♦ SUSSEX EUROPEAN INSTITUTE ♦

Centre on European Political Economy

TRAJECTORIES OF CHANGE IN EUROPE'S REGIONS: COHESION, DIVERGENCE AND REGIONAL PERFORMANCE

Mick Dunford and Adrian Smith
University of Sussex

SEI WORKING PAPER NO. 26
Centre on European Political Economy Working Paper No. 2

The **Sussex European Institute** publishes Working Papers (ISSN 1350-4649) to make research results, accounts of work-in-progress and background information available to those concerned with contemporary European issues. The Institute does not express opinions of its own; the views expressed in this publication are the responsibility of the author.

The **Sussex European Institute**, founded in Autumn 1992, is a research and graduate teaching centre of the University of Sussex, specialising in studies of contemporary Europe, particularly in the social sciences and contemporary history. The **SEI** has a developing research programme which defines Europe broadly and seeks to draw on the contributions of a range of disciplines to the understanding of contemporary Europe. The **SEI** draws on the expertise of many faculty members from the University, as well as on those of its own staff and visiting fellows. It is the home of the Centre for German-Jewish Studies. In addition, the **SEI** provides one year MA courses in Contemporary European Studies and in the Anthropology of Europe and opportunities for MPhil and DPhil research degrees.

Centre on European Political Economy In 1997 the University of Sussex created a new, self-contained research unit within the **SEI** to study the implications of the enlargement of the European Union to at least some of the central and east European countries and the implementation of economic and monetary union. The Centre's overarching research agenda addressses how political structures and bargaining processes in both West ad East will have to evolve in order to sustain an enlarged EU and structure the relationships between it and the central and east European countries awaiting membership. The Director of the Centre is Prof. Mick Dunford. The Administrator is Alasdair Young, Tel. 01273 877 156, Email <a.r.young@sussex.ac.uk>.

First published in August 1998
by the **Sussex European Institute**
University of Sussex, Arts A Building
Falmer, Brighton BN1 9SH
Tel: 01273 678578
Fax: 01273 678571
EMail sei@sussex.ac.uk

Ordering Details

The price of this Working Paper is £5.00 plus postage and packing
Orders should be sent to the **Sussex European Institute**, University of Sussex, Falmer, Brighton BN1 9QN. Cheques should be made payable to the University of Sussex. Please add £1.00 postage per copy in Europe and £2.00 per copy elsewhere. See pages 49-51 for list of other working papers published by Sussex European Institute.

Table of Content

Regional Inequality in an Enlarged Europe: Regional Performance and Policy Responses

On 12–13 March 1998 the Centre on European Political Economy at Sussex organised a research workshop to examine the regional dimensions of change in an enlarged Europe. The workshop brought together some 40 academics, practitioners and post-graduate students and was organised as part of the inaugural activities of Sussex European Institute's new Centre on European Political Economy. The workshop, which was supported financially by the University Association for Contemporary European Studies and the Economic Geography Research Group of the Royal Geographical Society (with the Institute of British Geographers), examined what the enlargement of the European Union to East-Central Europe will mean for the changing map of regional inequality in Europe. During the workshop three main themes were addressed:

- the level of regional inequality between the member states of the EU and the potential new members,
- the degree to which the relative performance of institutions matters in accounting for levels of inequality between regions, and
- the potential policy responses to regional inequality in a much larger Europe.

Four main papers, of which this is one, were presented and discussed during the workshop, and are published as Centre on European Political Economy/Sussex European Institute working papers. The papers were all edited by Adrian Smith, organiser of the workshop, and provide a record of some of the discussions held over the two days. For more details of the work the Centre is undertaking on European regional development please contact Adrian Smith (a.m.smith@sussex.ac.uk).

Introduction: regional performance in an enlarged Europe

The future enlargement of the European Union (EU) to include many of the states of Eastern and Central Europe (ECE) will result in a profound redrawing of the map of regional inequality in Europe. Unlike all other EU enlargements, even those to the south, expansion to include the eastern neighbours of the EU will involve incorporating national and regional economies at *significantly lower levels of development* than current EU members (even the Cohesion countries)[1] and nations and regions with *very different past pathways to development*. Three central issues are likely to arise out of this enlargement when considering regional change in Europe. First, it is clear that enlargement will have a significant impact upon the current members of the Union, not only in terms of providing new markets for EU firms (one of the main economic justifications for enlargement) but also in providing an important set of challenges to the EU in its own revision and reworking of policy. However, the recent decision to open negotiations with five of the ten ECE applicant countries, and the pattern of negotiations arising from this, are likely to be set in terms of the EU's agenda rather than providing a chance for rethinking EU policy. Enlargement then will very much be on the terms of current EU policy of deepening and widening of a largely neo-liberal order (see Amin and Tomaney, 1995), with some mechanisms for redistribution to the 'losers' of increased integration. It is also likely that enlargement will impact upon the more peripheral EU states in a number of ways. For example, various claims have been made that enlargement will damage and even destroy the fragile economies of some of the Cohesion countries and potentially other member states, and that enlargement will result in the diverting of funds away from regional development efforts in the EU less favoured regions (LFRs). Indeed, the recent decision to cap transfers of Structural Funds to new ECE members to 4 per cent of GDP may reflect a concern in the Commission over absorption, but also reflects the intense lobbying undertaken by representatives from LFRs to reduce the costs of enlargement on current EU members.

Second, enlargement will result in the inclusion of new states with significantly different national levels of development and trajectories of change from those found in the current member states, which raises questions about the applicability of EU models of regional governance to the contexts of ECE. How effective can models developed in one particular political-economic context be when applied in quite different circumstances? The lessons derived from the imposition of neo-liberal transition programmes in ECE suggest that it is *at the least* necessary to remain cautious about the ability to transfers models of national and regional development.

Third, enlargement is clearly going to be a 'staged' process and differential speeds to enlargement, with the potential exclusion in the short to medium term of some applicant countries and the long-term exclusion of those states who have not even applied to join but are clearly 'European' may mean the reworking of the map of economic and social inequality in Europe in which the difference between insiders and outsiders, cores and peripheries become ever more stark.

In this paper our aim is to provide an initial exploration of the role of differential and uneven development in an enlarged Europe. We do so by examining the dimensions of cohesion and competitiveness within current member states of the EU and then by extending this

[1] The average GDP per head of the candidate countries is roughly 20 percentage points lower than that of Portugal at the time of its accession in 1986 (Begg, 1996).

examination to the applicant countries (and also non-applicant states) of ECE.[2] The paper is organised as follows. First, we address some broad definitional questions regarding competitiveness and cohesion as conceived within the rubric of EU policy. We then go on to examine the levels of national and regional disparities in the European Union and address some of their determinants in the context of productivity and employment rate differentials and income inequalities. We also chart the changing nature of these disparities over time, we address the extent to which different trajectories of regional change are identifiable, and examine briefly the distributional aspects of cohesion. The paper then pursues the issues of differential development, productivity and employment raised in the EU context through a preliminary analysis of the countries of ECE, including the 10 applicant states. We highlight the significant 'development divide' between the EU and the countries of ECE and suggest that the competitive position of ECE economies has been further weakened by the pursuance of a neo-liberal policy agenda in the last 8 or so years. We also address the level of regional inequality in applicant states through a preliminary analysis of the Slovak case and argue that sub-national disparities are intensifying across ECE, reflecting a broader experience of social and geographical uneven development in the region. Finally, we return to broader questions concerning the redrawing of economic borders in an enlarged Europe and the lessons that the past may hold for understanding the present reconstruction of the European space economy.

Competitiveness and cohesion

Articles 130A and B of the EU Treaty require that Community actions and policies take into account the objective of an equilibrated development of the Community as a whole and contribute to the achievement of economic and social cohesion. At the centre of these Articles is a geographical concept of cohesion, as is also indicated by the fact that cohesion is usually measured by indicators of the degree of inequality in Gross Domestic Product (GDP) per head between Member States (national cohesion) and regions (regional cohesion) in the EU. This definition and this measure require qualification. As the concern is ultimately with living standards, GDP is measured at Purchasing Power Standards (PPS). Adjustments for differences in the cost of living are made, however, at Member State and not at regional levels, in spite of the fact that there are often quite wide variations in the cost of living within Member States. To the extent that costs of living are lower in less developed areas, official statistical series overstate disparities in living standards. At the same time it is important to remember that GDP is not a direct measure of living standards. GDP is used because the EU has adopted the view that what matters is not the distribution of income after transfers, but the capacity of different national and regional economies to create wealth. While this reasoning is valid, there are two reasons for also using indicators that include transfers. First, in some cases there is a wide gap between wealth produced and appropriated in a Member State or region because of the varying relative importance of externally controlled investments. The most striking case is the Republic of Ireland whose Gross National Product (GNP) lies 10 per cent beneath its GDP.[3] As the wealth that is created in Ireland and that is withdrawn is not available to increase the living standards of its inhabitants, there is a case for using GNP measures alongside GDP. Second, in so far as cohesion is defined in terms of the distribution of wealth between individuals and households (social cohesion) more attention must be paid to the distributional impact of economic change which includes not

[2] The work on EU cohesion and competitiveness was undertaken by Mick Dunford as a contribution towards the *First Report on Economic and Social Cohesion* (CEC, 1996a).

[3] The major cause of this gap is the outflow of repatriated profits. In some sectors the low rate of Corporation Tax levied on inward investors may encourage transfer pricing which boosts apparent levels of value added in Ireland and generates additional repatriated profits.

just changes in wages and property income but also the redistribution of wealth and income through the fiscal system.

Competitiveness is also a concept which requires a brief definition especially as the use of the concept in relation to geographical areas has been a subject of significant controversy and as the rejection of the validity of analogies between microeconomic definitions of competitiveness of enterprises and definitions of the competitiveness of national economies has led to a certain degree of convergence with the measurement of cohesion.

At a microeconomic level enterprises that are competitive are those that achieve a greater than average improvement in the quality of goods and services and/or a reduction in their relative costs that enable them to increase their profits (revenues minus costs) and/or market share. The more a firm reduces its costs relative to its competitors – whether through increases in efficiency and in organisational capacities or through reductions in wages, job security, social protection or working conditions for the workforce – for a given level of product quality, or the more it increases its product quality relative to its competitors for a given cost of production, the more competitive it is. (An ability to compete depends not just on a capacity at one moment in time to produce at costs and levels of quality which enable products to be sold profitably, but also on an ability to change to keep abreast of (or shape) the evolution of markets. Also, of course, it depends on the degree of concentration or the monopoly power of an enterprise as nothing generates more value added per worker than monopoly).

At the level of a national economy it is not possible to sustain simple analogies with this definition of the competitiveness of companies and to argue, for example, that national competitiveness is reflected in the gap between exports and imports, in part because of the implication that trade is a zero-sum game in which the existence of winners implies the existence of losers: if a European company reduces its relative prices and increases its market share at the expense of a Japanese rival, it is not automatically the case that Japanese citizens lose as the increase in some European incomes will increase the demand for Japanese goods and the fall in prices will benefit Japanese consumers (see Krugman, 1994). While this argument is widely accepted, Krugman's wider claim that there is no theoretical rationale for the view that the growth of national and regional economies is determined by their performance in international product markets and that international economic performance reflects differences in competitiveness is more controversial. At the root of this claim and of most mainstream work centred on ‘Solow–type’ growth models is the view that growth is determined by largely domestic supply–side factors (such as the rate of growth of the population or the labour force, factor prices, the savings rate, and, in more recent ‘new growth’ models, the generation of technological knowledge). This account of growth has however been contested. In the Keynesian tradition, for example, it has been argued that exports (Kaldor, 1966; 1970) and trade performance (Thirlwall, 1979) in particular and demand-side factors in general are the main determinants of growth, while ‘evolutionary’ growth models identify technical change as the main determinant of growth but reserves an important role for demand side factors in the shape of exports and imports (see Verspagen, 1997).

