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**REGIONS AND CITIES
IN THE GLOBAL WORLD**

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Essays in Honour of
György Enyedi

Edited by
Gyula Horváth

Pécs, Centre for Regional Studies
2000

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György Enyedi

CONTENTS

Preface

- Gyula Horváth / 11*
- 1 Question marks of European history
Ferenc Glatz / 17
 - 2 Regional unevenness and geographical convergence in Europe.
Concepts, models and data
Mats Lundmark, Anders Malmberg, Bo Malmberg / 30
 - 3 Regional and local economic development policy: the role
of administration and political entrepreneurs
Robert J. Bennett / 58
 - 4 Technopoles and regional development
Georges Benko / 82
 - 5 The globalization of the economy and the effect of EU policy:
the case of Austria
Elisabeth Lichtenberger / 115
 - 6 Regions in upheaval. Conceptual framework and empirical
findings of the regional transformation research
Heinz Fassmann / 126
 - 7 Patterns of post-socialist transformation in the rural areas
of Central Europe
Marie-Claude Maurel / 141
 - 8 The Polish urban system: stability and change.
Experience of the 1990s
Piotr Korcelli / 159
 - 9 Less-favoured areas and regional development in Romania
Ioan Ianoş / 176
 - 10 Recent trends in Russian regional policy and use of EU
countries experience
Sergey S. Artobolevskiy / 192
 - 11 Spatial transformations and economic restructuring in
post-socialist Hungary
Janet Henshall Momsen / 202
 - 12 The changing effects of geo-structural factors in a peripheral area
Shaul Krakover / 220

CONTRIBUTORS

Artobolevskiy, Sergey S., Professor, Head of Department, Institute of Geography,
Russian Academy of Sciences, Department of Economic Geography

Benko, Georges, Senior Research Fellow, University Paris 1 Panthéon-Sorbonne,
Department of Geography

Bennett, Robert J., Professor, Cambridge University, Department of Geography

Fassmann, Heinz, Professor, Technical University of Munich, Institute of Geography

Glatz, Ferenc, Professor, President of the Hungarian Academy of Sciences

Ianoş, Ioan, Professor, University of Bucharest, Department of Human Geography

Korcelli, Piotr, Professor, Director of the Institute of Geography and Spatial
Organisation, Polish Academy of Sciences

Krakov, Shaul, Professor, Ben Gurion University of Negev, Department of
Geography and Environmental Development

Lichtenberger, Elisabeth, Professor, University of Vienna, Department of Geography

Lundmark, Mats, Research Fellow, Uppsala University, Department of Social and
Economic Geography

Malmberg, Anders, Professor, Uppsala University, Department of Social and
Economic Geography

Malmberg, Bo, Professor, Uppsala University, Institute for Housing Research

Maurel, Marie-Claude, Director, National Centre for Scientific Researches, Paris

Momsen, Janet, Professor, University of California at Davis, Department of
Human and Community Development

PREFACE

This book was prepared in honour of György Enyedi, the world-famous researcher in regional science. The volume comprises the results of research by his friends and colleagues active in a variety of international research projects in the field of regional processes, in the determinant factors of regional development and in the consequences of the transformation of Central Europe at the turn of the millennium.

Although this book was published specifically for György Enyedi's 70th birthday, it should not be considered simply as the – by now customary! – gesture of respect. Quite independently of the birthday, this work merits publication in its own right since it deals most effectively with so many current and important problems. The selection of topics for inclusion displays none of the amiable tedium so typical of many *Festschriften*: truly serious issues are discussed – such as the impact of globalisation on the fundamentals of economic and social space, the responses of regional policy to new challenges, the reactions of nations to changes in regional development processes and future alternatives for development. The fourteen authors represented in this book introduce the motives for globalisation, demands that economic and social policies be adapted to local and regional factors, together with the forms of action necessary for the realisation of these aims.

Regional science is a discipline of the 20th century. The formation of its terminology, the institutionalisation of its research programmes, the development of its educational system and the integration of its research results into the political decision-making process all took place within this period.

We can now boast several truly distinguished scientific workshops operating worldwide. Their eminent personalities – sometimes by virtue of their leading positions in international organisations – created that discipline which we now term regional science.

György Enyedi is one of those most eminent personalities within that élite international group of researchers who have played a major role in the long-term development of regional science. He was born in Budapest on the 28th of August 1930. He graduated from the Budapest University of Economics, where he commenced his research career. His early studies in economic geography concentrated on the development and regional problems of world agriculture. During this period of almost fifteen years he published his first papers and edited his first books ([1–5]). He was a lecturer in agricultural geography both at the Budapest University of Economics and at the Agricultural University of Gödöllő.

In the early 1960's he became a researcher at the Geographical Research Institute of the Hungarian Academy of Sciences and was appointed Deputy Director (at a very early age) in 1962. At this time his research gained a new dimension in that

the organisational factors of rural space became the centre of his interest. His studies in agricultural and rural typology revealed the negative consequences of the transformation of the Hungarian settlement system with the social and economic inequalities of rural space ([8–9], [11], [21]). The international reputation of his activities at that time is demonstrated by the fact that he was the leader of a world-wide comparative research team studying the development of rural space between 1972 and 1984. Between 1984 and 1992 he was Vice-President of the International Geographical Union, the Union's General Assembly elected him against the candidate proposed by the Hungarian National Committee!

The 1980s brought new challenges for György Enyedi. In this period he integrated a great deal of research being carried out in isolation into a new organisation when in 1984 he founded the Centre for Regional Studies of the Hungarian Academy of Sciences. His scientific career then turned in a new direction as he studied regional inequalities and the spatial development of urbanisation.

In Eastern Europe the ideology of the regional and settlement policy of state socialism (the classical Marxist theory, urbanist concepts, planning theory) and its relevant objectives (proportionate development, the reduction in differentiation between rural and urban settlements, and the equal spatial distribution of state and social benefits) proved to be strong limiting factors for regional science. The ideal of a homogeneous society had different effects on scientific theories in different countries. In a relatively short time Hungarian social science – due to György Enyedi's close relationships with western scientific teams – produced important results in the study of uneven spatial development, in the negative tendencies of the transformation of settlement systems, and “*expressis verbis*” question marks were raised regarding the efficiency of a central planning system with economic policies which disregarded local regional features ([6], [15]).

The results of an analysis of spatial transformation within the planned economies revealed that the East Central European economic and urbanisation system is not unique; it is simply that West European-style urbanisation and development phases followed each other, albeit with significant delays. Differences in regional development may be explained by this late development and also by the period of state socialism ([13–15], [18], [22–23]).

Regional policy needs to move in a different way from the basic demands of the market economy. The search for an optimum way was hindered by the simple fact that the terms used during the time of state socialism were met by the strongest opposition. At first, regional policy was rejected outright by the prevalent Marxist social theory and down-graded to the level of a basic service for the planned economy. Even later – during the period of socio-economic reform – the mildest local initiatives favouring decentralisation were still frowned upon and often labelled as “provincialism” in the most negative sense. Although György Enyedi himself formulated coherent concepts regarding the necessity of an innovation-oriented re-

gional policy, the anti-modernisation policy of the economic and political system showed no interest whatsoever in the realisation of his ideas.

During the 1980's international science was characterised by the rapid development of integrative spatial science taking place in parallel with the modernisation of the more traditional disciplines. The preconditions for regional science to become an independent discipline were favourable at that particular time and it was György Enyedi who had a primary role in this. His theoretical competence, based on his wide international experience, his well-balanced social opinions, his innovation-oriented inspirational sensitivity towards problems and a remarkable natural kindness were together an enormously attractive and inspirational force for regional scientists. He became a major navigation point for the growing generation of young regional scientists who were starting to deal with the problems of regional processes in the late 70's and who were committing themselves to regional science in more and more remarkable ways ([19–20], [25]).

The Centre for Regional Studies of the Hungarian Academy of Sciences, the leading organisation in Hungarian regional science with a staff of one hundred located at four institutes, deals with the analyses of European and Hungarian regional development. The Centre's Director-General from 1984 to 1991 was György Enyedi. In 1986 the Regional Science Committee of the Hungarian Academy was established and its chairman from its inception in 1986 until 1990 was György Enyedi. The journal "*Tér és Társadalom*" (Space and Society) was first published in 1987. In the 32 issues now collected into 14 volumes nearly three hundred scientific papers have been published. György Enyedi is still the chairman of the editorial board. 18 books have been published in the series of monographs entitled "*Területi és Települési Kutatások*" ("Regional and Settlement Research"). In Discussion Papers an English language series published in 35 volumes introduce the results of Hungarian regional research worldwide. In 1989 a Post-graduate School of Regional and Urban Development was established at the Faculty of Economics of the Janus Pannonius University of Pécs. Today graduate, post-graduate and also PhD courses are held there. Apart from this, several regional policy and regional economics training programmes are held at three universities and two colleges in Hungary. The elevation of regional science to full university discipline level is also to the credit of György Enyedi and it should not be forgotten that he became a University Professor at Montpellier University at the very early age of 42. He has spent seven years as guest Professor at various foreign universities and has also presented – and still presents – lectures at the Universities of Debrecen, Pécs and Budapest.

This truly creative and successful career which is distinguished by no less than 40 books and by more than 300 other publications is, in addition, richly decorated with an enviable series of honours and recognitions: György Enyedi is a honorary member of seven foreign geographical societies; the Hungarian Academy of Sci-

ences awarded him Correspondent Membership in 1982 and Ordinary Membership in 1990; he has been Vice-President of the Hungarian Academy of Sciences since 1999; he is a member of the Academia Europea in London and a member of the editorial board of several international journals; he is the recipient of several Hungarian and international awards and honours.

With this book dedicated to the scientist, scientific organiser and professor we hope most sincerely that the results to be published in the following papers will further enrich the field of regional science and that they will inspire regional scientists to new research, discussion and co-operation – in the spirit of György Enyedi's "Ars Poetica".

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1 QUESTION MARKS OF EUROPEAN HISTORY

Ferenc Glatz

New challenges, new opportunities

In 1990, the Second World War ended in Europe. The Soviet Union finally withdrew its troops from the Central European region which they had occupied since 1945. Germany was reunited. The small states in Central and Eastern Europe were free to make their own decisions, both in home and foreign policy and the majority of their citizens enjoyed the pleasures of the freedom of speech for the first time. This was all taking place at a time when in Western Europe the pace of *European integration* and, parallelly *global integration*, were *accelerating*. At a time in which the organisation of worldwide production embarked on a ruthless competition on a global scale. And it is worth ensuring, within this global competition, the *competitiveness* of the citizens living within the boundaries of the European Union. But by what means?

New challenges have emerged. Firstly, the EU intends to extend its Eastern border region. Secondly, Western Europe must formulate and shape its relationship to the other states on other continents within the Christian–Jewish cultural sphere: to the USA, to Russia, to Africa, to South America, and Australia. And thirdly, now it has to shape its strategy for the 21st century towards the people and states of other cultural spheres, towards the Near East and non-Christian Africa, to China, India, Japan and the Far East.

New challenges bring with them new forms of conflict. We can immediately cite three such current conflicts. Firstly, the conflicts which have broken out on the territory of the candidate countries for accession to the EU. Secondly, the social and ethnic flashpoints which have erupted on current European Union borders. Thirdly, the latent conflicts which have arisen between the European Union and the USA.

These conflicts have been discussed with, more or less, great candour. One of the biggest failings of the European intelligentsia of the 1990s is, that they have not encouraged the European political elite to formulate the future of the EU through the mutual reflection of fundamental issues. Neither the aims, nor the conflicts which have flared have been addressed systematically. The fact that the Union, as a

unit of territorial administration, can have the single real aim of simply safeguarding the competitiveness of the citizens living within its boundaries has yet to be decided. At the same time, we must examine what this competitiveness has hindered in the last 100 years. Why Europe has lost the pioneering role in the world, for which it fought in previous centuries.

We suspect we must turn to history for our answers. We must not simply combat European political phenomena we consider restrictive with administrative political tools, we must rather discover the historical reasons behind the conflicts. We must not only extinguish the fires, we must also prevent the troublespots from flaring up again.

The conflict over the expansion eastwards

The newly liberated region, stretching from the Baltic to the Adriatic, is endeavouring to adapt itself to the process of Western European integration. Viewed from a historical perspective, the process of integration refers to the Eastern border regions as more or less loose component parts of the so-called West between 1000 and 1945. This integration was then more rapid (in the 11th, 14th and 15th, as well as in the 19th centuries) when the frontier territory and the Western European centre had to rely on one another economically and lived within one political system of alliance. The re-adaptation is equated with upheaval, because this area was cut off from the Western world for an entire 50 years and kept out of the post 1945 informatics and production revolution. It is also connected with upheaval for the simple reason that the principles of local life and the entire organisation of work has evolved much differently over the last thousand years than in Western Europe.

Politicians in the region talk of complete identification with the West and about the fact that their people have always been component parts of Western European culture. Historians, however, know that this is only partly true. The social structure of the frontier territories have for 1000 years always presented a "mixed model".

From the empty phrases of the politicians, the Western world seemed to consider the expansion of the EU as nothing more than the introduction of the multi-party system, the free-market economy and the extension of the European security system into the Central Eastern European region. Then they were astonished when the first socio-political conflicts flared up in the new democracies. At the same time, this threatens to jeopardise the entire process of European integration.

They were amazed when ethnic-religious clashes erupted in the region: first of all, between the Hungarian minority living in majority Romanian and Slovak communities (1991–92); then in the Balkans between the Croats, Serbs, Bosnians and Albanians (1992–99). The Western Europeans then began to recognise a peculiarity of this region, in that the borders of the areas of national settlement almost

never coincide with the administrative frontiers. (For this reason, people in the West began to speak of "history repeating itself". This has the negative, condemning implication that "a completely archaic, old-fashioned ideology of nationalism has sprung up in the East which can suppressed with international military and political sanctions".)

The Kosovo War (1999) then made the European (and perhaps American) political elite aware that centuries-old, unresolved socio-political tensions cannot be resolved with missiles and international sanctions. It is not the "good guys" and the "bad guys" we recognise from American westerns and European teenage romantic fiction who carry on hostilities. It is not that the Albanians are the "good guys" and the Serbs the "bad guys", just as it is not that the Hungarians are the "bad guys" and the Romanians the "good guys" in the confrontation. How senseless it is to lay the blame at each other's door. Even the Western European principles of administration and political ideologies cannot be used as they were by the superpowers in 1920 and 1947. The discovery and application of a political tool relevant to the local situation can be the only solution.

Time and again over the last ten years people have said that the relationship between nation and state in this region needs to be rethought. Endlessly pushing frontiers backwards and forwards is not the solution; abandoning the antiquated principles of regional government based on the sacred concept of the nation state can overcome the centuries-old problems. The peoples living in this region must reach a collective consensus regarding the principles to be embraced in the relationship between the national majority and minorities within their state boundaries.

Conflict in borderlands

The other shocking phenomenon of the 90s was the emergence of *xenophobia*. This took place in Austria, initially as it was waiting for accession to the EU and today even in its role as present day border state. In a Europe of "open borders", this xenophobia could have catastrophic consequences for Western Europe. The result of the Austrian elections (October 1999) has suddenly raised the "stakes" as far as xenophobia is concerned throughout this entire region. (Yet again there is talk of "history repeating itself", of the re-emergence of pre-1945 fascist ideologies; although, in effect, what we are seeing is simply the continuation of history across this region.)

Another feature of this region is its *bufferzone character*. Here, Western Europe, its integrated organisation of work developed down several millennia (its labour markets, workers' morale, its principles of life), clashes with the Eastern societies. (Many people claim that the nature of the clash is essentially developed

urban Western Europe meeting the rural East.) This bufferzone character has continuously given rise to *social conflicts* down the centuries. The free movement of labour and migration tow in their wake a whole series of social, psychic and ethnic contradictions affecting huge numbers of people. (What today constitutes the FPÖ electorate inhabiting the Austrian borderlands was basically already defined in the 16th and 17th centuries. Citizens in the Hungarian cities – who were incidentally of German ethnic background – did not want to permit Hungarians, Slovaks and Czechs, less well-educated and poorer elements access into the cities.) They had to be forced into obedience by law (Article No. 13 of the Law of 1608). The FPÖ electorate want to achieve exactly the same now as Habsburg Austria did in defending its territory against immigrants from the East during periods of the 18th century. (Now, though, it is not the kingdom of Hungary but rather the inherited states and there are hundreds of other similar examples.) Here again, we are not talking about a struggle between “good” and “evil”, but rather the constant presence of historical tension through several centuries. The local organisation of work is not in a position to fashion any kind of consolidation. Time and again it is destroyed by the ranks of migrants converging from all directions, by frequent changes in the international balance of power and by resultant social movements.

These ethnic and social tensions have flared up time and again over the past centuries. Simply because they have not been resolved. They were the reasons behind the outbreak of World War II. They were repressed after the Second World War, partly by the Soviet system and partly by the administrative means instigated by the victorious powers of the World War. Just as the sanctions imposed after the First World War could not last, neither could the suppression of historical conflict be expected to last forever. Only this time the incubation period lasted longer than between 1920 and 1938. For 45 years (1945–1990) the policies of occupation were “successful”. Now though the conflicts are resurfacing in the systems of the new democracies and, in turn, through the candour of expression of a new generation.

This means that centuries-old European socio-ethnic conflicts were not actually resolved by the European peace settlements of 1947. The conflicts were suppressed by administrative and political means. We, who believed, and still do believe, in the noble concepts of European freedom, we were mistaken: others, who simply saw military and political issues in the two European wars, in Fascism, in Communism, they too were mistaken.

And now, we are confronted with the possibility of a series of historical disasters of a different kind, in the field of nature conservation. In the Eastern frontier territory of Europe – just as in Russia – the industrial and technical revolutions in society were not handled organically and systematically. This, however, is a topic for another time.

New era of Euro-American competitiveness

The third area of conflict, to which we now turn our attention, is one about which little has been said, but one which could have a more decisive influence on the future of Europe.

The conclusion of the Second World War, the lifting of the division of Europe and the elimination of the Soviet Union also mean that the world order no longer consists of two poles, that the independent interests of Western Europe are now caught between different centres of power. On the one hand, with the end of the Cold War, the European Union is no longer a counter-organisation (front-line state). Soviet ideological and military might no longer presents an opponent. On the other hand, competition in the fields of production and culture with the American and Far East labour markets has intensified, above all, with America. There is a big difference between being an opponent and being a competitor. However, in order for the European Union to be able to realistically identify its opportunities in the 21st century, its history must be reassessed within the Christian–Jewish cultural sphere and on the global economic and cultural market. However, history emerges even in this competitive relationship, albeit in a distorted form. The European political elite speaks – albeit softly, because of a justified sense of responsibility concerning the two World Wars – about “history repeating itself.” Should the American competition employ the tools of psychological pressure, it may suddenly “occur” to them that the forerunners of European enterprise are the selfsame people who, 50 years earlier, collaborated with the fascist regimes. These firms can cynically exploit the fact that the crime was not committed too long ago for it still to be punished, in contemporary economic competition.

Again then Western Europeans are talking of “history repeating itself”, although in this case – just as in the case of East-Central Europe – we are talking about history simply continuing. To talk about *repetition* and to deny the *continuation* signifies a relativisation of history. As if this was really only a “far-fetched fishing around”. And as if the continuation of history poses no real danger. The threat of extreme right-wing solutions. We are afraid to trivialise the real threat.

We must turn our attention to history, and in turn we must study the history of the European continent. The reasons for the real conflicts, the continuation of the real conflicts, their continued existence up until the present day. It is worth examining and resolving the causes of these conflicts. And it is worth waging not only an ideological and political war against the voters and their leaders. Should a new series of socio-national conflicts flare up in Europe, then those people living on the European continent will no longer be in a competitive position in terms of production and culture come the 21st century. And precisely for this reason our children will rightly reproach us all, not simply those at the peak of this socio-national dissatisfaction. We are the ones, who, in reality, are responsible; we the idle European

intellectuals enchanted by the world we have built for ourselves while we neglect the society around us, both within the European Union and here at home.

Let us look at one or two historical lessons. Let us begin with rethinking European history.

Continuation and continuity

What is happening in Europe today is not simply history repeating itself, but rather the continuation of 2500 years of the history of European society.

Now in the year 2000 we can speak of the stages in the evolution of the European Union. Let us draw the chronological boundaries. In our view, the first stage in this evolution lasted from 1951 to 1999. In this stage the structure of the integrated territorial and political administration of the Union was developed (Maastricht 1992), that of the defence organisation (NATO 1949–99) and ultimately its economic structure (Euro 1999). Let us not forget though that all these stages were possible because they are based on a 2500 year old cultural and moral community, on the traditions of the Greek–Roman territorial organisation and on the foundations of the Christian–Jewish organisation of community and morality.

We calculate the history of European society from the so-called Hallstatt-culture which flourished from 800 BC. At that time, the people settled on the European continent overcame the hunter-gatherer way of life and started erecting permanent settlements, keeping animals and cultivating land and earth. This was all made possible by ore mining and metalworking (initially by the Bronze, and after that, primarily by the Iron Age). Also at that time Rome developed as the first city state (730 BC) on the Appenine peninsula in Italy, from which the great Roman Empire would rise. It can be noticed that from the 8th century BC right until the present day the political and economic area of activity of this culture stretched across a very defined geographical area: from what we know today as the Carpathian Basin (more precisely, the Eastern Steppes) to what is today the British Isles, from the Mediterranean and the coast of North Africa to the Scandinavian peninsula in the North, respectively. Within this area the different cultures and their organisations of territorial administration have spread.

The Western Europe which has become the economic and administrative foundation for the present day European continental integration has grown gradually by means of organic development: it has arisen on the soil of the Roman Empire (3000 BC–500 AD) then the Franconian Empire (700 AD–900 AD) and the Holy Roman Empire of the German nation (1000 AD–1806 AD). This organic development connected the material and intellectual heritage of many peoples from outside the ranks of the empire builders. The European Union of today is the continuation of an integrated state construction on the Greek-Roman basis and its social organisation.

Today's EU does not only decree over a common tradition of territorial organisation but also over common traditions of morality and behavioural patterns as well as customs. These mutual traditions of morality and customs though are discussed even less than the mutual traditions of administration. This is simply the Christian-Jewish cultural sphere. And within this Christian-Jewish cultural sphere very different norms have been formulated, not only concerning the relationship between man and the universe (man and God), but also the strictly integrated principles according to which it rules the community and private life of the individual within society. (Let us just think about the definition of the ten commandments within the context of the relationship to property, family, marriage, to behavioural patterns, inheritance.)

This cultural sphere differs very definitely from the other big cultural spheres of the world which emerged parallelly, from the Mohamedans, from the Buddhist cultural sphere and the other cultural spheres.

Should it remain the same then the construction of the EU has been easy so far, in that it was simply the organic continuation of the edification of a 2500 year old cultural sphere. The difficult work starts now.

Let me reiterate. In order for the European Union to realistically evaluate its opportunities in the 21st century, it must first re-evaluate its history. It must study the reasons for its successes and its decline.

The success must be that the present day area of the European Union has, for the last 1000 years, been the centrepiece of the aforementioned Christian-Jewish cultural sphere. The other success is that Western Europe stood for almost 400 years – from the 16th to the 19th centuries – without doubt at the pinnacle of technical and cultural developments throughout the entire world.

The decline: by the end of the 20th century Western Europe has lost this leading position. Today it stands, at least as far as performance and achievement are concerned, behind the USA. We must turn our attention to history, to the science of history to find an explanation for the migration of this cultural centre. And we must examine our history even more closely in order to draw from these lessons the possible alternatives for our future in the 21st century.

The rise of Europe

If we are looking for the foundations for the heyday of the people of Western Europe, we must, in principle, count three factors straight away. The first factor is the European Christian tradition of *reciprocity*, *solidarity* and *tolerance*, which has ensured movement between individual social strata and has also ultimately prevented a caste structure from developing. One result of this is, that in Europe, the multilingual nature and cultural diversity has remained within a relatively small geographical area. This in turn, led to these cultures with their different native lan-

guages being elevated through the emerging administrative units, through the nation states with their native language administrative and educational system, to a high standard of literacy in the 19th century. Western European societies could demonstrate their unique elite intelligentsia and the dependent strata of experts in immediate attendance to support them. The basis for this was a *cultural revolution*: the spread of *cursive writing* based on the European Latinate alphabet, then letter press printing through which new basic principles were laid for the contact culture, the organisation of production and the readership of the European peoples (14th–16th centuries). (This was the second factor.) Upon this, the third factor could be established – *the industrial and technical revolution* (in the 18th and 19th centuries), which brought in its wake the flourishing of the machine age and iron work.

It is worth continuing the discussion about the reasons for the rise. In our opinion, as the introductory paper, we must acknowledge the fact that the centrepiece of the Christian–Jewish culture has shifted in the past 1000 years to Western Europe. From the Eastern, Greek Pheonician basin in the Mediterranean, first to Italy (I am thinking of the Roman Empire), then within the framework of the Franconian, German and English state organisations. This culture has Western European societies to thank for the fact that it could spread further East (to the Slavic culture in the Steppes), then to South America and, finally, to Africa and Australia. Thanks to these reasons, Western Europe reached the pinnacle in competition with other cultures between the 16th and 20th centuries.

The decline of Europe

What caused Europe's decline and America and the USA's rise? Why has the centrepiece of the Christian–Jewish cultural sphere shifted to the American continent? Is the shift in the balance of power temporary or will the gulf (the difference) in the deficit further increase in the 21st century?

There have been debates about this issue and they will long continue into the future, just as there has been, and will continue to be, debates about the rise of Europe. We will obtain the answer, in my opinion, through the re-evaluation of the history of the 20th century.

Nonetheless, I would like to present one or two hypotheses, one or two reflections on the decline of Europe and rise of America.

My first hypothesis runs as follows: the most recent *industrial and technical revolutions* in the 20th century have developed, not in Europe, but in the USA (and partly in Russia). Simply because there the high state investment (from tax coffers) built up the required physical, chemical and biological, and later informatics base, with which the USA, within a century, became the home of the scientific and cultural revolution. The same is true of the Soviet Union.

Why? The answer lies in my second hypothesis: *the new organisation of production* (series production, mass production and their demand for big markets) requires big territorial and administrative units. This organisation of production cannot find a home on a continent where the territorial and administrative organisation creates nation state barriers (customs, limitations to the flow of the labour force). Even at the beginning of the century, one or two of Europe's leading thinkers noticed this system of obstacles. So they formulated the programme of the "United States of Europe". Yet they remained a minority. The principle of the nation state which would lead to the Second World War, remained in the foreground and the two World Wars destroyed not only the production, a major part of the population but also the European political and intellectual elite. This *military destruction* further increased Europe's deficit to the North American continent, who in comparison experienced peaceful development and organised itself in a large area. The victors of 1920 reestablished the same administrative system which in reality had already broken down at the beginning of the century, just as they did in 1945. The nation state administrative and cultural system brought about the peak in the rise of Europe in the 19th century, the rise of the cultural level of the population as I have already mentioned. Yet, this system had by then already become a hinderance to the production, scientific and cultural revolution of the 20th century.

My third conclusion reads: the *political split* after the Second World War sealed the decline of Europe. Admittedly, it finally began the extension of the only path which could lead the continent to competitiveness, to continental integration of administration and culture. Yet, its realisation was achieved in too twisting and ponderous a manner. This political split within the continent also meant that Western Europe had become a buffer zone in the competition between the USA and the Soviet Union. The entire European integration process was at the mercy of anti-Soviet military strategic thought (which explains why it has stretched, of necessity, its integrated administration and economic organisation to include Greece, differently organised as it is to Western Europe and, take note, to Turkey which belongs to the Mohamedan cultural sphere). Thus, of necessity, not Europe's own interests but the unilateral production and geopolitical point of view of the new centre, the USA, are primarily evidenced in the integration process. It developed accordingly.

Historical lessons

History is not repeating itself, but rather continuing. Unresolved problems resurface time and again. It is not those who formulate the unresolved problems and even those who, through democracy, raise their profile to the level of government office who are at fault; it is rather we who are guilty, we who cannot solve the problems. We, the historians, sociologists and political scientists are responsible for not uncovering the alternatives hidden in history and for not defining them

clearly and plainly for the present and the future. I hope that an on-going, determined and earnest discussion can now begin about the necessity, the possibility of *European liberation* (particularly, how wrong it was to speak of this before, of everything being fine as it is and how it should continue on its own sweet way).

Now though, one or two sentences to set the discussion in motion, beginning with some historical lessons relating to the future of Europe as a continent after the year 2000 and the future of the European Union as an administrative unit.

The liberation of Europe

We have been talking for decades, granted we are in a minority, about the need for Europe to liberate itself. We, who have grown up partly in the Eastern borderlands of this Western cultural sphere, partly in Western Europe. This can only come about now, in the 90s, with the end of the split and the expected development of awareness.

History contains a number of alternatives. We can either recognise or overlook them. We can choose between them. At the beginning of our century few people recognised the alternatives which Europe faced, and those who proposed integration were silenced by both the conservative and left-wing political movements. Whether the demands for liberation will be heard now or not is again an issue to be decided.

The EU does not equate with Europe

The European Union and the geographical and cultural Europe will never be the same. A position must be adopted in the issue of the potential borders of the Union as a territorial administrative unit. And it would be worth making an official statement concerning the policies adopted, with regard to the system of alliance, towards future Union neighbours. Up until now, security policy and economic considerations have predominated in the prehistory of the Union. The time has come, now when we talk about the borders of the expanded Union, for a third factor, that of the human and cultural factor, to be considered.

Myself, along with many others, have formed the opinion that the borders of the Union must be basically enlarged upon the societies developed over thousands of years by Western Christianity, ie. current members must be expanded to include the peoples of the ten state territories waiting for accession (perhaps even to include Israel). Even if this would mean that the countries waiting for accession are, as far as their cultural heritages are concerned, territories of very diverse and mixed traditions and customs (even including Eastern Orthodox). Technical and administrative considerations must similarly be taken into account within the context of the

expansion: according to the same principles, in today's informatics age, in a region of this size it is worth extending the borders of the established administrative units.

The expansion eastwards

This extension, this *expansion* must be carried out as quickly as possible. Both mutual economic dependence and political and military integration are important. Identical economic and social standards are, however, not necessarily a prerequisite for political integration. Just as they were not in the case of Southern Europe. In retrospect, it is rather the reverse which has been confirmed (firstly there was the political, and then the economic and social community).

The new conception of world politics

The European Community must think through its *stance on world politics*. It does not only have to liberate itself from the USA, but must also open itself up to the Eastern, Russian-Ukrainian regions. The legacy of the Cold War must be eradicated from this area too and it is worth taking notice of the raw material and market opportunities which the former Soviet Union has to offer. The USA and Japan have a "Russia strategy" at their disposal, the EU does not, or at least if it does, has not made it public knowledge. (This is a sad lesson of the history of the past decade, the years between 1989 and 1999).

The EU has to further consolidate and, what is more, strengthen the new kind of system of relationships which it began in the 1970s within its own cultural sphere. Our economic scientists, political scientists and strategists have decreed that, in the global system of production and in the geopolitical system, a restructuring is taking place. The EU must strengthen its independent economic and cultural policy, just as the USA, Japan and China have done.

The lack of European identity

There is no such thing as a viable EU without a European identity. We must endeavour, through financial means, to strengthen the present and applicable elements of the European identity. To this end, it is worth supporting the production of works on European history. European themes must be highlighted in the series of subjects included in political and social studies within the school system (history, geography, literature, art). (This should constitute a prerequisite for accession to the EU. This is at least as important as economic, military and political considerations).

Forward-looking public thinking

The emergence of self-critical, but still *forward-looking*, public thinking must be supported through cultural political means. There is no reconsideration, no re-opening the case in the matter of the negative phenomena which recur throughout our history. Neither in the matter of the two World wars nor in that of the holocaust. And yet being European cannot only mean a "collective guilt".

Firstly: we have to consider the historical foundations of today's modern European identity. My colleagues can list many; I would like to mention only three now: *openness to the world* – Europe has experienced no period of isolation like China, Japan and the USA – *solidarity* and *cultural diversity, tolerance* (which we have already discussed).

Secondly: we must study our history because, in its continuity, it lives in and among us – yet political thinking must be liberated from the inherited European (overwhelmingly German) traditions of historicization. The EU needs a vision of the future. All that has been said for years is: "We have become a Europe of cultural pessimism. With our forward-looking American sister culture, or against her."

The treatment – the prevention

Let us bring the list of problems to an end at this point. Those who have been committed adherents to the reform of European thought over the decades, can continue to list this set of problems. However, I cannot leave out a written conclusion which I myself, as a genuine admirer of the natural sciences, as an enthusiastic reader of their scientific output, have drawn.

The most important task for modern medicine today is considered to be the prevention of disease. While they consider intervention their duty to oppose every practice which alleviates the illness which has broken out. Modern medicine no longer sees man in a technocratic manner as a biochemical, biophysical unit, but rather as an individual, psychological and biological living organism. We must learn from this way of thinking. Social sciences must develop. They must strengthen themselves. They must examine the real processes within society. They must constantly relate to the sources of conflict. The attacks of fever cannot only be cured by hysteria, or through exorcism and military and political medication, but rather by using political means to eradicate the sources of inflammation, researchers and politicians together. The sources – history – must be studied afresh.

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2 REGIONAL UNEVENNESS AND GEOGRAPHICAL CONVERGENCE IN EUROPE. CONCEPTS, MODELS AND DATA

Mats Lundmark – Anders Malmberg – Bo Malmberg

Introduction

The research area devoted to the study of regional economic development has in recent years become something of a melting pot. Concepts and ideas originating from a wide range of academic disciplines – business strategy and innovation research (Dosi et al., 1990; Lundvall, 1992; Porter, 1990), political science (Putnam, 1993; Herrigel, 1996), economic sociology (Granovetter, 1985; Grabher, 1993; Powell, 1990), economic geography (Storper, 1995; Maskell et al., 1998), economic history (North, 1990) and various branches of economics such as growth theory (Romer, 1990) and international trade theory (Arthur, 1994; Krugman, 1991, 1995) – are being reconsidered and recombined in new and exciting ways. Not least has there been a marked increase in the number of studies aiming to identify regional differences in economic performance, “attractiveness” or competitiveness in Europe (Brunet et al., 1989; Dunford, 1994; Empirica, 1993; Fielding, 1994; Hallin–Malmberg, 1996; Lever, 1996).

At least three different processes have combined to bring the ‘regional question’ to the fore of academic and political debates in contemporary Europe. The *first* emerges from the belief that regions are becoming more important as political actors in the increasingly integrated (western) Europe. The notion of ‘a Europe of the regions’ has become the catch-word for a process by which the national political centres are believed to become increasingly by-passed by direct interaction between the regions and the EU. A widely held view – though not necessarily a correct one – is that the nation-states have become too small for to deal with the big problems and too big for the small ones.

These trends of simultaneous ‘globalisation’ and ‘regionalisation’ are in a sense reflected in the changing structure of the economy, and this is the *second* generator of interest in regional issues. Also here, a seemingly everlasting trend towards economic globalisation, associated with growing international trade, expansion of large TNCs and emerging global financial markets (Dicken, 1992), is to a degree counterbalanced by a process in which the local or regional milieu – defined in

economic, institutional and cultural terms – is seen to gain importance in economic development (*Storper, 1995; Lundquist, 1996; Malmberg, 1996*).

A *third* reason for the increased attention being paid to regional issues in Europe is the process of economic integration itself. The existence of barriers to the mobility of capital, labour, goods and services used to be regarded as a major explanatory mechanism in classical trade theory as well as in theories of regional economic development. The explicit goal of the Single European Market was to erode these very barriers, and it is therefore natural that the period leading up to the completion of the single market gave rise to questions about the impacts of integration on regional imbalances in Europe (*CEC, 1991*). The development towards a European monetary union has further reinforced this interest. Will – in a Europe with little or no barriers to economic interaction across national or regional borders – rich regions grow richer and the poor fall even further behind, or will – as classical theories on factor mobility suggests – capital flow to low-cost locations and labour migrate to high-wage regions until a state of equilibrium is reached? Will integration tend to even out differences in industrial structure, or will there be increased regional specialisation? Issues like these have triggered a heated debate as well as some substantive research in recent years (*Emerson, 1988; Suarez-Villa-Cuadrado Roura, 1993; Venables, 1994; Dunford, 1994*).

Given the importance of regional issues in the analysis of contemporary social and economic change in Europe, it is highly problematic that this rapidly proliferating field of academic interest is marked by sharp divides in terms of analytical scope, focus of interest and, perhaps even more so, in terms of theoretical points of departures and methodological approaches. The overall aim of this paper is to survey this research field in search of options to bridge this gap in European regional studies. The paper is divided in three main parts. First we review some of the modern literature on the location of economic activity, industrial competitiveness and uneven regional development with the aim to identify the main dividing lines between various approaches. Second, based on data from Eurostat, some important aspects of unevenness in regional Europe are explored. Finally, we present two different attempts to model regional income convergence in Europe. One is based on the neo-classical tradition, while the second takes an alternative, more explicitly geographic point of departure.

Competing or complementary approaches to regional economic performance

In this section, we will identify three broad approaches in the study of the mutual interdependence between economic and regional development. They can all be seen as dealing with various aspects of spatial unevenness:

- First, there are studies focusing on the *uneven strength of local and regional milieus*, in terms of the degree to which they offer firms an environment, or milieu, which promote innovative behaviour and competitiveness;
- Secondly, there are studies focusing on *the uneven industrial structure of regions* and the degree to which differences in degree and kind of specialisation affect the industrial – and economic – performance of regions;
- Thirdly, there are studies that more directly tries to explain *income disparities across regions*.

These different approaches can be seen as attached to micro, meso and macro-levels of analysis, respectively (Table 1). In this section, we will characterise each of these approaches and discuss the degree to which they complement or compete with each other in explaining uneven regional development.

Table 1

Various levels of analysis

Level of analysis	Empirical focus	Explanatory forces	Methodology
Micro	The firm and its local/regional environment	Interfirm relations, localisation economies, knowledge spillovers	Conceptualisation, regional and industry case studies
Meso	Regional systems of production (and innovation), specialisation	Path dependence, institutions, business culture	Conceptualisation, trade specialisation and industry structure analysis
Macro	Regional economic prosperity and growth	Infrastructure, human capital, urbanisation economies	Formal modelling, statistical analysis

Uneven strength of local and regional milieus

One strand of research takes its point of departure at the micro level of the economy. It focuses on the relations between the firm and its external environment in general, and its local or regional milieu in particular. The issue at focus here is whether one can determine which specific characteristics of a regional milieu that tend to foster industrial competitiveness, often defined as the ability of firms to continuously upgrade products and processes, i.e. to be innovative, and thereby to prosper and grow. Put simply: how does location affect firm competitiveness and growth? In this context, there has been a renewed interest in the classical concept of agglomeration economies (Malmberg, 1996).

In economic geography and related fields, there has been a long tradition of describing and analysing industrial agglomeration, ranging from *Marshall* (1890) and *Weber* (1909/1929) through *Hoover* (1948), *Estall-Buchanan* (1961), *Pred* (1977), *Lloyd-Dicken* (1977), to *Krugman* (1991a) and *Enright* (1994), to mention only a few contributions. Often, a distinction is made between two types of agglomeration economies, referred to as urbanisation economies and localisation economies, respectively (*Lloyd-Dicken*, 1977). *Urbanisation economies* relates to general economies of regional and urban concentration that apply to all firms and industries in a single location and represent those external economies passed on to firms as a result of savings from the large-scale operations of the agglomeration as a whole. *Localisation economies* are the specific economies that relate to firms engaged in similar or inter-linked activities, leading to the emergence of agglomerations of related firms and industries.

When it comes to the actual mechanisms that make up the agglomerative force, the distinction between the two is, however, less clear. In both cases, agglomeration economies have their roots in processes whereby links between firms, institutions and infrastructures within a geographic area give rise to economies of scale and scope: the development of general labour markets and pools of specialised skills; enhanced interaction between local suppliers and customers; shared infrastructure; and other localised externalities (*Hoover*, 1948; *Lloyd-Dicken*, 1977). Agglomeration economies are believed to arise when such links either lower the costs or increase the revenues (or both) of the firms taking part in the local exchange. Presence in an agglomeration is, in other words, held to improve performance by reducing the costs of transactions for both tangibles and intangibles (*Scott*, 1983, 1988; *Appold*, 1995). In this way, the key to agglomeration has been attributed to the minimisation of the distance between a firm and its trading partners, as well as to the rapidity with which communication can take place between customers and suppliers.

Already in the work of *Alfred Weber*, it is acknowledged that there are also forces counterbalancing the process of agglomeration. Agglomeration diseconomies, may arise as a result of excessive concentration of people and economic activity. Such disadvantages may be expressed in congestion problems and high costs because of competition for land and labour (*Maskell*, 1986; *Lundmark-Malmberg*, 1988). These disadvantages perhaps apply more to urbanisation economies than to localisation economies. *Nordcliffe-Zweerman Bartschat* (1994) use the concept 'locational avoidance' in analyses of firms that relocate out of metropolitan areas, in order to avoid socio-economic conditions that have evolved in such areas, as a result of excessive agglomeration.

The traditional accounts of the agglomeration phenomenon are predominantly static. It is first and foremost increased efficiency of the transactions of goods and services that is believed to give rise to benefits for firms located in agglomerations.

In line with a view of industrial competitiveness, where innovative capacity is assigned a more important role than mere cost efficiency, recent approaches have come to focus on the importance of localised information flows and technological spill-over when trying to explain the emergence and sustainability of agglomerations of related firms and industries. In this view, industrial systems are made up not only of physical flows of inputs and outputs, but also by intense exchange of business information, know-how, and technological expertise, both in traded and untraded form (Scott, 1995).

Thus, this first strand of research argues that the competitiveness of firms is largely determined by the conditions that prevail in its local and regional environment, and that the existence of localisation economies is a key explanation in this context.

Uneven industrial structures: regional specialisation

A second type of research focuses on the meso level of the economy. Focus is here placed on how regional systems of firms and industries are embedded in an wider institutional context, and the causes behind and consequences of regional specialisation. How come that regions (or nations) tend to specialise in a particular line of business and how come that such specialisation patterns, once in place, tend to be so durable?

Dosi–Pavitt–Soete (1990) show that technological specialisation patterns are dissimilar and that this dissimilarity is rather stable through an extended time period. In a similar vein, *Guerrieri* (1991) concludes that each major country presents a different structure of trade specialisation and comparative advantages and these national differences increased rather than diminished in the last two decades. *Dalum–Villumsen* (1995, 1996) present an even more detailed picture as they compare the trade specialisation pattern between countries over a considerable period of time by calculating so called symmetric Revealed Comparative Advantage index (*Balassa*, 1965). It turns out that among the 23 OECD countries, only Norway and the UK have experienced more radical changes over the last three decades, in both cases primarily as a result of the exploitation of the North Sea oil. Some other countries (notably Germany and France) have always shown rather modest tendencies to specialisation. The vast majority of the OECD countries, however, have maintained or further increased their existing specialisation pattern over the period in focus.

Traditionally, the long term survival of an established industrial region has been seen as resting on geographical inertia: a 'built-in' resistance to decline that is sometimes extremely strong in preserving the location of an industry. The reason for a country's or a region's tendency to sustain a given industrial specialisation, even if its original locational advantages have disappeared, has been attributed to

the fact that capital equipment is more or less immobile, and that it is therefore often cheaper to expand industrial capacity at an existing site than to construct a new plant on a new site (*Estall-Buchanan*, 1961). Modern accounts of the durability of regional specialisation focus more on the ability to produce and reproduce specialised knowledge in regions with a long track record of a particular line of business operation. Also in this tradition, economies of localisation plays an important role, even though less emphasis is placed on the benefits of firms being located in immediate proximity to one another.

There is an obvious relation between regional specialisation and regional growth in the sense that a region which is specialised in a growth sector is likely to grow faster than a region which is specialised in a typical sun-set industry. Some argue, however, that the important thing is specialisation as such, while the precise type of activity that a region specialises in is of secondary importance: "There seems to be a specific advantage in a higher degree of specialization in technological fields, associated with the economies of scale and scope made possible at the national level. This advantage emerges regardless of the particular sector in which individual countries concentrate their efforts; in other words, for advanced countries being specialised appears to be even more important than choosing the 'right' field" (*Archibugi-Pianta*, 1992: p. 150.).

This line of research is thus focusing on regional unevenness in terms of industrial structure and performance, rather than in terms of economic prosperity and growth.

Regional income disparities

Taking its point of departure in the pioneering works of *Myrdal* (1957), and *Hirschman* (1958), and further fuelled by recent advances in general growth theory, the third line of research adopts a macro approach to economic performance of regions. It focuses on overall regional economic prosperity, levels of income and economic growth. Why do certain regions prosper while others fall behind? Is the development of some regions conditioned by the lack of development in others?

After the productivity slow-down in the Western countries after 1970 there has, however, sprung a debate on the possibility of increasing convergence in per capita income between countries and regions. If there is a strong process of convergence, then a slower growth rate in more developed regions could be explained by their high initial income. It is now widely recognised that the post-war period has been characterised by diminishing differences in levels of productivity, technology and per capita income between countries and regions in the context of the economically more advanced parts of the world (*Baumol-Nelson-Wolff*, 1994). Much the same picture is found in the development of the economic standing between larger regions in Western Europe or between states in the U.S. According to *Barro-Sala-i-Martin* (1991), the overall evidence weighs heavily in favour of convergence: both

for sectors and for regional aggregates, per capita income in poor regions tend to grow faster than in rich regions. Some reviewers even conclude that the pace of the convergence process is extremely similar between countries, about two per cent per year (*Sala-i-Martin*, 1994; *Hofer-Wörgötter*, 1997). There seems to be less consensus, however, regarding whether the convergence process is more evident during times of economic booming, or periods of recession (*Chatterji-Dewhurst*, 1996; *Dunford*, 1994).

A problem with the convergence literature is, however, that it is firmly based on a strict neo-classical framework. Economic growth is, thus, essentially seen as an individual process where per capita income varies only with the amount of human and physical capital that each worker is equipped with. Differences in technological level is in most cases explicitly assumed away.

Complementarity or competition between approaches?

In a way, these are distinct approaches addressing different aspects of the relation between geography and economic and industrial development, but they tend partly to overlap in two different respects. First, in a sense, they compete over explaining uneven regional economic development. Analyses of which localised capabilities (*Maskell et al.*, 1998) that create competitive (innovative) firms tend to give results which are often readily translated to general theories of regional economic performance, as well as policy prescriptions in that area. It is not hard to see why this is so. It is in many ways natural to regard the overall economic performance of a regional (or national, for that matter) economy as the aggregate outcome of the performance of all firms operating there. Thus, the underlying assumption here is that a region that offers an innovative milieu for a set of firms would also be a region with a high level of overall economic performance. Theories on regional specialisation, on the other hand, tend to explain regional economic development with the degree or type of specialisation. Some would argue that a particular industrial mix is what renders a region growth (a large number of firms in typical growth industries; a highly specialised industry with many small firms in similar or related types of activity), while others, as we have seen, claim that the important thing is to be specialised, no matter in what type of economic activity. Regional growth theories, finally, tend to by-pass issues related to industrial structure and dynamics, and aim at explaining growth per se by means of other types of macro variables, notably related to savings rate/level of investment and human capital/education.

Secondly, all three approaches make use of partly overlapping explanatory factors. Thus, in all three cases there is in the literature a preoccupation with the role of skilled labour/human capital; knowledge and skills/education; R&D infrastructure; and physical infrastructure. While analyses of the macroeconomic performance of regions tend to put heavy weight on cost related issues (exchange and in-

terest rates, taxes etc.), human capital, infrastructure characteristics and relative location in general, the micro and meso approaches tend to focus industrial structure and specialisation, knowledge spill-overs and localisation economies resulting from agglomerations of related firms and industries and more subtle factors such as institutions, values, norms and culture etc.

The main divide between the three approaches is, however, related to methodology. While micro and meso analyses of regional competitiveness are predominantly based on "soft approaches" (careful conceptualisation, verbal theoretical analysis, in-depth case studies) the macro approach is normally marked by a preference for "hard" methodology (formal modelling, statistical analysis, empirical testing). This difference can partly be explained by the fact that certain concepts (human capital, population structure and density, education level) are more easily translated to measurable variables than other (institutional structure, regional culture), but there is also a mutual distrust between 'conceptualisers' and 'quantifiers' which cannot be reduced to data availability and measurability.

In our opinion the key to a more open dialogue between hard and soft regional researchers lies in a narrowing of this methodological gap. If economists would reconsider some of their purist views on how models of regional growth should be specified and if researchers with a soft approach would become more open to empirical testing, we believe that regional research could become even more exiting and rewarding than it is today.

To illustrate this point, we present below a picture of regional unevenness in Europe and examples of how this development may be accounted for in both a traditional growth model and a geographical alternative to the traditional model.

Regional unevenness in Europe: the data

It is a well documented fact that Europe is a continent of large differences, in terms of social and economic well-being, between countries and even more so between regions. Even if we delimit the analysis to the present 15 EU member states, the differences are considerable, especially at the regional scale. Average income differences between regions in EU is estimated to be twice as high as between comparable regions in the US.

Regional disparities within the European Union has certainly increased as a result of the successive inclusion of new member states, especially Ireland in 1973, Greece in 1981 and Spain and Portugal in 1986, but also the unification of West Germany and the former DDR in the early 1990s. The more recent widening of the Union, however, added countries (Austria, Finland and Sweden in 1995) that are more close to the average on most socioeconomic indicators (CEC, 1996).

In this section, we will make use of three indicators, or variables, to give a broad picture of regional disparities within EU. The variables and their sources are

presented and discussed below. The same variables will then be applied in the two subsequent sections, in an attempt to test different models of uneven regional development.

Per capita GDP is the most common measure of income differences at both the national and the regional scale. Expressed in purchasing power standards (PPS), GDP per capita is probably the best available measure for comparing standards of living across nations and regions in the EU, both in terms of standardisation of calculation methods and regional coverage. Data on regional GDP per capita are derived from the Eurostat database, *Regio*, for various years (for Sweden data are derived directly from Statistics Sweden).

Regional differences in GDP growth rate are later on to be related to aspects of human capital formation at the regional level. The second variable used in this paper is therefore regional *population in specific age groups*. The purpose of focusing on this variable is to generate information on the share of population in productive and dependent ages. Data on age specific population in 1985 are derived from the *Regio* database, except for Sweden, where national sources of data are used.

The third variable used in the paper, also relating to human capital formation, is the *educational attainment level* of the population (in the ages 25–59 years) in EU regions in 1991. Data are in this case derived from the Eurostat publication *Education across the European Union: statistics and indicators*, except for three countries where we have used other sources: Austria (Wirtschafts- und sozialstatistisches Taschenbuch. Bundeskammer für Arbeiter und Angestellte, 1993), Italy (Italian Statistical Abstract, 1996) and Sweden (Utbildningsstatistisk Årsbok, 1991). In order to facilitate comparison between countries, data on education in each country have been assigned to the categories of the International Standard Classification of Education (ISCED), developed by UNESCO. For the purpose of this study a three level categorisation – Low, Intermediate and High – of educational attainment is used. In brief, the *lower level* corresponds to the completion of full-time compulsory schooling, the *intermediate level* refers to either general, technical or vocational education giving admission to higher education or being 'terminal' as is often the case with education and training. The *higher level* refers to university as well as non-university higher education.

The *regional division* applied in this paper is the NUTS 2 level (except for Sweden, where NUTS 3 is used). In total, EU 15 consists of 206 NUTS 2 regions. Unfortunately the data used in the paper do not cover all regions for every year. One major problem has been the new member states Austria and Finland. Data on GDP per capita for previous years have not been possible to obtain, and Austria and Finland are thus excluded from the models tested in later sections. Furthermore, demographic as well as educational data for the UK are lacking for NUTS 2 regions, which means that the UK is excluded in the models used. Also excluded, due to missing data, are Madeira and Acores in Portugal, the four French Overseas Departments and the five new German regions (*Länder*).

Regional variation in GDP per capita

Although there are still large differences between the member states in terms in per capita GDP, there is clear evidence of a *convergence process* at the national level. The four 'Cohesion countries' – Greece, Spain, Ireland and Portugal – have all been able to get closer to the EU15 average level of income between 1984 and 1993 (*Figure 1*). Especially Ireland has experienced a growth rate well above average during the general recession period of the early 1990s, whereas countries like Sweden and Finland during the same period showed a dramatic drop in GDP/capita. With the exception of Luxembourg, the rich countries had an economic performance close the EU average. The convergence process at the national level seems to have been stronger during periods of general growth, e.g. the latter part of the 1980s, whereas the gap between rich and poor countries increased slightly during the recession period in the 1990s (CEC, 1996; Dunford, 1993, 1994).

As already stated, the differences in income level and economic performance over time are much more pronounced at the regional scale. The absolute difference between the richest and the poorest region has slightly decreased since the mid 1980s, but the gap is still large. In 1993 GDP per capita in Hamburg in northern Germany was almost 4.5 times higher than in Alentejo in southern Portugal.

