – especially high-tech engineering, research and development and financial/business services employment – which is associated with concentrations of higher professional and managerial occupational classes. Other regions, such as Yorkshire & Humberside and Wales, appear to have very small shares of high-technology activity. Both high-tech and producer services are most strongly represented within local labour markets in and around London and westwards from the capital as far as Bristol – the so-called 'M4 corridor'. However, during the late 1980s and early 1990s, electronics employment grew rapidly in Scotland, Wales and the North West, largely buoyed by substantial inflows of foreign investment into these regions.

Table 1: Regional employment structure in the UK, 2000 (employees in employment [(1)])

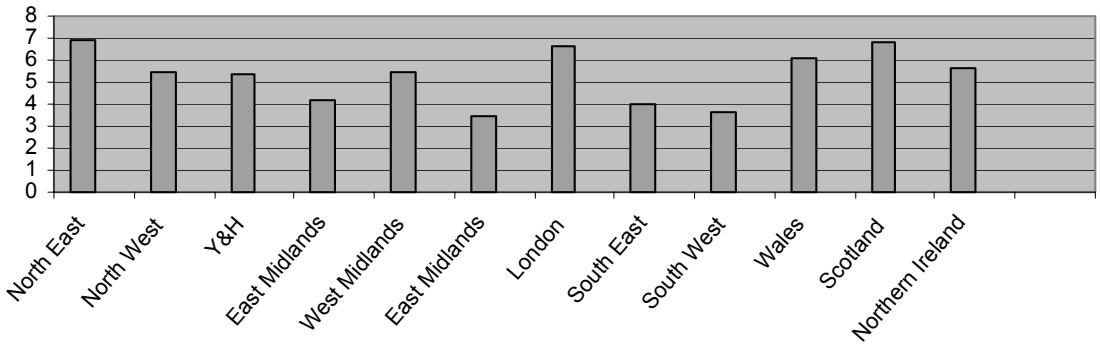
Region	Agriculture & other primary sectors (%)	Manu-facturing (%)	Distribution, catering, repairs (%)	Financial & business services (%)	Public sector [(2)] (%)	Whole economy ('000)
North East	0.9	18.2	21.9	12.6	29.6	962
North West	0.7	17.6	24.6	15.9	25.9	2,835
Yorks/Humb	1.2	18.4	23.9	15.2	25.6	2,079
E.Midlands	1.9	22.1	23.3	14.3	23.9	1,732
W.Midlands	1.0	21.6	23.4	15.5	23.6	2,286
East	1.8	15.0	25.7	19.5	21.7	2,231
London	0.2	7.1	21.8	33.6	19.6	4,053
South East	1.2	12.1	25.7	22.9	22.3	3,645
South West	1.8	15.0	26.2	16.3	26.5	2,010
Wales	1.5	18.6	22.3	12.1	30.3	1,078
Scotland	2.8	13.6	22.7	16.8	26.9	2,229
Great Britain	***1.3***	***15.1***	***23.9***	***19.7***	***24.0***	***25,141***

Source: Office for National Statistics, Regional Trends 37. Table 5.4 Employee jobs: by industry and sex, December 2000. Notes: [(1)] percentage figures exclude some small industrial sectors; [(2)] Public administration, defence, education, social work, health services.

4.2 Unemployment

Unemployment trends in the regions have broadly followed national shifts over the past two decades – decreasing in the boom years of the late 1980s, increasing in the recessions of the early 1980s and early 1990s, and falling consistently during the mid and late 1990s. In general, while unemployment rates fluctuated significantly over the past 20 years, the range in unemployment rates stayed broadly the same – from a range of 2.6-7.9 percent in 1979 to 6.8-11.3 percent in 1996 and 3.4-9.2 in 2000, although the definitions changed considerably over the period. However, the latest figures show a contraction to a range of 3.5 percent (Eastern) to 6.9 percent (North East) (see Figure 2).

Figure 2: ILO Regional unemployment rates in the UK, 2002 (%)



Source: Office for National Statistics, Regional Trends 37. Table 5.1.

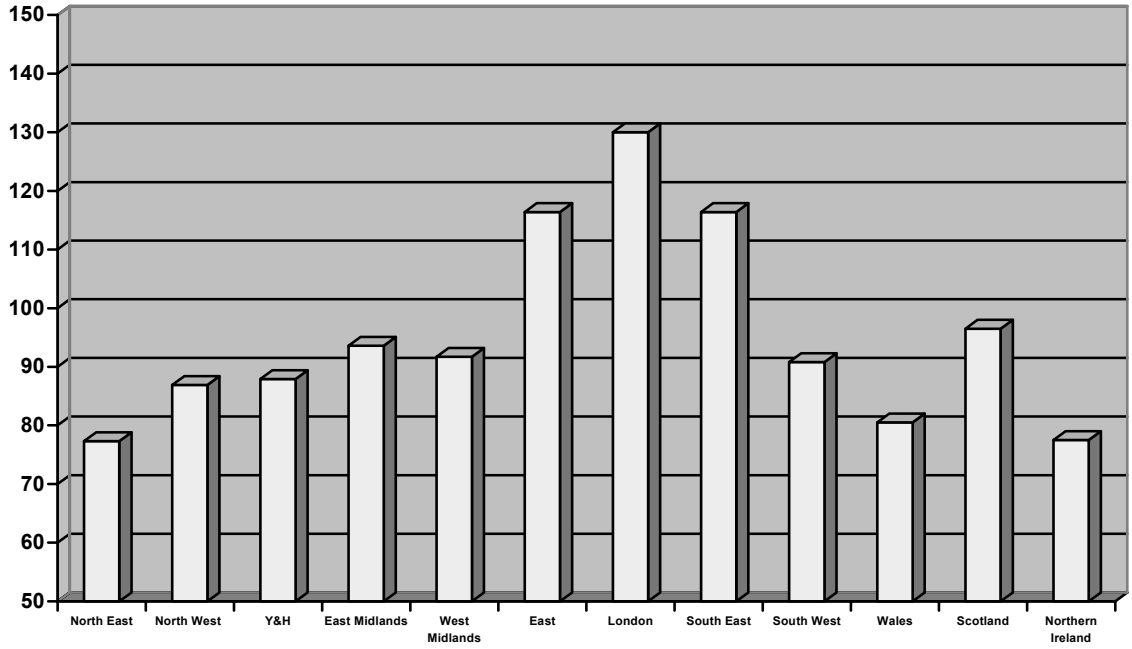
The ranking of regions has not altered appreciably over the period (apart from the emergence of Greater London as having severe unemployment problems). Although temporary differences in the direction of unemployment change can happen due to the 'staggered' effects of macroeconomic conditions on regional economies, in general, the northern regions have suffered higher than average unemployment rates (particularly Northern Ireland), whereas southern regions (notably Eastern region and the South West) have tended to have lower unemployment. This point is reinforced by trends in long-term unemployment – regions such as Northern Ireland and the West Midlands have experienced persistent problems, in contrast to regions such as Eastern region and the South West.

To this picture, a few caveats should be added. First, some regions have noted countervailing trends in recent years. For example, the long-term unemployed accounted for smaller shares of total unemployment in Wales and Scotland than in many southern regions. Second, while these trends have been consistent between regions, at sub-regional level a more complex picture emerges. Despite the South East's overall prosperity, pockets of Greater London have among the worst unemployment (overall as well as long-term) in the country. Similarly, the North West contained one of the largest regional unemployment 'black spots' (Merseyside) as well as the lowest unemployment areas in the country (eg. Windermere).

4.3 Economic Trends

Regional differences in GDP per head are long-standing; the level of disparity in the late-1990s was similar to regional differences in the early 1970s and mid-1980s. Prosperity is concentrated in the South East and its immediate surrounds, as the region has consistently by the highest per capita output by far, much higher than the next region (Eastern region) – see Figure 3. The least prosperous regions have been Wales and Northern Ireland (the latter in large part due to special circumstances). The regional ranking has not altered substantially over the years, though there have been significant changes in the West Midlands and Northern Ireland (both with particularly faster-than-average growth) and the North East, North West and Yorkshire & Humberside (with per capita income growth declining significantly in recent years).

Figure 3: Regional GDP per head in the UK, 1999 (UK=100)



Source: Office for National Statistics, Regional Trends 37. Table 12.2 GDP at current basic prices.

The regional pattern of income and expenditure has been similar to the pattern for GDP per capita. The South East and London have very major income differentials with the rest of the country because of their disproportionate share of high-wage occupations and labour shortages. There is some evidence that income and expenditure differentials widened between the north and south of the country during the period 1979-1986 and contracted during the period 1987-93. Since then, differentials have widened again over the 1994-99 period. Over the recent period, consumer expenditure, like output, increased faster in the North East, the North West and Northern Ireland, but remained stable or declined in the East Midlands, the South East and the South West.

As a measure of regional business performance, the rates of new firm start-up and failure provide a useful indicator of entrepreneurship and small firm survival. Across the UK, there is considerable disparity in firm formation rates. There is evidence that the least prosperous regions, especially those specialising in traditional heavy industries have had a poor record of new firm formation, whereas the more prosperous regions

have enjoyed relatively high rates of new business growth. The anomaly appears to be Northern Ireland, where the low level of per capita income has not lowered the new firm formation rate significantly below the national average.

5. Conclusion

The 'regional problem' in the UK has become increasingly difficult to define and categorise in simple terms. As in other countries, processes of regional and local restructuring have created a complex map of socio-economic change. During the 1980s, a frequently used concept was that of the 'North South divide', contrasting the differences between two parts of the country divided by a line from the River Severn to the Wash. The divide was justified mostly by comparisons of regional economic performance. Thus, during much of the 1980s, the 'south' – or more accurately, the South East, for many indicators – benefited more from new job creation, especially in private services, and suffered proportionately less from the loss of manufacturing jobs than the 'north'. Other measures include differences in employment type, socio-economic class, income, wealth and social welfare, and voting patterns.

The concept of the North South divide was, however, rather crude. First, it tended to conceal the more basic division between Greater London and the rest of the country. The importance of the capital in the UK's economy has long been attested, but it appears to have grown over the past two decades as service sector activities (particularly in London) have accounted for increasing shares of national income generation and employment. London's economic significance extends to the surrounding regions because of commuting and business relocation patterns, giving rise to the image of an undifferentiated, wealthy 'south'.

Second, the concept has ignored dimensions such as differences in industrial structure, the urban-rural shift and local decentralization. Although there were broad, north-south differences in social conditions and economic prosperity, disparities in variables such as unemployment and earnings were (and are) often greater between localities within regions than between regions. Local inequalities grew during the 1980s – between new and old industrial areas, between prosperous service-based towns and manufacturing communities, and between deprived inner cities and suburbs – dualisms which have occurred across the country.

For a period in the early 1990s, the north-south concept was superseded by different economic development trends. During the 1988-92 period, unemployment grew faster in the southern England than in other parts of the UK, leading to problems of congestion and overheating. In the recession of the early 1990s, the South East suffered a deeper and more prolonged contraction of economic growth and rise in unemployment than the 'northern' parts of the country.

Since the late 1990s, the issue of the 'north-south divide' has returned as a major issue for political, policy and academic debate. There is currently considerable disagreement in the UK about the nature of the regional problem. The view of the UK Government is that there is no longer a fundamental divide between northern and southern parts of the UK. Indeed, in 1999 it published a report (Cabinet Office 1999) specifically to disprove this point, arguing that variations within regions – in GDP per head, unemployment, mortality rates, educational standards etc – are much more striking than those between regions. It also noted the problems suffered in parts of the south of England,

justifying EU assistance under Objective 1 (Cornwall) or Objective 2 (London, Thanet, South West England). This argument has been used to justify a reduction in efforts to promote a redistribution of economic activity through an equity-based regional policy. Instead, the UK Government has pursued a redistributionist social policy (focusing on child poverty, old-age poverty etc) and an efficiency-oriented regional development policy encompassing all UK regions (through the creation of regional development agencies and regional economic strategies in every English region).

It is undoubtedly true that there are important intra-regional variations, but the fact remains that regional inequalities between different parts of the country persist. Three points are worth (re)stating here.

First, there are important differences between northern and southern Britain. Unemployment rates in southern regions are below the national average; the northern regions are above the UK rate. The unemployment rate in North East England is almost three times the rates in South East England. The same is true for a range of competitiveness indicators relating to GDP per capita, earnings, business birth rates, SME activity, corporate R&D, knowledge-based businesses, business performance etc. As the Centre for Advanced Studies in the Social Sciences has noted, the southern regions of England are driving economic growth in the UK. London and the South East are performing as well as the 'top ten' most competitive nations (such as Singapore or Switzerland), while Wales, Yorkshire and the Humber and North East England are ranked alongside nations such as Hungary, Chile and Israel (Competitiveness Index, Stationery Office 2001).

A similar conclusion was derived by Huggins (2003) in his 'UK Index of Competitiveness', encompassing indicators such as business density, knowledge-based businesses, economic participation, productivity, earnings and unemployment:

> "While the regions of London, the South East and Eastern, all perform above the UK average, the South West, East and West Midlands, Scotland, the North West, Yorkshire and the Humber, Wales, Northern Ireland and the North West are all significantly under-performing when compared to the UK average……it is the three 'south-eastern' situated regions of England that are driving economic growth in the UK."

Second, regional unemployment data may understate the extent of labour market differences. An issue of increasing concern to regional scientists in the UK has been the scale of hidden unemployment (Fothergill 2001, Turok; Edge 1999, Anyadike-Danes et al. 2001). They have sought to counteract the common perception of the UK as a low unemployment country, the implication that regional differences have narrowed and the presumption that the residual areas of high unemployment suffer from a lack of jobs rather than a lack of skills. Instead, it is argued that, in response to major job losses in manufacturing over the past 20 years, there has been a progressive withdrawal of people (men in particular) from the labour market.

Associated with increasingly stringent controls on entitlement to unemployment benefits, men and women have been diverted onto sickness benefits. This is evident in the high numbers of people on sickness benefits in areas of high job loss and also in economic inactivity rates. 'Hidden unemployment' among male sickness benefit claimants has been estimated to range from 7.2 to 8.6 percent of males of working age in Scotland, North West and North East England and Wales, with a total of 863,000 hidden unemployed across the UK as a whole.

Looking at the employment rate (see Figure 1), it is evident that there are big differences between regions, suggesting that the unemployment rates of 'northern' regions seriously understate the reality of job shortages (see Table 2). It has been estimated that raising the employment rate of the northern regions to the level of the south of England would require the creation of an additional 850,000 jobs, a figure which would increase to 1.4 million to raise the employment rate to the level of the South East (Anyadike-Danes et al. 2001).

Table 2: The 'Employment Gap' in the UK

	Additional jobs required to raise the employment rate:	
Region	**To average of the South**	**To average of the South East**
East Midlands	40,000	110,000
West Midlands	120,000	210,000
Yorkshire	100,000	190,000
North West	190,000	310,000
North East	140,000	180,000
Wales	150,000	200,000
Scotland	110,000	200,000
	850,000	1,400,000

Source: Anyadike-Danes et al. (2001)

In responding to these challenges, regional policy in the UK has witnessed something of a renaissance in recent years. Since 1997, the UK Government has promoted a new approach to regional policy based on decentralisation. Responsibilities for economic development, along with other policy powers, have been devolved to new government institutions in Scotland, Wales (and intermittently) Northern Ireland. In the English regions, regional development agencies have been established, charged with drawing up and delivering multi-sectoral regional economic strategies that aim to improve regional competitiveness. Although these are important steps towards ensuring a more strategic, coherent and region-specific approach to economic development, it is not clear how the new regional policy will reduce the north-south divide in competitiveness or employment. Indeed, providing regional development support for all regions may exacerbate rather than reduce disparities. With the prospect of losing a substantial share of Structural Funds receipts after 2006, a debate is now under way about the future direction of UK regional policy with a view to improving both competitiveness and cohesion.

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Economic Development and Regional Disparities in France

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1. The Special Features of Regional Development in France

Over the last decades, the studies performed on the agglomeration phenomena within the European Union seem to show a noticeable increase in the geographical concentration of the majority of industrial (Brülhart 1998, Amiti 1998, Midelfart-Knarvik et al. 2000) or technological activities (OST 1997), thus confirming a forecast from the geographical map for the new economy, according to which the sectors with growing yields tend to be the ones with the greatest geographical concentration. In parallel, and contrary to the observations one can make on the national level, the regional specializations seem to intensify, thus stressing the polarizations within the nations.

For France some recent studies provide quite similar results, although the development sometimes seems equivocal and often depends on the geographic scale used. Having presented some figures on the geographic distribution of the economic activities and of the employment over the national territory, we shall study the evolution of the geographic concentration in the activities and specialization of the French regions.

1.1 The Geographical Distribution of Economic Activity and Employment

If you go down to the level of the eight zones of the studies and regional planning (Zones d'études et d'aménagement du territoire = Z.E.A.T.), corresponding to the nomenclature NUTS-1 (see map in the annex), the region of Paris (Île-de-France and Bassin Parisien) gather, in 2000, 44.3% of the national GDP (table 1), i.e. the same percent-

age as in 1980. But during this period, the weight of Île-de-France has clearly grown, now 28.6% compared to 27%, whereas that of the Bassin Parisien (Champagne-Ardenne, Picardie, Haute-Normandie, Basse-Normandie, Centre and Bourgogne) has noticeably diminished, now 15.7% compared to 17.3%. However, as far as the employment is concerned, the weight of the region of Paris has decreased, in particular since 1990.

Concerning the provincial zones, one will state a decrease in the Northern and Eastern parts of France. The weight of Nord-Pas-de-Calais and of the Eastern regions (Alsace, Lorraine, Franche-Comté) decreased from 15.2% in 1980 to 13.4% in 1990 and 2000 for the GDP. The same applies to the employment. All of the other zones, that of the Western and Southern parts of the country, make progress and represent a total of 42.4% of the GDP in 2000, compared to 41.5% in 1990 and 40.5% in 1980, and a total of 46.2% of the national employment compared to 45.2% in 1990 and 44.5% in 1980.

Thus, the last twenty years are marked by the continuance of a phenomenon already at work during the preceding decades (Uhrich 1987), marked by a reinforcement of the economic weight of Île-de-France, the West and the South of the country to the prejudice of the former industrial zones of Northern and of Eastern France.

Table 1: Distribution of the GDP and employment (NUTS-1)

Z.E.A.T.	**GDP**			**Employment**		
	1980	**1990**	**2000**	**1980**	**1990**	**1999**
Île-de-France	27.0	28.5	28.6	22.2	23.0	22.2
Bassin Parisien	17.3	16.3	15.7	18.2	17.5	17.3
Nord-Pas-de-Calais	6.3	5.4	5.5	6.3	5.8	5.9
Est	8.9	8.0	7.9	8.8	8.4	8.4
Ouest	10.8	10.8	11.1	12.8	12.6	12.9
Sud-Ouest	8.7	9.2	9.2	10.1	10.2	10.5
Centre-Est	11.1	11.4	11.8	11.9	12.0	12.1
Meditérannée	9.9	10.4	10.3	9.7	10.4	10.7
France	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Source: I.N.S.E.E.						

If one now passes to an even smaller geographical level, that of the regions (NUTS-2), in 2000 eight regions gathered more than two-thirds of the national GDP. Île-de-France largely dominates with 28.6% of the national GDP. It is followed by the regions Rhône-Alpes (10% of the GDP), Provence-Alpes-Côte d'Azur (7%), Nord-Pas-de-Calais and Pays de la Loire (5%), Aquitaine, Bretagne and Midi-Pyrénées (4%). This shows the extent of the enormous difference existing between Paris and the rest of the country: the GDP of Île-de-France represents nearly three times that of the most important provincial region, Rhône-Alpes. Add to this that the weight of the region of Île-de-France has been steadily growing from the beginning of the 1980s up to the middle of 90s: 27% of the nation-wide total in 1980, 28.5% in 1990, 29.1% in 1996. In 2000, it fell back to 28.6%.

In terms of employment, the same observation can be made, but the weight of the eight main regions seems to be a bit less overwhelming (64.5% of the nation-wide total, compared to 68%), in particular for Île-de-France, which in 1999 only represents 22.2%

of the nation-wide employment, compared to 28.6% for the value added. But there are important differences in productivity between the French regions, Île-de-France largely dominates over the other dynamic regions of the hexagon like Alsace, Rhône-Alpes and Provence-Alpes-Côte d'Azur (the only one in Table 1 with the GDP/employment ratio exceeding the unit).

1.2 The Localization of the Economic Activities

Table 2 shows, for each of the eight Z.E.A.T. that form the Metropolitan territory, the distribution of the value added and of the employment among the three main economic activities, i.e. agriculture, industry (including the building trade) and tertiary sector.

The centre of gravity of the agriculture is located in the Western regions (Bretagne, Pays de la Loire and Poitou-Charentes), of the Sud-Ouest (Aquitaine, Midi-Pyrénées and Limousin) and of the Centre-Est (Rhône-Alpes and Auvergne), which dispose of 54.7% of the employment and 45.6% of the value added. Table 2 shows that the portion these regions hold in the nation-wide value added has been slightly progressing since 1980, 45.6% compared to 45.2%.

Table 2: Geographical distribution of the economic activities in France (NUTS-1)

Z.E.A.T.	Agriculture		Industry		Tertiary sector	
	Value added	Employment	Value added	Employment	Value added	Employment
Île-de-France	2.0	1.8	20.4	16.9	32.5	25.3
Bassin Parisien	30.2	24.3	19.7	20.4	13.7	15.8
Nord-Pas-de-Calais	3.9	3.8	6.6	6.4	5.1	5.8
Est	7.4	5.7	9.9	10.7	7.1	7.8
Ouest	20.9	25.0	12.2	14.2	10.4	11.7
Sud-Ouest	16.8	19.0	8.5	9.5	9.1	10.3
Centre-Est	7.9	10.7	14.6	14.2	10.9	11.5
Meditérannée	11.1	9.7	7.9	7.7	11.1	11.8
France	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Values added: year 2000 – Employment: on 1.1.1999
Source: I.N.S.E.E.

The industry is rather concentrated in the region of Paris and in Northern and Eastern France, which represent 56.6% of the industrial value added and 54.4% of the national employment. The region of Paris, Île-de-France and Bassin Parisien (Champagne-Ardenne, Picardie, Haute-Normandie, Centre, Basse-Normandie and Bourgogne) only concentrated 40.1% of the nation-wide industrial value added in 2000 compared to 42.4% in 1980 (table 3), due to the important decline of Île-de-France, 20.4% compared to 23.1% in 1980. Nord-Pas-de-Calais and the Eastern regions (Lorraine, Alsace and Franche-Comté) saw their portion noticeably diminish. The other regions made progress, particularly the West, the Sud-Ouest and the Centre-Est.

Table 3: Evolution of the geographical distribution of the economic activities (values added in %)

Z.E.A.T.	Agriculture		Industry		Tertiary	
	1980	2000	1980	2000	1980	2000
Île-de-France	3.3	2.0	23.1	20.4	31.0	32.5
Bassin Parisien	28.3	30.2	19.3	19.7	15.0	13.7
Nord-Pas-de-Calais	3.9	3.9	7.5	6.6	5.7	5.1
Est	8.2	7.4	10.7	9.9	7.8	7.1
Ouest	21.8	20.9	10.7	12.2	10.5	10.4
Sud-Ouest	14.8	16.8	8.1	8.5	8.8	9.1
Centre-Est	8.6	7.9	12.6	14.6	10.3	10.9
Meditérannée	11.1	11.1	8.0	7.9	10.9	11.1
France	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Source: I.N.S.E.E. data						

Almost a third of the tertiary activity is located in the region Île-de-France, the portion of which has increased since 1980. The region of Paris concentrates 46.2% of the national tertiary value added. The North and the East have greatly fallen behind, 12.2% of the total in 2000 compared to 13.5% in 1980. The opposite applies to the Southern regions of the country, Sud-Ouest, Centre-Est and Meditérannée, which have been making very strong progress, 31.1% of the total value added in 2000 compared to 30% in 1980.

1.3 Concentration and Dispersion of the Economic Activities

In order to get a more complete and precise survey on the evolution of the concentration or dispersion of economic activities over the whole of the French territory, it is necessary to have recourse to synthetic indicators that take into account the whole of the activities. The obtained results depend, as we shall see, on the scale which you apply and of the indicator used, and it is also advisable to be prudent with respect to the conclusions one may draw.

If one goes to the regional level, the indicators of the geographic concentration, calculated from the values added of the French industry, show that the former noticeably grew during the 1980s, but diminished over the following decade (table 4). At the end of the 90s, the industrial activities seem geographically more dispersed than they were in 1980.

These results are not in contradiction with those obtained by other methods which show a depression of the entropy indicator from 1975 to 1982, then it rose again for the years 1989 and 1992 (Santi 1997). Thus, the geographic concentration would have diminished in France since the first oil crisis at the beginning of the 1980s, then would steadily have progressed up to this date.

Table 4: The geographic concentration of the French industry on the regional level (values added)

	1980*	1990	2000
Herfindahl indicator	0.0919	0.0961	0.0845
Entropy indicator	0.901	0.883	0.900
* without Corse			

But as the region could be a too large scale for the appropriate assessment of concentration and the dispersion of the movements of the economic activities, it is wise to verify these results on a smaller geographical level. Then the results present greater contrasts. At the level of the French departments and if one uses the employment as a variable, the geographic concentration of the economic activities has decreased in France between 1978 and 1992 (Houdebine 1997). The different indicators used show a greater dispersion of the staff of all companies on the national territory (table 5). This may be explained by the replacement of traditional industries relatively concentrated by tertiary activities with a better spatial distribution that has been observed in numerous regions during this period. This dispersion movement has been verified for the industry and for the services, but the latter seem globally less concentrated than the industrial activities, their sites being rather in the departments with larger territories and greater urbanization.

It also seems that the high-technology sectors, generally considered as those with localisation depending the most on external technological factors, thus connected with agglomeration economies from which they can benefit, do not escape this disengaging movement. Of the various top sectors studied, only two, the manufacturing of semiconductors and the pharmaceutical specialties, show an above-average geographic concentration. The other, in particular the fabrication of electronic or informatics material, are scattered all over the French territory.

A study for the year 1993, proceeding from paid staff of the French industrial companies (Maurel; Sédillot 1997), shows a strong spatial concentration, on the department level, for numerous industries. By means of an indicator derived from the Ellison-Glaeser index, it is possible to identify three major types of industries with strong geographical localization in France: the extractive industries, the localisation of which is determined by the access to raw materials, the traditional industries (textiles, shoes and leather), the implantation of which often dates back to the Industrial Revolution, and the high-technology industries, for which the external factors of proximity seem strong. Contrary to that, certain industries are revealed as little concentrated, particularly the automotive industry and the machine tool industry.

If you go to an even smaller spatial level, that of the employment zones, it seems that the geographic concentration of the activities made progress between 1984 and 1992 (Table 5). This is connected to the movement of renewal of the enterprise stocks, the foundation of new enterprises that took place in the most dynamic zones of employment, which did not always correspond to those where the disappearances of enterprises were located.

Table 5: Evolution of the geographical concentration in France (Gini indicators)

Geographic concentration	**1978**	**1992**
Departments:		
- All activities	0.2165	0.2053
- Industry	0.2420	0.2398
- Tertiary	0.1745	0.1687
Employment zones	0.2691	0.2702
Source: M. HOUDEBINE (1999)		

This phenomenon is confirmed in the case of a region of former industrialisation like Nord-Pas-de-Calais, where one may observe a clear decrease of the geographic concentration of the industrial employment between the various employment zones since the middle of the 1970s (Dormard 2001). Today, the productive structures of the different industrial basins seem better diversified, even if strong local specificities seem to be maintained. On the other hand, for the tertiary activities, a process of polarization seems under way in the regions since the first oil crisis, particularly in favour of the zone of Lille, which risks, taking into account the growing weight of the services in the regional economic activity, to accentuate the internal imbalances in the region.

1.4 The Strong Concentration of the Innovation Activities

Several studies have shown the strong geographic concentration of innovation activities in the majority of the European nations. For France, the phenomenon seems particularly striking. Île-de-France includes the core of the French technological production. In 1997, almost 42.3% of expenses for public civil research were concentrated in Île-de-France (OST 1997), followed at very great distance by the regions Rhône-Alpes (10.8%), Midi-Pyrénées (9.6%), Provence-Alpes-Côte d'Azur (8.3%). Concerning the expenses for research and development made by the enterprises, the concentration is even stronger, as Île-de-France comprises 52.6% of these expenses compared to only 9.9% for Rhône-Alpes, 5.7% for Provence-Alpes-Côte d'Azur and 4.7% for Midi-Pyrénées. This concentration also concerns the employment: 40.1% of the staff of public research and 52.6% of the research staff of the enterprises are comprised by Île-de-France. From the preceding results that the region Île-de-France figures among the first European regions as for the number of patents granted (European Commission 2002), followed by the regions Rhône-Alpes, Alsace and Bourgogne.

Despite this potential, the number of public and private researchers diminishes since 1992, as does the number of scientific and techniques publications as well as the patent grants. Île-de-France seems to be more and more in concurrence with other European regions, London for the biotechnology, Stockholm for the information and communication technology and Frankfort for the practical research (Ministry of Economy 2001).

1.5 Strongly Marked Regional Specializations

However, the geographic concentration of activities does not tell us anything about the sectorial specialization of each region. To appreciate this, one needs to know the distribution of the total value added (or of the employment) of the region between the different sectors, and how to compare them to that observed in the whole nation. Thus, Table 6 allows to precise the specializations of the different French regions for the years 1980 and 2000.

It is possible to divide the Metropolitan territory in three major parts:

1. Western and Central France, where the agriculture remains relatively important. The agriculture represents 2.8% of the nation-wide value added, but in Aquitaine the portion of the agriculture is 6.3%, in Bretagne, 5.7%, in Poitou-Charentes 5.6%, in Pays de la Loire 4.8%, etc. However, in these regions the weight of the agriculture has diminished during the last twenty years. On the other side, one will note some regions in Northern France, for which the weight of the agriculture was found to be particularly elevated, Champagne-Ardenne with 11.1% and Bourgogne with 7.1% of the total value added, which is explained by a specific activity of these regions, the viticulture. The weight of the agriculture has also made progress in these regions during the two last decades.
2. Northern and Eastern France rather industrial. If the part of the industry (including the building industry) in the total value added in 2000 was at an average of 25.6% in France, in strong decrease since 1981, it achieves 39.4% in Haute-Normandie, 36% in Franche-Comté, 32.3% in Alsace, 32.4% in Picardie, 30.9% in the Nord-Pas-de-Calais, 32.1% in Basse-Normandie, 30.7% in Lorraine, 29.1% in Champagne-Ardenne. But certain regions not located in the North and the East have preserved an industrial sector that represents a still relatively important portion of their economic activity, although in regression: Rhône-Alpes, 32% of the total value added, Centre, 31.1%, Pays de la Loire, 31.6%, Auvergne, 30.7%.
3. Southern France and Île-de-France turned more towards the services. The portion the tertiary sector holds of the total value added is 71.6% in France in 2000, strongly increasing since 1980, but 84% in Corse, 77.6% in Provence-Alpes-Côte d'Azur, 76.2% in Languedoc-Roussillon, 72.5% in Midi-Pyrénées. These regions Île-de-France should be added where the portion of services in relation to the total activity amounts to 81.5%. Contrary to this, and this is explained by the relative importance of the agriculture or of the industry, the portion of the services seems weak in certain regions of the North and of the East of the nation: 58.4% in Haute-Normandie, 59.7% in Champagne-Ardenne, 60.6% in Franche-Comté, 62.6% in Picardie, etc. but this tertiary sub-specialization of these regions does not prevent a strong progression of the portion the services hold of the regional value added.

For a more global view of the movement of regional specialization in France, it is wise to use a synthetic indicator, for instance a Gini indicator (Houdebine 1999). Applied to the regional level for the period 1980-2000, proceeding from the values added of the sectors, it shows that the specialization in 15 for 22 regions has approached that stated on the national level. This in particular applies to the old industrial regions of the North and East, which saw disappear a great part of their traditional activities, and to the majority of the more rural regions of the West, which have been industrialized. But certain regions have increased their specialization during this period, particularly Île-de-France and Rhône-Alpes. Globally, the structures of activity of the whole of the French regions have noticeably approached each other during the last twenty years.

On the level of the departments and using the employment as variable, one will observe the same phenomenon. The average specialization of the French departments decreased from 1978 to 1992 (Houdebine 1999), as these depend ever less on their main sectors. The regression of the traditional industries in the very specialized departments of Northern or Eastern France and their replacement by more diversified activities explain this evolution. However, this does not mean that all of the French departments saw their specialization diminish and that the differences have faded.

Table 6: Evolution of the sectorial distribution of regional values added

	Agriculture		Industry		Tertiary	
Regions	**1980**	**2000**	**1980**	**2000**	**1980**	**2000**
Alsace	4.2	2.4	43.0	32.3	52.9	65.3
Aquitaine	6.4	6.3	36.0	23.3	57.7	70.5
Auvergne	5.4	4.0	40.5	30.7	54.1	65.2
Basse-Normandie	8.0	4.8	36.9	32.1	55.1	63.2
Bourgogne	6.8	7.1	39.3	27.1	53.9	65.7
Bretagne	8.8	5.7	31.2	25.2	60.0	69.1
Centre	7.0	4.4	40.9	31.1	52.1	64.6
Champagne-Ardenne	9.5	11.1	39.6	29.1	50.9	59.7
Corse*	-	2.4	-	13.6	-	84.0
Franche-Comté	4.0	3.4	49.6	36.0	46.4	60.6
Haute-Normandie	3.1	2.1	46.3	39.4	50.6	58.4
Île-de-France	0.5	0.2	31.5	18.3	68.0	81.5
Languedoc-Roussillon	8.8	4.9	28.9	18.9	62.3	76.2
Limousin	6.9	4.1	35.8	27.1	57.3	68.8
Lorraine	3.4	2.5	42.9	30.7	53.8	66.8
Midi-Pyrénées	7.5	4.1	31.2	23.5	61.2	72.5
Nord-Pas-de-Calais	2.6	2.0	43.7	30.9	53.8	67.1
Pays de la Loire	7.4	4.8	40.1	31.6	52.6	63.6
Picardie	7.3	5.0	42.7	32.4	50.0	62.6
Poitou-Charentes	8.3	5.6	34.2	26.6	57.5	67.8
Provence-Alpes-Côte d'Azur	3.0	2.3	30.3	20.2	66.7	77.6
Rhône-Alpes	2.7	1.5	41.9	32.0	55.4	66.5
France	**4.1**	**2.8**	**36.7**	**25.6**	**59.2**	**71.6**

* in 1980, the Corse has been attached to the statistics of the region Provence-Alpes-Côte d'Azur.
Source: I.N.S.E.E. data

Contrary to this, at the level of the employment zones, one states a noticeable increase of the specialization of these zones, in particular the most urbanized ones (Houdebine 1999). This result does not seem to be confirmed in the case of a region like Nord-Pas-de-Calais where, on the contrary, you may observe a better diversification of the industrial employment in the different zones of the region, with some exceptions like the zone de Saint-Omer, which is characterized by the growing domination of one activity, glass (Dormard 2001). But the region Nord-Pas-de-Calais is a particular case, as it has been marked by the disappearance of numerous traditional industries.

Thus, on the retained scale, the results differ very little. If one goes to a large spatial level, the region or department, one may state an attenuation of the territorial specializations during the two last decades. On the other hand, on a smaller geographical level, the employment zone for instance, the specializations are intensified, which tends to confirm the existence of local phenomena of a polarization of activities.

1.6 External Exchanges Marked by the Regional Specializations

The analysis of the foreign trade of the nations of the European Union shows that the development of the exchanges within the EU did not entail a strong specialization of the Member States: The trade between the branches has diminished since the beginning of the 1980s to the profit of the exchanges within the branches, which are based on a vertical differentiation of the products. The internal European exchanges of today are, above all, cross exchanges of products of different qualities (Maurel; Mouhoud 2001). But the nations differ with respect to the technological content and the quality of the exchanged products. France proved itself specialized in high technology and in the products of the middle and upper assortment (Fontagné; Freudenberg 1999).

The characteristics of the foreign trade of the French regions seem still to be little known. However, one may think that the accentuation of the regional specializations noted above should be reflected in foreign trade. The same applies to a region like Nord-Pas-de-Calais (Dormard 2001) the exchanges, imports and exports of which consist of products belonging to the same branches with, however, the exportations reflecting the regional specializations (steel and iron industry, automotive, chemistry, metallurgy, agriculture and food, textiles, glass, etc.).

1.7 Demographic Dynamics of the Western and Southern Regions

In the March 1999 census, France had 60,186,184 inhabitants, 58,518,748 for the Metropolitan area and 1,667,436 for the overseas departments (Départments d'Outre-Mer = D.O.M.). Compared with the previous census (1990), the increase is 0.37% a year on an average, slightly less as in the previous intervals between the census: 0.46% between 1975 and 1982 and 0.51% between 1982 and 1990.

The demographic gain of the period 1990-1999 seems to have a very unequal distribution. The South and the West of the country concentrate the core of the surplus of inhabitants: the Meditérannée region gained 439,000 inhabitants, the West 318,000 and the Sud-Ouest 222,000 (Table 7). These three zones include more than half the growth of the national population chart. But in these zones the natural gain seems very weak and only ensures a surplus of 142,000 inhabitants. Thus the migrational movements explain the core of the demographic dynamics of these regions.

Contrary to this, the regions in the North and East of the country, Île-de-France included, did only account for 15.3% of the demographic growth of France between 1990 and 1999. But they represent more than three quarters of the total natural surplus. All of them are characterized by negative migrational balances. Let us note the slight decline of Île-de-France, which concentrates 18.7% of the French population, compared to 18.8% in 1990.