Despite disagreements about the impact of trade on growth, attempts to make sense of the notion of national competitiveness have led to a certain degree of agreement about the meaning of national or regional competitiveness. As the First Report on the Competitiveness

of European Industry indicated (CEC, 1996b), competitiveness is a means to an end and not an end in itself. The end is a country's capacity to deliver high levels and rates of growth of welfare and high and increasing living standards for its citizens. The means are measures which enable it to generate more wealth per head than its competitors in world markets. To preclude monopolistic behaviour most definitions add the qualification that competition should take place in the context of free and fair market conditions (see D'Andrea Tyson, Cohen, Teece and Zysman, 1984).[4] This qualification itself requires qualification. In particular it assumes that free markets lead to full employment. Second, it does not acknowledge that 'how such competitiveness is achieved can also be a matter of concern. Devaluation of currencies to compensate for costs which have been allowed to get out of line, cutting real wages to compensate for insufficient efficiency or a relaxation of environmental standards may provide superficial relief for underlying problems' (CEC, 1996b: 1).

If these qualifications are set on one side, and if competitiveness is defined as the capacity of a country to ensure relatively high and sustained incomes for the owners of its economic assets and for its population, a good first indicator of competitiveness is GDP per head measured at PPS. Competitiveness is therefore measured using the same indicator as is used to measure cohesion. In the case of competitiveness what matters is whether measures increase the level and rate of growth of GDP per head and whether they result in a *potential Pareto improvement.* In the case of cohesion what matters is whether measures lead to a more equal distribution of GDP per head and contribute to processes of catch up in which less developed countries and regions and lower income groups enjoy faster rates of income growth than more developed or richer groups.

Measuring competitiveness and cohesion in the European Union

At present there are wide disparities in competitiveness and economic development in the EU, and these differences are seen as a factor standing in the way of greater cohesion. Figure 1 indicates the scale of these disparities in 1994 by plotting PPS estimates of regional per capita GDP for NUTS II regions in fifteen Member States, themselves ranked from left to right according to their national GDP per head. In that year output per head in NUTS II regions measured in PPS varied from 196 to 37.7 per cent of the EU average, while in ECU the extreme values were 227 and 31. The ten per cent band or decile of the population of the Community that lived in the least prosperous areas had an average GDP per head of 58. A further ten per cent lived in areas with an average of 71. More than 19 per cent of the population of the EU lived in (Objective 1) areas with a per capita GDP of less than 75 per cent of the Community average: included were all of Greece, Portugal outside of Lisbon, the French overseas départements, the former German Democratic Republic, 10 of 18 Spanish NUTS II regions, 5 of the regions of the Italian Mezzogiorno, Burgenland in Austria and South Yorkshire in the UK. Just outside were the Canaries, Merseyside, Corsica, Molise and Flevoland in the Netherlands. In most of these areas the share of income from low-productivity agricultural sectors was large, and unemployment was high. A further 36 per

[4] 'Competitiveness has different meanings for the firm and for the national economy. A nation's competitiveness is the degree to which it can, under free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously expanding the real incomes of its citizens. Competitiveness at the national level is based on superior productivity performance and the economy's ability to shift output to high productivity activities which in turn can generate high levels of real wages. Competitiveness is associated with rising living standards, expanding employment opportunities, and the ability of a nation to maintain its international obligations. It is not just a measure of the nation's ability to sell abroad, and to maintain a trade equilibrium.'

cent lived in areas with a per capita GDP of less than the Community average. Included are many rural areas and regions affected by the decline of employment in mining, steel, textiles and shipbuilding with above-average unemployment rates. At the other end of the spectrum ten per cent of the population of the Community lived in areas with an average of 153. Included were Hamburg (196), Brussels (183), Darmstadt (178), Luxembourg (169), Ile de France (161), Oberbayern (161), Vienna (158), Bremen (156), Greater London (147), Stuttgart (139), Antwerp (139), Grampian (136) in Scotland and Lombardy (131). A large share of the regions in this group were West German, and most were metropolitan economies clustered around an axis (the so-called 'blue banana') that extended from Greater London through Belgium and the Netherlands along the Rhine and into Lombardy and Emilia Romagna in the north of Italy which lie just outside the top 10.[5]

Components of territorial disparities

To help identify the causes of disparities in competitiveness and development, differentials in development can be divided into two elements: an element that depends on productivity differentials; and an element that depends on differential in the employment rate (the percentage of the population in employment). More formally:

$$\frac{\text{Gross Domestic Product}}{\text{Resident Popn.}} \equiv \frac{\text{Gross Domestic Product}}{\text{Employed Popn.}} \times \frac{\text{Employed Popn.}}{\text{Resident Popn.}}$$

Differences in productivity reflect differences in physical productivity – an area's ability to transform natural and human resources into the goods and services consumers wish to purchase, prices and earnings which may result from differences within a single sector or from differences in sectoral/functional specialisation. Differences in the employment rate defined as the share of the population in employment reflect variations in the capacity of an economic system to mobilise its human potential. The employment rate depends on a number of factors: the age profile of an area's population, conventions concerning retirement and schooling; the share of the population in active age groups that is inactive or whose work is hidden which depends on gender roles, the extent of early retirement, sickness and hidden unemployment; and the scale of unemployment.

In order to identify the relative roles of variations in productivity and the employment rate the data for each EU region are plotted on a graph which records the GDP per person employed on the vertical axis and the employment rate on the horizontal axis. Each variable is measured as a percentage of the EU average (see Figure 2). As the data are plotted using logarithms of the rates of productivity and employment a particular level of GDP per head is represented by a straight line sloping downwards from left to right. What is immediately clear from Figure 2 is that the two determinants of regional GDP per head play quite different roles in different parts of the EU. In most cases all the NUTS 1 regions in a particular member state are clustered in a particular part of the graph, though there are exceptions and in some Member States there are quite wide regional differences.

[5] To be in the ten per cent band or decile that lives in the regions with the highest levels of per capita output does not imply, however, that a household or individual is rich: it is average output that is large, and household income depends first on whether the income associated with a region's output of goods and services accrues to the region's inhabitants, and second on the personal distribution of income within the region.

The areas with the lowest GDP per head were in the main in Greece and Portugal. (Data was not available for the French overseas départements which also had particularly low levels of GDP per head). What is clear in the case of Greece (with the exception of Kentriki Ellada in the west) and mainland Portugal, however, is the fact that their employment rates were close to the EU average (92 to 102 per cent). (Of the Cohesion countries their unemployment rates were also comparatively low). Yet their levels of productivity (measured in PPS) were equal to 65 to 72 per cent of the EU average.

The situation in Spain and the Republic of Ireland was rather different. Generally speaking employment rates were low varying from 91 per cent in Northern Spain (ES1 and ES2) to 67 per cent in the South (ES6). In Ireland the employment rate stood at 84 per cent. The rates of productivity were much closer to the EU average than in the cases of Greece and Portugal varying from 112 per cent in Madrid to 73 per cent in North West Spain but with most areas clustered in the upper half of this range. In the Republic of Ireland productivity was equal to the EU average.

Close to this cluster were also the regions of Southern Italy: Campania (IT8); Puglia, Basilicata and Calabria (IT9); Sicily (ITA); and Sardinia (ITB). In all of these areas productivity was between 82 and 89 per cent of the EU average, while employment rates were 80 to 87 per cent of the average. Abruzzo and Molise (IT7) were somewhat detached from this group in that their employment rate (97 per cent) was just short of the average, although their productivity level (89 per cent) was quite close to the other parts of the Mezzogiorno. This region lay between the Mezzogiorno and the Centre-North. In the Centre-North productivity was greater than the EU average (varying from 95 per cent in the Central region to 115 per cent in Lombardia), while employment rates were 4 to 17 per cent above average. The differential positions of the two parts of the country graphically confirms the existence of two different economic and social worlds in Italy. Austria interestingly occupies a position that is close to that of the Centro region (IT5) in Italy and the North East (IT3) which in the past was under Austrian control.

The position of the United Kingdom (UK) is also particularly striking. Generally speaking UK productivity is low ranging from 82 to 96 per cent of the EU average. Employment rates were on the other hand much more varied and were in most cases in excess of 100 per cent: the lowest scores were 95 per cent in Northern Ireland, while the highest was 123 per cent in the South East, and the next highest was 118 in East Anglia. Overall comparatively high rates of employment partially compensate for low productivity.

The Nordic countries are associated with substantially higher rates of employment: 125 per cent in Denmark and 121 per cent in Sweden, but due to recent employment loss just 100 per cent in Finland. In Denmark (90 per cent), Finland (92 per cent) and Sweden (82 per cent) productivity lay below the EU average. GDP per head seems therefore to have been relatively high largely as a result of the high degree of mobilisation of the human potential of the Nordic countries.

Hamburg (DE6), Hessen which contains the city of Frankfurt and to a lesser extent Bremen (DE5) have high productivity and employment rates, though the figures for Hamburg and Bremen are difficult to interpret due to the significance of commuting. In the rest of Germany employment rates are high (125 and 126 per cent) in the southern Länder of Baden-Württemberg (DE1) and Bayern (DE2). Rates of productivity in these two Länder are close to

those in the northern Rhinelands and North Sea coast (98 to 103 per cent) but the latter are characterised by employment rates in the order of 101 to 110 per cent.

With the striking exception of Ile de France and to a lesser extent the Centre-East the French and Belgian regions display close-to-average productivity rates but less than average employment rates. French provincial productivity rates range from 96 per cent in the Ouest to 107 per cent in the Mediterranée. Employment rates range from 86 per cent in the old industrial region of Nord-Pas-de-Calais to 105 per cent in the Centre-Est (Rhône-Alpes and Auvergne) in provincial France. The Ile de France stands out from the rest of France as a consequence of its higher employment rate (118 per cent) and in particular of its rate of productivity (139 per cent). Belgium is characterised by high rates of productivity, and rates of employment that are on average low (96 per cent). In Belgium therefore the strong positive impact of productivity on relative GDP per head is in part offset by the downward pressure exerted by comparatively low rates of employment.

The Netherlands is a country whose position has changed from the top left to bottom right hand quadrant. In 1993 rates of productivity ranged from 87 (Zuid-Nederland) to 99 per cent (Noord-Nederland), while employment rates ranged from 106 to 118.

