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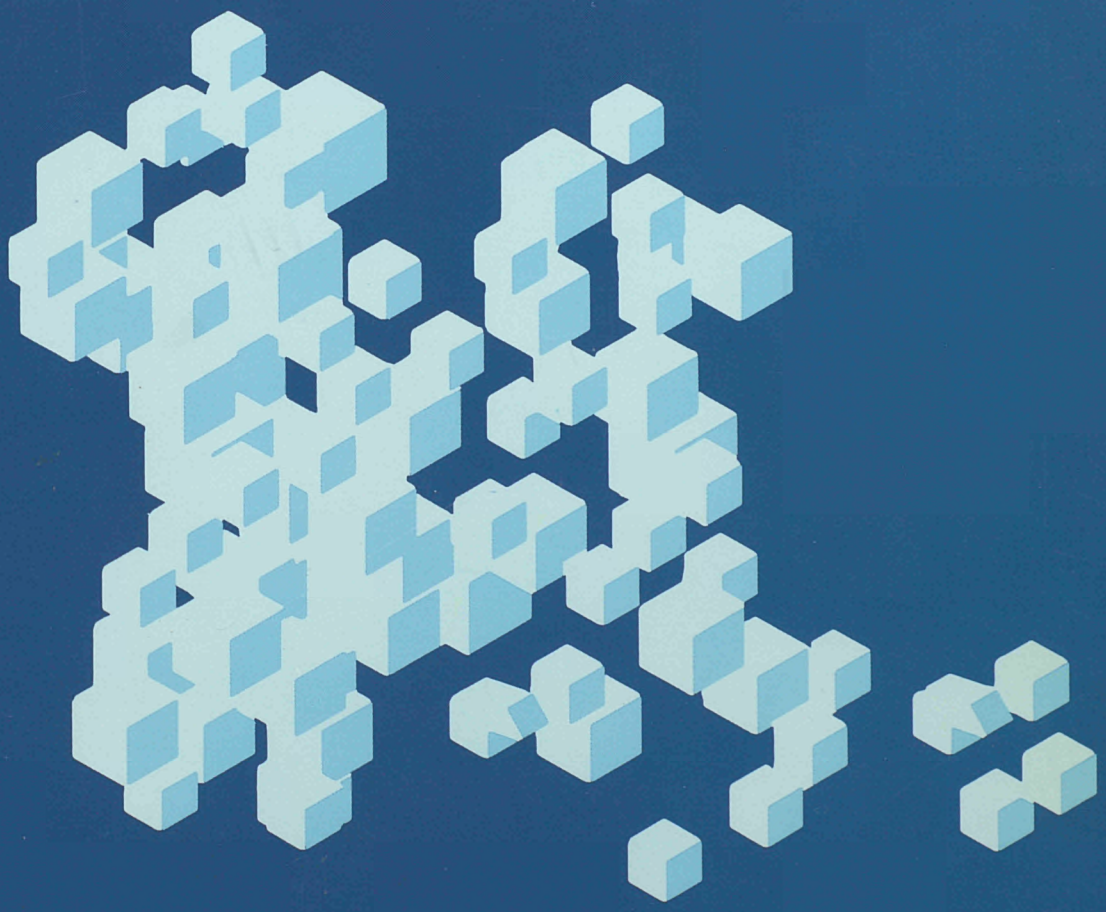

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Socio-economic situation and development of the regions in the neighbouring countries of the Community in Central and Eastern Europe

COMMISSION OF THE EUROPEAN COMMUNITIES
Directorate-General for Regional Policies

Socio-economic situation and development of the regions in the neighbouring countries of the Community in Central and Eastern Europe
Final report to the European Commission

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PREFACE

Each year, the Directorate-General for Regional Policies of the Commission of the European Communities launches a number of studies in the field of Regional Policy and Regional Planning. These studies mainly aim at providing a basis for policy formulation internally, as well as the preparation of programmes and initiatives and a basis for analysing the impact of current or planned activities. The most interesting or innovative of these will now be published in a series entitled 'Regional Development Studies'. With this series the Directorate-General hopes to stimulate discussion and action in a wider sphere on the research results received. The publication of the studies is addressed to politicians and decision-makers at European, regional and local level, as well as to academics and experts in the broad fields of issues covered.

It is hoped that by publicizing research results the Commission will enrich and stimulate public debate and promote a further exchange of knowledge and opinions on the issues which are considered important for the economic and social cohesion of the Community and therefore for the future of Europe.

Readers should bear in mind that the study reports do not necessarily reflect the official position of the Commission but first and foremost express the opinion of those responsible for carrying out the study.

FOREWORD

This report comprises the Final Report to the Commission of the European Communities for the project *Socio-Economic Situation and Development of the Regions in the Neighbouring Countries of the Community in Central and Eastern Europe.*

The report presents an overview of regional economic conditions and regional development strategies and options in six countries of Central and Eastern Europe - Bulgaria, Czechoslovakia, Hungary, Poland, Romania and Yugoslavia - as well as East Germany (formerly the German Democratic Republic).

The research project was undertaken by the European Policies Research Centre in collaboration with the following specialist research institutes:

- Vienna Institute for Comparative Economic Studies, Austria
- National Centre for Regional and Urban Development, Bulgaria
- TERPLAN, Czechoslovakia
- Niedersachsishes Institut fuer Wirtschaftsforschung, Germany
- UNCHS Habitat, Hungary
- European Institute for Regional and Local Development, Poland
- Institute of Geography, Romania
- Civil Engineering Institute, Yugoslavia

The research team, which was assembled at short notice during March 1990, collected and analysed a considerable volume of information and data in a short space of time. For much of the project, the team worked under considerable pressure to meet deadlines, despite problems due to the absence or inadequacy of data and delays or intermittent functioning of postal and telecommunications systems. The comprehensive contributions, professional advice and goodwill of the project participants in response to extensive requests for information was highly valued.