Table 7: The distribution of the population on the French territory (1999)

Z.E.A.T.	Population		Natural surplus natural (thou-sands)	Entries minus losses (thou-sands)
	Total (1/3/1999)	1990/ 1999 (thou-sands)		
Île-de-France	10,952,011	+ 291	+ 786	- 494
Bassin Parisien	10,452,978	+ 185	+ 277	- 92
Nord-Pas-de-Calais	3,996,588	+ 32	+ 177	- 145
Est	5,161,580	+ 134	+ 176	- 42
Ouest	7,768,326	+ 318	+ 142	+ 176
Sud-Ouest	6,170,985	+ 222	- 23	+ 245
Centre-Est	6,954,285	+ 282	+ 227	+ 56
Meditérannée	7,061,995	+ 439	+ 92	+ 347
Metropolitan France	**58,518,748**	**+ 1,903**	**+ 1,853**	**+ 50**
Source: I.N.S.E.E. data				

2. Regional Disparities in France

Having presented and analyzed the main characteristics of the regional development in France, we are now able to ask the question of the regional disparities in France, in particular of their evolution over last decades.

2.1 Economic Growth with Very Unequal Distribution

Table 8 provides some data on the growth of the French regions. From 1980 to 2000, the French GDP has progressed by an average of 2.1%, the period 1990-2000 being characterized by a gross slowdown of the growth as compared to the preceding period, 1.6% compared to 2.5%. The employment has only increased by an average of 0.2% a year.

The differences in growth between the regions seem considerable. From 1980 to 2000, the GDP of Lorraine has only increased by an average of 1% a year, whereas it has progressed by 2.7% in the region Midi-Pyrénées.

The regions with weak growth are rather situated in the North of the country, Lorraine (1%), Champagne-Ardenne (1.2%), Franche-Comté (1.3%), Nord-Pas-de-Calais, Picardie and Haute-Normandie (1.4%), regions of former industrialization in a situation of reconversion. Some of these regions have, however, improved their performances a bit during the most recent years, in particular Haute-Normandie, Nord-Pas-de-Calais, whereas others seem to intensify the decline, Champagne-Ardenne, Lorraine, Picardie.

Contrary to that, the regions with strong growth are, apart from the region Midi-Pyrénées (2.7%), Languedoc-Roussillon (2.6%), Rhône-Alpes (2.5%), but also Île-de-France and Bretagne (2.3%), Aquitaine and Pays de la Loire (2.2%). Concerning Île-de-France, one will note the decrease by half its growth rate during the last decade.

Table 8: Evolution of the GDP and the employment in the French regions (yearly averages)

Regions	GDP (volume)			Employment	
	1980-2000	1980-1990	1990-2000	1980-1990	1990-1999
Alsace	2.1	2.0	2.1	+ 0.4	+ 0.7
Aquitaine	2.2	2.9	1.6	+ 0.4	+ 0.6
Auvergne	1.7	1.7	1.7	- 0.7	- 0.1
Basse-Normandie	1.9	2.0	1.7	- 0.2	+ 0.2
Bourgogne	1.8	2.5	1.1	- 0.2	+ 0.0
Bretagne	2.3	2.8	1.9	+ 0.0	+ 0.6
Centre	1.7	2.6	0.9	+ 0.1	+ 0.1
Champagne-Ardenne	1.2	1.8	0.6	- 0.4	- 0.2
Corse*	-	-	2.1	+ 0.8	+ 1.5
Franche-Comté	1.3	1.3	1.3	- 0.6	+ 0.1
Haute-Normandie	1.4	0.4	2.4	- 0.1	+ 0.2
Île-de-France	2.3	3.1	1.6	+ 0.6	- 0.1
Languedoc-Roussillon	2.6	3.2	2.0	+ 1.0	+ 1.0
Limousin	1.7	2.1	1.2	- 0.7	- 0.1
Lorraine	1.0	1.0	0.9	- 0.7	0.0
Midi-Pyrénées	2.7	3.8	1.6	+ 0.7	+ 0.6
Nord-Pas-de-Calais	1.4	1.0	1.8	- 0.6	+ 0.4
Pays de la Loire	2.2	2.3	2.1	+ 0.1	+ 0.6
Picardie	1.4	1.8	1.1	- 0.3	+ 0.3
Poitou-Charentes	1.9	2.4	1.5	- 0.2	+ 0.3
Provence-Alpes-Côte d'Azur	1.9	2.5	1.2	+ 0.9	+ 0.3
Rhône-Alpes	2.5	3.1	2.0	+ 0.6	+ 0.5
France	**2.1**	**2.5**	**1.6**	**+ 0.2**	**+ 0.2**

* In 1980, Corse has been attached to the statistics of the region Provence-Alpes-Côte d'Azur.
Source: I.N.S.E.E. data

2.1.1 The Per Capita GDP: the Contrast Paris-Province

Taking into account the important differences in size between the regions, the better indicator for the appreciation of the development level and their evolution is the per capita GDP. To begin with, let us state that France in 2000 had an indicator of 101.1, slightly above the European average (European Commission 2003), but in continuous decline for a decade: 108.4 in 1988, 104 in 1995. If you record the average of the years 1998 to 2000, France, with an indicator of 99.8, was found on the 12th position of the 15 nations of the European Union before Spain (indicator 81.2), Portugal (70.7) and Greece (67.6).

In this context, all of the French regions saw their position in Europe weaken, with only the regions Île-de-France, Alsace and Rhône-Alpes exceeding the EU average in 2000. Two regions (without overseas departments), Corse and Languedoc-Roussillon, are localized in a range between 75% and 80% of this average and five between 80% and 85%.

In the interior of the French territory, the differences seem considerable, especially between Île-de-France and the other French regions. In 2000, the per capita GDP of Île-de-France is by 53% higher than the average of the French regions, the second region, Rhône-Alpes only having an indicator of 102.6 (table 9). Moreover, the relative situation of Île-de-France has very clearly improved during the last twenty years: + 42.1% as compared to the French average in 1980, + 48.2% in 1990 and + 53% in 2000. Thus the gap has deepened between the capital and the province. On the European level (NUTS-2), Île-de-France had the 4th position in 2000, but it had been on the 2nd position in 1983 (indicator of 168) and on the 3rd in 1993 (indicator of 166). The decline of France on the European level also affects the capital region.

If one brings the per capita GDP in relation to the number of employments instead of the number of inhabitants, the advantage of Île-de-France seems less overwhelming (+ 28.5% as compared to the national average), which may be explained by the elevated employment rate of the population of Île-de-France (table 8) and the not unimportant number of employments in Île-de-France occupied by the residents of the neighbouring regions.

Table 9: Evolution of the per capita GDP in the French regions

Regions	**1980**	**1990**	**2000**
Alsace	102.6	102.7	101.2
Aquitaine	90.4	90.2	88.9
Auvergne	81.6	81.3	83.6
Basse-Normandie	86.8	86.6	83.1
Bourgogne	90.4	89.3	89.3
Bretagne	82.5	83.0	82.3
Centre	93.0	91.1	87.7
Champagne-Ardenne	104.4	100.0	92.8
Corse*	-	70.5	78.9
Franche-Comté	95.6	92.0	86.2
Haute-Normandie	102.6	94.6	97.5
Île-de-France	142.1	148.2	153.0
Languedoc-Roussillon	76.3	77.7	75.9
Limousin	77.2	77.7	80.3
Lorraine	93.9	87.5	81.6
Midi-Pyrénées	80.7	81.3	86.0
Nord-Pas-de-Calais	86.8	81.3	80.8
Pays de la Loire	87.7	86.6	87.0
Picardie	95.6	85.7	81.0
Poitou-Charentes	80.7	80.4	78.5
Provence-Alpes-Côte d'Azur	91.2	90.2	89.5
Rhône-Alpes	100.0	97.3	102.6
France	**100.0**	**100.0**	**100.0**

* in 1980, Corse has been attached to the statistics of the region Provence-Alpes-Côte d'Azur.
Source: I.N.S.E.E. data

2.1.2 Differences in Income With Greater Limitation

The per capita GDP is not an indicator of the income level of each inhabitant. In particular as it does not take into account the retained amounts and the transfer income. Thus, other indicators are needed for the appreciation of the regional disparities in terms of income.

Concerning, for instance, the average gross yearly income, the region of Île-de-France had, in 1998, an indicator of 125.4, and the difference between the extreme regions (Île-de-France and Corse) was 29.1% (Colussi et al. 2001). But this difference is explained, for a large part, by the strong presence in Île-de-France of sectors that pay elevated salaries and employ an important proportion of senior staff. If you eliminate the structural effects connected with the distribution of the employment by sex, age, socio-professional category, sector of activity, etc., the gain (the proper effect) of Île-de-France is brought to about 10% (Rasolofoarison 2000). However, if one retains the net taxable income, which includes, apart from the wages and the income of the self-employed professions, the income of the capital, the gap deepens in favour of Île-de-France, which again raises up to the indicator of 133 for the year 1994.

One of the most appropriate indicators for measuring the effective standard of living of a population is the available gross income of the households, which comprises the primary income plus received transfer payments (social benefits) and reduced by the taxes and by the social contributions paid. That is the portion of the income that remains at the disposal of the households for consumption and savings. Calculated by inhabitant, in 1996, the avaiable gross income of the households of the region Île-de-France had an indicator of 117.9, the region the least favoured, the Nord-Pas-de-Calais, having an indicator of 86.5.

If you calculate the variation coefficients (ratio standard deviation/average) of the different income types for the whole of the regions, the following figures will result: per capita GDP, 0.1789, net taxable income, 0.1152, average annual net wages, 0.0805, available gross income per inhabitant, 0.0625. Thus, the more you take into account the transfer and redistribution mechanisms, the more the differences between the regions are reduced. These mechanisms allowed to adjust or invert the effects of the spatial concentration of the produced wealth.

Thus, for instance, for the region of Île-de-France, the difference between the taxes collected and the government expenses from which this region benefits represents 3 to 6% of its per capita income (Davezies 2001). If you add the effects of social contributions and benefits, the effects of which are at least equivalent, you will measure the importance of this redistributing effects. Moreover, if the part of Île-de-France in the national per capita income did not stop to increase, its share in the income of the French households has constantly diminished since the 1960s.

2.2 Convergence or Divergence of the French Regions?

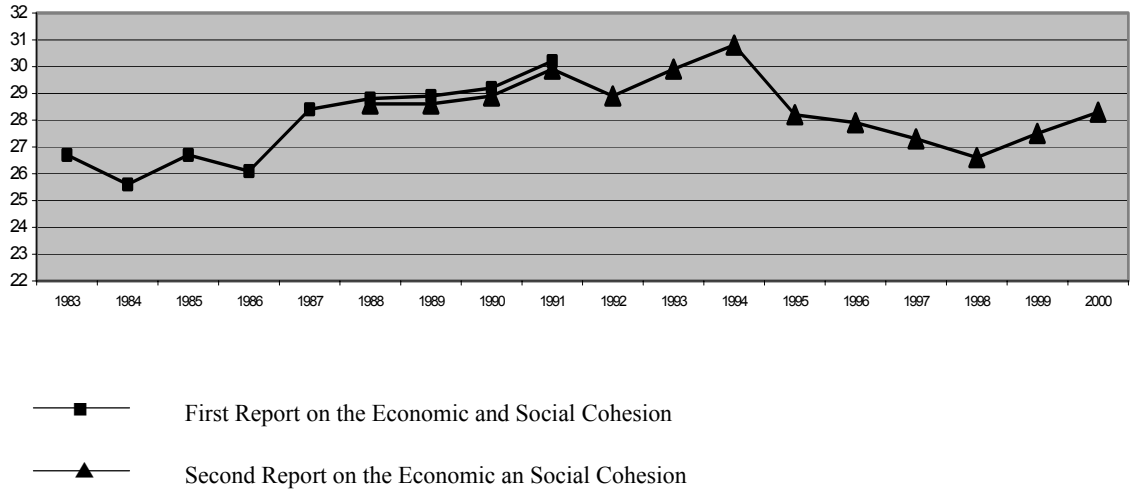
We provided the preceding data for a rather static appreciation of the regional disparities in France. For a more dynamic vision, it is prudent to study the eventual processes of convergence or divergence between the regions. The empirical studies on this question generally treated the whole of the European regions. From these studies we shall retain the parts that concern France, adding our own estimations. At first we shall discuss the question of the evolution of the differences development levels of the different regions calculated proceeding from indicators of dispersion (σ-convergence), then we

discuss the question of the capacities for a recovery of the regions the least developed (β-convergence).

2.2.1 Very Strong and Increasing Disparities

A convergence of the development levels of the different regions could be stated if the variation coefficient (standard deviation/average) of the per capita GDP of the French regions has diminished over the time (σ-convergence). Chart 1 represents the evolution of the regional disparities in France from 1983 to 2000. After a strong growth from 1983 to 1994, they went back, at the end of the 1990s, to the initial level before making progress again these last years. The regional disparities seem stronger today than twenty years before.

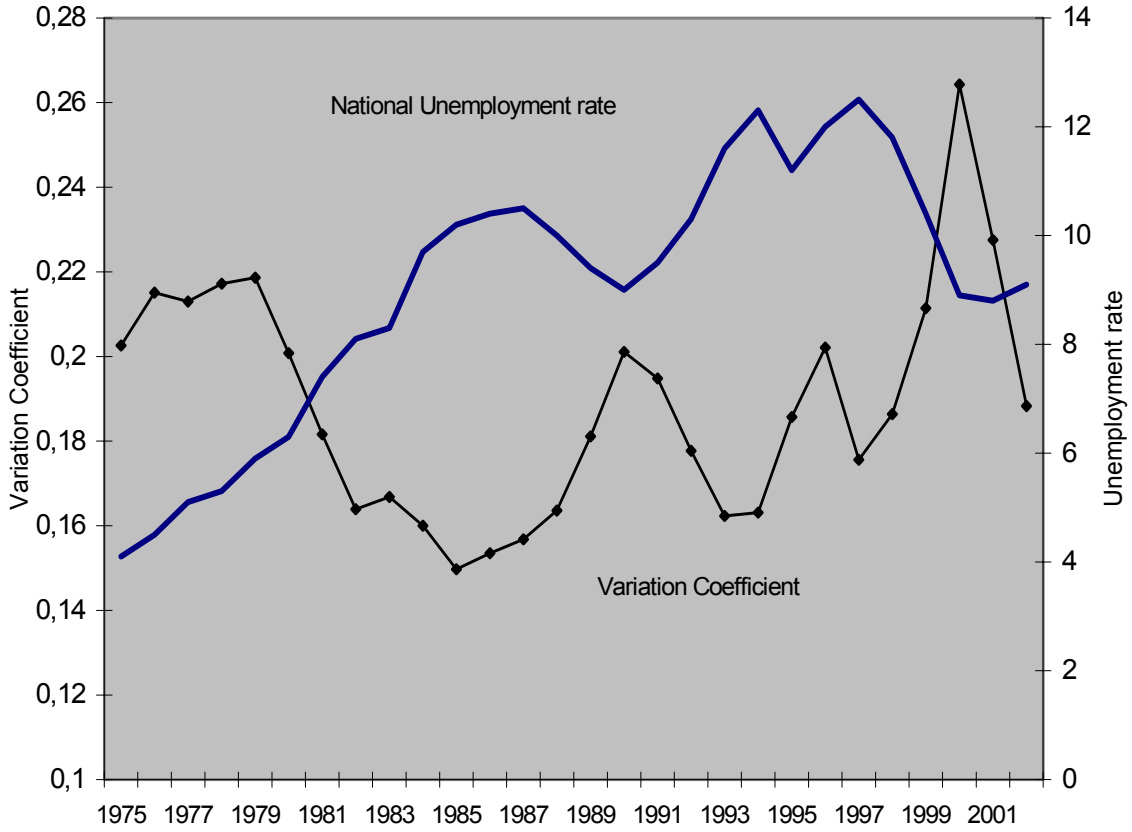
Chart 1: The evolution of the regional disparities of the per capita GDP en France (1983-2000) (coefficients of variation)



Let us state that, if you bring the evolution of the interregional disparities in relation with those of the weight of Île-de-France in the national per capita GDP, one states a clear parallelism between the two, which allows to verify that the problem of the inter-regional inequalities in France remains largely a question of Paris-province (Davezies 2001).

If you now examine the regional convergence in terms of unemployment, chart 2 shows that there is a certain inverse correlation between the evolution of the unemployment rate in France and that of the coefficient of variation of the regional unemployment rates. Except for the period 1975-1979, the years marked by a progression of the national unemployment correspond to a decrease of the regional disparities of the unemployment rate. This is true in particular for the period 1980-1985. Contrary to this, the periods of depression of the unemployment, the end of the 1980s or that of the 1990s in particular, were accompanied by a push of the regional disparities of the unemployment rate.

Chart 2: The regional disparities of the unemployment rate in France (1975-2002)



2.2.2 Slowness of the Recovery Process

An increase of the differences of development levels over a period does not exclude a process of recovery of the regions the least developed (β-convergence). An important deal of literature has been dedicated to this question, which has been the object of numerous empirical tests concerning the United States and different European nations, including France.

The calculations performed for the period 1950-1990, proceeding from per capita GDP of 21 French regions (Corse being attached to the region Provence-Alpes-Côte d'Azur) result, for France, in a value β comprised, following the calculations, between 0.012 (Barro; Sala-y-Martin 1995) and 0.016 (Sala-y-Martin 1996), i.e. a convergence speed of the per capita GDP of the French regions of 1.2% to 1.6% a year, as the case may be. It seems noticeably lower than the value stated in the other European nations. The process seems thus very slow, even in the most favourable case, as a convergence speed of 1.6% a year means that you would need 43 years to make half of the difference of the stationary situation disappear.

We have taken up the preceding calculations, extending the period until 2000, allowing to study the β-convergence over half a century (1950-2000), and dividing the period in several subperiods.

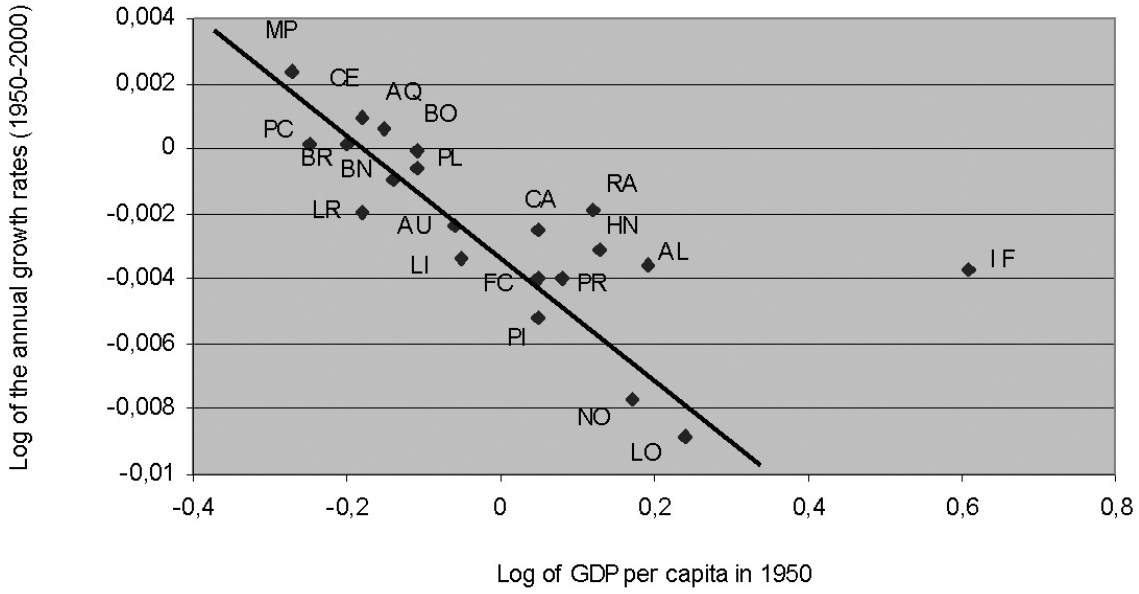
Chart 3 represents the convergence between the French regions over the period 1950-2000. The relation between the per capita GDP in 1950 and the mean growth rate from 1950 to 2000 seems quite negative, the regions with the greatest backlog having the highest growth rates. One region clearly distinguishes from the others, Île-de-France. If you set this region aside, the points seem relatively well aligned along a straight line. The coefficient β is equal to 0.016 without Île-de-France, but only to 0.009 with Île-de-France.

During the period 1980-2000, the coefficient β does not exceed 0.005 for the whole of the French regions, but it is 0.019 if you exclude Île-de-France. If you divide this period in two subperiods, the coefficients β are, for the years 1980-1990, 0.0058 with Île-de-France and 0.027 without Île-de-France and, for the period 1990-2000, 0.0084 with Île-de-France and 0.022 without Île-de-France.

In any case, even if you exclude the region of Île-de-France, the speed of convergence remains slow. It achieves its maximum over the period 1980-1990 with 2.7% a year (beyond Île-de-France), then adjusts itself to 2.2% during the last decade. If one takes into account the evolution of Île-de-France, the speed of convergence seems even slower and never exceeds 1% a year.

The analysis of the convergence may be realized by means of other variables than the per capita GDP. The use of the employment, for instance, provides the advantage of allowing to go down to a far smaller geographic level, especially the zone of employment. During the period 1982-1992, however, the speed of convergence of employment in the manufacturing industry seems very slow, 0.65% on an average, what means that a bit more than a century (106 years) is needed to make half of the difference of the stationary situation disappear (Maurel 1997). If you make use of the population as a variable, the speed is even slower, 0.16% a year. The phenomenon of convergence, however, seems more marked for the average wages in the industry with a speed of almost 5% a year.

Chart 3: Convergence of the per capita GDP of the French regions 1950-2000



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Annex: The French regions (NUTS-1 and NUTS-2)

II. Theoretical Aspects

Helmut Karl; Ximena Fernanda Matus Velasco

Lessons for Regional Policy from the New Economic Geography and the Endogenous Growth Theory

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1. Introduction

The configuration of the European Union has produced a deep transformation in all its Member States. Particularly, the geographic structure in all the area has changed with the disappearance of political and economic frontiers. Now, regions compete beyond their national borders, they compete for the European and international markets. Within this restructuring process, the spatial development in the European Union is characterised by the division between dynamic centres with high economic activity and those with low economic activity. This structure of the territory has been identified at different levels: the core-periphery divide, the north-south divide and with the process of European enlargement the east-west divide.

The regional unbalances in economic growth and in the spatial distribution of economic activities have become an unquestionable reality. However, the causes which yield in some regions to more growth than others; as well as the forces leading to spatial agglomeration are still controversial. The role of the European institutions is another relevant topic of the discussion in the political and academic arena. The regional disparities leads to the question, if they can and should influence this process. And in the case that interventions are possible and desirable, what kind of instruments are the most adequate to break with regional economic unbalances.

To deal with these issues this work considers two theoretical approaches: the economic geography theory – for the spatial aspects – and the endogenous growth theory for the growth processes. The major concern of this work is to find to what extent these studies are able to explain: a) the actual spatial organisation of the economic system in the European Union; b) the forces behind regional economic growth; c) the limits we confront when we stay with these lines of research and d) the policy recommendations derived from these two approaches.

The remainder of this work is organised as follows. The next section presents some of the main predictions of the economic geography theory regarding the effects of integration processes. This is followed by a brief review of the endogenous growth theory, approach which can provide some insights respect to the location of economic activities and, hence, in terms of the spatial development. The next section shows some of the limits of these theories followed by an empirical discussion. The last section deals with the policy implications derived from these theories.

2. New Economic Geography Theory

The understanding of the factors relevant for economic development has been at the centre of economic analysis. Different approaches have appeared with the aim to provide a framework capable to explain the process of economic growth and its distribution. One of them is the neo-classical theory. The neo-classical framework considers a world dominated by constant returns to scale, perfect competition and perfect mobility of production factors. This theory predicts that under free markets the geographical differences in income per capita and economic growth in the long-run will disappear. However as empirical evidence demonstrates these differences tend to persist over time. To correct the limitations of the neo-classical model some refinements have been undertaken. The extended approaches consider the existence of markets dominated by economies of scale and imperfect competition. Within this framework, it is now possible to analyse the persistence in the differences in standards of living among countries.

In the improved approaches the role of the economic space come also into play. Understanding the location of economic activities across a territory constitutes as well an important element in regional development analysis. When productive activities concentrate more in certain regions than in others, regional imbalances tend to emerge. Such uneven development is seen as undesirable if it has a negative effect on the economic progress and on the social and political stability of a territory. Especially, for the European Community, this aspect is of particular importance since one of its objectives consists precisely in the promotion of a balanced development of economic activities across the territory.[1] Until now, it is still not clear whether the effects of such socio-economic process induces economic activities and economic growth to concentrate in the core (central high income countries) or in the periphery (low income countries). This section summarises some of the theoretical findings of the new economic geography models.

The analysis of the role of the space and the forces driving location decisions is not a topic in economic sciences that has emerged just recently. The starting point goes back to the classical location theory. This line of research emphasised that geographical variables should be part of regional economic analysis. Besides time, the space should not be forgotten. The work of Weber, von Thünen, Christaller and Lösch among others provided the basis of this theory. They tried to build a framework able to explain a general spatial localisation pattern of production and human settlements. Distance to or access to markets (transport costs), size of the markets and their characteristics (quality of goods and services) were considered as central elements to explain location decisions and advantages from agglomeration[2].

Despite the relevance of the issues addressed by these studies, they were not included in the predominant economic theory. Transport costs were only seen as relevant for

[1] Treaty Establishing the European Community 2002 (consolidated version), Part one: Principles “Article 2”.

[2] Agglomeration is understood as the geographical concentration of economic activities and population.

those sectors where the transportation of a product represents a major part of total costs. As Kaldor noticed: "transport costs can only help to explain location in those particular activities which convert bulky goods, where transport costs are an important element, and where processing itself greatly reduces the weight of the materials processed" (Kaldor 1970: 340). One of the major deficiencies of these early studies was the absence of an adequate framework to model transport costs and agglomeration economies. With the analytical developments in the industrial organisation and international trade theories this has changed dramatically and the line of research which integrates these advances is known as the new economic geography theory.[3]

Similar to traditional regional science, the new economic geography analyses the impact of trade costs on the spatial distribution of factors and firms. These costs are seen as barriers to do business across space (Krugman; Venables 1993: 3). They exist due to physical reasons (transport and telecommunication costs), institutional arrangements (trade and fiscal policies) or language and cultural differences. In contrast to the traditional regional science, the new economic geography explains location decisions and the existence of regional clusters with economies of scale and imperfect competition. Having economies of scale implies that firms can reduce their (average) costs by increasing production output. The geographical concentration of production allows them to realise these gains.

Based on these two elements – trade costs and economies of scale – the new economic geography analyses patterns of geography concentration (agglomeration) by the interaction of centrifugal and centripetal forces. The economic geography follows Marshall 1895 who describes the elements behind these counter-acting tendencies as follows: On the one side, *centripetal forces* induce economic activities to concentrate in one or few regions. These forces are present in regions with access to large markets (market size effects) and an abundant supply of labour that offers specialised knowledge and skills.

The existence of external effects is responsible for centripetal forces. External effects appear when the output of a firm depends not only of factors of production needed internally, but also on the activities of others firms, the size of the region, the industry structure or on the proper characteristics of the region (quality and quantity of products and inputs supplied, infrastructure facilities, business environment). These external effects are also known as interdependencies among actors and can be transmitted through market (pecuniary externalities) or non-market interactions (pure or technological externalities).

The way centripetal forces operate can be summarised as follows. A region with access to a large market offers advantages for firms that produce goods subject to economies of scale. This type of firms can reduce costs by concentrating production at one site and serving other markets from that particular place. Large markets favour vertical linkages (forward and backward linkages) between producers (upstream) and users (downstream) of intermediate inputs, too. The higher variety of intermediate inputs offered reduces the cost for downstream industries. Firms take advantage of such a location because of the access to specialised labour force and because of the variety of inputs available. The high number of different firms and the proximity among them facilitates the diffusion of new ideas and technologies (knowledge spillovers), increasing the attractiveness to be located in those markets. A region with these characteristics is attractive also for consumers since the variety of products they can acquire is higher.

[3] Some authors prefer to use the term of geographical economics instead of the new economic geography. See Fujita; Thisse 1996 and Brackman et al. 2000.

At the other extreme, *centrifugal forces* spread economic activities in the space. These forces can be explained by immobile factors of production (land, specific resources, labour force) or congestion effects (pure external diseconomies) like high concentration of population, high land rents, high labour costs, crime, pollution, etc. Confronted with these adverse effects, some firms may have the incentive to locate outside such regions to avoid competition in product and labour markets; to gain access to the demand of the immobile population or to avoid any form of congestion (urban costs).

To formalise these ideas, the economic geography models consider an economy with two regions (countries). Each region has two sectors; one is perfectly competitive (agriculture) which produces homogeneous goods and the other is imperfectly competitive (industry) which produces differentiated goods. Each region has two factors of production (industrial and agricultural workers). While agricultural goods can be freely traded, firms incur in costs when they trade industrial goods. Taking into account these considerations the spatial equilibrium is determined by the level of trade costs, economies of scale and the proper characteristic of the economy.

In the model of Krugman (1991) whether or no concentration occurs depends particularly on the demand for manufactured goods (share of income on manufactured goods). When the levels of trade costs (transport facilities) are high, firms tend to disperse their production. As the level of trade costs begins to decrease due to improvements in transport infrastructure, the concentration of production becomes profitable. When the number of firms in one of the region increases, the demand for factors of production will also increase. The higher varieties of the products offered and the higher real wages in this region will attract the mobile labour. This effect will be stronger the higher the preferences of mobile workers for these products are. In this model, the interaction of these effects induces a self-reinforcing process in which economic activity concentrates in one of the locations.

An alternative way to see the forces leading to economic agglomeration is through vertical linkages between upstream and downstream industries (Venables 1993). In the previous model an increase in the number of firms in one region increases the demand for output of local firms through the expenditure of industrial workers attracted from other regions. In this model, where labour is immobile, an increase in the number of firms implies a higher variety of intermediate inputs. The firms which are intensive users of intermediate inputs in final production will move to that region. In this setting the interaction of trade costs, increasing returns to scale and the share of intermediate goods in final production drive concentration of economic activity.

The predictions derived from these models respect to the possible coexistence of an industrialised core and a de-industrialised periphery in a territory have been at the centre of the discussion in regional science. This result is especially relevant for analyses concentrated on the regional effects of market integration processes like the European Union. Within this model a closer market integration accompanied by lower levels of trade costs (transport and telecommunication costs) would give rise to a pattern of uneven development along with an increase in income inequalities among the Member States.

In the past years, some refinements in the analytical framework of the economic geography theory have been undertaken. This has helped to bring the theoretical models closer to the empirical reality. Principally the assumptions concerning the mobility of the labour force, the role of congestion effects and individuals preferences have been revised. Some studies instead of considering perfect labour mobility, assumed either no labour mobility (Krugman; Venables 1995) or partial mobility (Lammers; Stiller 2000), while others include urban costs (Junius 1999). With these adjustments, important

changes in the predictions of the economic geography models have emerged. In these extended models, as the level of trade costs begins to decrease industry concentration first increases and as trade costs continues to decrease (e.g. as the integration process proceed) concentration begins to decline. This result is represented by a non-monotonically relationship between the level of trade costs and the concentration of economic activity (Krugman; Venables 1995).

From the above review it can bee seen that the new economic geography theory offers a framework to analyse the spatial organisation of economics activities. Through the interaction of centripetal (market sizes effects) and centrifugal forces (urban costs) this line of research shows how economic agglomeration or dispersion may emerge. Crucial elements behind this process are the level of trade costs (tariffs, transport and telecommunications costs), economies of scale and the economic environment of the region or country. Considering the European integration experience, one of the tasks of the European Community is to pursuit social and economic cohesion. However if we take into account the predictions of this approach, it can not be expected that the objective of cohesion will be attained automatically. Therefore to understand the spatial effects of this process, it may be useful to consider the tools offer by the new economic geography theory.

3. Endogenous Growth Theory

Another line of research which has made important contributions in the analysis of regional development is the growth theory. This approach pays special attention to the factors relevant for economic growth, particularly human capital (education, skills, specialised knowledge) and technological progress (investment in research and development, diffusion of knowledge and innovations) as well as factors related to convergence processes. Looking at the European integration, these issues are also of great relevance since one of the tasks of the European Community is to foster a sustainable growth and convergence of economic performance across the Member States.[4] Therefore, this section reviews some of the theoretical developments of the growth theory.

The foundations of the growth theory are in the analytical framework developed by Solow (1956) and Swan (1956). In these studies capital and labour are the main factors to explain the income and the growth rate of a country. The main prediction of the standard theory is that, in the long run, income differentials disappear. This transitional behaviour is known as absolute convergence. According to this framework, countries with less capital per worker – due to the higher rate of return – will grow faster than countries with higher capital per worker.

With the development of empirical studies the predictions of the neo-classical theory were questioned. Particularly, some studies invalidated the convergence in absolute terms. This happens because countries which do not share the same economic environment (technology, human capital, saving rate, preferences and institutional framework) do not necessarily converge to the same equilibrium (income level). Therefore, with a heterogeneous sample of countries, conditional convergence instead of absolute convergence should be expected. (Barro; Sala-y-Martin 1995)

The failure to explain the persistence in the differences of standards of living is another limitation of the neo-classical growth theory. These findings motivated economic

[4] Treaty Establishing the European Community 2002 (consolidated version), Part one: Principles "Article 2".

researchers to refine the neo-classic framework.[5] At the centre of the new growth literature are endogenous growth models in which private and public preferences are taken into account (Romer 1994). In this literature two types of models can be distinguished: on the one side those models in which the accumulation of a wide variety of human capital explains growth and its persistence and on the other side those in which technological progress is at the centre of economic growth.

Human Capital and External Effects

Besides the stock of capital and labour, differences in the quality of labour (Schultz 1961), their skills and knowledge (Uzawa 1965) are considered important elements for the development of a nation. Unequal performance across countries may reflect differences in investment decisions in respect to education and training-programs. It may also reflect differences in investments in physical capital. Through investments in physical capital, some authors believe that the stock of knowledge can be increased (Arrow 1962). This process is called "learning by doing". It implies that by acquiring experience the level of productivity and as a consequence the rate of growth of a country can be increased.

Models of endogenous growth based on human capital accumulation explain differences in economic development through the presence of external effects, too (Lucas 1988). These effects emerge when the output of each firm depends not only on the human capital of its labour force, but also on the average value of human capital per worker in the economy. When firms take their investment decisions, they do not realise the effects that their actions have on the whole economy. As a consequence, the private level of investment in human capital tends to be lower than the social desirable level. An economy with this characteristics is expected to have an output level below the social optimum with a slow rate of growth.

Technological Change

A great deal of endogenous growth studies consider that the allocation of resources to innovative activities is the main reason for income and growth rate differentials across countries. This literature emphasises the importance of investments in research and development (R&D) to discover new products and improve production processes. The endogenous growth theory is not the first to recognise the role of technological change. The neo-classical theory was aware of the relevance of technological progress for growth. In the standard theory, technological change was considered as an exogenous variable. Within this framework improvements in technology were explained by public investment in R&D. However, private preferences regarding investments in R&D play also a role (Romer 1990). The development of models including private preferences requires to modify the assumption of perfect competition. This is because firms need to realise profits to cover the high investment costs that the creation of new ideas entails. In this literature, different models have been developed with the aim to capture the effects that technological improvements may have on the economic growth of a country:

Technological Change with Knowledge Spillovers

This type of externalities appear when a new idea (knowledge) can be used without any costs by other agents. When private actors know that not all the benefits of their invest-

[5] In the neo-classical framework the production function is characterized by constant returns to scale, constant saving rate, constant rate of growth of population, constant technology, perfect competition and diminishing returns to productive factors.

ments can be appropriated, their incentives to invest tend to decrease. This opens a gap between the private and the social desirable level of investment affecting the growth rate of a country (Romer 1986).

Knowledge spillovers do not always have negative effects on the economic development of a country, however. Knowledge spillovers may favour countries with low barriers to international trade, like in the case of the European Member States. The exchange of goods is seen as a mechanism which facilitates the diffusion of ideas between regions or countries. Local producers learn new techniques and new production forms (Romer 1986, Grossman; Helpman 1991). For the diffusion of knowledge, some authors believe that multinationals have a special role (Baldwin et al. 1999). Multinational firms can transmit to national producers entrepreneurial abilities and technological skills (e.g. by training programs).

An important point made in these studies is that even if countries are able to attract investments, they will not take advantages of them if under-qualified labour predominates. These countries will not have the capacity to assimilate specialised knowledge (absorptive capacity).[6] Therefore, if these countries do not increase the stock of qualified labour, they will tend to specialise in activities that demand less qualified skills.

Endogenous Technological Change

As in the case of the new geography theory, the developments in international and industrial organisation theories allowed the creation of models with endogenous technological change and in which private preferences come into play. Increasing returns to scale and imperfect competition turns to be one of the main characteristics of these models.

The basic framework to explain the mechanism in which technological change affects the level of income per capita and a sustainable growth rate, differentiates among three sectors (Romer 1990):

1) a research and development sector which produces new knowledge or ideas. The human capital of researchers and the stock of knowledge in the entire economy are the inputs of this sector;
2) an intermediate goods sector that provides differentiated inputs in an imperfect competitive market. The main inputs of this sector is capital and the new knowledge produced by the R&D sector and
3) a sector which produces goods for final consumption.

Labour, human capital and intermediate products are the inputs utilised in this sector. Within this setting, technological knowledge is considered as a non rival and partially excludable input. This means that through a patent system, the firm which creates the new idea can limit its use to other firms. Thus rival firms can not use the new idea to produce intermediate goods. Nevertheless, the actors involved in innovative activities (researchers) can use the new idea as basis to improve or to produce new knowledge (knowledge spillovers).

The framework of this model shows the relevance that human capital and the level of knowledge of the R&D sector have on the growth rate of a country. On the one side, by assigning more human capital into this sector the creation of new knowledge (ideas) can be increased. On the other side, the new knowledge increases the stock of knowledge of

[6] This ideas go back to the works of Nelson; Phelps 1966 which considers that human capital affect growth not only through innovation but also through the adoption of technologies.

the entire economy and as a consequence brings an increase in the productivity of the individuals (researchers) involved in R&D activities. Therefore, it may be expected that countries with low levels of human capital will contribute less to innovative activities and as a consequence they will tend to have a lower rate of growth.