Trends in inequality in the European Union

Data on long-term trends in territorial inequality in the EU indicate that disparities in regional development and inequalities in the distribution of income, which diminished in much of the 1960s and early 1970s subsequently increased, though trends do differ from one Member State to another. Figure 3 for example plots several indicators of inequalities in Gross Domestic product per inhabitant in the first twelve Member States. The graph shows strong convergence until the mid-1970s. In the case of Member States convergence gave way to divergence until the early to mid-1980s depending on the indicator used. From the mid-1980s until 1990 Member States converged. At the start of the 1990s there was a further upturn in most measures of inequality with levels close to their 1974 level: over the period from 1974 to 1992 there was no overall reduction in disparities.

At a European Union level and even in some Member States it is difficult to measure trends in regional inequality due to the absence of data for particular countries in particular years. A far from ideal solution is to drop regions for which values are missing. This course of action is adopted in Tables 1 and 2, though the complete data series are also recorded. The indicator of regional inequality used is the sum of the absolute deviations of regional per capita GDP (measured at Purchasing Power Standards) expressed as a percentage of the mean. The data in Table 1 set out inequalities within the EU at member State, while Table 2 sets out the results for individual Member States. The Member State indicators in Table 2 identify the same recent tendency for catch-up and for a reduction in inter-Member State disparities identified in Figure 3. Disparities between NUTS I and NUTS II regions however suggest that there was very little convergence in 1981-94: for 63 NUTS II regions the WMAD declined from 20 to 19, while for 166 NUTS III regions it diminished from 21.9 to 20.5.

The reason for the contrast between inter- and intra-member State trends is clear from Table 2 which shows that disparities in GDP per head and in competitiveness increased in virtually all Member States. At NUTS II level disparities increased in all Member States except the

Netherlands in 1986-94, Greece in 1977-81, Austria where disparities changed little, Portugal in the 1991-4 and the new Germany. At NUTS I disparities increased in the UK from 8.8 per cent in 1977 to 11.6 per cent in 1994, and at NUTs II level from 12.6 to 15.4. In France there was an increase at NUTS II level from 15.9 to 19.1, and in Spain from 14.7 in 1980 to 17.9 in 1994.

A disaggregation of trends in output per head

To what extent are these changes in disparities a result of differences in changes in rates of productivity and in employment rates? Are inter-regional productivity differentials increasing or decreasing? Are variations in the employment rate increasing or decreasing? Are areas that are economically weaker comparatively unsuccessful in their attempts to redeploy people who lose their jobs as a result of structural change or to provide alternative employment possibilities for new generations entering the job market for the first time? Does interregional migration serve to adjust the changing regional supply of and demand for labour?
To answer some of these questions trends in the rates of productivity and employment were analysed to explore whether disparities in the two constituent elements of differences in GDP per head (rates of productivity and employment) were increasing or decreasing relative to the EU average (which stood at 40.6 per cent in 1980, 41.3 per cent in 1990 and 38.1 per cent in 1993) at the member State level (see Figure 4).

What Figure 4 shows is that different Member States are developing along different trajectories with most, at any point in time, either converging on EU rates of productivity while diverging on rates of employment or vice-versa. Of the Cohesion countries other than Ireland after 1989 there is strong evidence of a trade-off- between productivity and employment rate convergence. Spain's overall position also improved but in different ways: until 1986 rates of productivity converged while rates of employment diverged, in 1986-90 the employment rate improved at the expense of divergence in rates of productivity, while in 1990-93 there were a series of switches. In Greece an overall improvement in its rate of employment occurred at the expense of its relative productivity, while in Portugal there was an overall improvement in relative productivity and a small decline in its relative employment rate. Ireland is the striking exception due to the speed of growth in the 1990s which allowed productivity and employment to converge at one and the same time.

Of the stronger economies Belgium and Luxembourg strengthened their positions in terms of productivity and employment; Austria, Italy and the Netherlands lost ground in terms of productivity.

There are few signs of a virtuous cycle in which relative rates of productivity and employment increase. Instead there is evidence of a trade-off in which gains in relative productivity are achieved at the expense of relative employment and vice versa. The per capita rate of growth of employment, measured in terms of jobs, is equal to the difference between the rate of growth of GDP per capita and the rate of growth of GDP divided by employment (or the product of output per average hour of work and average hours of work per person employed). Though productivity growth rates have been low equalling just 1.8 and 0.7 per cent per year in 1979-89 and 1989-95, growth has also been slow, and employment growth has not been sufficiently fast to allow catch-up to combine simultaneous improvements in relative employment and productivity.

Trends in income inequality in the European Union

A recent study of developments in the distribution of disposable income in seventeen OECD countries (OECD 1995) showed that there was a rise in income inequalities in the 1980s for the majority of countries. Increases in measured inequality were the largest in the Netherlands, Sweden and in particular in the United Kingdom and United States (see Table 4).

At the more recent dates for which there was data available, relative inequality was smallest in the Scandinavian countries, Benelux and Luxembourg and greatest in the United States, Ireland and Switzerland the highest. (These figures are a result of a complex set of factors that include changes in the distribution of earnings and workforce participation, ageing of the population, changes in household structures, changes in taxation and income transfers within several countries, reductions in taxes in upper incomes and reductions in the level and coverage of benefits and increases in the return to capital as well as changes in the ownership of assets in part as a result of privatization).

Competitiveness and cohesion in the European Union

This analysis of trends in competitiveness and cohesion indicate that after a rapid phase of convergence there was a mid-1970s turning-point when growth slowed and divergence occurred. Since the early 1980s catch-up resumed at a member state level, but divergence predominated between regions within Member States and in the distribution of income.

Evidence of a more unequal distribution of employment and a trade-off between productivity and employment rate growth are suggestive of a fundamental dilemma as a realisation of the gains of integration requires that the resources released as a result of restructuring are re-employed in activities where their contribution to output is greater.

Greater competition would normally result in a reduction in prices relative to incomes so that the consumers and users of goods and services gain. In so far however as producers are not re-employed (1) gains will be offset by greater welfare expenditures and an greater burden on government social security finances and (2) the multiplier effects of reduced incomes and expenditures of those who do not find new employment will have a depressive effect on output and employment. As adjustment is not instantaneous increases in competition in sectors that were formerly protected and in activities in which productivity growth exceeds the rate of output growth a short-term effect of change will be greater unemployment and non-employment. If solidarity and compensation mechanisms are insufficiently strong there will be losers and problems of cohesion unless and until these resources are re-employed. A re-employment of resources is required, however, not just to ensure cohesion but also to ensure that potential gains of integration are realised. If the resources released (or the new generations that join the job market) are not re-employed in activities in which their contribution to output is greater than in the activities they left the medium-term gains remain potential rather than actual. In this sense improved cohesion is a prerequisite for the achievement of efficiency gains and growth. Greater cohesion implies however not just that losers are compensated and that resources are re-employed but also that incomes and employment grow faster for groups in weaker areas and with lower incomes than for groups in richer areas and with high incomes. It is not enough therefore to argue that certain developments will improve the situation of weaker areas. To add to cohesion conditions must

improve faster in weaker areas than elsewhere and the position of disadvantaged groups must improve faster than that of privileged groups.

Disparities between the European Union and East-Central Europe

Recent work undertaken at the World Bank by Barbone and Zaduendo (1997: 7–8) has argued that 'the evidence on convergence among current members of the European Community suggests that the countries in CEE (and their regions) might converge, in time, to the EU average income per capita level. ... The CEE countries should then expect income convergence to take place as they implement policies in tune with EU accession requirements'. However, as we have argued above, while it is clear that some convergence between member states (particularly between the Cohesion countries and the EU average) has occurred, disparities between the constituent regions of the EU have increased (CEC, 1996a). This experience raises some important questions in relation to the claims of the World Bank research, as does the historical tendency for the countries of ECE to be located on the eastern periphery of a European division of labour.

Measuring disparities in development between the member states of the EU and the countries of East-Central Europe is a complicated and problematic task. Data of a comparable quality are difficult to obtain, and official reports from the World Bank (see World Bank, 1996), the European Bank for Reconstruction and Development (see EBRD 1996), the United Nations Economic Commission for Europe (see UNECE, 1997) and the European Union invariably use estimates of performance. Any firm conclusions should be treated with some caution and the measures reported here should be regarded as orders of magnitude rather than precise dimensions. Nevertheless, regardless of whether one uses GDP or GNP data and regardless of the sources of the estimates used, it is clear that the countries of ECE lie well below the levels of development found in the EU (Table 5). Differences are clearly found whether per capita GNP is measured using current exchange rates or in purchasing power parity terms (PPP),[6] but regardless of the measure all of those countries reported in Table 5 lie at least 40 per cent below the EU average. The poorest member of the EU (Greece), we should remember, had an income per head of 64 per cent of the Union average in 1993 (CEC, 1996a: 17).

However, in taking the full group of ECE applicant countries there are clearly startling disparities both between the EU15 and the applicants and also within the group of applicant states (Table 6). Again, we should recognize that the data in Table 6 represent orders of magnitude rather than precise measures of disparities, and we should also remember that measuring per capita income using exchange rates is problematic, however clearly the majority of applicant states lie below 80 per cent of EU average income per head, except Slovenia. Three of the most peripheral countries, Lithuania, Romania and Bulgaria, record per capita incomes 90 per cent below the EU average. As Iain Begg (1996: 13) has argued, then, the addition of 105 million people in the ECE applicant countries would increase the EU population by 28 per cent, while simultaneously adding only between 3.4 per cent and 8.5 per cent to EU GDP (depending upon whether one uses nominal exchange rates or PPP estimates). Consequently, average EU per capita GDP would drop by 15 per cent. In other words, at current levels, all applicant countries would be eligible for Cohesion Fund support in addition to support through the Structural programmes, costing something like ECU 42

[6] The lower income per head recorded when measured using current exchange rates compared to when using purchasing power measures reflects the relative weakness of the currencies of ECE economies.

billion. Such transfers would account for something like between 7 per cent of Slovenia's GDP and 51 per cent of Lithuania's (Grabbe and Hughes, quoted in Begg, 1996: 12). The decision to limit combined Cohesion and Structural Fund transfers to 4 per cent of a country's GDP has, then, a clear budgetary logic.

The large level of disparities between the EU and the applicant countries of ECE, however, lies not only in the continued failure of the state socialist development model to converge economic outcomes with those found in parts of western Europe, but also in the immediate impacts of transition in the region. The countries of ECE have seen a remarkable collapse of economic output in the early 1990s and only now are they witnessing, although by no means universally, a return to positive growth. Some of the dimensions of this collapse and its impacts on comparative east-west disparities in Europe can be identified in Table 5. Between 1990 and 1992 per capita incomes in relation to the EU average either fell or at best stayed the same (in the case of Poland). By 1994 per capita incomes were still below the level reached in 1990 relative to the EU average in three of the five countries reported.

If a larger set of countries are taken into account, it is clear that by 1995 throughout ECE, GDP had dropped to well below 1989 levels (see Dunford, 1998 and Smith, 1998). There have been clear national variations in this process of economic decline with Polish GDP standing at nearly 99 per cent of the 1989 level, Russian GDP at 60 per cent and Georgia at only 19 per cent. These figures, however, assume unrealistically that growth would have ended in 1989. The shaded bars in Figure 5 therefore record 1995 GDP as a percentage of what it would have been if growth rates in the late 1980s had continued. Consistently the loss of GDP is seen to be greater by several percentage points than the level of GDP forgone without potential growth taken into account (the unshaded bars). Russia lost between 92 and 136 per cent of its 1989 GDP, while Armenia, Azerbaijan and Georgia lost between 216 and 247 per cent. Much lower levels of collapse were experienced in Central Europe, but Slovakia, which has seen one of the highest economic growth rates in the last few years, witnessed a level of forgone GDP of between 72 and 112 per cent of 1989 levels.