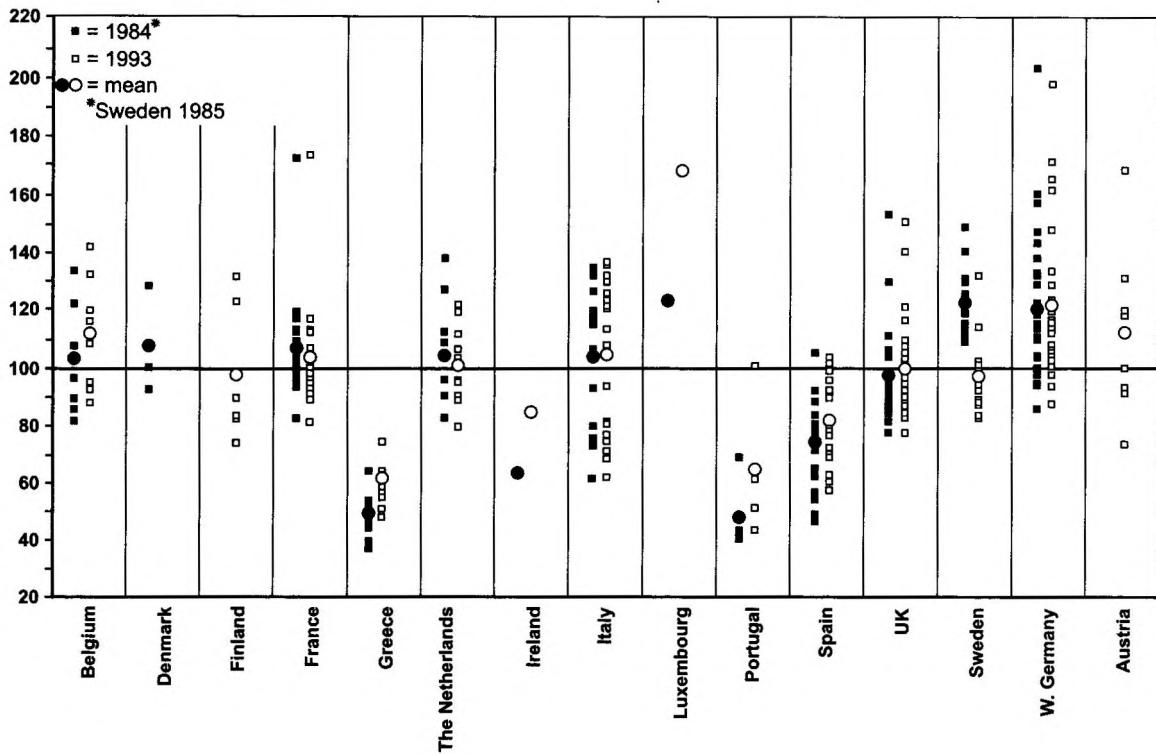
Regional differences within many of the EU countries prevail. In some of the richer countries, like Italy, (West) Germany, the UK, Austria and Belgium, the gap between strong and weak regional economies remains very evident. In the case of Italy and the unified Germany it is in many ways still relevant to speak of "two speed economies". Furthermore, in most EU countries the capital region is way ahead of the rest of the regions. This is most evident in the case of France, but it also largely applies to Austria, Portugal, West Germany and the UK.

The map of regional growth patterns gives at first glance a mosaic impression (*Figure 2a*). High annual growth rates for the period 1985 to 1991 are found in both central and peripheral areas of the Union. A closer look, however, shows that regional growth to a large extent is related to distinctive national patterns. Ten out of fifteen of the fastest growing regional economies are Spanish. Of the other five regions, three are to be found in Portugal (Norte, Lisboa e Vale do Tejo and Algarve), one in Belgium (Limburg) and Ireland. At the other end, eleven out of the fifteen regions showing the slowest growth rate, are Swedish. The other four consists of two Portuguese regions (Alentejo and Centro), one Dutch (Drente) and one Greek region (Anatoliki Makedonia). In some countries, however, there is a more mixed growth pattern. This is especially the case in West Germany, Italy and France.

Figure 1

GDP per capita in EU regions

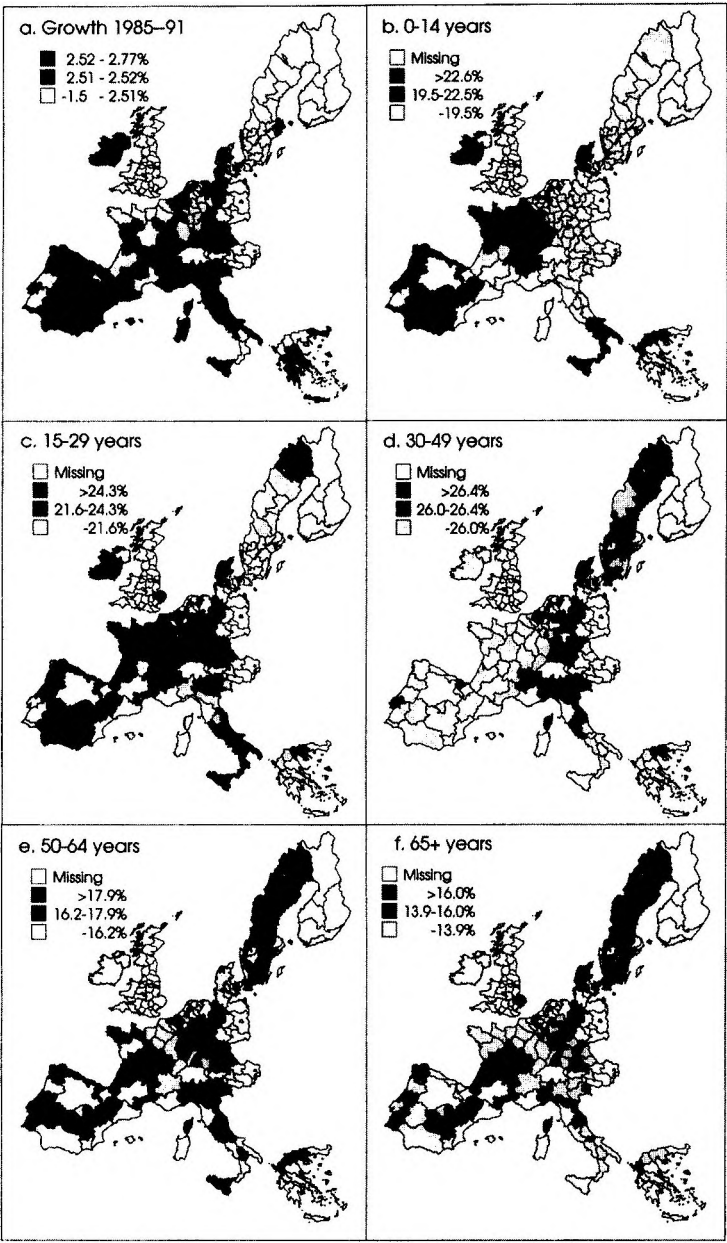
Index, EU15=100



Source: Regio and Statistics Sweden.

Figure 2 (a-f)

Regional differences in various factors of development



According to CEC (1996), there is a fairly strong co-variation between sectoral composition and growth. A slow growth rate is typical for regions dominated by activities in the primary sector (particularly regions in the four Cohesion countries and Finland). In many regions where manufacturing industry is important (like in Germany, northern Spain, northern France, central Italy and Austria), the income level is above EU average and growth rates just below the average of the union, whereas regions depending heavily on the service sector (most of the capital regions and particular parts of northern Germany, Belgium and the Netherlands) are among the richest, and growth rates roughly on the average. This pattern indicates that the productivity of different sectors might be an important determinant of different growth rates. On the other hand, as pointed out in CEC (1996) and *Dunford* (1996), GDP per capita is also dependent on the employment rate, i.e. the participation rate of the labour force. The employment rate is, in turn, dependent on factors like unemployment, age composition, education systems etc.

As already stated, the gap between the stronger and weaker national economies of the European Union has decreased to some extent over time. In *Figure 3* the standard and absolute deviation of regional GDP per capita from the mean value have been calculated for a selection of countries for the period 1981 to 1993. The deviation in relation to the mean is in this calculation weighted against the population share of each region, following the formula used by *Dunford* (1993). The figure shows first of all the level of inter-regional disparities in the seven countries. Large differences are revealed for France and Italy, whereas regional inequalities are less pronounced in countries like Greece and Sweden (in spite of other distinct differences between the latter two countries). In terms of changes over time, there also seems to be important differences between the countries. Increasing disparities obviously characterise Sweden, Greece, Spain and to some degree West Germany. A decrease in regional differences in GDP per head is most evident in the case of the UK, whereas Italy and France show more stable, but still high, levels of regional disparities. The question of a convergence process at the regional level (NUTS 2) will be analysed further in the last sections of this paper.

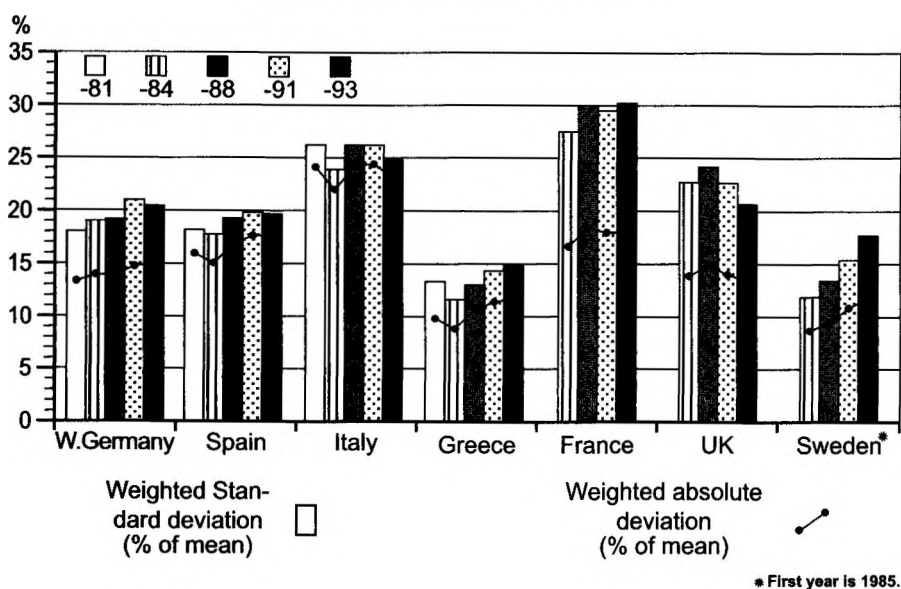
Regional differences in age composition

Differences in the age profile of regions are directly linked to the size of the labour force. Furthermore, age structure is likely to influence both the productivity and the savings rate within the regional economy (see next main section).

In a series of maps the share of population in different age groups in 1985 is depicted (*Figures 2b–e*). From the maps it is obvious that a distinct spatial pattern is revealed in the case of the younger age groups. A high share of children (0–14 years) is typical of most of the regions in Portugal, Spain and Greece, together with the southern part of Italy. High scores for this age group are also found in Ireland

and the northern and Atlantic regions of France. A similar, but not as clear-cut, pattern is shown for the youngest of the working age groups (15–29 years), the exceptions being in particular Greece and to some extent Portugal, along with some of the regions in West Germany and the Netherlands.

Figure 3

Deviation of regional GDP per capita

Source: Eurostats database Regio, and Statistics Sweden.

The share of the population in the age group 30–49 years again shows a distinct pattern, with high shares in both southern and northern Germany, most of the regions in the Netherlands, the industrialised central and northwestern Italy. The oldest age group of the working population (50–64 years) is heavily represented in northern and central Italy, southern France and northern Spain. Equally high shares are recorded for southern Portugal, as well as many regions in Greece. A third group of regions scoring high in this age group is some of the old industrial regions of West Germany and Belgium.

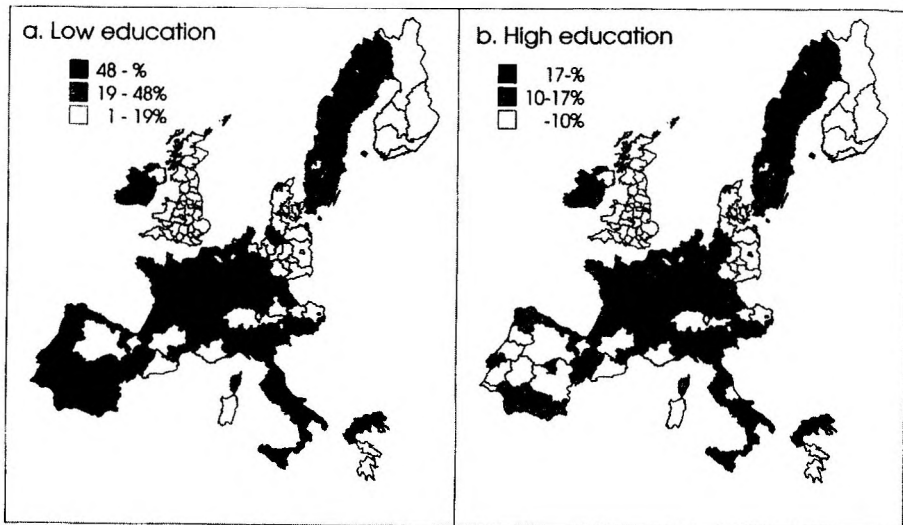
Finally, the oldest age group (over 65 years) is considered in Figure 2f. High shares are found in southern Portugal (Alentejo and Algarve), in southern France and in northern Italy. Also in Greece, West Germany and especially in Sweden, a number of regions show a large share of elderly citizens.

Regional variations in the level of education

Educational level is used in this paper as a broad indicator of the quality of the labour force at the regional scale. Formal education is by no means the only factor determining the productive performance of an individual, but there is reason to expect a fairly strong correlation between educational attainment and the level of qualification of the labour force in general. Educational attainment must therefore be considered as one of the best variables available in regional statistics measuring a qualitative aspect of the work force. In *Figure 4a-b*, the educational level of the population in the EU countries in 1991 is plotted. Again, a strong national pattern is revealed, a fact which suggests that there are important differences between national educational systems. In general, the pattern of educational level follows a typical north-south divide, with a large share of the population in the south having a low education (especially in Portugal, Spain and Greece). Regions with a large proportion of the population having a higher education are found in the Netherlands, Belgium, large parts of West Germany and Italy. To this pattern can be added a few regions in Sweden (Stockholm, Göteborg and Uppsala), and the capital regions of Austria, France and Spain, together with a couple of regions in northern Spain (Pais Vasco and Navarra).

Figure 4 (a-b)

Educational level of population



Modelling uneven development: the traditional approach

Is there then an overall process of convergence or a process of polarisation going on in Europe? In order to answer this question we have used data for the 1985 to 1991 period to estimate models of convergence. The conclusion is that there is tendency of convergence, but that it is to some extent counteracted by differences in educational levels and population structure across regions.

The models we estimate are based on a framework developed by *Mankiw-Romer-Weil* (1992) for the analysis of income convergence across countries. This (MRW) framework is essentially an empirical version of the traditional neo-classical growth model developed by *Robert Solow* in the 1950s (*Solow*, 1956). The Solow model shows that if there is no technological change, per capita income growth will eventually come to an end. The economy will reach a steady-state where the accumulation of capital is sufficient only for replacement needs. No further increases in capital intensity will occur. Per capita income will be constant. During the 1980s the *Solow* model was challenged by a new set of endogenous growth models that were designed to account for the apparent absence of convergence in real world economies (*Lucas*, 1988; *Romer*, 1990; *Rebelo*, 1991; *Rivera-Baitz-Romer*, 1991). Convergence was seen as a central prediction of the Solow model and therefore the absence of convergence raised serious doubts as to the validity of the neoclassical growth model. MRW could, however, successfully counter these challenges by showing that the Solow model does fit the empirical data given that the effect of differences in savings rates and human capital accumulation across countries is taken into account.

MRW's main point is that the Solow model predicts strict convergence of per capita income only if the factors that determine the steady-state level of per capita income are the same in different countries. An economy with a high savings rate will, for example, eventually end up with a high per capita income whereas a country with a low savings rate will stay on a lower level of income. In order to find Solow-convergence in empirical data we must therefore control for differences in the savings rate. MRW argue, furthermore, that differences in the rate of human capital accumulation also will have an effect on the steady state level of income. Also educational attainment must, therefore, be controlled for in studies of convergence.

In its most simple form, a statistical model of per capita income convergence contains only two variables: the growth rate of per capita income and the initial per capita income. These variables are then related in a regression model where initial per capita income is the independent and the growth rate is the dependent variable. If there is unconditional convergence the estimated regression parameter for the initial income variable should be negative. That is, for convergence to occur, areas with a low per capita income must have higher growth rates than areas with a high per capita income.

In Table 2, column A, we have estimated such a model of unconditional or strict convergence on European data. The level of observation is NUTS 2 regions and we use 130 observations for the 1985 to 1991 period. Only NUTS 2 regions from the twelve pre-1995 member states plus Sweden are used. The sample is furthermore restricted by the availability of educational and demographic data that are used in later regressions. As is explained below, the initial set of estimation is also based on a sample where Greece has been excluded.

Table 2

Per capita income convergence in European regions, 1985–1991, %

	Unconditional convergence (A)	Age conditional (B)	Education conditional (C)	Education and age conditional (D)
intercept	9.24 (1.65)	7.931 (1.726)	8.447 (2.121)	4.886 (2.356)
log initial	–0.701 (0.179)	–0.796 (0.208)	–0.716 (0.222)	–0.454 (0.269)
In 0–14		–0.635 (0.291)		–0.507 (0.537)
In 15–49		1.214 (0.469)		1.658 (0.696)
In 50–64		0.919 (0.448)		0.608 (0.535)
In 65+		–1.365 (0.300)		–1.053 (0.317)
In Low			–0.059 (0.099)	–0.231 (0.304)
In Med			–0.236 (0.095)	–0.420 (0.187)
In High			0.509 (0.137)	0.070 (0.171)
R-sqr	0.101	0.430	0.367	0.465
adj. R-sqr	0.094	0.409	0.348	0.432
N	139	139	139	139

Note: Estimation results. Standard errors in parentheses. Greece excluded.

As can be seen from the regression results there is in this sample some evidence of strict convergence. Initial per capita income explains, however, only a small proportion of the variation of growth rates across NUTS 2 regions.

Can we then, like MRW, find stronger evidence of conditional convergence? MRW used international data on savings rates and educational attainment to control for factors affecting the steady state level of income. For the NUTS regions, data on investments or savings rates are very sparse. Instead we have used age structure data for 1985 (log values of population in age group 0–14, 15–49, 50–64, and 65) to control for one potentially important determinant of steady state income. Clearly, a region with a large dependent population will have great difficulties in financing a large volume of investment. In regions with a large part of their population in working ages savings rates may be expected to be higher and this will make financing of investment easier (*Bentzel, 1957; Modigliani, 1975; Mason, 1987; Horioka, 1989; Auerbach–Kotlikoff, 1992*). Like MRW, we have also used education data to measure the level of human capital accumulation (log values of population with low, intermediate and high education in 1991).

The estimation results are presented in *Table 2*, column B–D. Column B presents the results when differences in age structure is controlled for. As can be seen, the introduction of age variables makes the convergence pattern stronger. The convergence parameter increases somewhat and the explanatory power of the model takes a jump. 38 per cent of the growth rate variation is accounted for by the age-conditioned convergence model. The estimated parameters for the age variables all have the expected sign. Regions with a large dependent population have lower growth rates than regions where the working age population is large.

Column C of *Table 2* shows the estimation results for the educational conditioned convergence model. The estimates show that also in this case is there strong evidence of conditional convergence. The main finding here is that high educational attainment is an important conditioning factor for regional growth. This finding is not surprising given the current discussion of knowledge driven growth, but it is comforting that this hypotheses is validated by the data.

Column D, finally shows the estimation results for a model that includes both age variables and educational variables. If column D is compared to the models with only age or educational variables included there are some differences. The negative effect of low and medium educational attainment is increased and the positive effect of high educational attainment is lowered. There is also an effect on the estimated parameters for the age groups. This instability of the parameter estimates may to a large extent be explained by correlations among the age and educational variables.

All the regressions in *Table 2* have been performed with the Greek regions excluded. The reason for this is that the Greek regions do not conform to the convergence patterns presented in *Table 2*. This is demonstrated in *Table 3*, Column A2, first shows that with Greece included there is no strict convergence across the Nuts regions. There is stronger evidence of education and age structure conditioned convergence (see column B2 and C2), but the parameter for initial income is much smaller and only borderline significant with the Greek regions included. The parameter pattern for the age and educational variables is, however, the same.

Table 3

Per capita income convergence in European regions, 1985–1991, %

	Unconditional convergence (A2)	Age conditional (B2)	Education conditional (C2)	Education and age conditional (D2)
intercept	4.533 (1.358)	3 869 (1.428)	4.710 (1.796)	1.821 (1.827)
log initial	–0.196 (0.148)	–0.346 (0.184)	–0.310 (0.187)	–0.026 (0.207)
In 0–14		–0.316 (0.301)		0.175 (0.514)
In 15–49		0.975 (0.486)		1.264 (0.692)
In 50–64		0.666 (0.473)		0.574 (0.546)
In 65+		–1.169 (0.310)		–0.693 (0.314)
In Low			–0.039 (0.099)	–0.605 (0.292)
In Med			–0.317 (0.095)	–0.682 (0.171)
In High			0.572 (0.137)	0.099 (0.172)
R-sqr	0.012	0.339	0.322	0.417
adj. R-sqr	0.004	0.316	0.304	0.384
N	152	152	152	152

Note: Estimation results. Standard errors in parentheses. Greece excluded.

If the models of *Table 2* are applied on Greece the result is that income growth in the Greek regions is much lower than it should be taking initial level of income, age structure and educational levels into account. Greece, thus, is not a member of the 'convergence club' formed by the other EU member states.

It could be argued that the age and education effects reflect differences in sectoral composition. We could, for example, be picking up a lower growth rate for regions dominated by agriculture. This is, however, not the case. The regressions have also been run with the agricultural share of employment among the regressors, and the results are essentially the same. There is, though, a change in the pattern of the age effects. The growth effect of the 50–64 years age group is increased, making it equal or even larger than the growth effect of the 15–49 years age group. The finding that an inclusion of a sectoral variable doesn't seriously affect the parameter estimates holds also for the geographical convergence models estimated below.

Modelling geographical convergence: an alternative approach

A disadvantage with traditional per capita income convergence framework is that it does not fit very well with the other approaches presented in the second section of the paper, above. In this section, therefore, we will test an alternative model based on geographical convergence which, in our opinion opens up for a closer dialogue between intensive and extensive approaches to regional development. The geographical convergence model differs from the per capita model in three ways.

First, it models regional growth rates instead of per capita growth rates. In the regional development literature the issue at focus has traditionally been why some regions grow while others lag behind. Per capita income growth has only been a secondary issue.

Second, the geographical model uses GDP per areal unit instead of GDP per capita as a measure of the initial level of development. An advantage with this measure is that it captures the intensity of economic land use in a region. According to many regional development theories, increasing density might generate locational disadvantages, for example in the form of rising land values.

Third, the geographical convergence model uses densities for the age variables and educational variables. By using densities, a possibility is opened for linking this model to theories of industrial districts, innovative milieus, knowledge spillovers etc. which all emphasise spatial proximity between individuals, firms and institutions as an important element in regional competitiveness.

Apart from these differences, the set up of the geographical convergence model is similar to the MRW model. The convergence assumption is that in the absence of counter-acting forces all regions should eventually end up with similar produc-

tion densities per areal units. However, the steady state value of GDP per areal unit will also depend on age specific population densities and on the density of different educational groups. Therefore, regions with a more advantageous age structure or educational structure will grow faster than more disadvantaged regions when initial production density is controlled for.

The regression results are presented in *Tables 4, 5 and 6*. The results are similar to those obtained for the per capita convergence model. A difference is, however, that the geographical model is more successful in capturing the variation of growth rates across regions. R-square is substantially higher for the geographical convergence models. Our belief that a geographical model is more appropriate for studies of regional development is, thus, to some extent confirmed by the data.

Table 4

Geographical convergence in European regions, 1985–1991, %

	Unconditional convergence (A3)	Age conditional (B3)	Education conditional (C3)	Education and age conditional (D3)	Age conditional and high edu. (E3)
intercept	8.747 (0.882)	20.822 (1.730)	11.787 (2.336)	10.863 (2.364)	22.232 (1.965)
log gdp	–0.158 (0.122)	–4.013 (0.516)	–0.988 (0.594)	–1.806 (0.655)	–4.218 (0.531)
In 0–14		–1.921 (1.020)		–6.636 (1.626)	–1.750 (1.021)
In 15–29		–0.454 (1.736)		5.664 (1.885)	–0.758 (1.740)
In 30–49		8.098 (2.220)		7.311 (1.945)	7.414 (2.257)
In 50–64		–0.484 (1.536)		–4.825 (1.606)	–0.551 (1.530)
In 65+		–1.281 (1.170)		–0.166 (1.022)	–1.152 (1.168)
In Low			0.645 (0.307)	1.714 (0.935)	
In Med			–1.410 (0.459)	–1.774 (0.641)	
In High			1.840 (0.490)	0.424 (0.520)	0.888 (0.595)
R-sqr	0.012	0.399	0.424	0.568	0.409
adj. R-sqr	0.005	0.371	0.407	0.538	0.377
N	139	139	139	139	139

Note: All RHS variables (except intercept) are log densities. Estimation results. Standard errors in parentheses. Greece excluded.

Table 5

Geographical convergence in European regions, 1985–1991

	Unconditional convergence (A4)	Age conditional (B4)	Education conditional (C4)	Education and age conditional (D4)	Age conditional and high edu. (E4)
intercept	10.518 (1.113)	21.052 (1.733)	13.163 (2.748)	12.118 (2.578)	22.996 (1.982)
log gdp	–0.378 (0.150)	–4.378 (0.530)	–1.570 (0.744)	–2.265 (0.709)	–4.701 (0.549)
In 0–14		–3.704 (1.120)		–7.354 (1.668)	–3.664 (1.106)
In 15–29		2.861 (1.925)		7.475 (1.976)	2.731 (1.902)
In 30–49		5.550 (2.420)		5.996 (2.158)	4.652 (2.434)
In 50–64		3.906 (1.905)		–2.202 (2.131)	4.008 (1.882)
In 65+		–4.119 (1.384)		–1.924 (1.268)	–4.200 (1.368)
In Low			0.854 (0.363)	1.428 (0.973)	
In Med			–1.108 (0.530)	–1.757 (0.670)	
In High			2.057 (0.577)	0.607 (0.551)	1.192 (0.613)
R-sqr	0.053	0.482	0.432	0.620	0.500
adj. R-sqr	0.045	0.454	0.411	0.587	0.467
N	115	115	115	115	115

Note: All RHS variables (except intercept) are log densities. Estimation results. Standard errors in parentheses. Greece and Sweden excluded.

The most important result of these estimations is that the production density variable – initial GDP per square kilometre – does indeed have a negative effect on subsequent growth. These estimations, thus, gives support to the hypotheses of locational disadvantages of agglomeration that has been proposed by various authors (see above). Thus, a high level of production per areal unit does pose a problem for further economic expansion. From a policy point of view this is important since it may help to explain the poor performance of many old industrial regions in Europe such as Wallonia, the Ruhr, Northern England etc.

On the other hand, the regressions show that agglomeration is not necessarily bad. Regions with high age specific population densities for people in their work-

ing ages or high densities of people with high education perform better than regions with high densities of dependent age groups or high densities of people with medium education. Agglomeration of active and highly educated is, thus, an advantage whereas an agglomeration of dependent and less educated poses a problem for regional growth. This is a potentially important refinement of the urbanisation economies concept discussed in earlier in this paper.

Again, these are not very surprising results. Nonetheless we maintain that the geographical convergence model in a neat way captures and resolves a problem that is omnipresent in the agglomeration literature – namely how to strike a balance between the advantages and disadvantages of agglomeration.

Table 6

Geographical convergence in European regions, 1985–1991

	Unconditional convergence (A5)	Age conditional (B5)	Education conditional (C5)	Education and age conditional (D5)	Age conditional and high edu. (E5)
intercept	6.669 (0.881)	10.683 (1.803)	3.928 (2.327)	2.085 (2.224)	13.117 (2.193)
log gdp	0.093 (0.124)	-1.138 (0.547)	1.375 (0.557)	1.196 (0.555)	-1.469 (0.575)
In 0–14		-2.759 (1.278)		-6.013 (1.830)	-2.154 (1.280)
In 15–29		6.255 (2.023)		10.181 (1.993)	5.935 (2.031)
In 30–49		-0.626 (2.488)		1.556 (2.032)	-2.190 (2.525)
In 50–64		-0.714 (1.936)		-5.667 (1.832)	-1.314 (1.993)
In 65+		-1.112 (1.368)		1.272 (1.010)	-0.479 (1.376)
In Low			-0.281 (0.317)	0.465 (1.048)	
In Med			-3.166 (0.441)	-3.678 (0.660)	
In High			2.181 (0.548)	0.624 (0.592)	1.477 (0.741)
R-sqr	0.004	0.138	0.343	0.490	0.166
adj. R-sqr	-0.003	0.103	0.325	0.458	0.126
N	154	154	152	152	152

Note: All RHS variables (except intercept) are log densities. Estimation results. Standard errors in parentheses. Full sample.

Conclusion: bridging the gap

The geographical convergence model provides – as we see it – an example of how the gap between different approaches to uneven regional development might be bridged. First, it uses variables that make a mapping between measurable entities and theoretical concept less difficult. Second, it demonstrates that processes which are deemed to be important in the theoretical and case study based literature may indeed be identified also in aggregate data. Third, the geographical model shows that the traditional model used by economists might be deficient when it comes to analysing regional data.

Our analysis also points out that demography constitutes an important link between regional structure and regional performance. In the early regional development literature the population feed-back was a key ingredient (e.g. *Myrdal*, 1957; *Pred*, 1977). More recent approaches in most disciplines have, however, more or less totally ignored the demographic component. Our regressions show that this might be a costly mistake. Imbalances in the age structure, in particular between the active and dependent population, have been important determinants of differences in regional performance. There is, thus, an urgent need for conceptualisations of why shifts in the age structure are that fateful for regional growth, as well as further empirical studies of how age structure conditions regional development (see *Malmberg*, 1994; *Lindh-Malmberg*, 1995; *Persson-Malmberg*, 1996). Demographic considerations also seem to be fully possible to integrate with case study based analyses at the micro and meso levels.

In the presence of this challenge to the received wisdom of regional development we maintain that a continued disciplinary isolation would be harmful. Our conclusion is, therefore, that it would be beneficial for further scholarly development in this field if, on the one hand, researchers pursuing an aggregate approach in their models would begin to acknowledge the role played by geographical and demographic factors while, on the other hand, researchers who pursue a more qualitative approach would increase their efforts to state their hypotheses in ways that admit empirical testing.

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3 REGIONAL AND LOCAL ECONOMIC DEVELOPMENT POLICY: THE ROLE OF ADMINISTRATION AND POLITICAL ENTREPRENEURS

Robert J. Bennett

Introduction

The economic development of an economy has profound territorial implications. Rarely is development uniform. More commonly development is focused in urban and metropolitan centres of agglomeration with resulting inequalities, particularly for rural and more peripheral areas. Between areas also the different histories of economic development have laid down different industrial structures which have different capacities to respond to technological and other forces of change. This chapter examines the implications of territorial inequalities of economic development and how policies can be developed to help regions that have been less successful to catch up. These issues have been a central focus of much of the research by György Enyedi (see e.g. *Enyedi and Veldman*, 1986; *Enyedi*, 1994), and it is a great pleasure to develop this chapter as part of a tribute to his work.

The chapter first introduces the theoretical basis for local and regional economic development policy, deriving from endogenous growth theory. The second major section then compares different policy approaches. The third section compares the different local institutional structures of the USA, UK and Europe as features underpinning the differences in policy approach. The fourth section presents the results of new survey research in Britain of how economic development partnerships have evolved. The concluding section draws the discussion back to the constraints under which different agents operate and the challenges that remain.

Regional and local economic development

Regional and economic development activity focuses on the development of resources and wealth, employment and social opportunities at the sub-national level. Generally this is the level which is the chief context of local labour markets and/or local networks of inter-business relations. This is also the level at which operate the

key agents of local government and many social and voluntary sector bodies, as well as small business support organizations. At the local and regional scale economic development is also focused on inward investment, major infrastructure, and the development of a strategic interface between EU and central state funding priorities and specific regional or local objectives. It is therefore a key focus for exchanges – horizontally between the key agents; and vertically between supra state, state and external agents to the local economy.

Local and regional economic development policy seeks to improve each of the five key elements of:

- human resources, workforce skills and social opportunities,
- land, infrastructure and site provision,
- capital formation and investment,
- innovation, entrepreneurship and technological change,
- the institutional context.

Each of these elements constitutes a factor of production necessary for the successful functioning of the economy and the social structures that this supports in any locality or region. Each factor separately contributes to economic development. But its supply depends on different and overlapping agents which have to cooperate with each other if the full potential of economic development is to be achieved. To achieve cooperation requires a willingness to exchange information, to develop joint policy positions between agents, and to back those positions with commitment and resources. Successful local and regional economies will have successfully built a process of cooperation founded on commitment. Less successful economies usually have gaps in exchange or commitment between agents. The objective of local economic development policy, is then, to develop a strong local capacity to develop local exchanges (*Bennett-Krebs*, 1991; *Bennett-McCoshan*, 1993).

The importance of inter-agent exchange and the development of institutional capacity relates closely to the role of local and regional agents in endogenous growth. Endogenous growth theory in part stimulates and in part derives from recognising the importance of new means of exchange needed to develop modern economies. These exchanges all emphasise the increasing importance of adaptive efficiency within companies, and within those government and other agents and personnel that deal with companies and operate policies that influence the economy. *Mokyr* and others have demonstrated through detailed historical analysis that the abilities of a society to absorb and benefit from technological change results for the complex interplay of many different agents, all of which are mutually critical (see *Mokyr*, 1990, 1992; *Atkinson-Coleman*, 1992; *Aghiou-Howitt*, 1998; *Nelson-Winter*, 1982; *Audretsch*, 1989; *Nickell et al.*, 1997). Many of these are influenced by government administrative policy: e.g. through the structure of institutions and property rights, through welfare policies to smooth the hardships created by tech-

nological change, through encouraging a climate of economic and social priorities, and by stimulating supportive educational and training attitudes. As *Crafts* (1997, p. 68.) argues, institutions are "at the heart of the growth process" in endogenous growth theory.

Local and regional economic development involves a wide range of different agents institutions and agents. These are the individuals, agents and institutions responsible for allocating resources or making the decisions that influence the elements of economic development. Their relations are political and social, as well as economic. Endogenous growth depends on their inter-relations and how administrators and government deals with each agent. Government and administration, at both local and national level, is a key agent in economic development decisions. Government is, however, only one of many agents in a complex scene. There are also the businesses and economic agents that are directly responsible for the decisions that make investments, generate wealth and innovate technological change. In negotiations on public policy, business may act directly, but usually the business interest is represented by national, sectoral or regional/local associations or other representative bodies. There is also a range of social and other agents concerned with how public policy is implemented at the community level on how it influences the rights or interests of specific groups. To be effective endogenous economic development policy must encourage exchange of information both ways between government, businesses and each of these agents.

But government is itself a complex multi-agent entity. Government is not a single, monolithic department. It is subdivided between ministers, administrative departments and agencies, and other special purpose bodies. There is also the influence of European Commission programmes of funding streams. At the local and regional level the result is a picture that is complex and often confusing.

The complexity and difficulty of joining-up administrative and other agents into a coordinated endogenous growth policy is well illustrated by the case of Britain. Central Government in Britain, as in most countries, is organized with strong vertical divisions of functions between ministers and their departmental administrations, each of which has some role in local economic development. But these roles are often developed quite independently of each other. On the ground, at the local and regional level, the result is a bewildering array of different initiatives.

In Britain the Audit Commission (1989: p. 1.) commented that local economic development activity was "*a patchwork quilt*" of complexity and idiosyncrasy (Government programmes)... baffle local (government) and businesses alike. The rules of the games seem over-complex and sometimes capricious. They encourage compartmentalised policy approaches rather than a coherent strategy". These comments are echoed in the Audit Commission's (1999) report, 10 years later. Although quoting the Prime Minister Tony Blair, that "government had to work more coherently" recognising the "importance of integrated approaches", the Commis-

sion's conclusion is clear: "fragmentation and duplication on the ground persists, underpinned by a maze of strategies, partnerships and organizational configurations. Government and European regeneration programmes extol the virtues of long-term, comprehensive strategies, but many of the funding systems involved promote the opposite ... (There is a) Labyrinth of programmes... The current system mirrors the 'patchwork quilt' described in the Audit Commission 1990 report" (Audit Commission, 1999, pp. 74., 84.). Thus, although the Labour government has recognised the need for greater coordination, or what the government has sometimes termed "joined-up government", it has yet to deliver it. The same comments apply with equal force to most other countries; it is an inevitable result of the complex multi-agent domain of economic development policy.

Policy approaches

Within the general context of endogenous growth theory a variety of different approaches is possible. The choices between these often depend on the extent of the economic problems confronted and the political dimensions of central, regional and local government. Three main approaches are discussed here.

Market-led

Market-led approaches derive from seeking minimal distortions to decision making so that the maximally efficient economic outcomes can be obtained. This often leads to economic development policies on taxes and expenditure which permit little decentralisation of responsibilities. As in the discussions of the normative theory of fiscal federalism (Musgrave–Musgrave, 1980; Oates, 1972), the emphasis in relations between levels of government is usually on grants paid to compensate for spillovers, or upon direct benefit principle fees and charges. The scope for fiscal decentralisation to local government is therefore small, but local government may play an important role in administration and service delivery, provided revenues are based on market or quasi-market pricing or equalizing grants.

The market-led approach is based on the expectation that the free movement of capital, labour and information will lead to a balancing of supply and demand, and hence an equalisation of the level of economic development across an economy. As a response to any local or regional inequalities in levels of development, labour will be attracted to migrate to the locations where greater employment opportunities exist or where wages are higher; thus removing labour surpluses in 'lagging' regions and satisfying demand in 'growing' regions. Capital, on the other hand, will respond to the opportunity from investments offered in lagging regions and will seek the benefits of excess labour supply and lower wages, or the unused investment opportunities and markets which lagging regions possess (see e.g.

Richardson, 1969). Hence inequalities in economic development should tend to be equalised by counterweighting capital and labour flows.

Within dynamic growth theory and endogenous growth theory this perspective is readily accommodated by expecting short-term full unemployment in some regions to be offset by the flow of labour or capital from other regions. Even if these equalising flows do not occur, normative theory tells us why this is so: because of imperfect information, absence of the needed factor of production or its imperfect quality and mobility. Hence it is possible to develop policy which seeks to overcome these constraints. But such policies are limited by the need to prevent interference with the market as a whole. The scope for decentralisation of economic development action is thus very limited.

Hence, under market-led approaches conventional practice leads to only limited potential for locally based economic policy: to play a local planning and facilitating role, providing important infrastructure, developing general investment in supply-side elements such as 'human capital' through local education and training programmes, and through information provision. Each of these instruments provides the general conditions to improve local capital investment or labour supply and it is expected that benefits diffuse or 'trickle-down' to each locality as the overall growth of the economy proceeds (e.g. *Hirschman*, 1958).

The main criticism of the market-led approach is that it takes no direct account of the inbuilt advantages of pre-established growth as a result of the influence of internal and external economies of agglomeration and clustering. Agglomeration benefits provide a formidable obstacle to the diffusion of development. As a result compensating capital flows or 'trickle-down' effects rarely occur on sufficient scale; *Myrdal* (1958) for example concluded that any 'spread' effect of economic growth from core regions would almost always be out-weighted by 'backwash' effects (the attraction of economic factors from lagging to core region), unless government intervened. This has formed the basis for interventionist and other approaches and has suggested that, for the diffusion of development from the core to the periphery, mechanisms beyond the market may be required.

Other occasions on which the economics of agglomeration are undermined is when technologies change such that existing locations are ill-adapted to new requirements; or where internal and external diseconomies of agglomeration choke off investment returns. Arguably, it is these two factors, of technological change and diseconomies of agglomeration, which chiefly underlie the needs for urban economic regeneration in depressed localities and inner cities. In this case capital and labour will flow to new investment opportunities, but not necessarily to the 'lagging regions'. For this situation, policies are required which allow the 'sunk' costs of infrastructure and capital in declining areas to be recovered or which allow adaptation of previous agglomerations. But it is usually the case that the areas which experience the severest economic decline are those that are least able to pro-

vide the necessary requirements from their own resources which allow economic, social and political change. This suggests the need for alternatives to supplement market-led approaches.

'Activities' approaches

In the light of regional and economic problems of unemployment and economic decline it has been difficult for any country in post-war years to take a totally market-led position. Political pressures and the interaction of economic with social policy has encouraged a level of government economic development activity.

Often of importance has been the local government as an advocate of the locality and as an elected democratic focus for attempts to change local conditions. Completely passive, market-led stances are not politically possible for local governments whose economies are suffering severe declines. As noted by *Wiseman* (1964, 1987, p. 46.): "it will usually be unrealistic to expect a region readily to acquiesce in its own depopulation, simply because it is believed elsewhere that economic efficiency requires that labour move". The mainstream activist approach has gone beyond advocacy not only to exercising planning and facilitating roles, providing crucial physical infrastructure and developing general investments in 'human capital' through education and training, but also to trying to overcome some of the barriers which prevent greater capital or labour mobility between areas.

Activism has often sought to use sectorally and geographically limited fiscal and other incentives to increase the attractiveness of some locations. These incentives have become more limited in the EU as a result of the Treaty of Rome, and in all countries under pressures from WTO and other bodies.

For local government, activism is frequently associated with local advertising and competition for mobile industry as well as the provision of local government information services, infrastructure and planning support. However, a greater range of instruments can be employed: for example; the provision of sites, facilitative planning control, small workshop construction ('nursery units') often with concessionary rents, 'incubators', managed workspaces, small grants and loans. These approaches have tended to concentrate on creating incentives through land, information and capital factors. There is also, however, a considerable influence on labour quality through local education policies and vocational training.

The activist approach at local level varies between countries depending on the extent of local government power. In Britain it is restricted by limitations on local government statutory powers (the doctrine of *ultra vires*). Hence, most activities, if they are targetted, must be small in scale; therefore small and new firms are the main potential beneficiaries: a so-called "seedcorn" approach. For untargetted activities local government has often sought to create the right conditions for investment through improving externalities such as infrastructure, labour market quality

and advice, or local 'image' and 'business climate'. As such, British local government activities are often at the margin and have not been able to have large scale impacts on the economic development of their areas. This has led, naturally, to calls for greater powers and also to the use of devices which go beyond 'activism' to attempt more direct intervention, partnership and direct participation in economic enterprises.

Interventionist approaches

Stronger interventionist approaches have been developed at the other extreme to market approaches. Indeed forms of planned intervention were seen as of major importance in many immediate post-war economic texts on public finance. For example, *Hicks* (1947, pp. 342–345.) saw investment by the local public sector as a key aspect in national economic policy which required planning, prioritisation, administrative machinery and appropriate finance. In various forms these assumptions underpinned much of the post-war 'welfare consensus' in Britain on intervention in employment and economic policy, and was also developed in many other western economies.

Some intervention policies are close to the activist approaches already discussed. Other policies are far more extreme in their ambitions and the range of instruments used. These policies are usually based on considerable emphasis on the structure of the local economies, and the nature and location of social and disadvantaged groups. The result can be a set of very specific programmes targetted to sectors, locations within local authorities and particular disadvantaged groups. Many socially inclusive approaches to local economic development have been stimulated by EU funding streams. Certainly intervention requires considerably more resources than 'activist' approaches. This is partly possible because most areas in which interventionist approaches are used are large metropolitan locations which usually have greater needs. However, for other areas resources are restricted and other resource models can be employed. However, all generally rely on creating partnerships to draw in the resources of other agents, or direct participation in economic enterprises. The way in which this can occur, however, varies considerably, depending on local institutional structures. These are examined below.

Contrasts in institutional structure

The scope for regional and local economic development policy depends crucially on the extent of decentralised power available within the state, and the territorial scale and structure of sub-national governments. As a result, the form and structure of regional and local economic developments policy will differ considerably between different countries. To make this context more concrete, three contrasting environments are compared below: the USA, the UK, and Europe.

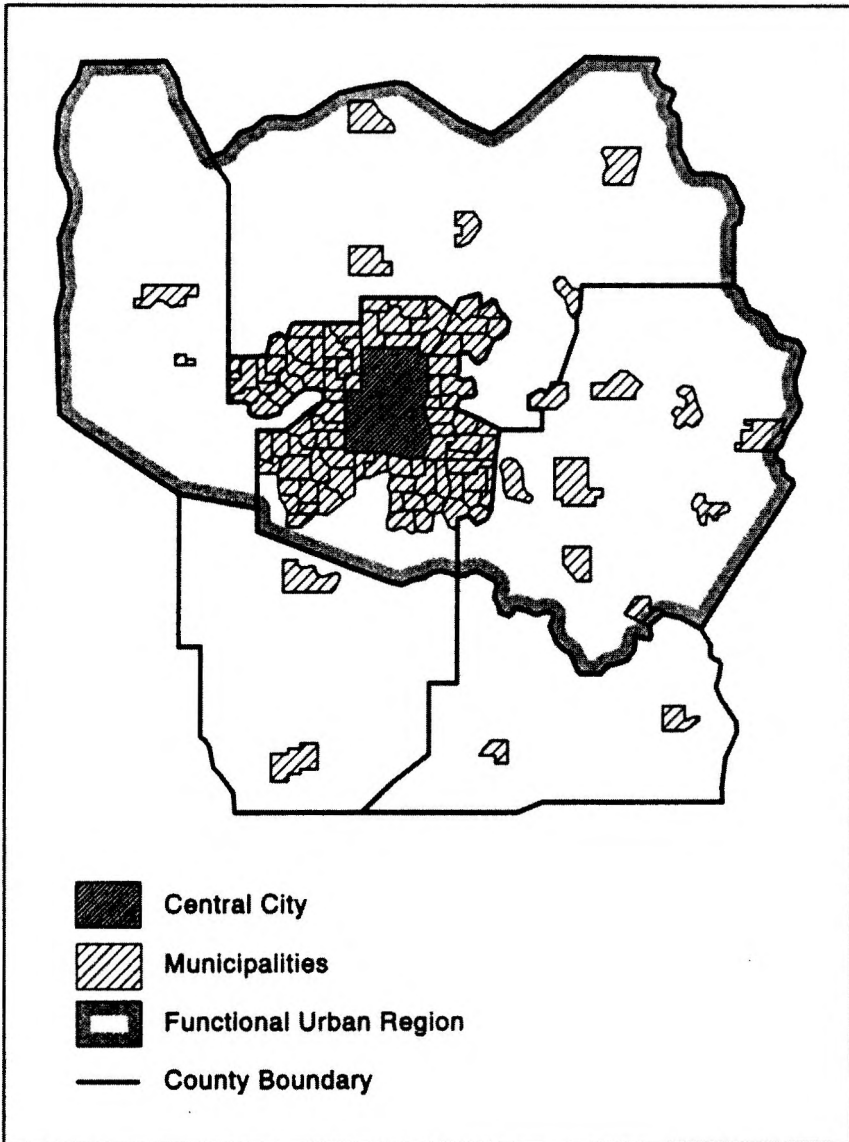
The US urban system

Much of the literature on local and regional economic development and the problems of potential 'urban crisis', especially 'urban fiscal crises', has been dominated by consideration of the administrative and fiscal structure of the older, northern and metropolitan areas in the USA (see, for example, *Sternlieb-Hughes*, 1978; *Clark-Ferguson*, 1983). The organization of these cities in the USA is highly fragmented, uncoordinated and strongly competitive between local jurisdictions. The typical pattern, shown in *Figure 1*, is a functionally integrated economic system or labour market which is highly fragmented into a major central-city local government surrounded by several counties within which are a multitude of suburban governments (usually municipalities and townships). These municipalities, referred to as the 'incorporated' areas, are usually very small in area and population, certainly compared to the central city. They are dispersed, and it is possible for unincorporated areas to be surrounded by incorporated areas. In addition there are a large number of special districts for certain functions, particularly for schools, fire, police, water and electricity supply, flood control, etc. Some of these special districts are organized at a metropolitan level, e.g. water and transport services, perhaps by coordination between counties; some are city-wide, e.g. housing; some are organized on approximate equality of population, e.g. School Boards. Generally, however, there is no correspondence of the boundaries of special districts and other governments. The councils of the central city, county and municipalities are elected with, mostly, an elected executive. The special-purpose districts are normally appointed. Hence, as well as administrative fragmentation, there is also political fragmentation. Occasionally central cities may also be counties, giving them greater administrative co-ordination; even where this occurs, however, the rest of the metropolitan area is highly fragmented.

Most of these administrative units, whether city, county, township or special-purpose, have autonomous taxing powers, make independent expenditure decisions, and may also have user charges and fees. Whilst almost all use property taxes and fees, many use sales tax as well, and a number, particularly central cities, use income tax. In most US states, local government also has autonomy in definition of the tax base; this is an important source of inequality and is a major contrast to most other countries, particularly in Europe. As a result the tax systems differ greatly between each locality, and also differ considerably between states. In most states, state constitutions are permissive of local actions. Generally at least one-half of local actions are within a context of freedom to act. This is in marked contrast to the UK where local authorities cannot act unless empowered to do so (the doctrine of *ultra vires*). As a consequence of this variable allocation of functions and taxing powers, the typical US metropolitan area is fragmented, not only administratively

Figure 1

Typical areal organization of US metropolitan areas, which is overlain by special-purpose districts (not shown)



and politically, but also fiscally. There is no congruence of the economic labour market of the urban system and of the political, administrative or fiscal structure.

The result is a system in which strong positive feedbacks can develop which lead to marked imbalances and continued divergences in fiscal burdens and benefits between areas. This is often particularly focused between central cities and suburbs, between urban and rural areas, and also where there are marked imbalances between rich and poor suburbs. This pattern produces considerable tensions and constraints on what local and state-level government can achieve for economic development in the US economy. As a result a strong reliance has usually been placed on market-led approaches, but there has also been some activism and some forms of intervention, particularly by state-level governments.

The UK urban system

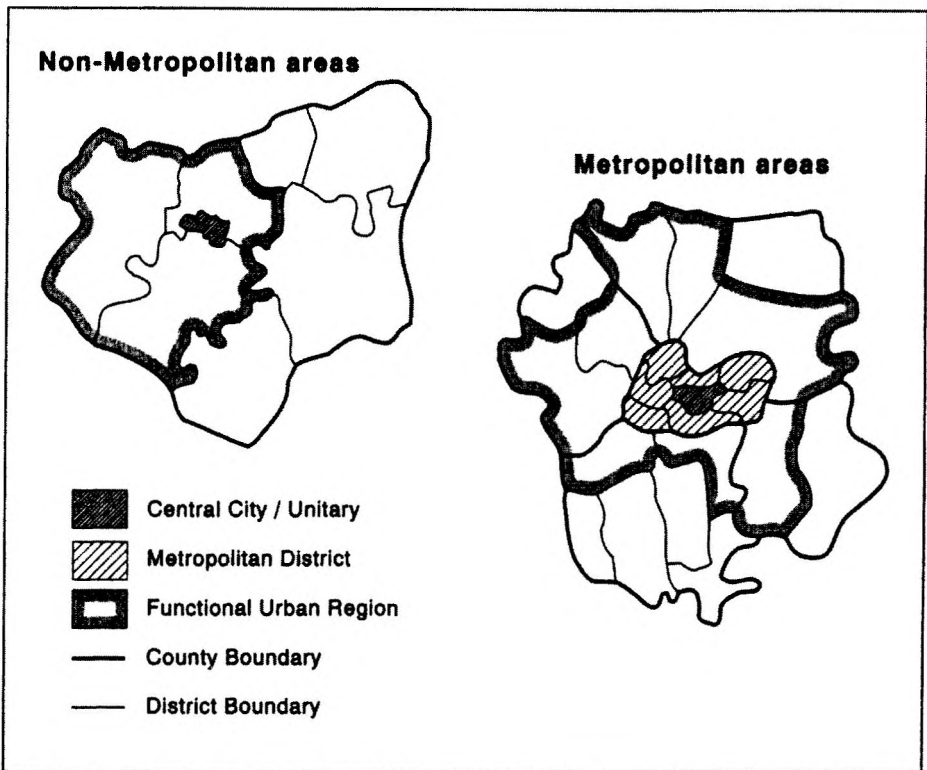
In comparison with the USA and with most other OECD countries, the UK urban system has a highly consolidated form of administrative, financial and political control. In this system the major metropolitan areas are differentiated from the non-metropolitan areas, as depicted in *Figure 2*. In the non-metropolitan areas these are both two tier and simple tier (unitary) structures, which divide responsibility for the major functions of education, personal social services, transport, police, fire, and refuse disposal. Where there is a lower tier, the District, this has mostly minor services such as housing, public transport, and refuse collection. In the metropolitan areas the services are administered solely by the Metropolitan Districts (Boroughs in London), or by special-purpose metropolitan bodies (with London also having an area-wide Government since May 2000). The special-purpose bodies are concerned mainly with transport, police and waste disposal. Prior to their abolition on 1 April 1986, metropolitan county governments administered most metropolitan-wide services. There is, therefore, an important contrast between the location of major responsibility, with the County and unitary Districts having the major services, and hence expenditure levels, in the non-metropolitan areas, and the District or London Borough having the major responsibility for service expenditures in the metropolitan areas. However, since April 1999 there is also a deconcentrated and appointed regional structure in England, an elected Parliament in Scotland, elected Assemblies in Wales and Northern Ireland, and within London since May 2000 a directly elected authority and mayor.

Between metropolitan and non-metropolitan areas an attempt has been made to keep the population sizes relatively similar. Nevertheless, the metropolitan districts are generally larger, at 140,000–700,000, than the non-metropolitan districts at 80,000–400,000. It was also intended to keep a close relation between the sizes of metropolitan districts and non-metropolitan counties; the latter range from 120,000

to 1.5 million. These are all large units in comparison with US or European structures. Also the powers are more uniform. The local tax base is defined by national legislation, in contrast to the USA. All localities also use fees and charges, although the extent of use varies very considerably between areas. Until 1985 local taxing decisions were completely autonomous, but since that date 'rate-capping' legislation has set upper limits, deriving from centrally-assessed expenditure requirement, beyond which local tax rates cannot be raised. On the expenditure side of the budget, UK local authorities have always been more constrained than their counterparts in most other countries, particularly the USA and Europe. Generally they cannot act unless specifically empowered to do so (the doctrine of *ultra vires*).

Figure 2

Typical areal organization of UK urban areas



As well as a high level of consolidation of local government, the UK is also distinguished by a high level of central government financial support for local services. This occurs mainly through a wide range of grants, of which the most important is a general grant, the Revenue Support Grant (RSG). Since the 1980s the proportion of specific grants has also expanded. Like the USA, the UK has seen a steady expansion of higher-level government support to local government such that now over 85% of local revenue is from central grants.