As we can see the endogenous growth theory offers important insights to understand the differences in growth rates and its persistence among countries. The analytical tools of this theory may also be useful to analyse the process of development in the European Union. In particular, considering that both specialized knowledge and technology are heterogeneously distributed across the European territory.

4. New Economic Geography and Endogenous Growth Theories

In the past years the new economic geography and growth theories have made important contributions to explain regional differences and economic development. However the analytical framework of both theories still has limitations. (Neary 2001, Sternberg 2001, Zoltan; Varga 2002). The following points show some of them:

Location of High Technology Industries: The new economic geography models based on pecuniary externalities are not able to explain the location of high technology industries. Understanding the location of these industries matters because as the endogenous growth models show the high technology sector plays a relevant role in economic development. The access to specialised knowledge (tangible and intangible) is crucial in this type of industries. Therefore, the elements related to the diffusion of knowledge (knowledge spillovers) need to be taken into account. The frequency and the quality of interactions (connectivity) and thus on the access to external knowledge (know-how) is a vital element of such technological externalities.

Relevance of institutions: One of the main deficits of the new economic geography and the endogenous growth theories is the lack of attention paid to the institutional framework.[7] Differences in institutions as well as social and cultural factors are relevant elements to understand the economic development among countries (Sternberg 2001). Institutions determine the kind of economic activity by forming the structure of incentives within a country. Complex institutionalised markets are likely to show imperfections which might lead to lower then socially optimal levels of activities. Therefore, these theories by including this aspect may gain insights concerning the functioning of:

- Labour markets: Low mobility of the labour force is especially true for the European Union. Studies which look at labour market institutions predict that inflexible labour markets (e.g. when labour has substantial bargaining and political power) tend to reduce the mobility of the labour force, the incentives to undertake education as well as the growth rate of a country (Bertola 1994, Andersen 1997).[8]
- Innovation process: Innovation involves social and economic institutions. Different institutional rules determine whether and how effectively individual and groups are motivated to acquire new knowledge and adopt innovations (North 1996). Institutions that support R&D activities influence the building up of technological infra-

[7] In the endogenous growth literature, there exist some studies which consider the role that institutions have on the growth rate of a country (See Hall; Jones 1998).

[8] Empirical evidence shows that mechanisms of labor flexibility supported the rapid industrialization in Italy in 1970 and 1980. This permitted a substantial increase in employment consistent with productivity growth and competitiveness. With the appearance of some rigidities in the labor market at the beginning of the nineties, the adjustment capacity of the Italian labor market decreased, however. See Garonna et al.1997.

structure within countries or regions. This technological infrastructure provides the basis to facilitate innovative activity and the competitiveness of a region (Feldman 1994).

- In the innovation process tacit knowledge (know-how, intangible knowledge) plays an essential role. Social institutions (social networks between firms, private and public research institutions, inter-regional and intra-regional links, trans-border co-operation etc.) determine the way in which access to tacit knowledge occurs at the local, national and international level. In the new economic geography and endogenous growth theories the role of tacit knowledge as well as the mechanism behind its acquisition have been ignored so far.[9]

In recent years an increasing interest to integrate the new economic geography and endogenous growth theories could be observed (Walz 1995, Martin; Ottaviano 1996, Baldwin; Forsild 1999). Synergies from combining these theories can be realised since both lines of research share common elements (increasing returns of scale and imperfect competition).[10] Analytical insights in terms of the spatial effects of economic growth can be gained (Easterly 1998). Recent research suggests that factor accumulation can be a reason for the geographical concentration of production (Baldwin; Forsild 1996). At the same time, the effects of changes in the spatial organisation of economic activities in terms of economic growth can be part of the integrated models. For instance, increases in the size of the market due to the concentration of firms may affect the level of income and the rate of growth by having a positive effect on R&D activities (Romer 1990).

With the interest to take advantages of both theories quite a number of new models have appeared. As in the new geography models, in these studies, geographical concentration is determined by the interaction of centripetal forces and centrifugal forces. The main prediction of some of these studies is that economic integration may increase regional concentration of production and growth.

The basic framework of these models is similar to those of the new economic geography and endogenous growth theories. However, in the improved models differences regarding the labour force are included (skilled and unskilled labour). The production of the intermediate sector requires now specialised knowledge that depends on the level of R&D. The stock of human capital (number of ideas) determines the number of differentiated goods. Some studies assume that knowledge or new ideas spread equally within and between regions (Walz 1995), while others assume that regions differ in terms of the stock of human capital (Martin; Ottaviano 1996). Taking into account this aspect, the geographical concentration of growth and production depends on the effects that knowledge spillovers have on individuals preferences.

In the case of global knowledge spillovers production and growth spread in both regions. Global knowledge spillovers implies that once an idea is discovered, it is available to everybody. Since firms can enter without restrictions into R&D activities, as long as new firms are continuously founded, the profits in the R&D sector are driven to zero. Hence, the invention of a new idea reduces the future costs in R&D activities for other researchers in both regions. These effects induce the movement of some firms from the large region to the small one with the aim to avoid competition effects (centrifugal force) in the R&D sector.

[9] In the endogenous growth literature, recent studies have started to look at the role that tacit knowledge has on the innovation process. See Cheshire et al. 2000.

[10] For a discussion respect to the complementaries of the new economic geography and endogenous theories see Knaap, 1998.

Under local knowledge spillovers production and growth concentrate in few regions. The invention of a new idea reduces the costs of investment in R&D, but now in the region with the highest number of industries (highest stock of human capital). Thus R&D activities cluster in the region with the highest number of firms. Geographic proximity plays a relevant role because firms and research institutions can easily learn from each other. Within this framework, the rate of growth is expected to be higher the higher the level of industry concentration is. In this setting, the region which starts with less new ideas or human capital will have permanently lower income and expenditure, fewer firms in that location and therefore a lower growth rate.

In the context of the European integration (enlargement), some authors point out that potential entrant regions – even when they posses small differences (technological capacity, business environment) compared to the regions already integrated – may have the danger to end in the group of the peripheral regions (Walz 1995). Under this perspective, economic integration is seen as a polarisation force. However, there are studies which take the opposite point of view. This literature considered that economic integration by reducing the costs of trading goods and the costs of trading information supports the process of inter-regional learning spillovers across the territory and therefore economic integration is seen as an stabilising force (Baldwin; Forsild 1999).

5. Empirical Background and Discussion

In recent years, empirical studies have appeared with the aim to contrast the predictions of the new economic geography and endogenous growth theories. Particular attention has been paid to the European integration experience. Of great concern for policy makers is to find out if the benefits of this process are uneven distributed and if inequalities and divergences processes predominate. This section presents some of the empirical results.

I. European Integration Increases Divergences across Member States

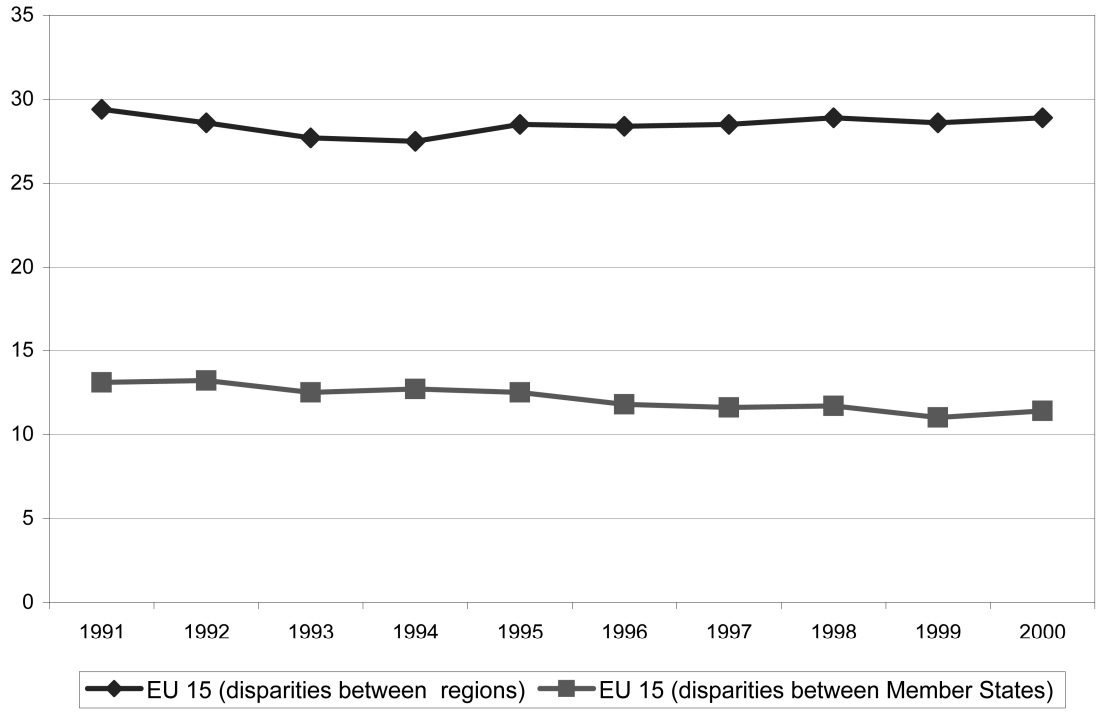
In the past years a catching up process has been observed across the Member States. Low income countries (countries in the periphery) like Ireland, Spain, Greece and Portugal have showed a positive income performance compared to the EU average income. The reduction of income disparities across Member States is product of this positive economic development. However, convergence in income per capita is less evident at the regional level. Some studies have found a low convergence across European regions. In fact, the disparities in income per capita between European regions has been higher than the disparities between Member States (see Figure 1).[11] At the same time empirical studies show that the disparities in income per capita inside the countries have tend to increase.[12] With this tendency, the structure of income disparities in the area is been determined by inequalities within countries rather than between them.[13]

[11] See the contributions of Dormard.

[12] European Commission (2000): EU Economy Review: Chapter 5 on "Regional convergence and catching-up in the EU".

[13] European Commission (1999): Sixth period report: Part 1 on "The Situation in the Regions.

Figure 1: Disparities in GDP per capita (PPS), 1991-2000 (standard deviation EU-15=100)



Source: Eurostat

Explanations for this uneven performance have been related to the concentration of benefits in the high income regions (rich urban centres, capital cities). Esteban 1994 finds empirical evidence supporting this prediction. The author shows that for the period of 1980-1989 the high income regions in the low income countries (peripheral countries) were the ones who most benefit from economic integration. These regions acquired a better geographical location due to their access to the European market. The dynamic economic performance of these regions improved their position in the European ranking and favoured the reduction of inequalities across EU countries. Nevertheless, it seems that the rapid growth of these regions increased the income inequalities at the regional level inside these countries.

II. European Integration Increases the Concentration of Economic Activity

Until now, the empirical literature has been inconclusive respect to the effects of the European integration on the geographical concentration of economic activities. Some studies show that during the period of 1976-1989, geography concentration of industrial activity increased (Amiti 1998). The types of industries experiencing geographical concentration were found to be either those with high share of intermediate inputs in final production or with high economies of scale. Besides the positive correlation between economies of scale and industry concentration, it could have been shown, that concentration happened in the central countries of the European Union (Brülhart; Torstensson 1996). This last result was also found at the regional level of the EU.

Analysing the period of the nineties, other studies show a decrease in geography concentration of industrial production (Liikanen 1999). Particularly, some industries inten-

sive in research and qualified labour have decreased their geographical concentration (Aiginger et al. 1999). Countries classified as being in the periphery of the European Union like Finland and Ireland have been able to increase their share in these industries. In the case of Ireland, the presence of multinational firms have favoured the development of this industry. This seems to go in line with the endogenous growth literature which considers multinationals as an important mechanism for the diffusion of technology, skills and entrepreneurial capabilities.

III. European Integration tends to Favour the Core Countries at Expenses of the Peripheral Countries

Until now, no empirical evidence has been found supporting a core-periphery spatial structure of economic activities at the country level for the European Union. Not only the countries in the core with high income have taken advantage from European integration, also the countries in the periphery with low income have benefited. In general, it is observed that the Cohesion Countries have increased their share in manufacturing activity. (Midelfart et al. 2000). Some countries in the periphery of Europe have increased their share of labour intensive industries (e.g. Italy and Portugal), while others have attracted industries active in the high technology sector (e.g. Ireland and Finland). At the regional level, development in the European Union are mainly some empirical studies show that the regions which have experienced a slow economic middle income regions, old industrial regions as well as rural and geographically isolated areas.

6. Policy Implications of New Economic Geography and Endogenous Growth Theories

6.1 Objectives of Regional Policy

The main objective of regional policy of every nation is to improve the socio-economic environment at the local level. Especially of great interest is to foster the economic development of the regions lagging behind. According to the economic theory, the intervention of the government through regional policy is justified by two reasons. These are either because of efficiency considerations or because equity concerns. Following the neo-classic theory, it is expected that free markets yield to an efficient allocation of resources. However when market failures come into play, the efficiency and as a consequence the social desirable equilibrium will not be attained. To correct for market failures, the active involvement of the government is considered as necessary.

Even in markets where efficiency predominates, government interventions can be justified. This is the case when income per capita is uneven distributed. Under this perspective, it is considered that by overcoming regional disparities the welfare of a nation can be increased. In the case of the new economic geography and the endogenous growth theories, policy interventions are justified under distributive considerations. The analytical framework of both theories shows the risk of increases in regional disparities. Disparities which may be observed in the spatial distribution of economic activities, in income per capita and in growth rates. Therefore, if one of the priorities of the European Community is to have a territory without polarisation, the predictions derived from these theories may provide some of the basis to fight against this process.

6.2 Policy Implications of the New Economic Geography Theory

Parallel to the interest in developing models which explain the spatial effects of regional integration processes, recent studies reveal a concern towards their implications for re-

gional policy. Following the new economic geography literature, regional policy interventions are primarily justified under distributive considerations, because the new economic geography does not analyse or indicate market failures.

For instance, Lammers and Stiller (2000) explain that these disparities may appear when both transport cost and worker's regional preferences are low. Within this scenario, the income level of the periphery is lower than the income in the core and the economic disadvantage of the integration process concentrates on the immobile labour force. Krugman and Venables (1995) show that decreasing transport costs incentives firms to move from the periphery to the centre since the market size in the centre allows to exploit economies of scale. On the other hand, decreasing transport costs makes it possible to move from the centre to the periphery, since the periphery offers lower costs for the immobile factor and less competition pressures. Therefore, integration in terms of the Krugman-Venables model leads first to divergence and then to convergence.

As the models reveal, economic integration through changes in the level of trade costs (e.g. transport costs) modifies the incentives of location of factors of production and as a consequence the income level and the employment rates across countries and regions. Looking at the predictions of this line of research respect to possible increases in regional differences two main issues are relevant for regional policy:

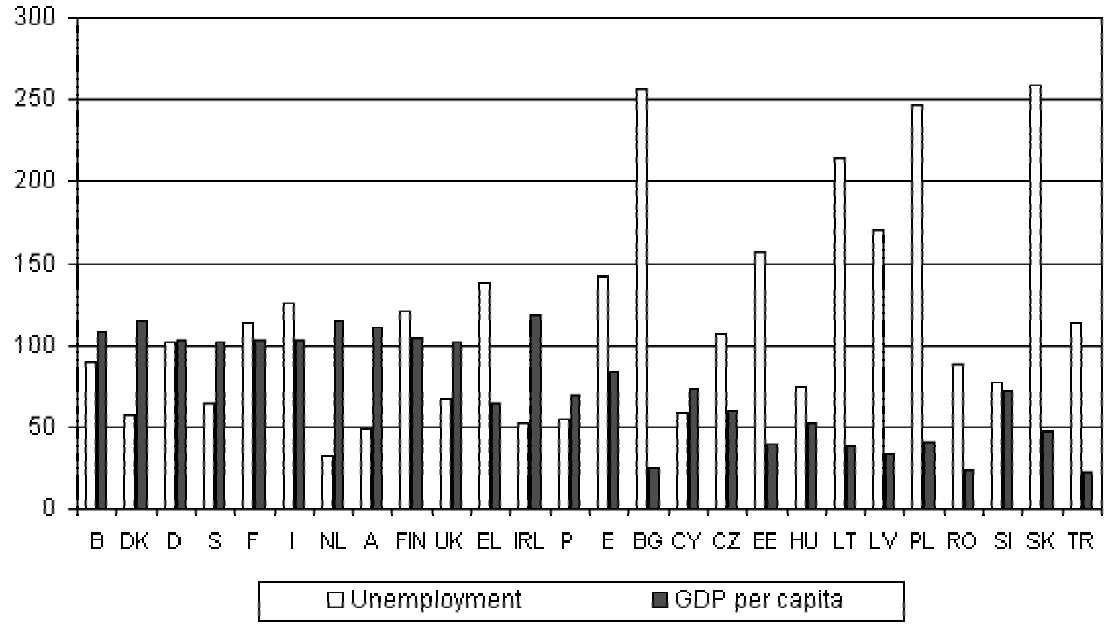
Regional policy should pay attention to the economic restructuring process. The non-monotonically relationship between industry concentration and transport costs highlights the potential transitional problems in which some European regions may be exposed. One of these transitional effects is in terms of employment. Regions suffering from the movement of industries, from industry decline or with inefficient industries are more vulnerable than other regions to increases in unemployment.

This complex environment will be accentuated with the accession of new countries since the number of old industrial areas as well as regions with a predominant agricultural base will increase. The European Enlargement will add other territorial dimensions, the east-west divide and the metropolitan-non metropolitan divide. Avoiding the widening of regional differences in terms of income and employment remain a great challenge to regional policy (see Figure 2). Within this scenario, measures supporting economic and social restructuring will continue to have a relevant role in regional policy.

Regional policy has primarily to rethink their infrastructure policies. Since the accession of Spain, Greece and Portugal in 1988, the European regional policy has paid special attention to transport infrastructure initiatives. This is because the fears towards increases in regional differences have been accentuated with the deepening of European integration. Fears which again appear because of the accession of the Central and Eastern European countries.

Traditionally improvements in transport infrastructure have been considered as a desirable policy measure to avoid income divergences. Having good transport networks is important for the well functioning of the regional economic environment. All economic agents gain from better transport connections since they can realise more efficiently their daily activities by confronting lower transactions costs (saving in travel time). At the same time, the regional productivity and capital inflows can be fostered allowing the recovery of the regional industrial base. Besides good transport, infrastructure facilitates trade between and within countries.

Figure 2: Unemployment rate (Unemployed persons as share of total active population) and GDP per capita (PPS) EU-15 and Candidate Countries 2001 (EU-15=100)



Source: Eurostat

Notwithstanding, as the regional science literature notes some caution need to be paid respect to transport infrastructure policies. In particular, the attempt to improve the economic environment in lagging regions by supporting transport infrastructure cannot be realised straight away. The attraction of capital inflows into lagging regions depends not only of the quantity and quality of transport facilities. There exist a wide range of factors which influence location decisions of the relative mobile firms. For instance, for firms the grade of substitution of inputs across regions matters. This means that the quality of the inputs and services supplied (human capital, communication facilities, financial services, research institutes) in the lagging regions need to be at least as good as the one offered to potential entrant firms in their actual location.

Recent new economic geography studies agree with this view. These studies highlight that contrary to the expectations, improvements in transport infrastructure in lagging regions may induce to more, rather than less, concentration of economic activities and therefore to increases in regional divergences (Martin; Rogers 1994). Some studies explain that when larger cities are better communicated, the cities in the centre gain better access to the rest of the regions, but the regions in the periphery gain access only towards the regions which are close to them. This type of location structure is known as a hub-and-spoke interconnection (Puga; Venables 1995). It is also emphasised that transport facilities like high speed railway lines, more than affecting industrial location, influences the location of business centres (Puga 2001).

Against this background a critical aspect which need to be taken into account is the spatial side effects that policy instruments have on international and inter-regional trade, industrial location and convergence, specially those strategies which pursuit to improve the transport networks (roads, airports, ports, high-speed trains). According to the new economic geography literature, it is not obvious that lower transport costs will promote convergence. Indeed this literature shows that the spatial equilibrium depends on par-

ticular economic characteristics of the regions and on the type of infrastructure projects. This is a very important issue which must be deeply discussed since one of the main instruments of the actual EU regional policy is the improvement in public infrastructure.

6.3 Policy implications of the Endogenous Growth Theory

Following the growth theory, three fundamental implications are important for regional policy. First, the growth rate of less developed regions is higher than the growth rate of developed areas (and their regions convergence in terms of σ-convergence). Second, the growth rate of the per capital income increases as more the economy is far away from their steady-state equilibrium (β-convergence). Third, the growth rate depends exogenously on the rate of population growth and technical progress.

Against the background of the first proposition relatively homogenous (in terms of production functions, saving rates etc.) regions converge over the time and economic integration supports this process via factor mobility. Due to different agglomeration levels, saving and population growths rates, human capital qualification levels, technological levels, economical and political institutions, relatively heterogeneous regions do not converge in terms of σ-convergence, however β-convergence is still possible. Since regional policy tries to balance regional growth, their interventions in lagging regions try to change one of the above mentioned key factors. The West European Countries and their regions are converging in terms of β- and σ-convergence. Irrespective of this trend regional policy could be still justified by interest in balanced economic growth, while against the background of the neo-classical growth model policy interventions are not well founded by market failure.

Although the endogenous growth theory deals with market imperfections, knowledge spillovers etc., there is no systematic indication for regional policy to prevent market failure. However, if agglomeration externalities, increasing economies of scale and knowledge spillovers exist, the scepticism of regional economics about the convergence mechanism is well justified. In particular the regional growth effects of product and factor mobility are not generally predictable and the results depend on specific assumptions or circumstances. Nevertheless, it seems almost certain that the political and economical gains from integration exist and the endogenous growth theory offers no arguments to stop the integration process. Therefore, regional policy is still designed to support sustainable economic growth across the European territory. But against the background of the economic theory of growth we have to rethink our regional policy approach. This leads to the question, what does divergence in regional growth cause?

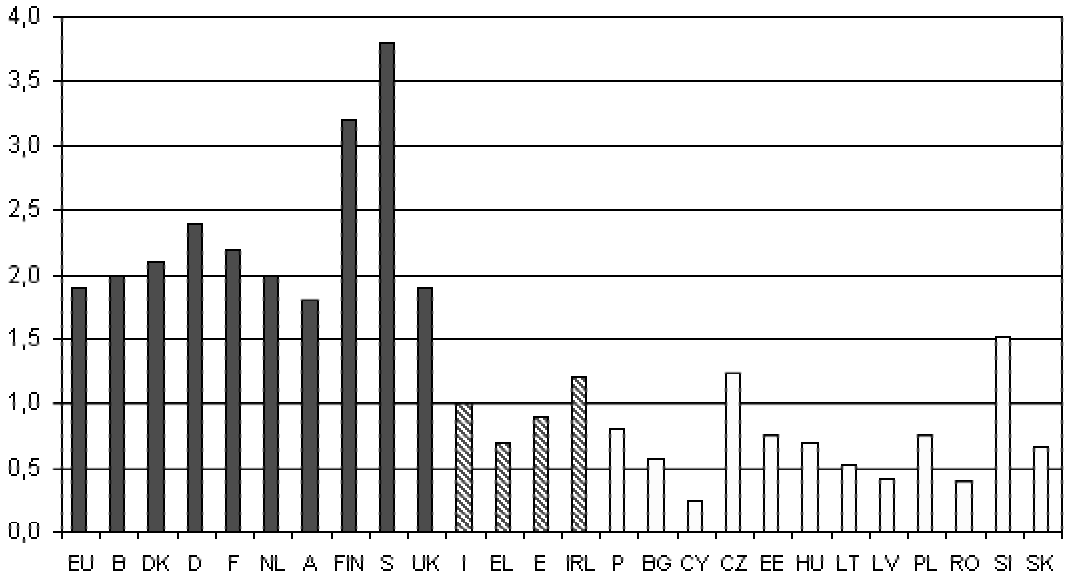
It makes still sense to reduce capital costs in regions with growth deficits, to make them more attractive for investors. However, not always a deficit of private capital primarily causes underdevelopment. It is difficult to identify the specific regional bottlenecks. Do regions have a lack in product innovation or is the production process inefficient? Do they have wages above the marginal productivity etc?

It is still necessary to improve the public infrastructure investments and public initiatives for regional development strategies, as well as qualification measures for the labour force.

The endogenous growth theory emphasises the role of knowledge for economic development. Tacit knowledge tends to increase divergence (if labour is immobile), meanwhile codified and interregional available knowledge decreases divergence. Therefore regional policy should try on one hand to reduce communication and imitation costs, because this improves the competitiveness of the entire territory. It should be also analysed the knowledge transfer via products, capital and labour mobility.

Regional policy should promote the power to innovate, because innovation has a key role in determining the competitiveness of a nation as well as its output growth. Within the European Union the expenditure in research and development is very low, there is an insufficient level of human capital involved in research activities and there is also a lack of co-operation among actors (see Figure 3). All these factors provide an unfavourable environment for innovation promotion. In particular the regional policy approach has to keep in mind the basic results of the new industrial economics and the regional specialisation and network theory (see the Contributions of Cappellin, Rollet).

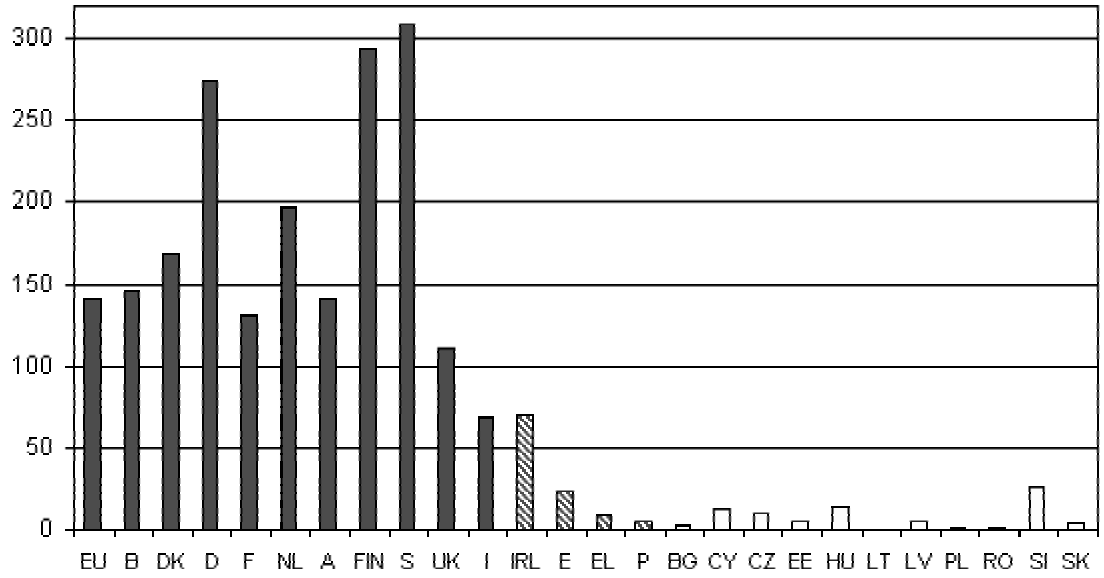
Figure 3: R&D expenditure as a% of GDP EU-15 and Canditate Countries, 1999



Source: Eurostat

Considering the EU experience, there exists a clear uneven distribution of innovation across countries and regions (see Figure 4). The production of innovation and indeed the location of research centres and industry are concentrated in few regions. Different policy measures have been suggested with the aim to reduce the concentration of leading knowledge, some of them are: development of an infant-region policy (Walz 1995), provision of subsidies for universities, promotion of technical colleges and high-technological industrial parks (Baldwin; Forsild 1999); support to increase the ability of the periphery to assimilate the knowledge created in the core (Currie et al. 1996) and the development of innovative strategies (Cooke et al. 2000). However, it should also keep in mind that to encourage the growth performance across a territory, it is necessary to complement these strategies with an adequate institutional framework. Particularly the conditions offer in the labour market are critical to determine whether or not individuals continue with training activities, acquiring new knowledge and skills.

Figure 4: European Patent application per million inhabitants EU-15 and Canditate Countries, 1999



Source: Eurostat

Within the current international environment the innovative capacity has a relevant role in the economic development of regions and countries. Under this scenario, the role of regional policy should not only be the distribution of welfare, it should be a spatial regional policy with an innovative perspective. A key challenge of the EU regional policy is to promote the regional innovative capacity of the entire territory. Particularly, the endogenous capabilities of regions need to be fostered in order to enhance their competitiveness. They need to be able to adjust their socio-economic institutional structure to rapid economic and political changes and learn to work in a co-operative way. Ignoring these aspects will reduce the power of regional policy to attain social and economic cohesion across the European territory.

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Philippe Rollet

Regional Specializations in the European Space

Contents

1. Factors of National and Regional Specialization
2. Non-Neutrality of Specializations
3. Effects of Economic and Monetary Integration on National and Regional Specializations

References

Preface

Reflections on the analysis of the impact an integration process has on the location of activities and the international specialization have a very old tradition. Theoretically there are two reference points:

- on the one hand a reflection initiated within the scope of the customs union theory (Viner, Meade) on the most favourable or unfavourable character of the (sectorial or geographic) specialization changes caused by an integration process;
- on the other hand a reflection initiated by the works of Balassa on the nature of the specialization process, both intra-branch or inter-branches.

The works developed since the early 80s have, more or less, pursued these two traditions. The analysis of the most favourable character of the Specializations has been pursued along with the analyses of the consequences the choice of specialization may have on the growth, depending on very different theoretical points of view (models of endogenous growth, models of "Kaldorian" growth drawn by the foreign trade, but also the analysis of sectorial shocks within the meaning of the theory of most favourable monetary zones...). A considerable refinement, especially on the empirical level, of the analysis of cross trade or intra-branch has been realised by taking into account the great extent as to both the vertical and the horizontal differentiation.

These works as a whole have nourished the reflection on the consequences the realisation of the single market and the monetary union may have on the spatial partition of activities in Europe and on certain aspects of their consequences (growth, employment, revenue). These different works have been carried through also within the scope of two application fields which were mutually reinforced by the development of the geographic economy, the international as well as the spatial and regional economy. Therefore the richness of the theoretical and empirical analyses leads to very uncertain results, and two visions are differing as to the consequences of economic integration on the spatial and sectorial evolution of the production systems.

The first reflection has initially been developed by the international economy. All works governed by the methodology of Balassa and Grübel and Lloyd have shown the strong growth, since the beginnings of the European construction, of the trade of similar products and of the intra-branch specialization. The hypothesis prevailing for some time, as is also found e.g. in the Emerson report on the consequences of the single market, is the hypothesis of the sectorial convergence which would accompany the macro-

economic convergence; the countries becoming more and more similar, especially in terms of their factoring endowments, would more and more produce and exchange similar products. The European economies would thus, on the level of the important branches, become more and more similar and the production systems more and more diversified. The European space would be characterised by specialization and intra-branch trade which would reduce the consequences of sectorial shocks considerably and facilitate functioning of the economic and monetary union.

The second reflection has been developed in terms of heterogeneous competition models (in the 80s), then of geographical economy (in the 90s). The presence of economies of scale, the margin of fluctuations of transaction costs are suitable for favouring the accumulation of activities and thus reinforcing the inter-branches specialization of the countries. Krugman, e.g., has taken into consideration that the process which had applied for the U.S.A. (specialization of the American States in a small number of activities) could develop in Europe.

These two visions lead to two scenarios diametrically opposed with very different economic consequences, as the specialization points of view are not neutral influencing growth, employment, the capacity to handle shocks within the monetary union; it is therefore of essential importance to examine the factors which could favour the one or other. A probable hypothesis may be that these two visions complement each other. In fact, when being interested in the nations, the European economy is not homogeneous and the enlargement towards a Central Europe will reinforce this heterogeneity. Which will facilitate the coexistence of different specialization models which is presently the case in other countries (intra-branche in most of the countries, inter-branches in the other ones). When being interested in the infra-national spaces, regions and territories, this becomes even more true. The regional disparities are very strong within the nations, between the nations, which would favour regional inter-branches specialization.

1. Factors of National and Regional Specialization

Here the approaches of the international economy and the geographical economy have adopted different approaches for examining the determinants of the spatial partition of activities. The international economy emphasizes the analysis of the specialization phenomenon. Why does a country favour certain production or service activities? The geographic economy is more interested in activity location factors considered in its globality in certain points of the space, but without being too much interested in the sectorial structure of this activity. Both of them do therefore a priori complement each other.

The Geographic Economy and the Partition of Activities within the Space

Before pointing out important features as factors of the spatial location of activities, the still fragile character of the results of the geographic economy should be noted. As underlineed by numerous authors (Fujita and Thisse 1997, Gérard-Varet; Mougeot 2001), there is no “theoretical model allowing to explain the economic scenery of very diverse societies”. The models are partial ones since they favour each of the strong, and of course different, hypotheses on the target functions of the economic subjects and on the spaces involved. The regional analysis is often confined to two zones taken into consideration (e.g. a rich centre and a poor periphery in the manner of the North-South models of international economy), the balances are multiple and susceptible to minor modifications of the hypotheses on the economic environment, the relevant dimension is absent thus rendering all approaches in terms of economic policy difficult. This criticism certainly applies to a lot of fields of economic analysing (international trade models in

terms of heterogeneous competition, models of the co-ordination of economic policies e.g.) and is typical of the new approaches. Nevertheless the conclusions are solid as to the factors influencing the location of activities. In this respect the geographic economy distinguishes centripetal forces applicable in terms of observed polarisation of the territories (the blue banana phenomena) and centrifugal forces correspondingly opposing.

The polarisation factors have been analysed e.g. by Jayet, Puig and Thisse (1996). Three factors are being distinguished:

- the arbitrage between the economies of scale and transport costs (or, in a wider sense, the different transaction costs). Should the economies of scale of any kind (due to research development, equipment etc.) be important and transport costs weak, the tendency shows the spatial concentration of activities which explains the shifting of a model of activity dispersion (19th and early 20th century) towards the contemporary model of polarisation;
- the roles of positive externalization: communication externalities, disposition of specialized and common inputs (basins of qualified manpower, service activities, existing infrastructures in terms of research and education);
- finally the phenomenon of spatial competition: price competition slowing down, spatial competition of activities will reinforce.

Two series of centrifugal forces can be brought forward:

- the concentration of activities can produce negative externalities: pollution, traffic congestion;
- the concentration favours the rise of real estate prices (land, housing) and the factoring prices; it thus favours a more "egalitarian" spatial partition, the new potential competitors (companies, households) thus being increasingly induced to move towards the periphery.

The combined game of these agglomeration and dispersion forces can certainly favour a lot of partition structures of the economic activity within the space and, in particular, of the polycentrical structures.

The models underline also the importance of history, of the initial situations. Should on the one hand, and this is important for examining the consequences of the modification of economic environment set forth by the economic and monetary union, the activity be initially partitioned homogeneously, this will complicate the game of centrifugal forces and the activity will be able to remain spatially diversified. On the other hand, the processes are cumulative or self-preserving: there are limits above which locations entail locations.

An important question refers to the sectorial composition of this activity and the model of regional or territorial specialization resulting. For answering this question an exact typology of the sectorial activities is necessary. The report of the team "Géographie Économique" of the Commissariat du Plan (Maurel, 1999) opportunely states that Weber (1909) had initiated an analysis distinguishing the activities for fixed location determined by natural advantages, then the activities working for diffuse location if transport costs are high, finally the activities for free location. As far as we know, such a work, of essentially empirical nature, has not yet been developed for contemporary economy and there are only approximate ratings available, sufficient for the theoretical models, but insufficient when an exact analysis and description of spatial partition of the activities within a space like the European Union is desired. The centrifugal forces therefore a priori apply in terms of spaces (city, region), and the centripetal forces

are applicable with a variable intensity depending on the activities: the needs for high technology services, for qualified manpower, the importance of significant economies, the inter-dependent relations between different activities are much varying from one activity to the other. From this can e.g. be deduced a tendency towards the concentration of high technology activities, of input or specialized services (e.g. qualified manpower) requiring activities or activities showing an increase in earnings in the Centre (or the North), and intensive activities in terms of less qualified low-wage work in the periphery (or in the South). This conclusion very much corresponds to the conclusions which can be drawn from the traditional approach of international trade. The other conclusion refers to the fact that, should the agglomeration forces prevail, the regional specialization could be of inter-branches nature.

Conclusions as to International Economy

Certain complements can be added by the – ancient or recent – developments of international economy to the specialization determinants and to the characteristics of intra-branch specialization.

Should the new models of international economy in terms of heterogeneous competition have emphasized the same factors as the spatial economy by insisting on the major role on the part of the important industries, the traditional analyses of international exchange have contrarily examined the impact of other factors of international specialization or location activities: factoring endowments (capital, work of different qualifications, natural resources), technological capacity (volume and orientation of research and development expenses), the sectorial productivity differences. It is very often considered that these are the determinants of the traditional comparative advantage and that these factors are particularly pertinent for understanding the phenomenon of inter-branches specialization. The development of intra-branch exchanges observed with a lot of industrial countries – in fact, more the important European countries than the U.S.A. and Japan – has resulted in minimizing the margin of fluctuations of these factors. It is true that the empirical tests carried through in the countries have lost some of their explanatory power. The estimates made for the 60s and 70s strengthen the traditional approaches, the recent tests are both rarer and less convincing. This can be easily explained; the traditional approaches emphasize the international differences as explication of the exchange; the convergence process particularly observed between the principal European countries has reduced these differences – has, however, not necessarily made them disappear – and has favoured the margin of fluctuations of other specialization factors (economies of scale, characteristics of demand) which have well been analysed by new approaches (life cycle of the product, approaches à la Linder, and, of course, models of heterogeneous competition). Therefore a conclusion as to the obsoleteness of these approaches would be at least rash:

- these approaches retain their explanatory power as soon as the international differences (productivity, salaries, factoring endowments, research and development) become noticeable. The neo-factoring approaches explain the important tendencies of North-South trade very well; the tests of neo-technological approaches (CEPII 1998) clearly show the specialization differences in the high technology sectors, even within the triad (U.S.A., Japan and EU countries, the latter obviously keeping in the background of their competitors); empirical analyses of the foreign trade data of the EU show that certain countries still have an inter-branches specialization (Portugal, Greece) and that others are in a medium position which does not develop on a long-term basis (Italy). It is probable that the enlargement towards the East will

make the new member countries, at least within some years, develop a more inter-branches specialization;[1]

- the specialization phenomena are not bogged down. Recent works (Mitelfart-Knarvik et al. 2000) suggest that the differences between the sectorial structure of the production of each of the European countries and the medium structure of the Union had diminished until the mid-80s, but had grown again since that time; the same works try to characterise the specialization structures of a more qualitative nature and underline the differences between the countries: the important EU countries (Germany, France, Great Britain) would thus be more specialized in activities in the fields of high revenue, high technological intensity and of qualified manpower, but the differences as to certain countries, particularly Ireland and Finland, would, especially in the high technology sectors, decrease;
- numerous empirical works (De Nardis 1996) argue that the Specializations are more obvious on the regional than on the national level; production structures would there be less diversified and inter-branch specialization would prevail; within the same meaning other works point to the existence of a process of convergence between the nations within the EU, and to the maintenance of the disparity observed between the European regions thus favouring an inter-branches specialization between themselves.