The research team received cooperation from a wide range of Central and Eastern European government departments and national statistical offices whose assistance was appreciated. The project team would also like to express their thanks to Adrian Dierx, Ronnie Hall and Leo Kowalski from DG XVI of the European Commission for their guidance and advice throughout the course of this project.

Finally, it should be noted that most of the research for this report was carried out during 1990. The rapidity of political, economic and social change in Central and Eastern Europe means that some conditions will inevitably have changed since the report was written.

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Glasgow

November 1991

SOCIO-ECONOMIC SITUATION AND DEVELOPMENT OF THE REGIONS IN THE NEIGHBOURING COUNTRIES OF THE COMMUNITY IN CENTRAL AND EASTERN EUROPE

CONTENTS

TABLES

FIGURES

SUMMARY AND CONCLUSIONS

This report provides an analysis of regional socio-economic development conditions in Central and Eastern Europe. It also undertakes an evaluation of regional and structural policy reforms implemented in East Germany and the "Six" i.e. Bulgaria, Czechoslovakia, Hungary, Poland, Romania and Yugoslavia. The following section provides a summary of the main issues and conclusions to emerge from the analysis of regional disparities and problems and the evaluation of policy responses.

A. REGIONAL DISPARITIES AND PROBLEMS

Part I of the report examines regional conditions and disparities in Central and Eastern Europe relating to population and demographic trends, patterns of employment and unemployment, output and income differences, foreign investment flows, environmental conditions, and the provision of technical and social infrastructure.

(1) The distinctive feature of regional economic structures in Central and Eastern Europe is the predominance of primary and secondary activities. In the manufacturing sector, the spatial distribution of industry is often highly concentrated which presents major challenges for regional economic restructuring, especially in monostructure regions.

The structure of employment in Central and Eastern Europe is strongly biased towards the primary and secondary sectors. The employment share of industry (including construction) is large by EC standards, averaging almost half of the economically-active population in Central and Eastern Europe compared to one-third in the Community. Heavy industry accounts for much of the industrial employment, notably in the engineering, chemicals, textiles and ferrous metals sub-sectors. Regional disparities in industrial employment are greatest in Poland and Romania, reflecting the continued importance of the agricultural sector. Regional industrial employment shares range from 12 to 61 percent in Poland, for example. Both Hungary and East Germany also have significant north-south differences in regional industrial employment as a consequence of the bias in industrial employment in the southern *Laender* of East Germany and the north-eastern and north-western parts of Hungary.

By contrast, the service sector in Central and Eastern Europe has hitherto been comparatively underdeveloped. Employment shares in the so-called "non-productive" sectors, combined with transport and communications and trade and commerce, are generally in the range of 30-40 percent of total employment. The exception is Romania where the service sector is extremely small (25 percent). At regional level, only in the capitals and major cities, eg. Sofia, Prague, Bratislava, Budapest and Warsaw, does the share of service employment exceed 50 percent.

The organisation of industry has featured a considerable degree of vertical integration in large production units. Industry has been almost

entirely in state-ownership, operated through centrally-planned "national enterprises". In Hungary, for instance, more than 80 percent of manufacturing employment was accounted for by 1,140 state-owned enterprises with an average of more than 1,000 employees.

The spatial distribution of industry is based on major industrial-urban agglomerations in the form of industrial "zones" or "axes". For the most part, these equate with the availability of raw materials: Hungarian heavy industry is concentrated along an "energy axis" running from the north-east to the south-west of the country corresponding to the availability of coal, non-ferrous ores and other primary industrial raw materials. Polish industrial development is also based primarily on resource exploitation (coal and iron-ore mining), notably around Upper Silesia, Lodz and Walbrzych. Similarly, much of Yugoslav industrial development is in the north - Slovenia, Croatia, Bosnia and Vojvodina - related to the availability of iron ores, oil and agricultural products; while the geography of industrial development in Romania is dominated by the availability of oil in the central and south-east of the country.

Across the region as a whole, eastern areas were favoured as sites to facilitate the processing of raw materials imported from the Soviet Union. Other important location factors include water supplies (especially for the chemicals industry) and manpower availability - a crucial factor in the drive for rapid industrial growth.

In addition to the locational influence of basic raw material supplies and other factors, state planning has attempted to impose centrally-determined patterns of industrial location. Since 1950, the Polish government has developed five new industrial areas in the central and southern parts of Poland (Konon, Legnica-Glogow, Tarnobrzeg, Oulawy and Plock), based on copper, sulphur, coal and other energy resources, in order to counter-balance the concentrations of industrial growth in older industrial regions. In Bulgaria, most industrial capacity is located within an area defined by an elliptically-shaped transport route (based in the centre of the country but running through all the Bulgarian regions) which has been used to determine the location of industrial enterprises. State planning in Hungary has also attempted to distribute industry more evenly - away from the capital Budapest and southwards from the northern "energy axis" to cities such as Szeged, Pecs and Debrechen, as well as to several smaller and medium-sized towns.

Economic restructuring will affect all areas. The experience of Central and East European countries with more advanced economic reforms is that even comparatively "strong" industrial sectors may be affected by economic collapse because of uncompetitive processes and products. Some regions, which have a relatively diversified industrial structure, should be able to manage the transition better, enabling job losses in particular sectors and enterprises to be more easily absorbed. However, even diversified structures do not guarantee restructuring free of economic dislocation and hardship.

The impact is likely to be particularly severe where the large scale and organised division of industrial operations is based on individual, or a limited number of heavy industrial sectors ie. monostructure regions with few alternative job opportunities. Many of these sectors are now at risk from economic restructuring and associated major regional problems, notably in areas dominated by raw materials such as coal and metal ore, and industrial sectors like heavy engineering, chemicals and textiles. The

closure of particular industrial plants, or the decline of production, with redundancies as a natural consequence, are likely to cause some of the most serious regional problems. Even if output rises, the productivity increase arising from investment in new machinery will lead to job losses.