In the UK the generally higher level and greater degree of redistribution of central government grants has substantially ameliorated the scope for fiscal disparities to develop, compared with the USA. However, for both older industrial areas and rural areas, local economic activism and some efforts at intervention have been stimulated by severe problems of economic adjustments. The current position is assessed in Section 5 of this chapter.

European urban systems

A wide range of contrasts of territorial administrative structure characterise Europe. But the greatest single contrast with the UK is the small size of most local government units, both in geographical size and population numbers. Like the USA, this has given rise to the possibilities for considerable territorial imbalances to occur. A summary of some of the main western and central European cases is given in *Table 1*. From this table it is clear that Britain is exceptional in Europe for the small number and large size of its basic local government units. Even The Netherlands and Sweden, which have the next most consolidated systems, have still only 25% of the population per unit of Britain. The more general pattern of both western and central Europe is for many very small units and a relatively small number of consolidated ones.

More consolidated units often do characterize the older industrial areas and larger cities. Thus in areas such as the Ruhr, North East France or Randstat, local government does have a number of large consolidated tracts characterizing central cities, which often abut each other. These are surrounded by local governments which are often of very small size. In the outer-metropolitan and rural areas the county sometimes exists as an administrative level. In the metropolitan areas, and for the large cities in less-urbanized areas, the central cities also sometimes have the status of being counties as well as local governments (so-called *kreisfreiestädten* in Germany). To these city-counties are normally delegated considerable powers which result in a coordinated and consolidated form of urban administration. Outside the urban centre, however, coordination relies on the national or county government which may, but usually does not, give consideration to urban structures and restructuring of population and economic activity. For some functions, notably transport, water supply, sewerage and hospitals, associations of local gov-

ernment (*verbänden* in Germany, *syndicates* in France) do give a major level of coordination of services in both urban and rural areas. The resulting pattern of urban government, shown in *Figure 3*, is thus relatively fragmented between central cities and other urban centres (particularly where they are city-counties), with some coordination *between* local government occurring for certain functions where associations exist. Nevertheless, the very small size of most European local government produces highly fragmented urban administrations with the ability to develop strong disparities between central cities and the rest of the urban system (see. e.g. *Bennett-Zimmerman*, 1986).

Table 1

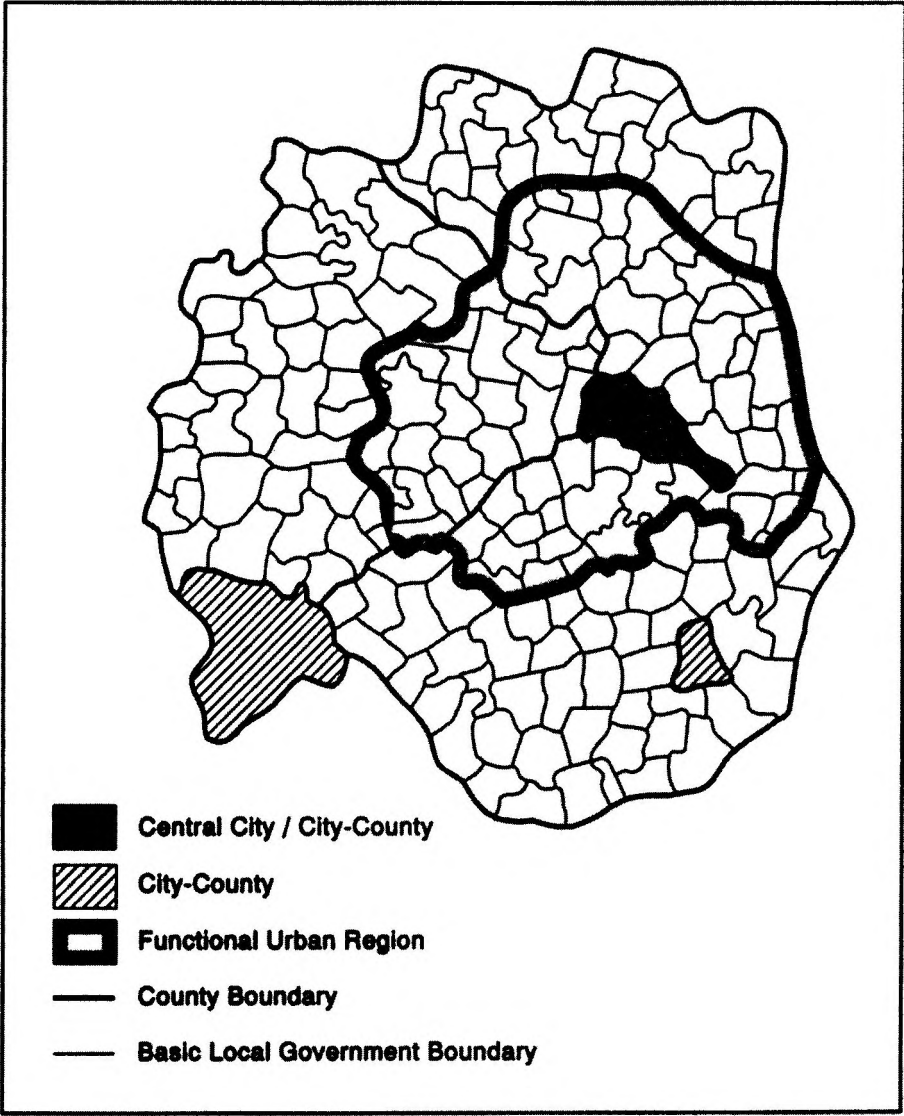
Size of local government units in selected European countries

Country	Number of local government units at the basic level	Average population per local government unit
France	36,664	1,613
Germany	14,417	5,736
Spain	8,056	4,776
Italy	8,097	7,102
Austria	2,374	3,291
The Netherlands	636	23,200
Sweden	288	30,900
Bulgaria	4,217	11,490
Czech Republic	6,196	1,680
Hungary	3,149	3,290
Poland	2,468	15,566
Romania	2,955	7,720
Slovakia	2,851	1,846
England and Wales	409	123,000

The main source of revenues is often fees, particularly for associations. Larger communities rely mainly on local taxes, chiefly those on businesses. Smaller communities usually rely mainly on shared taxes and grants. A property tax provides a small source of revenue for localities in almost all countries, and most localities also have minor and relatively insignificant taxes such as land transfer tax, amusement tax, or drink and ice cream taxes. Business tax (and in some countries income tax), property tax, fees and minor taxes provide autonomous revenue sources for which tax rates can vary considerably. Valuation of tax base is usually a country-wide function. In addition

Figure 3

Typical areal organization of European urban areas; which is overlain by local government associations (not shown) to perform special functions (gemeindeverbänden/syndicates)



to autonomous taxes, a major contrast to the USA and UK is the importance of share taxes in many countries. These are taxes which are legally the responsibility of one level of government, but shared with other levels of government through constitutional provisions. The federal VAT provides the major source of income to the German Länder, for example.

The extent to which fiscal and political imbalance can develop within this system depends on the developments of local tax rates and state-level grants, but is most fundamentally determined by legislation which adjusts the size of autonomous local tax bases and shared revenues. Activism and intervention to stimulate local economic development has been common in most countries, but resources are often limited by the small size of the local units so that inter-governmental partnerships and partnerships with other agencies are common.

The partnership approach: The example of Britain

The complexity and multi-agent structure of local economic development, and the multiple skills required of those seeking to stimulate economic development, can be illustrated for the case of Britain. These results derive from a survey of local government development activities in 1998 (*Bennett-LGA, 1998*).

In general the level of local government expenditures and staff devoted to economic development is fairly small, only about £4.2m per district per year in 1998, or £2.9 per head, on average. However, as shown in *Table 2*, this scale has been strongly increasing since the 1970s, and the scale of staff development has recently increased more markedly, doubling over the period 1989–1998, and increasing ever more rapidly in the 1980s.

Table 2

Local economic development (LED) expenditure and staff in local government in Britain: changes 1978/9–1998

	1978–9	1980–1	1985–6	1989	1998
Mean current expenditure per head of local population	n/a	1.9	2.2	n/a	2.9
Mean number of LED staff	2.0	2.5	4.0	7.1	13.8
LED expenditure as % of total local government expenditure	n/a	n/a	n/a	1.2	2.4

Sources: 1978–1988 from Sellgren, 1989, reported in Bennett and Krebs, 1991, Table 6.2; 1989 from Coulson et al., 1991; 1998 from Bennett and LGA, 1998; note that each survey uses a somewhat different sampling basis so that comparisons can be treated as only indicative, not definitive).

The scope of policies is strongly based on financial partnerships, i.e. activism and intervention has had to draw on many agents for resources. These partnerships are very broad in the agents involved, blending local government, central government, EU and other public as well as private sector agents. From the new surveys, *Table 3* shows that public finance is the main contribution to project development, with Central Government and Central Government Regional Office contributions generally the highest. The EU and other public agents are also major contributors in most areas. The private sector is widely involved, but chiefly as a co-partner in financial risk taking i.e. they are the joint developers of projects from which they receive direct financial returns. This largely derives from the popularity of property-led broader regeneration as the main fields of economic development activity.

Table 3

Percentage contribution to finance of those economic development projects in which each agent is involved (Because most agents are not involved in all projects the rows do not sum to 100%)

	%
Local Government	36.9
Government Regional office or Regional Agency	39.1
Central Government	29.6
EU	31.5
Other public sector	27.4
TECs	15.9
Chambers of Commerce	17.1
Other business associations	9.3
Private sector firms as sponsors	24.1
Private sector firms as risk takers and profit sharers	53.2
Other	16.4

The economic development strategy developed for an area is an important means to bind together disparate agents. *Table 4* lists the chief partners in local strategy development. Ten different bodies are mentioned as partners by 5% or more of local authorities. Of these, Training and Enterprise Councils (TECs), other local governments, Chambers of Commerce, Business Link and various colleges stand out as the most prominent, with the universities and private companies in a minor position.

For many areas, therefore, economic development strategy is a joint activity. But a surprising finding of the survey is that, even after more than a decade of high

profile for partnership development in Britain, in the majority of areas (55%) local government strategy has no formal partners. Of course in many areas formal partnerships are replaced by more informal forums and meetings, which may be the most effective means for development. But it does appear that most local government still sees the formal development of strategy as primarily their own preserve. Furthermore, since the main partner in 27% of other areas is another local government, it is clear that economic development *strategy* is seen primarily as a governmental activity. This is reinforced by the finding that 81% of local governments see themselves as "the lead" in strategy. The strategy level is therefore rather different from the project and financial level where partnership is much more fully developed.

Table 4

Chief partners with local government in for economic development strategy, as joint signatories on strategy documents (multiple partners mean that column does not sum to 100%)

	%
None (sole agent)	55
Other local government units	27
TECs	37
Chambers of Commerce	16
Voluntary sector	5
Universities / HE	5
FE Colleges	10
Private companies	5
Business Link	13
Health authorities	3

It has always been a key objective of partnerships to unlock some of the skills, resources and information held within different agents in order to help a broader strategy to develop. Exchange of information and expertise widens the agenda and helps each agent steer its "mainstream" services more closely with the broader needs of the economy. The skills of local government development officers are most frequently focused on specific areas within specific functional areas. *Table 5* shows that 87% of strategic and operational economic development staff are within another specific departmental area and only 11% within a specific economic development office with senior level officer. However, operational experience levels of senior staff in the economic fields is high, an average of 13 years of service *before*

the present position, with 76% of prior experience in other public sector posts, 20% in private industry, and 90% having university degree or equivalent professional qualification.

Table 5

*Organisational location of the Local Economic Development (LED)
function within local government administration*

	%
Within a separate LED department	11
Widely dispersed and/or integrated across the organisation	2
Within another department, of which:	87
Chief executive's / strategy unit	43
Planning / development department	21
Estates / property department	13
Education / training department	4
Business advice unit	3
Other / leisure department	3

The overall size of the economic development staff is quite significant, and in many areas local government will have the largest single focus of expertise. *Table 6* shows that, on average 14 staff (full time equivalent) have specific economic development responsibilities, but this rises to an average of 33 staff in English Unitaries and 39 in metropolitan districts. However, the table also shows the wide range of resources that can be applied by different types of local government to economic development processes, with only 3.6 staff in non-metropolitan districts.

Table 6

Number of staff specifically identified as economic development staff (fte)

	%
London Boroughs	9.6
Metropolitan districts	38.9
Non-metropolitan districts	3.6
Non-metropolitan counties	17.6
English unitaries	32.6
Welsh unitaries	20.4
Total (mean)	13.8

Considerable attention has been focused on economic development skills by the publication of a governmental Structure of Occupational Standards in 1996-97. The basis for defining standards is the methodology of vocational qualifications. This has ensured that they have a stronger educational process orientation than drawing on higher level professional experience or practitioner skills. Hence whilst the awareness of the governmental occupational standards is relatively high (48% average), the government-favoured models for further continuous professional development, of accredited longer courses at University at MBA/MSc level, or shorter modules, are least popular among present economic development staff, ranked 5th and 4th respectively. Top ranked were seminars and conferences, followed by short courses with qualifications, and short courses without qualifications.

For project development and implementation the relevance of targeted professional development and recruitment of specific skills is evident in *Table 7*. Specific knowledge of the substantive areas covered by economic projects is the main requirement. Unsurprisingly, to develop a specific economic or social project it is the relevant previous experience or skills in these areas that is sought. Other skills which are particularly prominent are also highly technically specific: project management, team working/partnership skills, financial management, entrepreneurship and private sector capacity, and marketing or communication skills. These again contrast with the government's emphasis on very basic management skills of a largely generic nature.

Table 7

Chief specific skills sought from economic development project staff

	% of respondents
Customer handling skills	3.9
Project management skills	24.4
Entrepreneurism/private sector capacity or experience	8.4
Specific knowledge (e.g. of markets, sectors, social/community issues)	27.4
Negotiations skills	2.5
Marketing, communications skills	6.5
Team working, partnership skills	9.9
Leadership/vision skills	1.0
Financial management skills	9.5
Fundraising skills	2.0
Research and evaluation skills	4.5

Since the baseline of qualifications and experience is already high among economic development staff, it is therefore not surprising that professional development is seen primarily as a need to plug gaps, and add specific skills at the margin to already highly developed professional qualifications, or to network and exchange information.

Local government economic development activities and skills show buoyant and continuing progress since the 1980s. Within this, partnership appears as both a mantra, and as an operational approach at the project level. Within the development of strategy, however, local government 'partnerships' appear too often as symbolic rather than real, seen as chiefly a government responsibility, with strategies not yet fully shared with other agents at a formal level. More informal relations may be easier to develop. They may even be more effective. Certainly many consultations, meetings and forums achieve a great deal. But with Ministers continue to complain about the slowness of many local government planning processes, and the DTI (1998) Competitiveness White Paper complains about the restrictions by local government on economic growth. There thus appears to be a case to answer so that, even in Britain, local economic development skills and processes still have a long way to go before they are fully effective.

Conclusion

The economic development process has been argued to be a multi-agent domain at local and regional level. Hence, successful development is fundamentally constrained by the extent to which agents can be drawn together. Partnership is thus both an essential mechanism and a strategic structure for regional and local economic development.

However, the process of partnership development and its outcomes is not an unproblematic and neutral ground. There are many important challenges that must be borne in mind. First it is important to recognise the constraints under which government, particularly regional and local government, operates. The mainstream services of these government levels are usually current-account dominated and largely committed to salaries in services such as education, social services, public transport etc. It is clear, therefore, that the decision to direct resources away from the immediate and mainstream services to specific economic development projects is politically difficult unless local public expenditure is allowed relentlessly to grow. For this reason, most theoretical commentators argue that the local government burden for economic development purposes must be kept small (e.g. *Musgrave* and *Musgrave*, 1980), and that economic development must be seen as chiefly dependent on business itself, stimulated by local and central government policies that seek to stimulate the reinvestment of profits, or incentives to individual savings. Also state-level government can play an economic development role

by financing large capital projects. It has a greater population area which to spread the burden, and it has monetary and exchange rate policies which allow it greater scope to manage medium-term financial deficits. But even at state-level government capacity is also limited, particularly with the development of EMU. Hence the key aspect of both local and central government policy must be to maximise the potential for businesses to invest resources in future growth.

Second, partnerships and networks of negotiations themselves influence the power of an agent. Generally the more central an agent within a network the greater is its power. This is not just the result of the resources deployed, but is also the result of the resources of other agents that can be mobilized through the structure of network interrelations. This will often depend on the number of 'ties' between agents, as well as the importance of the agent, the personnel and skills within each agent's organization with whom ties exist, and the ability of the agent to act as an intermediary. (see *Galaskiewicz*, 1979; *Laumann-Pappi*, 1976; *Knoke*, 1983; *Miller*, 1980; *Mizruchi*, 1982; *Mintz-Schartz*, 1985). For example, some agents can act as 'hubs' which offer 'reflected' centrality, where an agent is tied to many agents, whilst others can act as 'bridges' which offer 'derived' centrality, where an agent is tied to a few crucial or central agents.

A third challenge results is drawing together a collective will to enhance the economic outcome of partnerships. Partnerships depend on the distribution of power, resources and objectives between the different agents at any given point in time. As a result the outcomes of partnerships are unlikely to be 'optimal' in any sense, for any one agent, or for the economy as a whole. They represent only the result of the tradeoffs each agent makes over the period in which negotiations take place. For regional and local economic development this may present considerable challenges since there is no reason to assume that negotiations to improve economic development actually achieve that purpose; they may achieve the reverse. This statement is a direct challenge to the concepts of both pluralism and state-led corporatism as means to implement local economic development policy.

A number of commentators have argued, taking a pluralist perspective, that because of the accessibility of democratic government, all interests are represented in policy negotiations and each is held in check by the countervailing power of the others, such that all trade-offs are resolved as a political bargaining process. State-led corporatist interpretations are similar. They argue that government intervention, government intermediation to ensure that interest groups comply with agreements, government incorporation to draw agents into the government's objectives, and social partnership lead to the joining of disparate elements into a grand project (*Schmitter-Lehmbruch*, 1979; *Offee*, 1985; *Cawson*, 1985; *Grant*, 1993, 2000).

Both pluralism and state-led corporatism underpin a perception that a politically efficient outcome will produce an economically efficient outcome. This interpretation underpins much of the political science contributions to this area (Summarised by

e.g. Goldthorpe, 1984; Grant, 1993, Greenwood, 1997), as well as a number of economic arguments (Downs, 1957; Stigler, 1975; Pelzman, 1976). Gary Becker (1983, pp. 376, 396) for example, argues that "a political equilibrium (is produced that) has the property that all groups maximise their incomes by spending their optimal amount on political pressure, given the productivity of their expenditures, and the behaviour of other groups" ... "Policies that raise efficiency are likely to win out in the competition for influence because they produce gains rather than dead-weight costs, so that groups benefited have the intrinsic advantage compared to groups harmed".

An extension of the ideas of pluralism to concertation, which has been developed in Europe and underpins much of the way in which the European Commission operates, building on Jean Monnet's concept of "économie concertée". It is argued that a process of "generalized exchange" can be encouraged through peak associations, direct representation, and other routes. Lehmbruch (1984, p. 61), for example, argues that this process of concertation can replace the privileged access of one or a few groups by a plurality of antagonistic interests "who manage their conflicts and coordinate their action with that of government in regard to the ... requirements of the national economy". Marin (1987) and others have argued that concertation allows the development of a general process of political exchange.

However, it must be clear that economic development policies based on partnership negotiations are unlikely to be optimal. There is nothing inevitable about economically beneficial decisions being made. This leaves considerable challenges to the future of economic development policy, which are the more challenging the greater the 'problem' of economic development it is sought to overcome and the greater the levels of government intervention that is pursued. It is clear that regional and local economic development policy will remain a challenging field for many years to come.

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4 TECHNOPOLES AND REGIONAL DEVELOPMENT

Georges Benko

Economic conditions have changed considerably in the world's industrialised nations since the 1970's. This break with previous trends has become so great that the accepted development model is seen to be facing a fundamental crisis. A page has turned upon a once glorious period of economic history. This evolution has provoked the structural modification of urban and regional economic organisation, and has led to growth being influenced by the technological revolution, economic globalisation and the emergence of a new productive system.

This paper proposes that essential elements of theoretical debates of the last twenty years should be examined alongside a new context for regional development, the contemporary industrialisation process, and with particular reference to technopoles.

The macro-economic context

The turning point of Fordism

The world's industrialised nations all share characteristics of a single model of production, known as Fordism, that was strongly influenced by the period of unhindered growth following the Second World War. Yet this true existence and justification of this model has been under considerable doubt since the 1970's.

The period from 1970 to 1990 witnessed considerable change in the nature of interactive processes that exist between global, national and local economies. Prior to the demise of Fordism, under progressive decline since the 1970's, institutions were strongly orientated towards the scale of the nation state. The national dimension was dominant and this primacy was illustrated through the expression of sovereign economic policy, sheltered by customs barriers and protected by currency exchange controls. Within this defined space, living standards and institutions became progressively homogenised, thus permitting the implementation of relatively stable regulatory systems. Interaction between industry and the state took place within independent national political economies founded upon Keynesian beliefs and the Welfare State.

Since the mid-seventies economic uncertainty has increased, and this factor has stimulated numerous modifications in the productive system, in social relations, and in the national and international economic environment.

Evolution of the productive system and industrial restructuring

This situation illustrated the decline of the existing system of capital accumulation and the emergence of a transition period towards a new theoretical model. Geographical changes in the location of production occurred at the same time as a major reorganisation of the processes involved, this being provoked by demands of the new economic system. This required increased flexibility in production processes, in product development, as well as reinforced regulation of working conditions. Whilst increased flexibility has favoured the vertical disintegration of spatial relationships between large corporations and suppliers, the continuous exchange of information, and thus rewards close spatial proximity that allows increased communication and local adjustment of global production processes.

The introduction of flexible production techniques, allowing a greater variety of products, has opened up new opportunities in the reorganisation of global production processes. For the first time in the economic history, it has become possible to combine high technology activities with an increased diversity of products and processes. Demands for innovation and increased world trade has led to the spatial concentration of interconnected high technology firms. Whilst the introduction of flexible production has required profound reorganisation in industrial systems and economic flows.

The traditional production system has broken apart, giving rise to a mosaic of different spaces within which technopoles can exert a specific influence. One can see that whilst institutional innovations implemented within technopoles remain limited, they demonstrate the local adaptation to new demands, and thus maintain an essentially Fordist nature. Technopoles can therefore be interpreted as being local productive systems that permit the implementation of an alternative production organisation. This contrasts with primarily Fordist systems that remain the dominant socio-economic industrial framework within OECD member countries.

Technopoles have exerted a role in both the decomposition and reformation of the productive system. Yet they do not constitute a sufficient force of socio-institutional innovation required to promote the emergence of a new regime of capital accumulation. Instead, their influence is exerted through the modification of the wider productive system, of which they form the most advanced component. As they form part of an international network of technological production, technopoles constitute a focal point of renewed interaction between national and international economics. In this context technopoles can emerge as a spatial catalyst promoting the formation of a flexible system of accumulation.

The productive system needs to react to the demands of modernisation, which is itself a technical influence stimulated by social regulation. The system is in the midst of significant internal change, through the modification of production strategies, whilst at the same time being confronted by a new international environment. All of this is then set within a context of constraint exerted by the prevailing economic climate. This situation is marked by evolutionary structural changes taking place in the market place, the labour force, and in the techniques and factors of production.

New problems facing regional planning and development

National public deficits increased across the industrialised world during the seventies and eighties. States were suddenly forced to reduce expenditure, and delegate control of public services, such as education, training, transport infrastructure and social assistance, to regional and local government bodies. Similarly the density of relationships between different actors at the local level (companies, universities, local government bodies, trade unions, etc.) has been recognised as constituting a key role in determining local economic competitiveness. Marshall's industrial districts have recently attracted increased attention in both theory and practice. Responsibility for regional planning, controlled by central government until the 1980's has also been delegated to local government. This period has seen the emergence and recognition of a new aspect of development, indigenous local development, that has replaced exogenous development, dominated by central government influence. This tendency has become generalised in developed countries.

In France, an additional institutional dimension entered the local economic context through the 1982 administrative decentralisation programme. This reformed the responsibilities and role of different levels of local, regional and central government. This reorganisation of spatial authority has allowed local government bodies to greatly increase their influence, notably in the field of regional planning.

The development debate has become an increasingly localised issue. One example of this is the French concept of the 'pays'. This is a sub-regional spatial entity, that became a legal element of territorial organisation in the Planning and Development White Paper of 5th February 1995. The Pays reflects the shared social and economic interests, in addition to the mutual interdependence, that exists between an urban centre and its rural hinterland. This relationship provides an element of cultural geographical cohesion necessary to constitute an autonomous spatial unit. This allowed a legal definition and acceptance of the smallest existing spatial unit.

Technopoles possess a key role in the economic stimulation of a specific area, and as a policy tool to encourage local development. They can also further provide a strong basis on which to elaborate a localised marketing strategy, or at least as perceived by planners.

A rapid presentation of the concept and its definitions

It is far from easy to define a technopole, a term that can be seen with regularity in literature since the end of the 1970's. Whilst apart from its strong, virtually mythical image of economic and social modernity, the technopole does not represent a single concept founded upon one theoretical model.

Technopoles are initiatives implemented by local government bodies whose economic development strategies are based upon the exploitation of existing university and research potential. This is motivated by a desire to stimulate the expansion of the local high technology base, either by the creation of new companies, or attracting existing ones to the site from elsewhere. Technopole projects are based around the theory of cross fertilisation. This concept has been developed by numerous authors, one of whom *Pierre Lafitte*, the founder of *Sophia Antipolis*, has defined it as "the bringing together, within the same location, of high technology activities, research centres, companies, and universities, in addition to financial institutions that promote contact between these bodies, in such a manner as to produce a synergy effect from which new ideas and technological innovation can emerge, and therefore promote the creation of new companies."

Operationally, technopoles are a group of research and business organisations, that share a common interest in all aspects of scientific development, from the laboratory stage to manufacture and commercialisation. Their physical representation is an industrial zone, of predominantly small and medium sized companies, that comprises offices, laboratories and production units, all located within an attractively landscaped setting. They are frequently located within a demarcated enclosed area that comprises both public and private sector higher education establishments and technical research institutions. The technopole concept also refers to a defined space, a focal point where high technology based economic activities, striving for future innovation, are spatially concentrated. This factor theoretically encourages mutual assistance.

This term has also come to be used in a wider and more generalised sense. In this manner the term technopole, in French without a circumflex accent, has enlarged the original concept, and relates to the wider global influences of economic, social and political aspects of the reproductive production process. This is an updated version of the concept of a specialised urban centre, founded in neoliberal theory and prevalent during the period of decentralisation. It is both a technological centre and an urban growth pole exerting a regional polarisation role, thus associating innovation and regional development functions in the same location at the same time. As a component of town planning the technopole concept consists of a complex spatial relocation process that forms part of a broader business orientated strategy. This reflects the desire to encourage the relocation of existing companies and to incorporate spatial strategies into local government policy.

In conclusion one can state that the aim of every technopole is to exert the greatest possible impact, both spatially and in the understanding wider processes, to promote regional economic revitalisation.

In order to determine the existence of a technopole it is necessary to examine a number of different indicators: the proportion of scientific and technical jobs in the total labour force, total research and development expenditure, the extent of technological input in the production process, and the level of employment growth within the sectors present. By looking at this combined information it is possible to distinguish between different industrial zones, and to separate "real" technopolitan areas from "false" ones presenting similar physical appearances.

The decision to create a technopole is not the result of a single central government policy, but of a variety of local or regional initiatives. Thus all local government agencies, as well as other private or public bodies can create a technopole. This factor helps to explain the immense diversity of operations.

The attraction of companies from elsewhere is an essential part of a technopole's role, especially with regards to its wider role as a zone of transformation that requiring various marketing strategies, (economic, industrial, property and even social) all of which are intended to attract technology based organisations. Local politicians are particularly susceptible to this desire to create a prestigious property development, perceived as attracting and creating qualified employment, and the likely implications of this upon the general well-being and prosperity of the electorate.

Initiatives are justified by the perceived or real requirements of high technology companies that allows the valuable distinction between a standard industrial park and a true technopole. Technopole promoters often emphasise the different benefits offered by a site's location, such as the accessibility to specialised services and the close proximity of possible partners. But are often part of a more comprehensive economic development strategy intended to influence corporate relocation strategy. This can include the availability of economic assistance and subsidies, such as aid for newly created companies, or advice on how to obtain financial or fiscal benefits from national industrial schemes intended to encourage innovation and promote technology transfer. Thus technopoles are portrayed as preferential areas within the location strategies of a number of industrial policies.

These considerations provoke a number of further questions being asked. Are technopoles policy implementation tools designed to promote development through the combination of a range of existing methods, or are they both a new form of strategy and complimentary to existing efforts in their original way of restructuring economic activity within industrialised nations? It appears today that in operational terms technopoles represent a continuity with traditional planning tools and concepts, yet are applied within a context permits substantial use to be made of new opportunities offered by the technological revolution. On the other hand their

originality lies in the accepted economic and social vision of the future promoted by political and business leaders at the national and local level. This consensus is rare in a group whose wider opinions are commonly obscured by the lack of agreement and understanding of how to move away from a period of considerable economic uncertainty and instability. This illusory and simplified conviction has provided a certain faith, and maintains the hope of one day finding a new more socially acceptable industrialisation model. Yet it unfortunately diverts scientific analysis of contemporary socio-economic phenomena, at both the macro-geographical scale, as well as the micro-economic level.

The fundamental nature of technopoles

The fundamental nature of the technopolisation process can be summarised in the following way:

The technopole is essentially an image, representing the perceived framework of economic forces, and thus forms the productive space of the twenty first century.

The technopole is location of a new economic organisation. The installation of a new production logic is favoured by search for links between innovative industry, private and public research and higher education. Technology transfer provides an essential function for technopoles.

Technopoles also offer a particular form of location. The forms of planning, architecture and animation found in technopoles are all conceived to promote the establishment of a new socio-productive order.

And finally the technopole is a territorial form of polarisation present within a wider space. The technopole provides an interface between productive relationships based on proximity and a wider global perspective providing the stimulus for dynamic development.

The organisation of technopoles can thus be explained as an attempt to increase technological creation by minimising transaction costs associated with the collaboration of economic bodies previously hindered by institutionalised constraints. They therefore exert a role within a new form of analysis dominated by the spatial division of labour found within contemporary industrial organisation.

The technopole as a functional system

The technopole can be represented in a mathematical way by the following equation $Y_k = F_j(X_i)$.

In this formula, each function is multidimensional, including the F_j component:
 X_i is the variable that represents the "raw materials" of the technopole:

- the research field,
- manufacturing or service sector companies,

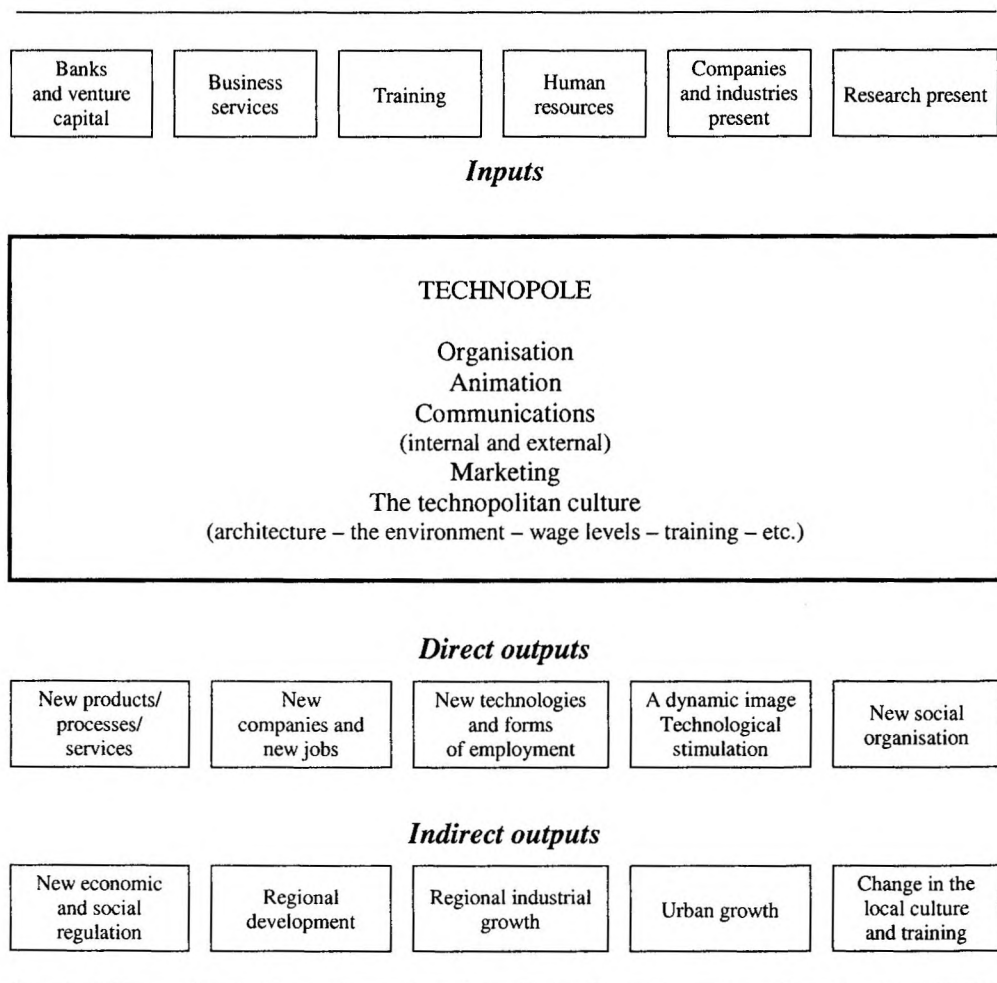
- higher education,
- finance,
- human resources.

Fj is the complex function that can be summarised under the concept of "crossed fertilisation", and whose principal influences are :

- organisation,
- communication,
- the technopolitan culture.

Figure 1

The theoretical and functional organisation of a technopoles



Yk constitutes the dependant result, comprising the added value element. It can be described as the "creation innovation" and represents:

- the emergence and use of new technological knowledge,
- the creation of new products and processes,
- the creation of durable and stable jobs,
- the arrival of new enterprises,
- the installation of new services,
- the emergence of an beneficial image.

The role of technopoles within the new economic context

From growth poles to technopoles

Polarisation theory provided the supporting doctrine for regional planning and development policy in the 1960's. It then came under significant criticism in the subsequent decade, and prior to renewed favour in the 1980's. The technopole movement has played a key role in this renewal.

The technopole, as a guiding light of territorial marketing, has replaced the industrial complex as the driving force in the polarisation of economic activity across geographic space. The technopole has also replaced traditional industry as the principal determining factor within market based development policies.

An important question thus emerges. Does the technopole represent an evolution of the polarisation phenomenon that necessitates a reappraisal of existing theory, or does it demand its complete replacement? This debate comprises two elements, one theoretical, the other practical.

Further more, does the technopole imply a spatial polarisation of economic activity, following the logic promoted by *Perroux*? Even if purely activity based polarisation exists, it is far from certain that geographic polarisation will be ensue. Thus such a weakening of the polarisation theory allows it to provide a transition from one to the other.

This aspect is also relevant with regards to regional policy. A technopole created in a given location by the implementation of specific policy is merely a white elephant? Is there not a significant risk of repeating previous failed initiatives founded upon the planners' belief as to what factors stimulate regional economic growth?

This occasion will not be used to repeat the history of the growth pole theory, yet it must however be mentioned that the principal criticism of this doctrine was that it was not truly spatial. *Perroux's* idea was essentially developed with regards to the wider influence of industrial sectors across other domains and not restricted to its impact across territorial space. Therefore the technopole phenomenon can

perhaps be used to incorporate the spatial dimension more effectively within the concept of economic polarisation.

Four characteristics identify the technopole phenomenon as a polarisation process: the image portrayed, site promotion through advertising, its role as a spatial organisation that links industry and research, and its influence both at the local level and internationally. Other factors influencing its character; the urban location, the impact of key influential personalities and the type of technology transfer in place appear to exert a secondary or additional influence.

One of the principal roles of a technopole is concerned with the transfer of local technological capacity, through its capacity as an essentially economic body. Whilst there exist two reasons to account for the spatial concentration of technological processes within a given location:

- The accepted fundamental comparative advantage of technopoles. That the creation of new technological processes itself requires a certain spatial proximity between different influential factors.
- Whilst the technopole cannot alone provide the framework for a process of technological creation if it is not itself a new form of spatial organisation. This factor would seem to be essential.

Technology transfer does not necessarily imply relationships based upon spatial proximity. It can operate equally well within large corporations with numerous locations, as within the framework of regional or national policy programmes. Various forms of technology transfer can be seen to exist, each corresponding to operations at different geographical scales. With the technopole as only one such form of knowledge transfer. Studies have illustrated how technological production processes have operated within a new system framework in the 1970's. Whilst current technical and scientific progress is characterised by the development of generic technology whose potential applications can be applied to a number of different sectors.

New competitive demands imposed on firms have obliged them to move away from a vertical model of innovation development. In this system, innovation is a result of exogenous scientific activity, that forms part of either the design or the manufacture of a product, yet can be incoherent with final market demands. This vertical organisation is fractured by the need to integrate various requirements at all stages of production. This needs to ensure both quality and flexibility of the manufacturing process and the demands of research and development, in addition to that of applied research, including how to best exploit military technology for civilian needs. Management based on later stages of the production process need to be modified to replace a previous orientation excessively concentrated upon earlier stages. This has resulted in internal company reorganisation, specifically in the decision making hierarchy and a greater integration of external elements present at

either ends of the innovation process. Simultaneously, each stage of the process has become a potential source of innovation that is no longer restricted to the areas of product design and development.

This situation has resulted in two observations:

- That the creation of technology operates at the interface of relationships between numerous different organisations; companies, universities, research centres, government agencies, financial institutions, and professional organisations;
- That technological creation is not a clearly defined activity, but a dynamic process active within a wider system. This can encompass such diverse fields as apprenticeship, co-operation with possible collaborators and the ability to solve new problems.

The technopole is in effect the spatial representation of these new forms of interactive and evolutionary technological creation.

Industrial creativity is key element of competitive behaviour. This factor has exerted an important influence in motivating central government agencies and others to launch technopole initiatives.

A number of other economic explanations as to the theoretical role of technopoles also exist. The close proximity to the location of technological creativity can save communication costs in an economic climate dominated by the role of information. The fundamental theory behind technopoles is that the reduction of physical proximity decreases collaborative separation between organisations whose technological creativity was previously hindered by mutual isolation, as illustrated by problems involving access to information, finding a collaborator and specialised market knowledge. Such proximity also reinforces mobility between organisations, thus further stimulating the inherent dynamism within the system. This in turn further strengthens the role of proximity through such factors as new company creation and improved risk management. Proximity, as represented by a concentration of specialised firms, also allows the establishment of a specific infrastructure dedicated to the creation and transfer of technology. This can include communication systems, business start-up centres and other necessary services.

However, this proximity has to be organised in order to be effective. Geographical proximity has to also include elements of organisational proximity, with the technopole intervening to provide a bridge between both factors. Professional organisations used to possess a certain element of independence in their behaviour, yet in the modern context they are obliged to follow technological changes and scientific progress more closely.

The technopole is also a spatial representation of social experimentation that encourages new professional relationships between those involved in technological creativity.

The technopole creates and promotes the concept of a site based technological project through the provision of certain environmental elements. Whilst physical representation is essential yet alone does not ensure the presence of immaterial flows.

The technopole is only one possible form of technology transfer. It is necessary define the function of this structure, to reduce organisational barriers through a spatial organisation based upon technological activity. One can interpret the potential of technopoles as regional development tools, as being proportional to the extent to which it can diminish the socially based barriers. A historical tradition of links between universities and industry, strong mobility between training systems and production, or technological collaboration between large corporations and small companies all decrease the justification for the role of technopoles in technology transfer. Thus the technopole phenomenon is closely linked to the national context of the socio-economic organisation.

The experimental nature of the technopole limits its impact upon regional development. Firstly because the technopole attempts to encourage new technological dynamism without being an integral element of their industrial system. Secondly because technopoles are often in closer contact with other technological organisations at the international or national level, than with their immediate environment. One can further state that the potential dynamism of a country is not reflected in the number of technopoles it possesses.

Technopoles and industrial organisation

Since the 1970's, industrial organisation has assumed a particular dimension within a context of rapid technological change and an acceleration of the innovation process that has led to the emergence of new activities whose spatial organisation remains poorly understood. Theories based around the ideas of *Launhardt* and *Weber*, promoting the inherent importance of distance as a key influence, between the market, labour resources, raw materials and the location of production, do not enhance the comprehension of contemporary industrial behaviour. This has led to the emergence of post-Weberian theory.

This primarily encourages research into the external factors present in a given region that influence the implantation and development of high technology industry according to location theory. Whilst empirical studies concentrated upon existing manufacturing structures have enabled the clarification of a great number of explanatory factors. The most frequently quoted reasons include the role of the labour force, both highly qualified staff and cheaper unskilled employees for routine manufacture; the close proximity of universities and research; the pleasant landscape; communications infrastructure for information exchange and transport of personnel; specialised business services; a favourable political and business cli-

mate; the availability of capital (notably venture capital funds) and finally benefits of an agglomeration economy. All these elements are seen as a package of factors essential for the emergence of a high technology complex. These elements are necessary, but are not sufficient to alone explain the location and dynamism of technopoles.

The second theory has developed around the ideas of *R. Vernon* (1966), and his theory of a *product life cycle*. This combines the location perspective with the organisation of production, by demonstrating a movement that goes from the concentration and centralisation to decentralisation and dispersion of production according to the evolution of the product any given time. With this vision of production development in space and time we can partly explain the spatial evolution of certain branches of high technology industry.

The third theory developed by *Aydalot*, examines the "*innovative milieu*" also known by *Stöhr* as the "*territorial innovation complex*", and concentrating on geographical conditions that favour the emergence high-technology sectors. This school of thought places the hypothetical emphasis on the determinant role exerted by local environments in stimulating local innovation. From a regional perspective, the analysis explains why some regions are indeed innovative and why others have ceased to exert such an influence, and that this why new technologies prefer to implant in certain locations. Space is no longer seen as the sole determinant of industrial location, and the theory uses a new observational factor, the milieu. This understanding allows the integration of all elements seen to exert an influence upon the functioning of a given space : the local industrial composition, complex inter-company relationships, characteristics of the local labour force, knowledge, infrastructure and the geographical context. Thus essentially every element that helps to define a region.

Finally a *global approach* in the examination of the location of technopoles brings together industrial organisation, the labour market, economies of scale and location theory.

In the last twenty years one can identify a process of vertical disintegration that has led to a significant rise in the number of small and medium sized companies. This is due to a complex range of different reasons, but analysis such as that by *Williamson* (1975) and *Scott* (1988c) attempting to explain what factors have encouraged companies to vertically integrate, explains that it was not merely the search for improved savings associated with economies of scale, but also economies of scope, encompassing initiatives intended to improve management efficiency across a range of production processes. Whilst it also seems evident that the fragmentation of production activities according to Taylorist principals and the increased automation of different functions that this entails, has weakened envisaged economies of scope. That can initially provoke spatial disintegration, through the search for advantageous labour market conditions and then provoke increased ver-

tical disintegration. It is also relevant with regards to the increasing out-sourcing of non essential functions. Whilst the strategic core functions of a company, the conception of new ideas, research and development, and marketing functions, remain vertically integrated. This has been shown by *Leborgne-Lipietz* (1988). Disintegration therefore occurs where the economies of internal integration, economies of scope, are weakest or even negative.

Several reasons and conditions can promote vertical disintegration. These can include market uncertainty, increased economic competition, specialisation and the profitability of production. One can note that disintegration is facilitated by the spatial concentration of companies, which considerably reduces external transaction costs. This vertical disintegration characterising contemporary production, (*Piore-Sabel*, 1984) permits the realisation of increased profits through the creation of external savings. Whilst company specialisation involves the continuous reduction of production costs (*Scott-Storper*, 1987).

It is therefore due to primarily economic factors, and their impact upon industrial organisation that one can observe the significant spatial concentration of companies exerting similar activities.

This concentration of economic activity further intensifies specialised employment, thus creating a localised labour market. Without entering into a detailed analysis of the mechanisms and the functioning of this labour market, or its impact upon the location of certain activities, it is clear that certain elements are apparent, notably the fundamental operational difference between labour markets according to size and the level of local urbanisation. The broadening of the labour market and its geographical concentration further encourages market flexibility. An increase of the local employment base, in proportional response to increased demand for labour, further facilitates the recruitment activities of employers seeking specialised criteria. This advantageous situation allows firms to pursue a relatively flexible personnel policy, recruiting and laying off labour according to precise fluctuations in need, and thus respond to uncertainty of market forces.

One can thus state that flexibility in the organisational structure of production further enhances labour market versatility and that these two forms of flexibility are mutually strengthened within a geographical agglomeration.

The dynamics of industrialisation are dependant upon the capacity of companies to adapt to new conditions of production, including modified political and social relationships. In this perspective, firms are obliged to relocate in order to respond to new demands within the labour market. With new growth centres offering particularly good opportunities for growth. Such redistribution can be directed towards traditional manufacturing regions, yet more frequently investment is directed towards underdeveloped areas. A local solution is possible by which old industrialised regions experience a vigorous economic stimulation, notably by state investment in education, research and other domains of the public sector such as defence

But this solution is problematic, complex and expensive. The economic and social restructuring of a region, strongly characterised by local established traditions, requires a considerable period of time. The external solution can therefore seem more attractive to policy makers. Firstly, the attraction of a region, generally characterised its quality of life, is neither a universal characteristic, nor a historical observation, but a political constructed image. This qualitative aspect is not merely an existing characteristic, but a social and political requirement for image makers seeking to attract a specific target audience whose impact is believed to potentially stimulate industrial growth. The creation of an executive lifestyle is strongly influenced by further beliefs relating to perceived demand. This includes the requirement of a low density urban structure, comfortable accommodation, secluded family life and the relative abundance of leisure and recreation facilities. For investors, the quality of the environment is primarily associated with a business climate that offers favourable taxation, an absence of trade unions, the freedom to increase production and the local labour market.

The socio-spatial organisation of new centres of industrial growth has led to the establishment of a number of new models. One can see the reduced power of the working class, and of political and community movements characteristic of traditional manufacturing centres. A dense urban environment and large concentration of workers was symbolic of the "manufacturing belt". Whilst in the contemporary world suburbanisation and individualism form the urban landscape of the "sunbelt".

The social structure of the new communities reflects and strengthens the division of labour within the productive system. Workers have adopted the prevalent conditions and demands of production within a local area. The flexible nature of spatially orientated production complexes favours technological innovation due to the knowledge, work skills and potential of the companies present. This contribution to dynamic investment has been recognised within the context of industrialised areas (Marshall, 1900). This has also been interpreted as a demystification of previously unexplained aspects of production. (Bellandi, 1986; Becattini, 1987).

Yet whilst spatially concentrated production offers a number of advantages, the excessive development of an agglomeration can become a hindrance. These diseconomies of scale have contributed to the decline of the old industrial regions and could well modify contemporary industrial location policies. Negative influences of the geographical concentration of economic activity can thus come from both socio-political origins or as a result of economic forces.

Spatial concentration can provide significant savings, yet then become a diseconomy due to accelerated expansion within these locations. The accumulation of such diseconomies within large cities further stimulates the process of economic decentralisation. But industrial relocation can only take place at a specific moment in time due to its inherent assumption of generalised change within the organisation of production, and additional technological progress and evolution of working

practices. The most favourable period within the context of industrialised nations appeared to be in the sixties and seventies, a time of emerging new sectors of activity, new products and the wider spatial diffusion of new technology.

These new activities experienced a relatively free choice as to where to needed to be situated. This was due to their differing demands compared with the Fordist mass production activities of the period. Certain sectors were so new, such as semiconductors and technology based communications, that firms were obliged to conceive and produce their own tools and raw materials (*Scott-Storper, 1987*). Companies in these domains sought to avoid the disadvantages of industrialised regions, higher costs related to congestion and an unfavourable socio-political environment, that they sought to locate in areas lacking an industrial tradition. In these areas, production was based within a new social, political and economic framework.

According to the expression of *Allen Scott* "a new opening for geographical opportunity" has encouraged the emergence of new manufacturers complexes, in the form of technopoles. This can come from an initial implantation, linked to a specific sector, a large corporation or the express will of local politicians, academics or others. Such growth has been favoured by new forms of industrial structure, both horizontal and vertical disintegration, that has responded to the local labour market, thus further stimulating economies of scale. Thus with a snowball effect, growth centres have got bigger, their activities become increasingly diversified and they have exerted an increasingly wider sphere of influence.

Sustained growth has stimulated diseconomies of scale that in turn influence the efficiency of activities in these new locations. It initially brought remedies through increased investment, vertical reintegration and where possible under market conditions obliging standardisation of production, which has consequently led to a progressive deskilling of the labour force.

This will eventually lead to an unavoidable process of geographical deconcentration. Increasing routine within certain industrial processes, such as assembly operations and semiconductor mass production, has encouraged further restructuring and the spatial dispersion of production activities. Producers seeking additional cost savings are relocating standardised and banal manufacturing functions to peripheral regions. Here they can find cheap and abundant labour, notably female, immigrant or former agricultural employees, and equally of cheap factory space. These zones are commonly under-industrialised areas of the developed or developing world. New growth centres, orientated around high technology activity have experienced rapid expansion, yet at the same time have been integrated within an international social and spatial division of labour (*Scott, 1987a, 1987b*).

It is possible to make a number of general observations concerning the problems of location. Firstly it is possible to identify two successive trends that characterise the spatial organisation of high-technology industry. The geographical concentra-

tion of activity allows the reduction of overall costs through economies of scale, through reorganised production and the emergence of a skilled localised labour force, which is subsequently followed by the geographical dispersion of production seeking to avoid higher costs liable to be incurred in areas of excessive industrial concentration. Arrival at this second stage is determined by the extent of standardisation within the production process.

This interdependent duality has recurred within different contexts, yet according to the same principals throughout the history of industrialised economies. Thus the new zones of production emerge and older ones obliged to adapt or decline. This process is determined by the technical, political, and social factors of production.

Technopoles and regional development

In the previous section we have examined relationships between regional development and new production complexes. By looking at this from a more generalised approach, it is possible to develop a number of additional explanations that can improve the understanding of the expansion of technopoles within a regional context.

Technopoles and policy development

During the period of post-war economic growth that existed until the 1970's, known in France as the "Thirty Glorious years", regional planning was founded upon growth pole theory. This model was dominant during an era of economic expansion and limited uncertainty. Whilst development was based upon the wider distribution of growth from a central location. It concentrated on large scale processes, vertically integrated corporations and the multiplication of economic trends.

But this model lost its practical and theoretical authority when this pattern was reversed. Growth could no longer be redistributed because it no longer existed. This fact and not government policy led to the increased relevance of indigenous development. This new tendency became more widespread and has been examined since the 1970's. It is no longer a pure theory of regional development and more a new requirement for development to occur.

New policies attempt to promote the exploitation of indigenous resources, and thus increase the innovation and adaptation potential of the regions concerned. As we have seen in the preceding section, in this period of industrial transformation, companies are willing to exploit any opportunities present and reorganise their productive system where necessary. This can occur both at the micro-economic level in the form of quasi-vertical integration, and also at the level of macro-economic scale by encouraging the emergence of the new sectors within a new spatial distribution. The new geographic and economic context and the reorganisation of pro-

duction, increased flexibility and by definition reduced state intervention has led to new forms of planned spatial development.

Within this new framework technopoles seem to fit perfectly, or at least they claim to do so. They have simply needed to repeat the existing theories of growth poles, leading economic sectors and activities that promote industrialisation. Today these concepts are described using new phraseology, such as the technopole, high-technology and spin-off. Following this logic, many observers believe in the existence of a clear relationship between regional development and technopoles, with the establishment of an interface between the locality and technopoles through high-technology activity, whilst taking account of the wider socio-economic processes, whose nature may influence the impact of technology upon spatial forces.

The restructuring of the industrial system has occurred in close correlation with the technological revolution, yet is not entirely dependant on it. It is neither technology, nor professional relationships that can directly influence a given space, but a far more complex combination of forces. These are represented in the development model, yet one cannot simply deduce the various technological components of the model. This ideally needs to be examined in terms of three interdependent components: the type of labour organisation present, an industrial paradigm; the macro-economic structure, a growth factor; and the combination of implicit norms and institutional rules, a mode of regulation. Thus new technologies have a role to play, yet do not determine which model will finally emerge as being most applicable and they can be seen to be compatible with a wide range development models (Leborgne-Lipietz, 1988).

It seems difficult to claim that the economic future of a region is dependant upon the presence of technopoles and the secondary benefits of new activities within the local industrial fabric. Yet there is no reason not to think that a technopole could not be integrated within the new inter-regional and international division of labour, governed by the requirements of contemporary industry. In contrast, technopoles can theoretically form an essential interface between inter-regional and international systems.

This framework is likely to be hierarchical with the emergence of new growth poles of global relevance. As a result of high-technology production a new logic has emerged, the interaction of different processes within different locations

As a consequence different centres have lost their capacity of independent self management, as each location is economically, socially and technically dependant upon wider forces whose definition and control is not situated in any single location. Each region or city must be specialised in order to define a role within the spatial division of labour. Whilst at the same time experiencing a gradually weaker role in the control and influence of production. Places have become components in a wider flow. The transformation of production processes further illustrates the dependence of productive localities upon information flows.

Technopoles and regions

It is probable that a fear of being excluded from principal economic trends has motivated regions and towns to launch technopole creation initiatives. It is thus somewhat predictable that technopoles represent certain typical positive characteristics of regional development tools. They are both an updated spatial form of regional planning during a period of economic uncertainty and a possible way of moving away from such economic insecurity, although the latter has yet to be proved either in terms of the efficient promotion of polarisation or net creation of local jobs. Whilst on the other hand, this adaptation promotes a far more widespread process than contemporary restructuring of space. It plays a role in increasing social and geographic diversity, shown in the contrast between competitive, post industrial regions and lagging regions facing fundamental economic difficulties.