In the same way recent empirical works (e.g. Fontagne et al. 1998) show that the progression of intra-branch trade observed in Europe is based on a vertical differentiation of the products, the intra-European exchanges mainly being cross exchanges of products of different quality. One may think that the production processes realised for different qualities are also differentiated (more or less intensive as to technology or qualified manpower), which lends again more weight to the specialization factors brought forward by the traditional approaches. In the same sense a specialization of a very differentiated spread within the European Union can be observed. The northern countries show structural export surpluses in terms of high performance products (but with perceptible differences between themselves since Ireland and Germany clearly outstrip Denmark, the Netherlands, Sweden and France) or of medium performance (Finland, Benelux and Austria). The southern countries are particularly specialized in low performance products.

Therefore, when making use of analytical classifications different from habitual statistical classifications, e.g. by giving preference to the quality of the products (measured according to the unitary value indexes), technology contents, factoring contents (more or less intensive processes in terms of qualified labour), more differentiated visions are achieved: the specialization features are rather different even within the richest countries of the European Community as a whole. Which suggests that the specialization forces are not only a phenomenon of important economies, which the new models have very much emphasized.

The variables which have just been examined to some extent constitute market forces. They suggest that inequalities are standard, before all between the regions, and that on medium term situations can change, sometimes slowly when taking into account the historical importance, sometimes quickly if the economic environment changes extremely. The game of these market forces can be modified by economic policy. We often think of the impact of industrial location policy on regional and local level, or of the

[1] The example of Spain shows that structures can sometimes also develop very quickly.

impact of industrial policies on national level controlled by or carried through within the scope of local government policy. But within the European monetary union constituting one of the major changes of economic environment, special attention should also be attributed to the evolutions of the real foreign exchange rate since they affect, in a manner not to be neglected, the international evolutions of competitiveness and specialization[2]. Within the Euro zone the maintenance of disparities as to the evolution of the inflation rates can be expected which will thus be shown by real revaluations for certain currencies, devaluations for others and thus modifications of the competitive price which will differently affect international trade and the production of the sectors – and therefore the Specializations – depending on price elasticities. The phenomenon will undoubtedly be even more remarkable in the relations with the rest of the world: the evolutions of the rate of exchange, particularly as to the U.S. Dollar, are far from correcting the inflation differences; the purchasing power parity is at best just a tendency at very long run, and the persisting phenomena of monetary over- or undervaluation will have to be taken into consideration. Those countries or regions specialized in activities where the competitors are guided particularly by the prices (activities of low spreads, e.g. intensive activities in terms of manpower) will be particularly susceptible to these evolutions. This phenomenon should particularly concern the New Member States and candidates of Central or Western Europe (Rollet 2002).

2. Non-Neutrality of Specializations

When being interested in medium and long-term effects, the orientations of international specialization, on regional and national level, affect the economic results of these different spaces thus not being neutral. The models of endogenous growth and international economy, developed since the mid-80s, put forward the cumulative processes, either favourable or unfavourable depending on the orientations of international specialization. E.g., the analyses of Grossman and Helmpan show that the specialization is favourable for the growth if taking place in the high-yielding sectors, especially the sectors of high technology, and unfavourable when being orientated towards the low-yielding sectors. The process is largely cumulative and an initial advantage may undermine the difference. In order to explain these cumulative dynamics, these new approaches emphasize the major economies (or, more generally, the externalities) or the activity of research and development. The intuition and the mechanisms are rather simple. The specialization in an activity of strong major economies – with productivity gains increasing and unit costs decreasing depending on the size – allows to improve competitiveness, to win new parts of the market and to draw supplementary competitiveness gains. At the same time all this favours reinforcement of the specialization and, thanks to productivity gains and increase of production, of growth. Therefore the exchange gain is not static (reallocation of resources, increase of the diversification of products e.g.), but dynamic since it favours growth. This gain is of unequal profit for the countries depending on their specialization. The taking into consideration of the knowledge accumulated leads to the same results. The approaches of the technological difference of Posner and Hufbauer already underlined that the technological lead, originating from the specialization of certain countries in high technology activities, tends to support itself. On the one hand, those countries being able to dedicate important resources to research and deve-

[2] This problem has not sufficiently been studied in the literature. The Ricardian models à la Dornbush-Fisher show that modifications of the exchange rate can affect the competitive price, but also the partition of Specializations between countries.

lopment benefit from a large potential of researchers and can protect themselves by good patent legislation, they are systematically the first ones when new products or new processes are concerned. On the other hand, those companies having a technological lead realize profits allowing them to finance new research. Innovation thus produces innovation, and the technological difference remains, even increases. The models of endogenous growth complete this approach. On the one hand, research and development do not drop from the sky and they are a factor of important growth. They are not only for the benefit of the individuals developing them, but for the society as a whole along with an increase of the store of knowledge of public character. On the other hand, the link is assured with the new approaches of international economy by examining the links between the growth and the variety and quality of the products marketed.

The specializations not being neutral and in different manners influencing growth and thus, in the end, employment, it will therefore still be important to wonder about the typology of products allowing to appreciate in a more concrete form the consequences of the development of certain economic activities within national and regional spaces. What matters is to more and more reflect upon the regulative mechanisms of the dynamics more or less virtuous of the specialization related growth. Economic reflection is necessary in this respect, and it is doubtlessly useful to recall certain ancient works. The works carried through in the 60s, particularly by W. Beckerman[3], examined the relations between international trade and growth setting force the circular causations – in terms of competitiveness, productivity, export growth – generating growth dynamics of the most different kinds depending on the countries. Being of post-Keynesian inspiration these works are based particularly on the application, within the scope of foreign trade, of one of the laws of Kaldor and Verdoorn – "the growth of productivity is produced by the growth of demand; its expansion in fact allows a better exploitation of major economies and has a stimulating effect on the process of innovation". This virtuous dynamic is as follows. On the one hand, the enlargement of the market improves the general conditions of the functioning of economy: the reinforcement of the competitive process favours the productivity gains, the innovation and thus the process of economic growth. On the other hand, the reallocation of productive resources favours the phenomena of specialization and a better exploitation of the comparative advantages by the countries. The companies therefore try to benefit from foreign demand by developing investments and production. Productivity gains will appear, in particular in the industrial field, thanks both to the major economies as well as to the technical progress associated with the development of production (induced technical progress, phenomena of learning process) and will have a depressive effect on the costs, at least for the time when they are not compensated by salary increases or other regulative mechanisms. Competitiveness will therefore grow allowing a new development of exportations. The countries are thus dragged into a virtuous circle of improvement of the competitiveness, of growth and of productivity. These approaches underline also the fact that certain countries are not able, for different reasons – the maintenance of exchange obstacles, a lack of competitiveness, the bad adjustment of their products to world demand –, to benefit, or they benefit less, from the initial stimulation caused by the export development.

Discussions around these models have specified the game of the regulative mechanisms[4], the cumulative circles can disappear, even be reversed for different reasons:

[3] It initially had been the matter of explaining the permanent divergences of economic growth between Great Britain and the six founder economies of the European Community.

[4] For a presentation see Ph. Rollet (1990)

- production increase inevitably leads to pressure on the labour market – this can be the labour market of a special sector, and this phenomenon can therefore occur even in connection with unemployment – and to salary increases which can more than compensate the productivity gains and entail deterioration of competitiveness;
- the major economies are not infinite, even when observing that the optimum size tends, along with the technical progress, to grow;
- the outlook for demand, the expansion of selling markets and therefore the increase of parts of the market are not unlimited;
- finally, the economies which benefit particularly well from these virtuous dynamics generally know of the foreign trade surpluses and, consequently, sooner or later, of a valuation of their currency reducing their price competitiveness.

The profound causes determining the divergences between countries are not really precise in these analyses, except concerning rather vague references to the differences of comparative advantages. The above stated new approaches have gone farther by emphasizing the importance of a specialization in the activities of gradual proceeds or in the activities of high technology, but useful complements can be found in certain essentially empirical works, carried through in particular in the 80s in France, on the quality of international specialization of the principal industrialized countries and thus on the links between the Specializations and macroeconomic performances of the countries. Two important complementary approaches can be distinguished:

- one of them has emphasized the role of driving activities thus pursuing the initial works of F. Perroux (1950). The driving activities are those achieving the highest growth rates – since they benefit particularly from a stabilized demand –, but also and before all those having driving effects on the rest of the economy, effects which are especially linked with the creation of products or new production procedures, and new activities leading, upstream or downstream, to an increase of productivity. In the train of these reflections emphasis has been laid on the existence of strategic activities being situated in the heart of the principal production branches, on the special role of certain fixed investment goods defining the production standards and of the competitiveness of other sectors – robot technology, goods for producing the other goods (Mistral 1978);
- the other approach, developed by the Centre d'Études Prospectives et d'Informations Internationales (CEPII) (1998), underlines the importance of a specialization in "progressive" activities marked by a strong growth of world demand. In fact, such a specialization favours three mechanisms:
  - the dynamic of exportations favours the virtuous circles described above;
  - the relaxation of the exterior constraint: with an unchanged price competitiveness the trade balance will tend to improve when exportations concern products – or clients – the demand for which grows strongly, and the importations of products showing a weak growth[5] ;
  - the constitution of competitiveness priorities, since the reinforcement of the commercial situation of sectors where the specialization takes place is profitable for the rest of the economy by opening a huge internal market to upstream sectors which can thus increase their competitiveness thanks to the major

[5] As in the models à la Thirlwall, of course, the well specialized countries have revenue elasticities of strong exportations and revenue elasticities of weak importations; the growth rate compatible with the equilibrium of the trade balance is therefore higher than the growth rate of other countries.

economies by contributing, in the same manner, to the decrease of the production costs of the downstream activities.

From all these works, which would merit some empirical studies, follows the idea that the specialization changes being normally the rule as far as the introduction of new products and new varieties, changes of factoring endowments or productivity conditions and the appearance of new competitors are concerned – do have repercussions on the economic growth, national or regional, and therefore on the process of convergence. They also set forth some appreciation criteria: the importance of driving activities, high technology activities, activities towards strong major economies and activities borne by a strong external demand.

3. Effects of Economic and Monetary Integration on National and Regional Specializations

Just as the establishment of a customs union and of elements of a common market has profoundly affected the partition of activities within the European space during the first two decades of the European construction, also the establishment of the economic and monetary union – the achievement of the common market and the monetary unification of a large part of the European space – is susceptible to modify the economic geography in Europe. The previous developments lead to two series of conclusions.

On the one hand, the working forces, as far as being sufficiently identified, have a complex effect and can entail very different configurations. When being interested in location factors, the agglomeration factors seem to prevail. The existence of growing graded proceeds, positive externalities and the reduction of transaction costs explain the spatial concentration of certain types of activities. The economic and monetary union could amplify the interplay of these forces: the achievement of the single market facilitates the exploitation of major economies, the standard currency makes disappear the transaction costs and uncertainty and unifies the markets. Generally the standard currency makes the exploitation by particular competent enterprises, attached to the infranational spaces (cities, regions) easier. The fact that the unification of the market will never be complete should nevertheless not be underestimated: obstacles will persist due to difficulties as to the application of the principle of mutual recognition or to the rules of opening of the public markets, and there will generally be a “frontier” effect (comparable with the transport costs) persisting which favours a dispersion of activities.

The combined game of specialization and agglomeration forces must also be specified. Even if it seems as if this would be a certain kind of activities agglomerating (high technology, strong major economies, intensive activities as to qualified labour), the consequences for the national spaces are not evident: the assimilation of the agglomeration and the inter-branches specialization, the dispersion and diversification are not just chance. Various configurations are possible. One extreme would be that the agglomeration takes place in numerous centres of the North, and the other activities settle down, in a more or less concentrated manner, in the South; this would favour an inter-branch north-south and an intra-branch exchange within each space, and thus between the countries of the North or between the countries of the South. Another extreme would be that the agglomeration takes place also in the South and the countries would therefore appear diversified assuring between them the exchange of similar products. In these two cases, and in intermediary cases, one should beware of a naive vision of the specialization schemes. The differences between the countries, more or less marked depending on the blocs of countries involved (e.g. the advanced Northern countries, the applicant

countries, certain Southern countries in an intermediary position like Spain), can produce both inter-branches as well as intra-branch exchanges: intra-branch trade is based on vertical differentiation (exchange of products of different qualities), and the countries can be prepared for a variety of different products or different technological standards.

On the other hand, irrespective of the spatial configuration of the activities, these will affect global performances of growth and employment of regions and nations. They will be able to emphasize the differences or, on the contrary, favour the convergence process, thus raising the problem of economic policies: should they correct or accompany e.g. the agglomeration forces, on the basis of which criteria (efficacy, equity), and on which level should they be carried through?

For advancing on these tracks, the method of the scenarios seems to be pertinent. This is the attempt particularly initiated by the "economic geography" team of the Commissariat du Plan in France. This team distinguishes two polar scenarios in order to elaborate a third one constituting the central scenario.

The first scenario is a scenario of agglomeration. This scenario is based on the transposition of the location scheme of the activities, prevailing in the American space, to Europe. The economic and monetary integration would reinforce the interplay of agglomeration forces and lead to a strong differentiation of the European space. The metropolises in the heart of Europe would absorb the essential of the "noble" activities towards growing proceeds and strong intensity and thus a very qualified population. The peripheral regions would absorb the economic manpower-intensive activities and services industries. The different regional blocks would be sectorially specialized and would exchange according to an inter-branches scheme.

The second one is a scenario of diversification. It emphasizes for its own part the tendency, observed since the beginnings of integration, of intra-branch trade development and claims the persistence of the dispersion of activities within the European countries. It is based on the idea that the conditions underlying the first one would not be fulfilled due to e.g. a too weak reduction of transaction costs (e.g., the monetary union would not enlarge), the "burden of history" and thus the influence of former specialization models, and the maintenance of obstacles to exchange or to the mobility of the factors.

A central scenario combines these different hypotheses and suggests at the same time the diversification of nations and the specialization of regions. It can be regarded as the scenario of tendency continuation observed by the geographic economy on the one hand, and international economy on the other hand. In fact, it suggests that the national concept remains a pertinent notion for analysing the spatial partition of activities and therefore the existence of different forces in terms of nations and regions (the agglomeration forces being essentially pertinent inside the frontiers). Two remarks concerning this scenario:

- the forces which would limit the agglomeration phenomena to the frontiers – the weak mobility of factors, the different cultures and national peculiarities of any kind – must be specified and the formation of Euro-regional blocks should undoubtedly not be excluded; also the nature of interactions between national and regional Specializations must be specified;
- the diversification of the nations should not be understood strictly within the meaning of the traditional intra-branch notion; if the regional production systems are more diversified since they are the sum of regional Specializations, the important differences between countries persist, as has been underlined; in an enlarged European space these differences will strengthen somewhere else.

Those scenarios do not have a predicting significance; their heuristic value is undoubtedly more interesting for analysing the desirable orientations of various policies (of technology, regional planning, regional policy), and their establishment, depending on the principle of subsidiarity, on the different levels of the Union.

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Grzegorz Gorzelak

The Poverty and Wealth of Regions

(Assumptions, Hypotheses, Examples)

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1. Introduction

The title of this paper (which is an obvious reference to David S. Landes' *opus magnum* [2000]) relates to the fundamental issue of regional development theory, which also has a bearing on regional policies.

Space is slow to change. "Long duration" (Fernand Braudel's term) is an inherent feature of a territorial system. Naturally, the slow pace of spatial change does not imply an absolute petrification of social and economic territorial structures. On the contrary, over the span of long historical periods, we have witnessed many significant transformations, both positive and negative in impact. Some countries and regions prove able to achieve a fast and lasting advancement in the economic hierarchy of the world, while others plunge into relative – and sometimes complete – backwardness.

Before we embark on an investigation of contemporary regional development processes, let us offer a short analysis of two historical examples.

The discovery of the New World and the conquest of South America came as a historic opportunity for Spain. Colonisation brought about two major consequences for its economy: influx of precious metals: gold and later silver, as well as trade with new economic entities across the Atlantic – the colonies.

Only a fraction of revenues from trade and import of gold and silver was invested in the economic development of the country. Their bulk was spent on the upkeep of the royal court and courts of aristocratic families, on the maintenance of the army and the repayment of loans contracted in Germany, Italy and the Netherlands. Even the military effort made by Spain contributed less to the development of the country's armaments industry than was the case in England and Flanders, where the Spanish Army bought its munitions, and the fleet – its men-of-war. Even horses for the army were purchased abroad. On the other hand, the 16th century was an age when architecture flourished and many magnificent palaces and castles were built.

The attitude and beliefs of the Spanish ruling elites, who were traditionally more opposed to economic activity than elsewhere in Europe (possibly excluding Poland) were a stumbling block to a broader utilisation for development purposes of profits derived from trade with the colonies and from production for the colonies. At the same time, investing higher profits (which were also due to increased food prices) in land and architectural constructions did not lead to any improvement of technology in agriculture.

However, even though Spain was the greatest naval, military and commercial power of Europe nearly throughout the entire 16th century, the country remained poor and structurally weak. As a direct consequence, its significance started to deteriorate rapidly since the end of the century, a process which was symbolically started by the crushing British defeat of the Great Spanish Armada in 1588.

According to LANDES (2000, p. 201): "Spain, in other words, became (or stayed) poor because it had too much money. The nations that did the work learned and kept good habits, while seeking new ways to do the job faster and better. The Spanish, on the other hand, indulged their penchant for status, leisure, and enjoyment – what CARLO CIPOLLA calls 'the prevalent hidalgo mentality'". And, further on: "By the time the great bullion inflow had ended in the mid-seventeenth century, the Spanish crown was deep in the debt, with bankruptcies in 1557, 1575 and 1597. The country entered upon a long decline. Reading this story, one might draw a moral: Easy money is bad for you. It represents short-run gain that will be paid for in immediate distortions and later regrets."

The economic development of Poland – a country comparable to Spain in population and size – was rather similar. It was also closely related to the history of geographic discoveries and their consequences for the economy, which might be seen as a contribution for long-term international relations in Europe. The influx of metals from the New World triggered inflation, progressing from the west of Europe eastwards. The differences in prices in Europe were quite significant. If the price level in the Netherlands in the 1540s was assumed as 100, it was 135 in Spain, 120 in Italy, 100 in France, 65 in England, 55 in Germany and 30 in Poland (Kaczyńska; Piesowicz 1977, p. XVI4). In such a situation, export from the East to the West was particularly profitable since the sellers would be rewarded with the "inflation premium", impossible to gain on their own markets.

Poland was able to export agricultural produce, timber, leather and hides. The export of agricultural goods was especially profitable as there were few market-oriented farms and unpaid work of serfs ensured low costs of agricultural production, mainly of grain - the commodity that could easily be transported across large distances. This resulted in the revival of manors owned by the nobility (*szlachta*), extensification of agricultural production at the expense of agrotechnical progress, monopolisation of the economy in rural areas by the nobility, and economic growth, later to be coupled with increased significance of this social class. Increased scope of unpaid labour in the farms and the obligation to get all produce from the farms resulted in the shrinking of domestic demand, which in turn limited the possibilities of urban development. The quality of farming tools deteriorated, poorer crops (already poor by European standards) were obtained, which led to increasing the scope of socage, drudgery.

The surplus of revenues that the nobility obtained from the export of grain (being at the same time exempted from tax and customs duties!) was spent on the purchase of manufactured commodities and luxury goods. None of these products was manufactured in a sufficient quality in Poland, hence the need for import; the former were imported from Western Europe and the latter from the Near East. All profits went to those regions and contributed to the structural conversion and development of modern production sectors.

The 16th century was the peak of Poland's economic, political and military prosperity. The centuries to come witnessed a steady decline of the Republic, unable to face competition. As a result of unexpectedly propitious international situation, after a short period of prosperity and growth, Poland regressed into feudal relations, which at this time in Western Europe were sinking into oblivion. Both Polish economy and culture suffered decline, while the participation of Poland in cultural and scientific exchange with Europe was severely curtailed. Soon thereafter Poland was erased from the map of Europe.

Why, then, are some countries and regions poor and other wealthy? How does it come about that some regions are capable of changing their disadvantageous status, rising from their backward state owing to a long period of steady development while other sink into economic and social degradation and some other remain in a state of inertia, peripherality and poverty? What mechanisms are at work that allow some regions to maintain a strong position in the changing geographical, technological, social and economic circumstances? Are the region's specific features the factor that plays a cardinal role in such dissimilar development trajectories? Or is it the broader context – the national or supra-national factors – that prevails? In other words – are endogenous or exogenous factors that matter the most? Or maybe their specific combinations and mutual relationships? How can an unfavourable combination of factors impeding faster development of backward regions be altered? Can this be done through external assistance, and if so – what form and what volume should such assistance have and how should it be utilised?

The theory of regional development strives to provide answers to the above questions, referring, in doing so, to general development theories formulated for supra-regional systems. Subsequently, the recommendations of theory are put to practical application via regional policy. However, an objective arbiter would have to evaluate its effectiveness as highly unsatisfactory, at least in relation to the goals it sets and the hopes it kindles.

There exist many possible approaches to analysing the poverty and wealth of regions. Some of them apply intricate methods of modelling economic phenomena, making use of various formulas combining factors of production: capital, labour, technological and organisational progress (theories and models of growth in their applications for regional analysis), as well as relationships between outlays and results, i.e. productivity. Other approaches point to the relationships between regions and their environment and imply that it is the volume and profitability of the "export" of goods and services to recipients located beyond a given region that is the determinant of their development (the so-called economic base theory). Some other approaches relate to intraregional linkages between economic entities which – in some cases at least – lead to extraordinary dynamics of development (theories of polarised growth, and recently theories of network relations, including those focusing on clusters of companies). There also exist theories explaining the durability of divisions into rich and poor countries and into rich and poor regions by an imbalance of exchange between highly developed and undeveloped systems (dependence theories, the centre vs. periphery approaches). Apart from that, the supply of production factors in individual regions (including human and social capital as well as material and institutional infrastructure), their location in relation to development centres and the characteristics of their natural environment are sometimes regarded as factors affecting regional development.

All those approaches, inspiring as they may be, frequently tend to be one-sided, and sometimes are too particularised, which impairs their explicatory – and therefore applicatory – potential. Is it at all possible to attempt a generalised outlook on regional development processes, analysing them in a longer, comparative historical perspective? This theoretical proposition, only sketched here given the size of this paper, is an endeavour to present such a generalised and dynamic formulation of the substance and mutual relations between key factors of regional development, such as: broadly understood regional features, the development paradigm and external stimuli.

For the purposes of further reflection, it is not necessary to offer a precise definition of the region. It will suffice to say that this is a territorial system which is a part of a larger whole, usually a state (although some smaller states may be treated as "regions", e.g. Ireland) – characterised by internal uniformity, both in terms of functionality as well as similarity of socio-economic features. Desirably, regions under analysis should be furnished with some competencies, empowering their authorities to undertake independent actions for the region's development. This is not a sine qua non requirement, however, since the national authorities frequently make decisions on behalf of the regions or – in the case of regions incorporating several territorial administrative units (e.g. "Eastern Poland") – power is exercised by several equipollent entities. Thus, we perceive the region as a certain whole that yields to statistical and factographic analysis, and consider the competencies of its authorities as one of the region's features.

2. Theoretical Approach

In subsequent sections of this paper we will try to expound the theoretical model aimed to offer a comprehensive, dynamic view of the factors and circumstances determining the development of regions (see the diagram at the end of the paper).

2.1 The Development Paradigm

There exists a number of formulations of the socio-economic development model (paradigm) and its transformations. Alvin Toffler's model of three waves of social development is one of them. Each of the three waves is characterised by a specific manner of obtaining and expending energy:

1. In the first wave – which lasted from the emergence of settled farming about 5000 BC until the industrial revolution – man used unconverted energy of nature: his own muscles, animal work, river flow, and later – the power of wind. At the same time, man did shape – albeit to a rather limited degree – natural processes, thereby becoming less and less a merely passive user of its resources (hunting and gathering communities did not go beyond this stage). This type of economy could be dubbed agriculture-based economy.
2. In the second wave, the economy was based on the conversion of thermal energy into mechanical energy (either directly or using electric power). This was connected with the capability to combust energy resources generated by nature (wood, coal, oil, gas) and with the possibility to use nuclear energy, also produced from natural resources. Thermal and mechanical energy, to a slight extent supplemented by the forces of nature (water, wind, the harnessing of which means huge investment expenditure and substantial maintenance costs), almost entirely replaced the energy of human and animal muscles. The second wave was an age when industrial economy was in its prime.
3. The third wave is characterised by a gradual retreat from energy expenditure, since information has become one of development factors whose significance is increasing rapidly. The generation, transmission and use of information does not require any significant energy resources or outlays, hence the concept of information, or post-industrial, economy.

The above paradigm could be summarised by the formula: nature – energy – information, that are factors which are drivers of development in consecutive waves. Other, broader approaches to the development stages or models are proposed (cf. e.g. Rostow's systems 1960 or Bell's 1973). Krzysztofek and Szczepański (2002: 36, 37) distinguish the following stages: pre-industrial; quasi-industrial; industrial (modern); post-industrial (post-modern); information (post-modernist). The distinction between the latter two phases is particularly interesting since it highlights the essence of the information economy and the information society. Referring to the typology of development stages proposed by Bell (1973), it can be proved that the post-industrial society is one whose economy is characterised by a dominant share of services, and in which information – understood as a vehicle for communicating knowledge and innovation – does not as yet represent a significant development factor.

Regardless of the usefulness of individual approaches, it should be observed that they all fall within the general typology outlined by Toffler, especially – as he points out – because these phases tend to concur and are not manifested in the actual life of societies in an isolated way (even in a country such as the United States aspects of all the three waves may be found, although it would probably be more difficult in less differentiated societies of the well-developed European countries). Similarly, in each of the models actually existing in the contemporary world there are three co-existing factors: nature, energy, information. What matters, however, is the extent to which the societies make use of them, and their mutual relationships.

Contemporary information economy (post-modernist) is sometimes referred to as knowledge-intensive economy, or even knowledge-based economy. This term is occasionally replaced by an expression even more strongly accentuating the role of knowledge as the crucial development factor – the knowledge-driven economy. According to this terminology, knowledge is increasingly becoming a leading constituent of the new economy or information economy; it is also the key resource of the intellectual enterprise.

However, we should more probably speak about economy driven by innovation, since knowledge means an ability to move in the existing as well as anticipated reality. Knowledge is a static concept, relating to what yields to cognizance through generalised experience gained as a result of the existing practice and an anticipation of the future. It has to be observed, however, that the essence of the new information economy, distinguishing it from the socio-economic models of the past, is change – in the sphere of technology, organisation, marketing, etc. – that is brought about owing to innovation. Innovation means a departure from the existing practice and a desire to gain a competitive advantage due to increased effectiveness of production and distribution, and above all to the launch of a new product.

An extremely important feature of innovation which tends to be overlooked in the studies of the new development paradigm should be particularly emphasised. Innovation creates demand for itself, becoming in this way an essential – crucial – factor in the economy that is confined on the demand side, that is in the market economy. Demand for an innovative product is generated by making people aware of a new need that the innovation is supposed to satisfy, or of a new, much more refined manner of satisfying a need that has already been acknowledged. Very many examples can be quoted here: recording of images: camera, digital camera; recording of movement: movie camera, video camera, digital camera; transmission of sound: telephone, cellular telephone, satellite telephone; transmission of images: television, colour television; recording and retrieving of sound: tape recorder, phonograph, CD-player, digital CD-player. Nonetheless, the most dramatic innovational revolution took place in the sphere of storing, processing and transmitting information, which was possible owing to unprecedented progress in IT technology.

The innovator – that is the entrepreneur (nowadays usually a company or a corporation) launching an invention[1] on the market – may gain a durable competitive advantage since he is not dependent on the demand satisfied by many manufacturers or providers of services and enjoys a quasi-monopolistic position until a competitive innovator arrives on the scene (for a discussion of the threat of competition for companies with a strong market position but lacking sufficient ability for innovation see also: Christiansen 1997).

A characteristic feature of contemporary economy is an acceleration of innovation processes on the one hand, and, on the other – its cumulative utilisation in the process of creating innovation. According to Castells (1997: 32): „What characterizes the current technological revolution is not the centrality of knowledge and information, but the application of such knowledge and information to knowledge generation and information processing/communication devices, in a cumulative feedback loop between innovation and the uses of innovation." This feedback loop results in strengthening the competitive advantage of the innovator over the manufacturer who is merely capable of manufactur-

[1] The distinction between the *inventor* and the innovator was made by Joseph Schumpeter, who pointed out that only the innovator alters the mode of production, while an invention becomes an innovation only once it has been marketed (a good example here may be the new form of organising production proposed by F.W. Taylor and its practical application by Henry Ford).

ing products which are situated further on the product life cycle curve. This cycle affects regional development processes, which can be manifested as follows:

1. Innovation may appear only in regions having a substantial potential for innovation, that is in highly developed regions which offer good conditions for academic establishments, for companies capable of transforming an invention into an innovation and for highly qualified personnel.
2. Regions with a relatively high development level may participate in the mass production phase; the newer the product, the more stringent requirements concerning the quality of the production environment. This is true both for the possibility of purchasing a licence and for the more or less lawful reproducing of the production and technological pattern.
3. Regions which are less developed and are characterised by a poor ability to undertake production at a high technological level and therefore compete mainly in prices are under a strong competitive threat on the part of potentially cheaper manufacturers. It should be stressed that only the poor, who accept low pay for labour, stand a chance of winning in this price competition.

As a result of those processes, the segmentation of territorial systems is petrified; in the top segment, innovation is created, which secures high salaries and high profits and allows to maintain a durable competitive advantage, while in the low segment technologically obsolete products are manufactured, which require small capital resources and lowly paid, unqualified labour. We will revisit the issue of segmentation while discussing the competitiveness of regions.

The phenomena and regularities discussed above provided a premise for one of regional development theories which emphasises the role of technological factors in regional development (the so-called technological dualism theory). This approach accentuated the impossibility of dissemination of high technologies and production techniques in undeveloped countries, which was attributed to their limited ability to finance capital-intensive investments, low qualifications of the population and the inevitable links of the majority of the population with the traditional sectors. The technological dualism theory was later generalised and given a regional dimension (cf. Sunkel 1973; Richardson 1984), and was incorporated into the trend of dependence theories.

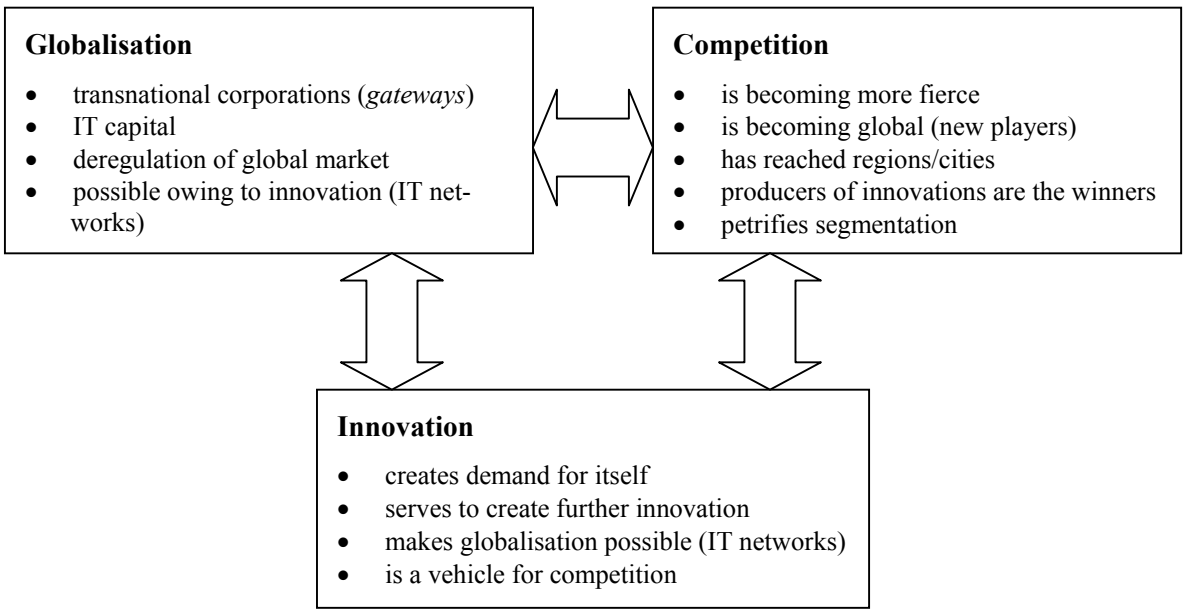
Suarez-Villa (2000, cf. also Gorzelak 2002, where the suitable diagram was reproduced from the publication in question) is one of the authors discussing the relationships between the ability for innovation and regional development. Fast increase of the innovation potential in the southern states of the USA with parallel decrease of this potential in the northern and north-eastern ones coincided with the dynamics of economic growth in both these groups of regions. The shift from the “frost belt” (north) to the “sun belt” (south) has to a considerable extent been caused by changes in the proportions of the innovation potential of the individual constituent parts of the United States.

Those processes occur along with globalisation processes. To avoid reiterating obvious truths about globalisation, we will restrict ourselves to an observation concerning only one aspect which is rarely debated and which is related to the new quality of the key actors on the global scene: transnational corporations. Reich (2001) points out that contemporary corporations have stopped being manufacturing entities and instead have become gateways identified with specific names – i.e. trademarks (SONY, General Motors, Philips, Nokia, etc.) connecting two global networks: that of the suppliers and that of the recipients. Corporations organise networks of manufacturers co-operating between themselves and compose their products from goods offered to them by other cor-

porations (majority of cars are furnished with electric equipment bearing the name of Bosch or Delphi, which does not automatically imply that it has been wholly manufactured by those companies since they themselves are arrangers of production networks). On the other side of the gateway, there are the networks of recipients – which include consumers – who are connected with the suppliers via e-commerce networks.

The diagram below, combining three inter-related and closely connected phenomena: globalisation, competition and innovation, offers a summary of our reflection so far.

Figure 1: The triad of the contemporary development model



2.2 Location Criteria

It has frequently been pointed out that the development model is determined by the location criteria (see for example Gorzelak; Jałowiecki 2000). Since these issues have already been broadly discussed, we shall only indicate that quantitative location criteria have largely been replaced by qualitative criteria. Among them, qualifications of the labour force, administrative capacity, diversity of the economic structure, reliability of transport and telecommunications infrastructure as well as living conditions[2] can be regarded as key features that a given region or a local system should possess in order to become attractive to the makers of investment decisions. At the other end of the spectrum, those regional features which mattered so much in the resource-intensive economy, such as: numerous, poorly educated labour force (hence mass-scale unemployment in the economy that is developing without generating new jobs – so-called jobless

[2] Last year "The Economist" published a whole page advertisement promoting Austria as a good business location, which was entitled: Mozart. Mountain Lakes and 4-Wheel Drive. Rethinking Your Image of a Great Business Location. Thus, it is no longer the market itself, the highways (they are ubiquitous) or the universities, but the pleasures of life that Austria can offer that are supposed to lure the potential investors.

growth), natural resources[3], mass transport infrastructure, financial assistance, sectoral specialization, are losing in importance.

Let us consider in more detail the long-term implications of aid offered by the public sector to businesses. Frequently, in the long time span, such aid is hampering competitive ability since the recipient enterprise ignores the need to make constant structural changes and to modernise production. A textbook example may be the case of the car-makers, The Rover's Longbridge car plant in Birmingham, which blackmailed consecutive British governments with threats of staff redundancies, securing in this way state aid (in 1999 the plant generated more losses than the entire Polish coal mining sector for that year!). The sources of the Korean crisis are attributed – among other factors – to too close links between the state and huge business conglomerates ("chebols"), which produced too easy operating conditions, including those concerning contracting foreign loans. Following the devaluation of the Won, those loans turned out to be too huge to repay. Similar reasons – in addition to others – have brought about the slump in the Japanese economy[4]. Unfortunately, in Poland the belief in the strength of financial instruments, such as for example tax reductions, still persists at the local and central levels. Its clear manifestations are the special economic zones which are utterly unprofitable in the majority of cases, cause many difficulties in Poland's negotiations with the EU and which lead to long-term obligations of the public finance sector towards private capital (cf. Kryńska 2000).

The above is summarily shown in the diagram below, which shows how the Research Triangle in North Carolina (USA) encourages investors to start business activity in this progress-oriented region[5]:

Welcome to the Research Triangle Region!

A great place to live	**A great place for education**	**A great place for business**
• Low cost of living. • Exciting college and professional sports. • Two hours from the coast, three hours from the mountains. • Mix of small towns and booming cities. • Great cultural and artistic attractions.	• Excellent primary and secondary private and public schools. • Three major award-winning research universities. • Several outstanding colleges and community colleges. • A great resource for business for both research and training.	• A highly skilled, well-educated workforce. • Excellent labour relations. • Lower business costs. • Plenty of land, office and warehouse space available at a reasonable cost.