All of these figures, however, give no real impression of how much output has to be recouped in order to return to 1989 levels. Rollo and Stern (1992) have estimated, for example, that it could take until at least 2000 before per capita GNP levels return to those of 1988 in most transition economies. Dunford (1998, p. 86) has argued, then, that 'net progress will occur only if exceptionally high rates of growth are sustained over very long periods of time'. He estimates that there will be no net gain above 1989 GDP levels until 2005 in Poland and Slovenia, 2009 in Hungary and 2013 in the Czech Republic. The countries of the former Soviet Union will see no net gains until into the second quarter of the twenty-first century. Dunford (ibid., p. 88) concludes, then, that '[t]he crash of the early 1990s represents in quantitative terms an extraordinary reversal and much more than a "transitional recession"'.

What of future trends in disparities between the EU and applicant countries in ECE? Modelling work undertaken by the World Bank (Barbone and Zalduendo, 1997) has estimated that convergence to 75 per cent of EU per capita income (the level set for Structural Fund requirements)[7] will take between 15 years (in the case of the Czech Republic) and 91 years (in the case of Slovenia) if current national economic growth rates continue (Table 7). Under this growth scenario, Poland will never converge and Hungary and Slovakia will take 41 years each. If the average growth rates of these five economies are

[7] The estimates are based on the assumption that the EU continues to perform at the present EU average levels.

used, convergence rates will vary from between 28 years (in the case of the Czech Republic) and 50 years (in the case of Poland). If a rate of growth equivalent to the average EU level is achieved then the period for convergence increases slightly over average ECE growth levels, yet if low rates of EU growth are considered, convergence will never occur.

The recent shift to positive economic growth rates in the region has been seen as evidence that 'the prospects for an extended period of strong growth are very good' (EBRD 1995, p. 5) and that shock therapy has therefore been a success.[8] While positive growth is now occurring in several economies, the depth of the collapse between 1990 and 1994 has meant that economic rejuvenation is at best a long way off. Indeed, the collapse of the early 1990s can be seen as a result of the implementation of a set of transition policies, or *technologies of transition* (see Smith and Pickles, 1998), completely unsuited to the environments of ECE economies (see Dunford, 1998; Kagarlitsky, 1995; Smith and Pickles, 1998). Indeed, we are beginning to witness the emergence of complex patterns of international uneven development in Eastern and Central Europe. The recent positive growth occurring in Central Europe has been accompanied by continued decline in much of the former Soviet Union and parts of the former Yugoslavia and stark fluctuations in countries such as Bulgaria (Figure 6). With negotiations for accession to the European Union (EU) to be opened with the Czech Republic, Hungary, Poland, Estonia and Slovenia, the combined geopolitical and economic unevenness of 'transition' may well be reinscribing the old European division of labour between east and west. We return to this point later.

Components of national disparities in East-Central European applicant countries

Given the earlier discussion of the determinants of differences in per capita income in the EU, Figure 7 plots productivity and employment rates in 1995 for the 10 applicant countries with productivity (GDP per person employed as a percentage of the ECE average[9]) on the horizontal axis and the employment rate (as a percentage of the ECE average) on the vertical axis. As in the case of EU regions discussed earlier, it is clear that productivity and employment rates play quite different roles in different applicant countries. Five main elements are evident.

The areas with the lowest GDP per head in 1995 were Bulgaria, Lithuania and Romania. First, in Bulgaria, poor economic performance, related to the complexity of political-economic change and struggles over the nature of change (Begg and Pickles, 1998; Smith and Pickles, 1998), is in part the result of low levels of productivity and a low employment rate. The low employment rate is, in part, reflected in the relatively high unemployment levels experienced in Bulgaria (Table 8). Second, in Romania and Lithuania (and to some extent Latvia), much lower productivity than in all other applicant states is a key determinant of poor performance, although this is somewhat offset by relatively high employment rates. In

[8] The *Transition Report* goes on to argue that many ECE economies 'share a number of the key features underpinning the outstanding growth of East Asia over the last few decades' (p. 10). Emerging export strength, macroeconomic stability, an educated labour force and large potential neighbouring markets in the EU are pointed to as being key similar features. Amsden et al. (1994), however, have argued that what made the East Asian 'miracle' was careful state planning of development trajectories. Similarly, Cumings (1987) has argued that repression and high levels of exploitation underlined the dynamic growth of the Asian newly industrialized countries (NICs). Unsurprisingly, no mention of these crucial factors is made and the comparison was made before the recent 'Asian crisis' emerged.

[9] The 1995 GDP data are estimates calculated from World Bank (1996) based upon 1995 growth levels and 1994 data.

the poorest applicant countries, then, low productivity is a key factor in determining poor performance (cf. the discussion of Greece and Portugal earlier), and in Bulgaria low productivity is combined with a low employment rate, mirroring somewhat the experience of Spain and Ireland in comparison to the EU average.

Third, the Bulgarian experience of relatively low productivity and a low employment rate is also seen to a much lesser extent in Slovakia and Poland, two of the middle-ranking economies in terms of per capita income. Both Slovakia and Poland lie close to the ECE average for employment rates, while Slovakia has a slightly lower level of productivity than Poland. Both economies also suffer from high unemployment (Table 8), reflected in the low employment rate. Fourth, in the Czech Republic and Estonia, two economies towards the upper end of ECE per capita income, productivity is below the average for the region, but this is offset by relatively high employment rates. Perhaps mirroring the UK experience, comparatively high rates of employment and (low unemployment levels) partially compensate for low productivity. Finally, in the richest two economies (measured using US $ exchange rates), Hungary and Slovenia, productivity is high, especially in the case of Slovenia. Furthermore, in Slovenia high productivity is matched with a relatively high rate of employment, while Hungary high productivity is associated with a less than average employment rate.

Trends in inequality between East-Central European countries

Evidence on the extent to which disparities between ECE and applicant countries are changing is limited and somewhat contradictory, depending upon the measure used. For example, Table 9 reports measures of disparities (coefficients of variation) for all the ECE countries for which data were available and for a sub-group of the 10 applicant countries. Two indicators are used, GDP per capita measured in PPP terms and GNP per capita measured in current US $. Cross-national variations in per capita GDP (in PPP) suggests that between 1993 and 1994 differences increased among all ECE states, while they declined between the 10 applicant countries, although they were about twice the magnitude of those recently found between EU member states. However, GNP per capita (in US$) differences, while also being much higher than EU levels, have seen marginal increases between 1994 and 1996.

To what extent can increased disparities in GNP per capita between countries be accounted for by the changing trajectories of productivity and rates of employment in the 10 applicant countries? Time-series data are limited, but Table 10 indicates that while productivity relative to the regional average has tended to increase in virtually all of the 10 countries – except Bulgaria where it has seen a significant drop and in Estonia where it has tended to fluctuate around the average – and while this may provide some evidence for convergence of productivity rates, increases in productivity are of quite different magnitudes and revolve around quite different base levels. For example, to take two extremes, Slovenia has seen its already high level of productivity increase relative to the average quite dramatically while Lithuania and Romania have seen productivity increases but at a very low relative level and not of the dramatic proportions of Slovenia.

Employment rate change has been more varied. In Poland, Slovakia and Romania employment rates have increased to around or just above the average, at the same time as productivity has increased. In Hungary, Latvia and Lithuania productivity increases have been accompanied by a reduction in the rate of employment, albeit at quite different

magnitudes. While in Bulgaria employment rate decline has accompanied productivity decline which, when coupled with the fact that Bulgaria is the poorest of the applicant states, has further eroded economic potential and performance. Clearly then, as in the discussion of the EU, there is little sign of an *overall* combined increase in productivity and employment rates leading to economic growth. In several cases, there appears to be a trade-off between productivity improvements (albeit often at very low levels) at the expense of rates of employment, or at best with marginal change in relative employment. The relatively high growth rates in some applicant countries are now beginning to slow, and the marginal increases in employment rates that have been seen in some cases have largely failed to reduce significantly mass unemployment.

Income and expenditure inequality in East-Central European countries

To what extent has there been a convergence or divergence of income inequalities in ECE under transition conditions? What does this tell us about levels and trajectories of cohesion, in terms of the distribution of income, in ECE? Accurate time-series data are limited for assessing income and expenditure inequalities. Data reported in Table 11 show two measures of inequality – the Gini coefficient and the percentage share of income or expenditure in quintiles (with the highest and lowest deciles also shown where possible). Clearly in the majority of applicant countries income and expenditure inequalities in the early 1990s are below those found in the United Kingdom and the USA in the late 1980s. Only in the two Baltic States of Estonia and Lithuania, and possibly in Bulgaria, are inequalities above those found in the UK and USA. Indeed, the level of inequality in the majority of applicant countries appears to be more on a par with those found in Canada and the Netherlands in the late 1980s (Table 4), although in all cases (except Slovakia) applicant state inequalities are above those found in the Nordic countries. As an aside, the situation in Russia, not presently an applicant country, is much worse than that found in the applicant states and the majority of western economies. Indeed, the Russian experience is perhaps more comparable to that found in many of the more industrialized countries of the underdeveloped world.[10]

When considering the distribution of income and expenditure,[11] it is clear from the data in Table 11 that the percentage share of income or expenditure in the bottom 20 per cent is greater than that in the lower 20 per cent of the UK and USA. At the opposite end of the quintile scale, the proportion of income in the top 20 per cent in the UK and USA is roughly on a par with that found in most ECE applicant states. Income differentiation has been highest in many of the USSR successor states and in Bulgaria, although it has been less severe in many of the more westerly located states, including the majority of applicant countries (UNECE, 1996: 107). Nevertheless, a clear polarization of income distribution is occurring with growth seen at top and bottom ends of the quintile spectrum, and a concomitant decrease in the number of middle-income groups. This polarization has also resulted in important shifts in consumption and demand, with the new rich in part fuelling the large-scale demand for western consumer goods and thereby contributing to the trade deficits of these economies.

[10] See, for example, Kagarlitsky's (1995) discussion of ECE as 'another road to the third world' in his book *The Mirage of Modernization*.

[11] It should be noted that significant problems of accuracy arise in comparing these data across countries because the underlying survey of household incomes from which much of the information on quintile distributions in Table 11 are derived differ between countries (see World Bank, 1996).

Indeed, Table 12 reports changes in the Gini coefficient for household income between the late 1980s and the mid-1990s. Comparisons are complicated by the fact that these data are computed by national statistical offices, but nevertheless they can tell us something about the trajectories of cohesion and income distribution in the applicant states. Clearly, increased income inequality is pronounced and occurring at a rate which is on the whole much faster than that seen in the EU over roughly the same length of time (cf. Table 4).