The national planning policies of different countries further illustrates the break with past initiatives based upon large scale investment, also known as physical planning. The French national economic planning authority, the Commissariat Général du Plan declared in 1983 that "those regional characteristics important for the future were changing. That in the past, physical infrastructure such as ports, air-fields, roads, electricity, telephone, and industrial zones were determinant." Whilst factors likely to influence future change include wider training of the work force, an improved skill base, increased dynamism of regional companies, an increase in the quality and quantity business services and the presence centres of research such as universities. With an additional capacity to integrate all of these factors in defined markets. It should be noted that these two requirements are complimentary and not mutually exclusive.

Emphasis remains concentrated at the national level, whilst regions all seek to assert modern characteristics, often manifested by a desire to reinforce or create a technopole, possibly within a wider network of other similar organisations. This tendency can be seen in France, here State-Region contracts encompass the creation and promotion of technology centres, themselves representative of science based industrial activity at the regional scale, in addition to research activity, higher education and other factors necessary for the success of technopoles.

But in what type of region can one find technopoles? Apart from the observation that they seem to be everywhere, and not returning to the debate on what constitutes a true or false technopole, different localities can be classified into three groups, each responding to a different technological direction.

Old industrial regions, which within the framework of industrial reconversion have sought to create technopoles as a way of changing their overall image, to attract new economic activities and to modernise the local industrial fabric. Often these activities and new innovation is linked to existing traditions thus ensuring

technological continuity. Whilst significant local government involvement and support seems to be crucial to success. Examples of this include Metz, Nancy, Villeneuve d'Ascq, and Saint Etienne.

Urban locations offering economies of scale, a strong concentration of high-technology based activities and the possible transition between traditional and new technologies. Most urban based concentrations of technology based activity appear to be in world cities, such as the southern Paris technopole, Route 128 in Boston and Los Angeles.

The new industrial space, and initiatives created from scratch are either based around existing companies who stimulate local growth through spin off activity, or the emergence of new enterprises. These regions often lack an industrial tradition and therefore can easily adapt to the requirements of the current organisation of production, as shown on the section concerning location. One commonly associates the third industrial revolution as being located in the southern United States, in California, Arizona, or Texas, collectively known as the Sun Belt, as opposed to the Snow Belt of traditional industry. Whilst in southern France such activity can be found in the Golden Crescent along the Mediterranean coast identified by Roger Brunet.

The current state of science parks in Great Britain

After having examined different interpretations of the science park concept and the diversity of such operations, it seems that an understanding of the definition of the scientific park concept in Great Britain is necessary to comprehend the specific nature of the movement within the British context. According to the United Kingdom Park Science Association (U.K.S.P.A.), a private organisation representing science parks in the United Kingdom, the concept is defined in the following way:

That it is "*a spatial development where the interface of research with commerce and industry is encouraged for the better exploitation of technology.*" (U.K.S.P.A., 1996).

In order for an operation to receive the classification of a science park in Great Britain it has to prove the presence of four key criteria.

- That it is primarily a property based initiative;
- That formal and operational links exist with a university, another Higher Education institution or a major centre of research;
- That the project is designed to encourage the formation and growth of knowledge based businesses and other high-technology organisations normally resident on the site;
- The presence of management function, actively engaged in technology transfer and assistance with business skills to on-site organisations.

According to the U.K.S.P.A. this concept can also embrace initiatives described as Innovation Centres, Research Parks and High Technology Development parks, where these criteria have been shown.

The history of the phenomenon in Great Britain

The science parks phenomenon began in Great Britain in the beginning of the 1970's with the creation of science parks adjacent to two universities; Cambridge, and Herriot-Watt in Edinburgh. Their evolution has been described as providing an example for an 'English model' that can operate elsewhere in the country.

Since 1979, within a wider climate of growing unemployment in the Midlands and the North, the science park concept has been used by local authorities as a tool for the promotion of new industry. In the same period, British universities facing a considerable decline in central government financial assistance, sought to benefit from new commercial relationships with the industrial sector. Even if the state has lacked clear enthusiasm for the direct funding of British science parks, the public sector has exerted a key influence through local government and the semi-public 'English Partnerships' agency. This organisation acted under its legal remit for the assistance of property development in economically difficult urban areas. The combined influence of these factors significantly encouraged the expansion of British technopoles in the 1980's.

Until 1988 all science parks in Great Britain were closely linked to universities or other higher education establishments. The creation of Belasis Hall Technology Park was stimulated by the close proximity of Imperial Chemical Industries' research laboratories. Whilst a second initiative following the same model was launched in 1992 alongside the Sellafield nuclear plant north of Liverpool.

The 1992 Further and Higher Education Act removed the legal distinction between polytechnics and universities. The location of many of the former in industrial cities, and their strong tradition of links with local industry, stimulated a new wave of operations in the 1990's. This form of science park has been launched by Surrey, East Anglia and Wolverhampton universities.

Thus a great diversity can be seen to exist amongst science parks in Great Britain. This difference varies according to relationships between the science park and the educational institution, links between the private and public sectors, as well as the prevailing local economic climate. In the same manner the size of initiatives may also vary from 500 and 100,000 square metres. Whilst they may be located in both urban and rural areas, on old industrial land or on a university campus.

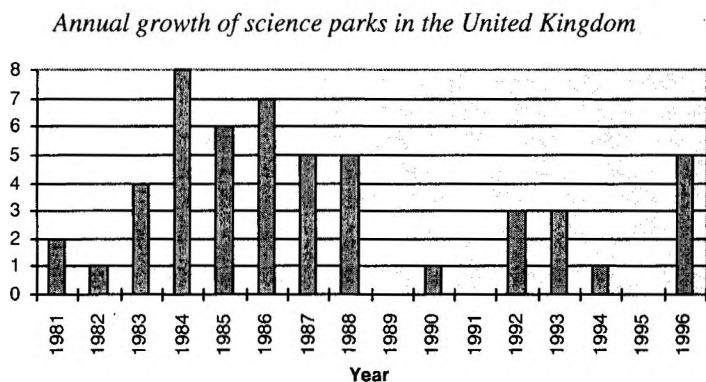
Different aspects of the evolution of the British science park movement can be examined from economic observations collated by the U.K.S.P.A. This data covers seven indicators of the movement's growth in the national context.

The geographical distribution of British science parks closely follows the location of the main university centres, whilst they can be found across the whole

country. Thirty-five exists in England, eight in Scotland, five in Wales and one in Northern Ireland. Of the eleven operations still in an early stage of development, nine are located in England. At the national scale most operations are situated in or close to principal industrial agglomerations, with the strongest grouping in the 'Home Counties' around London. It is also in this region that one finds the strongest presence of public and private research centres, and the qualified labour force required by companies already present on the parks. This last aspect is essential for high-tech companies, who frequently encounter considerable difficulties in recruiting qualified and specialised employees.

Prior to the 1980's, the British science park movement was dominated by Cambridge and Herriot Watt. Their current leading role can be explained by their enhanced experience due to a more mature age and their virtual monopoly of the concept in Britain for ten years. The growth of science parks since 1981, shown in *Figure 1*, has been marked by three phases of growth. The most important was from 1983 until 1988, when the number of operations increased from 7 until 38 in only five years. After this creations remained relatively stable for the next five years, prior to initiatives launched by former polytechnics increasing the total to 46. The last significant increase in the number of active science parks in Great Britain took place between 1995 and 1996 when five new operations were mounted.

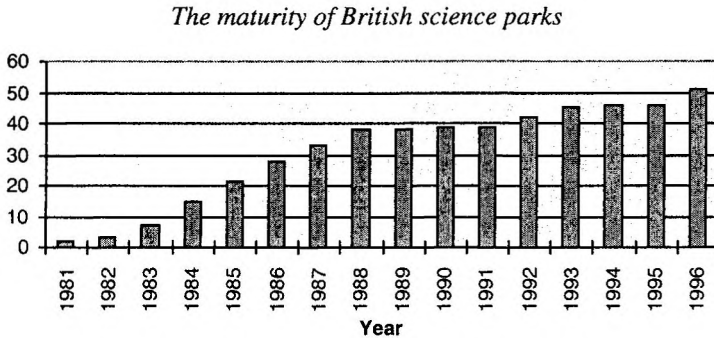
Figure 1



One can therefore see, that in an inverse manner, that these developments have been operational in Britain for between two and thirty years. This calculation does not include those that have remained in planned or early stages of growth, and have thus not been officially recognised as constituting a science Park. The average age of current members of the United Kingdom Science Park Association is eleven years. Scientific parks that have been active for such a duration illustrate a certain ability to succeed. Yet rivalry between operations, in the early stages of growth can

be difficult, where limited spatial or sectoral markets, prove capable of fully supporting only one. This aspect requires strong strategic management in the first years of a project.

Figure 2



Another indicator of the overall success of science parks within the British economy is the continued increase of attracted investment. This growth illustrates the confidence that exists in the business community towards this type of project. The expansion of the financial role of scientific parks has continued even during periods of economic uncertainty, no more so than in the property market of the early 1990's.

Annual investment in the period 1986 to 1995 averaged £58 million. Whilst the rate of growth of annual investment has also increased during the same period, but in a less spectacular manner than global investments. Investment in technology sectors is recognised as often being more indicative of growth than employment, especially in domains requiring specialised and expensive equipment. The presence of such activities can frequently stimulate secondary employment growth, yet at a later stage. A more illustrative indicator would be the cost of each new job created by a program of clearly defined investment, but current evaluation methods remain limited in this field. The possibility of quantifying the efficiency of these projects as regional development tools will therefore remain restricted until such data is produced.

The role of British science parks as property development schemes requires the continuous availability of a certain margin of vacant office and specialised laboratory space, but only where a demand exists. Data on the evolution of science park property space provides information concerning the total quantity, in addition to floor-space under construction and space available to rent. Since 1985 occupied space has been dominant. But to facilitate the expansion of companies present on or off the sites the availability of rental space was also essential. At the end of 1995 7% of the total space was unoccupied, this contrasts with 12.8% of property being empty in 1993 at the height of the property market recession.

Figure 3

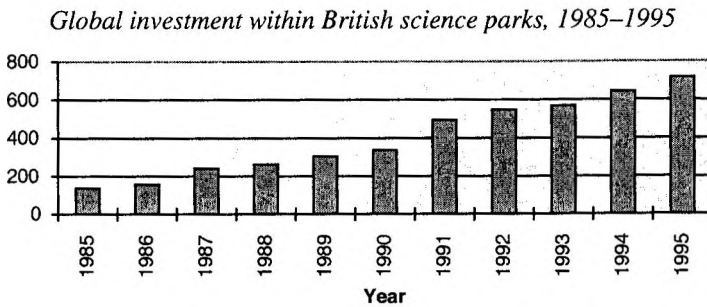
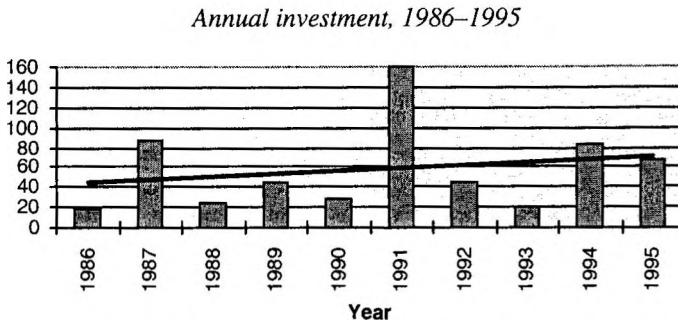


Figure 4



New units have been constructed in response to increased demand, this can reaction be seen to have continued throughout the history of the science park movement in Great Britain. The role of the property sector is shown by the fact that management and promotion activities are controlled by real estate agents in most sites. The latest available figures indicate the occupation of approximately 750 million square metres of property space in British science parks.

A significant aspect in the recent history of scientific parks in Great Britain has been the continued expansion in the number of companies present on the sites. In 1997 there 1367 different companies counted on all science parks. The total number of companies has increased by approximately one hundred firms each year, even in the period of property and economic crisis at the beginning of the 1990's. The only year experiencing limited growth was in 1991, with only 10 new companies. But the overall number of companies located on science parks has increased continually since the first initiatives achieved maturity and clearly illustrates the overall success of the movement in Great Britain. The fact that the number of bankruptcies of companies on sites has not been counted, or published, has possibly concealed certain negative aspects within the global growth pattern.

Figure 5

The characteristics of the total property stock of British science parks

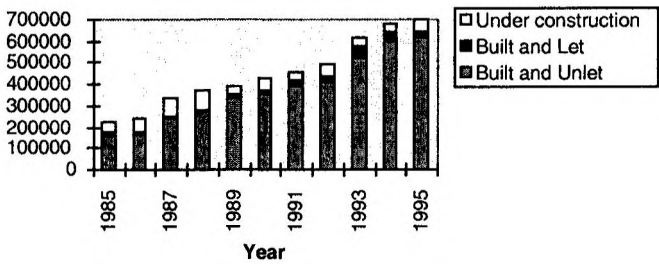
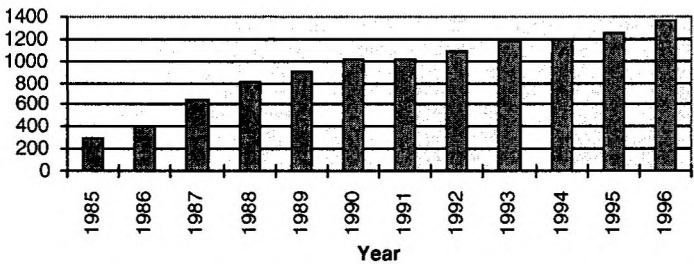


Figure 6

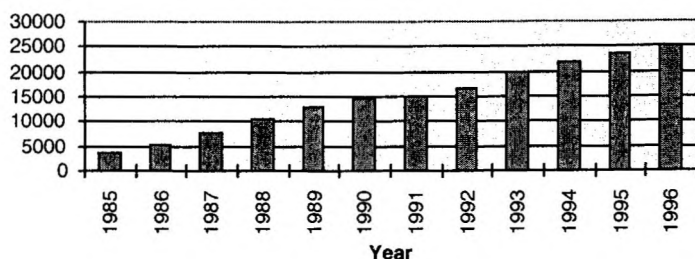
The growth of companies present on UK science parks



The growth of companies present on science parks was most significant at the end of the 1980's, which witnessed an increase in the number of operations from 7 in 1983 to 38 in 1989. The average number of companies present within British science parks has increased from 14 in 1985 to 27 in 1996. This growth can further enhance effects of localised synergy, with an increased possibility of co-operation between companies present.

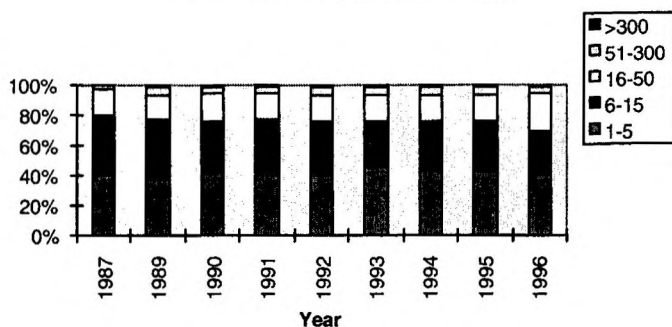
In 1997 science parks in Great Britain accounted for a total of 25,278 jobs. Employment on the sites has increased continually since 1985, with the creation of approximately 2000 new permanent posts each year. Another indication of the progression of the scientific park movement is the overall increase in the average workforce of individual companies from 12.6 in 1985 to 18.7 in 1995. Whilst the total number of jobs increased by 6.5% in 1996, far more than in the British economy at the national level.

Figure 7

The evolution of total employment within UK science parks

If one examines companies present in British science parks, one can note the dominant role of small and medium sized enterprises. Since 1987 more than 80% of firms present have less 15 employees. This fact encourages both flexibility and specialisation in high-technology sectors. One can also observe that the relationship between companies according to their workforce size has remained relatively stable since the beginning of the movement's maturity. These figures show the quality of science parks as a stimulating environment for small companies, who may encounter more difficulties in the first years of their existence if located elsewhere.

Figure 8

Company size by workforce size

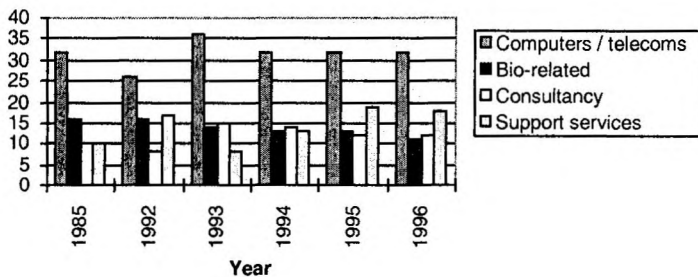
British science parks are most frequently specialised in computing and telecommunications sectors. This domination has continued without change since 1985. Whilst the secondary role of biotechnology activities have been as important. Science parks also possess a number of management consultancy companies. Other important research activities include energy resource and composite materials

development. The presence of biotechnology companies is more important if one considers their occupation of building floor-space, as opposed to the number of companies in the sector.

The Cambridge science park was one of the first two examples of this type of local development in Great Britain when it was opened in 1975, after five years of preparation. The site has been made famous by the study published in 1985, "The Cambridge Phenomenon". This report examined the history of the operation, profiled individual companies present and investigated their interactions with the regional economy. This was combined with a more theoretical based investigation of the creation and growth of the small and medium sized high-tech companies. The analysis also proposed recommendations for similar operations following lessons learnt in Cambridge. Further reflection examined the impact of the science park in the regional labour market and in the Cambridge private sector. An important aspect of the study was the manner in which the role of high technology activities was studied in the context of the entire Cambridge region and not purely within the confines of the science park.

Figure 9

Principal economic sectors represented on UK science parks



*An examination of the current role of the
Cambridge Scientific Park*

The approach taken in the management of the science park has been significantly criticised by the absence of intervention. The sole obligation required by the owner, Trinity College, was that potential companies were active in science based sectors. They did not insist on close relationships between college researchers and companies present. Some authors have judged British science parks to be too motivated by profits obtained from property development, and not sufficiently inductive to technological transfer. The administration of the park has preferred to leave the

eighty companies free to use established links with the university, and the other occupants only as required.

The planning of the site and its daily management, as well as property advertising has been allocated to a private company, Bidwells. Whilst tenant companies are responsible for maintenance of own buildings. Shared facilities include common catering services, a bar, meeting rooms and two squash courts in the Trinity Centre.

An important service for technology based companies in the region is the presence of a variety of capital funds risks. Whilst another private company has built a dozen new units for rent in the scientific park. Trinity College has no financial involvement in companies present on the site, but is always available to give specialised advice if necessary.

The Cambridge experience has undoubtedly been enhanced by the prestige given by its close connections to a university of world-wide renown, the concentration of high technology activities in the region and the presence of a specialised labour force. Whilst personal links between former researchers and old university students remain influential in the sector.

A case study of initiatives established following liberalisation in the British defence industry

A specialised and notable approach can be seen in the initiatives proposed by a new policy intended to promote and encourage diversification in the defence sector. This program was launched by the new administration of Tony Blair and published in March, 1998. The approach wishes to draw wider benefits from a sector that provides 400,000 jobs in Great Britain, a significant proportion of which is in high technology. The current government is aware of the numerous advantages given by the presence of these leading sectors in the national economy, and specifically the domains of aeronautics and electronics. Investments that have taken place in these areas could greatly assist applications in the other areas, and need to be strongly reinforced.

One component of this policy is the idea to create five new science parks in old military bases. It is intended to create structures to allow civilian and private sector researchers to exploit the presence of specialised laboratories and considerable knowledge of military scientists. Feasibility studies investigating the possibility of creating a number of science parks has identified a number of key advantages.

The specialisation of existing laboratories can create a convergence point for technologies, and international markets in which these laboratories are well known. Access to these laboratories, governed by accepted tendering procedures, not only to provide facilities for scientists, but also permits these services to obtain outside finance. Laboratories of a world reputation and information infrastructures can therefore be placed at the disposal of a wider public. Another aspect would allow

inventions and patents to be exploited by the private sector. The last component involves the encouragement of scientists and researchers the Defence and Research Evaluation Agency (D.E.R.A.) to create new companies to exploit their own ideas.

Companies that decide to relocate on the new technology parks can benefit from the close proximity of DERA. This will reduce costs, improve communication and ease professional collaboration. Four sites have already been proposed, each with its own specialisation.

Table 1

Science parks proposed by DERA

<i>Science Park</i>	<i>Region</i>	<i>Speciality</i>
Farnborough	Hampshire	Aerospace
Haslar	Portsmouth	Marine and maritime technology
Malvern Hills	Hereford and Worcester	Electronics and information technology
Porton Down	Wiltshire	Biotechnology

It is also proposed to create innovation and incubator centres on a number of these sites to assist new companies and provide specialised premises. These centres would have a secure environment, with good work conditions, provide access to common secretarial services and management advice by a network of experts. The private finance concept where public services are operated by the private sector will be used to manage the sites.

This new approach in a defence sector more open to external companies can assist public sector research laboratories, as well as private companies. The concept can also promote the exploitation of new products for new original civil uses from military research. Such a trend has already begun in the development of infra-red vision applications and the application of knowledge acquired in the research for air traffic control management to benefit road transportation companies. The application of this new policy will create a wave of highly specialised British science parks that can boost the movement in the next millennium.

Conclusion

Numerous publications and empirical studies have illustrated the lack of similarity between technopoles, even the absence of a single name. Science parks, the technopolis, innovation centre and other concepts are all linked to contemporary industrialisation, as poles of technological development or technology transfer centres, with certain a resemblance and a great deal of diversity. Analytical case studies

also show how their formation and development is further varied. Sophia Antipolis has hardly anything in common with Silicon Valley, whilst Cambridge Science Park is entirely different from Sheridan Park in Canada, or again the lack of similarity between Tsukuba in Japan and Route 128 in Boston. This recognised diversity does not focus on secondary points, but concentrates upon the principal elements of the operation. These can cover any number of aspects, including the principal source of influence on the site, the nature and direction of interaction between different organisations present, whether the technopole is planned or not, links with local, national and international bodies, dependency on past economic and social traditions, state intervention and so on.

The technopole phenomenon itself represents a specific form of polarisation process. Within this system the concentration of spatial activity is regarded as one aspect of a wider organisational pattern. This allows the technopole to find an essential role in the promotion of technological transfer between different economic agents. In addition to further contributions based around this activity, it attempts to exert an influence by exploiting close spatial proximity to encourage the opening up of certain activities deemed likely to promote technological creativity and the commercial exploitation of technology.

The economic theory of organisational behaviour possesses a number of different methods in which to examine the spatial component of technopoles: the limited rationality of economic actors faced with an absence of information and considerable uncertainty, the opportunistic behaviour of these actors with regards to alternative methods of technology transfer, and the role played by the specialised methods of technology transfer available to principal organisations present. The organisation of technopoles can thus be explained as an attempt to increase technological creativity through the reduction of transaction costs associated with difficulties in collaborating with others involved due to institutionalised constraints.

The technopole is more a spatial concentration of technology transfer than a policy instrument for regional development. Technopoles constitute local productive systems where the creation of new technologies can be achieved in a more efficient manner than elsewhere. One can add that not one technopole can offer all technologies necessary for a wider technological development strategy. This requires the support of a network of technopoles that can supply a range of different technologies required by a diverse organisation to improve its own potential. Thus the regional integration of technopoles remains relatively weak, and their beneficial impact upon a regional economy somewhat limited.

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5 THE GLOBALIZATION OF THE ECONOMY AND THE EFFECTS OF EU POLICY: THE CASE OF AUSTRIA

Elisabeth Lichtenberger

Introduction

A most momentous change – the opening of the eastern borders and membership in the EU – raises questions about the future of regions and society in the small country of Austria:

- Keynesianism is a thing of the past.
- The downsizing of the social welfare state has begun.
- A new liberal era is dawning.

The future is uncertain for country and society because of:

- the effects of internationalization of the economy,
- the de-industrialization trend of “Postfordism”
- the restructuring of the tertiary sector, particularly tourism and retail trade and
- the effects of EU policies on industry, farming, and regional disparities.

A new economic policy

The successful “Austrian way” in the post-war era can be interpreted as a sort of Keynesianism. This interpretation still suffices if we wish to understand the specific phenomena (and problems) of present-day Austria. Looking to Austria’s future, as a member of the EU and with open borders in the east, we have to take a new politico-economic approach into account. Like all other countries in the EU, Austria is going through a cycle of liberalization of social and economic policy. The influence of government is being reduced, private capitalist ventures are being encouraged, the individual citizen is expected to shoulder more “life-responsibility”. Elitist values, self reliance, and efficiency are in favor once more. Property and wealth are again accepted status symbols. This liberalization is actu-

ally an "import", though, and like most socio-political innovations, it came late to Austria, and, undoubtedly a specific "Austrian" version of it will evolve in due time.

Liberalization and the down-sizing of social security will certainly affect the country's real estate, labor, and capital markets. Liberalization lifts the many barriers that had hampered these markets. The "activation" of the real estate market has increased the number of lots, houses, apartments, condominiums etc. offered for sale. Activation of the labor market means that more mobile forms of labor, new forms and patterns of work places and work times must be developed, that altogether people will have to become more mobile. Entrepreneurial thinking and risk taking are needed, attitudes that decades of social distribution strategies have all but eradicated. A shock therapy, such as the collapse of the Eastern system means for those countries, is not possible in western welfare states. With its autonomy in these matters rather reduced, an EU member country like Austria will have to find its own way of – gradually – uncoupling economic policy from social policy. According to the weak capital endowment of Austria's business the call for market orientation and privatization of nationalized companies is, therefore, answered mainly by foreign firms.

The geographer's question is: What effects will liberalization have on the country's settlement pattern ?

- Liberalization necessarily reduces measures to alleviate disparities and lessen segregational tendencies. In the long run it leads, to sorting out and separation of land use and of population groups and strengthens segregation processes in the social, ethnic, and demographic spheres;
- The marginality of certain groups will be reinforced and regions already on the periphery will be "peripheralized" even more;
- Within centralized settlement systems the gradient between center and periphery will steepen. Work places will be concentrated even more at well placed locations and weak rural zones already lacking in jobs will be further depleted;
- Regional economic disparities particularly as regards productivity and real estate values, can at best be alleviated through external effects.

Effects of the globalization of the economy

The beginnings of Postfordism

In Austria the internationalization of markets occurred later than elsewhere because of the belated dissolution and privatization of the big nationalized industries and banking companies and the cooperative retail empire "Konsum". In the industrial

sector, Fordist organization with its typical large operations and strict hierarchies was finally changed in the early 1990s through the take-over of the respective firms by international capital which favors flexible specialization and decentralization. Production-oriented services and supply operations so far integrated in the groups of companies themselves were now separated and transferred to independent small and medium-sized companies, and networks of subsidiary and supply companies developed. This weakened, among other things, the power of labor unions. Certain segments of production were transferred abroad; and marketing intensified. This required improved market research and development. Employment opportunities for highly qualified personnel increased (for example at Siemens), but workers at the more traditional levels of activities, particularly semi- and unskilled laborers and apprentices, were faced with a decline of employment opportunities.

This major change in the organization of production is accompanied by an increase in long-term unemployment which began to affect Austria during the 1990s, again later than other western countries. Among the regions seriously affected is Vorarlberg, which suffered losses of jobs through the relocation of parts of its production (textiles, clothing) to low-wage countries. A somewhat older problem area of long-term unemployment is Upper Styria where (primary) industries experienced a decline much earlier. Still different is the situation in Vienna where the labor market is affected by rationalization measures in the administrative and management areas. This has sent many highly qualified employees in the upper echelons into unemployment or early retirement or forced them to accept lower paying jobs as company hierarchies were downsized.

Altogether, Austria's company and employment profiles are not basically different from those in neighbouring Germany. There is a difference in the age distribution of the labour supply, though, with Austrians being slightly younger on the average. This will produce more job seekers every year until early in the 21st century. That in turn will increase Austria's unemployment in addition to the downsizing and firing practices of the business world.

Three sectors of the economy, viz. tourism, banking, and retail trade, that so far have been typical growth sectors, will experience particular declines as to number of businesses and number of jobs, for a variety of reasons. So-called "re-dimensioning" is called for which will affect both plant size and labor supply and demand in the tertiary sector. This is not so much an European problem, but rather one specific to Austria.

The "re-structuring" of the tertiary sector

Tourism was the growth sector par excellence in the post-war era. Since the 1990s, its crisis has been a recurring topic in the media. Experts are agreed that the tourist industry in Austria needs "re-dimensioning", i.e. restructuring and downsizing.

New regional forms of financing and marketing need to be developed. One third of all tourist businesses are seriously threatened at this time. It has been estimated that the number of "beds" will have to be reduced by at least a quarter million, i.e. from 1,140,000 (1995) to 900,000 or 800,000. With decreasing number of tourists and slack business, some tourist facilities like in Switzerland, will probably be converted into second homes or vacation apartments for interested foreigners. On the other hand, some second homes and vacation apartments in densely populated areas will be converted into permanent homes for the local population, a development which meets with public support, including financial aid. The actual problem then is not the loss of facilities but of jobs. At least 20% of the current 170,000 employees in the tourist business could be affected.

As regards "sun and water" as holiday objects, Austria – for years now – has had to compete with air tourism world-wide. The opening of the East brought the additional competition of Hungary's cheaper Lake Balaton for Austria's vacation lakes. In 1996, Hungary's summer tourism reached 24 million over-night stays, more than the decline of Austria's tourist over-night stays from 130 million in 1992 to 112 million in 1996. Approximately 6 million over-night stays in Hungary were Austrian guests. In reverse, the opening of the East did little to add to Austria's tourist business because of the lower income levels in those East-Central European countries including Hungary, the Czech Republic, and Poland. Should incomes rise in those countries, numerical growth and more differentiation of tourists from there in Austria would probably ensue, which permits a relatively optimistic forecast for the foreseeable future.

Re-dimensioning and restructuring of tourism in Austria are necessary; yet a generally positive view may be taken. In the post-war years Austria's tourist industry developed as a private sector, outside the Keynesian public support economy, but within (and perhaps: despite) the social security system of the welfare state. It is based on domestic, mostly small enterprises which the state leaves to operate along free-market lines to deal with international competition on their own.

The *banking sector* is in a different situation. It has to cope with the long-run consequences of nationalization. With 5,800 branches and 70,000 employees, the banking sector in Austria is – at present – (relatively) more than twice as large as the one in the much larger Germany. This is the result of the oligopoly which evolved in the post-war era in conjunction with the welfare state. It entailed a "fanning out" of the banking business in the large center and the founding of branches in small central places and in the various neighborhoods of medium to large cities, according to a principle of accessibility to customers regardless of an area's actual population numbers. In Austria, there are 1400 inhabitants to one bank branch, while the respective figures are 3,960 in Germany and even 13,500 in France (figures for 1996). In other words: Austria's financial institutions make much less profit per employee than banks in other countries. Even cautious esti-

mates predict that at least 30% of bank employees will lose their jobs in the near future. In this context it is significant that in nearly every municipality in Austria there is a Raiffeisen bank branch. There has been discussions about reducing the number of post offices and maintaining one only in municipalities with at least 1,700 inhabitants. A combination of postal, banking, and perhaps other services in small central places may prove a way out of this problem.

The discussion of Austria's central place system has to refer to the extension of the respective market areas and the loss of *functions of central places* of lower and middle rank because of too few customers. The reduction of the bank branch net that is to be expected will undoubtedly cause reductions in other services, trades, and retail businesses, particularly in rural areas with low economic potential and low population density. This reduction of businesses will particularly affect local retail stores in central places of lower order where those have just begun to face the competition of the large chain-store companies. An overall reduction of stores by one half within the foreseeable future, not unlike in the banking sector, may not be too unrealistic an assumption. Whether and how banking, postal and retail services will continue to function in those "lesser" places, will more and more depend on the demands of the leisure society.

Effects of EU membership

In June 1994, two thirds of the Austrian people voted for joining the European Union. This success of great publicity campaigns of both major parties overshadowed early signs of budgetary problems which have only increased since 1995, namely how to finance the EU membership.

From Austrian to EU agricultural policy

A common agricultural policy (CAP) was one of the engines of Europe's unification. Understandably, the EU interferes in agricultural policy more than in any other matter. It has at its disposal an unprecedented apparatus of 22 market organizations for almost all important areas of production and pursues environmental and structural policies as well. The details too, to which these regulations go are unequalled in any other sector. The administrative system is most refined, and the EU laws pertaining to agricultural matters run to 20,000 pages of text. The common agricultural policy still absorbs half of all EU expenditures.

Austria has an even more refined institutional apparatus for the implementation of its agricultural policy. Only, before EU membership, this had set priorities quite different from those of the EU.

Even before EU membership, it was maintained in Austria that EU strategies for preserving family farming were not suitable for an Alpine environment. The viability and survival of most mountain farms in Austria could not be ensured even if all possible subsidies and support measures allowed by EU rules were to be applied. Therefore, interim conditions pertaining to mountain farm subsidies and investment aid for part-time farmers were negotiated as part of the conditions of Austria's membership.

It is important that the CAP support measures provide for a gradual replacement of the formerly common direct price supports by compensation payments which are not based on the quantities produced, but rather on the acreage under cultivation or number of cattle, respectively. There is also a general difference in assessment: The CAP assesses whole areas at the level of municipalities or parts thereof, while the Austrian definition of support referred to individual farms only. This has had some curious results in Alpine regions where even valley farms receive aid now, just because they are located within an "aid-worthy" area. In addition, the condition of aid-worthiness based on farm size or number of cattle, respectively, favors larger farms, which actually runs counter to the Austrian principle of supporting small farms in areas with less favorable natural resources. Thus, EU membership meant a considerable break with the traditional Austrian support system.

It cannot be predicted at this time whether the decline of compensation payments with the ensuing decline of incomes, will be offset by turning to other products, like "natural" or organically grown products, and/or cuts in production and running costs of the affected farms. In addition, income situations of farmers cannot be forecast at the turn of the millennium, because the development of prices and future support strategies are not known at this time.

Two Austrian medium-run solutions pertaining a part of the farms have begun to evolve, though. Ecological products, i.e. products of organic farming, and/or direct marketing and sales to the consumer appear to be the only realistic way to achieve higher prices and compensate overall price declines which have been quite dramatic, such as for wheat, for example, that now fetches only 40% of pre-EU membership prices, or beef and live cattle prices that dropped to 70–80% of before-1994 prices in Austria. It has already been elaborated that Austria takes a leading role in Europe's organic farming and will probably retain this position in the foreseeable future, because the natural conditions and the generally small size of farms in this country seem to favor such a development.

The second equally important venue towards stabilization, expansion, and professionalization is "vacation on the farm". In contrast to private room letting, this special form of Austrian tourism has not only remained in business but has managed to expand. In 1996, 21,000 farms offering 220,000 beds accounted for 10% of the entire tourist business of the country. Vacation on the farm has a future.

Manufacturing

EU effects on manufacturing cannot be separated from the effects of internationalization. They can be summed up as: adjustment shock and opportunity to modernize. A whole series of indicators like employment, orders, bankruptcies, and closings-down seem to indicate that many companies did not survive the adjustment shock and that further declines in industrial employment are to be expected. Takeovers of important companies by foreign firms have brought them into multinational industrial networks, but have weakened their autonomy, and in most cases meant a reduction of staff. In many cases, groups of companies were broken up and activities allocated to several smaller firms. In general, the integration of Austria's industries into the European market subsequent to Austria's EU membership has very much speeded up the process of their restructuring. As a result, the industrial sector is now split in two: on the one side, there are the successful, internationally competitive companies, making the best of the all-European internal market; on the other side, there are the weak ones that will probably not withstand the strong competition. Both are subject to the changed conditions set by the European Commission.

According to the EU Treaty, industrial policy is the responsibility of the member states, but the basic conditions of the European Union as such have profound effects on Austria's industrial policy. First and foremost, EU rule prohibits subsidies to industry, with the exception of small and medium size enterprises, research and development (R&D) subsidies, and regional development support. An important condition for EU support is national co-financing. The support thresholds are lower than in the past. Because of regionally different support thresholds, a battle between regions for EU support has ensued. In sum, EU membership has started a "change of regime" in Austria which is likely to have the following medium-term effects:

- Subsidies for industrial investments will generally decline;
- At the same time, the need for regional development plans becomes more pressing, i.e. a process of regional planning for the future has been started;
- Within Austria, inter-regional gradients will become steeper, which could cause relocations of industries within Austria.

Next to its support policy, the EU policy of free competition plays an important role. It prohibits price regulations and other restrictive practices. In Austria, this has meant that the ingrained monopoly and oligopoly practices – and, above all, the mentality that goes with them – have to be abandoned. Before EU membership, the "social partners" had been the ones to maintain a certain amount of competition. Now, the EU administrators are in control. It will take a lengthy adjustment process to turn these changes of economic policy to fruition and advantage rather than disadvantage as until now.

So far, while attracting high investments from abroad and causing an increase in productivity, on the one hand, EU membership has brought about great moderation in wage negotiations and a reduction of employment in the unionized industrial companies, while less well paid jobs in small companies and service businesses are on the increase. The most dramatic cuts occurred in the basic industries were accompanied by an above average reduction of jobs, but followed by an above-average increase of productivity. A clearly positive result of EU membership so far has been the increase of foreign trade and the dynamic development of Austria's exports.

EU regional policy and its support regions

With EU membership, Austria acquired a "new regional scenery" and a supranational authority for its regional and agricultural policy programs. Previously, Austrian regional support development programs like ERG Regional Programmes, regional special support operations etc., were based on the Austrian Regional Planning Programme of 1991, which pursued structural-political objectives in an economic context. According to this program, even the economic development of central regions (Greater Graz, the region of St. Pölten in Lower Austria, Central Carinthia) was considered the legitimate task of regional support programs.

The EU approach is different. Regional policy and regional development are to support weak regions with specific structural problems. Based on this different concept, a new order of national regional support areas, on the one hand, and of areas that warrant EU-initiated support programs and are co-financed by the EU, on the other, was identified. Austria was fortunate to join after 1993, the year in which it became legal for even net-paying EU-member countries to receive larger financial aid payments from the EU. For the program periods 1995 to 1999 Structural Fund payments of 1.623 bil. Euros were allocated to Austria.

The regions deemed worthy of support by the EU Regional Support Programme comprised 40.9% of the Austrian population. This generous categorization of Austria's regions helped to soften the change to the region-oriented rather than individual-oriented support policy of the EU. The general EU principle of free competition that allows aid to the weakest regions only, was not applied in Austria.

Beginning with the year 2000, "Agenda 2000" will be applicable. It delineates the new program of EU activities and the respective EU budgets for the years 2000–2006. There are three new focuses of attention to be distinguished:

- 1 One goal is a "European agricultural model" which is to improve Europe's competitiveness on the one hand, and to achieve sustainable development of rural areas, on the other, while paying all due regard to environmental problems. In the period 2000–2006 about half of the EU budget is again to go into agriculture;

- 2 The EU project of “narrowing down the welfare gap between regions” has been streamlined by reducing the seven targets, considered so far, to three and by concentrating on smaller areas. In other words, fewer regions will be considered worthy of support, but those selected will be given more money. At the same time, local and regional authorities are being given more leeway to decide upon the allocation of such money on their own;
- 3 With a view to the EU extension, considerable resources are being earmarked for improving transport and communications infrastructures, for measures of environmental protection as well as for the adaptation of the agricultural sector and rural environments in the countries aspiring to accession.

What do the changes in the EU targets from the five-year program for 1995–1999 to “Agenda 2000” imply for Austria?

As far as agriculture is concerned, subsidies were at first considerably increased in the five year period 1995 –1999. The amounts of support were considerably higher than former Austrian regional policy could afford. Some data to support this: Public funds for agriculture and forestry increased from 15.5 bil. ATS (1.1 bil. Euros; Federal money before 1994) to 27.7 bil. ATS (2.0 bil. Euros; Federal and EU 1995). For 1995, the Austrian Institute of Economic Research estimated the total volume of subsidies as 24.7 bil. ATS or 1.8 bil. Euros. The EU “Principle of Additional Funding” stipulated that national expenditures must be maintained at previous levels for additional EU funds to be paid. At this time, the subsidies made up approximately one third of the incomes of farmers. Since then, they have been reduced: in 1999 only 17.5 bil. ATS were paid out to farmers. With the decline in agricultural prices, farmers’ sales revenues went down from 82 bil. ATS to 63 bil. ATS in the years 1990 to 1998, though their output remained the same. Incomes have gone down. The farmers protested and succeeded in postponing the reform of the milk quota system until 2008; still, with “Agende 2000” pending, they had to accept price cuts (20% for beef, 15% for grain) as well as a ten percent reduction of the acreage farmed, as stipulated by EU authorities.

For the years 2000 to 2006, Austria has been promised 423 mil. Euros annually (i.e. 2,95 bil. Euros or 41 bil. ATS altogether) out of the agricultural funds of the EU one of whose objectives is the development of rural areas; but as yet it is uncertain if the required “additonal funds” to be provided in the respective Austrian budgets will be forthcoming.

The changes in the EU Structural Funds may be seen from the *Table 1*. Out of the structural funds of app.180 bil. Euros for 2000–2006. Austria is to receive an average of about 247 mil. Euros annually, i.e. about one third less than in the five years 1995–1999. At the same time the areas supported were downsized so that now only about two million, i.e. a quarter of the Austrian population, and not three millions, as has been the case so far, live in support regions.

Table 1

*EU Regional Support Programme for Austria,
1995–1999 and 2000–2006, in mil. Euro*

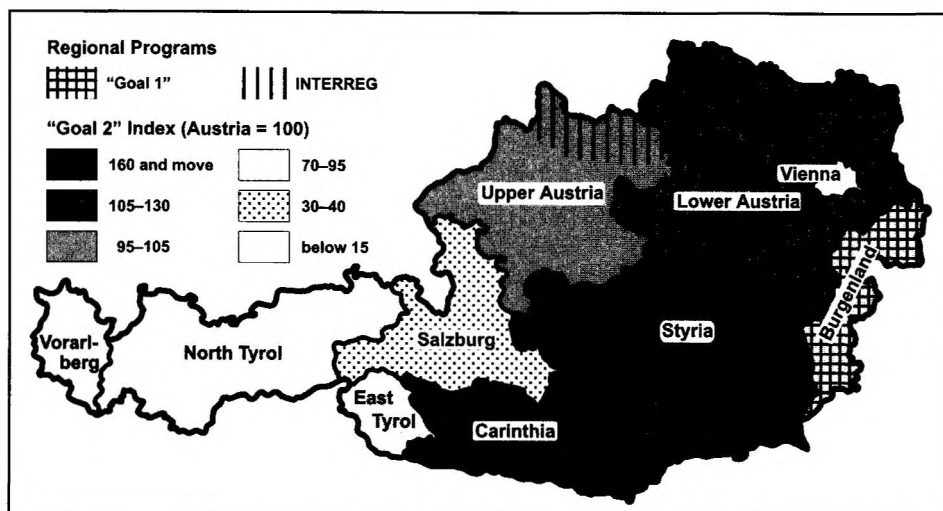
	1995–1999	2000–2006	
Regional Programmes			
“Goal 1”	174	261	Underdeveloped areas
“Goal 2”	106	578	Industrial depressed areas
“Goal 5b”	432		<i>Rural areas</i>
Sectoral Programmes			
“Goal 2 Ü”		102	
“Goal 3”	334	528	Unemployment
“Goal 4”	61		
“Goal 5a”	404		
Special Programmes	2	4	
	1,515	1,473	
INTERREG	49.79	183	Border areas
Other sectoral programmes	101.21	175	
Pilot	16		
Pilot	16		
Total	1,681	1,834	
Annual average	360	247	

Figure 1 shows the support regions for 2000–2006, as far as they had been confirmed by the EU at the end of 1999. Two regions are clearly defined: Burgenland as an Objective-1 region because of its development lag (with a GRP of less than 75% of the EU average) and the border regions (supported through the INTERREG Programme) adjacent to the states applying for membership, viz. Hungary, Czechia, Slovakia, Slovenia. In order that these border regions may become more competitive by the time of the EU's actual expansion to the East, the INTERREG funds were considerably increased.

The new target regions 2 replace the target regions 2 of the years 1995–1999 which had featured regions of industrial crisis. The money is allocated by the state governments. The map shows the intensity of support by federal states: indicating the per capita sums as a percentage of the Austrian average (1.158 ATS). The highest amount of support – viz. almost 200% – goes to Styria, followed by Carinthia. Thus, the historical unity of Inner-Austria as the relatively least developed region of Austria has been recognized also by the EU's regional support authorities. On the other hand, the sums allocated to the prosperous western states Vorarlberg, the Tyrol and Salzburg are lower than the Austrian average. Vienna brings up the rear.

Figure 1

EU development areas by priority zones, 2000–2005



Source: Elisabeth Lichtenberger: Austria. Society and Regions. Vienna, Austrian Academy of Sciences Press. 2000.

Upon admission, Austria, as an Alpine country, had large Objective 5b regions. From 1995 to 1999, they comprised 29.2% of its resident population and received 1,025 bil. Euros support from EU and Austrian funds. "Agenda 2000" has taken the subsidies earmarked for rural areas out of the EU regional policy programs and transferred them to the more comprehensive sector of agriculture (see above).

It remains to be seen how Austria's regional policy can be harmonized with EU policies in the future, not least in view of the EU enlargement eastward early in the 21st century, which will necessitate a reorganization of EU Structural Funds. It is quite possible that in case of full membership of the associated Central-European member countries (Hungary, Czech Republic, Slovakia and Slovenia), EU Regional Policy will entirely abandon the richer EU member states, as new peripheries and regions worthy of support are identified in those eastern states.

6 REGIONS IN UPHEAVAL. CONCEPTUAL FRAMEWORK AND EMPIRICAL FINDINGS OF THE REGIONAL TRANSFORMATION RESEARCH

Heinz Fassmann

Introductory remarks

This article deals with the transformation process in Central and Eastern Europe. It explains basic elements and depicts the macro-economic development. The focus, however, is on regional transformation research as a new scientific issue in geography and regional science. The transformation from a centrally-controlled economy to a market economy changes the quality of location and increases regional disparities. Ten years after the fall of the iron curtain it is possible to summarise the development and to formulate general trends. The underlying theoretical concepts and the empirical results obtained are the subject of the following article.

The processes of political and economic transformation

Terminology

The events of 1989–90 began with *glasnost*, *perestroika*, strikes, demonstrations, the occupation of embassies and the forced departure of citizens of the former GDR. The end of the events was followed by far-reaching changes in the political, economic and social systems. No stone was left unturned. Political and economic decision-making structures were changed completely, with considerable subsequent changes in the social and regional structures.

Attempts to describe these far-reaching changes in the political, economic and social systems in terms like “structural change”, “delayed modernisation” or “transition” overlook the vital part played by the actors involved. The changes were not automatic but were forced and introduced by individuals and parts of the population. Any other term than transformation depoliticises this unique and momentous phase of post-war European history.

Terms like delayed modernisation, transition and, particularly, structural change, also detract from the fundamental nature of the changes. For it is not only a matter of structural change, a modernisation process or reform of the system but of a fundamental change in the political, economic and social framework. These changes affect not only the material sphere but also social values, norms and identities which were either radically transformed or replaced by new ones. The period after 1945 taught Germany and Austria how difficult and how burdensome this process can be.

Basic concept of the transformation process

There are many examples that illustrate the fundamental nature of the transformation of the political and economic structures. The most noticeable are the changes in the political system. The Communist Party lost its overwhelming importance and was either dissolved as an institution or converted into a "normal" social-democratic party. The unlimited power it once enjoyed disappeared. The social-democratic parties throughout East-Central Europe may play an important role in the structure and sometimes form the government but the comprehensive ruling monopoly no longer dominates the structure, as can be seen from the way the post-communist parties see themselves. The governments, particularly where they are coalitions, no longer merely serve to carry out orders from party headquarters but themselves have the power to shape their own policies. The parliaments are no longer just a facade for "people's democracy" but exercise an important control function.

Sceptics may, in some cases justifiably, doubt the fundamental nature of the changes with terms like "rope parties" (Seilschaften) and historically evolved political connections but the fact remains that the structural changes, which are based on the principles of democracy and the rule of law, have basically altered the political system. How this system is perceived is a second and general question which concerns not only the countries of East-Central Europe affected by the transformation but also the Western world as well.

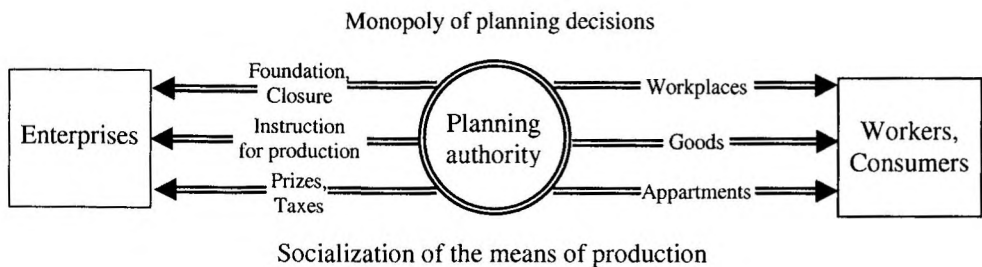
The dissolution of the communist parties and former centres of political and economic power went hand in hand with the transformation of the centrally-controlled economy. In this case it was the planning authority, the instrument of central control, that was dissolved and replaced by a new "institution", the market. However, in order to illustrate once again the fundamental nature of transformation, it is advisable to recall the functions of the planning authority in the centrally-controlled economy.

In the old centrally-controlled economy the planning authority decided the amount of production and the price; in consultation with the firm's management it also decided on the product itself, investment and employment. The planning

authority allocated jobs to the population on the basis of narrowly restricted written vacancies; it was responsible for the delivery of raw materials and for the distribution of the finished products. In order to fulfil all these functions it required comprehensive planning powers. No autonomous territorial authority or private ownership of the means of production was allowed to hinder the planning authority.

Figure 1

Control system and organisational framework of the centrally-planned economy



With the end of the communist regimes in East-Central Europe the planning authorities also lost power. The plan as the central instrument of the distribution and allocation of resources was scrapped. The central functions of which products were to be produced and their prices were taken over by the market. The free fixing of prices on goods, capital and labour markets is very important. It informs both employers and consumers about scarcity and surplus and thus controls production and consumption. When a product ceases to be in demand, the producer becomes aware of this through a large stock which does not decline, even when the price falls. When the product still does not sell, despite the fall in price, it disappears, and maybe also the company concerned, without a planning authority having to make decisions. The market economy is undoubtedly superior to the centrally-planned economy in creating information, selecting out companies and for a series of decision-making processes.

The replacement of the planning authority by the market is a many-sided and complex process. It is not enough to dissolve an institution and hope that the market will appear from nowhere. Markets also have to be created first of all. They need institutions and specific framework conditions. Only a few elements are shown in *Figure 2*. Freedom of contract, for example, ensures the individual has the right to make autonomous economic decisions. It guarantees employers and consumers the right to choose the suppliers most favourable to them and to do business with them – independently, autonomously, but still in a legally-secure framework.

The same process applies to questions of new products, increased production and price-fixing. In each case it is the decisions of autonomous employers and consumers that hold away. Decisions are made not by a bureaucratic central planning authority but by many autonomous and independent economic subjects. The wrong decisions may be made in some cases, but this has only a marginal affect on the market. This is the exact opposite of the decisions of the planning authority which are made by a very small number of people. As a result of this atomistic basic structure the market economy is more tolerant of mistakes than a planning authority.

Figure 2

Control system and organisational framework of the market economy

Freedom of contract, mobility of capital and labour



Private property of the means of production

This abstract juxtaposition in model form of the planned and market economies is intended to draw attention to the differing framework conditions and functioning of the two. Both the planned and market economies have a logic of their own. For the long-term stability of a market economy the private ownership of the means of production is just as important as freedom of contract, the freedom of establishment of workers and the mobility of capital. A transformation policy seeking to realise some of these elements that puts together "à la carte" a specific mix of political measures will fail in the long-term.

The programme of transformation policy results from the juxtaposition of the planned and market economies. One of the most urgent aims is the installation of the framework conditions. These comprise the privatisation of the means of production, trade regulations, contract law, a new tax system and monetary policy, to name but a few elements. Then there are institutions like banks, insurance companies and public authorities, which link the framework conditions with the real world and call markets into being. For example, a free property market cannot exist without a system of mortgage companies and credit banks, without estate agents

and newspapers with corresponding supply and demand advertisements. In the communist era before 1989/90 all these things either did not exist at all or only in a very rudimentary form. To accompany the market economy mortgage companies, credit banks, estate agents and property newspapers first had to be created. Many of these things occurred very quickly but others need longer. However, those "shock therapists" claiming that capitalism could be installed within a few months were soon proved to be wrong. The legal anchoring of the new framework conditions required several months, even a few years, before a political consensus could be reached for the adoption and implementation of legislation. More time is needed to create new institutions and to make them effective. And more time still is needed to allow enterprise and market-type behaviour to develop.

Particular national paths

Bringing the basic and generalised concept of the transformation process into reality significant differences occur. When the unifying blanket of communism was removed, old historical structures, differing traditions and mentalities regained importance and particular political strategies were chosen. The actual process and the future development of the former communist countries are and will be dependent on the way they had developed in the past. This development that can be labelled as path dependency development have led and continue to lead to an increasing differentiation between the countries of East-Central Europe. A few stylised factors should illustrate this diversity.

The Czech Republic, for example, was and still is a highly industrialised country whose economic successes and social security made for social integration. The economic success – even in the past – meant that the readiness for political reform remained weak and the opposition low-profile. The opposition was existent but restricted to intellectual circles without a broad societal basis. But on the other side the intellectual dominated opposition was able to replace the communist elites after the "velvet revolution" immediately.

After 1989 Czechoslovakia, as it then was, opted for a radical form of political transformation – rapid democratisation and the large-scale replacement of the political elite – and for a more moderate form of economic transformation with a mixture of Big-Bang and caution together with a very specific form of privatisation (privatisation of small enterprise by auctions and of large enterprises by the so called voucher privatisation).