[3] Natural resources can sometimes be a burden (like coal deposits); they can lead to maintaining a resource-intensive direction of development and can hold back efforts to seek ways to enter the knowledge-intensive path of development (for instance, such danger was observed in Canada).

[4] According to "The Economist" (5.-16.11.2002), in a relatively good situation are those Japanese corporations which have never received state aid, and in particular those which are not located in Tokyo or Kyoto, that is far from the political and economic decision centres.

[5] http://businessleader.com/rtp.html

The new development pattern is emerging only in some places: in those which are capable of gaining a competitive advantage owing to their ability to create and/or develop innovation or to effect a technological, organisational or product change. This model, which has emerged in a small number of the strongest regions, is spreading and gradually becoming the prevailing paradigm. This is the essence of segmentation which was referred to above: the most innovative regions, this time understood in the territorial (and not corporate) sense. Most innovative regions determine the direction of changes in the development model, thereby ensuring a durable competitive advantage over those regions which constantly have to adjust to the conditions set down by the leaders.

2.3 Regional Features

Every region manifests specific features, produced by nature and history. Drawing on Cappelin's concept of distance (cf. Gorzelak 2002), those features might be summarised under the following headings:

Geographical distance:

- location in the geodesic space: distance from the economic centres of the world, from metropolises, industrial centres, tourist attractions and recreation facilities;
- location in the physical space: climate, topography, natural resources, etc. This is undoubtedly one of the crucial characteristics of any territorial system. According to some (now obsolete) geographical determinism theories, climate is the decisive factor determining the activity of man. It was claimed that hot climate precludes any efficient functioning, which was proved using the examples from Africa. Indeed, the climatic conditions significantly affect the ability to undertake concerted effort (see for example Ryszard Kapuściński's essays "The Ebony" or the introduction to D.S. Landes [2000]). However, the example of Far Eastern Asia suggests that such restrictions may be overcome. Furthermore, technological progress widely popularised air-conditioning, which has become one of the factors permitting the "opening" of many regions – such as the south of the USA – to inward investment and business activity. Additionally, location in the physical space enhances the accessibility of a given territorial system, although as a consequence of progress in covering distances, the significance of the physical space is beginning to overlap with that of the geodesic space (the mountains or the ocean are no obstacle for an airplane).
- transport infrastructure, determining the accessibility of a given area and its openness to the movement of people and goods. Reliability has become a major feature of infrastructure (just-in-time supplies), so as connections with international transport networks[6];
- telecommunications infrastructure, which is a constituent part of the global telecommunication network. Of particular importance is access to this infrastructure, its universality and its educational role. What also matters is its quality (speed and reliability of data transmission) and dependability, including resistance to potential catastrophes and external disturbances (it could be claimed that computer networks with data of stock exchange, commercial and capital transactions are the most sensitive element of contemporary economy, since their destruction might have far-reaching, critical consequences for the entire global economy).

[6] As one of Polish composers living in the USA said recently, it is not the country that he lives in that determines his location in the global space but the distance to the nearest international airport.

Institutional distance:

- sectoral and branch structure of the economy, particularly the share of the fourth sector (banking services, research and development, tertiary education, professional consulting, etc);
- degree of technological progress, not only relating to the system of manufacturing but also to the sphere of public services (including education; for instance, in Poland only 40 per cent of schools have Internet access, and the share of schools where IT may be taught at a decent level of instruction is even smaller). Technological level affects the qualifications of staff, administrative capability, quality of living conditions, as well as potential for innovation;
- human capital (level of education and skills, motivation to work); it has already been pointed out that contemporarily it is one of the crucial development factors;
- social capital (ability to undertake joint efforts, willingness to cooperate, level of social trust, power mechanisms, etc.), by some researchers (e.g. Putnam 1993; Fukuyama 1995, 1999) regarded as the most important factor;
- institutional structure, both relating to business environment as well as civic society institutions.

Naturally, the features of territorial systems are not set in stone. It has to be indicated, however, that individual features are characterised by a varying propensity for change, since only some of them are dependent on the activity of man, and those which have been determined by nature tend to change extremely slowly. Furthermore, those features are both interrelated and interdependent. For instance, it would be unrealistic to hope that a territorial system (state, region or city) which has poor telecommunication links, with uneducated population engaged in traditional economy sectors will out of a sudden join the world's top league in scientific research.

2.4 Relationships between Regional Features and Location Criteria

At this point, we reach a crucial moment of the regional development model: the relationships between the region's features and the location criteria prevailing in a given historical period. Reducing the entire range of possible relationships to two extreme ones (which is a justifiable exercise in the formulation of generalised statements) we can distinguish two situations: that of a high congruity between the regional features and the location criteria and that of lack of such congruity (incongruity). Those two extreme types of relationships determine the position of a region in the competitive economic space, which has now become a global space, where innovation is the basis for victory in the competition race.

2.5 Competitiveness of Regions

The competitiveness of regions is one of the most commonly used concepts relating to both regional development processes and to regional policies. There is virtually no document (such as a regional strategy or a government document concerning regional policy) which would not identify enhancing the competitiveness of regions as one of its aims. It is equally rarely that we can encounter an attempt to define this notion.

Drawing on our earlier analysis (Gorzelak; Jałowiecki 2000), we can say that a region is competitive if:

- it creates such conditions for businesses operating in the area that they are in a position to win the competition race; it has been said earlier that a stable competitive advantage can be gained owing to the ability to create innovation;
- the region is capable of winning the competition with other regions to attract investment capital, particularly capital which is invested in ventures with a high innovation level.

It can easily be seen that those two definitions of competitiveness basically mean the same. On the one hand, a region will not attract innovative capital if it fails to ensure good conditions for such capital, and on the other hand, the mere fact of attracting innovative capital will have a positive impact on the business conditions in a given region.

The region's competitiveness depends on the relationships between its features and location criteria implied by a prevailing development model. Only those regions may attain high competitiveness whose features are congruent with those criteria, whereas regions whose features are not congruent with such location criteria can neither attract capital as not being sufficiently attractive nor can they create favourable conditions for the existing businesses.

Competitive regions develop a high ability for endogenous growth. They can modify their features (e.g. through infrastructure projects, improving qualifications of the labour force and attracting top staff by brain drain, development of the scientific and research environment, increase of local revenues, etc) in such a way that they become more and more congruent with the prevailing location criteria. Some of them – the strongest – can modify those criteria through their influence on the transformations of the development model. On the other hand, uncompetitive regions stagnate or slump into recession since the businesses located in such regions suffer problems and close down, the capital withdraws, followed by the wealthy, top qualified staff; in short, the negative feedback mechanism of Myrdal's "circular causality" is triggered, which widens the existing gap in the congruity between the regions' features and the location criteria.

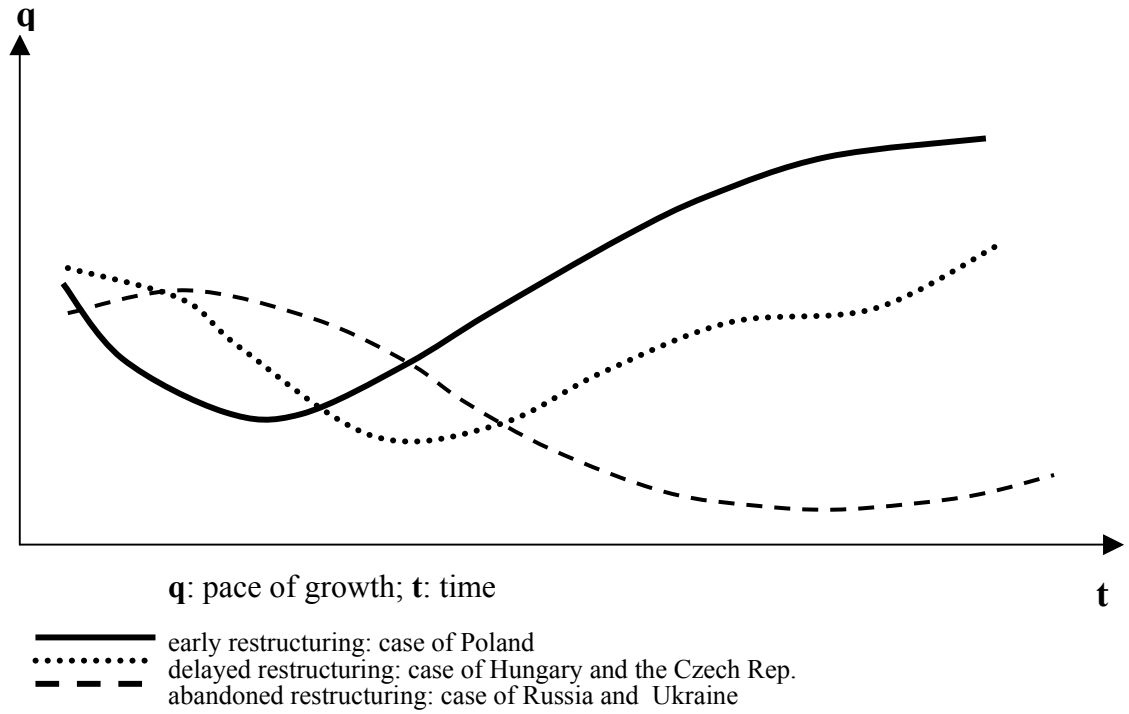
Thus, we deal with a dynamic system characterised by negative feedbacks between individual constituents of the development process. In view of the constantly changing (with very fast changes taking place contemporaneously) development model and the ensuing changes of location criteria, maintaining high competitiveness requires continuous adjustments of the regional features to those criteria. Therefore, it is necessary to undertake steady, unceasing restructuring, which should consist in replacing those elements in the region's structure (its economy or infrastructure) that are ill-adapted to the current – and future – location criteria with new elements, either anticipating or at least keeping up with the requirements of the ever-changing economy.

A significant feature of every structural change is that it is very expensive. Frequently this cost is externalised, pushed out of the system. For instance, if an unprofitable factory is closed down, the costs involved are incurred by the laid-off personnel, and later by the public sector which is forced to pay unemployment benefits and/or social welfare benefits. In addition, restructuring usually produces the desired results after some time elapses, since normally a period for adaptation is required. The essence of restructuring, however, is that it is objectively unavoidable if the region is not to lose the level of competitiveness that it has already attained, and especially if it wants to advance. In the former situation, this need is due to the fact that location criteria tend to change at an increasingly faster pace, and the region has to chase them (in line with the principle: if you are not going forward you are going back) In the latter case, this is caused by the need to "make up for the losses" that occurred in previous periods, as a result of which the restructuring has to be deeper and more thorough.

Forbearing restructuring inevitably leads to the weakening of the competitiveness level, and eventually to stagnation or recession. The social costs will have to be paid anyway, albeit in vain, that is without securing gains in the form of structural changes that could be effected if they were made in an understanding and controlled way.

The trajectories of post-communist countries in the years 1990-2000 shown in the figure below can serve as a perfect example of the regularities discussed. (see Fig. 2)

Figure 2: Trajectories of post-communist countries in the 1990s



The countries which made a conscious effort at the early restructuring stage (such as Poland, Slovenia and Estonia) achieved much better results in the post-1989 period than those countries which were trying to postpone restructuring (Hungary and the Czech Republic) or which were trying to forbear it completely (most of the ex-Soviet republics). The observable current slowdown in the Polish economy might also be partially explained by the fact that the restructuring effort was discontinued in the mid-1990s.

2.6 External Intervention

Regions are not wholly enclosed entities. Contrarily, as a result of globalisation processes, the development of telecommunication networks and the progress in transport, they are more strongly tied with the environment, creating systems of networks or through companies which are located in the region and which are themselves elements of larger cooperation networks.

The majority of spatial entities are affected by at least three types of external stimuli:

1. Inflow of inward capital, which is much higher in attractive regions than in those which are uncompetitive. At the same time, innovative capital flows into the regions characterised by highest competitiveness, while capital investing in low or medium

technology spheres flows into regions whose features are not congruent with the prevailing location criteria[7].

2. In uncompetitive regions, public aid is a financial alternative to investment capital, which frequently is sustained for long periods of time. Such aid is directed to such uncompetitive regions by the state (cf. the "New Deal" scheme, later the Appalachia programme in the USA, aid to the Mezzogiorno in Italy, the "assisted areas" in the United Kingdom, transfers to the "New Länder" in Germany, other regional assistance schemes), or, to a growing degree in the past 20 years – by the European Union (and its predecessors), which allocates approximately 30 per cent of its budget as aid to poor, stagnating regions.
3. External demand for the products and services of a given region represents the third type of external stimuli. Such demand may appear as a result of the modification of the development paradigm (e.g. coal became a valuable natural resource only after the steam machine had become popular, just as uranium after nuclear energy had been invented, etc.) or as a result of macro-scale changes (for example, as a result of globalisation there appeared demand for the production of traditional goods in cheap countries which until then had remained outside the main currents of global economy); it may also appear as a consequence of political events (as was the case following the 1990 opening of the Polish-German border and acquiring access to the cheaper Polish market by the Germans).

It should be noted that different external stimuli reach individual types of regions. Competitive regions attract innovative capital since, if invested there, it can yield high profits. Uncompetitive regions do not make such promises, and for this reason are in a sense doomed to wait for public aid that steers clear of the better performing regions. Although external demand may appear in the two types of regions, stronger regions have a better capacity to shape and stimulate such demand.

A distinctive feature of the aforementioned beneficial stimuli – which often occur in parallel, for example in Ireland in the 1990s, is that they ought to facilitate and foster development processes owing to the transfer of specific revenues to the region, and also frequently of the know-how and access to external markets. Such factors never occur in uncompetitive regions in a sufficient number, while – in the case of competitive regions – they may additionally foster the development process.

2.7 Use of External Impulses

External intervention may be put to various uses. We can differentiate between two contrasting situations:

- utilisation of additional gains obtained as a consequence of external stimuli in order to accelerate the structural change and to secure a better adaptation of the region's features to the current and future location criteria;
- forbearing structural changes and utilisation of external gains to cover the losses resulting from the growing ill-adaptation of the regional features to the location criteria and the ensuing decline in the region's competitiveness (which is also bound to affect businesses located in the region).

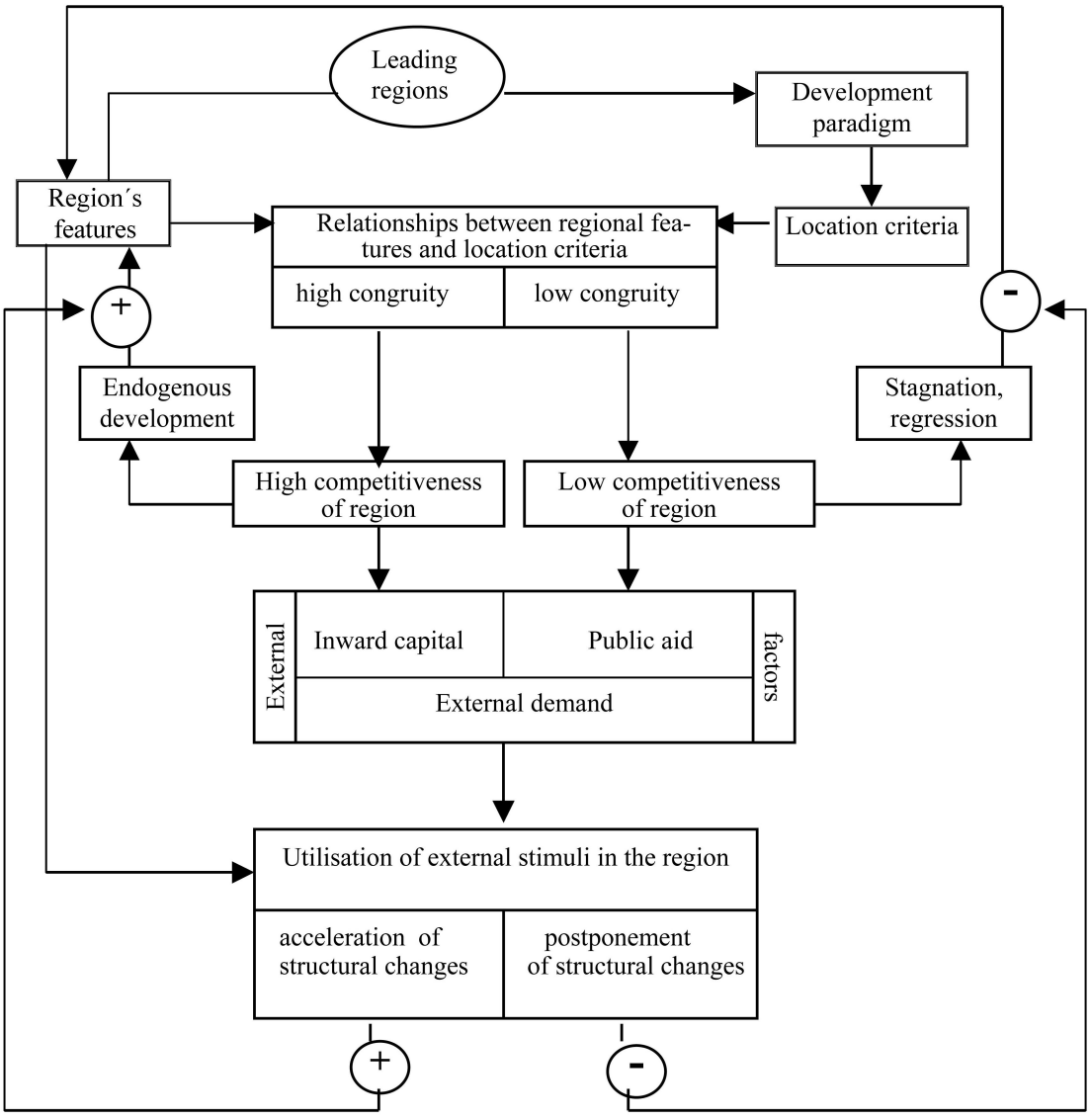
[7] The press reported that Ireland rejected Nissan's offer to build a car assembling plant in this country arguing that such a plant would have too low innovation level, not ensuring sufficiently desirable stimuli for its local environment. In Poland and other Central European countries, such offer would certainly be most warmly welcome, which well shows the differences in the overall competitiveness of those two systems.

A transitional situation is also possible, where restructuring is limited, and the gains derived from external stimuli are expended to cover the costs of such a limited restructuring exercise.

The manner of utilisation of gains produced by external stimuli depends on the features of the region itself, primarily its human and social capital, which includes political institutions representing the interests of social classes, as well as social and professional groups. In the democratic system, it is required to ensure the society's acceptance of social costs involved in the restructuring process. However, sometimes the political class will not seek such acceptance since the envisaged structural change is against its own interests.

Figure 3 presents the overall model of interrelationships between the location criteria, region's features and its competitiveness, the external factors and regional reaction to them.

Figure 3: Regional development model – a flow diagram



+: positive influence
-: negative influence

3. Model Situations of Regions and Examples

If we were to list three cardinal factors determining the development of regions, we would point to three variables**,** which at a given moment are basically independent, at least from the region's perspective: the prevailing development paradigm (and the ensuing location criteria), broadly understood regional features and external stimuli. Naturally, those three independent variables are involved in feedbacks operating on a broader time scale, and the most important one relates to the manner of utilisation of the appearing (sometimes out of a sudden) external stimuli. Importantly, the use of external stimuli depends on the features of the region itself. In the model approach, these relationships explain all the four regional development situations:

1. Strong regions ("the leaders"), maintaining their leading position despite the changes in the development paradigm – such as for example the core of Europe reaching from London to Milan (the so-called blue banana) – are examples of regions that defined the development models in the pre-industrial and industrial era and which, in the knowledge-intensive economy, are strong enough to sustain their high level of competitiveness owing to their endogenous development.

   Those regions function within two positive feedbacks (see Figure 3). The internal feedback has a positive impact since the regions are competitive due to the fact that their features are congruent with the location criteria. The strongest regions may even as much as determine those criteria. Owing to the positive external feedback, those regions are also able to utilise positive stimuli in the form of capital inflow (they are attractive for such capital); they may also shape the demand for products manufactured in them, since they are innovative.

2. Traditional industrial regions ("the losers") have lost their competitiveness following the change of the development model (and by this token also the location criteria).

   In consequence, their features were quickly proved to be incongruous with those criteria. The resulting stagnation and recession was later overcome in some of those regions (e.g. in the Ruhr Basin) owing to a skilful use of external stimuli. Other regions (e.g. Upper Silesia) utilised such stimuli to postpone the necessary restructuring, as a result of which their situation is difficult even a long time after losing the competitiveness they had in the resource-intensive economy.

   Referring to the pattern of the development process we can say that those regions lost the positive internal feedback as a result of the changed location criteria and have become uncompetitive. Nonetheless, some of them experienced strong, beneficial external stimuli (such as public aid to the Ruhr Basin or the construction of the Channel Tunnel in the case of North-Pas-de-Calais) and were able to utilise them in order to change their social and economic structure and not to delay the inevitable restructuring. On the other hand, the Upper Silesia region neither received sufficiently robust external stimuli nor were they focused on initiatives promoting modernisation, due to the attitude of the conservative regional elites.

A very conservative calculation may be made: the current debt of Polish hard coal mines totals approximately PLN 25 billion (it must now be much higher if calculated in current prices); the costs of the restructuring of the coal mining sector incurred so far to approximately PLN 30 billion (with the foregoing reservation concerning prices); the total sum of subsidies to the export of coal is not exactly known (it can be safely assumed that it is 20 million tonnes per year multiplied by 10 dollars per tonne multiplied by 10 years, that is c2 billion US dollars, i.e. PLN 8 billion). Altogether, the coal mining sector absorbed about 60 billion zlotys, which is equivalent to the gross regional product of the former Katowice voivodship in 1998. If we add the losses incurred by other sectors (mainly steel industry) of the region and the subsidies granted, it will turn out that the entire Silesia region received support roughly equivalent to one seventh of the product it contributed to the Polish economy after 1990. Nevertheless, the results of this public aid in the region are minimal.

The post-industrial region of Upper Silesia and the Basin [Zagłębie] calls for two things: a determined pro-restructuring attitude and substantial external assistance. However, no such support is anticipated. The aggregate allocation envisaged in the Integrated Operational Programme for Regional Development as assistance to Polish post-industrial regions is merely EUR 100 million, which is a figure ridiculously insufficient. The document also seems to overlook the fact that regional restructuring means not only a structural change (mainly through bankruptcies) of its major sectors but also very costly investments in infrastructure and redevelopment of post-industrial areas.

Taking into account strong attitudes opposed to change in this already highly uncompetitive region as well as lack of understanding of its objective needs outside the region, it can be anticipated that Upper Silesia will become the main problem region in the enlarged Europe. At the same time, there is reason to believe that appropriate policy decisions will be made only when guided from Brussels.

3. Poorly developed regions which remain underdeveloped for long periods of time – such as for instance the Mezzogiorno, Appalachia, eastern borderlands of some Central European countries) – are locked in two loops of negative feedback: their low competitiveness petrifies their stagnation since their inherent potential is too weak to ensure a high pace of growth, and external stimuli (public aid and external demand) – if any – are either too weak to overcome low competitiveness or are not employed to effect a sufficiently deep structural change[8].

   Underdeveloped regions may stand a chance of overcoming their backwardness only when their competitiveness is increased, for example as a result of changes in the location criteria, and when the effects produced by the generated external demand for their features and resources are used to induce a fast and deep structural change. Even better results might be produced when the backward regions anticipate their future opportunities, as was the case in some southern regions of the USA, when they invested in science, education and international contacts (e.g. the Research Triangle in North Carolina or Greenville in South Carolina, considered to be the town with the most favourable business climate in the United States).

[8] Discussions with the authorities of Alentejo, the poorest of Portugal's regions, indicated that in 1995 they had only one development strategy: to seek funds in Brussels and Lisbon. Endogenous development opportunities were beyond the sphere of interest of the regional elite. This attitude is shared by some Polish regional elites even though it does not lead anywhere.

Let us look at the development potential of Eastern Poland – an underdeveloped, peripheral region, practically uncompetitive in the European space. This region has no chance to overcome its backwardness on its own since its endogenous potential is very weak and the external demand for its assets poor.

Naturally, assistance ought to be directed to Eastern Poland, but it should definitely have a pro-developmental character, and aim to reduce the peripheralisation of this region through the development of transport links (also within the region), support to business environment and civic society institutions, promotion of education, etc. However, such efforts will not suffice to close the existing gap between Eastern Poland and wealthier regions of the country if the region is not given its historic chance in the form of emerging demand in the post-Soviet republics.

If the countries that emerged after the collapse of the Soviet Union enter the path of speedy and steady development, they will become a very promising market for hige transnational corporations. When seeking favourable locations for production targeted at those markets, such corporations might come to the conclusion that eastern Poland – the region of the EU that is most eastbound – is potentially a cheap and well organised area for necessary investments. Therefore, the expected demand in the East would provide a favourable external stimulus for Eastern Poland, and in all probability the only one that the region may hope for.

However, if such a stimulus is to be utilised, the region and its vicinity require actions that will help prepare it for this– uncertain – future opportunity. If such efforts are not made now, this opportunity – when it finally comes – will be embraced by the regions which prove more competitiveness – such as Slovakia or the Baltic republics, which are even now on a higher level of development than Eastern Poland.

4. Finally, there is the not too numerous category of "the winners", that are those regions which were able to overcome the negative feedback between their features and the location criteria owing to their making skilful use of external opportunities. Such regions include Ireland, southern USA, Bavaria. They had their historic chance as a result of the changes in the location criteria – suddenly they became attractive due to the popularisation of air-conditioning and decline of traditional industrial sectors (southern states of the USA), or due to increased mobility of American capital in Europe, they became an attractive location (Ireland), were able to take over the functions that other regions had lost (moving corporate headquarters of the research sector from Berlin to Munich after World War II), or offered cheaper goods to which the consumers suddenly obtained access (western Poland). This group also includes those Third World countries which were incorporated into global economy mechanisms as a result of globalisation and search of cheaper manufacturers of less technologically advanced products by transnational corporations.

In the early 1990s, as part of the Local Initiatives Programme financed by the European Commission, nine Polish *gminas* [municipalities] received approximately 650 thousand Ecu each for the implementation of their own development strategies. Those funds represented a sizeable share of the gmina budgets, ranging between 10 and 80 per cent of their annual revenues (cf. Gorzelak, 2000).

Eight years after the completion of the programme its results in the individual gminas were quite varied. Their assessment led to the following conclusion: „only those entities which are well prepared to absorb assistance should be supported, since allocating even substantial sums to local entities where there is no climate conducive to their reception and rational utilisation leads to the squandering of public funds which might be much better utilised elsewhere. It is an illusion to think that substantial assistance may on its own initiate the development process since some local communities and their elites are resistant to such supports, expressed both in the form of money and competent advice".

4. Conclusions

What then seems to be the key to the development of regions (groups of regions, countries, groups of countries)? Endogenous or exogenous factors? External opportunities or internal mechanisms of their utilisation?

Reflection on the nature of regions leads to the conclusion that both categories of factors: internal and external, are of great significance, even though in different types of regions they may take different combinations.

Strong regions make use of their own potential to determine the external conditions for weaker regions. On the other hand, weaker regions are not able to break free of this vicious circle despite the frequently substantial external aid they receive if they are not given an opportunity in the form of the demand for their potential, which might happen as a result of changes in the location criteria or changes in their competitiveness caused by different circumstances, for instance changes in the geopolitical situation. If those two conditions concur, such underdeveloped regions may join the group of the winners. The losing regions, i.e. those which lost their competitiveness as a result of changed location criteria, may overcome their difficulties provided they receive external assistance and use it to complete a deep structural change.

In a fast-changing, competitive world, no one can be sure of their relatively strong position. All actors are required to manifest an ability to foresee the future and to adapt well ahead to new, forthcoming requirements. This ability is especially needed in underdeveloped regions and in those which have lost their high competitiveness status – not through their fault. Regretfully, in both cases this ability is practically nonexistent. The elites in weak regions mainly look for outward opportunities, primarily in the form of public aid, refusing to acknowledge the need to undertake a deep transformation of the region's own social and economic structures. The elites and populations of the losing regions relive the memories of their past prosperity, which makes them unable to come to terms with the simple fact that if the former wealth is to be restored, the dramatic process of adapting to the new market requirements cannot be avoided.

These regularities explain why regional policy, so far dealing mainly with backward regions which are losing their economic base, is an art both difficult and, more frequently than not, quite ineffective.

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III. Policies

Riccardo Cappellin

The Network Model and Regional Policies for European Cohesion and Integration

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References

1. Introduction

According to the penultimate European Commission's progress report on social and economic cohesion (30.01.03), the aggregate index of regional disparities in Italy has weakly decreased in the period 1995-2000 and it is basically stable for all the EU-15 regions. On the contrary it has increased in other European countries. However, the aggregate disparity indicator is of little significance in order to explain or to anticipate the performance of individual regions, just as the aggregate overall grow rate of an economy is a poor predictor for the performance of the individual firms and even sectors, since in each year different firms growth and expand and others decline and close. Regional policies at the national and EU level can not be guided by aggregate indicators, while they should respond to the specific problems of the different regions (figure 1 and 2) and be based on the identification of the complex and also fast changing factors, which enhance or hinder growth in the specific regions.

Unfortunately, economists do not agree on the factors leading to economic growth neither at the national nor at the regional level. Thus, policy-makers pragmatically adopt various instruments, which seem to respond to specific problems. Clearly the number of policy instruments, which may be used, is more numerous than that of the theoretical approaches and it is continuously increasing. That lead to a seemingly confusion since the same policy instrument may be advocated for responding to different problems and on the base of different economic theories and policy approaches. Thus, the actual debate on regional policies may be described as the situation of "too many policy instruments in search of a theory".

The aim of this paper is to classify the various policy instruments into a limited set of theoretical theories and models and to clarify the different and often opposite hypothesis and methodological approaches which characterize these theories and models. As any ex-post evaluation, this effort is inevitably leading to an over-simplification. However, that may help in clarifying the issues at stake in what may appear as a rather techno-

cratic debate and in identifying the basic differences in the often opposite policy approaches which may be adopted.

The paper is articulated in three sections. It first confronts three distinct theoretical approaches, which have been defined as: neo-liberal, corporate and local development model. Then it presents a rather extensive data base of key economic indicators, which allow to appreciate the relevance of these different policy approaches, with specific reference to the case of the South-Italian regions (Mezzogiorno). Third, the paper focuses on the issue of knowledge creation and innovation, as the strategic factor of regional competitiveness and growth in the so called learning economy and it highlights the characteristics of an innovation oriented regional policy. Finally, the paper aims to frame this latter policy in a broader European perspective, aiming to promote the international integration of the various regional innovation systems.

2. The Neo-Liberal Approach to Regional Policy

A neo-liberal policy approach has often been advocated by economists at the European Central Bank, at the various Central Banks (e.g. Bank of Italy) and at the international economic institutions, as also often in the current policy debate on the media. According to that perspective, regional disparities are just a consequence of market imperfections and of regulations, which hinder competition between firms and flexibility in the labour market.

Salaries have to be decreased in the economic lagging regions and adapted to lower productivity levels. Lower production costs will make local products more price competitive. They also attract mobile external capitals. That will determine the increase of the capital/labour ratio, increase the productivity of labour and increase labour demand and employment.

According to this theoretical and policy approach, regional policies aiming to interregional cohesion have mainly a social dimension and short a term perspective and should work as accompanying measures, smoothening the social costs, of restructuring processes which are automatically driven by the free working of market forces, once regulations are removed.

The key economic policy instruments in a national policy promoting the development of economic lagging regions are:

- wage flexibility or regional differentiated wage negotiations,
- trade union flexibility or regional exceptions to law on labour rights and protections,
- emersion of the black economy through exceptions to national fiscal regulations,
- regional decrease of social security contributions,
- regionally targeted decrease of corporate tax.

The indications of neo-liberal approach are based on traditional neo-classical theory. They are intellectually provocative and have been demonstrated in the framework of an abstract macroeconomic model. However, they do not take into account the fact that a modern post-industrial economy, as also the world of large fordist companies of the 19th century, is based on actors, relationships and rules, which do not correspond to the rigid hypothesis of the pure competition model of the 18th century. Thus the policy recommendation of this approach are basically ineffective in promoting economic development in a modern industrial system.

Basically, the neoclassical approach is static and does not take into account the role of the rate of productivity growth and of the pace of innovation adoption in determining regional competitivity. Thus, lower wages give a una tantum advantage similar to a devaluation, as neo-liberal policies do not have any clear effect on the rate of innovation adoption within companies.

The case study of the economic lagging regions in Italy demonstrates that an absolute decrease of labour costs would be ineffective in promoting the growth of these regions, as:

- the foreign demand of South-Italian exports is very low price elastic,
- the lack of competitivity with respect to the other European regions is mainly determined by inadequate product innovation and product quality and not by costs,
- the wages in south-Italian are lower than in North Italy, as also the wages in Italy are lower than in the EU average and in the last few years European labour costs have benefited of a low exchange rate of euro with respect to the US dollar;
- lower wages would decrease consumption and the employment in service sectors in economic lagging regions,
- a decrease of wage would make them lower than the reserve wages of the labour force and that would lead to higher unemployment of local labour force,
- a decrease of local wages would then lead to an higher immigration from non EU countries,
- a decrease of local wage would lead to a greater emigration of local skilled workers toward the most developed regions, thus decreasing the return on the human capital investment in the economic lagging regions.

As indicated in table 1, the share of unemployment of South-Italian regions and also of the black economy is smaller than that of population, while the share of employed workers is greater. The basic economic weakness of the South-Italian regions is the scarcity of the number of industrial firms. That is coupled with their limited size and especially with their very low export orientation. The actual labour costs are already much lower than in the other Italian regions. On the other hand, it can hardly be advocated that economic lagging regions are penalized by too stringent labour regulations, as these latter are in the South-Italian regions the same as in other regions, where the unemployment rate is much lower. Moreover, the bargaining power of trade unions, as revealed by hours lost of strikes, is much lower and the number of deaths due do labour accident is unusually high when compared to the industrial employment. That is an indication that national regulation on labour security are already slack and not rigorously enforced in the South-Italian regions.

Table 1: Key statistical indicators of regional disparities in the neo-liberal model for Italy and the Mezzogiorno

Neo-liberal model : key statistical indicators of regional disparities	Measure Year	Mezzogiorno	Italy	Mezzog. / Italy
Population a.v.[1)]	2000	20,850,151	57,844.017	36.0
Total value added a.v.	1999	453,693,172	1,882,369,712	24.1
Unemployed workers a.v.	2000	1,576,194	2,494,934	63.2
Employed workers a.v.	2000	5,918,421	21,079,776	28.1
Employed in the black economy a.v.	2000	253,000	536,000	47.2
Industrial firms a.v.	2000	195,668	757,367	25.8
Industrial value added a.v.	1999	92,248,130	531,549,398	17.4
Manufacturing exports a.v.	2000	51,929,373	486,576,369	10.7
Yearly compensation of blue collar workers a.v.	1998	31,636	33,345	94.9
Cost of labour per employee with respect to the North-Central Italy %	1999	81.2	100.0	81.2
Productivity with respect to the North Central Italy %	1999	79.0	100.0	79.0
Hours lost for labour conflicts a.v.	1999	466,485	6,363,534	7.3
Deaths due to labour accidents a.v.	1999	317	1,150	27.6
Employed workers in Industry a.v.	2000	784	4,927	15.9

[1)] absolute value

A second and partially different approach in regional policies, as been advocated by the business leaders, large multinational firms and the national associations of industry (e.g. Confindustria). The principles of this approach, which may thus be defined the corporate approach to regional policy, are rather simple and to some respect more solid than that of the neo-liberal approach. In fact, this approach is based on the comparative costs and advantages of alternative locations and it basically advocates that the existence of external diseconomies in the economic lagging regions, due to the greater distance from the markets, the lower productivity of labour, the lack of basic infrastructures and services, should be compensated by public financial and fiscal subsidies. This approach mainly aims to attract external investments in the economic lagging regions. In that perspective, this approach is to a large extend a continuation of the traditional exogenous development approach, which in Italy has characterized the so called “extraordinary intervention in the Mezzogiorno” from the 60s to the 80s, although it is much more theoretically simple and less rich of cultural, social, political and economic implication.

The key policy instruments used in the Italian regions and which may be related to the corporate approach are:

- planning contracts with large industrial groups ("contratti di programma"),
- various job creation initiatives and area contracts within special local areas ("contratti d'area"),
- financial contributions to investment (Law n. 488),
- decrease of labour contributions ("fiscalizzazione oneri sociali"),
- greater wage flexibility and regionally differentiated contractual wages ("gabbie salariali"),
- time extension of the aid to workers temporary suspended or dismissed ("cassa integrazione straordinaria"),
- trade union flexibility (exemption from the "statuto dei lavoratori"),
- job creation in public financed socially useful activities ("lavori socialmente utili"),
- financial aid to the creation of new firms by young persons ("imprenditorialità giovanile"),
- decrease of corporate tax,
- tax allowances.

However, a policy of attraction of external investments (regional marketing) is not a substitute for a well designed industrial policy. The corporate approach is based on a simple comparative cost evaluation and it has failed to explicitly address the structural weakness of the South-Italian industrial firms and to evolve into a clear and modern strategy for the industrial development of these regions. In particular, the corporate approach not only lacks the consideration of the macroeconomic, intersectoral and systemic relations and issues, which are important in the process of economic development, but it even does not make explicit reference to the modern management theories and models. For example it makes no reference to the need to diffuse quality control methods in the south-Italian industry, to the need to promote technological progress as a key competitiveness factor, to increase inadequate R&D investments, to accelerate the time to market and product innovation, to promote the process of internationalization of south-Italian firms.

In particular, statistical indicators for the south-Italian regions demonstrate (table 2) that the south-Italian economy has been capable to attract only a very small share of foreign investments. The number of large firms is very small with respect to national economy. Clearly high-tech firms are much more rare. The productivity of labour is lower. The regional economy is isolated from the international economy as indicated by the low value not only of export but also of imports. The firms in the south-Italian regions are isolated or single plant firms. They neither belong to a group nor have been capable to create a group. The economy is characterized by very small firms, made by 1-2 employees. On the positive side, the rate of firm creation has recently increased and it is greater than the national average.