Two processes are important in considering income inequalities. First, it is clear that the state socialist commitment, officially stated, to equality of social groups had a significant impact on equalising differences in the populations of these states. Indeed, the UNECE (1996: 107) have suggested that 'these countries had the lowest level of measured income inequality as compared with all other country groups in the world'. Furthermore, this argument does not consider the role that enterprise- and workplace-level provision of collective consumption played in subsidising individual and household incomes and in enhancing the cohesion of these societies (Illner, 1992; Smith, 1998). Many of these kinds of activities, however, have been lost in the 1990s and have been privatised and commodified. Second, the transition to capitalism has been a major factor in increasing income and expenditure disparities between groups. The experience of transition in the 1990s has been one of economic collapse, labour shedding, 'rationalization', and social and political disorientation in which collapsing birth rates and increasing death rates suggest a deep-seated social and psychological crisis (Ellman 1994). The result has been an important increase in poverty and inequality. Milanovic (1994), for example, has found that poverty affects some 58 million people in ECE, or 18 per cent of the region's population. In Poland, a World Bank study (World Bank, 1995: xiv) has found that during the 1980s the poverty rate oscillated between 5 and 10 per cent of the population. After 1990 the rate jumped to 15 per cent, although there is some evidence to suggest that it is moving downwards at a slow rate. Aggregate real wages have dropped dramatically and wage differentiation is also occurring (Vecerník 1995), suggesting the emergence of a group of high-income-earning 'new professionals' and those involved in speculative and illicit activities. The emergence of poverty and inequality has been a breeding ground for two forms of activity. The first is the increased use of household survival strategies (Piirainen 1994) such as the exchange of household production, including food and other basic items, between friends and in networks established in the workplace which have led to a burgeoning of the informal economy (see Begg and Pickles (1998) for a discussion of Bulgarian survival strategies). The second is the rise of illegal and semi-legal activities such as Mafia-style organizations (Varese 1994; Burawoy 1996).

Labour market restructuring in East-Central European countries

Economic collapse has been based around a large-scale decline in industrial and agricultural output throughout the region. Indeed, in the absence of developed capital markets, one of the prime mechanisms by which enterprises have been able to restructure has been through 'downsizing' by shedding labour and reducing its price (Gowan 1995) which has had a significant impact on cohesion in ECE. Consequently, employment loss has been a universal yet uneven experience (Table 13), although recent data suggest that employment increases are occurring for the first time since 1989 in some countries. Bulgaria, Hungary, and Slovenia stand out as the worst cases. The Czech Republic and Russia seem to have fared better. Yet lying behind the relatively low levels of decline in the Czech Republic and Russia are a set of complex relations. In the case of the Czech Republic, labour had been largely retained (up until 1992) in industrial enterprises, suggesting that the perceived success of the Czech model was initially based upon limited intra-enterprise restructuring which has only

recently begun to make an impact.[12] Furthermore, relatively low levels of unemployment and labour-force reductions in the Czech Republic have been achieved through encouraging large-scale retirement of post-retirement-age workers, notably women (Paukert 1995). The impacts of the recent 'Czech crisis' however, are yet to be seen. In Russia the continued and clear commitment to the enterprise 'labour collective' is still in operation (Clarke 1993). An International Labour Office report on Russia, for example, has argued that some 35 per cent of employees had no job to do, thus producing high levels of hidden unemployment (Williams 1994). Recent UNECE reports based on labour-force survey data suggest that unemployment in Russia could be as high as nearly 8 per cent rather than the registered rate of nearly 3 per cent (UNECE 1996).

The key result of employment change has been the growth of unemployment, often within the context of only limited welfare budgets and in societies in which commitments to full employment were a fundamental part of the model of development up until 1989. Official unemployment has been particularly severe in Albania, Bulgaria, Croatia, Poland and Slovenia where levels reached more than 15 per cent in 1994 (UNECE 1994, p. 86) and in the former Yugoslavia where economic dislocation as a result of war has produced unemployment rates as high as 37 per cent (UNECE 1996). Furthermore, female unemployment rates have tended to be higher than those for males as the commitment to 'equalising the sexes' has given way to mass layoffs differentially affecting women and also, although figures do not exist, ethnic minorities, particularly the Roma (Ladanyi 1993; Sibley 1998). While relative inequality in unemployment rates between countries appears to be falling (Table 14), it seems now that structural and mass unemployment are the norm in many applicant countries, particularly in Hungary, Slovakia, Poland and Bulgaria. The UNECE (1997: 118) have recently argued that 'despite a relatively strong recovery in output since 1994 and a fall in total unemployment in 1995, the number of jobless people remaining out of work for more than one year increased rapidly' and that long-term unemployment is some 50 per cent more than the norm found in other non-transition countries (except Poland (40 per cent more) and the Czech Republic (30 per cent more)). The question of cohesion in the applicant countries of ECE therefore raises a serious question about the capacity of the economies of the region, in an increasingly globalized and integrated European economy, to generate enough work under the current rules of the game for those who are increasingly marginalized.

Regional disparities in East-Central European countries: the case of Slovakia

Thus far we have only examined the national economic experiences of ECE applicant countries. While it was found that there is some limited evidence to suggest a small scale national-level convergence of the applicant countries in the recent past, a parallel experience has been the dramatic increase in sub-national regional disparities. A thorough cross-national analysis of regional disparities is currently hampered by inadequate and unharmonized data sets. However, there is clear evidence from various country studies that regional disparities have increased markedly since the early 1990s (OECD, 1992, Capek and Sazama, 1993, Cséfalvay, 1994, Hajdú and Horváth, 1994, Nemes Nagy, 1994, Pavlínek, 1995, Sadler and Swain, 1994, Baláz, 1995; Ingham, Grime and Kowalski, 1996; Smith, 1996, 1998). Indeed, the process of relative regional convergence experienced in many ECE economies in the

[12] Pavlínek (1995), for example, has found that employment loss has been regionally uneven and sectorally specific. Parts of the northern Bohemia coal region saw up to 25 per cent loss of employment and estimates suggest that in the coal sector in northern Moravia 51 per cent of jobs were lost between 1989 and 1993, and that this figure may have increased to 80 per cent in 1996.

post-war period seems to be replaced by the fragmentation of regional economies since 1989 (Smith, 1996, 1998).

To identify some of the variations in regional performance in one applicant state (Slovakia),[13] Figure 8 shows estimated per capita GDP in 1995 for the 38 districts used in the territorial organization of the state prior to 1997.[14] The poorest region in 1995 — the rural hinterland of Košice (Košice-vidiek) — recorded a per capita GDP of only Sk 20,200 or US$673 (79.8 per cent below national average per capita GDP). The wealthiest region, Bratislava, on the other hand, recorded a per capita GDP of Sk 384,300 or US$12,800 (nearly four times above the national average). Beyond these two extremes there were only four regions in 1995 which record an above-average per capita GDP, including the metropolitan cores of Bratislava, Košice and Banská Bystrica (the three largest urban areas) and the region of Martin in Central Slovakia which has traditionally been dominated by heavy engineering but has undergone a certain recovery between 1993 and 1995. The 'success' of these regions is in part due to the concentration of industrial activity in these areas, with Bratislava and Košice alone accounting for 35 per cent of national industrial output (Smith, 1998). These core regions have also seen a high rate of average annual per capita GDP growth (5.7 per cent) between 1993 and 1995 suggesting that they are increasingly able to forge a growth trajectory away from more marginal areas.

Those regions recording close to average GDP figures (between 75 and 99.9 per cent of national average) are a diverse set of nine largely industrialized regional economies in Central and West Slovakia. Two types of regional economies are located in this group — those which have a more diversified industrial structure, such as Liptovský Mikuláš, Zilina and Trencín, and those reliant upon 'regional monostructures' such as Povazská Bystrica with its concentration of heavy engineering and armaments and Ziar nad Hronom, a large centre for aluminium smelting. These regional economies have recorded a more sluggish rate of average annual per capita GDP growth (1.1 per cent) between 1993 and 1995.

Those areas with between 50 and 74.9 per cent of the national average per capita GDP are a group of eight regions (down from ten regions in 1993) which again can be divided into two groups. First, there are a group of five regions, four of which have sizeable ethnic Hungarian populations, which are located in the hinterland of the Bratislava metropolitan region (Dunajská Streda, Galanta, Levice, Nové Zámky and Nitra) where agricultural production has traditionally been important and where dominance by the metropolitan core of Bratislava is pronounced. The second group is a core of East Slovak regions (Poprad, Prešov and Spišská Nová Ves) which have an industrial history but where agriculture remains important, albeit in decline, and where unemployment rates have reached between 16 and 20 per cent. Again a sluggish rate of per capita GDP growth (1.4 per cent) was recorded between 1993 and 1995.

The largest group of regions is found in the range of 25–49.9 per cent of national average per capita GDP and has grown from 12 regions in 1993 to 16 in 1995. In these regions, per capita GDP declined by some 4.3 per cent between 1993 and 1995. This group is composed of both agricultural peripheries which have seen significant levels of decline and high unemployment (particularly along the southern border with Hungary) and branch plant

[13] It is the intention to extend this analysis to other applicant states, within the limitations of data availability.

[14] Reliable per capita GDP data are currently unavailable for the new territorial structure other than for much larger county units. See for example Office for Stategy of the Development of the Society, Science and Technology of the Slovak Republic (1997) for NUTS III level data.

industrial economies in the northern, eastern and southern peripheries where the drop in industrial output has resulted in increased regional decline.

This contemporary picture suggests a high degree of regional fragmentation and a tendency for regional differences in per capita GDP to increase between 1993 and 1995. Indeed, the coefficient of variation for per capita GDP has increased from 79 in 1993 to 87 in 1995, significantly above the level of inequality (measured in US$) between ECE applicant countries and much greater than the level of inequality (measured in ECU PPP) between EU regions. The general tendency towards regional economic convergence during the 1948–89 period has clearly been replaced by a serious erosion of the potential for transformation in a large number of regions, while economic growth becomes increasingly concentrated in a small number of metropolitan core areas (Smith, 1996, 1998).

To help identify the causes of disparities we have earlier argued that differences in regional per capita GDP can be divided into two elements: productivity differences and variations in the employment rate. Data for 1996 are plotted in Figure 9, with productivity relative to the Slovak average indicated on the horizontal axis and the employment rate relative to the national average on the vertical axis. Three main dimensions are important. First, those regions with the highest per capita income identified above clearly stand out. In the two richest regions (Bratislava and Košice) productivity and employment rates are significantly above the Slovak average (although much higher in Bratislava than in Košice), and in these regions a combined process of high labour mobilization and high productivity, particularly in industry and certain internationally oriented service sectors in Bratislava, lie behind the relative strength of these regional economies.[15] Elsewhere, the other main buoyant region, Banská Bystrica, owes its strength in part to a high employment rate, although productivity is much lower (130 per cent below average). Here, industrial and other activity is clearly unable to sustain a strong regional trajectory, but a high employment rate is of some significance. Second, more productive regions located in the bottom right-hand segment (mainly central and westerly located regions) have relatively high productivity levels through dynamic industrial upgrading and restructuring, but poor employment rates, in part a factor behind increasing productivity as labour is shed. Finally, the majority of regional economies in Slovakia are found in the lower left-hand segment, suggesting a variegated level of low productivity and low employment rates, with significant levels of low productivity in some of the more peripheral easterly regions. This third segment clearly points to the significant differentiation and polarization of regional economies in transition.

From European periphery to European periphery: the lessons of history?