The development in Hungary and Poland was different. Hungary and Poland were late industrialised countries with a lower standard of living. The national identity – and in the case of Poland the catholic church – played a major role for

the social integration. The opposition was strong, numerous and well rooted in the population. The communist parties in Poland and Hungary were willing to reform the political and especially the economic system step by step. Maybe this is the reason why the political transformation required in the case of Poland a couple of years.

In Hungary and Poland the political transformation was less radical and the replacement of the elites not complete. Former communist politicians emerged in leading position also after 1989–90. This is reverse to the situation in the former Czechoslovakia. In Poland and Hungary the political elite survived while the majority of the firms were closed down, privatised or newly established. In the former Czechoslovakia – especially in the Czech Republic – the political elites were replaced but the old enterprises survived.

It is difficult to evaluate the influence of the different historical preconditions and the political strategy in a precise manner but it is obvious that there are consequences for the actual situation in the post-communist countries. In general the process of economic transformation has so far led to similar results in the countries of East-Central Europe but in detail there are differences caused by the varying initial conditions and policies.

In all the countries concerned there was a marked fall in gross domestic product and particularly in industrial production, which was the first time in post-war Europe that there had been such a dramatic fall. With the removal of the protective hand of an economic system with “guaranteed” markets, all manufactured products were suddenly faced with international competition. Many firms were unable to cope with this. The system of international labour distribution, a core feature of COMECON, lost effect overnight.

In the first year of the transformation GNP in Poland which realised a Big Bang strategy fell by more than 11%. This fall was markedly smaller in Hungary, Slovakia and the Czech Republic. However, their economies have since recovered from this shock decline. Growth rates of between 4% (Slovakia) and 5% (Hungary) show that the negative economic growth has long since bottomed out. The only exception is the Czech Republic where the growth rate declines after 1995 significantly also as a consequence of the specific economic transformation policy.

The fall in industrial production triggered off rising unemployment figures. Within just a few years unemployment became a mass phenomenon. Between 1990 and 1991 the unemployment rate in Slovakia rose from 1.6% to 11.8%, in the Czech Republic from 0.8% to 4.1% and in Hungary from 1.9% to 8.5%. Only in Poland, where the initial figure had been higher, was the rise from 6.3% to 11.5% relatively low.

Table 1

Stylised factors of national diversity

	Czech Republic	Slovakia	Poland	Hungary
Economic preconditions	High industrialised country (especially in the Czech Republic) with a small private sector; the economic success gave no reason for economic reforms until 1989–90	Late industrialised and concentration of Industry in some centers; low proportion of a private sector	Late industrialised country with a large private sector; especially in the agriculture and partially as a shadow economy	Late industrialised country with a relatively large private sector; economic reforms after 1968 lead to significant second economy
Political preconditions	Social integration through the economic success and the relatively high standard of living; weak political opposition; dominance of the communist party	Social integration through the economic success and the relatively high standard of living; weak political opposition; dominance of the communist party	Social integration through the national and religious identity; political opposition as a mass movement; weaker position of the communist party	Social integration through national identity; dominance of the communist but "hungarian" party
Political and economic transformation process	Rapid implementation of democratic institutions; low continuity of elites; specific economic transformation (auction and voucher privatisation)	High continuity of elites; foundation of the independent republic in 1992; reduced dynamic of the economic transformation after the independence	Long preparation and after 1989/90 rapid implementation of democratic institutions; relatively high continuity of elites; radical economic transformation (Big Bang)	Relatively rapid implementation of democratic institutions; average continuity of elites; successful economic transformation with dominance of foreign capital

Source: Own compilation.

Table 2

GNP growth rates in % (at constant prices) 1990–1998

	Czech Republic	Slovakia	Poland	Hungary
1990	-1.2	-2.5	-11.6	-3.5
1994	3.2	4.9	5.2	2.9
1995	6.4	6.9	7.0	1.5
1996	3.8	6.6	6.0	1.3
1997	0.3	6.5	6.8	4.6
1998	-2.3	4.4	4.8	5.1

Source: WIIW 1999.

Because industrial production fell faster than employment in the first years of the transformation, the hidden unemployment in the firms grew. It was only gradually that a system of unemployment benefits was introduced and that hidden unemployment became visible unemployment. As a result, unemployment rates rose in most East-Central European countries in the years up to 1993–94. Then, however, the positive economic growth led to a growth in the demand for labour and thus to a fall in unemployment or at least to a stabilisation. The path of the Czech Republic is different once again. There the unemployment rate rose up to 7.5%.

With the removal of the protective hand of the state, the first years of the transformation also saw the reduction or complete removal of all subsidies. As a result, a whole range of products became considerably more expensive. As many subsidised goods represented advance payments in a continuing production process, delayed price increases resulted. The rise in energy prices and the removal of agricultural subsidies had a particularly strong effect on increasing prices. In the first few years it was only a very disciplined wages policy and a strict control of the money supply that prevented a further growth in inflation. In 1990 consumer prices rose in Poland by a remarkable 586%, in Hungary by almost 30% and in the former Czechoslovak Federation by around 10%.

Table 3

Unemployment rates, 1990–1998

Year	Czech Republic	Slovakia	Poland	Hungary
1990	0.8	1.6	6.3	1.9
1991	4.1	11.8	11.5	8.5
1992	2.6	10.4	13.6	12.3
1993	3.5	14.4	15.7	12.1
1994	3.2	14.8	16.0	11.4
1995	2.9	13.1	14.9	11.1
1996	3.5	12.8	13.2	10.7
1997	5.2	12.5	10.3	10.4
1998	7.5	15.6	10.4	9.6

Source: WIIW 1999.

Following this adaptation inflation, there was a decline in price rises. This was very noticeable in Poland, as well as in Hungary and Slovakia, but less pronounced in the Czech Republic; there, however, it had also not been very strong at the beginning of the transformation.

One reason for the decline in price inflation can be found in the disciplined incomes policy of the early years. This succeeded in putting a brake on the wages-

prices spiral. The disciplined incomes policy in East-Central Europe also led, however, to real reductions in income. Real incomes fell very sharply, particularly at the beginning of the transformation. This is where the bigger social problems are also to be found: for the majority of the population the transformation was accompanied by reductions in living standards and wages.

Table 4

Annual % growth in the consumer price index, 1990–1998

Year	Czech Republic	Slovakia	Poland	Hungary
1990	9.4	10.6	585.8	28.9
1994	10.4	13.6	32.2	18.8
1995	9.0	9.6	27.8	28.2
1996	8.7	5.8	19.9	23.6
1997	8.3	6.2	14.9	18.3
1998	10.7	6.7	11.8	14.3

Source: WIIW 1999.

The disciplined wages policy could only be maintained for a few years. The rapid growth in many sectors (banking, insurance and quaternal services) and in central business locations (Prague, Budapest, Warsaw) brought it to an end. The rapid wage rises exceeded the growth in productivity and on the whole led to higher wages. This increased both private consumption, particularly of foreign products and services, and prices. This development was particularly evident in the Czech Republic.

Table 5

Annual growth rates of exports to the EU in %, 1990–1998

Year	Czech Republic	Slovakia	Poland	Hungary
1990	20,6	20,0	830,1	32,2
1994	16,7	51,3	52,4	50,8
1995	12,8	27,3	43,1	41,4
1996	-1,1	17,1	12,2	23,4
1997	25,1	19,0	24,1	52,4
1998	26,1	37,6	24,5	41,8

Source: WIIW 1999.

The reorientation of foreign trade ran successfully. Within a few years the firms that had been run under COMECON principles managed to adapt to West European markets. Nearly every year and in nearly all the countries exports to the EU increased by double-digit figures. Only the year 1996, when many factors converged, brought the Czech Republic an exceptional fall of 1.1%

Rising private consumption in the Czech Republic, made possible by an increase in domestic purchasing power, led to an increase in imports. The foreign trade deficit was thus increased, because at the same time exports weakened, partly as a result of rising personnel costs and the declining productivity of firm connected with this. A further consequence of the voucher-privatisation were the very visible ownership structures, which pose great obstacles to the necessary reorganisation of large firms. The transformation dynamic of the Czech economy was slowed by the lack of professionalism in the management of smaller and medium-sized firms and a still over-large public sector (railways, telephone, administration).

At the start of the transformation the abolition of subsidies and the restrictive spending policy led to a lowering of budget deficits but the latter increased again markedly later on. The main reasons for this lay in the declining economic activity and in rising social costs (unemployment). Other causes of the growing budget deficits are connected with privatisation, which enjoyed tax concessions, and with the favourable tax treatment of self-employed and employed people's incomes. The black economy is significant and the tax revenues are below average.

Leaving aside the macro-economic balance, the increased unemployment and increases in living and private consumption costs, clear improvements ensued in daily life. One success story was the fact that the partially-monetarised economy with barter trading and strongly segmented markets, has become monetarised and more open. Money has again become the generally accepted means of exchange. The "dollarization" of the economy has completely disappeared, because there is no longer a gap between an official and an unofficial exchange rate. But this success story contains different chapters. Some countries were and are more successful than others. And once again: The differentiation of the economic and political transformation process is necessary and the implicit assumption of convergence and of automatically disappearing of the differences between the countries holds not true.

Regional transformation research

Transformation policies lead not only to new, market-orientated economic modes, to new disparities between the countries of East and Central Europe but also to changed quality of locations and regions. Transformation policies upgrade implicit or explicit some locations and downgrade others. Regional transformation research

is concerned with the systematic description of these consequences. This new research field has established itself very rapidly and is now one of the fastest-growing research areas in regional science.

Basically, regional transformation research is concerned with the regional changes as a result of the switch from a centrally-controlled planned economy to a market economy. The predominant issues are those of housing, work, infrastructure and the quality of locations. Spatially the issues of transformation research are based on large cities. It is there that the economic and social changes in the wake of transformation are most clearly visible. The city as a burning glass is a popular metaphor which is also particularly apt for regional transformation research.

Regional transformation research has led to a series of solid, empirically-supported findings. Many of the things that were still controversial in 1989/90, and which led to academic discussions, can now be seen as explained.

Metropolises as economic growth poles

The polarisation theory predicts an economic upswing in the metropolises and in some border areas, while the peripheral regions are stagnating. This theoretically approach of the regional change during the transformation process have proved to be more or less accurate. There is a consensus that the metropolises of East-Central Europe are among the "winners" of the transformation process. The labour markets in Budapest, Prague and Warsaw have almost dried up. There are increasing signs of a new immigration from neighbouring countries to the east putting pressure on those branches of the labour market where there are no jobs left for local people.

The freedom of establishment and trade, together with other factors, has led to a massive wave of new firms being established, particularly in the services sector. Small firms have emerged. Many unemployed people have risked becoming self-employed. Ground-floor panel construction flats have been turned into food shops and hairdressing salons. Managing directors of state-owned firms have become self-employed business consultants. The growth of a compensatory labour market has been evident. This trend is increased by the investment behaviour of foreign capital, which has been concentrated in the large metropolises.

The downside of a booming urban economy is the increase in social disparities. The establishment of foreign firms has also brought to the cities foreign managers with Western salaries. Those who speak foreign languages can earn much more today than a few years ago.

On the other hand, the downgrading of the public sector and of social benefits and the massive reduction in the raw materials industry have led to far-reaching changes in the social structure. Unemployment has become a mass social phenomenon. The old social middle class – civil servants, teachers, administrative officials, members of the military – have lost social prestige and status. They have

been joined by skilled workers and pensioners who can no longer find work with which to supplement their modest income.

Poverty, unemployment and homelessness are one side of a society which is becoming increasingly unequal and the other side of which is characterised by an often ostentatious new affluence. Anyone that keeps an eye open as he walk through Budapest or Prague cannot help noticing this new form of social inequality and understanding why parties with social slogans are gaining ground again.

To this is added the social segregation that has followed the privatisation of the housing market. Following privatisation, rents rose rapidly. The population's immobilisation has been brought to an end. A society which is in the process of re-stratifying itself is beginning to take up a differentiated housing supply which varies by location, size and legal type. In more affluent social groups there is a stronger demand for private houses and flats in the "better areas" of town. Primarily, these are in the inner cities and in the favoured "green" parts of the metropolises. Poorer building stock is less popular and its modernisation is becoming the duty of the public authorities, like the accommodation of those in social need who are new to the housing market.

Border regions as gainers

The second type of regions that has benefited from transformation includes all the areas bordering on Western Europe. They are in a favoured position and differ very clearly from the countries bordering the former Soviet Union and Romania. These eastern border areas represent a new periphery. Gorzelak (1996) has described them as a new "eastern wall". Although the opening up of borders has stimulated trade and cross-border activity, the prospect of accumulating capital remains slight. Small traders from Belarus and the Ukraine offer their goods cheaply on the streets from temporary stalls or try to find short-term work in the black economy in Eastern Poland and Hungary. This gives little hope of the emergence of an economically prosperous region.

The regions bordering on Western Europe, however, are characterised by a different dynamic. There the consequences predicted by the neo-classical model can be seen. The population of the border regions can achieve higher salaries as weekly or daily commuters and use these both for consumption and for productive investments. At the same time, traders and many service industry workers can achieve higher turnovers and profits from the sale of their goods and activities. Regional economic circulations are set in motion by the income earned abroad and the proceeds of the goods and services sold at home.

There is also the fact the regions bordering Western Europe are favoured business locations for firms relocating and for those newly setting up. These include not only large "showcase projects" like the establishment of the Audi factory in

Győr and the General Motors-works in Szentgotthárd, but also many small enterprises in the trade and services sectors.

The developments in the border regions are impressive and extremely dynamic. The positive integration effects they are having are clear to see. Unemployment is less than the national average, private industry is growing and living standards are rising.

Industrial cities as losers

Among the main losers of the transformation process are the industrial cities. The industrial giants of East-Central Europe and thus also the industrial cities are today having to adapt in two ways: on the one hand the products they manufacture have to be adapted to the demands of the new trading markets while keeping pace with competition; at the same time they must also catch up in a much shorter time frame with the changes that have occurred in the structure of industrial production in recent years in Western Europe. However, many industrial firms are incapable of this rapid transition from a Fordian to a post-Fordian production structure. They are having to close and, by ceasing to be the monopoly employer, they are responsible for the vicious circle that leads to the downgrading of their area.

The unemployment that follows their closure particularly affects younger people, women and those entering the occupational structure for the first time. A trend towards the closure of local labour markets can be seen. This later leads to the emigration of younger workers and of the unemployed. While this implies a fall in unemployment, it also entails a loss of young consumers and of qualified labour. The lack of a labour market for younger and qualified workers also represents an obstacle to the relocation of firms. A negative and cumulative process sets in which means the beginning of the end for many industrial areas.

Numerous examples come readily to mind of such local "labour market disasters" and of the vicious circle of the downgrading of a region that they set in motion. Starachowice in the south-east of Poland (Woiwodschaft Kielce) is one of them (cf. Gorzelak, 1996. p. 80), Mielec, Ostrowiec and Stalowa Wola are other Polish examples, together with Miskolc and Ózd in Hungary.

Rural areas as "islands of stability"

A fourth type of regions which should be addressed are rural areas outside the urban fringe and the border regions. Rural areas have in many cases remained largely untouched by changes. A return of the collective farming system to family farming has not so far been observed. The agricultural production firms continue to exist and have merely changed their organisational forms. To be sure, there is a high level of open or hidden unemployment in rural areas and a decline in jobs both within and outside agriculture. But partly, however, unemployment is reduced and

socially concealed by an existence in private agriculture. This is particularly true in Poland, where collectivisation only affected some agricultural firms. It is obvious, however, that the problem of under-employment and the massive decline in jobs outside agriculture remains unsolved in agricultural areas.

There is also the fact that rural areas are well equipped with private development houses which, while they have a high utilisation and exchange value, are not worth much on the market. This delays rural mobility and further stabilises rural areas. Anyone travelling through Eastern Slovakia, Eastern Hungary and the rural parts of Bohemia and Moravia soon notices that little has changed there and that time seems to have passed very slowly.

Conclusions and new challenges

The return of East-Central Europe into Europe and the transformation of society, the regions and the state connected with this are among the most fundamental changes occurring at present. Regional transformation research has an important function in this. It will accompany the transformation process and systematically observe and analyse the regional and social effects. It will concern itself with the metropolises, the border regions, the industrial cities, the housing market, the labour market and social inequality.

Assuming that the path dependency development will not lead automatically to a convergence of regional and social structures the regional transformation research will be important in the future too. The system of central planning has left behind structures which can no longer be reversed and which thus form the basis of something "new". The collectivisation of agriculture, for example, has very specific utilisation and ownership structures which can no longer be changed in practice. Despite the possibilities of the law, there can be no return to a family-oriented, small-business agriculture. The development of agriculture and of rural areas will thus proceed differently than in Western Europe.

The same is true of urban growth areas in the large metropolises. The way in which Petržalka in Bratislava, Nowa Huta in the east of the Krakau and the Süd-stadt in Prague have been built up will continue to mark the urban landscape for decades. The extent of socialist housing makes it inconceivable that the socialist suburbs will be torn down and rebuilt. Urban structures have undergone lasting changes.

Therefore it is less a question in all of whether the regional science would like to concern itself with the transformation and with Central and East-Central Europe. For the planned eastward enlargement of the EU focuses attention on this region as well as on the fact that an end of transformation can really only be postulated theoretically. Regional transformation research will be an important issue nowadays and in the future.

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7 PATTERNS OF POST-SOCIALIST TRANSFORMATION IN THE RURAL AREAS OF CENTRAL EUROPE

Marie-Claude Maurel

The political, economic and social changes that occurred in Central Europe through the 1990s have profoundly transformed the structure of rural societies. Changes have been wide-ranging and their underlying trends have now been identified. In this short article, we will confine our analysis to the main features of the changes in order to characterise the overall social and historical background in which they have been taking place. The diversity in the trends that have emerged at different national, regional and local levels is less easy to identify and explain. The process of transformation has been taking place in different ways in different areas, a fact that raises fundamental questions as to the mechanisms and the nature of the forces behind these differences. In attempting to identify reasons that may account for the specific features of individual transformation processes, we have developed a comparative approach based on empirical observations, to bring out the complex interplay of the factors affecting the dynamics of each situation.¹

Ten years on, what changes have emerged?

Many dimensions of transformation

The term “system transition” is used to describe how the rules that regulated society under socialist systems have changed. This transition, which was brought about through radical changes in the political systems governing the Central European states, needs to be apprehended as an overall process encompassing both the economic and political spheres. It encompasses more than the shift from a planned economy (*i.e.* the process of adjusting the activities of economic agents) to a market economy in which the economy is self-regulated by market mechanisms: changing economic rules imply still broader changes in social relationships and behaviour. The time taken by economic agents to learn how the mechanisms of a new type of regulation work, their capacity for doing so and the way they learn

vary considerably from one individual and one society to another, depending on the differences between national, regional and local situations.

The new macro-economic context that has taken shape through institutional changes has brought about a profound transformation in the workings of the structures that organise economic, social and political life in rural areas. Our aim here is to highlight the trends that are common to all situations.

The basis for these changes has been the disappearance of the collectivist system under which all rural activities had been organised. We have used the term "collectivist system" to refer to a set of institutions (single-party system and collective ownership of means of production) and to the ways of coordinating economic and social relationships that together made up the system. Under their various forms (State or cooperative farms, cooperative organisation of farm supplies and collection of farm produce), collectivist structures functioned as part of an economy that was managed under strict control by the party machinery and the State. These structures made up the framework for all economic, social and cultural activities and social services, forming a largely uniform network that covered every aspect of local rural society.

This integration of the different dimensions of economic, political and social life in rural areas was disrupted by the political and institutional changes that began in the early 90s. We shall not go into the stages of the dismantling process here, other than to emphasise that as local authorities became more autonomous, new ways of representing the interests of local society began to emerge.² New management principles were introduced to promote more autonomous forms of local development. The former close links between collective farms and the political and administrative authorities were dissolved as soon as local administration reforms began to move towards a more genuinely democratic form of public life.

Having in fact been destabilised by the first effects of macro-economic stabilisation policies, and forced to privatise both their lands and means of production, the collective farms were superseded within just a few years by other forms of corporate production (company-type enterprises, owner cooperatives, family farms etc.). While the legacy of the former system still shapes the rural landscape in many ways (land parcelling, farm buildings and collective infrastructure), the logic that drives any enterprise has profoundly changed with the reform of the land tenure system and the integration into a market economy.

In terms of employment and GNP contributions, agriculture is declining everywhere to varying degrees. Productivity having become the overriding need, new farms established as a result of the transformation of the former State cooperatives and farms had to lay off parts of their workforce. Services that had previously been provided as part of the collectivist system became autonomous, through the creation of mostly small-scale businesses. The former organisational bodies (technical assistance, supply and collection etc.) either disappeared or were reconverted. Not

all industrial and agricultural workers have been able to keep their jobs or find other employment. Unemployment is particularly high among former State farm labourers. Small family-run farms have helped to alleviate a crisis whose effects vary widely in intensity in different areas and localities. The jobs created by the new private enterprises have not offset all job losses in the former State and cooperative sector. The erosion of employment in the countryside is paralleled by a diversification of socio-economic profiles in rural areas, resulting from the decline of farm employment and the emergence of new activities in the service sector.

With the decline of the egalitarian ideology which formed the basis of the collectivist system, social differences have become more marked, and patterns of inequality differ from the past. A social stratum of small entrepreneurs is taking shape. The great majority of households and individuals have accepted passive forms of professional adaptation or reconversion. Social exclusion and precariousness have appeared, especially among unskilled workers and some ethnic minorities, particularly gypsies. The change in ownership of the former collective farms (redistribution of land and means of production either as shares in new companies or in kind) has contributed to the process of social differentiation by creating opportunities for entrepreneurial activities. However, among individuals, such enterprises are driven more by cultural background and capacity for initiative than by any economic assets they may own. The scale of family incomes, which had been relatively uniform in a society dominated by public-sector salaried employment, is becoming broader. Greater affluence in a fraction of rural society is reflected in ostentatious consumption (new houses and cars, travel etc.) and is coexisting with new forms of poverty in which the signs are much less visible.

Ten years after the political systems of Central Europe were overturned, rural society has changed greatly, not so much in terms of its local contours, as there has been little migration during this period of relative demographic stability, but in the rearrangement of the strata within each society. Those who have been involved in the changes have generally remained in the same place throughout the past ten years, but the course of their lives has changed in many ways, sometimes in terms of their relative positions in local society.

The complex patterns of transformation

The choice of the term "transformation" rather than "transition" here is not neutral, for what is at issue is the nature of the change which has affected the economies and societies of Central Europe. The point of departure – a socialist economy with its particular rules and institutions – is well known, but what has been arrived at is much less clear, at least if it is assumed that the new market economy is based on a set of institutions, economic mechanisms and social relationships that work in the same way as those characterising the capitalist economies of Western Europe. Our

hypothesis is that the changes under way can only be assessed in relation to the previous system and that it would be inappropriate to analyse them with reference to a situation that is typical of economic systems which have had a very different history over the last half century.

The structural changes taking place in rural areas are giving rise to very diverse and sometimes hitherto unknown corporate forms of production. In this article, we shall deal with just two types of transformation in the agricultural sector.

By becoming legally incorporated as owners' cooperatives, the former collective farms have effectively undergone a conversion process which we shall refer to here as "neo-collectivist". Once the process of redistributing common property was completed, most new owners contributed a share to these "transformed" cooperatives. How these new structures have fared so far has depended partly on their ability to adapt to the new rules of the market, but even more on the change in internal social interplay, and especially on the strategies employed to control and appropriate profits, the ultimate purpose being to accumulate capital. As hybrid structures, these owners' cooperatives will necessarily change over time.

The revival of family-run farming has taken place in many different ways, whether in terms of the size of farms, the underlying logic of each enterprise or their market integration level. The smallest farms are similar in nature to the plots that farm workers were allowed to use for their own benefit under the collective system, while the larger farms (the borderline varies with each region or system of production) are attempting to recreate the family-farm logic based on close interlinkages between farm capital, labour and the family.

The shift towards a market economy involves much more than simply converting the forms of production inherited from the collective system to corporate forms that are the same as those which have evolved in capitalist societies. The transformations occurring today stem from a combination of old and new patterns – in other words, they are not evolving from a situation in which the past was entirely done away with: parts of the old system have been integrated into the new corporate forms created by institutional and organisational reforms. The post-socialist transformation process is thus characterised by a combination of inherited and newly developing patterns.

Local responses to the changes

Diversity in patterns and rates of change is especially evident at local level. Our assumption here is that these differences stem from the configuration of the various forces at work – both internally and externally – in each local society. Local societies do not all have the same adaptive capacity in situations of rapid and radical change. Furthermore, the area inhabited by each local society is defined both by its spatial position and by the external forces acting upon it, which vary in nature and

in terms of the influences they exert. Our analysis here is based on surveys which covered several localities in an attempt to identify the factors at work.

Individual initiatives and collective projects

Differences in the dynamics of local situations are in the very nature of a democratic system which recognises that individuals have capacities for initiative. Institutional changes have helped to liberate individual initiatives by eliminating obstacles to the development of private enterprise, and to develop local societies by introducing genuinely autonomous local district management. After decades of centralised state control, reinstating a favourable context cannot alone revive an entrepreneurial spirit or the will to implement local development strategies. When a society is faced with imminent and major changes, people react in many different ways, from passivity – the most frequent response – to more active patterns of behaviour on the part of those who try to anticipate changes which they believe are inevitable. There are considerable differences in the ways local societies respond and the time they take to do so. This raises questions as to how far geographical location and social context influence attitudes to change. Three social categories deserve particular attention in this respect: farm managers, entrepreneurs and the mayors and municipal councillors who are responsible for local development.

The new farm managers

In the early 90s, when decollectivisation first came onto the agenda, we made a survey focusing on intentions and plans among the staff of collective farms. What responses were there among local people to the structural transformation policies being implemented by their governments? What representations did they entertain, and what models did they refer to? Our subsequent observations in the field focused on those who were actually putting plans into practice to set up or take over a farm, in an attempt to understand their strategies.³

The first point that should be made was the fact that those who were likely to carry such initiatives through were in the minority. The second point concerns the farm model they referred to, which was in some cases a traditional peasant model and in others a farm business operating within a market context. People's representations with regard to these two models were characterised through their responses to questions on the ideal acreage of a farm, on investment strategies and on the role of the family in the project. These "conceptual" models, were based on the course of individuals' lives, their social origins and how recently their families had owned land, their level of education and their vocational skills. Wanting to own land again (through restitution policies especially) was a factor in the decision to recreate an independent farm. Thus, some families who, before collectivisation,

had owned farms whose size and facilities made them viable at the time were making attempts to revive a family tradition. We observed cases of this type in some Czech and Hungarian localities. Other factors were also at work in the choices that defined projects: thanks to the professional skills they had acquired, former specialists and technicians of collective farming were in a better position to create or take over an independent farm. Thanks to their broader and more thorough knowledge of the trade, they were able to use the material means which they often succeeded in acquiring during the redistribution process to better advantage in starting up their farms than ordinary farm workers. In many cases, the former managers of State farms and cooperatives organised the transformation process (privatisation plans) so as to become the managers of privatised farms. Though not all of them did become managers of farm or agribusinesses, many succeeded – demonstrating the importance of cultural background in economic initiative.

In Poland, where agriculture had stayed for the most part peasant farming, family-run farms suddenly came up against a process of differentiation with the abrupt shift to a market economy. Nowadays, over half the commercial agricultural production comes from a small group of dynamic and efficient farms (estimated at 15–20% of the total), while the weaker ones have dropped out of Poland's commercial supply circuits and are simply surviving on meagre incomes from other sources. The farmers in the first group are extending their lands, modernising and becoming more technically specialised, while the others – the great majority – have fallen back on the logic of subsistence farming to earn the family's livelihood and no more.

The new entrepreneurs

The reinstatement of private enterprise at institutional level has opened up potential for individual initiatives and symbolically rehabilitated the private entrepreneur, thus legitimating the most enterprising individual projects. This turn of events, however favourable to the creation of new enterprises, cannot in itself revive a thriving entrepreneurial class. There are many conditions to be fulfilled before a project can even begin to get off the ground. Those who naively believed that opening a warehouse or shop was all that was needed to join the ranks of the market economy lost out to poor preparation and bad management. Our observations of how businesses – both commercial and industrial – were set up in practice, and subsequent analysis of attitudes and strategies among those responsible, have highlighted several common factors of success. Such projects rely to varying degrees on material assets, capital, know-how and skills. The resources called upon were generally accumulated before the big changes of the 1990s. Our analysis of individual courses of action shows, retrospectively, that these people had generally undergone a prior learning period, usually within a socialist enterprise, as managers or technicians with managerial responsibilities. Those who had experienced some

professional mobility seemed to be in a better position to cope with the new economic context. It should be noted that in Poland and Hungary, some of the constraints unfavourable to the revival of entrepreneurial initiatives had been relaxed during the pre-transition period. The more enterprising individuals made the most of the extra room for manoeuvre provided by the “*second economy*” to start up additional and relatively lucrative activities. They were thus in a position to spot opportunities (available resources, social demand etc.), to gain experience and knowledge (know-how and networks) and to accumulate capital. Such experience – which could be seen as a prefiguration of enterprises – was therefore often a starting point leading to a decision to broaden its scope and consolidate its legal, material and functional basis.

In an institutional context which is still unclear, there can be many obstacles to the development of such initiatives, including the lack of ready access to funding, unstable supply circuits and market fluctuations. The capacity to overcome difficulties in an uncertain economic environment, together with speedy adaptation, are two of the essential qualities required to succeed in new business ventures. In a capitalist economy, still “untamed” in many ways, the determining factors are tenacity, resourcefulness – and sometimes the ability to break rules.

Mayors and other leaders of local development

Local elites have only been partially replaced. At this level of society, relatively few people are in a position to take on responsibilities in the management of public affairs. Under the old bureaucratic system, power was held locally by small groups of cadres who were selected by the Party. Their posts at the head of local government (People’s Committees and Councils), and as directors of the main enterprises and economic and social bodies were virtually interchangeable. Gravitating around this “*nomenklatura*”, their subordinates played out a kind of “*figurative democracy*”. The change in the political regime overturned the foundations of this domination of local society by an elite, by dissociating the areas of political and economic power that the bureaucratic system had woven together. The free elections organised in 1990 opened the way for changes in the make-up of the local leadership and ousted representatives that were perceived as the most despotic and corrupt. Most of the previous leaders successfully achieved their occupational redeployment: some gave up politics to take up economic activities, while others succeeded in shaking off their image as representatives of the old system by changing their political stance or party. The transformation of former communist parties into social democratic parties, and the return of traditional political groups – especially in Poland and Hungary – made such reversals of position much easier. While the old regime has retained some of its political clout in the Czech Republic’s rural communities (especially in Bohemia), it has lost its predominant position and con-

stitutes now a more or less active opposition to the new parties forming today's majority.

In terms of the organisation of the political forces and means of action available to local leaders, the situation varies widely from one country to another. The small size of most Czech and Hungarian rural communities – a result of the fragmentation of the administrative structure which began immediately after the change of regime – is a major obstacle to achieving greater local autonomy, since they lack the required financial means and capacities for action. In this respect, the Polish rural districts (*gmina*), which have remained stable in size since the administrative reform in the 1970s, provides a much more appropriate framework for managing community services and infrastructure. The enduring attachment to the farmers' party (PSL) has ensured a degree of continuity in political and social life. Many local leaders have been recruited from its ranks, and although none occupied major posts before 1989, they are relatively familiar with the management of public affairs. This is not the case in the Czech municipalities we studied. The new leaders here were elected on a platform that explicitly broke away from the former communist leaders. Despite local society's recognition of their moral standing, their previous training and professional life did not qualify them at the outset for their new responsibilities. Personal qualities, age and dynamism in local elected representatives are variables of major importance in local politics. The highly unequal standards of performance among local authorities means that rural districts are now in very different positions when it comes to coping with the economic and social challenges of transformation.

Local situations: the market makes the difference

Transformation has been proceeding very differently in different areas. Many authors have underlined the discrepancies in the pace and scope of transformation in towns, especially large towns and capitals, and villages and rural areas where the effects of the transformation crisis are the most severe. The regional differences in the level of development (in terms of industrialisation, urbanisation, transport infrastructure etc.) which the socialist system had attempted to correct are getting worse.

As the former collectivist system is progressively dismantled, the new system is taking shape through a series of mechanisms which select the economic activities and rural areas that are best able to adapt to the new market logic.

The change in the political and economic system has opened Central European countries to international trade and foreign investment, facilitated migratory flows and increased traffic along major highways. The impact of these changes varies from one area to another and is contributing to a shift in the relative positions of rural localities. In an economy which is essentially regulated by market forces,

geographic proximity to urban centres and access to major corridors and traffic interchanges are likely to enhance market positions.

The geographical location of the Steszew *gmina*, about 15 kilometres south of Poznań on the north-south highway linking the Baltic coast to Wrocław, has undoubtedly been a factor in the growth of new industrial and service companies – especially vehicle repair, hotels and restaurants – which derive their custom from the heavy HGV traffic using the Berlin–Poznań–Moscow corridor. Residents of the rural district are not far from the regional capital and its labour market, and new employment opportunities have contained the growing rate of unemployment to some extent. Those responsible for local development have been trying to make the most of these assets by creating an area zoned for economic activities and introducing fiscal incentives. However, they have not succeeded in attracting the German investors who had expressed their interest in the potential offered by the town's geographical location.

In the Sumava Range, the former Desenice State farm bordering the Federal Republic of Germany suffered from the presence of the Iron Curtain and the resulting strict control of population movements. After the departure of the German communities just after World War II, the area was recolonised by Czech migrants, but only to a limited extent. On either side of a border that was for many years one of the most impermeable in all of Central Europe, the density and types of human occupation now varies enormously. Tourists from Germany (hunting, green tourism, pilgrimages to Sudeten German memorials) have boosted the development of accommodation services in small towns and villages, while the increase in numbers of people travelling to Bavaria in search of work has offset some of the job losses that resulted from the liquidation of the former State farm.

The dense urban network in southern Moravia includes industries that have been established for many years but have succeeded in adapting to technological changes. The rural districts of Blatnice and Blatnicka have always supplied the workforce for these centres (Veseli na Horavu, Uherské Hradiste, and Hodonin) but travel back and forth increased over the last decade as the agricultural cooperatives laid off more workers. Every morning, residents leave their villages by the busload to work in the industrial enterprises in nearby towns. Recently established companies have taken on part of the workforce laid off by the agricultural cooperative (in which permanent staffing dropped from 621 in 1989 to 160 in 1996), but mostly in unskilled or home-based jobs.

Drobin rural district (*gmina*) in Mazovia seems to be at a disadvantage, being fairly distant from the town of Plock which has itself suffered from the decline of the petrochemical industry. The steep rise in public transport prices in Poland over the last decade has become an obstacle to mobility among rural dwellers who can only apply for relatively unskilled and poorly paid jobs. This is also a sparsely populated area with roads in poor condition, which is a further handicap to people

living a long way from the main town or main roads and railways. This is a major cause of marginalisation among a significant proportion of rural dwellers, with an attendant increase in local pauperisation. Furthermore, Mazovia is in the eastern part of Poland which has a lesser transport infrastructure and is generally not as well equipped or developed as the western part of the country. The region's position in relation to the well-known East-West modernity gradient reflects its comparatively low level of dynamism.

Territories and their different histories

The history of rural societies is crucial to a better understanding of the restructuring processes at work. By placing social actors in their local context, field research brings out the endogenous and exogenous forces that are likely to affect the way transformation proceeds. These forces appear to stem from a set of socio-historic factors that provide keys to interpretation and help to place the current transformation process in a long-term historical perspective. Shared history and geography produced systems that are relatively homogeneous. However, the model of change shared by all of Central Europe nevertheless had many variants that express specific national features.

Shared historical and geographic heritage

Historically, the rural lands of Central Europe belonged to large landowners until the agrarian reforms of the early 20th century and the aftermath of the Second World War, when they were integrated into the collectivist system. These periods of major change came to form a common historical legacy which has left its mark to this day in the collective memory. This is the case with the legacy of the large nobiliary and royal landowners. Geographic studies have shown that the agrarian pattern created by these large domains has endured to this day, on both large and small scales.⁴ The structural framework of the large farmholding was remodelled and extended to the entire country under the collectivist system, but is still the predominant pattern in today's agrarian landscape.

The agrarian societies of Central Europe do not have a long history of land ownership, and it is still partial and reversible. Collectivisation in the 1950s affected three peasant categories: those who had owned their lands for a long time, those who had received titles to land under the agrarian reform between the two World Wars and those who received land under the next agrarian reform after the Second World War. How far back land ownership goes is still a factor in the varying degrees of attachment of local societies to their lands. In destroying the age-old peasant lifestyle, the collectivist period also destroyed the specific features of peas-

ant societies as defined by the sociologist *H. Mendras*.⁵ The original peasant economy has degenerated to the point where it survives only as a small plot and an individual home, and peasant societies have lost all their powers of autonomous management as well as their role as a political and social force.

For several decades the collectivist system exerted pressures to standardise lifestyles and social interplay. This system was imposed by forces that were external to rural society and has left a common normative legacy. As they took over the functions of the rural community, collective farms also extended its members social rights and protection, under the authority of local government. The integration of local societies into a network of cooperative and State institutions brought them under the control of the Party-State, while the « wider community » became the framework for all social activity. The reorganisation of administrative division and the restructuring of the local centres network was an attempt to match the administrative division with the economic network by separating them from the traditional territories of local societies. Like all spatially-related facts of society, the influence of the collectivist system has been fading slowly, and landscapes will bear the signs of this form of spatial organisation for some time to come.

The final characteristic that stems from a shared historical and geographical legacy is the simultaneous entry of Central Europe's rural areas into a phase of rapid transformation of economic relationships and property ownership, which has implied changes in social structures, representations and value systems. However, while the overall direction of post-socialist transformation seems to be common to all these countries, there has been some divergence at the national level.

Specific national patterns

Local societies are evolving within a State-dominated national framework whose specific features are defined in terms of their belonging to a historic and cultural community. Although historical events have shifted borders and populations, this framework may be considered as a sufficiently stable frame of reference for analyses of major trends.

In the aftermath of the Second World War, the socialist system was introduced in countries which differed significantly in terms of their formation, national traditions, economies and levels of development. The history of the agrarian reforms took a different course in each case, and the symbolic value of the fundamental changes they produced in each country therefore differs. The history of these agrarian reforms is important in trying to understand in what terms the issue of restitution was raised after the fall of the communist regime. To decode the logic driving arrangements for re-establishing private ownership of land and real estate, the historical background has to be reviewed and the laws governing privatisation have to be seen in a historical perspective.

Despite a common structural legacy, there were marked differences in the political, economic and social situation of each country, which some have agreed to refer to as "initial conditions" but which actually mean the specific traits that each different national system acquired during the socialist period. These "initial conditions" have been analysed as the capacity to implement institutional and structural changes and, therefore, to influence the direction taken.

In Poland, collectivisation was abandoned at an early stage, which ensured the survival of a peasant system mostly made up of small privately-owned family farms. The State-run sector covered about one fifth of the land, mostly in northern and western Poland. The communist State had a policy that discriminated against peasant farms and effectively halted the process of modernisation and land consolidation, while distorting the economic logic of production activities caught between upstream and downstream enterprises. After decades of state interventionism, farmers suddenly found themselves having to cope with the rules of a market economy. The preservation of a fossilised agrarian structure and an abundant labour force hampered the capacity of family-run farms to adapt to the new economic environment. It has now been accepted that the factors promoting rural development are external to farming, and that rural areas cannot be restructured successfully without the parallel creation of substantial rural employment, e.g. in services and industrial production.

The Czech rural areas have remained closest to the collectivist stereotype. With gradually improving economic conditions (favourable price ratios and stable salaries), modernised equipment and techniques and more diversified employment and activities, the Czech model proved to be efficient as long as it was able to function within a planned economy. Having become relatively affluent during the collectivist period, country people naturally remained relatively attached to collectivist structures. The transformation of property ownership within large farms was carried out without dismantling the structure of those that took over their activities: they remained of a reasonable size but laid off excess manpower in substantial numbers. However, the family-run farms came up against numerous obstacles. Farming now only occupies a small minority of people in rural areas, which are continuing to diversify their economies.

In Hungary, various arrangements were introduced into the collectivist system which afforded a measure of economic prosperity among rural communities. The adoption of a « new economic mechanism », in 1968, enabled cooperatives to operate more autonomously and to diversify their economic base by developing industrial activities and services. Nowhere else were conditions as favourable to the development of individual farming. Small specialised farms using intensive production methods worked in close interdependence with the cooperative sector. For many individual farmers, the "second economy" became a matrix for developing a good head for business, which enabled them to accumulate a little capital and to

acquire some of the know-how they would need. Not all were able to take the perilous step in which they lost their close technical and economic links with the collectivist economy, and now have to earn a living from a market whose various circuits are unfamiliar to them. Only specialists and cadres from the former collective farms had adequate knowledge of the agents and networks involved, and the new entrepreneurs who have started up agri-food processing and marketing activities are mostly recruited from their ranks.

Territories and local societies: the impact of inherited traits

On this scale, the different patterns of post-socialist transformation appear to depend on the historical course of events in each local society. Sudden changes brought about by historical events have not always had the same significance and the same importance in different local societies. Such events have sometimes had no particular repercussions on the continuity of social relationships, while in other cases they have damaged the very roots of social cohesion. The periods of major change that mark the points where a society began to deviate from its previous course were analysed specifically in an attempt to identify the active dimensions of a society's inheritance and their role in the current process of social reorganisation.

Desenice: a society without roots

The entire population of this region in the southernmost part of Bohemia was evacuated in 1945. The peasants of German origin who had been tending this agro-sylvo-pastoral area were replaced by Czech "colonisers" who were given the houses and lands of their predecessors. The newcomers, mostly from the small or landless peasantry, were unable to re-establish the farms on a sound basis or to obtain lasting recognition of their title to the land. Economic difficulties forced them to join the agricultural cooperatives that were established in 1948. In the years that followed, these cooperatives were turned into State farms which were then progressively grouped together to form a single entity covering over six thousand hectares of arable land, pasture and forest. The salaried workers recruited by the State farm made up a rural proletariat with few ties to the land, who were scattered among the 29 villages belonging to the 4 districts of the State Farm. This area on the country's border was classified as a nature reserve and managed under strict State control, which was reinforced by the military. The State farm, whose mediocre agricultural output was supplemented by various auxiliary activities, was the main employer and the only provider of services to the population. In 1990–1991, the State farm was dismantled with devastating consequences (debt, bankruptcies, theft and squandering of everything that could be squandered) and privatisation projects did not get off the ground for a long time. Having been deprived of any official title to

their lands, the former landowners had great difficulty in obtaining restitution. Most were not interested in being reinstated as farmers. The property of the former State farm was fragmented and rented out to over twenty new entrepreneurs (most of whom formed shareholder companies). Our analysis of this group shows that it is made up partly of former State farm cadres and technicians, and partly of entrepreneurs from outside the area for whom taking over the lands seemed to be an investment opportunity. Now that it has opened up to the countries over its borders, this hilly region is diversifying again, through more extensive woodland and pastoral activities and the development of green tourism in a natural area in which some protection is being attempted. With low population density compared to adjacent areas, inhabitants of very different origins living in small, scattered localities with few financial means, there is little social cohesion and the area has remained marginal.

Blatnice: a society of small wine-growers

The villages of Blatnice and Blatnicka, in the heart of the southern Moravian wine-growing area, were part of a 2000-hectare cooperative for many years before regaining their autonomy. The first collectivisation phase, in the early 1950s, was hampered by very strong ties to the land among a peasant population of small and medium landowners, and the cooperatives stagnated for some time. The merger between two cooperative farms in 1976 created a powerful and well-equipped enterprise undertaking both agricultural and auxiliary activities (dairy, construction work, mechanical repairs etc.). These activities flourished and workers in the cooperative were relatively prosperous for some time. The villagers claim that social cohesion is high, and they are attached to egalitarian principles. Is this linked to the Catholic traditions of the area? Or is it an expression of the sociability that characterises this society of wine-growers who have kept their own small plots and wine cellars? There is little evidence of social differentiation in the virtually identical houses. Yet today, inequalities have reappeared or become more marked. The redistribution of the former collective farm's assets, now a landowners' cooperative, was more favourable to the former landowners (595 received land titles including 120 active members of the former cooperative) than to the workers. Initial contributions of a few hectares of land, some agricultural equipment and a few heads of cattle proved to have more value in terms of shares in the new enterprise than long years of labour in the former cooperative. Today, conflicts of influence are dividing the group of new managers. The stakes are control of the cooperative's capital, but these divisions are destabilising production management. Many small landowners who are not members of the cooperative have bought back their shares, thus eroding the cooperative's capital in a process that is compromising its future. The transformation of the former collectivist structure has created conflicts of interest and

roused deep-seated resentment amongst those who see themselves as having lost out to the changes.

Right at the beginning of the transformation process, in 1992, a small group of engineers and technicians seized the opportunity provided by the redistribution of the cooperative's assets trade their assets for equipment of particular value. They succeeded in getting hold of Blatnicka's collective wine cellar, turning it into a wine business which is now flourishing. The cadres of Blatnicka's former cooperative, which had been separated from Blatnice's in 1993, formed an agricultural company which rents six hundred hectares of land from small landowners who have retired or can no longer work them.

The changes are smoothly taking place. A few businesses have been set up, craftsmen are setting up their own businesses, and the more enterprising wine-growers have started bottling and marketing wine produced by the smaller growers. The most dynamic among them have seized opportunities to develop new types of activity, others have managed to keep their jobs or to find other employment on the spot or in nearby towns.

The patrimonial and income gaps that have resulted are something new in the local community. Over more than forty years, the whole notion of property had been distorted. The property of each household was limited to the house, the wine cellar, the vegetable plot and a small vineyard. Today, the very idea of inherited property seems unjust, and the restitutions have damaged the egalitarian value system. Although "the laws of economics are tough", as one woman resident put it, they have not damaged the cohesiveness of the local society. The social events continue to weave a web of solidarity: social life is organized around folk traditions, religious festivals, dances and gatherings between friends to taste the new wine

Drobin: local society destructured

As in many rural districts in Poland, the events of the last half century have left deep scars in the social landscape in Drobin. The centre of this market town, which had been the home of many Jewish artisans and shopkeepers who were killed in the Holocaust, became the property of the State which used it to house families in difficult situations. The larger domains and manors were turned into State farms, and part of the land was used to establish peasant smallholdings during the 1945 agrarian reform. Small to medium sized family-run farms, whether isolated or grouped into hamlets, became predominant.

Since the early 1990s, local leaders – who are mostly of peasant origin – have had to cope with social problems ranging from unemployment (900 people lost their jobs as collective enterprises went into bankruptcy and State farms were liquidated) to an increase in social ills such as alcohol abuse and theft, which are linked to a the presence of a type of "fourth world" made up of large or broken

families living on welfare. Although two businesses have successfully taken off – a mechanical assembly plant and a prepared meat product plant employing 90 and 600 people respectively – the local economy is stagnant. Low incomes among farming families and employees are an obstacle to the development of activities in trade and services. The district does not have the resources needed to remedy the lack of local infrastructure (water distribution and road networks) and the municipal council has no plans for local development.

Those responsible for the few initiatives that have emerged are all outsiders. The mechanical assembly plant took over a State enterprise that specialised in the construction of farm buildings, transport and equipment for power stations. The latter branch was taken over by former cadres and workers who also have a share in the capital of the new company, which is now successfully expanding. But this enterprise seems timid in comparison with the expansion of the small pork butcher's shop set up by a farmer who, in ten years, has organised one of the most powerful businesses in the entire sector, producing 60 tonnes of prepared meats per day and running its own slaughter house, distribution network and fleet of lorries. This "new Rockefeller" of the Polish countryside has managed to keep the company's capital under his family's control. Most social success stories have been on a rather smaller scale.

In this Mazovian rural district, farmers attempting to consolidate and modernise their farms are very much a minority. Half of the 900 farms in the district are not self-supporting, and will gradually disappear as the farmers retire.

As a remote district in an underdeveloped region, Drobin is particularly representative of the economic and social problems facing the Polish rural areas today.

Steszew: opening up to the world

In the early 1980s, Steszew, near Poznań, had a diversified economy combining cash crop farming using relatively modern technical methods, industries and construction enterprises. Part of the area was listed as a nature reserve within the Greater Poland Park and protected under specific regulations, although leisure activities were permitted. Agricultural lands were farmed partly under a socialised system (one State farm and five agricultural production cooperatives) and partly by individuals, most of whom had very small farms which they worked on a part-time basis, alongside a minority of family-run farms of more than ten hectares. The latter were relatively well-equipped and output for both crops and livestock was high.

In recent years, Steszew has been increasingly drawn into the peri-urban sphere: more and more people are commuting to work in the nearby town and new industrial activities and services (hotels and restaurants) have been set up. Public transport is good, and Steszew is fast becoming a residential area for people working in the regional capital. These developments have been accelerated by the change in the economic system. Farming activities have declined since the disappearance of

the area's collective enterprises. The great majority of farms are now only worked for food production or as a hobby, while the larger family-run farms are tending to consolidate their lands and to modernise their techniques according to areas of specialisation. Under the influence of the Peasant's Party, local politics are still very lively, after a short interlude – from 1990 to 1994 – which saw the rise to power of political forces spawned by the "Solidarity" movement. Whatever their politics, the local elites are giving priority to collective infrastructure (water mains, gas, telephone and road networks) and are driving active local development policies.

Steszew had always been receptive to modernisation, and has successfully negotiated its way through a process of adaptation to the new social and economic environment. Active entrepreneurs have emerged from the ranks of local society and succeeded in creating a dense fabric of small businesses, thanks to which the district can look serenely to the future.

Conclusion

In the current process of transformation, the course of history in each of these local societies accounts in many ways for the paths chosen by their members, which are generally a function of the inherited social traits at work. The social history of the Central European countryside has been marked by radical breaks with the past which have disrupted trends that have continued unbroken elsewhere. While country-wide processes of post-socialist transformation have many important points in common, patterns at regional level appear to owe a great deal to historical processes whose roots go far back in time in the areas and societies in which they emerged.

Notes

¹ This research work relies on fields surveys made within the framework of transition « observatories » concerning the rural areas in Hungary, Poland and the Czech Republic. Carried out in cooperation with researchers of these countries (I. Bockova, M. Halamska, H. Hudeckova, K. Kovacs, E. Piotrowska) these works have been the subjects of many publications. Some of them are mentioned in the bibliography.

² This process had been extensively analysed in Maurel M-C, 1994, *La transition post collectiviste, mutations agraires en Europe centrale*, Paris, L'Harmattan.

³ In accordance with the hypotheses that not all individuals have the same capacity for learning and that determinants linked to society, culture and locality may intervene in the process of differentiation, a survey was conducted among 367 persons working in cooperative or state farms in Poland, Hungary and the Czech Republic. This field work has brought to light the ideal models borne by workers as well as the characteristics and modes of operation of the new social forms of production. See Lamarche, H.-Maurel, M-C. 1995: Agrarian transitions in Central Europe, *Etudes rurales*, N° 138-140, 117-132.

⁴ See Rey, V., 1996, *Les nouvelles campagnes de l'Europe Centre Orientale*. CNRS Éditions, Paris.

⁵ Mendras, H., 1995, *Les Sociétés paysannes. Éléments pour une théorie de la paysannerie*. Paris, Gallimard.

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8 THE POLISH URBAN SYSTEM: STABILITY AND CHANGE. EXPERIENCE OF THE 1990S

Piotr Korcelli

Introduction

The radical political and economic change that came in 1989 could be expected to find its various reflections in the structure and functioning of Poland's urban system. Although this seems to be a rather plausible hypothesis, it has to be confronted with the well-documented rule, according to which national urban systems tend to display a considerable degree of inertia and stability (*Bourne*, 1975). Changes in such basic structural characteristics as distribution of urban places by population size, the urban hierarchy, as well as the spacing of cities and towns, may be less than pronounced, if at all observed in a short-term perspective (such as a single decade), even when urban functions are subject to a rapid change. Therefore, our initial hypothesis has to be modified and its scope restricted accordingly. The specific aim of the paper is to document basic shifts in the economic functions and the role of large, the middle-sized, and small towns the shifts, that have occurred during the 1990s, and to trace those changes against the background of the conventional population and migration statistics that describe the set of urban places in Poland.

This discussion will refer to, and partly draw upon some earlier studies on the Polish urban system, which summarized the developments of the 1970s (*Dziewoński-Jerczyński-Korcelli*, 1984), and the 1980s (*Korcelli*, 1990a; 1990b). This should allow us to identify long-term trends, as opposed to those that can be attributed to the on-going systemic transformation.

The following section of the paper will focus on the population subsystem, mainly the population size of urban places as well as rural-to-urban and inter-urban migration. Subsequently, shifts in economic functions and their implications for the evolution of the urban hierarchy will be discussed. In the last section, likely future developments, including those related to the growing interdependence and inter-urban competition at an international scale, will be outlined.

Changes in population distribution and migration

The 1990s have brought relatively little change in the general structure of Poland's urban system which is traditionally characterised by a fairly regular spacing of towns and a well-articulated urban hierarchy. The distribution of urban places by population size which closely follows the rank-size rule, has undergone only small alterations during the last decades. This, however, is an aggregate pattern which may hide more notable shifts in relative population size, and hence the ranks of individual urban places, within the urban system. It may also conceal some trends towards population concentration as well as population deconcentration in various size categories of urban places.

During 1950–1990, the overall trend was an increasing concentration of the urban population in medium-sized and large cities. This was, however, a rather slow process. As data in *Table 1* demonstrate, only the smallest urban places, i.e. those below 10 thousand inhabitants, were losing population relative to all other places throughout the whole period. The drop was particularly sharp during the 1970s, when 85 small settlements lost town rights in effect of the administrative reform of 1973–1975. The increase of the share, as well as of the absolute aggregate population number since 1990 reflects the opposite phenomenon, i.e. the elevation of selected rural places to the urban status (45 such cases, which, as a rule involved restitution of town rights formerly held).