Further disadvantages may arise from the cessation of armaments production or the conversion of armament factories to civil production. Although alternative production may safeguard some jobs, it is likely to yield considerably lower earnings for employees. The reorientation of trading relationships away from trade and barter agreements with the Soviet Union, and the break-up of the CMEA, could also be detrimental. It has been estimated that, for some regions, this could involve a loss of production of up to 50 percent.

In summary, therefore, economic restructuring will lead to a short-term decline in employment and performance in nearly all sectors of economic activity. This is likely to be a nationwide phenomenon. However, monostructure regions, raw material based regions, under-industrialized regions, and Soviet export-oriented areas are likely to be most affected.

(2) The agricultural sector also accounts for signficant employment in Central and Eastern Europe. Privatisation and productivity improvements will have a considerable impact on certain regions.

There are several inter-related regional development problems relating to agriculture, all of which could lead to a rise in unemployment as a consequence of restructuring. Privatisation and efficiency improvements such as greater use of technology and improved local infrastructure could lead to major job loss and outmigration.

First, the proportion of employment engaged in agriculture is very high, by West European standards, in parts of Central and Eastern Europe. The agricultural sector (including forestry and fishing) accounts for 21 percent of employment, compared to a figure of eight percent for the European Community. The main differences are between countries: agricultural shares range from 10-11 percent in East Germany and Czechoslovakia to 27 percent in Poland, Romania and Yugoslavia. Within countries, regional disparities are relatively low, with the exception of Poland where the maximum regional employment share in agriculture exceeds 60 percent and eight further provinces have more than half of all employees working in the agricultural sector.

The process of agricultural change is likely to reduce the labour intensity of agriculture considerably. Even in areas like the fertile agricultural regions of the Great Hungarian Plain, the efficiency of food production will have to be raised significantly to compete on world markets, especially against highly-subsidised products from other countries.

Second, large areas of agricultural land have, in the past, been nationalised and organised into cooperatives. This varies between countries: in Czechoslovakia and Romania, almost 90 percent of agricultural land was nationalised. By contrast, in Poland 75 percent of the land is privately owned; in Hungary and Yugoslavia the equivalent figures are 70 and 83 percent respectively. State-owned agriculture was

characterised by vast agricultural complexes. Bulgaria has 300 complexes, averaging 18,000 ha each and covering four-fiths of the agricultural land. Paradoxically, in view of the previous point, the redistribution of land may increase the labour-intensity of agriculture: the consequences of privatisation may be a rising input of manpower, a return to subsistence farming especially in countries with the most severe employment problems, and declining productivity.

Third, there is the problem of underdevelopment. In parts of Central and Eastern Europe, conditions for agriculture are good with fertile soils and favourable climate. Examples include north-east Bulgaria, southern Romania, east of the Danube in Hungary, along the rivers Elbe (central Bohemia) and Morava (central and southern Moravia), and in western and eastern Slovakia, in Czechoslovakia, and along the rivers Sava and Danube (Panonia Lowland) in Yugoslavia. However, in terms of efficiency and productivity, many agricultural regions are relatively backward, again mainly because of lack of appropriate infrastructure and technology. In Hungary, it is estimated that unfavourable conditions (upland terrain, poor soils, inadequate technology etc) in the highland and mountainous parts of the country would, in a free-market situation, make farming unprofitable in the case of 30-40 percent of agricultural units. In Poland, half of the 2.75 million farms, mainly in the central and southern parts of the country, are less than five hectares in size; and in Yugoslavia, the size of private sector holdings averages c.3.5 hectares.

(3) Infrastructure deficiencies present a major obstacle to economic restructuring. Peripheral areas of individual countries, and the eastern parts of Central and Eastern Europe appear to be particularly badly served.

The shortage of infrastructure is considered a major causal factor of many current problems in Central and Eastern Europe. Transport infrastructure in the region is generally of poor quality and overloaded. For example, rail networks are extensive but significant parts are one-track (in Hungary only 14 percent is double track), the load-bearing capacity is low, and many sections are not capable of high-speed travel. Electrification is limited, and the rolling stock suffers from under-investment. With respect to the road network, in both Czechoslovakia and Hungary less than one percent of the total road network consists of express highways, and many rural roads are not metalled.

There are two main characteristics of regional communications infrastructure provision in Central and Eastern Europe. First, infrastructure development relating to transport and telecommunications in most countries has concentrated on the major urban areas and the axes of economic activity: eg. Sofia-Varna and Sofia-Bourgas in Bulgaria; Prague-Brno-Bratislava (the only express highway links) in Czechoslovakia; and within the Budapest region in Hungary. The concentrations of urban/industrial development in the southern parts of East Germany (and in Berlin) are also associated with higher levels of telephone ownership and living space. In Poland, the provision of telephones in rural, eastern parts of the country (eg. Ostroleka, Siedlce, Krosno or Cezestochowa) is less than half the level in Warsaw, Lodz or Krakow. The concentration of infrastructure in core regions means that infrastructure and services in rural areas, and connections with peripheral and border regions, are very

secondary. This pattern has in turn encouraged further concentration of industrial location of economic activities and agglomeration.

The second characteristic is the west-east difference in infrastructure provision; the availability of infrastructure decreases with distance from Western Europe. This reflects the history of industrialization in different countries and investment for military purposes. Thus, the density of road and rail network is relatively high in East Germany, although the quality of construction and maintenance is very poor. In Poland, the main feature of transport infrastructure is in the decline density from western to eastern regions of the country (eg. a decrease of railway track from 12km to 4km per 100 sq.km and a reduction in road surface from 70km to 40km per 100 sq.km).

Social infrastructure, in the form of basic education and healthcare facilities, appears to be relatively evenly distributed, although insufficient information is available for substantive conclusions regarding regional differences to be drawn. In both fields the major problem is quality rather than quantity. Healthcare and educational facilities are characterised by under-investment and serious shortages of equipment and materials.

(4) A key indicator of the effects of reform policies and economic restructuring is unemployment. Agricultural regions have experienced the most immediate effects, but in the medium term it is likely that certain industrial regions will experience very severe job losses.