Table 2: Key indicators of regional disparities in the corporate model for Italy and the Mezzogiorno

Corporate model : key statistical indicators of regional disparities	Measure	Year	Mezzogiorno	Italy	Mezzog. / Italy
Population	a.v.	2000	20,850,151	57,844,017	36.0
Total value added	a.v.	1999	453,693,172	1,882,369,712	24.1
Manufacturing plants created or acquired by foreign firms	%	1986-1989	9.3	100.0	9.3
Manufacturing plants created or acquired by foreign firms	%	1990-1993	13.8	100.0	13.8
Employed workers in firms with more than 200 employees	a.v.	1996	233,918	2,960,618	7.9
High-tech firms	a.v.	2001	18,461	81,486	22.7
Value added per employee in non agricultural activities (Italy = 100)			87.6	100.0	- 12.4
Export to the European Union	a.v.	2000	29,955,677	273,267,382	11.0
Imports from the European Union	a.v.	2000	21,507,449	279,074,452	7.7
R&D intra-muros expenses by firms	a.v.	1999	452,252	5,684,034	8.0
Employees having attended training courses	a.v.	2000	181,235	1,064,619	17.0
Firms controlled by other firms	a.v.	1999	14,785	121,755	12.1
Firms controlling other firms	a.v.	1999	2,447	21,224	11.5
Employed workers in firms with 1-2 employees	a.v.	1996	976,503	3,306,414	29.5
Firms registered since less than 2 years	a.v.	1997	230,167	666,552	34.5
Firms registered from 10 to 20 years	a.v.	1997	438,370	1,376,199	31.9

The corporate approach while emphasizing the capability to attract foreign or external investments does not explicitly acknowledge that the low export capability of the south-Italian industry is the main factor of the gap in industrial development of South-Italian, as the development of once rural regions in North and Central Italy has been driven during the last 50 years by the exports to EU countries and the international markets.

The emphasis on financial and fiscal subsidies, characterizing the corporate approach, is leading and it is instrumental to the aim to maintain the political power concentrated within the national ministries and it has been an argument traditionally used to oppose

the devolution of powers to regional and local governments in the field of industrial policies. Moreover, a regional policy based on financial and fiscal State subsidies is determining recurrent conflicts with the European institutions and is incompatible with the EU competition policy. Clearly, a regional policy based on financial and fiscal State subsidies is distorting the price and incentive system and leading to the creation of uncompetitive industrial plants.

3. The Model of Local Development and the Model of Territorial Networks

According to the endogenous development approach, the most important development factors or resources are almost geographically immobile, such as: physical infrastructures, specialized labour force, local economic sectoral structure and localization economies, technical and organizational know-how, entrepreneurship capabilities, urbanization economies, local social and institutional structures, local consensus and identity, etc. (Cappellin 1998). Thus, the productivity of mobile (exogenous) resources, such as: capital, unspecialized labour and codified information, depends on the quantity and quality of local (endogenous) immobile resources and the strategic objective of regional development policies is to insure the quantitative and qualitative growth, the full employment and the efficient use of local immobile resources.

In synthesis, the process of economic development consists of the gradual reconversion of local resources and productions, both within the firms and through the creation of new firms and the closure of existing firms. That reconversion allows to shift local resources to more sophisticated and higher-margin productions, which allow to increase the per capita income.

The international literature has elaborated various tightly related concepts, which may be grouped into the so called local development model. Among them, well known concepts, are those of industrial districts and local production systems. Although there is not a single definition of industrial district in the very large number of empirical and theoretical, Italian and foreign studies devoted to the analysis of this modern form of territorial organization of the firms, a wide consensus seems to exist on the following characteristics of an industrial district (Brusco; Paba 1997, Steiner 1998):

- a high specialization in a specific product,
- a population of small and medium size firms,
- production processes decomposed in different phases with low optimal technical sizes,
- a presence of external economies for the individual firms, but internal in the local territory,
- the development of subcontracting agreements and of cooperative behaviors between the firms,
- a high mobility from employee to self-employment status and high birth and death rates of the firms,
- the development of a common production and organizational know-how embodied in the skills of the local labour force.

Clearly, the local development approach underlines the need to promote the relationships of co-operation and of technological integration between the various firms and local actors.

More recent studies have focused on the concepts of clusters and networks. The model of territorial networks is tightly related to the local development model. However, it implies a greater formalization of those relationships between the firms, which were mainly informal and based on reciprocal personal knowledge and trust in the traditional industrial districts (Cappellin 1998). That requires the use of more binding or formal agreements between the local firms, as it is characteristic of the just in time and the total quality processes. In particular, this approach implies a greater sectoral diversification of the local economy and a tight integration among the various sectors.

The approach of territorial networks has allowed to identify various forms of integration in a local economy, leading to the creation of various specific links and networks, where different types of flows circulate (Cappellin; Orsenigo 2000):

1. technological integration and information flows,
2. integration of the local labour market and labour flows,
3. production integration between the firms and product flows,
4. integration between the service sectors and the manufacturing firms and service flows,
5. financial integration of the firms and capital flows,
6. territorial integration at the local level and transport flows,
7. social and cultural integration and social links,
8. relationships of institutional integration and institutional links,
9. territorial integration at the interregional and international level and all above indicated flows and links.

According to the network approach, regional economic development does not only depend on the endowment of local resources and capabilities, but also on the regional openness toward the international economy or on the intensity of the integration with the other regional production systems, in terms of exports, productive investments, financial investments and firms acquisitions, transfers of organizational capabilities, transfers of technological know-how and tourist flows.

Often networks are perceived as an organization form, based on intentional co-operation, intermediate between the market, which is based on the concept of competition, and the hierarchy, which is based on the concept of authority. However, the concept of network is broader than that of co-operation/alliances. In fact, two firms may belong to the same network even when they do not explicitly co-operate, but they are tightly integrated, such as in the vertical supply chain of a given product. Moreover, contracts between firms in a network may be rather stable, although they may not explicitly be long term contract. In particular, the stability of the networks is insured by the existence of adequate hard and soft infrastructures, which represent a public good and are not only created by the individual actors themselves but also by the public authorities.

Thus, networks may have different characteristics and they may be distinguished in the following three types:

- ecology networks, often indicated as agglomeration economies or as complex adaptive systems and characterized by strong interaction. Ecology networks are made by relationships of objectively observable stable interdependence or integration. They are also based on behavioral adaptation, strong specialization, complementarity and idiosincratic relationships and lead to various forms of traded and untraded interdependencies or spill over effects,
- community networks, often indicated as social capital and based on the sense of identity and common belonging, an homogenous culture, the sharing of common values. Community networks are characterized by the existence of trust relationships and of common institutions and specialized intermediate social organizations,
- strategy networks, often defined as joint ventures or cooperative agreements between firms and other organizations, based on negotiations, formal and explicit agreements and reciprocal commitments. Strategy networks often imply the sharing of specific resources which are invested in order to achieve common goals and future but uncertain benefits.

A local production systems of firms may also be defined as a complex adaptive system made by a large number of components, which interact in non linear ways and adapt or learn (Holland 2002). Thus it is possible to describe this system with a model, which focuses on key relationships and can only contain a limited amount of detail. In fact, the wide literature and the extensive empirical studies on the evolution of local production systems in various countries and periods allow to identify some regularities or mechanisms, which describe the evolution of this specific type of a complex adaptive system.

In particular, according to the approach of regional endogenous development, the process of economic development may be represented as in figure 1 and it is the result of the tight interaction between six key blocks of variables:

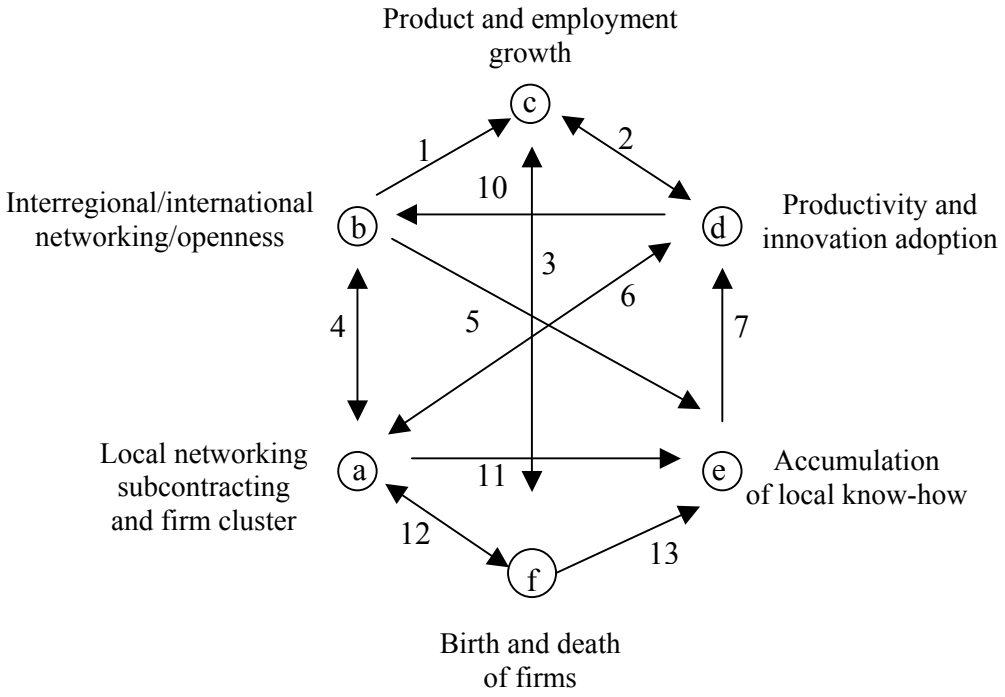
a. the process of local networking,
b. the process of interregional and international networking,
c. the growth of the regional product and employment,
d. the dynamics of productivity or the adoption of innovation,
e. the accumulation of the local technological and organizational know-how and
f. the process of birth, growth and closure of local firms.

The dynamic relationships between the above six variables allow the identification of various cumulative processes, which may have a virtuous character, as indicated in figure 1.

In particular, the adoption of process innovation and the growth of productivity leads to a decrease of employment (2) and of labour costs and to an increase in profits, which has a positive impact on investment and especially in the creation of new firms (3). That allows an increase of employment (3) and the reconversion of production capabilities, which were made temporarily unemployed. The maintenance of a low level of unemployment promotes a high social consensus (12) and it lowers the resistance to the adoption of innovation by the workers (6), thus promoting the increase of productivity. Moreover, the creation of new firms promotes the diversification and a greater integra-

tion of the local production networks (12): that decreases the obstacles to innovation within firms (6).

Figure 1: The development process in the model of territorial networks



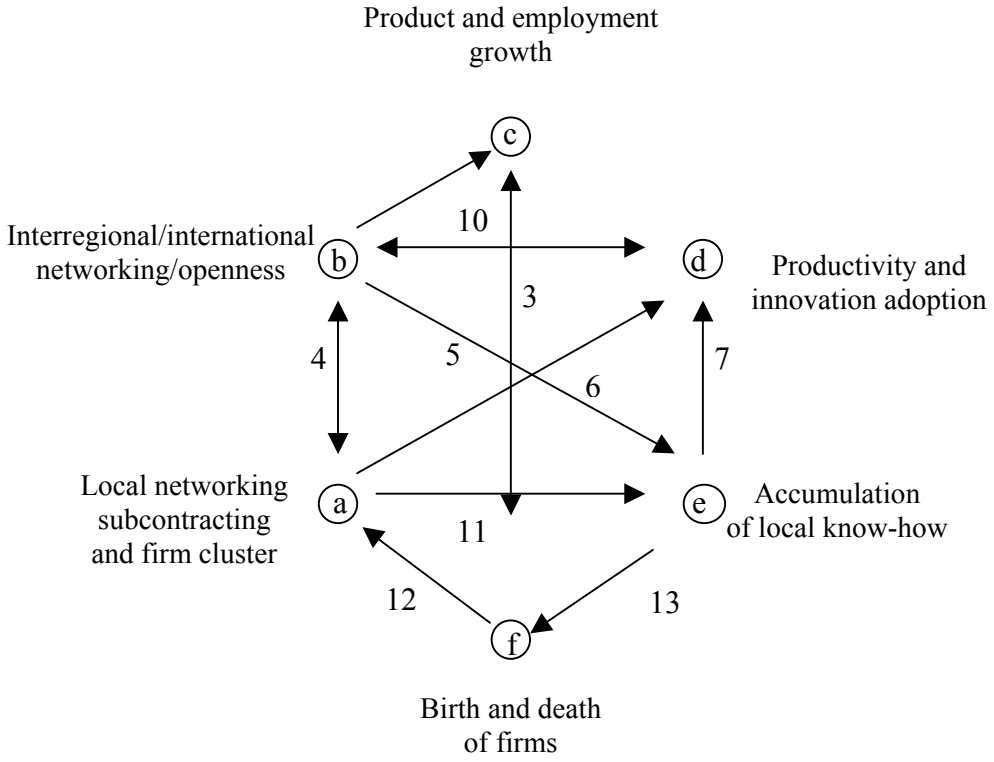
Secondly, the development of the local economy stimulates the demand of local services by the population and of specialized subcontractors by the firms and thus leads to the creation of new firms (3). The higher number of firms in the local economy implies a greater competition and co-operation (12) among them, a greater diversification of the organizational and technological know-how and the development of the entrepreneurial capabilities (11). That stimulates the adoption of product innovation (7), an increased quality of local productions, the competitiveness on the external markets and the growth of exports (10), which represent the most dynamic component of the demand of local productions (1).

Thirdly, the tight integration between the local firms within the networks of subcontracting and the increased complementarity of the local firms increase the efficiency of the local production system and facilitate the innovation process (6) and thus the competitiveness of local productions (10). On the other hand, the increased international openness stimulates the co-operation between the local firms (4), in order to jointly face the challenges of the international competition.

Fourthly, the development of local networking and especially of the subcontracting networks facilitates the creation of new firms (12), which, as indicated above, promotes the diversity of the technological and organizational know-how and the entrepreneurial capabilities (11). That facilitates the innovation process (7) and this latter stimulates the networking and co-operation between the local firms (6), as it promotes the outsourcing and the creation of subcontracting agreements.

The relationships of these six block of variables may also be used in order to interpret the case of the failure of the traditional exogenous approach in the development of Mezzogiorno regions (e.g. the "extraordinary intervention of Mezzogiorno") during the '60s and '80s (figure 2). In this case the increasing openness of the economic lagging regions has determined an increasing dependence from central public intervention (Latella 1999).

Figure 2: The effects of traditional regional policies in economic lagging regions



In fact, the external financial flows sustain the revenue level and the local demand (1). That determines the development of local production systems made by service and industrial firms mainly oriented to the local demand rather than to the national or international market (3).

Moreover, the dependence from the public resources determines a distortion in the sound economic evaluation of the investment projects and in the incentive system (5). In particular, the abundant flows of financial resources transferred to the firms discourage the stimulus to increase the productivity and to introduce innovation (10).

Moreover, the dependence on public resources of the central intervention spreads at the local level an assistance mentality and of patronage practices (5) and that hinders the development of local networking between local firms and institutions (4) and determines a lower cohesion in the local community. On the other hand, the hierarchical relations with central authorities hinder the development of horizontal relations with other regions and determine an attitude of closure and an effect of international isolation (4).

The low capabilities to cooperate between the local actors and the frequent internal local conflicts and political instability on the local governments lead to a lengthening of

decision-making processes, decrease the process of networking and interactive learning (11) and the capability to promote institutional learning and change and the pace of innovation adoption (6).

The centralized structure of national and European regional policies and the lack of fiscal powers of local governments hinder the sense of responsibility of the local institutions and the development of their internal policy capabilities (5).

The low rate of innovation adoption and the low productivity and higher costs decrease the competitive capabilities (10). The export flows are very low and that increases the dependence from external resources (5). This latter lead to the imitation of external life styles and to the loss of local tradition and identity.

The increase of the employment in the public sector decrease the labour mobility and flexibility (5). The prevailing of a bureaucratic and conservative culture hinders the development of innovation and of entrepreneurial capabilities (5). On the other hand, the location of large external firms determines the crisis of handicraft activities and of traditional labour crafts (5), which could have become the base for future export capabilities. The revenues transfers from abroad through the public sector determine negative effects on the labour ethic and on the saving capabilities (5).

The inadequate development of local competencies compresses the local entrepreneurial capabilities and the creation of new firms (13). The insufficient birth rate of new firms and the inability of existing firms to emerge from the black economy hinders the growth of employment and productions (3). Moreover, the limited number of industrial firms existing in the local economy hinders the development of local networks, leads to an inevitable isolation and make more difficult the development of forms of cooperation with other local firms or organizations (12).

The lack of production diversification of the local economy and the difficulties in cooperation between the local firms hinder the development of interactive learning processes, the development of the local know-how, of competencies and of technological and organizational capabilities within the firms (11). The lack of specialized competencies and the decay of the local education services hinders the adoption of innovation and the increase of productivity (7).

4. Regional Disparities Indicators and Policy Guidelines for the Italian Mezzogiorno

According to the local development approach the key indicator of the weakness of the south-Italian regions is the low level of industrial employment (table 3). Moreover, industrial firms are scattered within the regional territory, often outside of well designed industrial areas, and are isolated one from the other. Thus, they are not in position to exploit agglomeration economies, such as the firms in the industrial districts of other regions. Further weakness are the low endowment of economic infrastructures, the low institutional autonomy, indicated by the very low fiscal revenues, and the weak administrative capabilities. Another negative factor is the poor planning of the regional territory, as indicated by the scarce diffusion of basic planning procedures, leading to a progressive decline of the environmental quality.

Other negative indicators focus on the lack of external openness and international networking of the south-Italian regions. Transport flows at the national, non local, level are very low. The diffusion of information is scarce, as indicated by the readership of newspapers. Exports and import flows are low and indicate a situation of isolation with

respect to international markets. Also international tourist flows are very low, with respect to other Italian regions. Finally, the investment in R&D are much lower as also the participation to the international networks of technology is almost absent.

These historical weakness of the south-Italian regions have substantially decreased in the last decade, when the traditional exogenous development policies have gradually been substituted by a new regional policy approach focusing on the development of the endogenous potential. In particular, various positive factors seem to indicate that also the Mezzogiorno economy could usefully adopt a modern network approach to regional policy, as the south-Italian regions indicate:

- an higher birth rates of firms with respect to other Italian regions,
- an increase of their share in national exports (as demonstrated by the exports of furniture of large company Natuzzi and by the very modern Fiat plant in Melfi),
- the creation of some large hubs in intercontinental maritime container flows (as the port of Gioia Tauro in Calabria is the largest container port in the Meditterranean sea),
- the emergence of various clusters with a strong industrial specialization, similarly to the "industrial districts" in the central-eastern regions of Italy,
- the development of co-operation between local actors and the creation of many territorial pacts for local employment,
- the political change in municipal, provincial and regional institutions and their increasing credibility,
- the improvement in the management and planning capabilities of regional administrations.

In fact, recent statistical indicators point out a greater rate of firm creation and a positive balance between firm registration and closure. Moreover, the typical medium high-tech sectors characterizing the Italian light manufacturing sectors (e.g. "made in Italy" productions) are increasingly diffused also in the Mezzogiorno regions. Manufacturing exports, while being very low, have consistently increased faster than the national average in the last decade. Agricultural exports of Mezzogiorno represent a large part of the Italian national export, thus indicating a great increase in the competitiveness of agricultural productions. In particular, the Mezzogiorno regions indicate the capability to perform an original role in the national economy as gateways in its relationships with the North Africa and the Middle East countries. The gap of Mezzogiorno regions in the participation to modern ICT is now very low with respect to the other regions. Finally, the quality of the labour force is not a problem any more since the level of students registered in the secondary schools is even higher than the national average.

Differently from the neo-liberal and the corporate approach, the network approach underlines that international competitiveness is mainly determined by labour productivity, firms organization and technology. Innovation and especially product innovation is the key factor, in order to promote the sectoral diversification of the economic lagging regions.

Table 3: Key indicators of regional disparities in the local development and the network models

Network model: key statistical indicators of regional disparities	**Measure Year**	**Mezzogiorno**	**Italia**	**Mezzog. / Italy**
Population a.v.[1)]	2000	20,850,151	57,844,017	36.0
Total value added a.v.	1999	453,693,172	1,882,369,712	24.1
Employed in industry a.v.	2000	784	4,927	15.9
Employed in industry – selfemployed a.v.	2000	179	860	20.8
Irregular labour units in industry a.v.	2001	253	536	47.2
Internal networking				
Employed in industry a.v.	1991	733,703	5,270,598	13.9
Employed in industry within industrialized areas a.v.	1991	250,964	4,561,418	5.5
Industrial employment in industrial areas / total industrial employment %		34.20	86.50	- 52.3
Industrial districts a.v.	1991	9	199,0	4.5
Employed in industry in industrial districts a.v.	1991	31,381	2,229,750	1.4
Industrial employment in industrial districts / Total industrial employment %		4.30	42.30	- 38.0
Industrial employment in non industrial areas a.v.	1991	482,739	709,180	68.1
Tax revenues / currents revenues %	2000	33.10	40.80	-7.8
Tax and non tax revenues / current revenues %	2000	49.60	62.50	-12.9
Endowment of economic infrastructures %	2001	59.30	100.00	59.3
Share of provinces having elaborated or adopted a territorial plan %	2001	19.44	44.66	-25.2
Urban plans adopted by municipalities in the period 1995 - 2000 a.v.	2001	217,0	2,027	10.7
Number of municipalities a.v.	2001	2,556	8,104	31.5
Differentiated garbage collection a.v.	1998	138,0	3,007	4.6

External networking					
National transport of goods - loaded tons	a.v.	1997	205,074	1,130,936	18.1
Newspapers sold	a.v.	1998	416,315	2,183,957	19.1
Exports	a.v.	2000	55,343,432	497,989,601	11.1
Exports - Manufacturing	a.v.	2000	51,929,373	486,576,369	10.7
Imports	a.v.	2000	66,694,735	493,307,990	13.5
Italian tourists (days)	a.v.	1999	30,684,411	128,237,924	23.9
Foreign tourists (days)	a.v.	1999	13,575,835	90,235,528	15.0
R&D intra-muros expenditure, Total	a.v.	1999	1,869,235	11,524,031	16.2
Technological balance of payments - revenues	a.v.	2000	54	5895	0.9
Technological balance of payments - expenses	a.v.	2000	129	7362	1.8
Factor of strengths					
Firms in industry	a.v.	2000	195,668	757,367	25.8
New firms registered in industry	a.v.	2000	9,779	33,724	29.0
Cancellation of firms in industry	a.v.	2000	9,829	37,504	26.2
Employed in the made in Italy sectors	a.v.	1951	163,037	1,172,813	13.9
Employed in the made in Italy sectors	a.v.	1991	194,753	1,314,636	14.8
Employed in the made in Italy sectors	a.v.	1996	169,682	1,139,426	14.9
Growth of manufacturing exports	%	1991-1999	233.40	204.30	29.1
Agricultural exports	a.v.	2000	2,262,908	6,951,533	32.6
Imports from North Africa	a.v.	2000	14,008,170	27,028,927	51.8
Imports from Middle East	a.v.	2000	9,565,575	18,017,569	53.1
Exports to North Africa	a.v.	2000	2,580,148	11,995,821	21.5
Penetration in % households – mobile phone (*CN)	%	2001	77.00	78.80	-1.8
Penetration in % households - internet (*CN)	%	2001	17.70	25.50	-7.8
Students registerered in secondary schools	a.v.	1999-2000	1.068.056	2.360.808	45.2

[1)] absolute value

The specific role of regional policy is not to struggle with labour organizations for reducing wage levels, but first of all to look for policies aiming to increase the long term productivity growth. Labour flexibility is a necessary condition in the innovation process. However, labour flexibility by itself does not generate technological and organizational innovations, which requires entrepreneurial and managerial capabilities and sound industrial strategies and policies. On the contrary, flexibility alone without innovation and investments is going only to endanger that social consensus between the local actors, needed in a regional economy aiming to a rapid and pervasive transformation.

Clearly, wage levels should be proportional to productivity levels. In fact, high wage levels may be a negative factor for firms, which are already in a crisis. However, low wages have never been a factor of success and of long term growth for modern corporations, neither the reason for the recovery of firms, which need to undergo through a deep restructuring process.

According to the network approach, regional policy should not aim to compensate the local costs and external diseconomies with financial subsidies, but to remove these latter and promote the specific local factors of strengths. The network approach aims to enhance the specific characteristics of the Mezzogiorno economy, its differences with respect to other European regions and to exploit its regional comparative advantages in international competition. It also aims to strengthen the social and cultural identity as a factor of economic development and international visibility and competitiveness. It emphasizes the role of the urban network and the various cities in the process of economic restructuring as also that of international linkages and of the role of Mezzogiorno in the network relationships between the European Union and the various Mediterranean countries.

As indicated above the endogeneous model of development may be distinguished into two different and related approaches. The local development approach highlights the importance of various regional policy instruments, which have increasingly adopted in the South-Italian regions, such as:

- territorial pacts for local employment,
- provision of technical assistance (real services) to small firms by public technology centers,
- creation of regional financial corporations (“finanziarie regionali”),
- creation of industrial location offices in municipal governments (“sportello unico”),
- decentralization of national administration,
- contract for education and labour for young workers (“contratti di formazione e lavoro”),
- time determined labour contracts (“lavoro a termine”),
- job creation in new socially useful activities (“lavori socialmente utili”).

On the other hand, the network approach underlines other instruments, such as:

- national and regional innovation policies,
- creation of science parks,
- creation of technology incubators,
- promotion of regional exports,
- improvement of transportation and communication infrastructures,

- creation of modern logistic services,
- urban renewal in large metropolitan areas and regional territorial planning,
- institutional agreements and planning contracts between public institutions,
- promotion of fiscal regional autonomy and devolution of power to local governments,
- transnational and national interregional co-operation programs.

In conclusion, the approach of the endogenous regional development underlines that regional policies can intervene on the six key variables of the regional development process, which have been indicated in figure 1 and 2, through various specific policy instruments:

- *I - productivity and innovation*: promotion of investments, adoption of process innovation, product innovation and organizational innovation within firms, investment in R&D, etc.,
- *K- growth of local know-how*: vocational education, continuous education, technical and managerial education, territorial knowledge management, creation of centers of technical assistance, co-operation between local firms in innovation projects, etc.,
- *F - birth and death of firms*: promotion of entrepreneurship, firms incubators, venture capital, managerial assistance, etc.,
- *N - local networking*: empowerment of local institutions, improvement of administrative capabilities, creation of intermediate institutions and industrial association, infrastructure investments, urban and environmental quality, transport infrastructures, etc.,
- *O - external openness*: promotion of exports, of internationalization of local firms, of interregional subcontracting, attraction of external investments, international transport and communication infrastructures, programs of interregional co-operation, etc.,
- *L - employment growth*: employment in public sectors, policies on the labour supply, promotion of woman labour participation, disclosure of firms in the black economy, unemployment subsidies, etc.

5. The Transformation of a Local Production System into a Learning Region

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 economic integration at the European level has been a factor, which has enhanced a higher development of various economic lagging regions.

In fact, 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 economic development of the European Union in the last decades demonstrates that the development of each 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 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.

The competitivity of firms is determined by the quality of the product and processes, the shortening of decision making time, the time to market in product development, the time lags in production cycles and the adoption not only of technological innovation but also of organizational innovations in the production processes. Key factors are the enhancement of the competencies and professional skills of the labour force, the intermediate cadres and the managers and entrepreneurs. The factor which insure the survival or growth of firms is not the material investments, the financial capital and the value of material assets, but rather the know-how and the core competencies of the firms.

Innovation – both technological and organizational – is a fundamental ingredient of economic growth, both directly and indirectly – via exports and trade and that it has a crucial role in enhancing the positive potentials of the process of international integration.

The quality and level of the know-how is a major factor in promoting the competitiveness and the development of a region. In particular, according to a network approach, the advancement of knowledge is promoted by the cultural diversity, by the synergy between local and external sources of knowledge 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.

The concept of the knowledge economy indicates a new phase of economic development in which scientific knowledge and human resources represent the strategic factors. Moreover, the concept of the learning society underlines the link between the processes of learning, the innovation process and the competitivity of the firms and the national or local economies.

The concept of knowledge economy is different and wider than that of the new economy based on ICT (Information and Communication Technology). Internet facilitates the transfer of information and the capability to learn and it, therefore, enhances the development of the knowledge economy. However, the development of the knowledge economy and therefore of the demand of information is a key factor, which stimulates the diffusion of Internet and of the so called new economy.

The international literature has elaborated various tightly related concepts in order to interpret the process of local development, such as: the industrial districts, the milieu innovateur, the clusters, the regional innovation systems (RIS), the approach of the proximity dynamics, the institutional thickness and the approach of territorial networks (Becattini 1991, Putnam 1993, Brusco; Paba 1997, Braczyk; Cooke; Heidenreich 1998, Steiner 1998, Porter 1998, Rallet; Torre 1998, Maillat; Kebir 1999, Cappellin 2000a).

Regional development theories have recently focused on the process of learning and of knowledge accumulation in regional networks (Lundvall; Johnson 1994, Cooke; Morgan 1999, Maskell; Malberg 1999, Cappellin 2000, 2003, Holland 2002). On the other hand, mechanisms and potentials of learning in individuals have been studied from different disciplines and can benefit from a quite long tradition and consolidated

knowledge, though various and not always converging. Some contributions have focused on the social aspect of learning, where social learning is defined as the process by which the individual, according to social stimuli and internal stimuli connected with the social environment, acquires information from the social context and processes them to produce social behaviours.

The creation of new knowledge implies an intense process of interaction (Nonaka; Konno 1998) which is characterized by transfers both of tacit knowledge and of explicit knowledge and which requires face to face contacts and a physical proximity, like also contacts through the ICT on long distance.

Defining a region as a learning region means to contend that the actors of the system are committed to an interactive learning process, which allows the development of knowledge, know-how and other capabilities required for creating innovation and keeping the regional competitiveness (Maillat; Kebir 1999).

The objective of a learning region is that of integrating the tacit or implicit traditional knowledge, which is bound to the local context, with the codified knowledge available at the world level, in order to stimulate the regional endogenous potential. In particular, a learning region may represent the final outcome of the evolution of an industrial district, which undergoes an ongoing evolution thanks to the active role of the processes of learning, adaptation and innovation.

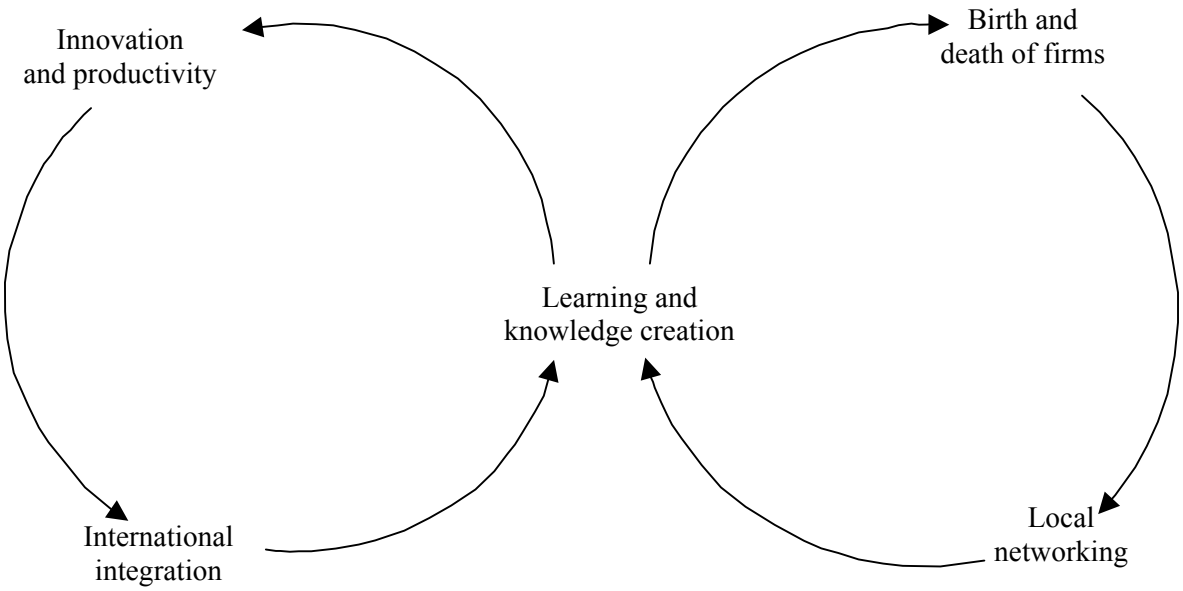
The key variables of the economic development process in a learning region, are those which characterize the process of knowledge creation and innovation. In fact, the processes of interactive learning and of process of knowledge creation play a crucial role in the development process, as they enhance on the one hand the innovation within the existing firms and on the other hand the creation of new innovative firms.

Innovation and productivity increase in the existing firms, lead to a greater international competitiveness and thus an increasing openness and integration in the international economy. The creation of new innovative firms increase the sectoral diversification of the local economy and enrich it of new technical competencies and production capabilities and lead to the formation of networking between the firms at the local level. Both the increasing international integration and the increasing networking at the local level stimulate the process of interactive learning and of knowledge creation, thus leading to positive cumulative process of development, as indicated in figure 3.

Learning and innovation are intrinsically a collective and interactive process that involves access to, interactions among, integration of heterogeneous agents, technical skills and fragments of knowledge, competencies and capabilities. Innovation has a fundamental systemic, organizational and often spatial nature and it involves, in various forms and degrees, collaboration and cooperation with a multitude of differentiated actors. That leads the innovation process to change from a linear model to a chain-linked model (Mansell; When 1998).

The knowledge networks are based on vertical customer-supplier relationships, which are a crucial tool for the development of incremental product innovations, and also on horizontal relationships, that could promote the development of the innovation process through the offer of information on technological opportunity and the process of imitation and of adaptation of success innovations adopted by other firms and organizations (Maillat; Kebir 1999).

Figure 3: Learning and knowledge creation, indicators and drivers of economic development process



Regional innovation policies in less developed regions, should focus on the case of small and medium size firms and on the medium and low technology industrial sectors, which may represent the crucial specialization in the industrialization process of these regions.

Innovation affects the capabilities of small and medium size firms to survive and to grow in the actual process of liberalization and openness to international markets. In particular, innovation in small and medium size firms (SMEs) can be broadly defined as extending beyond research and development activities and also beyond the adoption of new technologies, in order to include more incremental developments, such as the adaptation of product and services to meet the changing needs of customers and markets and the adoption of new organizational methods both internally and in the relations with other firms in a sectoral or regional framework.

6. The Aims and the Metrics of Territorial Knowledge Management (TKM)

The "European Innovation Scoreboard" has selected various indicators of innovative performance. Table 4 allows an analysis of the individual indicators of innovative performance in an international sample of economic lagging regions and of industrial restructuring regions and it compares it with average levels in the European Union, the new Member States and in the Candidate Countries. The gap of the economic lagging regions with respect to the EU average is the largest in term of business R&D and in particular of high-tech patent application. That is certainly related to the high gap in term of employment in medium and high-tech manufacturing and of employment in high-tech services. On the other hand, the gap is lower in term of public R&D and of tertiary education.

Table 4: The innovative performance of new Member States and the Candidate Countries, Economic Lagging Regions and Industrial Restructuring Regions

	Population with tertiary education	Public R&D / GDP	Employment in high-tech services	Employment in medium/ high-tech manufacturing	Business R&D / GDP	High-tech patents / population	GDP per capita
Economic lagging regions	16.8	0.41	1.96	3.8	0.33	2.37	
Burgenland	14.5	0	2	4.31	0	0	14,105
Brandenburg	33.4	0.89	2.32	4.58	0.60	9.3	15,412
Peloponnisos	12.7	0.10	1.27	1.35	0.09	0	8,230
Andalucia	18.8	0.46	1.48	2.41	0.22	0.3	9,508
Limousin	17	0.21	3.18	4.38	0.53	1.4	17,485
Campania	8.8	0.54	2.05	4.46	0.29	0.5	10,525
Norte	7.3	0.30	0.74	3.39	0.10	0.3	8,738
Northern Ireland	22.2	0.39	2.65	5.54	0.45	2.4	15,963
Other Italian regions							
Puglia	9.36	0.30	2.19	3.99	0.15	0.5	10,971
Basilicata	6.59	0.36	0	9	0.08	3.3	11,826
Calabria	10.21	0.26	2.54	1.21	0	0	9,983
Sicilia	9.47	0.48	2.12	2.3	0.03	4.9	10,798
Sardegna	8.27	0.58	1.83	2.26	0.09	1.2	12,407
Industrial reconversion regions	17.9	0.44	2.34	7	0.44	5.49	
Steiermark	12.29	0	1.99	7.05	0	5	18,237
Regione Wallonne	22.47	0	3.14	4.85	1.15	6.9	17,329
Saarland	17.85	0.63	2.34	8.76	0.33	6.5	21,533
Kendriki Makedonia	17.9	0.43	1.38	2.14	0.09	0	10,576
Aragon	24.66	0.31	1.15	10.54	0.39	0	14,424
Nord-Pas-de-Calais	16.39	0.31	2.4	6.59	0.36	3.7	17,299
Umbria	9.59	0.57	2.99	6.65	0.11	1.2	16,284
North East England	22.35	0.37	3.34	9.45	0.62	2.7	16,451
European Union	21.2	0.67	3.6	7.6	1.28	12.4	
Candidate Countries	17.5	0.41	2.6	5.4	0.32	0.5	

Sources: European Innovation Scoreboard 2002 and Science, Technology and Innovation: key figures 2002

The gap of the EU economic lagging regions in term of employment in medium and high-tech manufacturing and of employment in high-tech services is also significant when compared to the new Member States and the Candidate Countries (CC) and to a sample of industrial restructuring regions, which indicate higher average level in both indicators. On the other hand, the levels of the other indicators of innovative performance are very similar in the economic lagging regions, in the CC and also in the industrial reconversion regions, and they are all significantly lower than the EU average.