These national and regional disparities in development have their roots, at least in part, in the last two centuries of the region's economic history. For example, Table 15 presents per capita GDP data in 1913 for some of the ECE economies and Table 16 presents the same data for other countries in 1870 and 1910. These data clearly suggest that the area that became Czechoslovakia ranked closest to the European average, with Hungary, Poland and Romania all appearing in the upper ranks of this distribution earlier this century. Bulgaria, Yugoslavia and Russia lay in a more peripheral position. However, Bairoch (1976) has found that throughout the eighteenth century the only major growth in per capita GNP occurred in Britain. Elsewhere in Europe, per capita GNP stagnated around growth rates of 0.2 to 0.3 per

[15] Košice for example saw the highest level of productivity increase among all Slovak regions between 1993 and 1995.

cent per annum. Furthermore, using Bairoch's estimates Berend and Ránki (1982) have argued that during the nineteenth century Eastern Europe and Austria-Hungary were consistently in the lower end of economic development in Europe, as Britain consolidated its economic power and parts of Western Europe began to experience industrialization. As Berend and Ránki (ibid., p. 18) argue

> [f]rom the middle of the nineteenth century on, then, Europe became much more divided than [it] ... had earlier been, the differences that development and backwardness implied having grown considerably more acute. Clearly, the road opened up by the dual revolution, the path to modernization taken by Western Europe, was by no means one that was open to the countries of the periphery in the second half of the nineteenth century.

Berend and Ránki go on to argue that the continued peripheralization of Eastern Europe resulted from the 'refeudalization' of the region. The 'second serfdom' developed in a number of ways. Foremost among these was through the 'pull' of industrial development in Western Europe, as a consequence of which Eastern Europe was increasingly forced into a role in the European division of labour as a producer of agricultural products and raw materials for West European markets. Concomitant with this was the reinscribing of serfdom and tithing to feudal lords, particularly in Russia and Romania. The contemporary picture of EU-ECE disparities is clearly not part of a reinscribing of feudal relations and a second serfdom. Yet, this historical analysis does suggest that we may be witnessing a clear reinscribing of an East-West European division of labour and development divide of quite significant proportions.

However, within this broad picture of East–West differences, there was a significant differentiation of development within Eastern and Central Europe itself. While data are very limited, Good's (1991) discussion of estimated regional product per capita in the Habsburg Empire sheds much light on the nature of uneven development in the nineteenth century (Table 17). Regional differences between Austria and Hungary in the Empire were important and because the rates of growth in Hungary and the relatively underdeveloped areas of the Empire were slower than those in Austria divergence between richer and poorer regions occurred. Economic growth was particularly concentrated around the Austrian alpine areas, including Vienna, and in Bohemia as a result of industrialization (Good 1991; Klíma 1989). Meanwhile, in most parts of Hungary (including contemporary Slovakia) agrarian conditions dominated and feudal relations were often maintained, which effectively consolidated a peripheral position within the Empire. As Good (1986, pp. 140–41) has argued, there was 'a modest gradient stretching from west to east in the eighteenth century. Habsburg mercantilism indirectly confirms such evidence since it aimed at promoting regional specialization between an industrial west and an agrarian east'. However, in the late nineteenth century the divide between east and west in the Empire diminished as increased communications, eastward flows of capital and an intensification of trade between Austria and Hungary resulted in the partial diffusion of industrialization to westerly locales in the Hungarian lands, particularly around Budapest. The extent to which increased integration at the turn of the twenty-first century will lead to convergence remains an open question. What is clear, however, is that differentiation is more apparent than convergence and that, as in the EU, convergence will only occur through faster improvement in peripheral territories and for marginalized peoples. This suggests the need, then, for increasing demand in ECE through reintegrating marginalised spaces and social groups in the 'new Europe' as a fundamental aspect of any enlargement of the European Union.

References

Aldcroft, D. and Morewood, S. (1995), *Economic Change in Eastern Europe since 1918*, Aldershot: Edward Elgar.

Amsden, A., Kochanowicz, J. and Taylor, L. (1994), *The Market Meets its Match: Restructuring the Economies of Eastern Europe*, Cambridge, MA: Harvard University Press.

Bairoch, P. (1976), 'Europe's gross national product: 1800–1975', *Journal of European Economic History*, **5**, 273–340.

Baláz, V. (1995), 'Regional development during economic transition: a case study of the Slovak Republic', *European Urban and Regional Studies*, **2** (4), 353–62.

Barbone, L. and Zalduendo, J. (1997) 'EU accession of Central and Eastern Europe: bridging the income gap', *Policy Research Working Paper* No. 1721, World Bank, Country Department II, Europe and Central Asia Division.

Begg, I. (1996) 'Inter-regional transfers in a widened Europe', *South Bank European Papers*, No. 5, European Institute, South Bank University.

Begg, R. and Pickles, J. (1998), 'Institutions, social networks and ethnicity in the cultures of transition: industrial change, mass unemployment and regional transformation in Bulgaria', in Pickles, J. and Smith, A. (eds), *Theorising Transition: The Political Economy of Post-Communist Transformations*, London: Routledge, 115–46.

Berend, I. and Ránki, G. (1982), *The European Periphery and Industrialization 1781–1914*, Cambridge: Cambridge University Press.

Burawoy, M. (1996), 'The state and economic involution: Russia through a China lens', *World Development*, **24** (6), 1105–17.

Capek, A. and Sazama, G. (1993), 'Czech and Slovak economic relations', *Europe–Asia Studies*, **45** (2), 211–35.

Clarke, S. (1993), 'The contradictions of "state socialism"', in Clarke, S., Fairbrother, P., Burawoy, M. and Krotov, P., *What About the Workers? Workers and the Transition to Capitalism in Russia*, London: Verso, pp. 5–29.

Commission of the European Communities (CEC) (1996a) *First Report on Economic and Social Cohesion*.

Commission of the European Communities (CEC) (1996b) *First Report on the Competitiveness of European Industry*.

Cumings, B. (1987), 'The origins and development of the Northeast Asian political economy: industrial sectors, product cycles and political consequences', in Deyo, F. (ed.), *The Political Economy of New Asian Industrialism*, Cornell: Cornell University Press, pp. 44–83.

D'Andrea Tyson, L., Cohen, S.S., Teece, D. and Zysman, J. (1984) *Competitiveness, The Report of the President's Commission on Competitiveness*, volume III

Dunford, M. (1998), 'Differential development, institutions, modes of regulation and comparative transitions to capitalism: Russia, the Commonwealth of Independent States, and the former German Democratic Republic', in Pickles, J. and Smith, A. (eds), *Theorising Transition: The Political Economy of Post-Communist Transformations*, London: Routledge, pp. 76–111.

Ellman, M. (1994), 'The increase in death and disease under "katastroika"', *Cambridge Journal of Economics*, **18**, 329–56.

European Bank for Reconstruction and Development (EBRD) (1995), *Transition Report 1995*, London: EBRD.

European Bank for Reconstruction and Development (EBRD) (1996), *Transition Report 1996*, London: EBRD.

Fagerberg, J., Versbagen, B. and Caniëls, M. (1997) 'Technology, growth and unemployment across European regions', *Regional Studies*, 31 (5): 157–66.

Good, D. (1986), 'Uneven development in the nineteenth century: a comparison of the Habsburg Empire and the United States', *Journal of Economic History*, **46** (1), 137–51.

Good, D. (1991), 'Austria-Hungary', in Sylla, R. and Toniolo, G. (eds), *Patterns of European Industrialization in the Nineteenth Century*, London: Routledge, pp. 218–47.

Gowan, P. (1995), 'Neo-liberal theory and practice for Eastern Europe', *New Left Review*, **213**, 3–60.

Hajdú, Z. and Horváth, G. (1994) (eds), *European Challenges and Hungarian Responses in Regional Policies*, Pecs: Hungarian Academy of Sciences.

Ingham, M., Grime, K. and Kowalski, J. (1996) 'A geography of recent, regional Polish unemployment, *European Urban and Regional Studies* 3 (4): 353–64

Illner, M. (1992), 'Municipalities and industrial paternalism in a "real socialist" society', in Dostál, P., Illner, M., Kára, J. and Barlow, M. (eds), *Changing Territorial Administration in Czechoslovakia: International Viewpoints*, Amsterdam: Instituut voor Sociale Geografie, pp. 39–47.

International Labour Office (1996) *Yearbook of Labour Statistics*, Geneva: ILO.
Kagarlitsky, B. (1995) *The Mirage of Modernization*, New York: Monthly Review Press.
Kaldor, N. (1966) Causes of the slow rate of growth of the United Kingdom, Cambridge: Cambridge University Press.
Kaldor, N. (1970) 'The case for regional policies', Scottish Journal of Political Economy, November.
Klíma, A. (1989), 'Domestic industry, manufacturing and early industrialization in Bohemia', *Journal of European Economic History*, **18** (3), 509–27.
Krugman, P. (1994) 'Competitiveness: a dangerous obsession', *Foreign Affairs*, 73, 2, 28–44.
Milanovic, B. (1994), 'A cost of transition: 50 million new poor and growing inequality', *Transition*, **5** (8), 1–4.
Nemes Nagy, J. (1994), 'Regional disparities in Hungary during the period of transition to a market economy', *GeoJournal*, **32** (4), 363–8.
OECD (1997) Historical statistics 1960-95, Paris, OECD
OECD (1996) Historical statistics 1960-94, Paris, OECD
OECD (1995) Historical statistics 1960-93, Paris, OECD)
Organization for Economic Cooperation and Development (OECD) (1992), *Regional Development Problems and Policies in Poland*, Paris: OECD.
Paukert, L. (1995), 'Economic transition and women's employment in four Central European countries, 1989–1994', *International Labour Office Labour Market Papers*, 7.
Pavlínek, P. (1995), 'Regional development and the disintegration of Czechoslovakia', *Geoforum*, **26** (4), 351–72.
Piirainen, T. (1994), 'Three scenarios for the future of eastern Europe', in Piirainen, T. (ed.), *Change and Continuity in Eastern Europe*, Aldershot: Dartmouth, pp. 214–42.
Rollo, J. and Stern, J. (1992), 'Growth and trade prospects for Central and Eastern Europe', *The World Economy*, **15** (5), 645–68.
Sadler, D. and Swain, A. (1994), 'State and market in eastern Europe: regional development and workplace implications of direct foreign investment in the automobile industry in Hungary', *Transactions of the Institute of British Geographers*, **19**, 387–403.
Smith, A. (1996), 'From convergence to fragmentation: uneven regional development, industrial restructuring and the "transition to capitalism" in Slovakia', *Environment and Planning A*, **28**, 135–56.
Smith, A. (1998) *Reconstructing the Regional Economy: Industrial Restructuring and Regional Development in Slovakia*, Cheltenham: Edward Elgar.
Smith, A. and Pickles, J. (1998), 'Introduction: Theorising transition and the political economy of transformation', in Pickles, J. and Smith, A. (eds), *Theorising Transition: The Political Economy of Post-Communist Transformations*, London: Routledge, pp. 1–22.
Thirlwall, A. P. (1979) 'The balance of payments constraint as an explanation of international growth rate differences', *Banca Nazionale del Lavoro*, 32, 45–53.
UNICEF (1997) *Children at Risk in Central and Eastern Europe: Perils and Promises*, UNICEF.
United Nations Economic Commission for Europe (UNECE) (1994), *Economic Survey of Europe in 1993–1994*, New York: United Nations.
United Nations Economic Commission for Europe (UNECE) (1996), *Economic Survey of Europe in 1995–1996*, New York: United Nations.
United Nations Economic Commission for Europe (UNECE) (1997), *Economic Survey of Europe in 1996–1997*, New York: United Nations.
Varese, F. (1994), 'Is Sicily the future of Russia? Private protection and the rise of the Russian Mafia', *Archives Européennes de Sociologie*, **35**, 224–58.
Vecerník, J. (1995), 'Changing earnings distribution in the Czech Republic: survey evidence from 1988–1994', *Economics of Transition*, **3**, 355–71.
Williams, F. (1994), 'ILO warning on Russian jobless', *Financial Times*, 1 November, 3.
World Bank (1995) *Understanding Poverty in Poland* New York: World Bank.
World Bank (1996) *World Development Report 1996: From Plan to Market*, New York: Oxford University Press.