Explicit unemployment is a relatively new phenomenon in Central and Eastern Europe (except for Yugoslavia), although "hidden unemployment" has always been in existence. At the end of 1990, estimates of unemployment ranged from 1-5 percent in Bulgaria, Czechoslovakia, Hungary and Romania, 5-10 percent in East Germany and Poland, and over 10 percent in Yugoslavia. However, estimates predict that unemployment will exceed 10 percent in most Central and East European countries during 1991-92. Across the region, it has been suggested that unemployment could reach 12-14 million in Central and Eastern Europe by 1994.

A feature of the employment situation in East Germany, in particular, is the extent of unemployment concealed through short-time work arrangements. Many short-time workers are expected to be made redundant in the course of 1991. The total under-employment in East Germany, comprising unemployment and under-employment, was estimated at 30 percent of the economically-active population at the start of 1991.

In the short term, the most immediate effect of restructuring has been in the agricultural sector where the introduction of privatisation and efficiency improvements is resulting in serious job losses. These regions are also characterized by vulnerable industries, a predominance of companies with low market share, fewer immediate alternative employment opportunities and low political "bargaining potential". Low levels of industrialization, backward infrastructure and high birth rates usually made unemployment widespread in these areas even before restructuring. Thus, the highest unemployment in East Germany has so far occurred in the rural parts of Mecklenburg-Vorpommern, notably in the districts of Schwerin and Neubrandenburg. Likewise, unemployment rates are highest in the

agricultural parts of Czechoslovakia (West and East Slovakia), Yugoslavia (Macedonia) and Poland (eastern provinces).

In the medium term, however, industrial areas will be affected to a greater extent than agricultural regions. Traditional industrial sectors are likely to experience the greatest levels of unemployment as a result of economic restructuring, since many firms have been inefficient, unproductive, labour-intensive and heavily subsidised. The highest job losses can be expected in monostructure raw material, heavy industry and Soviet trade-based regions. The impact of restructuring on these regions has hitherto been limited because industrial closures have yet to take place on a significant scale, and there is considerable hidden unemployment and underemployment (eg. short-time working).

(5) Demographic indicators produce a highly differentiated map of regional population change across Central and Eastern Europe. The distribution of population is characterised by agglomeration tendencies in some major cities and peripheral depopulation and underdevelopment. Inter-regional and international migration flows may increase, encouraged by the effects of restructuring.

There is considerable regional variation in population trends across Central and Eastern Europe. In most countries, there are regions with birth rates exceeding 14 per thousand population. Death rates are also high (and have been increasing recently), with regional levels exceeding 12 per thousand. However, regional disparities are significant, and differences in the rate of population change between regions range from 10 to 20 percent, especially in East Germany and Czechoslovakia.

The rate of population growth should continue to decrease as birth rates fall further. Death rates should also decline significantly as health care and environmental conditions are improved, and the consequent ageing of the population is likely to produce age structures similar to those in West European countries. Nevertheless, economic development differences, the influence of religion and the presence of regional minorities will maintain considerable spatial variation in population change, notably with respect to birth rates, between and within countries.

The distribution of population is characterised by significant concentration and agglomeration in some major cities. Capital cities such as Prague, Budapest and Sofia have seen population development out-stripping the provision of services. The consequence of agglomeration has been the deprivation or neglect of smaller rural localities, particularly those in border areas and remote or upland regions. Depopulation and underdevelopment is a common characteristic of peripheral regions (especially in Bulgaria and Romania) which were deprived of centres large enough in size and functions to counter negative migration processes.

The effect of a very imbalanced distribution of population, associated with considerable upheaval arising from industrial and agricultural restructuring, is likely to be substantial migration. The restructuring processes imply a significant reallocation of production factors arising from the break-up of major state enterprises, the closure of loss-making firms and increases in productivity. The mobility of labour will be an essential part of the process, yet population migration could also be an

undesirable consequence of lack of jobs and poverty.

On the other hand, the mobility of labour is constrained by an overall decrease in employment opportunities. Growing regional differences in the price of housing (apart from the general housing shortage) will also reduce mobility.

In the past, migration in Central and Eastern Europe has been largely inter-regional within countries apart from the repatriation of ethnic minorities and emigration to the West following political upheavals. Inter-regional migration has been substantial (regional gains and losses of +/- 10 percent over the period 1980-88) and dominated by movement from backward to advanced regions and movement from rural to urban areas.

In the future, international migration to Western Europe could present Central and East European with major problems of labour shortage arising from the loss of young and skilled people. Within countries, less developed rural areas could be severely affected as a result of further rural-urban and inter-regional outmigration losses combined with a falling birth rate, an ageing of the population (as death rates fall), and fewer employment opportunities.

For the present, however, migration has not yet caused major labour shortages. The exception is East Germany which has hitherto been most affected by migration flows. A combination of the desire for consumer goods, wage differentials of around 35 percent (between West and East Germany), rising unemployment in East Germany and major differences in living standards has caused "intra-German" migration of about 256,000 people during 1989 and 238,000 in the first half of 1990. During 1989-90, much of the high level of emigration from East Germany originated in the southern regions (Sachsen lost almost three percent of its population during 1989-90). The outmigration continues at a high rate; in early 1991, 10,000 people per month were leaving from Sachsen alone.

In Poland it has been estimated that up to 12 million people are "potential migrants". Although it is unlikely that migration will actually involve such large numbers, it is anticipated that major migration will take place - particularly from the Upper Silesia region (and surrounding area) - if industrial restructuring causes high unemployment and if severe environmental damage is not rectified. In Central and Eastern Europe as a whole, more than 1.3 million people (including citizens of the Soviet Union) have migrated to the West since the political events of 1989. The high levels of unemployment may increase this flow as people seek employment opportunities and higher living standards in Western Europe.

(6) Environmental pollution of soil, water and air is a consequence of major industrialisation combined with inadequate technology and under-investment in waste processing. In certain regions, the impact of environmental degradation is extremely severe, although the worst effects seem relatively localised.