Table 1

Distribution of urban population in Poland by city-size categories

Population size, '000)	Number of urban places						Percentage of the total urban population					
	1950	1960	1970	1980	1990	1998	1950	1960	1970	1980	1990	1998
Below 5	393	405	359	264	257	281	11.0	8.5	6.4	3.8	3.4	3.6
5–9	159	236	220	185	177	181	11.5	11.6	9.2	6.1	5.3	5.4
10–11	76	138	162	169	177	182	10.8	13.3	13.1	11.4	10.8	11.0
20–49	50	68	97	111	128	131	15.9	14.7	17.1	16.5	16.8	17.8
50–99	12	20	27	38	48	50	8.8	8.9	10.9	12.5	13.7	14.1
100–199	11	13	14	22	23	22	17.2	13.3	12.8	14.7	12.8	11.9
200 and above	5	9	10	15	20	20	24.9	29.8	30.4	35.0	37.3	36.2
(500 and above)	(2)	(2)	(4)	(5)	(5)	(5)	(14.7)	(12.7)	(19.1)	(20.5)	(19.0)	(18.3)
Total	706	889	889	804	830	870	100.0	100.0	100.0	100.0	100.0	100.0

Source: Demographic Yearbook 1987, 1999. Central Statistical Office, Warszawa, 1987, 1999.

The aggregate population of the smaller medium-size towns, i.e. those with 10–19 thousand inhabitants, increased during the 1950s, and was then slowly declining until 1990. The increase of the respective population between 1990–1998 reflects both the restitution of town rights and a reclassification of urban places from one size category to the next. The urban population size of 20 thousand represents a boundary between relative decline and relative growth. Until 1990, when a decrease in the share was recorded in one of the larger-size categories (as in the case of cities between 100–199 thousand inhabitants), this was attributable to reclassification – a graduation of a number of places to a higher city-size category. While this is taken into account, the end product of the differential growth appears to be, until 1990, a concentration of the urban population in cities between 50–99, and of more than 200 thousand inhabitants.

These rules, however, are no longer applicable. Between 1990 and 1998 relative (as well as absolute) increments of population numbers are observed in lower and intermediate city-size categories only. Cities in the 100–199 thousand population category, and especially those above 200 thousand inhabitants, have recorded both relative and absolute population losses.

The largest cities, those with 0.5 million inhabitants and more, have actually been growing at lower rates than the total urban population throughout the whole period since 1950. This can be seen for those periods (the 1950s and the 1980s) when the number of units in that category was constant. Since the mid-1980s the population of the largest cities has been stagnating, and more recently – decreasing in absolute terms. The combined population number of Warsaw, Cracow, Łódź, Poznań and Wrocław slipped down from 4488 thousand in 1990 to 4382 thousand in 1998. Intra-urban deconcentration was not a reason, since administrative boundaries of the cities in question are drawn quite liberally. This is more than just a reflection of a slowing-down urbanization in Poland; it indicates a change in spatial urbanization patterns.

The changes observed reflect a rapid decline of rural-urban migration, as well as a decrease in the level of birth rates. In addition to this, differential growth (and decline) of population numbers of individual urban places, and of city-size categories, is a product of inter-urban migration.

Poland has experienced a three-fold increase in the size of its urban population since World War II. Starting from a low urbanisation level of 34 percent in 1946, the country passed through the crossover point of 50 percent of the total population living in urban places by 1966, and has reached the urbanisation level of approximately 62 percent in 1990. The growth of the urban population was particularly rapid during the 1950s, it slowed down considerably in the 1960s, went up again during the 1970s, and was quite low during the 1980s. Since 1990 the size of the urban population has remained almost unchanged (1.3 percent increase between 1990 and 1998), similarly as in the case of its share in the total population. Hence, the urban system of Poland has ceased to grow in terms of its population potential.

Unlike in many other European countries (including those in Central and Eastern Europe), the rural population in Poland has shown a very small absolute decrease – by only 6.5 percent, or approximately one million between 1946–1990. This reflects the absence of large-scale land ownership transformations, i.e. of farmland collectivization during the “socialist economy” period. In the 1990s the rural population has increased by 175 thousand (until 1998) which represents an outcome of the restructuring of urban economy, in particular the decreasing number of jobs in manufacturing and construction, i.e. those sectors that have traditionally attracted rural migrants.

The evolution of the shares of the rural and urban populations within the total population results from the interaction of three components of change: differences in the natural increase, migration between rural and urban areas, and reclassification of the territory from rural to urban (as well as from urban to rural) status. In the case of Poland, as in most other countries, the birth rates are still consistently higher among the rural population. On the other hand, the effect of territorial reclassification has been rather limited, since the graduation of rural villages to the category of towns has, as a rule involved small communities, with low aggregate population numbers. Hence, the relative growth of the urban population is mostly explained by patterns of rural-urban migration.

As *Table 2* demonstrates, the volume of internal migration in Poland (migrations are defined as those changes in permanent residence status which involve the crossing of administrative boundaries of the lowest levels, i.e. of towns and rural townships) has decreased from 1.4 million a year during the early 1950s to 0.4 million in the late 1990s. This decline, in fact, has not been a continuous trend. The number of moves fell down sharply during the 1960s, to increase again in the late 1970s. However, owing to an administrative reform carried out in 1973 (the size of basic reporting units expanded by about one-third) only a part of the actual mobility increase was reported in the migration statistics. Since 1980, however, spatial population mobility in Poland has been subject to a rapid contraction. The 1990s have marked a continuation of this trend, with an exception of urban-rural migration.

Among the basic categories of internal migration, the flows from rural to urban areas were, until 1990, accounting for a growing proportion of the total. Their share was increasing both during the periods of mobility increase, and of spatial mobility decline, mostly on account of migrations among rural areas. The 1990s have marked a trend discontinuity in this respect. While the role of rural-urban migration, as a proportion of the total number of internal migration, has gone down sharply in both absolute and relative terms, it became surpassed in mid-1990s by urban-to-urban migration. Nevertheless, the latter category still accounts for less than one-third of all reported moves. A new phenomenon in the 1990s is an increase of migration from urban to rural areas. The residual category, i.e. the rural-to-rural migrations, has maintained their share in the total since the mid-1970s.

Table 2

Internal migration in Poland by urban and rural areas, 1952–1997

Time periods	Number ('000) and percentage of move: mean annual figures									
	Total number	%	Urban–urban number	%	Rural–urban number	%	Urban–rural number	%	Rural–rural number	%
1952–1955	1408.5	100.0	392.7	27.9	363.2	25.7	263.4	18.7	389.2	27.6
1956–1960	1343.5	100.0	311.6	23.2	322.1	24.0	238.1	11.7	471.7	35.1
1961–1965	1006.2	100.0	225.7	22.4	260.8	25.9	160.2	15.9	359.5	35.7
1966–1970	864.8	100.0	189.4	21.9	253.1	29.3	113.5	13.1	308.8	35.7
1970–1975	854.2	100.0	201.9	23.6	291.1	34.1	103.5	12.1	257.7	30.2
1976–1980	932.5	100.0	262.7	28.2	336.5	36.1	123.0	13.2	210.3	22.5
1980–1985	732.2	100.0	201.2	27.4	252.8	34.5	115.6	15.8	162.6	22.2
1986–1990	610.0	100.0	164.4	27.0	220.9	36.2	89.4	14.7	135.3	22.2
1991–1995	462.8	100.0	133.4	28.8	151.5	32.7	88.0	19.0	90.0	19.4
1998	425.8	100.0	125.0	29.4	111.9	26.3	103.3	24.3	85.6	20.1

Source: Demographic Yearbook 1986, 1999. Central Statistical Office, Warszawa, 1986, 1999.

During the earlier decades the proportion of moves originating within rural areas was considerably higher and was decreasing much slower than the corresponding share of the rural population. For example, during 1951–1965 the rural–urban and rural–rural migrations jointly accounted for 61.6 percent of all internal population moves, while in 1986–1990 the corresponding proportion was still as high as 58.4 percent. This indicated a persistently higher mobility of the rural, as compared to the urban population (as long as intra-urban moves were disregarded). In the 1990s this pattern no longer holds true. The rural–urban and rural–rural moves now represent less than 50 percent of the total. As *Figure 1* shows (with respect to rural–urban migration), the rural areas outmigration rates have dropped precipitously since the mid-1970s, while the respective rates for the urban areas have basically remained stable. If for a resident of a rural area, the probability of migrating to a town or a city was 22.83 per 1000 in 1975, it has decreased to 7.59 per 1000 by 1997. During the same period the corresponding rate for urban-to-rural migration has changed from 4.85 to 4.32. Even more pronounced is the change of immigration rates. Relative to its population size, the rural areas in Poland receive, since the mid-1990s, more migrants from urban areas than *vice versa*. This implies, providing the trend continuity, and keeping other components of population change constant, a de-urbanisation process, i.e. an increase in the share of the rural population in Poland. Although such phenomenon could assume only a transitional,

Figure 1a

Evolution of rural-urban migration rates in Poland

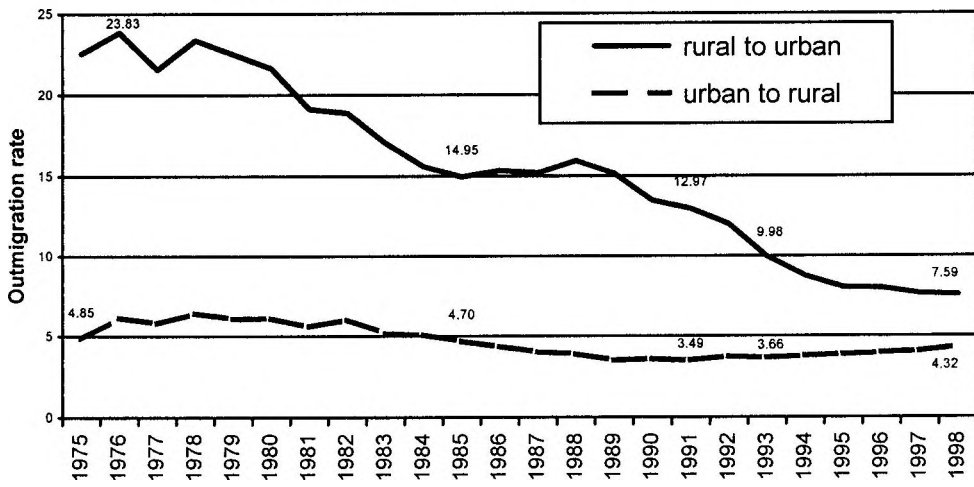
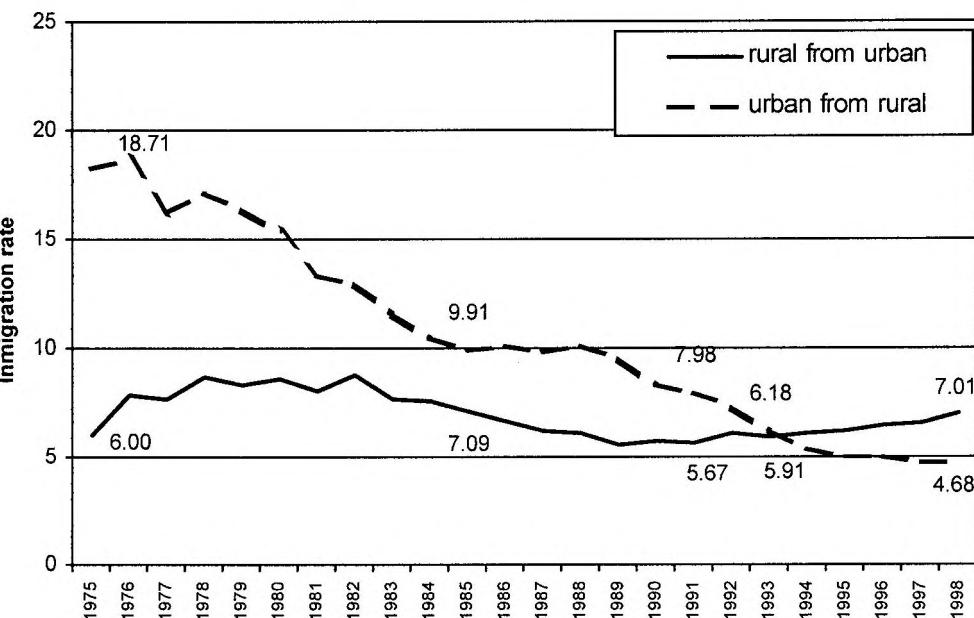


Figure 1b

Evolution of rural-urban migration rates in Poland



probably a short-term character, this shift points to the nature of spatial population change in Poland which, although seemingly quite recent, can nevertheless be traced back to the early 1980s. As we can conclude at this point, with a general decline of internal mobility rates, the migrations between rural and urban areas have become approximately balanced during the 1990s. What are the prospects concerning the rural-urban migration in the next decades?

In both scientific and policy-related debates, held in connection with the ongoing negotiations on Poland's entry to the European Union, questions concerning the large employment in agriculture and the high percentage of the rural population among the total population, are strongly emphasised. The agricultural sector is seen as generally overgrown, one requiring deep restructuring. This would involve, among others, a radical contraction of agricultural employment. Such a shrinkage could not occur over a short time period, as it would have to be accompanied by measures aimed at increasing the retention of non-agricultural (as well as occupationally non-active) population on farms (or, in the rural areas in general), as well as, by a substantial growth of rural-urban migration. This question requires a somewhat extended discussion, since its outcome may be quite critical for the future development of the urban system.

According to official statistical sources, employment in Polish agriculture accounted for 25.8 percent of the total employment in 1997. This share, which is very high indeed when compared to other European countries, has remained virtually unchanged throughout the 1990s. The same is true of the average size of farms which amounts to 7.8 hectares.¹ According to these figures, agriculture provides the livelihood to approximately two-thirds of the rural population. Nevertheless, this share is actually much smaller, as the figure quoted includes a large, and highly diversified sector of part-time employment which, in the case of a large segment of the farm population, provides only a lesser part of the total income. A more realistic figure, according to recent estimates, is 12–15 percent of the total – still high, but closer to the agricultural sector's contribution to Poland's GDP (which is 6 percent).

In order to improve the competitiveness of Polish agriculture in terms of the cost of production, labour efficiency, product quality standards etc., in view of the European integration processes, the number of farms producing for the market, and, as a consequence, the employment in agriculture should decrease considerably, to some 6–7 percent of the total employment by the year 2020. This will require provision of at least 3 million new jobs to compensate for farm jobs to be lost, as well as to account for the existing rural unemployment (*Stasiak-Zgliński*, 1997). Transformation of rural areas into a poly-functional economic and living space is a proclaimed goal of spatial as well as of socio-economic policy of the state. These policies are of the "jobs-to-people" type, which in this case implies aiming at the retention of a large part of excess agricultural labour in the rural areas.

We can assume that such policies may only be partly successful. However, they coincide with such factors as: (1) the ageing of the rural population which implies its decreasing demographic mobility; (2) a considerable, and based upon developed contact networks, short, as well as long-term labour migration of the rural (and small town) population abroad, to the EU countries and North America; (3) an acute shortage and the associated high cost of rental housing in the major cities; (4) a potential attractiveness of many rural areas in Poland as places of residence, in particular when confronted with growing dysfunctions characteristic of the large urban areas.

When these factors are confronted with observed trends and forecasts, according to which growth of economic activity and job creation, particularly in the tertiary and quaternary sectors, is (and it is likely to be in the near future) mainly concentrated in the large urban centres, one arrives at a conclusion that all forecasts concerning the size of future rural-urban migration are characterized by a high degree of uncertainty. Although it seems rather certain that rural-urban migration will increase during the next years, it may never again reach the magnitude observed during the 1970s, i.e. 200 thousand persons a year in net terms.

Under a moderate level of rural-urban migration, such as a more realistic level of 50–70 thousand persons a year, the urban areas may not be expected to grow rapidly in the future, especially as the natural increase of the urban population is close to, or even somewhat below the replacement level. Therefore, one should not anticipate major changes in the urban system of Poland, as a consequence of increasing rural outmigration. This impact, however, will be regionally differentiated. Rural population densities and the values of rural outmigration potential are the highest in the southeastern regions of Poland. On the other hand, the northern regions are those where the crisis resulting from the liquidation of former state farms is the most acute. Since at least 50 percent of internal migration moves in Poland tend to be intraregional (i.e. intra-voivodship) migration, the urban areas in both southern and northern Poland are likely to become overproportionately affected by the future transformation of agriculture.

The role played by inter-urban migration in the process of population redistribution is revealed by data in *Table 3*. (Unfortunately, owing to data limitations it was not possible to achieve a more detailed disaggregation of the category of large cities.) The pattern conforms to the hierarchical migration hypothesis (Korcelli, 1982). Such a pattern is identified when urban places in a given size category record net gains in their interaction with places of the smaller size, and net migration losses vis-a-vis urban places of the larger size.

This regularity, one typical of the intermediate phase of urbanization processes, can be found for each of the four time cross-sections presented, i.e. 1975, 1985, 1991, and 1997. In the first case, for all 15 pairs of city-size categories the flows

Table 3

Interurban migrations in Poland, 1975, 1985, 1991 and 1997, '000

From urban places of	Urban places of						Total
	below 5	5-9	10-19	20-49	50-99	100 and above	
1 9 7 5							
below 5	0.8	1.7	3.1	4.0	2.5	5.5	17.6
5 - 9	1.2	2.3	3.3	5.3	3.7	10.6	26.3
10 - 19	1.4	2.8	4.5	8.2	4.5	17.2	38.5
20 - 49	1.6	3.2	5.9	8.6	5.7	21.0	46.0
50 - 99	0.9	1.7	3.1	4.1	3.6	14.3	27.8
100 and above	1.9	4.7	7.7	10.6	9.9	28.7	63.2
Total	7.9	16.4	27.7	40.8	29.5	97.1	219.5
1 9 8 5							
below 5	0.5	0.8	1.6	2.4	1.7	3.3	10.3
5 - 9	0.5	1.1	1.8	3.0	2.4	6.0	14.7
10 - 19	1.1	1.5	2.7	4.5	3.1	9.5	22.4
20 - 49	1.3	2.7	3.7	5.7	4.2	15.0	32.6
50 - 99	0.9	1.5	2.1	3.5	2.5	11.2	21.8
100 and above	2.3	4.6	8.2	12.8	11.6	26.8	66.2
Total	6.7	12.1	20.1	31.9	25.5	71.8	168.1
1 9 9 1							
below 5	0.4	0.5	1.2	1.9	1.5	3.3	8.9
5 - 9	0.5	0.7	1.4	2.1	2.1	5.3	12.1
10 - 19	0.9	1.1	2.2	3.1	2.4	9.6	19.3
20 - 49	1.9	1.6	3.2	4.1	3.0	13.6	26.6
50 - 99	0.9	1.2	2.0	2.4	2.1	9.9	18.5
100 and above	2.0	3.7	7.9	11.4	8.6	23.2	56.7
Total	5.8	8.9	17.9	25.0	19.7	64.9	142.2
1 9 9 7							
below 5	0.4	0.4	0.9	1.4	1.0	2.6	6.6
5 - 9	0.4	0.6	0.9	1.6	1.4	3.7	8.5
10 - 19	0.8	0.9	1.9	2.8	1.9	8.6	16.8
20 - 49	1.3	1.4	2.7	3.9	2.5	12.7	24.5
50 - 99	0.8	1.3	1.7	2.3	1.6	8.9	16.6
100 and above	1.9	3.1	7.5	10.2	6.9	18.0	47.6
Total	5.5	7.7	15.5	22.1	15.3	54.4	120.4

Source: Demographic Yearbook 1976, 1986, 1992, 1998. Central Statistical Office, Warszawa, 1976, 1986, 1992, 1998.

from smaller to larger urban places were bigger and vice versa. In 1985 the only exception to the rule was a nominal net migration gain by cities in the 50–99 thousand category with respect to urban places with over 100 thousand inhabitants. In 1991 there was also one exception of this kind, pertaining to migration exchange between urban places in the categories of 10–19 thousand, and of 20–49 thousand inhabitants.

Thus, the hierarchical pattern of inter-urban migration has persisted in spite of the contraction of the total volume of flows by almost one half between 1975 and 1997.

The overall picture of inter-urban migration in Poland is one in which the smaller towns lose migrants in net terms with respect to medium-size and large cities – those with at least 50 thousand inhabitants. However, all the six size-groups of urban places have positive migration balance *vis-à-vis* rural areas. The relevant net migration rates are actually the highest for the two smallest city-size categories. These gains more than compensate for the net migration losses which the small urban places experience on the inter-urban level. They add to the differences in the rates of natural increase, which are consistently higher in smaller towns, and give rise to the recently observed population deconcentration in the urban system, in spite of the prevailing hierarchical migration patterns.

Redistribution of economic activity

In stark contrast to the overall stability of Poland's urban system in terms of population distribution and migration patterns, its economic dimension, when measured by the reallocation of economic activities and changing welfare levels, has been subject to a dynamic change since 1989.

According to results of numerous empirical studies (Gorzelak-Jałowiecki, 2000), the large cities, together with their surrounding urbanized zones (i.e. the urban agglomerations), have undergone generally positive economic change during the decade. Against data for Poland as a whole, these regions are characterized by low (3–5 percent) unemployment rates and above-average incomes and consumer demand levels. While attracting a large proportion of both foreign and domestic private investments, they have been able to restructure much of their economic base and to move from the previous dependence upon manufacturing, to a dominance of service sector activities.

Cities with 500 000 inhabitants and above² have increased their share in the national total employment from 26,3 to 29,4 percent between 1992 and 1998. This translated into an absolute employment growth, from 2297.3 to 2664.3 thousand. The large cities have also featured the strongest growth of tertiary sector employment, and, within the tertiary sector, a particularly dynamic expansion of market services (such as trade, repair, hotels and catering), as well as producer, i.e. finan-

cial, insurance, real estate and business services. In the latter category the employment growth was almost two-fold: from 259 to 475 thousand between 1992–1998 (Nowosielska, 2000). In fact, the figures quoted give only a partial picture of the service sector expansion which is led by small firms, while the data available cover enterprises with at least five employees.

This general pattern of change is by no means uniform among the individual large cities. In this context the case of Warsaw may be of particular interest, as the role of capital cities in the transformation processes in Central and Eastern Europe has been extensively discussed in the geographical literature (Enyedi, 1994; Lichtenberger, 1994; Fassmann, 1997). It is generally assumed that, owing to their market potential, the concentration of decision making power, and the location at the focal points of national infrastructural networks, the capital cities are in a privileged position to gain from spin-off effects of the expansion of international financial and real estate markets, and hence to participate in the new global economy. Such perspectives are much more limited in the case of other large cities, and even more so of the small and medium-size urban places. As a result, one could expect an increase of economic and social disparities, both at an inter-urban, and an inter-regional level.

In the early 1990s these rules did not seem to apply to Poland in a similar extent as to other countries of the region. At that time the position of Warsaw within the Polish urban system was relatively weak. It was even further weakened by the administrative changes of 1990 and 1994, in the result of which Warsaw became subdivided into several (7, then 11) individual townships, each equipped with extensive competencies, and a limited motivation for collaboration at the city, not to speak about the urban region level. Nontransparent legal provisions, together with an obscure ownership status of much of the land area in the city centre, provided a poor basis for long-term investments and the expansion of real property markets. All these factors contrasted with active investment promotion policies carried on by the local government in the established regional centres such as Cracow and Poznań. Prospects were emerging for the west-central region – the historical province of Greater Poland, with its capital in Poznań, to assume gradually the function of Poland's economic heartland, the role performed since the Second World War by the Upper Silesian industrial region.

This situation, however, has changed in mid-1990s, when the accelerating economic growth, as observed for Poland as a whole, has brought cumulated effects in the Warsaw agglomeration. As the present author has claimed (Korcelli, 1999), the transformation of Warsaw, as evidenced by its changing economic profile and land-use development, represents mainly a consequence, rather than a factor, of national economic growth. This remains in contrast to the role of other capital cities in East-Central Europe Prague and Budapest in particular, which can be considered as important magnets for investments and human resources "on their own ac-

count". In the case of Warsaw resources (capital as well as skilled labour) are attracted to the city and its surrounding zone owing mostly to the size of the national market and the rate of growth of the GDP, while local conditions, such as a rather low quality of the public space and an atrophy of the urban transportation networks, may generally be considered as hindering factors rather than magnets to prospective investors.

In spite of the persistence of some negative externalities, the metropolitan area of Warsaw has emerged at the late 1990s as Poland's leading economic region, one characterised by the biggest private investments, the highest earnings per capita (almost 50 percent above the national average) and the lowest (2–4 percent unemployment level). Its relative prosperity rests upon three interdependent pillars: the endogenous growth of the new private sector (mainly of business and professional services), the function of a national financial market, and the gateway role for international business transaction. It is estimated that Warsaw, together with its surrounding zone, accounts for more than one-fourth of the total direct foreign investments in Poland, while its share in the new office space constructed during 1995–2000 has amounted to some 80 percent.

The Upper Silesian conurbation, with its main urban centre of Katowice, represents a much different case of economic and land-use change. As it became apparent already in the 1980s, its growth potential, based upon traditional functions, i.e. coal mining and iron and steel manufacturing, had been exhausted. Since 1990 these sectors have undergone a graduate contraction, as a result of both governmental policies (which involve considerable subsidies) and market factors (including a declining demand for coal). The employment in coal extraction has gone down by about one-third (some 90 thousand) during 1992–1999. This has so far not resulted in high joblessness, as foreign investments (in automobile industry in particular), combined with the endogenous business activity, have been able to offset the job loss effects by generating alternative employment opportunities and income sources. Nevertheless, the structural transformation in the region is far from complete. Its subsequent phases are likely to bring serious economic and social problems within the next 5–15 years and to constitute a major challenge to spatial policies at both a regional and a national level.

The city of Łódź, the second largest in Poland, represents another case of a declining industrial agglomeration with 19th century origins. Unlike in the Upper Silesia, its industries (textiles, garment, textile machinery) have become fully exposed to international competition already in 1990. This resulted in a number of factory closures and a massive unemployment. Over the subsequent years the industrial activity has actually partly revived, as small private firms have taken over some of the production facilities and were able to absorb much of the skilled labour formerly associated with state-owned enterprises. Łódź and the surrounding zone have also emerged as a major distribution centre specialising in textiles and gar-

ment products, and oriented to both domestic and international (the post-Soviet states in particular) markets. Still, economic restructuring of the region has been rather "shallow", while its economic base remains vulnerable to fluctuations in price and demand levels. The highly-skilled and professional segments of the local labour are increasingly oriented towards the neighbouring labour market of Warsaw.

The two large, polyfunctional regional centres in western Poland, i.e. Poznań and Wrocław, have witnessed a relatively "smooth" structural transformation during the 1990s, as new industrial and commercial activities, to a significant part based upon foreign capital (which was largely used to modernise the technical gear in the existing facilities), have substituted for some of the older industries, such as metal-working and rolling-stock manufacturing. The pace of change has been slower in two other major cities and metropolitan areas of Cracow and Gdańsk-Gdynia, owing in part to the dominant role of steel manufacturing and shipbuilding, respectively, the two industrial sectors undergoing rapid contraction. Still, owing to historical values and other qualities of the local milieu, Cracow and Gdańsk have maintained their ranks as Poland's second and third most important urban centres in the 1990s.

In the next lower population size-category, i.e. cities of 200–500 thousand inhabitants, the pace and scope of structural adjustments have generally been comparable to those observed in the largest urban centres. Further down the urban hierarchy this process has been more differentiated. For example, the category of urban places of 50–100 thousand inhabitants has clearly been polarised into winners and losers in the transformation process. This rule applies to an even greater extent to the smaller towns, while the proportion of the cases of success diminishes with decreasing population size. Among local communities (townships) identified as local development leaders on the basis of per-capita public investments (*Surazka*, 2000), a majority are situated within, or close to major metropolitan areas. Other townships represented in this category include some seaside and mountain resorts.

In a cross-sectional perspective, employment growth, as well as income growth have strongly, and positively been associated with city-size between 1992–1998 (*Nowosielska*, 2000). This marks a departure from trends observed during the previous decade, when growth and contraction could not be associated with the specific population size or functional characteristics of urban places (*Korcelli*, 1990a). A characteristic discrepancy has emerged in the 1990s between the population redistribution and the reallocation of economic activity. With the level of internal migration remaining very low, and natural population change in large urban areas falling below the replacement level, the spatial pattern of jobs formation runs contrary to population trends. As some studies demonstrate (*Maik*, 1996), the metropolitan areas tend to intercept some of the economic functions formerly performed by smaller urban centres situated within their hinterland zones. This process is not

accompanied by the absorption of labour resources found in those smaller places. As a consequence of this, economic and social disparities, measured by income and unemployment differentials, tend to grow not only on an interregional, but also an intraregional scale. We can therefore speak of economic and social polarisation within Poland's urban system.

Conclusions and future prospects

Concentration of economic activity in the large urban areas, when accompanied by their decreasing population numbers – a consequence of shrinking internal migration – are phenomena of the 1990s. A number of authors, including the present one, had anticipated a substantial increase of population mobility in Poland to occur during the decade. So far this has not been observed, in spite of the fact that large cohorts of young people (a reflection of the high-birth rates period of 1975–1985) have entered the labour market in the recent years. Temporal migration to work abroad, which according to estimates (Okólski–Stola, 1998) involves 600–800 thousand persons at any point in time, together with a rapid expansion of tertiary education and the related extension of the average schooling period (the number of students has shown a fourfold increase since 1989, to reach more than 1.5 million in 1999), provide partial explanations of what can be described as a phase shift between demographic and economic trends. Nevertheless, an increase of spatial population mobility, in particular of rural–urban migration, is seen as inevitable during the 2001–2010 decade.

In these concluding remarks reference should be made to two other factors which are likely to have a major impact upon the structure of Poland's urban system in a long-term perspective. These include the spatial administrative reform and the extension of the range of inter-urban competition to an international scale.

In 1989, as a first step of a comprehensive administrative reform aiming at decentralisation of political power and building of local democratic institutions, the self-government was reinstituted at the local i.e. township (*gmina*) level. The locally elected bodies were equipped with extensive competencies, including, among others, organization of primary education, environmental protection, and land-use planning. The second step of the reform took place as of 1st January 1999 and involved a return to a three-tier division, similar to the one that existed before 1975. Self-government has been introduced at both the upper (16 *vivodships*) and the intermediate (373 *poviats*) level, with the former units serving also as a territorial sub-division in the structure of central government. All the major cities – those with the number of inhabitants of 100,000 and above – now constitute separate *po-viats*.

The outcome of the administrative reform of 1999 represents a compromise achieved following a long dispute between proponents of a limited number (8–10)

of "strong", regions oriented towards the main metropolitan centres, and supporters of the previous pattern, i.e. one with 49 voivodships as upper-level units. As a result of the reform, the smaller regional capitals have in a way become elevated to the top rank. This is so in the light of both regional policy and the spatial development policy. With the decentralisation of public finance and the diminishing role of the central government, individual voivodships are becoming responsible for the preparation and implementation of regional plans and strategies of spatial development, while the state retains mainly co-ordinating and controlling functions in this domain.

Another consequence of the reform is the strengthening of the position and development opportunities for nearly 300 towns, mostly of middle-size, which have assumed the administrative functions of powiat centres. Therefore, one may conclude, the new administrative pattern is a factor that stabilises the existing urban system and provides a limit for the scope of concentration in the urban hierarchy.

Conversely, the European integration and globalisation trends are likely to bring more dynamic effects. With an increasing orientation of urban economies towards international markets for goods and capital, the interdependence within national urban systems will tend to decline. This pertains in particular to large cities which aspire to perform specialized functions of international range. In the case of Polish cities, a specific challenge is posed by the development of Berlin which is likely to take in the future one of the top ranks in the European urban system. This may bring both positive (spread) and negative (backwash) effects so far as it concerns the functions of Warsaw, and of such cities as Poznań and Wrocław. These questions have so far been discussed in rather general terms (Korcelli, 1997; Kukliński, 1999), while they offer a suitable topic for empirical studies.

During the 1990s – the period of political, social and economic transformation – the process of urbanization in Poland has virtually come to a standstill. Internal migration has decreased by one-half, and the largest cities have been stagnating, or slightly decreasing in terms of their population numbers. Relatively higher rates of population growth are found in smaller towns and the less urbanized regions. While no longer growing, the urban system has been undergoing a slow deconcentration in terms of the distribution of population. This trend has been running against economic change which offers ample evidence of spatial concentration of economic activity (in particular the tertiary and quaternary functions), as well as of income potential in the large cities and their suburban zones. Owing to the above discrepancy, the observed trends in population redistribution are "premature" and reflect a temporal disequilibrium on the labour, education, housing and land markets. They should therefore not be considered as sustainable, long-range trends. Their longer persistence would lead to sharp interregional disparities and potential social conflicts.

Another phase of urbanization processes, and of spatial population concentration, one forecasted by numerous authors for the late 1990s, will probably arrive during the subsequent decade. However, it will no longer involve large scale population transfers, comparable to those that were observed in the 1950s and the 1970s. A part of the still large rural population of Poland will most likely become urbanized "*in situ*", without migrating, or while moving over relatively short distances. The large cities will experience growth – moderate rather than fast – that will be primarily expressed in terms of physical expansion – of the volume of traffic, of the building stock, of recreational space. Phenomena such as suburban development and internal social polarisation of urban areas will move higher up on the scientists' and planners' agenda.

Footnotes

- ¹ This stable average is however somewhat misleading as it hides an actual polarization process – an increase of the number of both very small (1–3 hectares) and relatively large (above 20 hectares) farms at the cost of the medium-size (5–10 hectares) farms, typical of many of Poland's agricultural regions.
- ² This category includes the Upper Silesian conurbation consisting of 16 urban places, with the combined population of 2.4 million in 1998. Population of its main city, Katowice, was 346 thousand in 1998.

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9 LESS-FAVOURLED AREAS AND REGIONAL DEVELOPMENT IN ROMANIA

Ioan Ianoş

All nations, and particularly so the countries passing through a period of transition from centralised to market economy, have set regional development high on their development policies agenda (*Artobolevskiy, 1997*). The experience of Western Europe has shown that a better territorial distribution of resources and use of potential local and regional elements are likely to promote economic growth and social equity (*Kuklinski, 1970*). In this context, two basic concepts are frequently mentioned: developed regions and less-favoured regions, the latter sub-divided into deeply disadvantaged regions. This last category requires special attention and priority treatment.

However, in a regional analysis, it is pretty difficult to single out the most disadvantaged areas, because the region represents a vast space (the state's biggest territorial division according to *Juillard, 1966*) with lots of sub-spaces on different development levels. Therefore, in order to avoid confusions, it is recommendable to use the syntagm "area of high poverty" (not region).

In the particular case of Romania, a country whose general development standard ranks below the average of Europe or Central Europe, regional policy must be flexible, because gaps cannot be bridged overnight, and meagre financial resources hamper the accelerated economic growth of backward regions. Romania's regional development policies are based on the concept of most disadvantaged area, single out such areas and consider modalities of dealing with them.

A recent history of regional development in Romania

The regional development policy, a component part of macro-stabilisation and territorial development policies, has its origins in older concepts of harmonious, or balanced development of all of Romania's counties, dating from the period of centralised decision-making and funding of various projects, giving the impression of attenuated territorial disparities. All assessments and monitoring actions focussed on the county, as basic unit, and the central idea was its industrialisation, irrespective of economic efficiency and competition. The main pursuit was overall em-

ployment of the workforce. The artificial character of the then extensive industrial development drive has emerged clearly in the period of transition to the market economy. European values have called for the elaboration of sustainable regional development policies with highlight on real economic growth by using regional and local assets to the best, and limit the effects of weaknesses. As from 1995, the principles of regional development have been acknowledged, and a specific policy was elaborated under a two-year PHARE Programme started in February 1996, and concluded with a Green Paper on Regional Development Policy in Romania (Ianoş, 1998). The promulgation a set of laws and the government acts and other materials issued laid the basis for the creation of an institutional framework and tools to implement these policy.

The fundamental regional development law passed on July 13, 1998, stipulates the creation of the institutional framework, central and regional bodies of eight development regions, also providing guidelines for an adequate and coherent regional development policy. Designation of these regions relies on two major criteria: number of inhabitants (over two million in all cases) and complementariness (Table 1).

Table 1

The share of disadvantaged population and communes by regions, 1997

Region	Total population	Urban population, %	Disadvantaged population		Total communes	Disadvantaged communes	
			Total	%		Total	%
West	2,073,740	60.6	106,706	5.14	267	53	19.85
North-West	2,861,521	52.7	338,868	11.84	386	100	25.91
Centre	2,660,679	62.6	158,607	5.96	334	63	18.86
South-West	2,419,686	45.4	210,085	8.68	387	62	16.02
South	3,496,579	41.9	438,144	12.53	481	120	24.95
South-East	2,943,256	57.5	302,524	10.27	330	93	28.18
North-East	3,785,530	44.4	518,662	13.70	463	134	28.94
Bucharest	2,304,934	88.8	—	—	38	—	—

Source: Author's data and Romanian Statistical Yearbook, 1999.

These macro-regions were formed by the free association of counties. The next step was to choose the headquarters of the future eight regional development agencies. Considerations of centrality and maximum accessibility were not accepted by the participants whose seats had been sidelined during the Stalinist period. Still frustrated, they would oppose the location of agencies in the largest cities of the new development regions. For example, the North-East region opted for Piatra-Neamţ town and not for the city of Iaşi. The Central region indicated Alba Iulia and

not Braşov or Târgu Mureş (as a matter of fact right from the beginning of the discussion Alba county had refused to join the same region with Cluj county for fear that Cluj-Napoca city would overshadow Alba Iulia town). The South region chose first Alexandria, then Calaraşi, but in no way Ploieşti or Piteşti as its seat; for the South-East region they insisted on Brăila instead of Galaţi or Constanţa. These decisions were the exclusive option of each region's association of counties, without any central interference.

In the wake of social pressure on the process of economic restructuring, in the mining sector in particular Law No 20 passed in 1999, was intended to attenuate the shock of massive remittances. Under this Law, 24 less-favoured areas are established; in order to reduce the negative effects of restructuring, investors are offered a number of facilities.

The establishment of disadvantaged zones and their development problems

The Government Decisions Nos 191 and 210/1999 and Law No 20/1999 define as less-favoured geographical regions, strictly delimited in the territory, those areas meeting at least one of the following conditions: a) mono-industrial structures that include more than 50% of the waged population within the activity specific to the respective area; b) mining zones with massive personnel lay-offs due to restructuring programmes; c) collective dismissals (more than 25% of the employees living in that area) through the liquidation, restructuring or privatization of economic units; d) an unemployment rate which is greater than 25% of the national unemployment rate; e) a lack of means of communication and a poor infrastructure.

A first cross-country analysis has distinguished 24 less-favoured areas in 12 counties. Noteworthy, their territorial delimitation by the above criteria shows them to cover 5% (12,000 sq km.) of Romania's surface area. The largest disadvantaged areas, encompassing almost the whole mountainous zone are found in Suceava county (38%), followed by Caraş-Severin (cca 28%, 2,370 sq km), Maramureş (26%) and Gorj (23%). Correct estimations for Hunedoara and Alba counties are missing, but applying the same methodology, approximations would run over 30% and 20%, respectively. Had these very large areas as a matter of fact not always overlapping the surfaces on the ground been awarded the facilities stipulated in the Law No 20/1999 the state budget would have suffered. As a result, the situation was reconsidered and disadvantaged areas remained circumscribed to miners' localities, severely affected by restructuring and massive lay-offs. As a matter of fact, locality and disadvantaged area are not always perfectly identical, moreover, the number of inhabitants varies widely (e.g. in Gorj county there is the large area of Motru-Rovinari, and the very small one of Schela).

As a result, the 24 disadvantaged areas are represented by three miners' localities in each of the counties of Caraş-Severin, Bihor, Gorj, and Sălaj, two in each of the counties of Hunedoara, Maramureş and Prahova, and one in each of the Bistriţa-Năsăud, Harghita, Covasna, Bacău and Tulcea counties (Table 2). The less-favoured area status is in effect until the year 2008 or 2009. Quite strange setting this time-limit because the complex problems facing these areas are so very different. For example, the locality of Ip will recover from the impact of restructuring in a shorter time than the Jiu Valley where there is a whole urban agglomeration centred exclusively around the mining industry.

Table 2

List of less-favoured areas established by the Government of Romania

	Area	County	Development region
1.	Gura Humorului	Suceava	North-East
2.	Comaneşti	Bacău	North-East
3.	Altan-Tepe	Tulcea	South-East
4.	Filipeşti	Prahova	South
5.	Ceptura	Prahova	South
6.	Motru-Rovinari	Gorj	South-West
7.	Albeni	Gorj	South-West
8.	Schela	Gorj	South-West
9.	Moldova Noua-Anina	Caraş-Severin	West
10.	Bocşa	Caraş-Severin	West
11.	Rusca Montana	Caraş-Severin	West
12.	Brad	Hunedoara	West
13.	Valea Jiului	Hunedoara	West
14.	Stei	Bihor	North-West
15.	Borod	Bihor	North-West
16.	Popeşti	Bihor	North-West
17.	Baia Mare	Maramureş	North-West
18.	Borşa	Maramureş	North-West
19.	Rodna	Bistriţa-Neamţ	North-West
20.	Ip	Sălaj	North-West
21.	Jibou	Sălaj	North-West
22.	Şarmăşag	Sălaj	North-West
23.	Baraolt	Covasna	Centre
24.	Balan	Harghita	Centre

Source: Statistical data processed from different official publications.

After the lapse of three months since an assistance programme for the 24 disadvantaged areas was put in place, the data provided by the regional development agencies reveal some significant facts. The 2,700 jobs created by 460 investors are scheduled to double very soon, but even so, they will hardly meet the demand of the numerous unemployed, or of people seeking a job for the first time.

At regional level, the situation is more promising, given the volume of vested capital and the short time in which investors appeared after the law had come into effect. The North-East region concentrates 111 domestic and foreign firms, with a social capital of 60 billion Lei. Only 18 companies have met investor's licence criteria, the others have obtained a provisional functioning certificate. Foreign investors (important firm) from Holland, Switzerland and Israel) are interested mainly in the wood processing, ready-mades and dairy industries.

Although investments are not very big (reaching USD 13 million in Gura Humorului town), they stand proof to the areas' potential attractiveness, also due to extremely low taxation facilities. Therefore, a disadvantaged area status may prove lucrative provided it is correctly defined and targeted. In view of the above studies of less-favoured areas are a necessity, because they point out intrinsic potential factors, fiscal facilities and accessibility, attractive assets for many domestic and foreign investors.

There are no doubt many disadvantaged areas in this country, some of them very large, and ongoing economic restructuring has obviously increased their number. Some are extremely less-favoured, and should not be treated simply as disadvantaged by referring them to one element alone. They ought to benefit by a special development strategy.

Outlining disadvantaged areas, within a region or state, calls for an in-depth analysis of the smallest administrative unit, or whatever division is in place, with focus on the main social-economic domains and the respective indicators: economy, human potential, infrastructure, social condition and the cultural behaviour of local communities.

The notion of disadvantaged area could easily be assimilated with problem-area even through the term "disadvantaged" is generally accepted in an integrated approach regional studies. Disadvantaged areas are formed of various groupings of communes and towns having in common characteristics and standards far below the national or regional average.

There are two categories of disadvantaged areas:

- Special disadvantaged areas featuring by one or two particularities, and listing below the national or regional average values (e.g. high unemployment, very degraded soils, pollution, isolation, etc);
- Complex disadvantaged areas which, according to several indicators (e.g. poverty, deficitary infrastructure) have many variables below the national or regional average. The majority overlap well outlined geographical areas that present one or two restrictive natural elements (the Danube Delta, Apușeni Mts, Petroșani Depression).

An outline of less-favoured areas

These areas are essentially the most backward ones. A correct definition of the types of less-favoured areas would help countries or local and regional communities in their efforts to reduce the territorial tensions generated by development disparities. Regional development policy ought to place part of the less-favoured areas high on their priority agenda.

Any analysis of areas of high poverty should contain two basic elements: *scale* and *time*. The scale on which the analysis is made represents an important definitory element because the mean distribution value of specific indicators is not the same at national and regional levels. Areas that do not list under disadvantaged at national level may well be extremely disadvantaged on the regional or local plane. On the lower levels, problems are more acute, better visible and individualised. Also, the region's general development level could influence targeting the most disadvantaged areas. For example, the presence of some small and extremely disadvantaged areas in the territory of a developed region might appear catastrophic, although they may well resemble a similar area from an underdeveloped region. In this case even though disparities between advantaged and disadvantaged areas are not that great, their local perception is very different.

Time is another definitory element in analysing of the most disadvantaged areas and, given the dynamics of the social-economic processes, they should be permanently looked into and followed up. Usually, direct incentives can bring disadvantaged areas under control, even shift them into the disadvantaged group for short or medium periods of time. But eliminating disparities between developed and disadvantaged areas is a very difficult task. Most of the deeply disadvantaged areas are the outcome of measures taken by society to rush up national and regional development (e.g. the mining zones). Normally, major problems can be solved only in a few years' time.

The problems posed by the disadvantaged areas, some of them still obscure for the researcher, shall in the long run be solved. The fact is that society would sometimes continually postpone finding solutions for this very important type of areas (poverty areas), or offer minor and superficial treatments. So, bridging gaps could take a very long time. Unless territorial problems are given due consideration, new deeply disadvantaged areas may crop up anytime.

Our analysis of criteria for the territorial designation of the less-favoured areas in Romania and of methods to study them is based on the disadvantaged area concept relating to regional development policy.

Criteria to identify less-favoured areas. Identifying such areas is a very complicated matter, because each micro-region can have several problem areas. The

question is, which of them are indeed the most disadvantaged ones? A correct response is necessarily relying on a set of criteria specific to each level – national and regional, such as:

- spatial contiguity of geographical areas; the presence of at least five neighbouring basic elementary units (communes and towns) for the purpose of their territorial aggregation;
- the global indicator mean value should be by 25% below the value of the global indicator of the respective disadvantaged area, or by 75% below that of the development area;
- functional homogeneity of the disadvantaged space;
- the value of at least one elementary indicator should equal the minimum national or regional one;
- striking disparities of territorial development levels;
- negative territorial impact on all neighbouring areas;

When analysing deeply disadvantaged areas it is important to have in view the following:

- To detect the factor or set of factors responsible for the very low development level;
- To focus the analysis on the relevant level, namely counties or group of counties for national assessments and communes for regional estimations in order to obtain a correct image of territorial disparities. Following the deeply disadvantaged areas at national level, as individualised lower scales, means also noting their effects on the structure and dynamics of the national social-economic life;
- To appraise the territorial impact of the problem-area and how the specific problems affecting it in a direct or indirect manner also affect the human resources;
- To establish the extent to which some territorial components can block the country's or region's social and economic life (putting new restrictions on the development process).

The set of information used to single out the most disadvantaged areas, the absence of other data perceived to be essential (e.g. the unemployment rate at communal level is not possible to calculate), as well as estimations concerning the boundaries of the area itself are sometimes tinted by subjectiveness. But, whatever the case, the reality confirms that these areas do exist and that they are the most backward ones in the country.

The results of complex studies on the correct delimitation of deeply disadvantaged areas could induce decision-makers to look more carefully into research-work before estimating development potentials, create selective facilities to attract

investors, elaborate local models of behaviour for actors and the population to attenuate development gaps. In our opinion, it is vitally important to continue doing substantial analysis of the deeply disadvantaged areas, elaborate development strategies and hand them over to regional development agencies and the National Development Agency. The latter is expected to co-finance such studies that offer a scientific basis to territorial development options.

Analysis of less-favoured areas by development regions

In order to single out the most disadvantaged areas we began by estimating the development levels of elementary administrative units. Because statistical records contain very few relevant elementary indicators, we limited our study to eight indicators which cover many characteristics specific to the development level, e.g. recent population growth rate (1990–1996); dwelling space/capita; number of inhabitants/one physician; share of active population/total population; degree of illiteracy; infant mortality (1990 and 1996 averages), and number of telephone lines/1,000 inhab. Standardising these values yielded a general development indicator; the next step was to aggregate them at communal level. In this way, different, relatively homogeneous, areas could be outlined (*Ianoş, 1997*). Subjective considerations made us include into a vast disadvantaged area some developed rural settlements, or towns even, isolated in a compact mass of poorly developed communes.

In order to make a correct territorial delimitation of areas with the lowest development record, it was necessary to opt for a reference system. More precisely, were they to be referred to national or to regional disparities. In principle, differences were not particularly high in either case. However, detailed determinations based on the intra-regional variation of development levels proved far more relevant. Having in view that regional development councils and agencies become increasingly more involved, it would be preferable to individualise the most disadvantaged areas by referring them to the value range of each development region.

The methodology used outlined forty deeply disadvantaged areas in seven of the eight development regions (no problem-areas in Bucharest region, which has a high level of development). Most of these extremely less-favoured areas (7) lie in the South region, and in regions located in the opposite direction – North-West and South-East (6 in each). What is important is not so much their number as the inhabitants and administrative units affected.

According to geographical distributions these areas are concentrated largely in the southern plains of the country, and in the north-western mountainous and hilly zones of Transylvania. The size of these areas is also a relevant element. In Moldavia, for example, there are few deeply disadvantaged areas, but they englobe a very

large number of inhabitants and communes. In the West and Central regions, disadvantaged areas have the least number of affected population (5.14% and 5.96%, respectively), while in the North-East region they have over 2.5 times more inhabitants in this situation (13.7%). In absolute values their number is nearly 5 times higher in the North-East than in the West region, for example.

Our analysis comes to confirm well-known disparities among certain regions of Romania. Underdeveloped areas with fewest inhabitants are found in the West Region overlapping almost completely the historical province of Banat, and the Central region corresponding to the southern and central parts of Transylvania. The North-West region, englobing part of Transylvania, Crişana and Maramureş registers population percentages in backward areas close to the values of the North-East and South historical regions, which are the highest. Relatively low values has the South-West region (below 10% of the population are affected). However, this statistical situation does not give a faithful image of the reality.

It should be remembered that the relatively low ratio between deeply disadvantaged area population/total population is due to the fact that nearly all these areas lie in the countryside (except for three towns: Zimnicea – South region, Săveni and Darabani – North-East region). The extent of underdevelopment is better revealed by a reverse correlation with the degree of urbanisation of each region. Excluding Bucharest, highly urbanised regions (West and Central) register the lowest percentages.

An interesting situation is revealed by the disadvantaged administrative units/total administrative units ratio (19/29 per cent). Lowest values register the South-West, Central and West regions; at the other end of the spectrum lies the North-East region (just like for the population ratio). Similar variations are seen in the size of deeply disadvantaged areas: very small in North-East 4, South-East 5, South-West 4, North-West 5 and West 5 with 5 communes on the average and about 20,000 inhabitants (*Table 3*), as compared to North-East 1 (58 communes and 246,000 inhabitants), North-East 2 (38 communes and 137,000 inhabitants), South 3 (34 communes and 130,000 inhabitants) and South-East 3 (32 communes and 108,000 inhabitants). These vast expanses also require very serious efforts to stop their economic decline over a short term and possibly revitalise their social-economic life over medium and long terms.

After 1989 these areas have become dramatically depopulated, particularly the very backward ones from the West and North-West regions where the natural increase is negative and the German nationalities had emigrated in a mass, especially in 1990. Highest depopulation values have West 3 and West 4 (both cca -12.2%), which have an isolated position and a declining mining sector; over 10% in North-West 4 (-11.6%), North-West 2 and South 5 (both with -10.8%). The most disadvantaged areas of Moldavia province with high natural increases and a demographic excedent throughout, register lowest depopulation values.

Table 3

Population and communes/towns by less-favoured areas

Region and its less-favoured areas	Population, 1990	Population, 1996	Population change, %	Communes	Towns
1 West region	2,201,717	2,073,740	-5.8	267	
a) West 1	39,602	37,941	-12.2	13	
b) West 2	18,418	16,595	-9.9	13	
c) West 3	19,240	16,883	-12.25	13	
d) West 4	15,267	13,404	-12.2	8	
e) West 5	23,569	21,883	-7.15	6	
<i>Total less-favoured areas</i>	<i>116,096</i>	<i>106,706</i>	<i>-8.1</i>	<i>53</i>	
2 North-West region	2,978,169	2,861,521	-3.9	386	
a) Nord-West 1	92,482	85,279	-7.8	25	
b) Nord-West 2	72,146	64,320	-10.8	26	
c) Nord-West 3	90,445	83,096	-8.1	18	
d) Nord-West 4	31,660	27,979	-11.6	13	
e) Nord-West 5	21,343	19,311	-9.5	5	
f) Nord-West 6	60,083	58,883	-2.0	13	
<i>Total less-favoured areas</i>	<i>368,159</i>	<i>338,868</i>	<i>-8.0</i>	<i>100</i>	
3 Central region	2,843,215	2,660,679	-6.4	334	
a) Centre 1	22,097	20,037	-9.3	10	
b) Centre 2	26,571	24,452	-8.0	13	
c) Centre 3	46,674	44,630	-4.4	16	
d) Centre 4	21,375	20,471	-4.23	9	
e) Centre 5	18,983	18,460	-2.76	7	
f) Centre 6	30,989	30,557	-1.39	8	
<i>Total less-favoured areas</i>	<i>166,689</i>	<i>158,607</i>	<i>-4.8</i>	<i>63</i>	
4 South-West region	2,451,502	2,419,686	-1.3	387	
a) South-West 1	82,751	78,003	-5.74	28	
b) South-West 2	28,634	27,498	-3.97	8	
c) South-West 3	47,311	43,750	-7.53	13	
d) South-West 4	21,200	20,134	-5.03	5	
e) South-West 5	42,250	40,700	-3.67	8	
<i>Total less-favoured areas</i>	<i>222,146</i>	<i>210,085</i>	<i>-5.4</i>	<i>62</i>	

Region and its less-favoured areas	Population, 1990	Population, 1996	Population change, %	Communes	Towns
5 South region	3,589,073	3,496,579	-2.4	481	
a) South 1	72,514	69,018	-4.82	21	
b) South 2	63,551	58,696	-7.64	18	
c) South 3	139,652	129,972	-6.9	34	1
d) South 4	51,494	46,806	-9.1	11	
e) South 5	81,705	72,915	-10.8	22	
f) South 6	33,342	30,156	-9.6	7	
g) South 7	33,524	30,581	-8.8	7	
<i>Total less-favoured areas</i>	<i>475,782</i>	<i>438,144</i>	<i>-7.3</i>	<i>120</i>	<i>1</i>
6 South-East region	2,993,423	2,943,256	-1.7	330	
a) South-East 1	92,519	86,426	-6.6	24	
b) South-East 2	51,281	49,181	-4.1	18	
c) South-East 3	113,753	107,961	-5.1	32	
d) South-East 4	25,061	23,013	-8.2	7	
e) South-East 5	18,843	17,582	-6.7	5	
f) South-East 6	19,655	18,361	-6.6	7	
<i>Total less-favoured areas</i>	<i>321,112</i>	<i>302,524</i>	<i>-5.8</i>	<i>93</i>	
7 North-East region	3,763,342	3,785,530	0.6	463	
a) North-East 1	256,139	245,801	-4.04	58	2
b) North-East 2	142,730	136,645	-4.3	38	
c) North-East 3	70,101	65,756	-6.2	20	
d) North-East 4	11,475	10,556	-8.01	4	
e) North-East 5	62,454	59,904	-4.1	14	
<i>Total less-favoured areas</i>	<i>542,899</i>	<i>518,662</i>	<i>-4.5</i>	<i>134</i>	<i>2</i>
Bucharest Region	2,394,284	2,304,934	-3.7	38	
<i>Total disadvantaged areas</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	

Source: Romanian Statistical Yearbook 1991, 1997 and author's data.