In the EU industrial restructuring regions, the level of tertiary education is lower with respect to the EU average and also (only with some exceptions) to the average results for the CC.

Also employment in high-tech services, public R&D, business R&D is lower in the industrial restructuring regions than in the EU average and comparable to the levels in the CC.

On the other hand, EU industrial restructuring regions indicate in most cases levels of employment in medium and high-tech manufacturing higher than the CC and in some cases higher even than the EU average.

The collection of statistical indicators of innovative performance requires a specific theoretical framework, which allows to clarify the key relationships in the process of knowledge creation and of innovation adoption.

According to an evolutionary perspective technology is knowledge. Therefore, it is linked to the understanding, elaboration and assimilation of information, and it has a cognitive dimension. On the other hand, a modern industrial economy may be described as a complex adaptive system (Holland 2002), which is similar to a cybernetic circuit, performing various calculations, or to a network of biological cells, which live integrated among themselves in a symbiosis relationship. In particular, the basis for cooperation and survival in the knowledge economy is differentiation and similarity between the knowledge nodes. In fact, a knowledge economy thrives on diversity of knowledge, as such diversity should enhance complementarity and cooperation.

As in the models of neural networks, the creation of knowledge is the result of an adaptive learning or searching process, which leads to new synaptic connections of various nodes. Knowledge sciences show that improvements of a man's knowledge base are only possible, when outside stimuli reach the individual's cognitive system and these stimuli are integrated and processed within the cognitive system.

The approach of territorial knowledge management allows to identify the key dimensions of a modern innovation oriented regional policy. While the neo-liberal approach to economic policies basically aims to the increase the competition between firms and flexibility in the labour market, the aims of the network approach to regional policy may be summarized with the following six “I”:

- *investments* and promotion of a forward looking perspective,
- *integration* at the local level of firms,
- *international integration* in terms of production, investment and technology,
- *interaction* between different technologies, competencies and actors,
- *intelligence*, creativity and receptivity to new technologies,
- *innovation* and entrepreneurship capabilities within firms and of local institutions.

In fact, regional development requires greater investments not only in fixed structures but also in intangible assets, such as R&D and education. That requires an enlargement of the temporal perspective both of the institutions and also by the private firms and the adoption of medium and long terms strategies and qualitative targets. Clearly the return of investments in R&D, such as those in physical infrastructures, can not be evaluated on a yearly perspective, but as a prerequisite for application technologies which may be developed in the next decades.

The development of knowledge requires a strong integration and the creation of network at the local level between the firms and also with the institutions, the citizens and the various local actors, which have different and complementary competences. While cooperation has often been interpreted as alliance between firms with similar characteristics, a network perspective emphasize the need of creating cooperation schemes between firms which are different and complementary and aim not to defend themselves but rather to achieve a joint project and to create new productions.

The development of the knowledge economy requires an increasing international openness, as that enhances the access to external knowledge and new technologies. It also allows a greater diversity of competencies available as the access to local markets and the specialization of local firms.

The process of knowledge creation requires learning processes which do not occur at the individual level but have a strong interactive dimension. In particular, innovation requires interdisciplinary collaboration or the interaction of different technologies and the interaction of basic with applied research, of tacit with codified of diffused with private, of specialized with combinatorial or integrative knowledge and of propositional with prescriptive. That also requires the existence of institutions, organizations, social capital, networks or soft infrastructures which may facilitate the creation of these forms of interactions.

There is the need to free the intelligence and to promote individual and collective creativity. The innovation process depends not only on the accessibility to complementary knowledge, but also to openness or to the absorptive capabilities, which determine the speed of change and the time to market. These latter are mainly related to level of education, the investment in human resources, in continuous or lifelong training, as they allow a greater flexibility and receptivity to what is new. Creativity depends on the capability to connect existing building blocks in new ways, to accept external stimulus. That also requires the acceptance of the differences and of the positive aspects of the conflicts, as innovation always generates conflicts creative destruction). There is the need to promote the lateral thinking, the autonomy and freedom of researchers and inventors and to reserve to them stable resources to prosecute their search of innovation. These policies should also aim to avoid the brain drain and to attract competent and creative people from other countries and regions.

Finally, development policies should promote the innovation or the capability to implement technological ideas in the firm's organisation and to generate income and promote revenue creation. That implies the capability to integrate the cognitive processes with the production processes and organise local resources and increase their productivity. Innovation does not only have a technological dimension but also an organizational and institutional dimension and it is important also in the tertiary sectors and in the public administration. Next to the innovative start-up in the science based sectors are also incremental innovation which develop within the complex networks of many small firms and of tight client-supplier production cooperations, leading in the medium term to completely new products and to radical changes in the technologies.

7. The European Dimension of Innovation Policies

Clusters are often considered as the main drivers of regional development. Clusters are formed by groups of innovative enterprises, academic and research institutions, local development agencies and/or other supporting organizations. Clustering is networking at large, with constituent parts developing strong, interdependent links. Interaction flow patterns vary, representing knowledge transfer, financial transactions or simply, increased personal contacts. Clusters of industrial and service activities, networks of small and medium size enterprises, supported by a rich endowment of social capital and intermediate institutions, have a diffused role in all European regions and that seems a characteristic of Europe with respect to other world areas.

However, local clusters are also increasingly integrated in the regional, national, European and global economy. Thus, local networks are gradually extending at the interregional/international level. Moreover, concepts and methods which have been elaborated on the economic and social integration at the local level and on analyzing the concentration of innovative activities in specific local clusters and networks, could be applied in an interregional/international framework.

Innovation generates winners and losers at the same time and depends on learning processes and knowledge creation and accumulation. Learning brings about enormous opportunities for growth but also severe threats of exclusion and marginalization, especially for the economic lagging regions in the EU and Central and Eastern Europe (CEE) regions and countries. In fact, there is the need of examining the problems and possible policy actions arising from the perceived need for tighter integration and cohesion within EU countries, as seen from the perspective of a learning economy, taking into account the persistent disparities of the economic lagging regions (particularly Objective 1 regions) as well as the enlargement of the European Union.

An important problem in regional policies is the transition of the less developed regions, such as the actual Objective 1 regions and the regions of the CEE countries, to the model of the knowledge economy and how to avoid their exclusion with respect to the most developed regions, which operate at the frontiers of technologies. The question of how international knowledge networks can contribute to economic development and how policy can support such networks is of great importance. Knowledge and innovation networks have developed within Western Europe and they should be encouraged to develop in the economic lagging regions of the actual 15 EU members and in the new accessed countries with a view to maximizing the full potential of Europe's knowledge and learning capacity as a whole.

European regional policies should identify the role of international openness and receptivity and promote the integration of the less developed regions into the international knowledge and innovation networks from the perspective of the transition of these regions to the model of the learning economy. There is the need to analyze the mechanisms which operate at the interregional/international level and lead to higher forms of integration of industrial and service firms, not only in a commercial or financial perspective, but also in that of the knowledge and innovation networks. In particular, interregional/international knowledge and innovation networks should allow the circulation not only of information or codified knowledge, as in the collaboration between R&D institutions, but also of tacit knowledge, know-how and competencies.

There is the need to promote the transfer of information, knowledge and competencies between firms at the interregional/international level, as a factor leading to higher competitiveness and growth, in all countries but especially in economic lagging regions (particularly Objective 1 regions) and in Central and Eastern Europe countries. That

implies to decrease the organizational and institutional distance between the various regions at the interregional/international level, since tacit knowledge and innovation capabilities often are embodied in human capital and individual organizations and institutions.

European regional and R&D policies should identify specific institutions and procedures or soft infrastructures which could favour European cohesion or a greater integration of the less developed regions within a European Research and Knowledge Area. Regional and innovation policies should develop strategies for an intensification of interactive learning processes and co-operation not only with specific regions but also at the interregional and international level. They should promote the creation of new hard and soft infrastructures or institutions, both at local and European levels, which can enhance the way in which knowledge and innovation networks existing in the most developed countries of the EU, may be extended to the economic lagging regions (particularly Objective 1) in South Europe and the countries in Central and Eastern Europe.

Policies should tackle the obstacles which usually hinder the diffusion of technology spill over outside a specific local economy, and the policies should care for soft infrastructures and institutions which can remove those obstacles. In fact, the question of whether knowledge creation and diffusion leads to economic convergence or divergence to a large degree depends on the development of institutions that create and transfer knowledge.

An appropriate institutional framework at the European level may have a key role in determining the rate and direction of technological learning. Thus, it is important to promote an environment conducive to research and innovation, through the introduction of accompanying legal, financial and fiscal conditions that would prove necessary. Supranational institutions may become an important actor in setting policies, which do not merely support particular innovative activities, but create a framework by which knowledge dynamic processes are harnessed. Transregional infrastructures could allow a greater share of information through more frequent face-to-face contacts, common culture and greater opportunities for collaboration. These policy indications may contribute to the European R&D policy and to the European regional policy in economic lagging regions.

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Enlargement and EU Regional Policy

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1. Introduction

In March 1999, the EU began the process of adapting its regional policy for the enlargement of the Union. With its Agenda 2000 reforms, the Berlin Council devised a financial framework that would provide pre-accession and enlargement-related support for the new members, but without increasing the overall EU budget. For the first time, the growth in Structural and Cohesion Funds was stopped, and the receipts of the existing EU-15 recipient regions (in most cases) were projected as declining over the 2000-06 period.

The cutbacks were not easy to achieve. Reductions in the spatial coverage of Objective 2 areas were subject to a 'safety net', and de-designated Objective 1 and 2 regions were granted generous transition periods. Nevertheless, by 2006, the spatial coverage of EU regional policy in the EU-15 will have contracted from the 1999 figure of 51 percent to 41.4 percent, the first occasion on which assisted area coverage has actually fallen (Wishlade 2000), and the annual EU budget for Structural Funds in the EU-15 will have fallen from € 29.4 billion in 1999 to € 26.7 billion in 2006.

The next reforms will be rather more challenging. Although the EU-15 have budgeted for € 12.1 billion in 2006 for the new Member States following enlargement, this is merely a temporary allocation of funding to cover structural operations until the end of the funding period. After 2006, the new members will expect to receive shares of Structural and Cohesion Funds that reflect the severity of their economic development problems, while the existing recipients will need either to give up on entitlements or increase the overall budget, or a combination of both. However, there are also more fundamental questions about the rationale and scope of EU regional policy in an enlarged EU: What should be the objectives of EU regional policy? should it address disparities between countries or regions? What type of regional problems should be addressed? What are the most important forms of aid?

The European Commission has launched a debate on these questions, first with the publication of the Second Cohesion Report (Commission of the European Communities (CEC) 2001) and then the Second European Cohesion Forum. Some Member States and interest groups have also begun to express views. Over the next 2-3 years, this discussion will develop further until the EC puts forward its proposals as a basis for negotiation.

The following paper rehearses the main issues. It begins by examining the arguments about enlargement and cohesion with a summary of one of the preparatory studies (Weise et al. 2000) undertaken (by the DIW and EPRC) for the Second Cohesion Report, as well as references to some of the Commission's own research. The paper then outlines some of the options for the future of EU regional policy, describing four possible scenarios originally put forward in a 'Sub Rosa' discussion paper (Bachtler et al. 2001) before concluding with some questions for discussion.

2. EU Enlargement and Cohesion

At the heart of the debate over the challenges of EU enlargement is economic and social cohesion in a wider Union. Cohesion is an important pillar of the European social market economy, it underpins EU action in the field of regional development and it will take on greater political, economic and social significance in an enlarged EU given the relative underdevelopment of the Central and Eastern European (CEE) countries. The importance accorded to cohesion derives from the belief that: "solidarity and mutual support are an equally important basis for progress [as market forces], not only for social reasons but also for optimising overall economic benefits since there is ample evidence of detrimental effects of inequality of growth" (Commission of the European Communities (CEC) 1996). This commitment to territorial and social justice provides the rationale for the EU Structural Funds and the Cohesion Fund as well as the pre-accession instruments, Phare, ISPA and SAPARD.

While there is a clear political commitment to economic and social cohesion at EU and national levels, the architecture of future policies is not clear. Several issues need to be taken into account.

- First, the impact of enlargement on cohesion is still speculative, in particular because of the uncertainty about national and regional growth rates, and the difficulty of measuring and comparing sub-national economic growth reliably across the EU and Central and Eastern European countries (CEECs).
- Second, the size and diversity of an enlarged EU requires a fundamental reappraisal of the rationale and objectives of policies to address economic and social cohesion.
- Third, the scope for EU intervention will be influenced by the willingness of the EU-15 to commit financial resources (the size of the structural policy budget) and their preparedness to forego the aid provided to current recipient regions (the criteria for allocating the budget).
- Fourth, the relationship between EU and national policies in the field of regional development is changing, affecting the scope for current and future Member States to implement their own regional policies. Greater coherence is driven partly by regulation (Structural Fund reform, EC regional aid guidelines) and partly by a convergence in thinking about strategies for economic and social cohesion, but the relationship is still uneasy.

- Lastly, it is becoming increasingly recognised that effective delivery of both EU and national policy intervention in regional development requires significant investment in institutional capacity at national, regional and local levels.

2.1 Disparities and Problems

The starting point for considering the cohesion 'challenge' is the extent of national and regional differences. Eurostat data shows a resumption of strong growth across much of CEE. However, despite recent above EU-15 average growth rates in the CEECs, economic convergence remains limited and GDP levels are still below the 1989 figure in many countries. Poland, Slovenia, Hungary and the Czech and Slovak Republics overall show the most positive macro-economic indicators. Considerable labour market changes have occurred associated with the processes of economic restructuring, privatisation and liberalisation. Broad sectoral change includes a sharp fall in industrial and a considerable rise in service sector employment, but differences to the employment structure of the EU members remain substantial. Agricultural employment has generally declined, with important exceptions (e.g. Romania). Unemployment has risen in all countries to varying extents, averaging ten percent across CEE, but remains at levels which are comparable to EU-Member States. Economic transformation has been associated with emerging social problems and widening inequalities within CEE societies. Income levels and standards of living have declined and poverty has spread considerably, with variation between countries. Poverty has a disproportional effect on certain social groups e.g. the elderly, specific ethnic groups, single-parent families, unemployed, low paid employees and women. This is affected by unemployment, discrimination and changes to social protection systems. Rapid industrialisation, inefficient raw material extraction, obsolete technology and a lack of environmental control has left a legacy of environmental degradation. While reduction in pollution levels is evident, the costs of clean-up are still extremely high.

The extent of sub-national disparities (in GDP and unemployment) in the CEECs is generally less than in some EU-Member States. CEE regions (at NUTS II level) are more sparsely populated than in the EU (except the Nordic countries). GDP per capita in CEE regions is considerably less than the EU average – only Prague and Bratislava lie above this level. The poorest regions are in Bulgaria (ca. 23 percent of the EU average). The poorest EU region (Ipeiros in Greece) is 43 percent of the EU average, comparable with Hungary. Regional unemployment is relatively low in CEECs in comparison to the EU, with considerable sub-national variation (but again less than in EU-Member States). The lowest rate (1998) was in Prague (3.1 percent) and highest in eastern Slovakia (21.6 percent). Agriculture dominates regional employment structures in some CEECs (e.g. Romania and Poland) to a much greater extent than in the EU. Capital cities have the highest levels of service sector employment and, overall, EU regions tend to have more diversified employment structures.

The types of regional problems in CEE reflect both the unique process of transition, as well as structural changes already undertaken in Western countries but delayed in CEECs by geo-political factors. As noted in the earlier discussion paper, there are four overall groupings.

- *Capital cities/major urban agglomerations* which demonstrate the most favourable economic indicators, benefiting from e.g. high investment, skilled labour force and training facilities, more developed infrastructure, business services and access to decision-makers. Some capitals (e.g. Budapest, Prague, Tallinn, Bratislava) are highly dominant in the national economic structure.

- *Western border regions* which benefit from proximity to the EU, encouraging investment, trade, tourism and cross-border retail and educational/technological initiatives. At the EU-CEECs border, per capita GDP and productivity (excluding commuters) is lower in all the CEECs border regions than their EU neighbours (except for the case of Bratislava and neighbouring Austrian regions of Niederösterreich and Burgenland). Total unemployment is higher in German border regions than neighbouring Polish and Czech ones but the situation is reversed on the Austrian, Greek and Italian border with CEE.
- *Peripheral eastern and rural regions* are among the most economically disadvantaged in CEECs. Geographical location, poor infrastructure, low investment, declining agriculture and rural out-migration are all contributory factors. These regions have particularly high rates of unemployment.
- *Old industrial regions*, the drivers of economic activity under socialism, which have been particularly negatively affected by privatisation, enterprise restructuring/closures, subsidy loss and market re-orientation. Problems include unemployment, lack of entrepreneurship and environmental decline. A full process of restructuring still has to be undertaken in some old, mono-structural areas.

As part of the preparatory study (Weise et al. 2000), a cluster analysis was conducted to classify all ca. 260 EU and CEEC regions simultaneously in types of regions according to their employment structure and population density. This led to six clusters: agglomerations, service-dominated, service-biased areas, industry, agriculture-biased, and agriculture dominated. The distribution of the regions among the clusters shows the very poor development of the service sector and the importance of agriculture in the transition countries compared to the EU-15. Industry plays a dominant role for employment only in a minor part of the CEEC regions. This economic structure of the CEEC regions is noteworthy because, in general, regions with above average GDP per head are more likely to be found in the agglomeration or service clusters than in the industry cluster (although some of the industry regions in EU countries, mostly from Germany or Italy, are quite well-off). An agriculture bias is clearly associated with a low per capita GDP. Worse still, with only few exceptions, the CEEC regions were clearly the poorest regions in their respective cluster. While the cluster analysis produced quite homogenous groups of regions with regard to their overall structural characteristics, there is no uniform socio-economic situation among the regions of a specific cluster. Labour market problems tend to be concentrated on selective regions in the EU as well as in the CEECs. They are not obviously related to the GDP level of a region and national characteristics seem to play a dominant role.

2.2 Impact of Enlargement

The enlargement of the EU will not be a spatially homogenous process, but will have differing impacts both on the regions of the current EU-15 and those of the CEECs. Looking at the effects of enlargement, during the 1990s, the CEECs managed to redirect their exports away from the former CMEA members towards the European Union. The trade volume has increased significantly and the EU has become the most important trading partner of the CEECs. From the point of view of the EU, the CEECs are much less important partners. Geographical proximity seems to play a key role in determining bilateral trade flows. The main trading partners being Germany and Austria, as well as Finland, Italy and Greece on the EU side and Poland, the Czech Republic and Hungary on the CEE side. Regional trade data available indicate that this pattern also applies at the regional level. However, eastern German, as well as western Polish regions do not account for significant shares in total trade of their respective countries.

A further trend is that CEECs have been able to change the commodity structure of their exports from inter-industry to intra-industry trade, i.e. their export structure is now more similar to that of the EU as in the early 1990s. However, it is important to note that bilateral exchange is overwhelmingly trade in vertically differentiated products with the CEECs being exporters of product variations with lower unit values. Only Hungary seems to be an exception. There is no indication that the CEECs constitute a severe competition for the EU cohesion countries or other EU members.

As in the case of trade, recent years have seen a marked increase in foreign direct investment (FDI) flows from the EU to Candidate Countries, dominated by the main trading countries but also by France and the Netherlands. While FDI flows are important for the receiving countries (most notably Hungary, the Czech Republic and Poland), Austria is the only EU member where CEE plays a prominent role as a destination for FDI flows. Other than for trade, there are practically no FDI flows from the CEECs to the EU. The choice of destination seems to be influenced, in general, by proximity and political stability. The motives for investment are not entirely clear. While surveys show a slightly above average importance of wage costs advantages for FDI in CEE (compared with overall FDI outflows from the EU), there are also indications that this is not the dominating influence factor. Market access and first-mover advantages also play a decisive role.

Migration is often cited as the most important post-enlargement effect with automatically associated negative consequences for EU members. High estimates of future migration are introduced in the debate apparently based on crude measures and without econometric and economic-modelling background. More diligent analyses do not expect a massive influx of migrants after enlargement and see only minor – and by no means necessarily negative – effects on wage and employment in the EU. Migration flows will be directed mostly into Germany and Austria as these countries are already home to the largest shares of CEEC citizens in the EU. Inside these countries, they will be directed to centres of economic activity, not necessarily to the border regions. Actual migration flows depend on the income gap, the labour market situation in the destination country and the stock of migrants. The share of citizens of the country of origin that are already living abroad determines, on the one hand, the destination choice of new migrants. More importantly, on the other hand, it dampens the potential for further emigration from a specific country because the propensity to migrate is not distributed evenly among the population. It is, therefore, to be expected that migration flows will rise after enlargement (there are only comparatively few CEECs citizens already living in the EU). However, the inflow will not be as excessively high as sometimes expected and it will slow down over time. The actual labour market effects do not just depend on the number of migrants but also on their qualification. Highly qualified migrants can have positive effects for low qualified domestic workers.

In summary, enlargement has often been discussed in a negative language of ‘threats of competition’, an ‘influx of migrants’ and ‘cost burdens’. The research summarised above (Weise et al. 2000) shows that it is important to keep these issues in perspective. The EU-15 currently have a € 25 billion trade surplus with CEECs, particularly in investment goods, and there is no indication that the CEECs constitute severe trade competition for the EU cohesion countries or other EU members. Similarly, the CEE economies host a stock of € 27 billion of foreign direct investment from EU countries, only a small part of which appears to be driven by low-wage costs in CEE. The major part of FDI is motivated by market access; investment in CEE is created rather than diverted from elsewhere in the EU. Lastly, high estimates of future migration appear to be based on crude calculations. More detailed analyses do not suggest massive out-migration

from CEE countries after enlargement and foresee only minor, and by no means necessarily negative, effects on wage and employment in the EU.

The latest EU research on the impact of enlargement (Commission of the European Communities (CEC) 2001) concurs with this overall assessment, concluding that, like other studies:

> "… enlargement is a positive-sum game for the parties involved. The candidate countries should benefit greatly from enlargement thanks to a more efficient allocation of resources, greater investment and higher productivity growth… Growth is also expected to increase in EU-15 due to enlargement … with those countries with relatively strong ties to the transition economies, such as Germany and Austria, benefiting the most".

Nevertheless, as noted above, the critical factor for a positive enlargement scenario is the preparedness for structural change. Along with the economic, industrial and social policies of the EU and national governments, enlargement presents formidable challenges for EU structural policies. Widening the EU to include 27 Member States would increase the territory of the Union by 34 percent and its population by 28 percent, whereas the average GDP per capita would decline by approx. 15 percent. Accession of the ten Central and Eastern European countries would radically alter the EU maps of regional problems and disparities. Agriculture dominates regional employment structures in the transition countries to a much greater extent than in the EU-15, while the service sector remains relatively under-developed, especially outside the capital cities. The agriculture bias is associated with low per capita GDP; the poorest CEE regions (Bulgaria, Latvia, Lithuania and parts of Poland and Romania) have a GDP per capita of below 30 percent of the (current) EU average.

EU enlargement will, therefore, require a reorientation of the Structural and Cohesion Funds. Under the current budgetary parameters, for whatever objectives and criteria are used for allocating funding, there would need to be a substantial shift away from current recipients to the transition countries. However, there is also scope for new thinking about the way in which the EU and Member States work together on regional policy.

3. Enlargement and Regional Policy

The EU Treaty commitment to economic and social cohesion is an important pillar of the European social market economy and it underpins intervention through EU structural policies. However, the economic development logic of EU action is undermined by a perception of the Structural and Cohesion Funds as a 'side payment' to enable agreement in other policy areas and by the political bargaining associated with the allocation of funding. EU enlargement presents an opportunity to improve the allocational logic of EU regional policy and maximise its impact on economic and social cohesion.

The principles of the 1988 reform of the Structural Funds – concentration, multi-annual programming, partnership and additionality – have proved to be a good basis for regional development policy. However, their impact outside the Cohesion Countries has been obscured by the dissipation of aid over small areas, the bureaucracy of programming, the wide range of interventions and the short programming periods (in Objective 2 areas). For EU structural policy in CEE, it will be important to develop medium-to-long-term priorities and consistent objectives for policy measures. In particular, there is a need to concentrate on a limited number of key priorities. Arguably, assistance should be concentrated geographically (growth poles) and export-oriented to promote the 'motors' of development.

The major lesson of the past 15 years of Structural and Cohesion Fund implementation in the EU is the critical role of institutional capacity. There are major differences in the mode of implementation among Member States, but the common experience is that there is a long 'learning curve' relating to all aspects of programming. Given the historical institutional legacy in many CEECs, the 'vacuum' of regional self-government and the slow process of territorial administrative reform, it will be important to recognise, for the time being, the primary role of national governments in the implementation of the Funds and to respect the institutional differences between countries.

With respect to the possible options, these theoretically range from an EU-wide interregional fiscal transfer system, at one extreme, to a complete 're-nationalisation' of regional policy, without a role for the EU, at the other end of the spectrum. Between these extremes are several plausible scenarios for future funding allocations, as presented in Bachtler et al. (2001).

3.1 Policy Options: Scenario 1 – Current Policy Approach

The first scenario is that the existing approach to EU structural and cohesion policy is retained and extended eastwards. Funding would be allocated to eligible areas according to EU criteria for delivery through regional programmes. As now, the Commission would retain responsibility for allocating finance, approving programmes and overseeing delivery while the Member States would have responsibility for programme implementation.

According to Eurostat data, all of the CEECs would be classified as Objective 1, except for Slovenia and Prague, Bratislava and Budapest. Many current Objective 1 regions would lose eligibility except for Sachsen-Anhalt and some other districts of eastern Germany, significant parts of Greece and Portugal and some areas in Spain. However, the CEECs are unlikely to be able to utilise all the 'potential' Objective 1 funding for a number of reasons: (a) only some of the Candidate Countries will be EU members by 2007; (b) potential allocations could exceed the 'absorption limit' of four percent of national GDP in CEECs; and (c) there are likely to be problems co-financing programmes from national budgets in some countries. Current Member States would continue to receive a share of the Funds, at least through Objective 1 transition provisions lasting for part of the next funding period, but possibly also for high unemployment and social exclusion among current Objective 2 areas.

This option preserves the scope for achieving political cohesion since most (all?) Member States would receive some Structural Funding, and net payers are kept on board. The use of established methodologies and indicators (however imperfect) limits controversy. The established implementation systems, on which capacity-building in CEECs has hitherto been based, facilitates policy continuity.

The disadvantage is that this would be more of a political than an economic solution. There remains the difficulty of obtaining usable indicators and data to support the approach to area designation and allocating funding, exacerbated by the fact that existing measures of disparity are unsuited to CEEC conditions. It would maintain and potentially enhance the bureaucracy of Structural Fund implementation with additional regional programmes needing to be negotiated, managed, delivered, monitored, evaluated and controlled. A major injection of funding into the CEECs entails problems of monitoring and control, especially at regional levels. The CEECs may lack the requisite institutional capacity at sub-national levels.

3.2 Policy Options: Scenario 2 – Differentiated Policy Approach (Variable Geometry)

Under a second scenario, the EU would take a differentiated policy approach to CEECs and EU-15. For the CEECs, it could take a 'cohesion policy' (or transition policy?) approach, providing policy support to each of the applicant countries as a whole, regardless of the levels of prosperity of individual regions. For the EU-15, the current approach to 'structural policy' could be maintained. In the CEECs, funding would be allocated to new Member States for delivery through national development programmes; in the EU-15, funding would be allocated to eligible regions for delivery through regional programmes. As above, the Commission would have responsibility for allocating finance, approving programmes and overseeing delivery, while the Member States have responsibility for programme implementation.

In this scenario, the CEECs would be designated in their entirety. EU-15 eligible regions would be designated according to Objective 1 and 2 criteria. The implications of this are the same as for Scenario 1.

On the positive side, this approach has a measure of economic development logic – countries such as Slovakia, Czech Republic and Hungary need to have their capitals as part of the eligible area as 'drivers' of economic development (cf. experience of Portugal and Ireland). This scenario would allow funding allocations to the CEECs to be determined according to different criteria from those used hitherto, and problems of inadequate designation indicators and data in making international comparisons between CEE and EU regions are avoided. In addition, CEECs can take a national approach to the design and delivery of policy to suit national conditions. Again, most EU-15 Member States would get some Structural Funding, and the net payers are kept on board.

However, this scenario remains largely a political, rather than an economic solution. It entails a reversal of the recent trend away from supporting poor countries in favour of poor regions (although this may be justified). Crucially, it would involve differential treatment of Member States (why not treat Portugal and Greece in the same way?) which would be politically unpalatable to CEECs. The approach does not guarantee that CEECs use resources for less-favoured regions (but does this matter in the short term?) and could increase internal regional disparities

3.3 Policy Options: Scenario 3 – Concentrated Policy Approach

A more radical scenario would be a reform of structural and cohesion policy so that the Community only intervenes if cohesion "cannot be sufficiently achieved by the Member States" and can be "better achieved by the Community" (Article 5). Under such a policy option, the EU would only intervene where Member State per capita GDP is below 90 percent of the EU average (for example). In other words, the EU would provide support for the poorest Member States and other fields where there is a clear Community role eg. inter-regional, cross-border and transnational co-operation as well as innovative actions etc. According to current Eurostat figures, under this scenario the EU would only intervene in the CEECs, Greece and Portugal.

This approach would clearly respect the principle of subsidiarity. Structural policy would become a Community policy with an economic rationale for intervention, focusing on convergence among Member States. It would avoid the so-called circular flow of income from net payers to the Commission and back again and would overcome problems of inadequate designation indicators and data in making international comparisons between CEE and EU regions. The approach would allow recipient countries to take a

national approach to the design and delivery of policy to suit national conditions, and the implementation of policy would become more manageable for the Commission.

The potential 'downside' is that net payers would not be recipients of EU funding, potentially lessening their financial commitment to the EU and to structural policy in particular. The Commission would not have a 'place at the table' in all countries, and the profile of the EU could thereby be potentially diminished. Pressure for spending in areas where the current membership could benefit more may be increased (aspects of agricultural policy, R&D policy) as may pressure for relaxation of the regulatory environment, especially in the area of national regional aid.

3.4 Policy Options: Scenario 4 – 'Horizontal' Policy Approach

More radical still might be a 'horizontal' approach, whereby greater coherence to regional development might be achieved. This would involve promoting the co-ordination of EU, national and sub-national actions within a single regional development policy framework at Member State level. Under this approach, the EU would allocate funding to Member States according to GDP per capita and population (all Member States would receive minimum funding as with Objective 3). Each Member State would have a 'national regional development strategy' combining all relevant regional development actions. The EU role would be to check conformity with EU objectives, competition policy, environmental policy etc. and promote good practice, pilot projects, innovative actions, inter-regional co-operation, evaluation etc. The Member States would be responsible for policy design and delivery.

Under this scenario, there would be no area designation at EU level. Member States would designate one set of areas only. Funding would be allocated to all Member States on the basis of GDP per capita and population, ie. the poorest countries with lowest GDP per head would receive the maximum per capita allocation.

This option respects the principle of subsidiarity and promotes coherence – a single map of eligible areas, and coherence between all economic development actions within Member States. It would retain a universal system of regional development, and the net payers would retain vested interest (albeit small in some cases).

However, there would be the danger of inadequate consideration of EU regional development objectives and potentially a partial return to the pre-1988 situation. Again, there would probably be pressure to relax the constraints of State aid controls.

4. Issues for Discussion

The preceding paper has argued that enlargement will be a positive-sum game for both the EU-15 and CEECs. However, the gains will vary between countries and, even more, among regions. There are wide regional disparities within and between the current and future Member States and severe economic, social and environmental problems to be overcome. While national macro-economic, industrial and regional policies will have a primary responsibility in addressing these problems, the EU has an important role to play in reducing the spatial differentiation of gains and losses associated with European integration.

What type of regional policy is appropriate in an enlarged EU?

The first question is how EU regional policy can be adapted to meet the needs of an enlarged EU. The initial responses to the Second Cohesion Report indicates the difficulty facing the EU. It is evident, for example, that the CEECs want to be treated on the

same basis as the current Cohesion countries - avoiding discriminatory treatment, either positively or negatively. There are obvious concerns that a regional policy focused solely on the poorest countries would be seen as a 'welfare policy' rather than a policy of development and would, as a result, lead over time to reduced solidarity contributions from the richer Member States.

A second set of concerns has been expressed by the current Cohesion Countries whose relative position will change in an enlarged EU. In particular, several of the current eligible regions will no longer qualify for Objective 1 support when the average EU level is reduced by the accession of poorer countries from Central and Eastern Europe. Arguing that the absolute severity of problems will not have changed, countries such as Spain are seeking assurances that their current receipts can be maintained by an increase in the EU structural operations budget.

A further viewpoint is that of the so-called 'net payers' who want to limit additional budgetary contributions. Given that the richer Member States will cease to qualify for significant EU Structural Fund support, their net payment position will worsen following enlargement. This concern has been voiced by Germany – the largest contributor to the EU budget – which has suggested that richer countries should have reduced budgetary contributions as a price for not receiving any Structural Funds. Some form of 'trade off' between EU regional policy and EU competition policy has also been mooted, whereby countries receiving no Structural Funds would have greater flexibility under EU State aid rules to provide support under national regional aid policies.

Lastly, the European Commission is trying to structure the debate in accordance with its interpretation of the future of EU regional policy. It has, for example, rejected the option of any kind of 'renationalisation' of EU regional policy and seems to be avoiding any fundamental review of the objectives of policy. Instead it is encouraging consideration of an EU regional policy that embraces the needs of the CEECs, the current Cohesion Countries and other less-developed regions, as well as a continued EU role in addressing the problems of old-industrial regions, rural regions and sparsely populated areas in the EU-15, combined with a new focus on urban centres.

In this context, to what extent is incremental change or radical reform likely to be feasible or desirable? Is a fundamental reconsideration of the objectives of EU regional policy needed or should the current and future Member States opt for adaptation within the existing financial and institutional framework?

One of the key factors underlying decisions on EU regional policy is the allocation of finance. Eligible regions, especially in the richer countries, have a 'subsidy mentality' that accords an importance to eligibility for EU aid which is out of all proportion to the scale or impact of the funding. Similarly, the net national payments or receipts are increasingly regarded by national politicians as a measure of the 'success' of the outcome of EU budgetary negotiations. To what extent is this inevitable, or is it possible to change political and popular perceptions of the budgetary process in the interests of a more 'efficient' allocation of Structural and Cohesion Funds?

How can the implementation of EU regional policy be improved?

Closely related to the future objectives of EU regional policy are the mechanisms through which the objectives are fulfilled. As is well known, EU regional policy has become a complex and bureaucratic instrument, both in its implementation in the Member States through the Structural and Cohesion Funds, and in the CEECs through the pre-accession instruments.

The complexity of EU regional policy has several aspects. First, the regional policy of the EU has grown up in an ad hoc manner, with three different Structural Funds, plus the Cohesion Fund, each with its own regulatory and implementation framework administered by different directorates-general. Although focused principally on the least-developed parts of the EU, the scope of regional policy has been spreading across virtually every category of regional and local problem in the Community. The reform of the Funds in 1988 may have brought some co-ordination and alignment in the regulatory regimes, but there are still tensions between the funding instruments, a tension which increases further in the relationship between EU structural and agricultural policies. To a significant extent, the institutional division between the economic, employment and agricultural DGs in Brussels is mirrored at Member State level; proposals for amalgamation or integration of the Funds have not been able to overcome the resistance to change established institutional structures and interests.

Second, the 'policy coverage' of EU regional policy has widened inexorably over the past 15 years. In the mid-1980s, the Funds were used mainly either to co-finance national regional (investment or employment) aid schemes or to fund physical infrastructure projects or programmes. Since then, the targets of assistance have progressively broadened to encompass both 'hard' and 'soft' measures in the fields of economic infrastructure, human resources, tourism and R&D. Despite the recent moves to promote 'financial engineering', there is still a heavy reliance on grant funding. So-called 'horizontal' policy objectives have been overlaid on all programmes – better jobs, social inclusion, sustainable development, equal opportunities and the knowledge economy – to the extent that the term 'policy overload' has been used with increasing frequency.

Third, the implementation of the Funds is highly bureaucratic. On the one hand, the Council, the Parliament and Court of Auditors have required ever more checks on the effectiveness of policies, and the financial control and auditing of expenditure; on the other hand, those implementing the programmes have found it increasingly difficult to manage the Funds efficiently. The principles of programming and partnership have many virtues, but they are labour intensive to operate well, and the simplification of Agenda 2000 is proving to be harder to achieve than expected.

With a further reform of the Funds, especially one that would need to take account of the needs of the CEECs and the limitations of the Commission services, to what extent are the current policy instruments and implementation mechanisms of EU regional policy appropriate for an enlarged EU? How can the design and delivery of the Structural Funds be adapted to meet future needs more effectively?

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Challenges of the European Union Enlargement – a Note from the Polish Perspective

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1. The Development Levels

The main challenge of the current enlargement stems from the formula 18:4, which means that the number of population of the enlarged EU will increase by 18 per cent, while its GDP only by 4 per cent. This shows the discrepancy between the new and the old members states, and the magnitude of effort which would be needed to overcome it to fulfil the goal of cohesion.

One should keep in mind that GDP is a stream category, measuring a flow of given economic values in a given period of time. It represents the results of the effort which a given economic system has done in a year. However, a stock category of accumulated wealth should be a better measure of differences between countries, regions, households, since the difference in flows do add up over long periods of time[1]. One can assume that the differences in accumulated wealth between the old and the new Member States are greater than in the case of the GDP values. This is represented by endowment with social, transport, technical etc. infrastructure, level of housing, equipment of households etc. It can be assumed overcoming this gap could be much more difficult than alleviating the differences in the levels of the GDP.

One should not limit the reflection of differences in the level of development only to internal discrepancies within the enlarged EU, but include into the analysis also the new external borders. The following table 1 presents the estimates of these differences.