The scale and nature of environmental problems in Central and Eastern Europe are the result of rapid industrialisation and massive exploitation of raw materials combined with inadequate environmental controls or consideration of environmental impact. The use of low-grade brown coal as

an energy source, inefficient industrial and transportation technology and under-investment in processing and purification facilities have contributed to major air and water pollution as well as the despoilation of forests and countryside. Poland, Czechoslovakia and East Germany appear to face the most widespread and serious environmental problems, primarily in regions with a high concentration of extractive and processing industries.

Environmental conditions are sub-standard, by comparison with Western Europe, in many parts of the region. The consequences are apparent in health effects such as pollution-related diseases, high infant mortality and lower life expectancy. However, extremely severe pollution (eg. relating to very high sulphur dioxide emissions or concentrations of heavy metals in rivers or soils) tends to be restricted to localised and contained areas. These include Upper Silesia (in Poland), North Bohemia and North Moravia (Czechoslovakia), Halle and Cottbus (East Germany); the Sofia region (Bulgaria); Jesenica in Slovenia (Yugoslavia); and Resita and Copsa Mica (Romania). Clearly, policy efforts will be concentrated on these severe cases of environmental damage, but pollution levels should also decline as production in heavy industry decreases.

(7) With greater political and social freedom, tensions between territorial minorities and the host population may be exacerbated in certain regions.

One of the distinctive regional problems of Central and East European countries consists of regions with territorial minorities. Cultural and social differences have been translated into hostility, especially where the minority has been subject to chauvinist pressures and repression under Communist rule eg. the Turkish minority in Bulgaria or Hungarians in Romania. The combination of greater political and personal freedoms, together with economic dislocation again has the capacity for causing social tension and migration flows. In Poland, for example, many people in Upper Silesia have declared themselves to be ethnic Germans; such actions inevitably distort relationships between the majority population and the regional minority. More generally, many regional and local political pressures were kept subdued under former regimes, and these are now being released.

The problems are greatest in Czechoslovakia, Yugoslavia and Romania - less so in East Germany and Hungary. The potential for social tensions in Yugoslavia is especially significant, as the civil disturbances and military conflicts during 1991 have shown. Aside from the ethnic variation among the various republics, the country's population of 24 million also includes significant minorities of Albanians, Hungarians, Roma, Turks and Romanians. Even in countries which do not have these problems, the consequences are apparent in the form of refugees and the growth in the "black" and "underground" economies eg. Hungary has some 100,000 migrants, mainly from Romania.

(8) The patterns of regional disparities and regional problems are likely to change considerably, even in the short term, as a consequence of political and economic restructuring.

The analysis of regional disparities and the identification of regional problems in this report was based largely on data representing conditions in Central and Eastern Europe in the late 1980s ie. prior to the start of significant political and economic liberalisation. As noted above, the whole of Central and Eastern Europe now faces a serious recession with declining production, high inflation and rising unemployment. Within the context of restructuring processes which will have negative nationwide and region-wide effects, the map of regional disparities is likely to change significantly, even in the short to medium term, as reforms are introduced. Three sets of trends may be identified.

First, economic restructuring is likely to change regional employment structures significantly, with effects on all three sectors. The rationalisation of agriculture has the potential to reduce agricultural employment shares very considerably (especially in eastern Poland), a trend that is already apparent in the northern parts of East Germany. The closure of unprofitable or environmentally damaging factories, mines and power stations is creating significant unemployment (primarily in regions with few opportunities for diversification). These trends will stimulate urban-rural and inter-regional labour mobility, altering both regional demographic and employment structures and the requirements for regional social and economic infrastructure (although the degree of labour mobility may be impeded by the shortage of jobs). The easing of international travel restrictions will provide the option for people to emigrate as well as moving between regions within countries.

Second, the development of urban areas, especially secondary centres, is likely to increase. There is very considerable potential for development of the service sector in Central and Eastern Europe, particularly the expansion of consumer and producer services in urban areas. The reform of territorial structures, with greater autonomy and responsibility at regional level, will also promote the development of local and regional administrative centres, especially regional capitals. New legislation on property ownership will increase the demand for private housing, promoting suburbanisation and the development of small and medium-sized towns and cities.

Third, some peripheral and rural areas will gain from the opening of borders and the opportunities associated with cross-border trade and development. An increase in international tourism may also create significant growth for certain regions.

(9) Beyond the spatial disparities within individual countries, the region of Central and Eastern Europe as a whole presents a highly-differentiated map of development potential for restructuring processes. Progress with economic reforms and spatial differences in socio-economic criteria indicates that development conditions are more favourable in the western parts of the region.

Across the region of Central and Eastern Europe, there is a clear opportunity for west-east (and north-south) differences to emerge as the region undergoes a transition to a market economy at varying rates of progress. East Germany has been reunited with West Germany and absorbed into the EC; Poland, Czechoslovakia and Hungary have made considerable progress with economic reform; in Bulgaria, Yugoslavia and Romania, the outcome of political reforms is still uncertain. Beyond the study area,

the Soviet Union's western republics (the Baltic States, Ukraine and Byelorussia) are showing signs of seceding from the USSR amidst a major economic crisis.

Key socio-economic criteria also suggest that the conditions for regional development are more favourable in the western part of Central and Eastern Europe. The clearest regional differences relate to population change and employment structure.

Demographic criteria indicate that population growth during the 1980s has been high in many parts of Central and Eastern Europe, compared to EC averages. However, birth rates and the proportion of children in the population is exceptionally high in the eastern parts of the region - much of eastern Poland, the eastern regions of the Slovak Republic, the north-eastern regions of Romania, as well as some southern republics of Yugoslavia.

To a certain extent, population growth is synoymous with the degree of economic (under)development. The proportion of employment in agriculture, forestry and fishing (which is also very high in comparison with EC countries) is higher in the peripheral areas of individual countries and, overall, in the eastern parts of Central and Eastern Europe. The most industrialised areas tend to be in the west of the region: the southern districts of East Germany, western Poland, central Czechoslovakia, northern Yugoslavia, north-west Hungary and the western regions of Bulgaria.