Table 1. Trends in regional inequality in the European Union

No. of regions	1977	1980	1985	1990	1994
Member states					
15	–	–	–	11.1	9.7
12	12.9	13.7	13.3	11.6	10.0
NUTS I					
45 to 76[a]	17.5	20.2	20.0	18.8	19.5
63	–	–	20.0	19.2	19.0
NUTS II					
82 to 203[b]	18.4	22.8	23.3	20.7	21.0
166	–	21.9[c]	21.3[d]	20.7	20.5

Notes:
[a] 45 in 1977, 62 in 1980, 72 in 1990 and 76 in 1994.
[b] 109 in 1977. 132 in 1980, 134 in 1985, 191 in 1990 and 199 in 1994.
[c] 1981 figure.
[d] 1984 figure.

Table 2 Trends in regional inequality in Member States (NUTS I, II and III regions)

Member State	No. of regions	1977	1980	1985	1990	1994
Austria	3	–	–	–	9.4	9.5
Belgium	3	10.8	11.5	12.0	14.0	13.2
Germany		–	–	–	–	18.5
West Germany	11, 10 in 1980	–	8.0	8.9	10.4	11.7
Spain	7	–	14.0	16.3	18.1	17.2
Finland	2	–	–	–	0.3	0.4
France	9, 9 in 1989–93	15.6	15.5	18.1	19.5	19.0
France	8	15.6	15.5	18.1	19.2	19.0
Greece	4	14.5	8.8	3.5	5.0	8.7
Italy	11	22.1	22.0	21.9	23.0	22.3
Netherlands	4	11.1	11.5	13.5	7.7	7.1
Portugal	3	–	–	–	2.8	2.6
UK	11	8.8	10.7	10.1	12.3	11.6
NUTS II						
Austria	9	–	–	–	18.7	19.0
Belgium	11	18.2	18.7	19.9	19.7	19.5
West Germany	31, 30 in 1980	–	14.0	14.4	14.8	20.0
West Germany	31	–	–	14.4	14.8	15.7
Spain	18	–	14.7	16.6	18.1	17.9
Finland	6	–	–	–	14.9	15.8
France	21, 22 in 1985 and 1994, 26 in 1990	15.9	15.8	18.1	20.0	19.1
France	21	15.9	15.8	18.1	19.4	19.1
Greece	13	16.5	13.0	7.3	8.6	9.7
Italy	20	22.5	13.0	7.3	8.6	9.7
Netherlands	9, 12 in 1990–94	12.9	13.3	16.5	9.3	8.7
Portugal	5, 7 in 1990–94	–	22.2	22.5	21.3	20.5
Portugal	5	–	22.2	22.5	21.0	20.3
Sweden	8	–	–	–	–	10.3
UK	35	12.6	13.6	13.7	14.8	15.4

NUTS III						1993
Belgium	43	–	23.4	23.4	23.2	23.6
Portugal	3	–	–	–	–	15.2
Sweden	24	–	–	–	–	9.9
UK	57, 65 in 1985–93	13.6	14.5	14.6	15.9	14.7
Germany	327	–	30.3	31.8	30.5	31.6
Denmark	11, 11 in 1990–93	2.9	3.4	4.1	49.8	47.4
Denmark	11	2.9	3.4	4.1	5.4	6.6
Spain	50	–	15.8	17.1	18.8	18.6
Finland	19	–	–	–	15.2	15.9
France	88, 94 in 1993, 98 in 1990	–	20.6	22	22.6	22.2
France	88	–	20.6	23.2	23.3	23.4
Greece	51	–	11.5	10.5	11.4	12.7
Netherlands	32, 40 in 1990–93	–	–	24.7	15.4	15.3

In the case of those Member states where the number of regions, the definition of the regions or the availability of data has changed, to enable comparisons results are also given not just for all regions but also for those regions for which data existed in 1981.

Table 3 Output and employment trends in the EU15 and OECD (Source: elaborated from OECD, 1997; 1996; 1995)

	1960-73	1973-79	1979-89	1989-95	1960-73	1973-79	1979-89	1989-95
	EU15				OECD			
Real GDP	4.7	2.5	2.2	1.5	4.9	2.8	2.6	1.8
Real GDP per head	4.0	2.1	2.0	1.1	3.7	1.9	1.7	0.9
Civilian employment[3]	0.3	0.2	0.5		1.1	1.2	1.1	0.7[2]
Civilian employment in manufacturing[3]	0.5	-1.0	-0.9	-3.0[2]	1.3	-0.3	-0.3	-2.1[2]
Civilian employment in services[3]	1.8	1.8	2.0	1.1[2]	2.5	2.5	2.3	1.4[2]
Employment as percent of population from 15 to 64[3]	65.3	63.2	60.1	61.3[2]	66.1	65.2	64.8	66.2[2]
Real GDP per person employed	4.4	2.3	1.8	0.7	3.8	1.7	1.5	1.4
Real value added in manufacturing per person employed[3]	6.0	3.7	2.8	2.4	5.0	2.6	2.8	3.0
Real value added in services per person employed[3]	3.3	1.8	0.7	0.4	2.7	1.4	0.7	0.9

Notes:

2 1989-93

3 Since 1991 data for Germany refer to the new unified Germany

Table 4 Trends in income inequality in OECD countries (Source : OECD, 1995b)

Country	Year	Gini coefficient	Year	Gini coefficient	Change in Gini coefficient
Finland	1990	21.5	1987	20.7	0.8
Sweden	1987	22.0	1981	19.9	2.1
Norway	1986	23.4	1979	22.2	1.2
Belgium	1988	23.5	1985	22.8	0.7
Luxembourg	1985	23.8			
Netherlands	1987	26.8	1983	24.7	2.1
Canada	1987	28.9	1981	28.6	0.3
Australia	1985	29.5	1981	28.7	0.8
France	1984	29.6	1979	29.7	-0.1
United Kingdom	1986	30.4	1979	27.0	3.4
Italy	1986	31.0			
Switzerland	1982	32.3			
Ireland	1987	33.0			
United States	1986	34.1	1979	30.9	3.2

Table 5. GNP per capita for selected ECE countries relative to EU levels, 1990–94

	GNP per capita (World Bank Atlas method)[a]						GNP per capita (PPP est.)	
	1990	% of EU av.	1992	% of EU av.	1994	% of EU av.	1994	% of EU av.
Czech Republic	3490	22	2570	14	3200	17	8900	53
Hungary	2910	18	3120	17	3840	20	6080	36
Poland	1700	11	1950	11	2410	13	5480	33
Slovakia	3330	21	2250	12	2470	13	6450	38
Slovenia	9500	59	6770	37	7020	37	6230	37
EU average	16185		18532		19005		16757	

Notes:
[a] World Bank Atlas method involves a conversion of GNP for a country into US $ using the average exchange rate for the specified year and the exchange rates for the two preceding years, following adjustments for differences in inflation rates between the particular country and the G-5 countries (see World Bank, 1996: 236).

Source: Barbone and Zalduendo, 1997: 4.

Table 6. Differences in GNP per capita between EU applicant countries in ECE and EU15, 1994

	GNP per capita (US $)	
	1994	% of EU average
Slovenia	7040	34
Hungary	3840	19
Czech Republic	3200	16
Estonia	2820	14
Poland	2410	12
Latvia	2320	11
Slovakia	2250	11
Lithuania	1350	7
Romania	1270	6
Bulgaria	1250	6
EU15 average	20673	

Source: elaborated from World Bank, 1996.

Table 7. Estimates of years required for per capita GNP convergence to 75 per cent of EU level

	Current national growth rate	Average ECE growth rate	Low EU growth rate	Average EU growth rate	High EU growth rate
Czech Republic	15	28	###	31	12
Hungary	41	46	###	50	22
Poland	###	50	###	54	24
Slovakia	41	44	###	47	20
Slovenia	91	45	###	49	21

Source: Barbone and Zalduendo, 1997: 4.

Table 8. Unemployment rates in ECE applicant countries, 1990–95 (countries ordered by GNP per capita in 1995)

	1990	1991	1992	1993	1994	1995
Slovenia	4.7	8.2	11.5	14.4	14.4	7.4
Hungary	1.7	8.5	9.9	12.1	10.9	10.3
Czech Republic				3.8	3.8	3.4
Estonia	0.8	1.8	4.5	7.8	8.9	
Poland			13.7	14.9	13.9	13.1
Latvia			2.3	5.8	6.5	6.6
Slovakia		6.6	11.4	12.7	13.7	13.1
Lithuania		0.4	3.6	3.8	4.5	7.3
Romania		3.0	8.4	9.9	8.2	8
Bulgaria	1.7	11.1	15.3	16.4	12.4	11.1

Source: elaborated from International Labour Office, 1996.