The depth of disparities between the Member States of the European Union and its neighbouring countries following the enlargement will increase. In lieu of the disparities between Germany versus Poland and The Czech Republic, and Austria versus The Czech Republic, Slovakia and Hungary, there will be even greater differences between Ukraine and its neighbours (Poland, Slovakia and Hungary), Slovenia and Croatia, as well as Hungary and Romania. The differences between Albania and Greece, and between Russia and Finland will continue to be the widest with regard to the Member States and their neighbours outside the European Union. Only the (ranked seventh) disparity between Poland and Germany, comparable to the difference between Poland and Ukraine, will become such an internal disparity within the EU.

[1] Until now a category which would add to the flow values the imputed value of the part of the accumulated stock that was used in a given period of time has not been commonly applied in statistical practice.

Table 1: European disparities, GDP per capita according to Purchasing Power Parity (PPP), 1999

Rank	Border	Ratio of GDP	Rank	Border	Ratio of GDP
1.	*Finland-Russia*	3.91 : 1	16.	*Germany –The Czech Republic*	1.83 : 1
2.	*Greece-Albania*	3.90 : 1	17.	**Romania-Ukraine**	1.79 : 1
3.	**Hungary-Ukraine**	3.32 : 1	18.	**Poland –Belarus**	1.74 : 1
4.	**Slovakia-Ukraine**	3.18 : 1	19.	*Austria-Slovenia*	1.61 : 1
5.	*Greece-Bulgaria*	2.94 : 1	20.	**Romania –Yugoslavia**	1.56 : 1
6.	**Hungary-Yugoslavia**	2.85 : 1	21.	**Hungary – Croatia**	1.55 : 1
7.	*Germany-Poland*	2.84 : 1	22.	**Poland –Russia**	1.48 : 1
8.	*Greece-FYROM*	2.60 : 1	23.	**Estonia- Russia**	1.41 : 1
9.	**Poland-Ukraine**	2.48 : 1	24.	*Italy-Slovenia*	1.36 : 1
10.	*Austria-Slovakia*	2.41 . 1	25.	**Bulgaria-Yugoslavia**	1.32 : 1
11.	**Romania-Moldova**	2.39 : 1	26.	**Lithuania-Belarus**	1.28 : 1
12.	*Austria-Hungary*	2.35 : 1	27.	**Latvia- Belarus**	1.27 : 1
13.	**Slovenia-Croatia**	2.26 : 1	28.	**Latvia – Russia**	1.08 : 1
14.	*Austria- The Czech Republic*	1.96 : 1	29.	**Lithuania – Russia**	1.08 : 1
15.	**Hungary–Romania**	1.83 : 1	30.	**Bulgaria-FYROM**	1.07 : 1

italics: current borders of the European Union; **bold**: **future borders of the European Union.**
Author: after *World Development Report 2000-2001,* World Bank-Oxford University Press, 2000, Washington-New York

However, the difference in human capital seems to be smaller than the discrepancies in material aspects. The levels of qualification of the citizens of old and new Member States – although existing, especially due to differences in the technological advancement – are definitely smaller than 5:1 or 4:1 which would represent the gap in material wealth. This fact should be considered as a major chance for overcoming the material incoherence in the enlarged European Union.

One of the great challenges of enlargement stems from the danger that the iron curtain created by the political divide after the Second World War may be now replaced by the "golden curtain" one: disparities between the new members states and their eastern neighbours may grow even further, to outweigh the disparities along external borders of the European Union before enlargement. Can the EU politicians and administration go beyond the immediate interest of the Member States and help, in an efficient way, the countries like Ukraine, Belarus, Moldova, Albania, and the former Yugoslav republics (except Slovenia) to embark on the path of secure economic growth and - in some cases – also on the process of democratisation and building civic societies – so that these countries may hope to become the members of a further enlarged European family?

On the one hand, the experiences with the eight post-socialist countries entering the EU in May 2004 are encouraging, since the EU assistance, technical and later directed to concrete investment projects, no doubt, was an important factor in increasing the preparedness of these countries to become full members of this organisation. However, on

the other hand, these countries have demonstrated persistent determination to proceed with market reforms and strengthening their democratic political systems, which has not been fully the case of the potential members listed above. In most of the cases (and the Turkish part of Cyprus may be included into this group), these countries have wasted most of their time after the collapse of the communist system. Can they be influenced by the EU and by the example of the new members (and the Greek part of Cyprus in the case of this particular case)? This remains to be an open question.

2. Financial Assistance and its Potential Effect

According to decisions taken in the process of negotiations, the overall net financial cost of enlargement will be 13,131 million Euro (see table 2).

Table 2: Financial flows between 10 Member States an the EU, 2004-2006, general framework of Copenhagen agreement, 1999 prices (in million Euro)

2004 – 2006	**CY**	**CZ**	**EE**	**HU**	**PL**	**SI**	**LT**	**LV**	**SK**	**MT**	**TOTAL**
Pre-accession aid	17	432	159	558	2,302	122	302	237	286	9	4,425
Agriculture	95	975	214	1,322	3,871	326	594	314	522	21	8,254
Structural actions	38	950	237	1,171	4,743	159	545	406	651	35	8,934
Internal actions	26	222	26	212	779	61	54	49	97	11	1,537
Additional expenditure	2	25	78	180	412	114	320	85	124	1	1,339
Special cash flow facility	38	358	22	211	1,443	101	47	26	86	66	2,398
Temporary budgetary compensation	300	389	0	0	0	131	0	0	0	166	987
Total allocated expenditure	**516**	**3,351**	**735**	**3,654**	**13,549**	**1,014**	**1,863**	**1,117**	**1,766**	**310**	**27,875**
Subtotal – without pre-accession aid	***499***	***2,919***	***576***	***3,095***	***11,247***	***893***	***1,560***	***879***	***1,480***	***300***	***23,450***
Traditional own resources	-107	-276	-33	-397	-550	-76	-88	-28	-140	-55	-1,749
VAT resource	-43	-309	-27	-253	-808	-94	-57	-35	-107	-16	-1,749
GNP resource	-245	-1,750	-151	-1,434	-4,574	-530	-322	-197	-606	-93	-9,902
UK rebate	-33	-238	-21	-195	-621	-72	-44	-27	-82	-13	-1,345
Total own resources	**-428**	**-2,573**	**-231**	**-2,279**	**-6,552**	**-771**	**-510**	**-287**	**-935**	**-177**	**-14,745**
Net balance	**88**	**778**	**504**	**1,374**	**6,997**	**243**	**1,352**	**830**	**831**	**133**	**13,131**

Note: In case of political settlement for Cyprus an additional amount of 127 million Euro in payments should be foreseen for the three years 2004/2005/2006

It has to be admitted that 13,3 million Euro will not become a major burden on the EU budget. Looked upon from the side of the new Member States, this will constitute ca. 1 per cent of their GDP during these three years, which is not much when compared to expectations and needs of these countries.

According to the experiences of the old Member States, there exists a kind of a development multiplier effect of the funds coming to a given country from the European Union. The following table 3 demonstrates this phenomenon. In all cohesion countries the estimated increase of the GDP dues to the financial flows from the EU was on average over 2 times higher than the share of these flows in the respective GDP values.

Table 3: Structural Funds and Cohesion Fund in the cohesion countries, 1989-2006

	Greece	Portugal	Ireland	Spain
(A) Increase in GDP due to CSF				
1989-93	4.1	7.4	3.2	1.5
1994-99	9.9	8.5	3.7	3.1
2000-06	7.3	7.8	2.8	3.4
B) Percentage share of CSF in GDP (annual size of CSF)				
1989-93	2.6	3.0	2.5	0.7
1994-99	3.0	3.3	1.9	1.5
2000-06	2.8	2.9	0.6	1.3
(C) "Beneficial impact" of CSF with respect to GDP, *"multiplier"*				
1989-93	1.6	2.5	1.3	2.1
1994-99	3.3	2.6	1.9	2.1
2000-06	2.6	2.7	4.7	2.6
Average 1989-2006 (approx.)	2.6	2.7	2.8	2.4

Source: LOLOS, 2001.

A similar relation is estimate by an *ex ante* evaluation for Poland (see table 4).

Table 4: General impact of funds for the EU on Polish GDP (in per cent) and unemployment rate (UR) (in percentage points), 2004-2010

Years	Only funds assumed in the National Development Plan		Funds assumed in the NDP and further (after 2006) funding (2.5 per cent of the GDP yearly)	
	GDP	UR	GDP	UR
2004	0,22	-0,14	0,22	-0,14
2005	1,13	-0,71	1,13	-0,71
2006	2,51	-1,48	2,51	-1,48
2007	3,33	-1,77	4,57	-2,52
2008	2,83	-1,15	5,66	-2,73
2009	1,56	-0,27	6,30	-2,80
2010	1,22	-0,05	7,43	-2,84

Source: Bradley; Zaleski, 2002

A cumulative process is assumed, and it is estimated that a constant funding in the period 2004 - 2006 and least till 2010 will result in net increase of Polish GDP by almost 7.5 per cent, and decrease the unemployment rate by almost 3 percentage points. Similar values can presumably be assumed for other Central European countries. For

example, the increase of GDP due to realisation of the National Development Plan (NDP) for Latvia was assumed to reach 6.5 per cent.

The emergence of the development multiplier can be explained by the differences in the structures of expenditures of the funds paid from the state budget to the European Union. Overall sums transferred from the EU to the Member States are approximately twice as large as net payments, since the Member States contribute almost as much as their net gain. However, it should be noticed that the funds transferred from the EU are mostly spent on pro-growth projects, like building infrastructure, training, technology transfer etc. which would probably not be the case if these funds had remained in the national budgets, from where they would be spent in higher proportions on social and current issues. So the payments from the EU to the Member States are composed of two parts: net payments and the payments which are in fact own resources of these states, but redistributed according to the priorities of the Commission. This redistribution is probably mostly responsible for the effect of the development multiplier.

Therefore, a crucial question arises: to what extent the new Member States will be able to utilise the assistance coming from the European Union for accelerating their growth and structural change? This is more a political than economic question, and the answer should be sought upon not only in the capital cities of the new Member States, but also in Brussels.

3. Absorption Capacity

There are several issues related to the absorption capacity:

- the overall preparedness for turning the flows of structural aid into new development factors;
- readiness of local and regional governments, as well as organisations and institutions to prepare and implement efficient, economically viable projects;
- availability of own resources for programme preparation, prepayment and contribution requested by the additionality principle.

All these dimensions of absorption capacity definitely depend on the new Member States themselves, their political elites and economic organisations. The choice between poor and good experiences of some of the old members is wide, indeed. Until now, the experiences, especially on the national levels, are not encouraging. The National Development Plans, prepared in the Czech Republic, Hungary and Poland, cannot be labeled as progressive, coherent and comprehensive documents which would create sound grounds for acceleration of development of this countries with the use of the funds coming from the EU. A critical analysis of these documents reveals their internal incoherence, lack of a strategic thought on major goals and priorities and too great subordination to the formal requirements of the Brussels administration[2]. To some extent this is a result of a persistent absence of strategic thinking in the central European countries – in none of the so-called Visehrad countries a far-reaching, comprehensive strategy of socio-economic development has been elaborated, and therefore the mid-term National Development Plan of Poland does not have any general framework to be hooked in. As a result, occasional, short-sighted projects have filled this document up, being the pro-

[2] In all these NDPs a kind of a check-list can be noticed: environment, equal rights, cohesion etc. have to present almost everywhere, no matter if this is appropriate or not. In a conversation with experts from Czech Republic and Hungary we coined a bitter phrase describing the internal virtues of our current National Development Plans: "form problems to slogans", which reflects a very formalistic attitude of their authors.

ducts of mutually unrelated ideas and visions of particular segments of the state administrations.

Moreover, only in Poland – the most decentralised country among the CEECs – the regional system has been able to influence the National Development Plan through the Integrated Programme on Regional Development which has been composed from the projects submitted by the regions themselves. This, however, brought the programming process to the extreme of an uncontrolled fragmentation of the regional policy of the state which now has become an aggregate of the programmes and projects devised on the regional level.

The institutional preparedness of state and local administration to managing the structural and other funds of the European Union is far from being satisfactory as yet, and one may only hope that the delays can be overcome in the course of the time before May 2004. This preparedness is clearly regionally differentiated. Research on Poland reveals that the regions and localities which had been enjoying massive inflow of Phare projects have acquired much higher skills in designing and implementing EU-financed programmes than the regions which did not have this chance. Learning-by-doing thus seems to be the widely applied pattern of education in EU procedures and principles.

Most of the post-socialist countries face the necessity of deep, fundamental reforms of their fiscal system in order to match own input to the structural funds and other flows from the European Union. Most of these countries are delayed in this process, and overcoming these delays becomes one of the macroeconomic challenges to enlargement. In several cases this also holds true for local finances. As Swianiewicz (2003) states, in some cases (like Poland) the overall level of public debt closes to the constitutional threshold of 60 per cent, which prohibits further indebting by any public entity, also the local and regional governments (in spite the fact that their debt constitutes only a small fraction – 3.5 per cent of overall public debt). In several countries (Czech Republic, Estonia, Hungary, Slovenia) there are a few cases of high indebtness of local governments or insolvency problems within local budgets, but this – in principle – should not dramatically decrease the absorption capacity on the local level of the structural funds.

4. Regional Development and Regional Policies

It is not clear how the structural intervention in the regions of the new Member States will influence the regional differentiation of these countries. On the one hand one may assume that the funds pumped to the lagging regions will allow for acceleration of their growth rate and for closing the gap to the more developed ones. On the other hand – and this seems to be more probable – the poorer regions may lose the sharpened competetion, for EU funds and foreign direct investment as well, which would lead to growth of regional disparities within the new Member States. Such a situation will create still another challenge for the structural policies of the European Union.

The situation of the lagging regions of Central European countries will be aggravated by the fact of where they are located (with the exception of the Czech regions) along the external borders of the enlarged European Union. These borders will be sealed which will jeopardise transborder relation which until now have been conducted mostly in the black or grey economic sphere. Moreover, the post-Soviet republics which will be the eastern neighbours of the lagging regions of the new Members States for a long period of time will demonstrate rather poor economic potential which will not create development impulses for the external regions of the enlarged European Union.

We are at the end of phase one of a profound discussion on the future policies of the EU among which the agricultural policy and structural policy are by far the most important. These policies in their traditional shapes have been long challenged by claims of reforms which opted for more progressive, efficiency-oriented activities and programmes which would enhance the competitive position of the European Union in the global setting. Some proof of these discussions we can find also in one official document of the Commission (CEC 2002):

> „At regional level, in particular, there is a clear demand, for both political and economic reasons, that future policy should not focus exclusively on the least developed regions, and that it should continue to take account of the problems and opportunities arising in urban areas, areas undergoing economic restructuring or with permanent natural handicap as well as the cross-border dimension."(...) „Cohesion policies should also strengthen the links between the wider strategic objectives of the Community adopted by the European Council in Lisbon, and the support given by the Structural Funds. Key among these are: more and better jobs, greater social inclusion, equal opportunities, and continued push towards the knowledge-based society."

One should remember that the new members will belong to the group of net beneficiaries of the traditional, old-type structural agricultural and other policies, and that they will probably opt for slow pace of changes and shallow reforms. This creates still another challenge for the forces of change and modernisation. Will the enlarged European Union of 25 be able to cope with the needed reforms in a more complicated decision-making system in which the status quo will have more supporters that it was the case before enlargement? This is – like several others – still an open question.

Regional policies should approach the four regional cases (leaders, winners, laggards and losers) differently, and the efficacy of the external intervention in particular types is strongly differentiated. Moreover, all regions should be made subject to regional policy, and not only the losers and the laggards – as it is the case now. This is important, since we should look at the EU not only for the inside (cohesion), but also from the outside (competitiveness). There is no proof that these two dimensions are not mutually competitive (as there is no proof that the regional policy dilemma has a compromise solution), at least in the medium-range. Embracing by the regional policy also the leading and winning regions could enhance the competitiveness side of the EU development, as it also could accelerate the catching-up process of the new Member States.

From the point of view of the new Member States the question arises related to their preparedness to utilise this considerable amount of money in an efficient way. Besides the administrative capacities to manage these considerable funds, the general orientation of the regional policies of the EU and the new members should be disputed.

As it appears from official documents, most of the CECs pursue equity-oriented regional policies, even in spite of the formal declarations which are being formulated by the governmental agencies. For example, in Poland it has been stated in a document approved by the Polish parliament that for the first period of 10-15 years the regional policy should achieve a fast rate of growth in order to close the civilisation gap to Western Europe, at the expense of growth of the regional differences in the country. This has been also repeated in the first part of the National Strategy for Regional Development for Poland and in the National Development Plan approved for this country in winter 2003.

It might be proposed that the regional policies of and for the accession countries should avoid the failures of the traditional approaches and should be concentrated on the following priorities:

- developing infrastructure connecting the peripheral regions to the national and European core areas, and thus integrating the socio-economic space of the new Member States with the old and new European cores;
- increasing human and social capital, with special emphasis on the lagging regions which might increase their absorption capacity, and in this way increasing the efficiency of the use of Structural Funds and other form of EU structural assistance;
- creating networks of transfer of innovation and technology, both on the international level and within the new Member States. Relating the less advanced regions (and their research and academic units) with the more advanced ones may appear the most efficient way of enhancing the endogenous potential of the lagging regions and a fruitful channel of transferring experience and know how for the more to the less advanced territorial systems;
- creating networks for interregional, international cooperation, especially in the field of institutional support for businesses.

Also, supporting growth in the post-Soviet republics may appear the most efficient instrument for decreasing the continental peripherality of the eastern regions of the new Member States. The experiences of the Cross-border Cooperation Programme should be repeated along the new eastern borders of the European Union. This would need going beyond the future external boundaries of the enlarged EU, as it was done in the past with the CBC programme.

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Abstracts

Serge Dormard

Overview about Regional Inequalities in Europe

The very great diversity of the regional situations in Europe requires, if you wish to get a clear view of the present state and of the development of the regional disparities during the last years, the use of simple and synthetic indicators as the per capita GDP for the economic disparities and the employment and unemployment rates for the social disparities. Looking at these indicators of the 15 present nations of the European Union the situation will be marked by important territorial inequalities, on the economic level as well as in the social area. While the regional disparities decreased during the 1960s and 1970s, they have been tending to stabilize for a decade now and even to grow noticeably within the majority of the Member States. The entry of ten new Member States into the European Union will considerably aggravate the situation in terms of territorial disparities, as the vast majority of the new Member States and candidate nations have very low levels of diversity and unfavourable situations in terms of employment and unemployment.

John Bachtler

Regional Disparities in the United Kingdom

Economic historians and geographers have recognised a ‘dualism’ in the economic development of the UK – a divide between the northern and southern parts of the country - dating back over several centuries. The ‘regional problem’ in the UK has become increasingly difficult to define and categorise in simple terms. As in other countries, processes of regional and local restructuring have created a complex map of socio-economic change. During the 1980s, a frequently used concept was that of the ‘North South divide’, contrasting the differences between two parts of the country divided by a line from the River Severn to the Wash. This chapter reviews regional disparities in the UK, a country illustrative in many aspects of regional dynamics in other parts of the EU. The chapter begins by reviewing the historical context and long-term trends in regional disparities, before examining current spatial patterns and contemporary policy debates on the regional problem.

Serge Dormard

Economic Development and Regional Disparities in France

To begin with, we present some features of the regional development in France, insisting on the concentration and specialization phenomena shown by the regional economies. We will see that the territory of France, despite important transformations especially in favour of the South of the country, is still suffering from profound imbalances, particularly between the region of Paris and the province. Then we analyze the issue of disparities of the levels of development and their convergence over the last decades. These disparities are still very strong and do not seem to decrease but very slowly.

Helmut Karl; Ximena Matus

Lessons for Regional Policy from the New Economic Geography and the Endogenous Growth Theory

The social and economic cohesion across the European territory represents one of the main tasks of the European Community. This goal goes along with the objective to reach a balance and sustainable growth and economic convergence at the regional and country level, as well as to avoid income and employment disparities. However, due to different reasons (e.g. factor endowment, agglomeration economies, infrastructure facilities or innovation networks) this goal may be difficult to obtain. Therefore, the aim of this paper is to show the forces which may impede the cohesion of the European territory. This is done through the tools offered by the new economic geography and the endogenous growth theories. Looking at these perspectives a framework with some proposals to improve regional policy at European, national and local level can be provided.

Philippe Rollet

Regional Specialisations in the European Space

This paper examines certain aspects both of the geographical and international economy when analysing the phenomena of national and regional specialisation. First of all the factors of specialisation are examined by directing our attention particularly to the conclusions which can be drawn from the development of quality intra-branch exchanges within the European Union. The fact that these specialisations, influencing the economic performances of the territories (regions and nations), are not neutral will be subsequently pointed out. The specialisation scheme favoured by the realisation of the economic and monetary union thus has an important impact on the convergence between European economic systems, both regional and national.

Grzegorz Gorzelak

The Poverty and Wealth of Regions
(Assumptions, Hypotheses, Examples)

There exist many possible approaches to analyse the poverty and wealth of regions (growth theory, economic base theory, polarised growth theories, dependence theories, centre vs. periphery approaches). All these line of research frequently tend to be one-side, and some times too particularised, which impairs their explicatory – and therefore applicatory – potential. However, it is possible to attempt a generalised outlook on regional development process in a longer, comparative historical perspective. The present work is an endeavour to expound such a theoretical proposition in a generalised and dynamic formulation of the substance and mutual relations between key factors of regional development (regional features, the development paradigm – location criteria – and external stimuli). This theoretical model aims to provide a comprehensive dynamic view of the factors and circumstances determining the development of regions. One of the lessons derived from the theoretical proposition is that maintaining high competitiveness requires continuous adjustments of the regional features to the prevailing – and changing – location criteria. The way the external stimuli are utilised represents also a fundamental factor behind regional development.

John Bachtler; Ruth Downes

Enlargement and EU Regional Policy

The following paper examines the arguments about enlargement and cohesion with a summary of one of the preparatory studies undertaken for the Second Cohesion Report, as well as references to some of the Commission's own research. The paper then outlines some of the options for the future of EU regional policy, describing four possible scenarios originally put forward in a discussion paper before concluding with some questions for discussion.

Riccardo Cappellin

The Network Model and Regional Policies for European Cohesion and Integration

The paper is articulated in three sections. It first confronts three distinct theoretical approaches, which have been defined as: neo-liberal, corporate and local development model. Then it presents a rather extensive data base of key economic indicators, which allow to appreciate the relevance of these different policy approaches, with specific reference to the case of the South-Italian regions (Mezzogiorno). Third, the paper focuses on the issue of knowledge creation and innovation, as the strategic factor of regional competitiveness and growth in the so called learning economy and it highlights the characteristics of an innovation oriented regional policy. Finally, the paper aims to frame this latter policy in a broader European perspective, aiming to promote the international integration of the various regional innovation systems.

Grzegorz Gorzelak

Challenges of the European Union Enlargement – a Note from the Polish Perspective

It is an obvious statement that the first 21st century enlargement of the European Union is a very important and meaningful event, both for the old and the new Member States, their societies and their economies. It is also an obvious statement that for both sides, as well as for the whole of Europe and even for the global political and economic system, and especially for the newcomers, the overall balance of this decision will be – in a long run – a very positive one.

However, enlargement has its challenges and dangers, conceived not only in absolute, but also in relative terms. Its positive effects can be smaller or greater, as well as the price both sides would have to pay for achieving the expected results. This note aims at indicating some challenges which face all actors of this new, continental game called enlargement.

Résumés

Serge Dormard

Aperçu sur les inégalités régionales en Europe

La très grande diversité des situations régionales en Europe nécessite, si l'on veut avoir une vision claire de l'état actuel et de l'évolution au cours des années récentes des disparités régionales, l'utilisation d'indicateurs simples et synthétiques, le PIB par habitant pour ce qui concerne les disparités économiques, l'emploi et le taux de chômage pour les disparités sociales. L'ensemble formé par les 15 pays actuels de l'Union européenne apparaît alors marqué par d'importantes inégalités territoriales, tant sur le plan économique et que dans le domaine social. Si les disparités régionales se sont réduites au cours des années 60 et 70, elles tendent à se stabiliser depuis une dizaine d'années et même à s'accroître sensiblement à l'intérieur de la plupart des États. L'entrée prochaine de dix nouveaux pays dans l'Union européenne va considérablement aggraver la situation en matière de disparités territoriales, la grande majorité des pays candidats ayant des niveaux de développement très bas et des situations en matière d'emploi et de chômage peu favorables.

John Bachtler

Disparités régionales au Royaume-Uni

Les historiens et les géographes économiques ont identifié un dualisme dans le développement économique du Royaume-Uni, une frontière entre le nord et le sud du pays, remontant à plusieurs siècles en arrière. Le 'problème régional' au Royaume-Uni est devenu de plus en plus difficile à définir et à catégoriser en terme simple. À l'instar d'autres pays, les processus de restructuration locale et régionale ont créé une carte complexe des changements socio-économiques. Dans les années 1980, le concept 'division nord sud' était fréquemment employé. Ce terme mettait en exergue les différences existantes entre les deux parties du pays divisé par une ligne de partage allant du fleuve Severn jusqu'au Wash. Ce chapitre passe en revue les disparités régionales au Royaume-Uni, un pays à maints égards représentatif de la dynamique régionale d'autres parties de l'Union européenne. Ce chapitre rappelle d'abord le contexte historique et les tendances à long terme des disparités régionales. Il brosse ensuite le tableau des modèles régionaux actuels et des discussions politiques contemporaines sur le problème des régions.

Serge Dormard

L'évolution économique et les disparités régionales en France

Nous présenterons d'abord quelques caractéristiques du développement régional en France, en insistant sur les phénomènes de concentration et de spécialisation des économies régionales. Nous verrons que le territoire français, malgré d'importantes transformations notamment en faveur du sud du pays, continue à souffrir de profonds déséquilibres, en particulier entre la région parisienne et la province. Nous analyserons ensuite la question des disparités de niveaux de développement et leur convergence au cours des dernières décennies. Ces disparités restent très fortes et ne semblent se réduire que très lentement.

Helmut Karl; Ximena Matus

Leçons tirées de la nouvelle géographie économique et théorie de la croissance endogène pour la politique régionale

La cohésion sociale et économique sur l'ensemble du territoire européen constitue l'objectif premier de la Communauté européenne. Cet objectif va de pair avec celui de parvenir à un équilibre et une croissance durable, la convergence économique au niveau régional et national, de même qu'éviter les disparités au niveau des salaires et de l'emploi. Cependant, pour diverses raisons (par ex. facteur naturel, économies d'agglomération, infrastructures ou réseaux d'innovation) ce but peut être difficile à atteindre. Ainsi, l'objectif de ce papier sera de mettre en évidence les forces susceptibles d'empêcher la cohésion du territoire européen. Pour ce faire, nous utiliserons les outils qu'offre la nouvelle géographie économique et les théories de la croissance endogène. L'observation de ces perspectives pourra fournir un cadre accompagné de propositions destinées à améliorer la politique régionale au niveau local, national et européen.

Philippe Rollet

Spécialisations régionales dans l'espace européen

Ce papier examine certains aspects de l'économie à la fois géographique et internationale en analysant les phénomènes de spécialisation régionale et nationale. Nous examinons dans un premier temps les facteurs de spécialisation en dirigeant tout particulièrement notre attention sur les conclusions pouvant être tirées du développement des échanges intra-branches de qualité au sein de l'Union européenne. Nous soulignerons le fait que ces spécialisations, en influençant les performances économiques des territoires (régions et nations), ne sont pas neutres. Le projet de spécialisation favorisé dans le cadre de la réalisation de l'union économique et monétaire a donc un impact important sur la convergence entre les systèmes économiques européens, régionaux comme nationaux.

Grzegorz Gorzelak

La pauvreté et la richesse des régions
(suppositions, hypothèses, exemples)

Il existe diverses approches possibles pour analyser la pauvreté et la richesse des régions (théorie de la croissance, théorie de la base économique, théories de la croissance polarisée, théories de la dépendance, approches centre-périphérie). Toutes ces directions de recherches tendent fréquemment à privilégier un aspect, ce qui nuit à leur potentiel explicatif – et donc applicatif. Toutefois, on peut tenter de brosser une projection généralisée sur le processus de développement régional dans une perspective historique comparative à plus long terme. Le présent travail s'efforcera d'exposer cette théorie en formulant en des termes généraux et dynamiques la substance et les relations mutuelles entre les facteurs clés du développement régional (caractéristiques régionales, le paradigme de développement – critères de localisation – et stimuli externes). Ce modèle théorique a pour objectif de fournir une vue dynamique d'ensemble des facteurs et circonstances déterminant le développement des régions. L'une des leçons tirées de la proposition théorique est que pour maintenir un haut niveau de compétitivité, il est nécessaire d'ajuster en permanence les caractéristiques régionales aux critères locaux prévalant en perpétuel changement. La manière d'exploiter les stimuli externes représente donc un facteur fondamental sous-tendant le développement régional.

John Bachtler; Ruth Downes

Élargissement et politique régionale de l'Union européenne

Le papier suivant examine les divers points de vue alimentant la discussion concernant l'élargissement et la cohésion et fournit un résumé de l'une des études préparatoires entreprises pour le second rapport sur la cohésion, et donne également des références aux travaux de recherche de la commission. Ainsi, ce papier esquisse certaines des options s'offrant à la politique régionale future de l'Union européenne en décrivant quatre scénarios possibles avancés à l'origine dans un papier sur la discussion, avant de conclure par des questions ouvrant la discussion.

Riccardo Cappellin

Le modèle de réseau et les politiques régionales pour la cohésion et l'intégration européenne

Ce papier s'articule autour de trois sections. D'abord, il confronte trois approches théoriques différentes ayant été définies comme modèle de développement néo-libéral, d'entreprise et local. Il présente ensuite une base de données assez approfondie des indicateurs économiques clés qui permettent d'apprécier la pertinence des différentes approches politiques en se référant au cas spécifique des régions du sud de l'Italie (Mezzogiorno). Troisièmement, le papier se concentre sur le problème de la création et de l'innovation de connaissances, comme facteur stratégique de la compétitivité et de la croissance régionales dans ce qu'on appelle l'économie apprenante et il met en exergue les caractéristiques d'une politique régionale de l'innovation. Enfin, le papier s'efforce de concevoir cette dernière politique dans une perspective européenne plus vaste, visant à promouvoir l'intégration internationale des divers systèmes d'innovation régionaux.

Grzegorz Gorzelak

Défis posés par l'élargissement de l'Union européenne – Note sur le point de vue polonais

Il va sans dire que le premier élargissement de l'Union européenne du 21ème siècle est un événement très important et significatif pour les anciens États-membres comme pour les nouveaux, pour leurs sociétés et leurs économies. De même, il va de soi pour les deux côtés, que comme pour l'ensemble de Europe, voire pour le système économique et politique mondial, et particulièrement pour les nouveaux arrivés, l'équilibre global de cette décision sera très positif à long terme.

Toutefois, l'élargissement conçu en termes absolus mais aussi relatifs, n'est pas sans risques ni défis. Ses conséquences positives pourront être inférieures ou supérieures, de même que le prix à payer par les deux côtés pour parvenir au résultat escompté. Cette note se donne l'objectif de montrer les défis posés aux acteurs de ce nouveau jeu continental appelé « élargissement ».

STUDIES IN
SPATIAL DEVELOPMENT

Policy Vision for Sustainable Rural Economies in an Enlarged Europe

Publication of the Academy for Spatial Research and Planning (ARL), Hanover 2003, No. 4, 223 p., ISBN 3-88838-230-0

Implemented by a joint initiative of ARL and DATAR (Délégation à l'Aménagement du Territoire et à l'Action Régionale) an international group of experts elaborated the *Vision* encompassing the shift from a *sectoral*, i.e. pure agricultural policy of today, to a *territorial* policy for rural regions to be implemented over a 25 year time horizon. This policy constitutes a desired vision for Europe's rural areas which requires: (1) appropriate institutions, (2) diversifying the economic activities in rural areas, and (3) integrating agricultural and rural policy.

To achieve that shift to an integrated policy we need

- new institutional frameworks, both on European and national levels,
- effective instruments to guarantee the sustainable use of natural resources in agriculture,
- the care for the rural population as a whole not only for farmers,
- the improvement of quality products and production processes meeting the required environmental and animal welfare standards guaranteeing international competitiveness,
- compatibility of the single European market for agricultural products with respect to prices and safety standards with commitments under the WTO,
- a policy design and implementation at a decentralised level and
- a coordination of that policy at European and national levels for the benefit to implement the principles of solidarity and cohesion.

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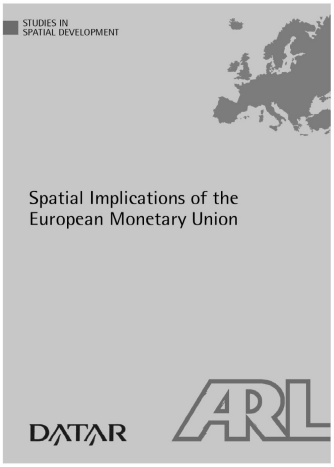
STUDIES IN
SPATIAL DEVELOPMENT



Spatial Implications of the European Monetary Union

Publication of the Academy for Spatial Research and Planning (ARL), Hannover 2003, No. 6, 66 p., ISBN 3-88838-232-7

With the beginning of the year 1999, a further important step towards deeper integration of Europe took place: The European Monetary Union (EMU) was put into force. Undoubtedly, this has, beside other effects, also considerable effects on the economic geography of the integrating area. Possible and probable spatial effects of EMU was the motive to establish a working group within the ARL-DATAR (Délégation à l'Aménagement du Territoire et à l'Action Régionale) cooperation agreement in order to shed some light on these effects. The present volume consists of papers having been elaborated by members of the international working group.

Considerations are made with regard to

- consequences for the regions of a changed relationship in which countries being members of the euro-zone stand to each other;
- macroeconomic consequences for regions of their being a member of EMU;
- effects of the possible concentration of industrial activities in regions and of trends towards specialisation of regions in certain industries;
- effects of EMU using a multiregional general equilibrium model;
- distinguishing between static and dynamic effects of the Euro.

Based on these deliberations recommendations are formulated and spatial orientated policy conclusions are given even though one fear seems to be unfounded: the aim of territorial cohesion in the EU seems not to be touched systematically by the common currency in a negative way.

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Implemented by a joint initiative of ARL and DATAR (Délégation à l´Aménagement du Territoire et à l´Action Régionale) an international group of experts reflected regional development policies. Due to a variety of reasons, economic development is accompanied with different regional performances in terms of income, employment, growth etc. Empirical studies and theoretical works in modern regional economics indicate that even in relatively homogeneous groups of countries like the EU economic convergence need time and this is certainly true after EU enlargement, because new Member States with a lower economic performance joint the community.

To enhance efficiency and reduce disparities across regions, different approaches have been proposed as a framework for regional development policy; among them are the growth pole concept, spatial economic corridors, and recently, spatial economic networks. This last one emphasizes the role of cooperation among regions and provides a new spatial policy framework. Instead of considering the individual problem regions (as the traditional approach does) trans-national networks and European macro-regions constitute the new typology of the spatial policy framework. Within this new paradigm of regional policy there is a greater tendency to see regions in terms of spatial economic networks and to see the EU as a part of a global competitive innovation system.

Due to the economic and political structure of the new Member States and the Candidate Countries regional policies should concentrate on infrastructure, human and social capital, network formation to facilitate the transfer of innovation technology, on areas affected by industrial conversion and on the role played by interregional, international and trans-border cooperation. They should support the modernisation of the institutional system in Central and Eastern Europe and the process of decentralization not only institutional, but also financially. They should enhance local administrative competencies and promote the periphery of the new Member States and the Candidate Countries and increase the cross-border cooperation. These measures together with a substantial reform of EU regional policy and their funds are necessary to make the enlargement to a success story.

Mis en place dans le cadre d'une initiative conjointe de l'ARL et de la DATAR (Délégation à l´aménagement du territoire et à l´action régionale), un groupe d'experts internationaux a réfléchi sur les politiques de développement régional. Pour diverses raisons variées, le développement économique est inégal selon les régions en terme de revenu, d'emploi, de croissance, etc. Les études empiriques et les travaux théoriques réalisés dans les économies régionales modernes indiquent que même au sein de groupes de pays relativement homogènes comme l'Union européenne, la convergence économique demande du temps, et a fortiori après l'élargissement de l'Union européenne, lorsque de nouveaux États-membres moins performants sur le plan économique entreront dans la Communauté.

Dans le but d'accroître l'efficacité et de réduire les disparités observées entre les régions, diverses approches ont été proposées pour servir de cadre à la politique de développement régional parmi lesquelles on peut citer le concept des pôles de croissance, des corridors économiques territoriaux, et plus récemment des réseaux économiques territoriaux. Cette dernière approche souligne le rôle de la coopération entre les régions et fournit un nouveau cadre à la politique régionale. Plutôt que de considérer individuellement les régions problématiques (comme le fait l'approche traditionnelle), les réseaux transnationaux et les macro-régions européennes constituent la nouvelle typologie du cadre de la politique régionale. Ce nouveau paradigme de la politique régionale tend de plus en plus à envisager la politique régionale sous l'angle des réseaux économiques régionaux et de considérer l'Union européenne comme partie d'un système global d'innovation compétitif.

En raison de la structure politique et économique des nouveaux États-membres et des pays candidats à l'adhésion, les politiques régionales devraient se concentrer sur l'infrastructure, le capital humain et social, la constitution d'un réseau afin de faciliter le transfert des technologies d'innovation vers des régions concernées par la conversion industrielle et sur le rôle joué par la coopération interrégionale, internationale et outre-frontière. Elles doivent encourager la modernisation du système institutionnel en Europe centrale et orientale ainsi que les processus de décentralisation, pas seulement sur le plan institutionnel mais aussi sur le plan financier. Elles doivent étendre les compétences administratives au niveau local et promouvoir la périphérie des nouveaux États-membres et des pays candidats à l'adhésion tout en accroissant la coopération transfrontalière. Ces mesures, accompagnées d'une profonde réforme de la politique régionale de l'Union européenne et de ses fonds, sont nécessaires pour que l'élargissement soit une réussite.

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