The level of infrastructure provision also declines from west to east. Based on limited data, it appears that road, rail and telecommunications links diminish in density and quality from the western to the eastern parts of the region, as noted earlier.

Lastly, the orientation of past and present trading links is an important issue. Regions in the east of Central and Eastern Europe, oriented towards the Soviet Union, are losing an important trading partner with the break-up of the CMEA and fall in Soviet trade. Western border regions, by contrast, are in an extremely favourable position to benefit from trade, foreign investment, infrastructure development and cross-border ventures with West European countries.

Thus, although all countries and regions are expected to suffer significant economic and social dislocation, some areas are better placed than others. There is a risk that, even with current consensus on the objectives of restructuring, political and economic reforms will be obstructed by dissatisfaction and demoralisation among the population. The danger of the spatial variations in the state of economic transition and regional development is the negative impact on the relationship between individual countries and regions. This compounds the problems derived from the region's history of political instability, national and regional hostilities and socio-cultural differences.

B. POLICY RESPONSES

Part II of the report examines structural reforms and regional development in Central and Eastern Europe with respect to the main components of macro-economic policies, past regional development strategies and the future prospects for regional policy.

(1) The potential for developing regional policies in the immediate future may be limited. Past regional policies involved mainly the regional allocation of centrally-planned development resources. The development of new regional policies will be delayed by the priority accorded to national economic policies and the rapidly changing regional economic conditions.

There are important obstacles to the development of market-based regional policy. First, at the current stage in the reform process, countries such as Poland, Hungary and Czechoslovakia perceive it to be premature to consider regional development strategies. The initial priority is to develop policies at the national level. Current economic restructuring is focusing on key measures such as price reform, privatisation, improvement of foreign investment conditions, international trade and relations, and social policies.

Second, there are difficulties in identifying regional disparities as a basis for policy. In a situation of rapid change and uncertainty, the "regional problem" still has to become apparent and to be defined. There is the likelihood that current assumptions will become erroneous as new development options emerge. Thus, prognoses of regional development requirements are extremely difficult.

Third, there is little experience with market-based regional policies. In the past, regional development strategies tended to involve regional planning and the regional implementation of sectoral plans. Decentralised decision-making for economic development was limited, tightly controlled from the centre and subject to reversal at times of crisis.

Lastly, the reform of territorial structures is in progress in several countries. The structure of territorial units and the relationships between central, regional and local government are being reorganised to create systems more appropriate to market economies. The emphasis is more on regionalisation than regional policy.

The exception to the delay in implementing regional policies is in East Germany. Unification has meant the West German system of regional economic aid under the *Gemeinschaftsaufgabe* being extended together with budgetary allocations under the ERP Special Fund and other special regional programmes. Initially, regional aid was applied across the whole of East Germany. The extent of economic development problems, the need to await the emergence of regional disparities and the absence of sophisticated designation criteria mean that regional differentiation of aid was not possible. However, during 1991, a special regional programme has been introduced to assist those East German regions experiencing the most severe restructuring problems.

(2) **In the short term, regional preferences in the promotion of economic development will have to focus on those areas of greatest development potential. However, emergency regional aid may also be required to assist areas of major unemployment and areas suffering the most severe ecological damage.**

The requirements of national economic survival during the transition phase may allow few resources for the reduction of regional disparities. Any regional component of economic development policies will have to promote potential growth areas which have the best opportunities for leading the restructuring process. Such regions are primarily diversified industrial regions with a relatively good material and technical base, experienced personnel, good infrastructure and international links. Other areas with development potential are fertile agricultural regions, centres attractive to foreign investment, regions sharing borders with developed market economies, and tourist areas with attractions for the international tourist trade.

However, the scale of industrial restructuring and social consequences in the form of high unemployment and population migration may require selective emergency regional aid to contain the worst effects of job losses. Immediate action to start rectifying the most severe environmental problems may also be required in the interests of human health and overloaded ecosystems.

(3) **In the medium term, the development of new regional policies could encompass a wide range of possible measures. Priority should be given to infrastructure investment and support for local and regional restructuring.**

Once major macro-economic reforms are in place in Central and Eastern Europe with a new framework of national economic development, it will be necessary to consider longer term regional development issues. In addition to the general task of industrial restructuring and environmental clean-up, key problems include congestion and over-development in the large urban/industrial agglomerations, the lack of investment and infrastructure in peripheral areas, and a more balanced distribution of settlement and industry.

Among potential regional policy measures, the first important priority is infrastructure development, especially high-quality, national and international road and rail links, international airports and regional transit hubs. The development of regional telecommunications infrastructure is also urgent, especially to rectify local deficits in the efficiency of local switching systems and telephone exchanges, the availability of telephone connections and access to fax and telex facilities. The second major target for regional policy is local and regional restructuring with emphasis on maintaining the competitiveness of diversified industrial regions but diversifying in areas dominated by monostructures with support for small and medium-sized enterprises. Managing the privatisation and reorganisation of state-owned enterprises is important eg. through reconversion companies and enterprise subsidiaries. The most severe problem areas should be the focus for comprehensive, concentrated and coordinated restructuring programmes comprising SME

support, environmental improvement, local and regional infrastructure development, training and social facilities.

Additional targets for regional policy measures would be environmental improvement and protection, agricultural restructuring and the development of rural areas, the equalisation of urban and regional development, and international cooperation and cross-border development.

(4) The effectiveness and efficiency of regional policy in Central and Eastern Europe could be significantly improved by the transfer of information and competence from Western Europe and the creation of East-West networks to promote the flow of expertise and experience.

The countries of Western Europe have enormous experience and expertise in the field of regional development under market economic systems. Strategies employed over the past 40 years have addressed a range of regional problems at various spatial scales. Numerous regional instruments and policies have been tried, and there is a wealth of evaluation knowledge on the efficiency and effectiveness of different mechanisms - at the level of individual countries and the European Community as a whole.