A case study: less-favoured areas in the Central region

The Central region includes six counties (Alba, Braşov, Covasna, Harghita, Mureş and Sibiu) and has a population of nearly 2.7 million. It occupies the fifth position in the hierarchy of the eight development regions of Romania. Development levels between these counties being pretty equal, the process of their association went smoothly; only Braşov county, the best developed one in this group did put some preconditions, but later gave it up. By common consent, the region's development agency central offices were opened in the town of Alba Iulia. Smaller counties refused to have it located in a larger city, because they had had a dire experience during the Stalinist period, when most budgetary allocations were constantly earmarked to regional capitals.

The region's geographical landscape is extremely varied: a depressionary cuvette surrounded on three parts by mountains (west, south and east) and crossed by a very rich network of waters. Favourable living conditions made different populations settle here, Hungarians, Gypsies, Germans, creating a rich cultural diversity. A west-to-east transversal profile in the central part of the region shows that Romanians are majority in the west, a deep mix of the four ethnical groups in the tableland area and Hungarian nationalities are dominant eastwards, in the counties of Harghita and Covasna.

The Central region ranks second to Bucharest region in regard of urbanisation level (62.6%), boasting some of the largest cities on its territory (e.g. Braşov); other centres occupy the upper hierarchical ranks (Târgu Mureş and Sibiu) followed by several small and middle towns. A characteristic feature of the Region's urban network is the multitude of towns and the great proportion of middle towns, part of which functioned as county-seats in various historical periods (Sighişoara, Odorheiu Secuiesc, Tarnaveni, Blaj, and Făgăras).

Our analysis focused on the communal level, distinguishing six deeply disadvantaged areas, sheltering up to 6% of the total population in nearly 19% of the elementary administrative units (communes). The fact that population is scarce poses serious development problems for the future.

In regard of geographical distribution, these areas are concentrated in the west and north-western part of the region, with two more areas lying in relatively better developed territories. By number of affected inhabitants and communes, Centre 3 (cca 45,000 inhabitants and 16 communes) heads the table. It is located in the north-west of the region (overlapping Mureş county) in the so-called Transylvanian Plain.

Dealing with deficitary elements requires the elaboration of an intra-regional development policy and the correct assessment of strengths and weaknesses in each of the deeply disadvantaged areas. A brief analysis of these areas reveals the following:

- a) Centre 1, situated in the western extremity of the development region, englobes ten communes, all in the Apuseni Mountains, with a population of 20,000. Comparatively with the 1990's population, there is an obvious decrease in 1996, but about 2,000 inhabitants (9.3%). A steeper demographic decrease is registered in the communes of Scărișoara (-17%), Vidra (-15.6%) and Albac (-14.6%), with a surprising increase (by over 300 inhabitants, i.e. 20%) in Garda de Sus.

But for two communes where 20% of the population is over 65 (Avram Iancu -21.8%, Vidra -20.5%), the overall age structure is positive since part of the active population is working in the mining sector, the proportion of farmers is rather low (see the branch structure of the active population). Only two communes register values close to or above 80% (Horea -79.6%, Poiana Vadului -80.5%). The illiteracy index below 7% (in three communes) represents a deviation from the general rule, values rising high in Arieșeni (19.4%), Garda de Sus (14.6%), Scărișoara (10.4%) and Sohodol (6) communes.

The main problems of this area are connected with accessibility, the slow-down of mining and forestry activities, the weak polarising capacity of Abrud and Cîmpeni towns and moreover the dominant scattered village type, with distances of 100 m between the homesteads. Treatment suggestions: to revitalise tourist activities and create a local development centre capable to ensure local demographic stability and a higher family living standard. Generally, in the treatment of the disadvantaged areas and in the regional development is very efficient the decentralization of economic power (Enyedi, 1989).

- b) Centre 2 is separated from Centre 1 area by a series of better developed localities. It extends mainly in the Trascau Mountains; some of its communes lie in the contact zone between the mountains and the Mureș Corridor. The thirteen communes of the area total over 24,000 inhabitants. Like elsewhere, depopulation has been on the increase over the past few years, the area losing some 2,100 persons.

A characteristic feature is the high proportion of elderly population (over 65 years of age), in one-fifth of its communes (10 out of 13) highest values being registered in Ocolis and Ponor (close to 30%). Because the terrain is not proper for agriculture, the majority of the active population works in the mining industry or in other sectors. Nevertheless, there are a few communes where farming is the main occupation (Ponor -86.3%; Ramet -76.9%; Mogos -74.7% and Intregalde -73.2%).

Of all the disadvantaged Transylvanian areas this one has the fewest telephone lines (less than three in five of the thirteen communes: Mirăslău and Livezile one in each, Intregalde two and Ponor three). Illiteracy is high in one commune alone – Ramet.

Treatment suggestions: any development scheme ought to focus on increasing the polarising capacity of the towns of Zlatna, Abrud and Cîmpeni and improve the physical infrastructure. The diverging character of economic and social-cultural structures precludes the establishment of development or economic growth centres.

- c) *Centre 3* is the largest of the most disadvantaged areas in the Central development region. It overlaps the whole of the Transylvanian Plain and comprises 16 communes with a population of 45,000. The recent most depopulation trend (1990–1996) of 4.4% meant a loss of 2,000 inhabitants, with certain differences from one place to the other. Top values registered Sanpetru de Cîmpie commune (–23.8%). On the other hand, two communes, Zau de Cîmpie and Band, had a positive record (10.6% and 3.3%, respectively).

The age structure is relatively similar in all of the area's communes, namely around 65 years. In one commune they represent more than one-fourth of the total population and one-fifth in another six. Although this is a big agricultural area, the farming population represents only up to 70%, everywhere, frequently under 60 per cent. The values of the other indicators are in general typical of a disadvantaged area.

Treatment suggestions: to establish a local economic growth centre capable to stimulate real development in the territory. Problems that need be addressed: water supply, local processing of agricultural products, easy access to the Region's large cities, and inter-regional efforts to sustain the deeply disadvantaged areas of the neighbouring North-West region (North-West 2).

- d) *Centre 4* numbers nine communes and a population of over 20,000. This deeply disadvantaged area lies in the north-west of the Tîrnăve Tableland. The demographic decrease in 1996 comparatively with 1990 was of 4.4% i.e. by nearly 1,000 people. But for two communes (Farau –11.1% and Radeşti – 10.1%) values did not exceed 10%. Atinteşti and Sona communes had a positive record (8.6% and 2.8%, respectively).

Age structure: over one-fifth of the total population is over 65 years in six communes and one-fourth even in three of them. Because many of the German nationals had emigrated, housing conditions are better – more than 15 sq m/capita (Hoparta –15.8%; Radeşti –15.3%). The farming population is depleted and only in two communes it represents over 70 per cent. Unexpectedly for this area, there are very few telephone posts in three communes: Hoparta –1; Atintiş –2; and Radeşti –3.

Treatment suggestions: inter-settlement relations are divergent and based rather on individual connections with the urban centres or better developed settlements from the Mureş or the Tîrnave corridors, people taking the easiest access routes. Stringent problems are raised by the degradation of lands, the loss of soil productivity, the lack of drinking water resources and the massive depopulations begun under the totalitarian regime. Economic and demographic revitalisation is dependent, among others, on better access to neighbouring areas, monitorisation and implementation of land melioration schemes.

- e) *Centre 5* covers seven communes and a population of over 18,000. The area lies in the mountainous and hilly zone of Harghita county. It has one of the lowest population decrease rates (2.76%), and significant increases in some communes (Corund -7.7%). Age structure: the over 65 year old represent over one-fifth of the total population in two communes alone, in the others age-groups are much younger than the national average.

There is a large farming population, but values above 60% are registered only in Varşag (78%) and Atid (64.6%), in other communes percentages are frequently below 40. Illiteracy is high in Atid and Corund, three times the values registered in the other communes.

Treatment suggestions: in order to reduce disparities between this area and its neighbours, it would be recommendable to turn Corund locality, which has a good economic and creative potential, into a local polarising centre capable to boast the development of the other communes. Located in a specifically Subcarpathian space, settlements ought to be better connected to the local urban zone, to process some local resources, and sustained such as traditional processing of wood, and building materials.

- f) *Centre 6* lies in Braşov Depression and comprises eight communes totalling over 30,000 inhabitants. Over the analysed period, the population was found to have decreased by a mere 1.39%. The explanation for this unexpectedly low value should be sought in the alternation of negative demographic with positive demographic communes. In the former category list Turia (-5.8%) and Zagon (-5.0%), in the latter Borosneu Mare (5.1%) and Moacsa (4.4%). Age structure: there is a good demographic potential, the group of over 65 olds represents no more than 16% of the total population in any commune. The proportion of population working in agriculture is generally under 45%, only three communes have a higher record.

Treatment suggestions: this area, formed of several communes stretching out almost in a line along the north-south direction, has distinctively different resources. Development schemes should provide for closer relations with the near-by towns (Covasna, Târgu Secuiesc, or Sfintu Gheorghe) each of which

may attract two or three communes into its sphere of influence. At the same time, local initiatives ought to be stimulated to process forestry or agricultural products, and make good use of the favourable climate conditions. In this way all localities could be brought on to similar levels of development.

Summing up we would say that this first analysis of deeply disadvantaged areas in Romania has a twofold purpose: in the first place, it emphasises the importance for regional development of sustaining such studies, and in the second place, it brings into the focus the particular case of Romania under transition to the market economy. A further analysis, possibly adding new statistical indicators and elements of quality, could prove its utility for setting coherent strategies for each development region. Such studies could be a groundwork for the selection of regional development projects, of those benefiting by financial support in particular, the choice of which raises serious doubts as to the reasons behind selection criteria. Giving priority to projects liable to sustaining these most disadvantaged of all areas could more readily attenuate disparities between them and the surrounding territories

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10 RECENT TRENDS IN RUSSIAN REGIONAL POLICY AND USE OF EU COUNTRIES EXPERIENCE

Sergey S. Artobolevskiy

Regional disproportions in Russia

On the basis of the official statistics analysis it is possible to conclude, that in Russia regional socio-economic disproportions in level of economic development and quality of life are great: in 1997 the difference between maximum and minimum was twenty-one times for GDP per head (1996), thirteen times for income per head (ten times taking into account purchasing capacity of rouble in different regions) and fourteen times for level of unemployment (see statistical yearbook for Russian regions for 1998). By their scope Russia considerably surpasses countries of EU).

There are the basis to approve, that in the 90-s years occurs sharpening of regional disproportions. The geography of Russian crisis is very unequal and that caused further increase of territorial disproportions. Huge regional socio-economic disproportions are dangerous for any country, especially such big and non-uniform as Russia.

One can see increase in anti-Moscow "moods" practically in all regions. The main reason of this phenomenon is higher benefits received by Moscow in the period of reforms, reflected in much higher level of personal incomes, than average in the country (more than 3 times higher, than in the country on average), better employment opportunities (both in official and grey economy).

The state has to react on existing spatial disproportion, i.e. has to conduct socially and politically oriented regional policy.

Recent financial and economic crisis (after August 17, 1998) increases disintegration tendencies in the country. One can saw a lot of economic separatism attempts from regional authorities, fragmentation of all-country market. Discussions about future unity of Russia again become popular in mass-media and scientific community. Necessity in regional policy became even more obvious after „August events”.

Institutional infrastructure of regional policy

In Russian Federation so far, despite availability in the country of big regional socio-economic disproportions, effectively functioning system of regional policy has not yet developed. It is determined by many factors, the not last place in a number of which takes institutional factor. The efficiency of any regional policy in many respects depends on how institutions, created for its "registration" and realisation, are organised and work.

In Russian Federation various aspects of regional policy are realised by various official institutions, without proper co-ordination of their activities in the field (sometimes they even compete with each other – as Ministry of Economy and Ministry of Regional Policy). Another big problem – institutional instability of regional policy in the country (practically during all 90s years).

Theoretically country already for several years has all necessary institutional infrastructure for realisation of regional policy. Till now in Administration of the President there was territorial department (and under "tutoring" of other department the representatives of the President worked in the regions – see below). There is now separate Ministry of National Problems and Federal Relations. In addition to this, "regionally oriented" departments exists in Ministry of Economy. In both chambers of the Parliament (in Duma and in Council of Federation) there are commissions on federalism and regional policy.

In Administration of the President one couldn't find structures directly engaged in nation-wide regional policy, though the Administration conducts monitoring of socio-economic situation in the regions and still has large opportunities of influence on the administration of the regions. It carries out own regional policy of Administration, largely subordinated to the achievement of the political purposes. Problems of regions are sphere of activities of two above mentioned independent departments: earlier they were parts of one big department and now are again in process of unification. Under conditions, when the role of President is decreasing, possibilities of Administration become smaller.

Formally just Ministry of Economy was leading until now in the field of regional policy. Thus it considers as sphere of its activities only regional economic policy, and till now pay very little attention to other aspects of spatial effects of state influence, including social ones (only as slogans, but not as guidelines of practical activities).

Obviously, that the activities of the ministry provides realisation of economic strategy of government in regions, decides huge quantity of current regional and local problems. At the same time its activities can not replace state regional policy, directed on smoothing of spatial distinctions in quality of life and level of development, frequently even to the detriment of economic efficiency (the latter, and is absolutely fair, dominates in the activities of the ministry). If to recognise the so-

cial bases of regional policy, it is absolutely clear, that ministry of economy can not be main institution responsible for it.

From autumn of 1998 country has independent Ministry regional policy, which included part of Ministry of regional and national policy and previously independent State committee on development of the North. Ministry of Regional and National Policy existed, officially, only from spring 1998, earlier it had and from 2000 it has again name of – Ministry of Federal Affairs and Nationalities till 1996 it has another official title – Ministry of Nationalities and Regional Policy. Before 1998 changes formally the ministry realises policy of state in the field of the national and federal relations, local self-governing. Today the Ministry is still not very closely connected, in its practical activities, with questions of regional policy, but try to occupy new field.

It is the third attempt of the ministry to play more active role in federal regional policy. In 1993–95, when in the name of Ministry there was word collocation “regional policy”, attempts has been done to make regional policy one of the main directions of specified ministry activities. The ministry even discuss its regional policy programme (see below) in the Council of Ministers (1995–96), but without any practical consequences. The programme has been rejected.

Current “administration” of the ministry try to include regional policy into sphere of its activities. At the moment only basic documents are preparing and it is too early to discuss even first results. Two obvious problems exist: ministry can decide to work only in sphere of federal relations and municipal problems (and call these “regional policy”) or other more powerful ministries would not give rights and means to the ministry (for regional policy realisation).

It is necessary to stress, that the Ministry can become the leading executive body in the field of regional policy. But in future legislative decisions, concerning the role of ministry in regional policy, it is necessary to exclude effect of the subjective factors (so strongly influenced on the regional policy in the ministry).

Previously independent State Committee on Development of the North formed federal policy concerning northern territories and executes its realisation. A sphere of the committee activities varies from scientific researches and monitoring till realisation of “northern delivery” (supply of various goods by water transport to remote northern areas during short summer, only period when it is possible). As a whole it was possible to welcome the existence of such complex development body for the super-region, covering 2/3 of the country territory. Just due to existence of the specified Committee the North and its population “are supplied” by the laws on the order better than other territories.

At the same time the Committee acted absolutely independently, development of the northern territories were not co-ordinated with regional development of country as a whole (to the point, so was and during its – Committee – functioning within the framework of Ministry of National Problems). The development of

northern territories was considered as a separate task, their problems are not compared with existing in other regions. From the point of view of northern territories development existence of independent management body is positive phenomenon, but realisation of all-country regional policy it hinders. Now the main task is real integration of ex-Committee (even separately located in Moscow) into the new ministry (till today this part of Ministry of National Problems defacto continue to work independently). Otherwise the state would receive two regional policies.

The special attention deserve so called "profile" committees of both chambers of the Parliament (both of them include "regional policy" into their official titles), for really only they can initiate and lobby the laws in the field of regional policy. But till now the main work of the committees in the field of regional policy is the expert and legal assessment and support of the federal laws and their drafts (till their full formal approval). Assessment of the committees pass many mentioned above documents in which refinements and correction has been introduced for the protection of various regions interests.

As a whole examination of various laws regional consequences (and diminishing of possible negative consequences) is important component of any regional policy. It is bad, that such examination is carried out not in the frameworks of officially approved federal regional policy (and, hence, can not take into account its priorities).

Regional policy programmes

In the 1990-s several programmes in the field of regional policy has been created. Strategy of regional development of Russia – the most valuable of these documents, was prepared in 1993 in Analytical Centre of the President. This document has become the base for discussions on regional policy.

From the moment of creation this document was several times revised and, thus, even improved, but has not become the base of legal decisions (laws, decrees of the President, enactments of the Government). Even official approval of the document by President don't made it the basis for practical steps.

The main arguments presented in the document for the necessity of interference of state into decision of regional problems are: preservation of country unity, strengthening of regional disproportions on the way to the market, and social justice. This approach is very close to the Western ones and correspond to Russian reality.

In the autumn of 1994 on the basis of the strategy was produced already more "practical" document – "About the Programme on the help to the depressed regions" (in the same Analytical Department) and again it was not, in any form, realised. At first were hopes to take it into account in the 1995 budget, then in 1996 budget etc. (but really the developers of the budget never even do not know about

existence of the Programme). Now it is absolutely clear that this document will never be realised. What is interesting, that this existing only on paper draft document received active support of some crisis regions.

Programmes on regional policy for Russia were developed in 1993–1995 also by Ministry of National Problems and Regional Policy and by fraction “New regional policy” in previous Parliament (1993–1995). Both documents were already some times discussed by politics and experts. The main defect of both programmes is misunderstanding what is regional policy. The authors of both documents include in it and strategic, and external economic, and pure social, and etc. problems. Practically all, what determines development of the country were included into regional policy. Clearly, on the base of so wide documents it is impossible to develop the real laws concerning regional policy, to accept the executed organisational decisions.

Developed by Ministry of Economy document of the same period was devoted to only regional economic policy (and was made at high professional level). But it rather the plan of territorial organisation of Ministry of Economy activities, instead of base for creation Russian regional policy. In the specified document one can find idea about stimulation of development of leading regions, the implementation of which could only strengthening regional disproportions. But the latter is difficult to include into main aims of regional policy in Russia, where regional differences are so big.

As has been already mentioned in 1996 Ministry of Nationalities prepared and even send to the Government already very realistic documents, proposed how to organise regional policy in Russia. In many aspects specified document has much in common with the Strategy and with the described document on regional economic policy and can be easily included (naturally partially) into the potential law on regional policy. But it has been rejected. Now “new” ministry is creating new programme on regional policy and its activities in the field.

Programmes for the development of regional policy in Russia became the field of international activities. TACIS project on Russian regional policy (which is represented by the author of this text), started in January 1998 (for 3 years), and will be implemented in close co-operation with Ministry of Federal Affairs and Nationalities. It has clear aim – create “reasonable” models of socially oriented federal regional policy. The project could support ministry efforts to become leading state institution in the field of regional policy. If the ministry succeed, results of project would have more practical value.

Legal base of regional policy

As it already has been mentioned there are no official documents, regulated regional policy in a country as a whole. There are laws and other official documents regulation development of Northern regions. However, even towards northern ter-

territories the federal government is not present clear and consistent decisions. The federal law "About the bases of state regulation of socio-economic development of the RF North (is accepted in the middle of 1996) is possible to consider as the unique complex legal document in the field of regional policy. But it only declare only the right of state to stimulate development of northern territories (instead of the responsibility to do it). Under the conditions of the budget deficit, naturally, very small sums of money are allocated for realisation of the law.

In spring 1996 Council of Ministers sent to the President project on the Decree of the President "Main directions of regional policy in Russia", prepared by mentioned above department (working directly under the Chairman of Government). This 20 page document don't propose any real steps in regional policy, but describe what will be good to achieve in the sphere of economic and social development of regions, ecology, national relations etc. (in very general terms) without any indication how to achieve these aims and what state bodies will be responsible (and who will pay).

Even from the contents of the document one can see that unknown authors include into regional policy all problems connected with federal relations, local self-management, all forms of international activity of regions, employment, ecology, national relations. At the same time regional economic policy is absolutely separated from regional social economic policy (even ideas on co-ordination are in absentia). Naturally one could not find in the document understanding of regional policy as institutionally independent activity of the state.

It is possible to agree with the document that forecasts and programmes have to be the main tools of regional economic policy. But what institutions will be responsible for creation and implementation of these documents, what will be their place in economic strategy of the state?

The Decree of the President by its status has to be "temporary" law and has to include practical steps in the field, orders for various state institutions, time-table, etc. Lets take for example last part of the document: "Legal base for regional policy". It is logic to find in it list of necessary laws and other legal documents, institutions responsible for them, propose dates. But what we find instead: "Law creation process in the field of regional policy has to increase harmony in relations between federal centre and subjects of Russian Federation. Constitution of Russian Federation creates the necessary conditions for this as the base for creation of federal relations mechanism". The rest of this part of the document (in total less than 1 page) is devoted to indicate in what fields federal centre and regions has common interests and responsibilities. But this one can easily find himself in the Constitution of the country.

Though the texts of the agreements about differentiation of subjects of management and rights between federal executive authorities and bodies of a state authorities of the RF subjects with various regions (and appendices) have much in

common, all they take into account and features of the particular region and attitude of Centre toward it. Therefore it is possible to consider, that in the specified documents the regional policy of the federal authorities has partly received expression.

In principle the specified agreements and appendix to them could become a powerful tool of federal regional policy (especially taking into account the tendency of more and more complete scope by the given documents of the subjects of Federation). For this purpose federal level should officially be responsible (completely or partially) for the decision of the most acute problems of regions, which the latter are not able to solve using only own resources.

The Decree of the President about the proxy representative, signed on July 9, 1997 granted large opportunities for strengthening of Presidential structures influence on regions. Obviously, that the opportunities of this "new" representative, in course of interactions with regional authorities, would sharply increase. The representative of the President even now has an opportunity to act as the supporter of municipal authorities in their conflict with regional ones. But how far central authorities will go in specified direction, risking to destroy normal relations with the administration of regions, is not clear. The decree has some potential to be used as regional policy "tool". Unfortunately two years that has been passed after the Decree approval, didn't show any big progress in the implementation of its ideas.

Practical steps in the field of regional policy

It will be exaggeration to insist, that now Russia has no regional policy at all. In Russia, as well as in practically all other countries, territorial redistribution of public funds goes actively. State provide help to regions of coal mining and ecological disasters, social help to poor regions through the budget (beginning from 1994 – see below) etc. In total approximately of 15% of the country budget are used for the help to closed cities, support of the regional budgets, financing of the regional programs, etc., i.e. for regional purposes. But specified redistribution, in many cases, goes without official criteria and as a result one can see great subjectivism of the accepted decisions.

The specially strong effect on redistribution of means has the political factors. For 1992–94 years the President and Government have accepted 70 decrees and enactments on regions and practically all of them included granting of the additional rights or/and means. But never general regional analysis did not precede to this official decisions. It was not clear, whether the help was provided really to the most requiring it regions.

Ministry of Federal Affairs, Ministry of Economy and Ministry of Construction are engaged in preparation and realisation of several regions complex programmes of development. Programmes of concrete regions development may be part of fed-

eral regional policy if they have been prepared for really most crises territories. Even from this list it is clear that nobody compared selected regions with others. Why concrete regions were selected? The answers one can find in pure political sphere, analysing political weight of regional leaders in Moscow.

The Government were not able to resist to political pressure, but find solution in permanent under-financing of all programmes. In 1997 these programmes received on average below 10% of proposed sums (1998 situation would be even worse).

Attempts to solve the most acute problems of crisis regions at the expense of providing to them exclusive economic advantages (taxes, credit, in export) don't achieve, in majority of cases, the proposed aims. And these exclusive advantages lead mainly to increase of tensions between regions.

Transfers ("transferti") from the Fund of financial support of the regions can be partially regarded as regional policy. In their frameworks part of taxes is transmitted by federal centre to regions, possessing insufficient tax base, not ensuring average country level. Transfers are intended to cover current charges (on education, health service, support of housing, etc.). In 1994 they have for the first time occurred in the budget, but the regions have received only half of transfers – because of low rate of taxes collection. Thus some regions depend on them on 80–90%.

The direct state redistribution of means between regions can be regarded as regional policy. But regional policy should assist to the most crisis regions, and the latter can not coincide with regions with insufficient tax base. Plus this means can not be used for any investments.

What can be taken from EU countries experience?

World experience shows (and especially of EU countries and Union as a whole), that more often the regional policy has social roots. Excessive territorial distinctions in the level of development naturally result in significant spatial disproportions in quality of life. The latter threaten to real economic and social unity of the country (and, in extreme cases, even to its political unity). As a result one can see "picture" of two Italies (North and South), Great Britains (South and North), Frances (Paris and "French desert").

In EU countries, even on the ideological level, it is considered as inadmissible the existence in uniform country of excessive spatial disproportions (thus scales of "excessive" is defined individually by each country). The same approach dominates and in frameworks of EU, determining its common regional policy (one of the main directions of its activities).

Regulating the processes of regional development the EU states realize its own "understanding" of territorial justice (responsibility for all population of the country, where it did not live, and for all territory). But solving social tasks the state

(within the frameworks of regional policy) realize them through economy. But taking into account, that the regional policy is directed on achievement of spatial "equality" (or what is more precise – on decrease of inequality degree) between separate territories, projects realized in its frameworks are not maximally effective from the purely economic point of view.

The social purposes of the state couldn't be separated from its political goals. Regional policy role in preservation of country unity has been already mentioned. In many countries the role crisis regions electorate is great. In a number of cases crisis territories coincide (partially or wholly) with areas of ethnic (or other) minorities. Thus, the regional policy is executed by a state, in majority of cases, proceeding from socio-political reasons.

Naturally Russia simply has no means to realized EU-countries type of regional policy (or Brussels one). But Russia can borrow logic of western regional policy: its socio-political orientation, values of spatial justice and responsibility for the whole population, etc. Russia can follow logic of its development: creation of program and responsible institutions, adoption of specific laws, fixing of its financial basis, etc. All this will help to use even scarce available resources for real needs of regional policy. Use of some practical instruments of EU countries regional policy is much easier task (naturally only as the next stage).

Conclusions

- 1 Level of socio-economic disproportions (asymmetry) in Russia lead to disintegration of the country and really threatening to its unity. But the scales and form of regional policy (i.e. reaction of federal state) does not correspond with acuteness of the country territorial problems.
- 2 In Russia there are significant number of institutions, responsible for regulation of various regional processes. But activities of these institutions are extremely weakly co-ordinated and frequently contradicts to the aim of spatial socio-economic disproportions smoothing. Ministry of Federal Affairs could become leading institution in the field, but only in sharp competition with other federal institutions.
- 3 Russia still don't have officially approved programme of federal regional policy (neither of spatial development strategy), which can be really implemented. But already existing documents create good base for such programme. The main problem – absentia of institutional initiator.
- 4 It is urgently necessary to intensify legislative processes in the field of regional policy. Taking into account slow "velocity" of both chambers of the Parliament, probably the temporary decision of the problem is Decrees of the RF President. Ministry of Federal Affairs is really the only institution, which can initiate legislative process in the field.

- 5 The federal state do not have now enough means for “normal” regional policy. But part of existing regional redistribution of means has to “service” regional policy aims: promote economic development in predetermined crises areas.
- 6 Decisions of regional sphere are too subjective. This is great obstacle for regional policy development. Regional policy has to be more open for institutions of various territorial levels and to the public. Without this pre-condition it will not receive support in the country.
- 7 EU countries experience in the field of regional policy (as well as of common EU regional policy) is extremely valuable for Russia. It is impossible even to speak about replication of western regional policy in Russia, but general logic and main approaches can be taken. As well as EU countries Russia needs socially and politically oriented regional policy, aimed on decreasing of spatial disproportions in quality of life and, correspondingly, in level of economic development. It is necessary to understand that people is aim of such regional policy and economy is only instrument.

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11 SPATIAL TRANSFORMATIONS AND ECONOMIC RESTRUCTURING IN POST-SOCIALIST HUNGARY

Janet Henshall Momsen

The collapse of communist regimes in East and Central Europe and the Soviet Union between 1989 and 1991 not only resulted in economic and political changes but also in the need for the construction of new post-socialist geographies of the region (*Dingsdale*, 1999). This was recognised by *Fukuyama* (1992) who wrote of 'the end of History' while *Johnston* (1994) proclaimed 'the ascendancy of Geography'. To what extent these predictions have come true is yet to be seen but the geographical realities for the people of the region did change dramatically with the opening of international borders. This spatial transformation in itself made possible new economic opportunities at the national, regional and local level.

Dingsdale (1999) suggests that the new situation demands a new conceptualization and re-territorialization for the region based on four paradigms: redefining personal and territorial identity and perception; transition and transformation; the New Europe; and global processes. Amongst new cultural identities is that of gender politics and equity (*Tímár*, 1993; *Regulska*, 1998; *Meurs*, 1998) embedded in uneven patterns of national economic transformation (*Smith*, 1997) and influenced by trade, aid and investment from Europe and elsewhere. *Dingsdale* (1999) sees the European Union 're-territorializing post-socialist Europe most sharply within its policy discourses on assistance, international migration and enlargement' conceptualizing Hungary as part of a buffer zone protecting Western Europe from unwanted immigrants whilst granting it top tier status for membership of the EU. Spatial differentiation within the country as a result of the implementation of transition to a market economy involves a commodification of place and environment which alters the perception and influence of space in the minds of decision-makers and leads to a new and more rigorous examination of place-specific comparative advantage. Scale also influences attitudes to environment, especially in rural areas where the use of firewood for heating and dependence on small subsistence plots gives the environment local use values versus management based on exchange values as practiced by the state (*Staddon*, 1999). The local environment may also be seen as providing the basis for rural tourism in that it may offer a 'wilderness' element no longer found in most parts of Western Europe.

Hamilton (1999) argues that the opening up of previously closed borders is exposing localities and regions to more international trade and migration and thus more 'cross-border economic scrutiny' (p.140.). This enhances the significance of global-local dependence and independence relative to the former unidimensional dependence on the centralized socialist state. Areas seen as peripheral within Hungary change their status as open borders allow closer links to the newly accessible international core of the European Union. In western Hungary informal trade and strong cross-border links with Austria are encouraging particularly rapid change in border areas compared with other border zones elsewhere in Hungary.

The new market economy is also resulting in the commoditisation of spatial relationships (*Hamilton*, 1999). Thus transport, information, communications and transactions suddenly acquire costs associated with distance, quality of infrastructure and time, as the former socialist government's subsidies on transport disappear. Thus geographic proximity, accessibility, 'demonstration' and nearest-neighbour effects all reinforce the faster pace of transformation in the areas adjacent to the EU. These areas are seen as being most welcoming to foreign firms which then, in turn, reinforce a business environment likely to sustain local entrepreneurship.

This paper looks at the effect of this post-socialist transformation of space on economic changes in Hungary by comparing gender differences in the growth of entrepreneurship in rural areas in the western and eastern border zones. I look first at the importance of the border in defining the Hungarian regional political economy. This is followed by a consideration of the pre-1989 situation and its role in setting the preconditions for the recent development of entrepreneurship in rural areas and its regional variation. The conclusion provides an examination of the present situation in the two areas studied.

Regional policies

Enyedi (1990) has described three phases of regional policy in East-Central Europe during the communist era. The first phase which ran until the late 1950s, was characterized by regionally polarized growth based on urban and industrial development. The second phase lasting until the late 1970s involved a deconcentration of industry and the modernisation of the urban network. In the 1980s the beginnings of a post-industrial era was marked by attempts at regional equalization of living conditions. However, *Enyedi* (1990) points out that regional policies throughout East-Central Europe had a consistent urban bias with a very small proportion of central resources directed towards villages (*Paul et al.*, 1992). In the 1970s growth was concentrated in larger villages and key settlements with the result that isolated villages declined rapidly. In 1985 a new regional policy recognized the independence of settlements and began a development programme for backward regions but lack of funds meant that this had little impact.

The introduction of a market economy and the changes in the administrative system fundamentally altered the aims and regulatory system of regional policy (Horváth 1999). Most of these political and economic changes have had and continue to have an influence on regional processes (Enyedi, 1994, 1995). The opening up of Hungary to the global economy brought in foreign direct investment which in itself affected the relative growth of regions although it is not yet clear whether it has permanently increased or decreased regional inequalities, as Buckwalter (1995) found in Bulgaria, since foreign investors are, of course, influenced in their locational decision-making by pre-existing local conditions. However, Agócs and Agócs (1994) and Tóth (1992) argue that the expansion of the market economy with a redirection of trade towards the west from whence come most of the foreign investors, has increased regional differentiation. Of greater importance in terms of national regional policy is the growing influence of the European Union. In 1996 the Hungarian Parliament adopted the Law on Regional Development and Physical Planning. Its aims are to assist the balanced regional development of the country and the socio-economic development of its regions in accordance with the content of the European Regional and Spatial Planning Charter and with the regional policy principles of the European Union (Horváth, 1999). This policy was very different from that of socialist planning, in which sectoral objectives had taken precedence, and instead targeted problem areas with high unemployment where re-structuring was causing major difficulties. The list of areas eligible for support was approved by the government in 1998 and involved 34% of the national population and was financed at the level of 0.3 to 0.5% of GDP, which was considerably higher than for previous regional plans (Horváth, 1999). In addition, because of the improved compatibility with EU planning policies, Hungary was now eligible for special project funding from the European Union.

Borderlands

The border areas have a distinctive position in Hungarian regional development planning. The EU provides special funds to encourage cross-border interaction (for example PHARE-CBC and Inter-reg schemes). At the same time the National Regional Development Concept, adopted by Parliament in March 1998, also encourages cross-border cooperation and relations and, thereby, contributes to the better use of potential regional centres that have become peripheries of the country due to the creation of political borders (Horváth, 1999). Funding is to be directed towards assisting cross-border cooperation between border regions, common planning and coordinated development on the basis of bilateral and multilateral agreements. This is already happening, for example on the Hungarian–Romanian border where the mayors of fourteen settlements meet twice a year once in Hungary and once in Romania.

Hungary's borders were relatively stable for almost one thousand years but since the end of the First World War there have been frequent and radical border changes. For this reason, border-related issues have become a crucial element of Hungarian domestic and foreign policy, as well as of the country's social and political geography and in a sense the whole country can be considered a borderland society. Out of Hungary's nineteen counties only five do not share a boundary with another country but only the Austro-Hungarian border coincides with a linguistic boundary. About 60% of Hungary's borders (including four-fifths of the Hungarian/Romanian border) sever linguistically and culturally cohesive regions (*Hajdú*, 1996). There are about 320 settlements and cities – about 10 per cent of all Hungarian settlements – located directly along the 2,242 km long state borders. These are considered in a sociological sense as “frontier settlements”. The main social and economic characteristics of these settlements are determined by the border with many being cut off from much of their natural hinterlands by frontier realignments (*Kovács*, 1989; *Kovács*, 1993; *Böhm*, 1995). The north-west border was seen positively while the south-east border had a negative connotation (*Kovács*, 1993).

We have selected one study area on the northwest border with Austria in the county of Győr-Moson-Sopron and one in the southeast in Békés county on the Romanian border. These areas have very different histories. In 1945 the Austrian territories adjacent to Hungary were occupied by the Soviets and so the Hungarian-Austrian borderlands were controlled by the same foreign power. After the Austrian Treaty of 1955, the occupying Soviet troops were withdrawn and Austria regained its sovereignty and became an independent but neutral country. Its 365 kilometre common border with socialist Hungary became an almost completely impenetrable frontier between the two worlds and all along the border minefields were set. The first cracks appeared briefly during the Hungarian revolution in 1956 when more than 200,000 people emigrated. During the 1980s the frontier became more permeable and less restrictive and was a popular area for contacts between families who had been divided by the Iron Curtain. Research on border region problems and transborder regional planning began in 1967 but stopped in 1972 because of lack of interest by Austria. It started again in the 1980s with the initiative coming from the Austrian side generated by the growth of large scale transborder shopping. By 1985 this border became the busiest between East and West. Cross border commuting also intensified first in the form of contract labour and later with considerable legal and illegal short-term migration of inexpensive Hungarian male and female labour. The privatization of the Hungarian economy has attracted substantial flows of Austrian capital some of which is being put to use for the purchase of farmland by Austrians although Hungarian law forbids the purchase of land by foreigners (*Hajdú*, 1996). Between the World Wars double ownership was quite common when many landowners had their properties split by the new international

border. However, Austria's membership of the EU from January, 1995 is creating new conditions since the border now separates Hungary from the European Union and so has become a major entry point for illegal immigrants.

According to official propaganda, the Hungarian–Romanian border should have been an area of friendship and cooperation between socialist comrades. However, because of “differing attitudes towards the issue of minority rights during most of the period of state socialism, the Romanian–Hungarian border symbolized alienation and even downright hostility” (*Hajdú*, 1996, p. 144.). This border transects Hungarian linguistic areas which should have eased transboundary cooperation. In practice it became the main hindrance, as for the Romanian government it was more important to change the frontier's ethnic character than to encourage cross-border contacts. It is now considered a border of intensifying cooperation with new crossing points being opened, although the expectations of better interstate relations and more liberal border regional policies raised during the 1989 Romanian Revolution have only partly been fulfilled. However, the liberation of individuals has led to more transboundary movement than ever before. Much of this involves ‘black market’ trade, illegal temporary workers, ethnic Hungarian refugees and gypsies.

In the Győr area it was predicted that cross-border trade and flows of capital and tourists would encourage the growth of entrepreneurship while in Békés county the presence of the border with Romania was expected to have a neutral effect on the growth of small firms. The western study area is described by *Enyedi* (1994) as an area with promising prospects while he sees the eastern area as a crisis region. The northeast has fewer foreign residents than the southeast but both have net outmigration (Geographical Research Institute, 1994 and 1995). Győr area has one of the lowest unemployment levels for women while Békés has consistently had one of the highest levels in the country. Békés also has had the lowest number of job openings in the country (*USAID*, 1991). There is considerable foreign investment in the west but very little in the east (*Berényi*, 1992) and the rural economy of Győr-Moson-Sopron is more diversified than in Békés county. Thus the conditions for the development of entrepreneurship are very different in the two regions.

Rural restructuring

Under the system of central planning regional differences were supposed to be reduced through redistribution of resources (*Bachler*, 1992). Despite this ideology the dominant growth pole of the country was, and is, Budapest, which in 1990 had 19.4% of the nation's population. Development was concentrated in urban areas: in the 1950s in Budapest, and later in the 18 county seats and by the 1970s in smaller towns (*Andorka*, 1993). Rural–urban inequalities in mortality, living standards, infrastructure and communal services increased during the 1980s due to increasing

centralization of services (Orosz, 1990). Likewise, rural-urban differences in income which had declined between 1962 and 1982 because of the role of household plots in subsidizing wage income, by 1992 were at the same level as in 1962 (Andorka, 1993). In rural areas wages are lower than in urban areas and jobs are especially hard to find since the agrarian reform (Répássy-Symes, 1993).

In 1972 there were 1.7 million small plots and five million people, half the population, lived in households cultivating small private plots (Tóth, 1992). These plots produced 31% of the gross agricultural output and 23% of the marketed output (Tóth, 1992). In 1987, 10.5% of the total personal income of all Hungarian households and 18.6% of the personal income of village households came from the agricultural secondary economy. By 1990, 41% of the total agricultural production was produced by the few private farms and nearly 1.5 million household plots (Andorka, 1993). Szelényi (1988) hoped that a new bourgeoisie would evolve from this rural secondary economy but after the transformation of the regime in 1989 the tendency to inequality intensified. In 1992 only 75.7% of village households had piped water in their homes and 7.2% had telephones while the equivalent figures for Budapest were 93.8% and 53.0% (Andorka, 1993). If households in the lowest quintile of income distribution are considered poor then 36.4% of those living in detached farms, 24.7% of those in villages but only 14.8% of those in Budapest were suffering poverty (Andorka, 1993). As in so many countries rural poverty though less visible, was more widespread than urban poverty.

Unemployment is also higher in rural areas than in urban areas with only 78% of those living on detached farms being employed, and 81% of those in villagers versus 88% of those living in Budapest. Overall Andorka (1993, 220) considers that rural areas have shouldered the greater part of the burden of economic restructuring since 1990 because of the ending of government agricultural subsidies, the loss of export markets in the east and the slow and uncertain progress of privatization of agricultural land. Several studies point to the feminization of agriculture as an outcome of industrialization (Tardos, 1993) and the tendency towards a feminization of poverty (Völgyes, 1985; Szalai, 1991; Tímár, 1993) but it is only among the older part of the population that women have stayed behind when men migrated to the city (Huseby-Darvas, 1990).

Changes in rural policy in the European Union are increasingly being felt in Hungary as the country prepares itself for accession to the EU. At the same time, the impending expansion of the European Union as the countries of East-Central Europe become members has forced the EU to reform its Common Agricultural Policy. Marsden (2000) sees rural development policies in Europe now involving three dynamics: agro-industrial; post-productivist and rural development. It is likely that policies looking at the Hungarian countryside as consumption space for the urban and ex-urban middle classes of a wider Europe will emphasize environmental policies which protect the visible landscape and maintain the scarcity value

of different types of rural nature. The implementation of such policies can be seen in the 1998 Targeted Budgetary Allocation for Regional Development which offered assistance for the restructuring of agriculture, the utilization of agricultural lands for non-agricultural purposes, development on lands not designated as environmental protected areas, and the growth of tourism (Horváth, 1999). Such changes increase the potential opportunities for rural entrepreneurship.

Rural entrepreneurship

In the post-socialist countries of Eastern Europe, *Brezinski and Fritsch* (1996) suggest that bottom-up development based on small new firms may make a considerable contribution to the solution of social, economic and political problems. This approach is welcomed by the new governments of the region as money is no longer available to subsidize large state-owned enterprises and top-down privatization is proving more difficult than expected. Bottom-up development is thought to fulfil four functions in the process of transformation to the market economy: firstly it creates a pluralistic society and safeguards the existence of democratic society; secondly it contributes to competition and may help protect the market from the collapse of dominant large companies; thirdly small firms improve the flexibility of the economy as a whole by encouraging the adoption of innovations, adaptation to changes in supply and demand and reduction of regional disparities; and fourthly small firms are seen as providing a social cushion by absorbing some of the job losses caused by the collapse of state enterprises (*Brezinski-Fritsch*, 1996).

The success of new, small enterprises depends very much on the economic environment at the starting point. In Hungary "quite widespread forms of artisan/craft based small scale private production were tolerated throughout most of the post war period" (*Bartlett-Hoggett*, 1996, p. 154.). The limit to the number of employees permitted in such enterprises was gradually raised starting in 1982 and by 1986 Hungary had over 36,000 small enterprises (*Bartlett-Hoggett*, 1996). This was in addition to the widespread private production of food from small family plots. This second economy was more openly tolerated in Hungary than in most of the other countries under communist regimes. There has been considerable discussion as to the extent to which production of food from small household plots enabled rural entrepreneurship to develop from the late seventies and of the role of family traditions and household survival strategies in encouraging possibly as many as 15% of these household-based producers to be identified as entrepreneurs (*Szelényi*, 1988; *Morell*, 1999). The inter-household and community networks upon developed in the second economy now provide a crucial means of acquiring the skills, information and capital necessary to start up new enterprises in both the formal and informal sectors. Such networks are especially important in Hungary where the official enabling structure for raising capital is a major deterrent with high interest rates

varying between 30% in 1989, 32.6% in 1995 and falling to 17% in 1999 (*Barclays*, 1999) and a banking system which refuses to accept property as security for loans (*Bartlett-Hoggett*, 1996). A woman entrepreneur in an eastern Hungarian village interviewed in August 1996 was paying 35% interest on her start-up loan. It is not surprising that most entrepreneurs interviewed in 1997 went to great lengths to avoid taking out formal loans preferring to depend on family and friends for start-up funding.

Bartlett and Hoggett (1996) consider that the mechanism for state encouragement of small business development in Hungary is pretty rudimentary and the *World Bank* (1995) is encouraging further structural reforms. Attempts to support entrepreneurship through capitalization of unemployment benefits and provision of technical assistance to the unemployed through local labour offices has not been very successful (*Fretwell-Jackman*, 1994, 184; *Laczló*, 1996; *Voszka*, 1995). Despite this, the proportion of small firms, with fewer than 50 employees but excluding sole proprietors, legally registered rose from 55% of all enterprises in 1989 to 88% in 1992 (*Bartlett-Hoggett*, 1996). It is estimated that the number of sole proprietorships increased from 221,794 in 1989 to 339,866 in 1991 but the majority of these operate on a part-time or second-job basis and have no legal status (*Bartlett-Hoggett*, 1996). Over one-fifth (21%) of these small firms are in the trade sector in Hungary (*Bartlett-Hoggett*, 1996, 166) responding to the breakdown of the centrally planned system of retail distribution. The European Bank for Reconstruction and Development considers that Hungary is short of shops (*Economist*, 1996) and there is much enthusiasm for investment in this sector (*Bogyó*, 1995).

Research in the United Kingdom (*Curran-Blackburn*, 1991) has shown that entrepreneurial activity is often a response to unemployment and low wages and to limited unemployment benefits. In Hungary where such benefits cover only 78% of those looking for work (*Bartlett-Hoggett*, 1996) it is not surprising to find a ready supply of new entrepreneurs. In the West it has been shown that only 2–3% of the unemployed become successful entrepreneurs but this option may have greater significance in Eastern Europe because of the poor development of small businesses (*Fretwell-Jackman*, 1994, 183). Those who experience discrimination in the labour market such as ethnic minorities and women have also been shown to frequently seek a solution in self-employment (*Curran-Blackburn*, 1991). In Hungary, women are facing increasing discrimination in employment and usually receive lower unemployment benefits than men as a result of earning lower wages, so they find entrepreneurship has much to offer them. In Eastern Europe where women tend to be better qualified relative to men than in the West in both their education and work experience, training programmes may encourage entrepreneurship among women (*Fretwell-Jackman*, 1994). A tradition of entrepreneurship which is important in capitalist countries, has not been seen as being so relevant an explanation for the growth of entrepreneurship in the transitional economies of Eastern Europe. However, it has been suggested that, given the opportunity, long-buried family tra-

ditions can revive (Szelényi, 1988, p. 107) and our fieldwork has shown that having family members who have entrepreneurial experience is one of the best predictors of success for new businesses.

Rural areas have certain advantages for entrepreneurial activities. The 'push' factors of unemployment and lack of alternative opportunities are often more marked than in urban areas and the positive element of community and family networks is stronger. Women, as in most cultures, are most likely to be involved in maintaining these networks and in preserving entrepreneurial traditions. The privatization of the collectives has to some extent released capital, equipment and agricultural resources in rural areas (Kovács, 1996). Many women were employed by the collectives in small manufacturing branch plants, or services such as childcare or retail stores or bookkeeping. These skills can now be transferred to self-employment in the private sector. The availability of shops is more limited in rural than in urban areas and as commuting to towns is reduced by the rising cost of transportation, there is an increasing need for local services such as convenience and clothing stores, hairdressers, and restaurants. These services are particularly important to women who are least likely to have access to private means of transport and it is logical that women entrepreneurs should respond to these needs. They are also involved in providing secretarial and financial services in small family-owned businesses such as plumbing or pig-rearing.

The development of a politically conscious entrepreneurial class occurred very rapidly after 1989 (Agócs-Agócs, 1993). At the end of 1991 there were over 400,000 individual entrepreneurs and 10,000 private firms active in Hungary and six months later the total number of enterprises had reached 638,275 indicating a pent up interest in this kind of activity (Agócs-Agócs, 1993). Szabó (1991) reports that 32% of the owners, managers and members of these new small enterprises were women. Their participation rates are especially high in trading enterprises at 65% and in new small cooperative activities at 43%. The new privatized businesses made use of women's knowledge gained from the skills learned from women's management of the household economy, their involvement in private or semi-private spheres of production and their high levels of education and training especially in economics and finance (Szabó, 1991). Women's role in such enterprises has been encouraged partly because the hotel and catering sector, in which a lot of women are involved, was one of the first to be privatized in 1990 (Groen-Visser, 1993).

The changing role of women

Hungary is the only country in East-Central Europe in which the transition to privatization did not immediately led to higher unemployment among women than men (Eberhardt, 1991; UN, 1992) although a similar imbalance may be emerging

in Romania, Estonia and Slovenia. The reasons for this situation in Hungary are complex. The 1990 census revealed that women's unemployment rates were lower than those of men in all age groups and for workers with all levels of qualification but by 1994 this relationship was not found in all parts of the country (Köllő, 1995).

Under socialism, citizenship was linked to employment and both women and men were expected to be in full time paid jobs (Tímár, 1993). Thus work became a prerequisite for access to social services and indeed "eligibility rights based on citizenship were substituted by ones based on having regular and continuous employment" (Szalai, 1991, 153; Ferge, 1992). In 1987 among the population aged 15 to 74 72.5% of men but only 60.7% of were economically active. In Budapest and the towns 73.4% of men and 65.5% of women were economically active while for villages the rates were 71.5% versus 54.7% for women. Morrell (1999) argues that it was mainly older women who were not in paid employment and this age cohort made up a larger proportion in rural than urban areas. By 1994 only 62.8% of men and 51% of women overall were economically active but in the villages the figures were 58.9% for men and 43.9% for women as against 65.7% and 55.8% respectively in the towns reflecting the effect of the job losses caused by the privatization of farmland.

Despite the apparent official support for gender equality under socialism (Bolló, 1993), women's double burden meant that in terms of the number of hours worked per week the gender gap was greater in Eastern Europe than in any other industrialised region of the world (Einhorn, 1993). Gender differences in the extent of involvement in domestic tasks in homes with few labour-saving devices created a situation where in Hungary and Poland, for example, women worked an average of seven hours per week more than men (Einhorn, 1993). Table 1 shows that women's double burden has increased since the transition especially in the villages. The time spent on reproductive work has increased over the last two decades for both men and women but in the villages this burden is greatest for women and least for men. These differences may reflect both poorer living conditions in the villages than in the towns and the survival of the traditional gender division of labour to a greater extent in the villages than in the urban areas.

The economic restructuring following the end of the Cold War was 'embedded' in the simultaneous process of social and political transformation (Quack-Maier, 1994) and was not gender neutral (Einhorn, 1993). Watson (1993) argues that "the transformation of the relationship between public and private spheres lies at the heart of the process of change in Eastern Europe, and that the exclusion of women and the de-grading of feminine identity currently in train are not contingent to, but rather a fundamentally constitutive feature of, the democratization of Eastern Europe". The transition from the command economy to a market economy and from a centrally planned regime to democracy was accompanied by rising unem-

ployment and price inflation, a decline in state-provided services, an increase in pornography and prostitution, pressure from politicians and church to limit access to abortion (Gal, 1994), increased public support for traditional male and female stereotypes, a decline in the number of women in political positions and an increase in jobs being advertised as only for men with women being left out of retraining programs (UN, 1992; Makara, 1992; Goven, 1993; Matynia, 1995).

Table 1

The gender division of time spent in minutes, on productive and reproductive labour according to settlement types in 1977, 1986 and 1993, on an average day, for the population 18–49 years of age

Date	Budapest		Towns		Villages	
	Men	Women	Men	Women	Men	Women
Productive Sphere						
1977	286	227	321	227	380	221
1986	284	195	343	222	369	207
1993	249	175	287	177	306	175
Reproductive Sphere						
1977	117	258	112	289	105	309
1986	106	253	110	287	97	306
1993	134	280	116	303	113	314

Source: A magyar társadalom életmódjának változásai az 1976–77., az 1986–87. és az 1993. évi életmód-időmérleg felvételek alapján I. A társadalmi idő felhasználása. KSH, Budapest, 1994. pp. 58–65.

The part-time work undertaken by young mothers in much of Western Europe is generally not available in these transitional economies. Thus self-employment may offer the flexibility needed by many women in order to combine their productive and reproductive work. A 1988 study found that 77% of Hungarian working women wished to continue with their jobs even if given the opportunity to stay at home although ideally they would prefer part-time work (USAID, 1991, 57). By 1995 only two-thirds of Hungarian women thought that women should be in paid work and 60% of these thought that women should not be employed full-time (Frey, 1996).

In 1990 one-fifth of businesses were owned or operated by women. This may be an underestimation of women's involvement in small enterprises as in many cases women are not the 'official' owner of the business but may play a key role in its management and operations (AID, 1991, iii). The USAID study (1991) found no legal or structural impediments specific to women in business except for the burden

of the traditional Hungarian family structure which continues to place responsibility for children and household management in the hands of the mother (Ibid). In 1991 the Hungarian Association of Entrepreneurial Women was created to encourage women in business (AID, 1991).