Table 9. Inequality between ECE countries, 1993–96 (coefficients of variation)

	GDP per capita (PPP)		GNP per capita (US$)		
	1993	1994	1994	1995	1996
All ECE	46.7	51.4	77.3	81.3	82.9
Applicant countries	39.2	30.8	58.9	58.9	59.4
EU	–	–	37.2	–	–

Source: elaborated and estimated from World Bank, 1996 and EBRD, 1996

Table 9. Trends in productivity and employment rates in ECE applicant countries, 1993–96 (average for 10 applicant states = 100)

		1993	1994	1995	1996
Slovenia	Productivity[a]	–	241	241	272
	employ. Rate	100	105	105	104
Hungary	Productivity	–	151	146	160
	employ. Rate	94	91	92	92
Czech Republic	Productivity	–	85	98	110
	employ. Rate	115	134	118	119
Estonia	Productivity	–	100	99	–
	employ. Rate	103	101	102	–
Poland	Productivity	–	94	93	106
	employ. Rate	93	92	96	97
Latvia	Productivity	–	74	70	79
	employ. Rate	113	112	113	111
Slovakia	Productivity	–	87	86	99
	employ. Rate	–	92	96	97
Lithuania	Productivity	–	46	46	51
	employ. Rate	114	105	105	107
Romania	Productivity	–	41	40	45
	employ. Rate	105	112	118	117
Bulgaria	Productivity	–	80	81	79
	employ. Rate	63	56	55	55

Notes:
[a] measured as GNP per capita (US$) divided by number of employees

Source: elaborated from World Bank, 1996 and ILO, 1997

Table 11. Income and expenditure inequality in the ECE applicant countries

	Gini index	Lowest 10%	Lowest 20%	Second quintile	Third quintile	Fourth quintile	Highest 20%	Highest 10%
Slovenia[a]	28.2	4.1	9.5	13.5	17.1	21.9	37.9	23.8
Hungary[b]	27.0	4.0	9.5	14.0	17.6	22.3	36.6	22.6
Czech Republic[a]	26.6	4.6	10.5	13.9	16.9	21.3	37.4	23.5
Estonia[a]	39.5	2.4	6.6	10.7	15.1	21.4	46.3	31.3
Poland[c]	27.2	4.0	9.3	13.8	17.7	22.6	36.6	22.1
Latvia[a]	27.0	4.3	9.6	13.6	17.5	22.6	36.7	22.1
Slovakia[d]	19.5	5.1	11.9	15.8	18.8	22.2	31.4	18.2
Lithuania[a]	33.6	3.4	8.1	12.3	16.2	21.3	42.1	28.0
Romania[d]	25.5	3.8	9.2	14.4	18.4	23.2	34.8	20.2
Bulgaria[d]	30.8	3.3	8.3	13.0	17.0	22.3	39.3	24.7
Russia[b]	49.6	1.2	3.7	8.5	13.5	20.4	53.8	38.7
United Kingdom[e]	30.4		4.6	10.0	16.8	24.3	44.3	27.8
United States[f]	34.1		4.7	11.0	17.4	25.0	41.9	25.0

Notes:
[a] 1993 data refers to income shares of persons.
[b] 1993 data refers to expenditure shares of persons.
[c] 1992 data refers to expenditure shares of persons.
[d] 1992 data refers to income shares of persons.
[e] 1988 data refers to income shares of households.
[f] 1985 data refers to income shares of households.

Source: elaborated from World Bank, 1996.

Table 12. Household income inequality in ECE applicant countries (1989–95)

	Year	Gini coefficient	Year	Gini coefficient	Change in Gini coefficient
Slovenia	1989	23.7	1993	25.0	1.3
Hungary	1989	21.4	1993	23.0	1.6
Czech Republic	1989	18.5	1994	23.4	4.9
Estonia	1989	27.7	1995	30.7	3.0
Poland	1989	24.9	1995	32.1	7.2
Latvia	1989	25.0	1992	32.0	7.0
Slovakia	1989	19.5	1994	22.5	3.0
Lithuania	1989	27.5	1995	34.5	7.0
Romania	1989	23.5	1994	28.4	4.9
Bulgaria	1990	25.0	1995	38.0	13.0
Russia	1991	26.0	1995	38.1	12.1

Source: UNICEF (1997) from National Statistical Office returns to the MONEE database.

Table 13. Percentage employment change in selected ECE applicant countries and Russia, 1990-95

	1990-95		1995	
	Total	Industry	Total	Industry
Slovenia	-20.7	-35.9	-0.3	-3.6
Hungary	-27.4	-37.5	-1.8	-5.4
Czech Republic	-7.2	-22.9	2.6	0.6
Estonia	-19.8	–	-1.5	–
Poland	-13.3	-23.8	1.8	3.2
Latvia	-15.5	-41.7	-1.3	-9.9
Slovakia	-14.6	-28.4	2.0	-0.1
Lithuania	-13.6	-37.2	-1.9	-7.6
Romania	-13.3	-34.6	-5.2	-5.8
Bulgaria	-24.1	-43.1	2.1	-1.1
Russia	-12.1	-24.7	-3.0	-7.5

Source: UNECE 1997, p. 113.

Table 14. Unemployment rates in applicant countries, 1991–95 (ILO methodology)

	1991	1992	1993	1994	1995
Slovenia	8.2	11.5	14.4	14.4	7.4
Hungary	8.5	9.9	12.1	10.9	10.3
Czech Republic	–	–	3.8	3.8	3.4
Estonia	1.8	4.5	7.8	8.9	–
Poland	–	13.7	14.9	13.9	13.1
Latvia	–	2.3	5.8	6.5	6.6
Slovakia	6.6	11.4	12.7	13.7	13.1
Lithuania	0.4	3.6	3.8	4.5	7.3
Romania	3	8.4	9.9	8.2	8
Bulgaria	11.1	15.3	16.4	12.4	11.1
Russia	0.1	4.7	5.5	7.4	8.3
mean	5.7	9.0	10.2	9.7	8.9
coeff. of var.		48.4	43.5	38.4	34.1

Source: ILO, 1996

Table 15. GNP per capita in selected Eastern and Central European countries, 1913

	GNP per capita (1960 US $)
European average	534
Czechoslovakia	524
Hungary	372
Romania	320
Poland	301
Yugoslavia	284
Bulgaria	263

Source: Aldcroft and Morewood 1995, p. 84

Table 16 GNP per capita in the Austro-Hungarian Empire and Russia, 1870 and 1910

	GNP per capita (1970 US $)	
	1870	1910
Austria	450	810
Hungary	362	616
Habsburg Empire	413	728
Russia	252	398

Source: Good 1991, p. 228.

Table 17. Real per capita regional product in the Habsburg Empire (in 1970 US $)

Region	1870	1880	1890	1900	1910	Annual growth rate, 1870-1910
Alpine Lands	517	561	659	930	1 098	2.00
Bohemian Lands	459	481	551	708	819	1.54
Northern Karst Lands	457	487	514	603	789	1.31
Dalmatia	429	455	486	531	650	1.00
Carpathian Lands	379	374	427	543	575	1.21
Austria	450	473	539	706	810	1.58
Lower Western Hungary	356	402	468	587	713	1.77
Upper Western Hungary	374	338	433	522	606	1.40
Eastern Hungary	358	330	400	489	566	1.30
Transylvania	378	413	429	483	542	0.88
Croatia-Slavonia	346	405	416	467	542	1.04
Hungary	362	377	434	523	616	1.39
Empire	413	434	495	629	728	1.50

Source: Good 1991, p. 230

Figure 1 Gross domestic product per head (in PPS) by NUTS II Region in 1994

Figure 2 Employment and productivity rates in NUTS 1 EU regions in1993

Figure 3 National disparities in per capita GDP at current market prices and purchasing power standards (EU15) 1960-94

Figure 4 Trends in productivity rates in Member States, 1980-93

Figure 5 Loss of GDP as % of 1989 GDP in selected transitional economies

Figure 6 Economic collapse and uneven growth in central and eastern Europe 1991-96

Figure 7 Employment rates and productivity in EU accession countries, 1995

Figure 8 Per capita GDP proportional to Slovak average

Figure 9 Productivity and employment in Slovak regions 1995

SUSSEX EUROPEAN INSTITUTE
Working Papers in Contemporary European Studies

1. Vesna Bojicic and David Dyker June 1993
   Sanctions on Serbia: Sledgehammer or Scalpel

2. Gunther Burghardt August 1993
   The Future for a European Foreign and Security Policy

3. Xiudian Dai, Alan Cawson, Peter Holmes February 1994
   Competition, Collaboration and Public Policy: A Case Study of the European HDTV Strategy

4. Colin Crouch February 1994
   The Future of Unemployment in Western Europe? Reconciling Demands for Flexibility, Quality and Security

5. John Edmonds February 1994
   Industrial Relations - Will the European Community Change Everything?

6. Olli Rehn July 1994
   The European Community and the Challenge of a Wider Europe

7. Ulrich Sedelmeier October 1994
   The EU's Association Policy towards Central Eastern Europe: Political and Economic Rationales in Conflict

8. Mary Kaldor February 1995
   Rethinking British Defence Policy and Its Economic Implications

9. Alasdair Young December 1994
   Ideas, Interests and Institutions: The Politics of Liberalisation in the EC's Road Haulage Industry

10. Keith Richardson December 1994
    Competitiveness in Europe: Cooperation or Conflict?

11. Mike Hobday June 1995
    The Technological Competence of European Semiconductor Producers

12. Graham Avery July 1995
    The Commission's Perspective on the Enlargement Negotiations

13. Gerda Falkner September 1995
    The Maastricht Protocol on Social Policy: Theory and Practice

14. Vesna Bojicic, Mary Kaldor, Ivan Vejvoda November 1995
    Post-War Reconstruction in the Balkans

15. Alasdair Smith, Peter Holmes, Ulrich Sedelmeier, Edward Smith, Helen Wallace, Alasdair Young — March 1996
The European Union and Central and Eastern Europe: Pre-Accession Strategies

16. Helen Wallace — March 1996
From an Island off the North-West Coast of Europe

17. Indira Konjhodzic — June 1996
Democratic Consolidation of the Political System in Finland, 1945-1970: A Potential Model for the New States of Central and Eastern Europe?

18. Antje Wiener and Vince Della Sala — December 1996
Constitution Making and Citizenship Practice - Bridging the Democracy Gap in the EU?

19. Helen Wallace and Alasdair Young — December 1996
Balancing Public and Private Interests Under Duress

20. S.Ran Kim — April 1997
The Evolution of Governance and the Growth Dynamics of the Korean Semiconductor Industry

21. Tibor Navracsics — June 1997
A Missing Debate?: Hungary and the European Union

22. Peter Holmes with Jeremy Kempton
Study on the Economic and Industrial Aspects of Anti-Dumping Policy September 1997

23. Helen Wallace — January 1998
Coming to Terms with a Larger Europe: Options for Economic Integration

24. Mike Hobday, Alan Cawson and S Ran Kim — January 1998
The Pacific Asian Electronics Industries: Technology Governance and Implications for Europe

25. Iain Begg — August 1998
Structural Fund Reform in the Light of Enlargement
Centre on European Political Economy Working Paper No. 1

26. Mick Dunford and Adrian Smith — August 1998
Trajectories of Change in Europe's Regions: Cohesion Divergence and Regional Performance
Centre on European Political Economy Working Paper No. 2

27. Ray Hudson — August 1998
What Makes Economically Successful Regions in Europe Successful? Implications for Transferring Success from West to East
Centre on European Political Economy Working Paper No. 3

28. Adam Swain August 1998
Institutions and Regional Development: Evidence from Hungary and Ukraine
Centre on European Political Economy Working Paper No. 4

Sussex European InstituteWorking Paper Series in Contemporary European Studies The Sussex European Institute publishes Working Papers (ISSN 1350-4649) to make research results, accounts of work-in-progress and background information available to those concerned with contemporary European issues. The Institute does not express opinions of its own; the views expressed in these publications are the responsibility of the authors.

Ordering Details

The price of each Working Paper is £5.00 plus £1.00 postage and packing per copy in Europe and £2.00 per copy elsewhere. Cheques should be made payable to the University of Sussex.
Payment can also be made by credit card. Please give the following information when ordering:

1. type of card
2. full card number
3. expiry date
4. full name of card holder
5. the name of a person to contact

Orders should be sent to the address below

✂.....

Date..... Please send ..... copy/ies of Paper No. ..... to:

Name:.....

Address.....

.....

.....

I enclose a cheque for £ ..... (including postage)

SUSSEX EUROPEAN INSTITUTE, UNIVERSITY OF SUSSEX, FALMER, BRIGHTON BN1 9SH
TEL: 01273 678578 FAX: 01273 678571 E.MAIL: sei@sussex.ac.uk