This knowledge would be of great value for regional policy-makers in Central and Eastern Europe as they begin to address regional disparities. It is important, therefore, to develop structures, networks and fora that can promote and organise the transfer and interchange of information, ideas and competence between Western and Eastern Europe.

(5) East Germany is experiencing a much more rapid transition to a market economy than other parts of Central and Eastern Europe. Although the processes and policies of restructuring in East Germany may provide some lessons for neighbouring countries in the region, there are considerable limitations to the comparison and transfer of development experiences.

For the purposes of this study, East Germany has generally been treated as a "country" in comparing regional economic and social conditions in the different parts of Central and Eastern Europe. This is justifiable insofar as much of the socio-economic data relates to the pre-1990 period when the GDR existed. Moreover, the speed with which East Germany is having to adapt to a market economy provides valuable insights into the effects of economic reforms; other Central and East European countries are undertaking reform measures, and experiencing the effects of economic restructuring over longer timescales. Consequently, the scale of the problems has become more readily apparent in East Germany: the rise and greater visibility of unemployment, first in agriculture and then in urban/industrial areas, particularly monostructure towns and regions; the inefficiency and under-investment in plant and machinery; infrastructure deficits; and the upgrading of industry required to meet West European environmental standards.

The exposure of the East German population to full market economic conditions is also revealing. Many East German people are experiencing

difficulties in adapting to competition, the elimination of subsidies and loss of certain social services, and western expectations of "enterprise" and "entrepreneurship" - despite considerable assistance from west German organisations. The populations of other Central and East European countries are being confronted with these problems more slowly but, ultimately, the effects may be more severe. It has been argued that, if East Germany - at one time the "shop-window of socialism" - is experiencing such severe transitional problems, then the prospects for other Central and East European countries (which have no access to the substantial resources of West Germany) are likely to be worse.

However, the comparison of development problems and opportunities in East Germany with those of other Central and East European countries has considerable limitations. The abolition of the GDR has removed a range of important national policy options, particularly related to trade and monetary policy - exchange rates, interest rates, prices, taxation, import controls etc - which could be used to manage a more progressive and controlled restructuring process. Furthermore, while the GDR economy was well developed compared to other Central and East European countries, East Germany is now the only part of the region to face direct competition from Western countries. East Germany, therefore, faces some very distinct restructuring problems compared to its former CMEA partners.

Thus, the analysis of regional development problems and policies in East Germany provides useful lessons for other Central and East European countries, but the transfer of experiences and (in particular) policy responses has to be undertaken with great caution.

RESUME ET CONCLUSIONS

Le présent rapport analyse la situation socio-économique des régions de l'Europe centrale et orientale et se propose, en outre, d'évaluer les réformes de la politique régionale et des structures intervenues dans l'Allemagne de l'Est et dans les "Six", à savoir la Bulgarie, la Tchécoslovaquie, la Hongrie, la Pologne, la Roumanie et la Yougoslavie. La section qui suit fournit un exposé succinct des principales questions et conclusions découlant de l'analyse des disparités et des problèmes régionaux existants, ainsi que de l'évaluation des politiques en la matière.

A. DISPARITES ET PROBLEMES REGIONAUX

La partie I du rapport est consacrée à l'examen de la situation et des disparités régionales des pays d'Europe centrale et orientale qui concerne la population et l'évolution démographique, la structure de l'emploi et du chômage, les écarts de production et de revenus, les investissements étrangers, l'environnement et la mise en place d'infrastructures techniques et sociales.

(1) La principale caractéristique de la structure économique des régions d'Europe centrale et orientale réside dans le rôle prédominant des activités du secteur primaire et secondaire. Dans le secteur manufacturier, les entreprises sont souvent fortement concentrées du point de vue de leur répartition géographique, lançant un défi considérable à la restructuration économique, notamment dans les régions monostructurelles.

La structure de l'emploi en Europe centrale et orientale repose principalement sur les secteurs primaire et secondaire. Le taux d'emploi que représente le secteur industriel (y compris la construction) est élevé par rapport aux paramètres de la CE; ce secteur emploie près de la moitié de la population active d'Europe centrale et orientale contre un tiers dans la Communauté. L'industrie lourde (notamment l'ingénierie, la chimie, le textile, les métaux ferreux) occupe une grande partie des effectifs industriels. Les disparités régionales au niveau de l'emploi industriel sont le plus marquées en Pologne et en Roumanie, reflétant l'importance persistante du secteur agricole. Cet état de fait peut être illustré par la Pologne, où l'emploi industriel régional varie de 12 à 61 % ou, encore, par la Hongrie et l'Allemagne de l'Est qui présentent des différences Nord-Sud sensibles résultant du rôle différent de l'emploi industriel dans les Länder du sud de l'Allemagne de l'Est et dans la partie nord-est et nord-ouest de la Hongrie.

En revanche, le secteur des services des pays d'Europe centrale et orientale se révèle relativement sous-développé. En effet, les secteurs dits "non productifs", couplés au secteur des transports et des communications ainsi qu'au secteur du commerce, emploient en général 30 à 40% des effectifs totaux, en dehors de la Roumanie où le secteur des services s'avère extrêmement réduit (25%). A l'échelon régional, seules les capitales et les

grandes villes, telles que Sofia, Prague, Bratislava, Budapest et Varsovie, voient plus de 50% des effectifs totaux occupés dans le secteur des services.

Les industries présentent un degré considérable d'intégration verticale dans de grandes unités de production. L'industrie reposait presque entièrement sur les "entreprises nationales" à planification centrale. En Hongrie, par exemple, plus de 80% des emplois manufacturiers étaient assurés par 1.140 entreprises publiques comptant plus de 1.000 employés en moyenne.