Studies in 1988 and 1990 of potential interest in entrepreneurship found that about one-third of those interested were women and follow-up research to 1996 revealed that the same proportion of women became actual entrepreneurs, although the potential business people tended to be younger than the actual ones (Lengyel, 1998). Interestingly there was little correlation between size of settlement and entrepreneurial interest although occupants of *tanyas* had the highest level of inclination towards entrepreneurship which Lengyel (1998, 41) ascribes to their experience of independent production. However, there was a clear difference by size of settlement as to the use of the profit from business: two-thirds of those in Budapest would invest their profits while 51% of entrepreneurs in villages and 71% of those on *tanyas* would use any profit to improve their living standards (Op. cit. 43). These differences reflect the extent of rural poverty and a poorer infrastructure especially affecting the isolated farms.

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In rural areas wages are lower than in urban areas and jobs are especially hard to find since the agrarian reform (Répássy-Symes, 1993). Yet housing is cheaper than in the towns and local supplies of wood can be used for heating. A slow-down in rural-urban migration and some counter-urbanization, prompted by both lower living costs and a more pleasant environment, has become noticeable in the transition period. Although the number of people living in the rural areas fell steadily from 62% in 1946 to 41% in 1989, the decline has been reversed and in 1997 it was estimated that 47% of the Hungarian population lived in villages and towns of less than 10,000 (Kovács, 1997). The opening of borders has made these areas particularly more attractive as a focus for new opportunities for private enterprise al-

though illegal cross-border activities such as prostitution and drug smuggling are also bringing crime to these areas.

Democracy and capitalism encourage individualism and empowerment of women. Under socialism the family provided a refuge from the demands of the state and today individual women utilize these networks to build businesses. Housing in rural areas is less cramped than in cities and family networks remained in place. Tóth (1992) argues that closed rural labor markets will evolve. Not only have villagers lost their jobs and their urban incomes but they have also lost their ties to urban culture and way of life and find themselves stuck in a more traditional paternalistic rural way of life. The impact of the economic transition on the polarization of incomes is also very conspicuous in the villages. The *nouveau riche* people are predominantly those who were able to benefit from the break up of the collectives, often the former managers. One such was raising racehorses and traveled by helicopter between Budapest and his remote ranch in eastern Hungary. Thus rural society is becoming increasingly polarized.

The urban bias in planning in Hungary has meant that services and infrastructure in rural areas are much inferior to those in the cities so there is scope for the development of local services such as hairdressers and village stores. In Békés county in 1992 there were 13,388 firms of which 11,305 were individual entrepreneurs most of whom had legalized their former activities in the second economy (Groen-Visser, 1993). In one eastern border village we found a hairdresser who had been in operation since 1972. Firms in Békés county had the lowest profitability amongst Hungarian counties except for the small entrepreneurs of whom 65% were making a profit. Only Vas county in western Hungary had a higher proportion of successful entrepreneurs (Groen-Visser, 1993). In one of the border villages in Békés county, in the summer of 1996, we met a woman who had opened a village general store and an icecream stand. She had previously worked for the store in the collective farm but when the collective was broken up she got a loan and built her own store in the village. Her husband had been forced to take early retirement from the fire service in a nearby town and so she had become the family breadwinner. She had also invested in additional land which she and her husband farmed producing both for household consumption and for sale. However, she excused her activities by explaining that she was only doing it because they needed money so their two teenage daughters could train for good jobs. Overall we found that there were three main reasons for people in villages choosing entrepreneurship: household survival; a response to changing taxation laws and fiscal policies; and a desire for self-employment (Table 2). However, individuals may often have several reasons at the same time. In the above case study, although the entrepreneur explained her activity as a response to her husband's loss of employment it was clear that she enjoyed the challenge of building her business.

In western Hungary of the 825 registered entrepreneurs in the seventeen villages surveyed, 36% were women while in the ten border villages in eastern Hungary 39% of the 336 entrepreneurs were women. In both cases the type of business owned by women was less varied than those of men and the vast proportion of women worked in the service sector. Most women ran small shops or restaurants/café/bars while men were more likely to utilize craft skills to set up carpentry, electrical or car repair businesses. Women were also involved in personal services but these were more common in the west where Austrian tourists and second-home owners provided high-paying customers.

Table 2

Types of entrepreneurial activity in rural West and East Hungary, by gender

Activity type	W e s t		E a s t	
	Women, %	Men, %	Women, %	Men, %
<i>Primary</i>				
Agriculture/Forestry/Hunting	5.1	14.9	11.4	28.4
<i>Secondary</i>				
Manufacturing/Craft work	9.4	36.0	5.3	13.7
<i>Tertiary</i>				
Services	85.5	49.1	83.3	57.9

Source: Fieldwork, 1998.

As Table 2 shows differences between the two border areas in terms of cross-border links, accessibility to towns, levels of disposable income and importance of agriculture are reflected in the types of business found. In one village in the west there were even two masseuses while in the east few villages had more than a hairdresser and possibly a cosmetician. Men often drove trucks or buses but one woman in the west had a horse-drawn carriage used by tourists. Tourism also created a demand for souvenirs and small hotels and for security services. In Békés one village had joined the national rural tourism association but had failed to attract tourists although German hunting parties did occasionally visit. In Győr-Moson-Sopron the mayors of the border villages had a conference in June 1998 to discuss ways of joint advertising in the western European press to attract visitors, emphasizing especially their local horsemanship. In both areas there was a surprising range of professional jobs in the villages, from customs officials, and insurance agents to business advisors, doctors, dentists and veterinarians. Dentistry, and accountancy are predominantly female occupations. In western Hungary the cheap and excellent dental care attracts people from all over Europe and some of the biggest new houses in the villages are owned by women dentists.

Entrepreneurship was also seen as related to life stage. Some started businesses in order to provide a going concern for their children when their education was completed. Others were doing it to survive between losing their job when the cooperative closed and being able to retire. There was very little interest in working beyond retirement age.

Conclusion

It appears that rural women in Hungary are slightly more likely to become entrepreneurs in poorer areas where the need for services is greatest and alternative opportunities scarce. Neither proximity to Western Europe's capitalist ideology nor a small farming economy offering opportunities for farmgate sales and rural tourism, as in western Hungary, are sufficient to generate high levels of entrepreneurial activity. For many the alternative of a well-paid job in Austria is more attractive than self-employment which is seen as inherently risky. Many women interviewed said that they saw entrepreneurship as a last resort when they were unemployed or husbands were unable to support the family. Yet at the same time they showed pride in their own business acumen and their achievements. Many couples run their businesses jointly although the woman may be registered as the entrepreneur, even though she may have a full-time job. Thus traditional rural family values survive despite decades of state-sponsored gender equality now reinforced by global influences encouraging female employment.

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12 THE CHANGING EFFECTS OF GEO-STRUCTURAL FACTORS IN A PERIPHERAL AREA

Shaul Krakover

This paper examines the changing effects of several geo-structural factors in shaping the intra-regional distribution of population growth. The examination is conducted using data from a peripheral region in Hungary during the country's transition from socialism to capitalism. The central city of the peripheral region and its spatial position vis-a-vis other settlements, is considered as a major geo-structural factor using the conceptual framework of growth centers. Such centers are assumed to spread growth effects to their vicinity (*Hansen, 1972; Mosely, 1973; Taaffe et al. 1992*). The radiating growth effects attributed to the city compete, however, with other structural and historical factors deeply rooted in each specific settlement. Thus, the spatial role of the city is assessed comparatively to several other factors that may be held responsible for the distribution of growth in a region. These factors are economies to scale, infrastructure, and historical inertia. The impact of these factors is estimated in the framework of expanded multivariate models.

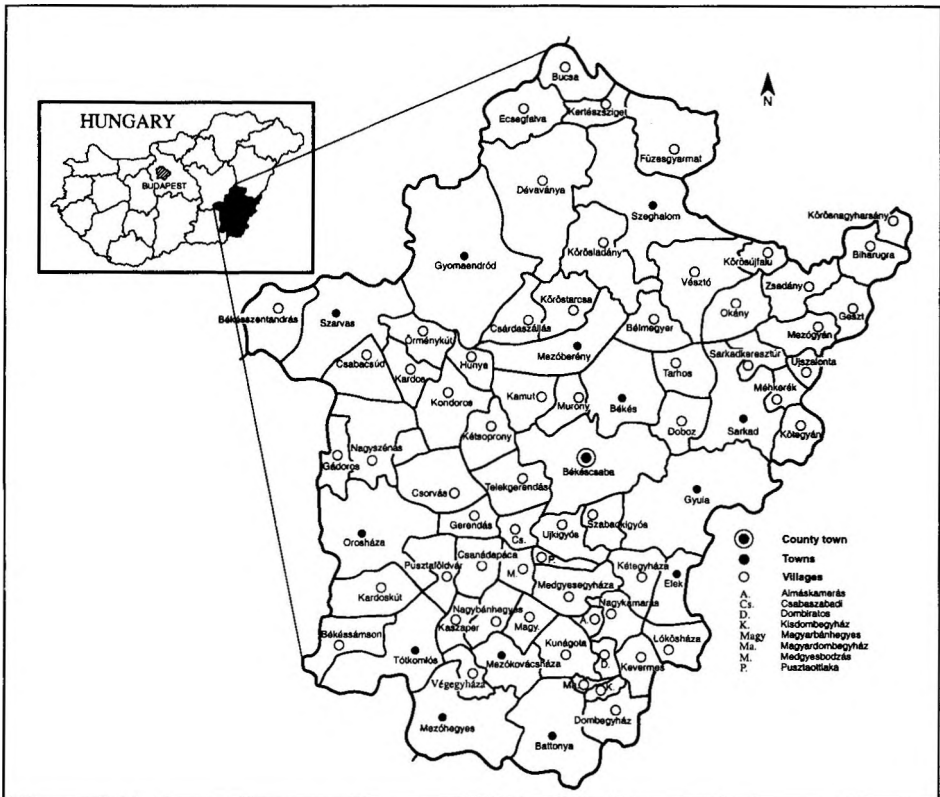
The suggested models concentrate on the most basic geographical and structural factors that are usually employed in economic and regional development schemes. The paper deliberately limits the scope of the factors included in the analysis to those associated with space, time, and infrastructure, and avoid the exploitation of any direct socio-demographic factor associated with the dependent variable. Several models are examined in order to evaluate the interplay among the competing factors. Although the same models can be applied to any region, they are most suitable for peripheral areas where the region is dominated by a single relatively large urban center. The application of the models to data pertaining to periods before and after transition should reveal the changing role the selected geo-structural factors play under different political-economic conditions.

The region selected for investigation is Békés county, Hungary (*Figure 1*). Békés county suits the definition of a peripheral area, first, by its remote location in the southeastern part of the Great Hungarian Plains next to the Romanian border. Second, its economy is still dominated by agriculture, agro-business, food-processing plants, and only a small sector of other industrial activities. Third,

Békés county suffers from population decline for several decades. The central city of the area, Békéscsaba, has about 65,000 residents, comprising about 16 percent of the region's 400,000 inhabitants. The study focuses on the years 1970 to 1996. During this period Hungary underwent a major change from a socialist regime and a centrally planned economy to the first steps toward a free market economy. The models are applied with the intent to research the changing role of the central city as opposed to the other factors during the socio-economic transition of the country's regime.

Figure 1

Békés county study area



The paper opens with a literature review concentrating on three issues: the importance of regional development schemes in former eastern block countries, the debate around *Rondinelli's* (1985) urban function approach in regional development (UFRD), and the selection of variables to be employed in the study. The two following sections present the methodology and the results. A final section provides summary and conclusions.

Literature review

The literature review section could have begun with a summary of the core-periphery relationships (Friedmann, 1966), the spread and backwash, or polarization and trickle-down effects (Myrdal, 1957; Hirschman, 1958), and the derived growth center policy (Hansen, 1975). Although such summary would supply the appropriate conceptual framework for this study, the writer assumes that readers of this article have a good familiarity with these concepts. Those readers who do not belong to this category should refer to early conceptualization reviews furnished by Darwent (1969), and Gaile (1980) and a recent retrospective review provided by Parr (1999). Instead, this section of the paper concentrates on two current debates, situated at the heart of this study. One is the current status of regional development and regional empowerment especially in East Central Europe; and the second is the debate on the urban function approach in regional development. A third section presents previous studies substantiating the factors selected for inclusion in the models.

Status of regional development and regional empowerment in East Central Europe

Following the fall of the Iron Curtain, many if not most, of the regions of the former eastern block countries found themselves in a state of underdevelopment. Alonso (1991), for instance, noted that "the various regions, rural or urban, of Eastern Europe, in a sense fit the [EC] Regional Commission's typology of underdevelopment or of actual or threatened industrial decline" Horváth, 1997. p. 10.) reported more recently that in East Central Europe, there is no region – except for the three around the capital cities of Prague, Budapest, and Sofia – with higher GDP per capita than the average value for the EU, with most regions being much below that level. It has been further observed that in most East European countries one or few rapidly growing urban centers predominate the whole country (Surazska et al, 1996).

Consequently, peripheral regions in East European countries used to the allocation system of the centrally planned economy have to cope with reduced central government support and the vagaries of the process of privatization (Enyedi, 1994; Enyedi, 1996; Surazska et al, 1996). The initial stages of capitalistic development result, most often, in increasing interregional disparities. Eventually, in order to avoid the risk of state instability and popular unrest, many of the peripheral regions require the intervention of central government or supranational agencies (Murphy, 1992). The evolving gaps between few core areas and the many peripheries and their consequences on political instability, call for the investigation of regional development problems in the peripheral areas of these countries (Bartke, 1997; Nagy-Turnock, 1998).

The urgent need to investigate regional development problems is further highlighted by the emerging views on regional governance (Wallis, 1994) and the ongoing discussion concerning the devolution of power from the central government to the lower tiers of the regions and the local municipalities (Kingsley, 1996). According to Surazska et al. (1996) there are indigenous actors pressing for change in territorial reorganization of political power in Central Europe. However, the authors assert that "The most effective pressure seems to be prospective admittance to the EU, where regions act as partners in the distribution game" (p. 454).

Although in the developed countries large-scale regional development programs had become rare, "public policies affecting the economic development of regions have not vanished". "Regional development policy has become more narrowly and explicitly focused... on publicly enhancing the profit-making potential of private enterprise" (Pudup, 1993, p.178). In the former eastern block nations, it is not only that large scale regional economic development schemes are missing but also the former tradition of centrally planned regional programs have been abolished. Also, mechanisms for the dissemination of incentives to local private entrepreneurs are yet not in place.

Thus far, Hungary is the only country in East Central Europe that has reorganized its local governance system and enacted a regional development law. As a result strategies and programs for regional development are now being formulated. In most other countries in this group, new schemes of regional reorganization of space and governance are still in the stage of national debate (Wollmann, 1997; Surazska et al, 1996). This situation, and its potential for social tension and state instability, calls for a thorough investigation of regional problems afflicting the peripheral regions of the former eastern block nations.

Debate on the urban function approach in regional development

The possibility of any central government or supranational agency to effectively intervene in the development process of a peripheral region depends, first of all, on the diagnosis of its problems and their spatial distribution. Rondinelli and Ruddle (1976) mentioned the achievement of these goals among the reasons for the development and application of the urban function approach in regional development (UFRD). The UFRD approach utilizes about the same factors as those suggested in this study. This paper argues, however, that alongside the UFRD approach some preliminary models should be applied in order to uncover the basic underlying regional spatial trends.

The UFRD approach was initially proposed by Rondinelli and Ruddle (1976), and later intensively applied and convincingly advocated during the last two decades by Rondinelli (1983, 1985, 1990, and 1993). In a nutshell, "the urban function

approach offered a conceptual framework and identified a set of spatial planning and analysis techniques intended to help regional planners in poor rural areas create a physical environment more conducive to economic growth and poverty alleviation. It helped them identify strategic locations for the services and infrastructure that were part of the package of integrated rural development programs" (Rondinelli, 1993, p. 326).

The twenty-page description of the urban function approach to regional development given by Rondinelli (1985, p. 27–46) sketches a broadly-defined process-oriented planning approach aiming for a rational allocation of public resources among the settlements of a geographically defined rural area (Rietveld, 1990). The urban function approach concentrates on the analysis of the spatial and the infrastructural attributes of the developing region, though it does not ignore its social and demographic composition affecting the region's human resources. Methodologically, this approach is applied using "methods and techniques that could be used by planners and policy-makers untrained in regional analysis" such as "scalograms, location quotients, measure of spatial concentration and association, and indices of development" (Rondinelli, 1993, p. 326).

Belsky-Karaska (1990, 1993) criticized the UFRD approach for being built on shaky and underdeveloped theoretical foundations, for ignoring important demand-side information, and for neglecting more sophisticated methods of analysis such as the location-allocation siting approach. Belsky-Karaska's (1990) paper opened a heated discussion that ended in delineating the differences between the two methods (Rietveld, 1990; 1993). As a part of this discussion Hansen (1992) suggested that key issues in the debate may be "clarified by placing them within an appropriate historical context".

Hansen referred in particular to three contexts. First, the "balanced versus unbalanced growth controversy" associated with Hirschman (1958). Second, to the "cumulative-causation version of unbalanced growth [that] tended to emphasize the negative backwash effects operating in peripheral areas" as proposed by Myrdal (1957) and, third, to partially adopting the model of hierarchical diffusion in the urban system suggested by Berry (1973). In this regard the UFRD approach emphasized the important developmental roles assigned to the urban centers in general and to the intermediate size cities in particular as potential points for the concentration of growth inducing investments (Hansen, 1982; Rondinelli, 1983; Hansen, 1988). The models for the examination of regional central city potentials suggested in this paper as well as their specific parameters are anchored in the urban function approach in rural development (UFRD) and its historical context as summarized in the aforementioned quotations.

Factors selected for inclusion in the models

The literature reviewed in the previous section shed light on the type of factors required for the analysis of a region's spatial geo-structural situation. These factors are presented and justified for inclusion in the models in the following paragraphs.

Size of settlements: This factor probably represents the most elementary variable for the measurement of the geo-structural attributes of a region (Rondinelli, 1993). Each settlement according to its size represents private and public investments made throughout the years in its housing stock, road system, production capacity, public services, public facilities, and more. The settlement size variable is usually highly correlated with, and thus used as a surrogate for, such factors as economies to scale, concentration of public infra-structural services, or volume of commercial services. Due to the advantages accrued to people moving to urban areas and larger size settlements, a positive relationship is hypothesized between population size and population growth.

Transportation infrastructure: The access to transportation arteries is unequally distributed anywhere and especially in the case of the sparse road system of developing regions. Places located closer to the road or rail systems enjoy higher degree of connectivity and lower transportation costs. Several recent studies reiterated the significance of transportation infrastructure and accessibility for regional growth, though most of them emphasized the conjoint need for other favorable conditions (Hart, 1993; Moore, 1994; McQuaid, et al., 1996). It is anticipated that settlements located closer to the main road or railroad systems will have better chances for economic development and population growth.

The time dimension: One of the important structural variables often ignored in studies of regional development is the temporal dimension. As argued by Allen (1982), time should be considered as a structural variable since, in most instances, past trends have a great impact on the future. This argument is based on grounds of human behavior on the one hand, and vested interests on the other. Behaviorally, people tend to rely on routines and habits inscribed by cultural traits, local histories, and physical environments. These factors tend to generate a pattern of behavior best described as *inertia*. As in physics, and as was recognized long ago in migration studies (Lee, 1966), people will usually not leave the track prescribed by inertia unless there are some push or pull factors that detour them from their regular orbit. Vested immobile interests also tend to retain people in their original locations at least as long as their investments can be utilized here but not elsewhere. Large and indivisible, public or private, investments tend to generate economic growth and attract population during a period that may transcend one temporal unit of measurement. Organizational linkages also tend to preserve their structure, especially during periods of political stability. This logic leads to the hypothesis that present population growth should at least, partially be related to trends of the immediate past.

Relative position with respect to the regional city: The larger city in a region represents the top of the regional urban hierarchy. Usually, such places are well connected via the road system to other regional or national centers. Also, they are usually situated at the hub of the intra-regional road network. Thus, the location of and access to the regional central city should be considered as an important element in the organization of regional population growth (Benziger, 1996). Using the regional central city as a focal point helps to introduce a measure of relative location of each settlement to the central city. This measure takes into account not only the distance dimension of each settlement from the central city but also its directional position in a system of polar coordinates using the central city as a focal point (Krakover and Casetti, 1988). Such coordinates system allows testing hypotheses of anisotropic organization of population growth (Fotheringham-Pitts, 1995) around regional central cities (Taaffe, et al., 1992).

The variables introduced in this section are not claimed to represent a complete list of geo-structural factors effecting regional population growth. No doubt, some other variables may be added. However, these variables seem to share in common their fundamental geo-structural nature. It should be further noted that the suggested competing models are not offered as all-encompassing true models. On the contrary, the selection of variables is done with the view that "it is fruitless to speak of true models in the context of social science research" (Berry, 1992, p. 7). In this context, many different view points for the understanding of population growth may have been selected, such as socio-cultural indicators (i.e., education levels), economic activity (i.e., employment structure), and decision making (political structure). The variables selected for this study are specified with the intent to reveal the underlying importance of the elementary geo-structural factors as organizers of intra-regional population growth during a period of transition. The related research hypotheses will be listed following the presentation of the methodology.

Methodology

The suggested variables are applied in the framework of several supplementary models, some of them based on expanded regression analysis. The following general conceptual model (1) introduces all variables applied later individually or in various combinations. In this conceptual model, population growth (PG_t) at any time period t is viewed as a function of one or several of the aforementioned five variables:

$$PG_t = f(PG_{(t-1)}, PS, R, Dis, Dir,) \quad (1)$$

where:

$PG_{(t-1)}$ = population growth at the previous period of time $t-1$.

PS = population size of each settlement at the initial year of the time period t ,

R = presence of main road or railroad arteries within the land area of the settlement applied as a dummy variable (0=no, 1=yes).

Dis = air distance of each settlement to the regional central city,

Dir = the angular position of each settlement with respect to the regional central city (to be elaborated),

Practically, the variables are specified so as to adjust to the local conditions. Population growth (PG_t) is related to population size (PS) by an exponent α . This is because the relationship of population growth to population size is expected to vary positively, however at a changing rate. The Distance to the regional central city (Dis) is taken not as a linear function but rather in its quadratic form ($Dis + Dis^2$). This combination is preferred because many secondary regional towns in the study area are located close to the region's boundaries, and these towns are expected to grow faster (or decline slower) than the closer rural settlement. This specification introduces a measure of flexibility and allows for the detection of nonlinear, U-shaped relationship between population growth (PG) and distance.

The directional (Dir) or angular position is indicated by sine (Sin) and cosine (Cos) of the angle θ . These trigonometric functions are measured in radians of the angle θ enclosed between the straight line connecting any settlement to the central city and an east-west reference line crossing through the central city. Both trigonometric functions, sine and cosine, are required in order to define locations in particular quadrants around the central city. These angles together with the distance variable (Dis) represent a system of polar coordinates (Gaile and Burt, 1980). Following these adjustments, the conceptual model (1) is redefined more specifically as (2):

$$PG_t = PG_{(t-1)} + PS^\alpha + R + (Dis + Dis^2) + (\sin\theta + \cos\theta) + \epsilon \quad (2)$$

In order to allow the detection of more complex anisotropic spatial patterns of change in population growth, the parameters of the distance variables are redefined as functions of the angular position obeying the expansion method suggested by Casetti (1972). In formal terms, let population growth pg be a quadratic function of distance ($Dis + Dis^2$) as in (3) with a_i as its parameters:

$$pg = a_0 + a_1 Dis + a_2 Dis^2 \quad (3).$$

Now let the parameters a_i of (3) be a function of the sine and cosine of the angle θ as in (4) with b_i as its parameters:

$$a_i = b_0 + b_1 \sin + b_2 \cos \quad (4).$$

Inserting equation (4) into (3) yields the expanded polar coordinates equation (5):

$$pg = c_0 + c_1Dis + c_2Dis^2 + c_3Sin\theta + c_4Cos\theta + c_5Sin\theta Dis + c_6Cos\theta Dis + c_7Sin\theta Dis^2 + c_8Cos\theta Dis^2 \quad (5).$$

This expanded version of the polar coordinates has the flexibility of redefining the population growth (pg) function of distance as it rotates around the central city to all directions. The estimated values of such an equation will be mapped and utilized to test hypotheses concerning specific spatial trends. Equation (4), on its 9 terms (including the constant c_0), will be estimated to test the organizational forces embedded in distance and direction (*Krakover-Casetti*, 1988; *Krakover*, 1999).

As a final test, the polar coordinates equation (5) is reinserted into equation (2) to yield equation (6).

$$PG_t = PG_{(t-1)} + PS^\alpha + R + Dis + Dis^2 + Sin\theta + Cos\theta + Sin\theta Dis + Cos\theta Dis + Sin\theta Dis^2 + Cos\theta Dis^2 + \varepsilon \quad (6).$$

This equation is utilized to assess the relative importance of all suggested variables in a competing framework.

Hypotheses

Several hypotheses were suggested in the literature review section. Those are spelled out here in a stricter manner:

- 1 Population growth is positively associated with population size in a decreasing rate. The positive relationship is amplified in places where main roads or railroads are present.
- 2 Population growth in the previous time period is used as a surrogate for the factor of inertia. This factor is expected to positively contribute to continued population growth in the next time period. This relationship is expected to be even stronger in places where roads or railroads are present.
- 3 Distance to the central city is expected to affect population growth in a parabolic manner. Initially population growth declines with distance. As distance to the central city increases, a turning point is expected and population growth will be on the rise. This hypothesis is based on the distribution pattern of the secondary urban centers that are located mostly close to the region's boundaries.
- 4 Distance is expected to be a more effective estimator of the distribution of population growth when applied in interaction with the settlements' angular position.
- 5 Angular position of settlements with respect to the regional central city contributes significantly to the understanding of the regional distribution of population growth.

- 6 The models will be examined in Békés county, Hungary in three time periods in order to test for changes in the role of the selected factors before and after transition to democracy. The first period is the 1970s when the hold of socialism looked stronger than ever. Although some decentralization policies were suggested, in practice, they have not been applied. In the second period, in the 1980s, regional development policies reflected the confrontation between the centralized power and the reformers struggling for decentralization. In these years first steps towards post-social transition were taken (Enyedi, 1990). The third period of the early 1990s is marked by dramatic transition from a centrally planned economy controlled by a single party to privatization, free market economy and democracy. The models are expected to fare better during the earlier decades characterized by stability when the rules of the game were clearer.

Study area and data

Békés county is one of 19 major regional subdivisions in Hungary. Being a part of the Great Hungarian Plains, the region is located in the southeastern side of the country next to the Romanian border. The region's land area stretches over 5,631 km² and its total population declined from 473,663 in 1960 to 415,264 in 1996^(a). The region's central city of Békéscsaba grew from 1960 to 1980 to a maximum population of 68,612 and then declined to 67,979 in 1996^(b). To date there are other 13 urban centers in the county ranging in their population from 5,500 to 33,300. In addition, there are 61 rural communities ranging in their population from several hundreds to several thousands (KSH, 1996). As in most regions of east central European countries, the share of the rural population is declining. The region's rural population share declined from 75.9 percent in 1960 to 36.8 percent in 1995, partly due to administratively changing the status of several villages into towns (Table 1).

Table 1

Percent population according to place of residence, 1960–1995

Years	Central city	Other urban	Total urban	Rural
1960	11.2	12.9	24.1	75.9
1970	13.5	18.9	32.4	67.6
1980	15.7	26.0	41.7	58.3
1990	16.4	43.9	60.3	39.7
1995	16.2	47.1	63.2	36.8

* Data represent residing population as opposed to permanent population.

However, while in the 1970s part of the loss of the rural sector was absorbed locally in the urban areas, in the other decades the urban sector itself barely retained its own population as is evident in the data presented in *Table 2*. Despite the change in population enumeration, the sharp decline of the 1980s seems to be moderated in the 1990, including a renewed growth in the central city.

Table 2

Percent population change by sectors, 1960–1996

Area / Decades	1960–70	1970–80	1980–90	1990–96*
Central city	12.0	15.2	–1.5	2.0
All urban as of 1996	–0.2	6.1	–3.3	–0.1
Rural as of 1996	–14.3	–9.9	–9.4	–2.5
Total	–6.9	–0.9	–5.7	–1.0

* Permanent population, with Tótkomlós remaining in the rural sector.

Source: KSH, 1990 and 1996.

Analysis of results

The variables included in equation (6) were applied in several combinations – separately for each decade – to test population changes in the 74 urban and rural communities in the Békés county^(c). The results of these tests are presented in the following order: the size factor, the inertia factor, and combination of both appended by the dummy infrastructural variable of roads. These are followed by the analysis of the explanatory power of the locational variables of distance and direction. Finally all variables are tested together as suggested by equation 6.

Population size: The size factor is found to contribute positively to population growth in a decreasing rate as expected (*Table 3*). The larger the settlement in the initial year, it is more likely that its population will further grow during that decade, albeit by decreasing rates. This means that the retention power of the larger settlements is getting weaker as we approach the largest city in the region. The effect of this factor has diminished throughout the decades as indicated by the decreasing values of the regression coefficients. The share of variability accounted for by this variable also decreased throughout the decades as indicated by the adjusted R^2 s. Thus as the economy moved from controlled economy to a free market one, the settlement size cannot be used anymore as a reliable predictor to further population growth. This finding may be partly attributed to the emerging trends of suburbanization (Tímár, 1992). The presence of main roads and railroads, added as a dummy infrastructural variable, did not affect the results.

Table 3

Estimated effect of the population size factor, 1970–1996

Variables / Decades	1970–1980	1980–1990	1990–1996
Intercept	–.776 (.000)	–.449 (.000)	–.129 (.001)
Ln population size	.082 (.000)	.043 (.000)	.013 (.006)
Standard error	.075	.056	.044
Adjusted R ²	0.54	0.40	0.09

t-test levels of significance are enclosed in parentheses.

Inertia: Growth in the previous decade (t-1) is found to be a very important and statistically significant factor attributing to current population growth (Table 4). It turned out that 1 percent of growth in the 1960s induced 0.88 percent of population growth in the 1970s. This relationship declined in the 1980s and 1990s to about one half and one third of one percent, respectively, though in the 1990s it applies to a shorter period of 6 years only. Also the goodness of fit, represented by the adjusted R², has greatly decreased as the economy transformed from socialism to capitalism. The inclusion of roads as an infrastructural element did not affect the results.

Table 4

Estimated effect of the factor of inertia, 1970–1996

Variables / Decades	1970–1980	1980–1990	1990–1996
Intercept	.011 (n.s.)	–.052 (.000)	.004 (n.s.)
PG _(t-1)	.877 (.000)	.482 (.000)	.310 (.000)
Standard error	.071	.050	.040
Adjusted R ²	0.59	0.53	0.23

t-test levels of significance are enclosed in parentheses. n.s.=not significant.

Combined effects of Inertia and Size: When both variables associated with the effects of time (inertia) and scale (size) were examined in a multivariate setting (Table 5) they appear to lose the mutually independent impact they had during the socialist regime of the 1970s. In this decade both variables had a statistically significant impact accounting together for 70 percent of the variability in the growth of local populations. Thus, during this period, inertia and size were important factors in preserving the internal structure of population distribution. However, during the 1980s and the 1990s, it is the factor of inertia that not only preserved its superior impact, but also replaced the factor of size and made it redundant. Again, the road system, when added, did not exhibit any significant impact.

Table 5

Estimated effects of inertia and size factors, 1970–1996

Variables / Decades	1970–1980	1980–1990	1990–1996
Intercept	–.417 (.000)	–.154 (.052)	–.017 (n.s.)
Pop. growth _(t-1)	.581 (.000)	.394 (.000)	.324 (.001)
Ln population size	.048 (.000)	.011 (n.s.)	–.001 (n.s.)
Standard error	.060	.050	.040
Adjusted R ²	0.70	0.53	0.22
Adjusted R ² increment by ln Pop. size	0.11	0.00	–0.01

t-test levels of significance are enclosed in parentheses. n.s.=not significant.

Distance to Central City: Table 6 presents the regression results obtained for the quadratic relationship of population growth with distance to the region's central city. The results are much poorer than those obtained for the previous variables. While the hypothesized relationships of a decreasing cone of growth attached to the central city is verified by the negative sign of the distance variable, the share of variability 'explained' by distance is rather low. Traces of renewed growth in greater distances are apparent in the positive signs of the distance square coefficients, however they are statistically insignificant. These results indicate that the role of the region's central city in controlling population growth in its vicinity in a concentric pattern is rather weak in all periods.

Table 6

Estimated effect of the distance factor, 1970–1996

Variables / Decades	1970–1980	1980–1990	1990–1996
Intercept	.034 (n.s.)	.007 (n.s.)	.024 (n.s.)
Distance	–.009 (.033)	–.006 (.019)	–.003 (.091)
Distance square	.0001 (.082)	.00007 (n.s.)	.00003 (n.s.)
Standard error	.106	.068	.044
Adjusted R ²	0.06	0.13	0.06

t-test levels of significance are enclosed in parentheses. n.s.=not significant.

Relative Position to Central City (Direction and Distance): When the factor of direction is added to distance (equations 3–5), the variability accounted for increases from 6–13 percent (Table 5) to 13–19 percent (Table 7). The incremental variability accounted for are not very high considering the large number of vari-

ables involved. Such results are typical to places with a large number of small and diverse observation units, and with a relatively small and weak urban center (Taaffe et al. 1992, as opposed to Krakover-Casetti, 1988). The results indicate that the central city of Békéscsaba does not exert a strong organizational power unto its surrounding area. Processes of population growth and decline are not affected to a large extent by the proximity to the urban center.

A comparison of the results obtained for the directional variables with the results received for the time (inertia) and scale (population size) factors shows that the two latter variables were more effective in accounting for the variability in population growth. Nevertheless, it is interesting to note that while the factors of time and scale decreased considerably in their importance during the transformation to market economy, the directional factor continued to account for about the same level. It should be noted, however, that although the level of variability accounted for remained about the same, the directional patterns of the distribution of growth have changed. These changes are evident in the maps (Figures 2–4) produced by solving the equations reported in Table 7.

Table 7

Estimated effect of direction and distance, 1970–1996

Variables / Decades	1970–1980	1980–1990	1990–1996
Intercept	.006 (n.s.)	.045 (n.s.)	.048 (.080)
Distance	-.007 (n.s.)	-.010 (.003)	-.005 (.019)
Distance ²	.00008 (n.s.)	.00015 (.013)	.00008 (.054)
Sine	-.140 (n.s.)	-.129 (.023)	-.025 (n.s.)
Cosine	.207 (.015)	-.0015 (n.s.)	-.019 (n.s.)
Sine*distance	.008 (n.s.)	.010 (.013)	.002 (n.s.)
Cosine*distance	-.009 (n.s.)	.0018 (n.s.)	.004 (.089)
Sine*distance ²	-.00009 (n.s.)	-.0002 (.013)	-.00004 (n.s.)
Cosine*distance ²	.00006 (n.s.)	-.00006 (n.s.)	-.0001 (.015)
Standard error	.099	.068	.042
Adjusted R ²	0.18	0.13	0.16
Adjusted R ² for only significant coefficient following backward elimination	0.19 (5 Variables)	0.18 (5 Variables)	0.17 (3 Variables)

t-test levels of significance are enclosed in parentheses. n.s.=not significant.

Figure 2 exhibits the estimated level of population growth during the 1970s on the basis of the directional variables only. At this decade most of the county was dominated by a trend of population decline. Population growth was concentrated in a small and narrow stretch, to the east of the central city. This sector leads toward the nearby former administrative town of Gyula that serves as an important tourist center. Also, two of the most suburbanizing rural settlements – Szabadkigyos and Ujkigyos – are located here to the south of the central city. This statistically identified stretch of growth covers about 260 square kilometers. *Figure 3*, that presents estimated population growth for the last decade of socialism in the 1980s, revealed two major changes. First, the island of population growth in the vicinity of the central city shrunk to only 160 square kilometers, but second, there are initial signs for the spread of growth to the west of the central city.

Figure 4 depicts the results obtained for the early years of transformation to free market economy. The applied polar coordinates model identified a clear reversal in the concentration of growth around the central city. At this period the phenomenon of population growth spread all around the city and now covers a land area of about 630 square kilometers. The geographically increased coverage of population growth and the fact that growth now engulfs the central city from all directions, both are taken as indicators for the increased attraction power of the central city. It seems that in this decade, more people residing to larger distances around the central city started to realize the economic and social advantages that may accrue to people living close to the central city. Such results seem to represent early signs for the emergence of a local market economy centered upon the local large city.

Comparative evaluation of the geo-structural factors: *Table 8* presents the statistically significant results from the application of all eleven variables included in the model as specified in equation 6. The regression coefficients reported in this Table are standardized (beta) coefficients allowing for comparative analyses. In the 1970 four variables accounted for 72 percent of the variability in the spatial distribution of population growth in the Békés county. Although all four variables had about the same weight – as reflected in the magnitude of the standardized beta coefficients – the inertia ($\text{Growth}_{(t-1)}$) and the scale ($\ln \text{pop}$) factors alone accounted for 70 percent of the variability as reported in *Table 5*. Thus the incremental contribution of the directional variables were only minimal. This reconfirms the previous observation that, during the socialist regime, inertia and scale were the important factors acting to preserve the existing structure.

Figure 2

Directional distribution of estimated population growth, 1970-1980

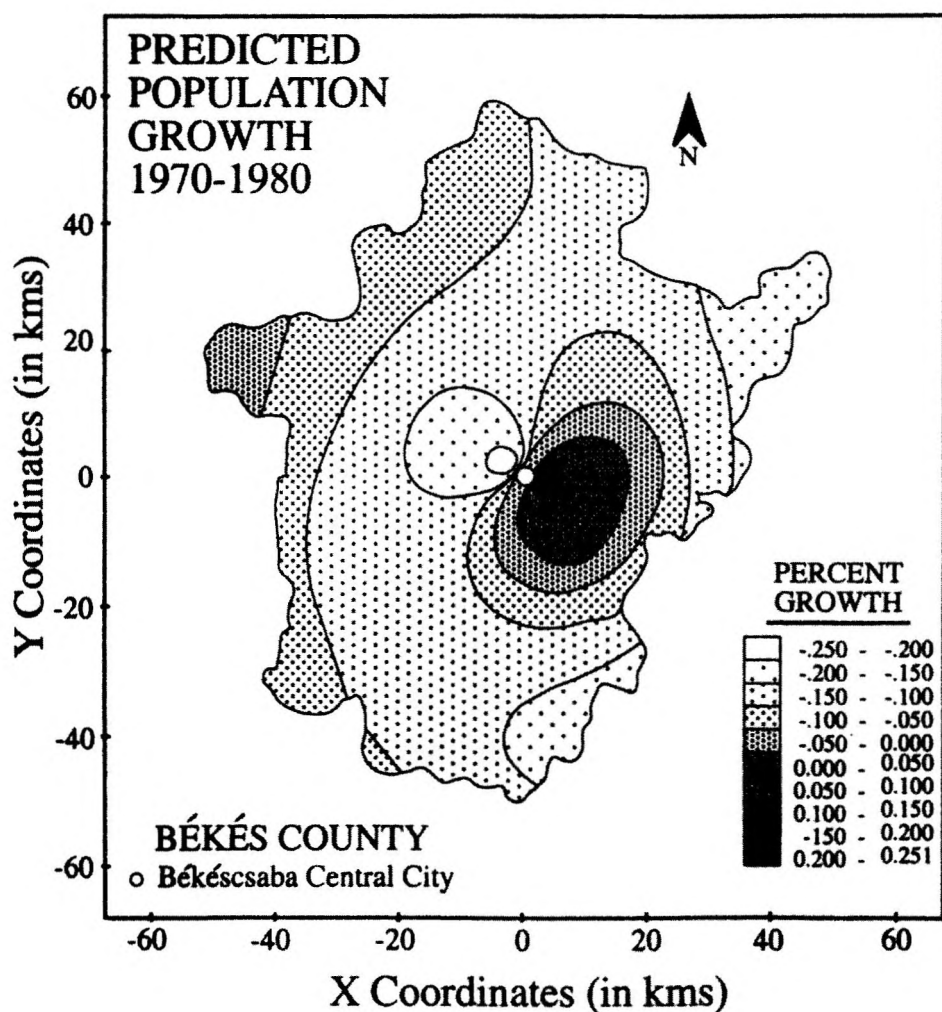


Figure 3

Directional distribution of estimated population growth, 1980-1990

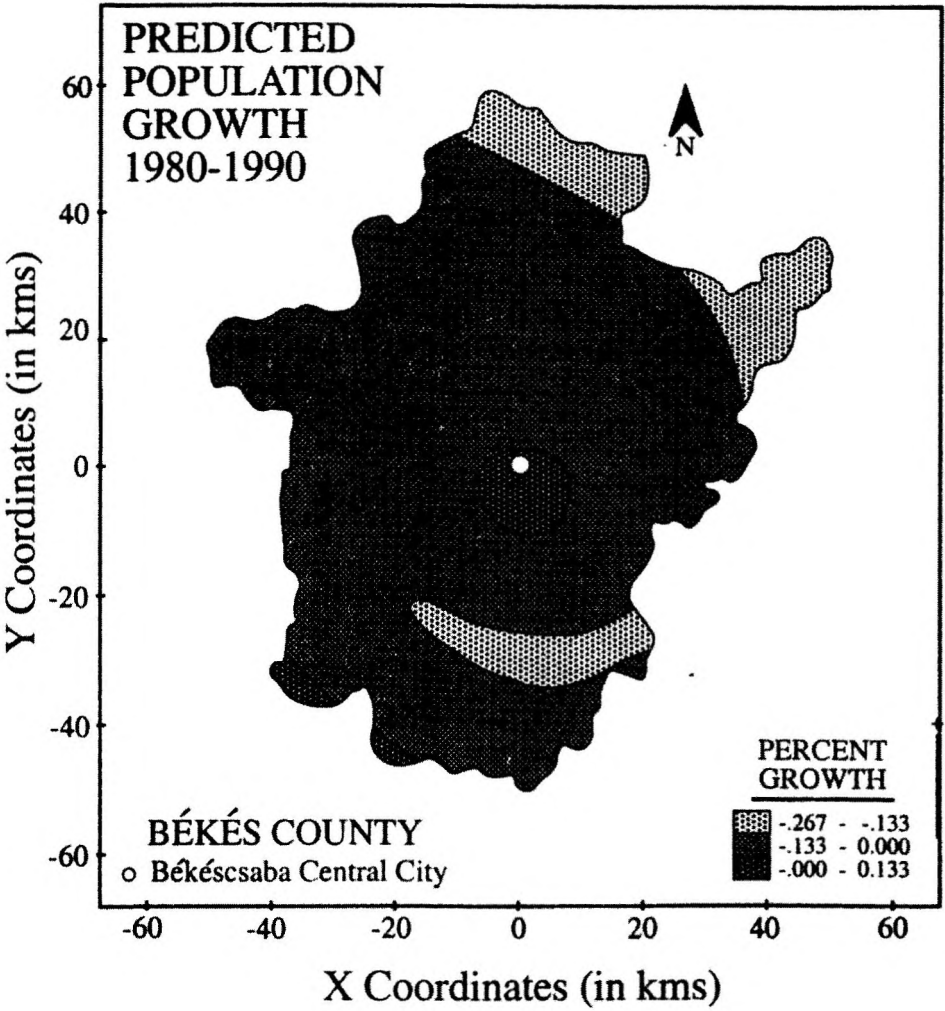


Figure 4

Directional distribution of estimated population growth, 1990–1996

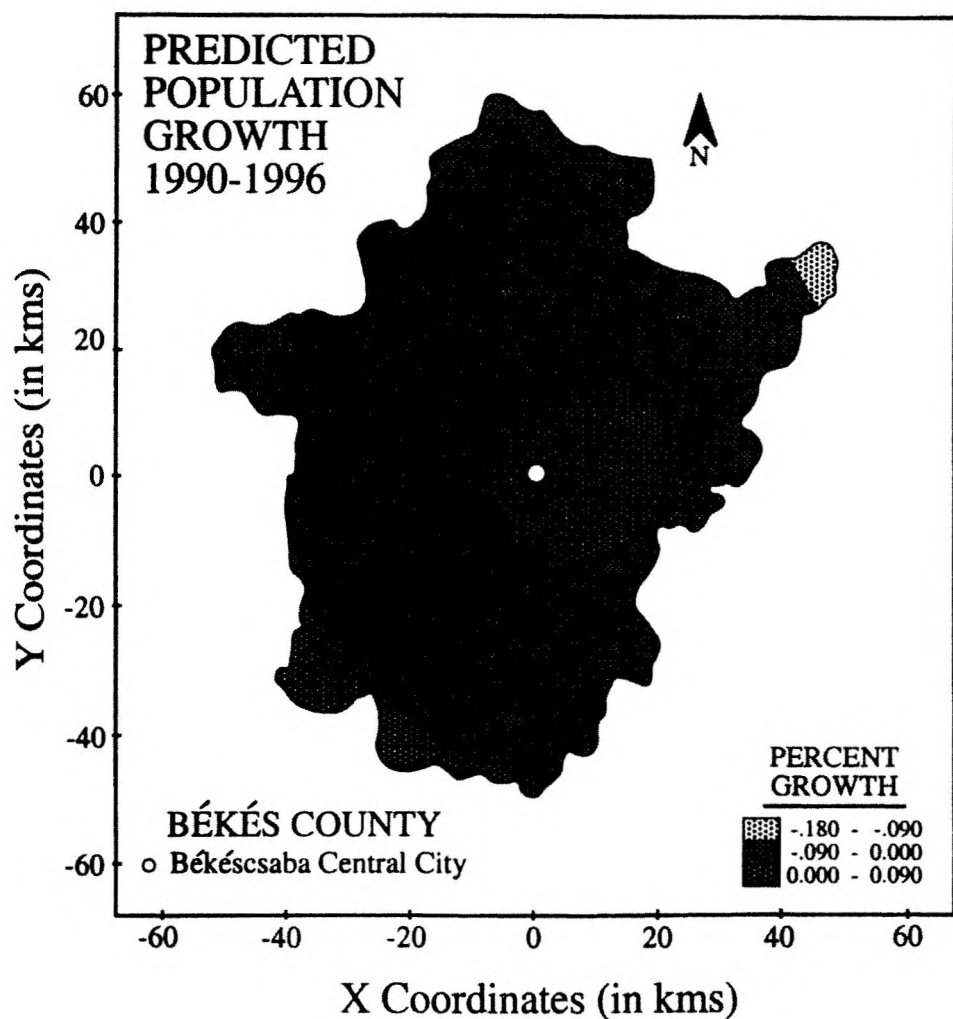


Table 8

Standardized coefficients beta of the final model

Variables / Decades	1970–80	1980–90	1990–96
Growth _(t-1)	.494 (.000)	.734 (.000)	.432 (.000)
Ln pop. (at base year)	.456 (.000)	–	–
Sine	–.447 (.010)	–	–
Distance * sine	.442 (.011)	.708 (.018)	–
Distance ² * sine	–	–.777 (.009)	–
Cosine	–	–	–
Distance * cosine	–	–	1.112 (.005)
Distance ² * cosine	–	–	–1.182 (.003)
Adjusted R ²	0.72	0.56	0.30

In parentheses: t-test levels of significance. Variables excluded from the equation by backward elimination.

During the last decade of socialism in the 1980s the overall fit of the model decreased from 72 to 56 percent. The variability of the distribution of population growth in the county is now accounted for by three variables having each about the same magnitude. These variables are inertia, distance and direction, whereas the effect of the population size factor has vanished. Comparing the results reported for this decade in *Table 8* with those reported in *Table 4*, leads to the conclusion that still the effect of inertia on the distribution of population growth was much stronger than the effect of relative location with respect to the central city. As can be seen in *Table 4*, inertia alone accounted for 53 percent of the variability embedded in population growth while the incremental contribution of the two locational variables was only 3 percent.

The regression results for the post-transition era of the 1990s reflect a change in the importance of the relative position variables. The overall fit of the variability accounted for by the model suffered from a further decline to 30 percent only. The variable of locational inertia still contributes 23 percent out of 30 toward the explanation of the variability in population growth (*Table 4*). However, the distance and directional variables seem to gain in their importance. This gain is reflected in two measures. First, by the increase in the share of the variability accounted for that rose to 7 out of 30 as compared to 3 out of 56, and 2 out of 72 in the previous decades. A second measure is the relative weights of the statistically significant variables. At this decade the magnitude of the directional variable is much higher than that of the inertia factor.

The results reported in *Table 8* seem to indicate that the socio-economic transition from socialism to capitalism has shaken the previously stable structure of population distribution. Instead of a structure of population growth driven by the factors of historical inertia and size, the region seem to enter an era of reorganization of population growth attracted to settlements surrounding the regional central city. This pattern closely resembles trends of population concentration found to exist in the more established capitalist economies (*Nichols, 1969; Mosely, 1973, Taaffe, et al. 1992*).

Changes from pre to post transition era: The major differences between the early decades of the study and the 1990s have been identified above as follows: 1. Reduced importance of inertia. 2. Vanishing importance of settlement size. 3. Increased importance of the spatial factor, and 4. spatial expansion of the cone of growth around the central city. *Table 9* draws together the adjusted R^2 obtained from the application of all competing models. It is immediately observable that the explanatory powers of the models have declined through time. Except for distance, all R^2 s of the 1970s are higher than those of the 1980s, and those of 1980s are higher than those of the 1990s. It seems that, following transition to democracy and to free market economy, it is no longer possible to account for the variability in population growth by the selected variables. There is a need to re-specify the model and to look for complementary variables embedded in other contexts of life. These observations lead to the conclusion that the factors accounting for population growth in the county's settlements became more complex after transition.

In all three decades the single variable that took on the larger share of the variability accounted for is the factor of inertia – that is growth in the previous period. However, the contribution of this factor in terms of its R^2 has declined from 0.59 in the 1970s, to 0.53 in the 1980s, and to 0.22 only in 1990s (*Table 2*). This decline indicates that the high level of continuity that characterized the intra-regional system under the socialist regime has been interrupted during transition.

Table 9

Summary of adjusted R^2 from all models

Models \ Decades	1970–1980	1980–1990	1990–1996
Pop Growth _(t-1)	0.59	0.53	0.23
Ln population	0.54	0.40	0.09
Pop. growth _(t-1) +Ln-pop	0.70	0.53	0.23
Distance+Distance square	0.06	0.13	0.06
Polar coordinates	0.18	0.18	0.16
All variables	0.72	0.56	0.30

Summary and conclusions

The data analyzed in this study provide evidence concerning shifts in the factors governing the dynamics of population redistribution during transition from socialism to capitalism in peripheral regions. The study arrived at the following three main findings. First, it has been validated that factors and models that accounted fairly well for the distribution of population growth during the socialist regime are not performing as well after the transition to capitalism. Second, larger places and places that grew in the previous decade used to have higher chances to continue their growth. This is no longer the case. Following transition, the effect of settlement size appeared irrelevant and even the effect of inertia has weakened significantly. Third, the poor performance of the central city as a magnet for population retention underwent a turnaround. Following transition to free market economy, the directional model of relative position with respect to the location of the central city, has detected initial signals of population growth gravitating towards the region's largest urban center. Although, the variability accounted for by the factor of relative position is not high, its share in accounting for the total variability has increased.

These findings seem to point towards the need to reconsider regional development policies in peripheral regions of the former east block countries. The results of this study reflects the end of the agrarian era when financial assistance was spread thinly to many small and medium-size communities (Bartke, 1997). The newly established market economy and the privatization of the collective farms brought to fore the prevalence of surplus agricultural labor. Many of these people are now searching for new occupations even at the cost of changing their residential locations. The size differential of settlements within the county is not sufficient anymore to attract these people to the larger communities. Also, inertia as a factor holding people in situ due to old habits, local histories or indivisible investments is hardly effective without the previously furnished public financial support.

On the other hand, under privatization distance acquired a more rational economic value in terms of cost and time. Under such conditions, places situated closer to the largest regional market are now assessed as preferred locations. This probably explains the gravitation of population to the proximity of the largest regional urban center. These findings does not seem to support the application of the UFRD approach (Rondinelli, 1985) to the peripheral areas of former eastern block countries. Instead of a regional development policy that recommends tunneling investments to several medium and small centers, the revealed trends of population growth seem to suggest a preference for a single large center, reminiscent of the conventional growth centers policy (Hansen, 1972; Mosely, 1974). If more evidence supports the findings of this study and they are reaffirmed in other peripheral areas of the eastern block countries, this should lead to the consolidation of a

growth center policy and the application of a matching program for the devolution of political power. The transition era from socialism to capitalism provides a 'window of opportunities' for the implementation of such policies. If the surplus of agricultural labor will not be treated appropriately within their regions with respect to the location-allocation of resources they will eventually leave the peripheral regions and join the crowded poor quarters of the large national urban centers.

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Notes

- (a) Population data for the years 1960 to 1990 was compiled on the basis of actual resident population. Due to procedural changes introduced in 1994 in the way residential population are recorded, the data used for 1990 and 1996 represent permanent population. Data for 1990 are provided in both forms for the sake of comparison.
- (b) Population includes residents added to the central city as a result of annexation as follows: 1,650 in the 1970s, and 1,380 in the 1980s. Since annexation represents exertion of power by the central city, these people were considered as part of the central city statistics.
- (c) Without separating Csabaszabadi (441 inhabitants) that became an independent settlement in 1994.

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Centre for Regional Studies of the Hungarian Academy of Sciences,
Pécs, Hungary

In this tribute to György ENYEDI, the founder of Hungarian regional science as rigorous academic discipline, some of the most prominent scholars contribute theoretical and applied papers in the newer areas of research interest. The contributors constitute an international community of scholars whose papers feature news insights in such fields as regional and integration economics, urban and rural studies, regional development and policy.

Gyula HORVÁTH is "Széchenyi" Professor of Regional Policy at the University of Pécs, DSc, the Director-General of the Centre for Regional Studies of the Hungarian Academy of Sciences. He has published books and papers in the areas of European regional development and policy.