Les entreprises se concentrent, au niveau géographique, dans de grandes agglomérations industrielles urbaines sous la forme de zones ou d'axes industriels, correspondant, pour la plupart, à la présence de matières premières. L'industrie lourde hongroise est répartie le long d'un "axe énergétique" allant du nord-est au sud-ouest du pays et regroupant diverses ressources (charbon, minerais non ferreux et autres matières premières industrielles). Le développement industriel de la Pologne repose également sur l'exploitation des ressources (charbon et minerai de fer), surtout dans les zones cerclant la Haute-Silésie, Lòdz et Walbrzych. De même, la Yougoslavie a vu son industrie se développer principalement dans le Nord, à savoir dans les régions de minerais de fer et de produits pétroliers et agricoles (Slovénie, Croatie, Bosnie et Vojvodine); en revanche, le développement industriel de la Roumanie est dominé par l'exploitation du pétrole au centre et au sud-est du pays.

Dans l'ensemble de la région, on constate que les zones orientales se sont vu attribuer un rôle de prédilection en vue de faciliter la transformation des matières premières importées de l'Union soviétique. Parmi les autres facteurs importants d'implantation, on peut citer les possibilités d'approvisionnement en eau (surtout pour le secteur de la chimie) et la disponibilité de main-d'oeuvre, élément clé de l'essor industriel.

Outre le rôle important que jouent les ressources en matières premières ainsi que d'autres facteurs dans le choix du site d'implantation, l'Etat a tenté, par les plans, d'imposer des critères déterminés à l'échelon central. C'est ainsi que, dès l'année 1950, le gouvernement polonais a lancé le développement de cinq nouvelles zones industrielles dans les parties centrales et méridionales du pays (Konon, Legnica-Glogow, Tarnobrzeg, Oulawy et Plock), basées sur l'exploitation du cuivre, du soufre, du charbon et d'autres ressources énergétiques, afin de faire contrepoids au développement industriel concentré dans les zones plus anciennes. En Bulgarie, l'essentiel du potentiel industriel se trouve concentré dans une zone déterminée par un axe routier de forme elliptique (partant du centre du pays pour desservir toutes les régions bulgares), qui a servi de base à l'implantation des entreprises industrielles. En Hongrie, la planification étatique a également tenté de répartir les industries de manière plus égale: à l'écart de la capitale Budapest et au sud de l'axe énergétique, à savoir vers les villes Szeged, Pecs et Debrechen, ainsi que vers des villes plus petites ou de taille moyenne.

La restructuration économique affectera toutes ces zones. L'expérience des pays d'Europe centrale et orientale ayant connu des réformes économiques plus poussées a révélé que même des secteurs industriels relativement "sains" peuvent décliner, faute de méthodes et de produits compétitifs. Il semble que certaines régions, dotées d'un appareil industriel relativement diversifié,

soient mieux armées pour faire face à la transition, les perspectives d'absorption de la perte d'emplois dans certains secteurs étant plus favorables. Néanmoins, la diversification n'est pas une garantie contre les problèmes économiques et les dures épreuves qu'ils entraînent.

L'impact de ces réformes sera particulièrement aigu dans les régions où la division organisée et à grande échelle des opérations industrielles est basée sur des secteurs industriels lourds distincts ou sur un nombre réduit de ces secteurs (régions monostructurelles présentant peu de possibilités d'emploi). A l'heure actuelle, la restructuration économique et les problèmes régionaux qui en sont le corollaire constituent une menace pour un grand nombre de ces secteurs, notamment dans les zones où prédominent les matières premières (charbon et minerai) ainsi que les branches telles que la construction mécanique, la chimie et le textile. La fermeture de certaines entreprises ou la régression de la production, avec comme corollaire naturel des licenciements, seront probablement à l'origine des plus graves problèmes auxquels les régions seront confrontées. Même en présence d'une progression de la production, la productivité accrue découlant des investissements en nouveaux équipements conduira à des pertes d'emploi.

Par ailleurs, la cessation de la production d'armements ou la conversion des fabriques de ce secteur vers des productions civiles pourrait ajouter aux difficultés. Si les productions nouvelles peuvent absorber certains emplois, les revenus que les employés en retireront devraient subir une baisse sensible. La nouvelle orientation imprimée aux échanges commerciaux-distanciation par rapport aux échanges et aux accords de troc avec l'Union soviétique- ainsi que la dissolution du COMECON pourraient également avoir des effets négatifs. Les estimations indiquent, pour certaines régions, une baisse de la production allant jusqu'à 50%.

On peut conclure, par conséquent, que la restructuration économique entraînera une régression à court terme de l'emploi et de la performance dans la quasi-totalité des secteurs d'activité économique, phénomène qui revêtirait un caractère national. Il n'en demeure pas moins que les régions monostructurelles, les régions basées sur les matières premières, les régions sous-industrialisées et les zones dont les exportations sont orientées vers l'Union soviétique en seront probablement les plus affectées.

(2) Le secteur agricole emploie une part importante de la population active d'Europe centrale et orientale. La privatisation et l'amélioration de la productivité auront un impact sensible sur certaines régions.

Il existe un ensemble intimement lié de problèmes de développement régional concernant l'agriculture, lequel pourrait accentuer le chômage à la suite de la restructuration. La privatisation et l'amélioration de l'efficacité (utilisation accrue de technologies et meilleures infrastructures locales) pourraient aboutir à des pertes d'emplois importantes et à un phénomène d'exode.

En premier lieu, le taux d'emploi que représente l'agriculture dans certaines parties de l'Europe centrale et orientale s'avère très élevé par

rapport au chiffre atteint en Europe occidentale. Le secteur agricole (y compris les forêts et la pêche) absorbe 21 % de l'emploi, contre 8% pour la Communauté européenne. Les principaux écarts apparaissent entre pays: la part de l'agriculture dans l'emploi varie de 10-11 % en Allemagne de l'Est et en Tchécoslovaquie, à 27% en Pologne, en Roumanie et en Yougoslavie. A l'intérieur des pays, les disparités régionales se révèlent relativement faibles, à l'exclusion de la Pologne, où le taux d'emploi régional maximal dans le secteur agricole excède 60% et où huit provinces comptent plus de la moitié des effectifs agricoles.

Le processus de restructuration agricole réduira probablement de manière considérable le coefficient de main-d'oeuvre agricole. Même dans les zones telles que les régions agricoles fertiles de la Grande Plaine de Hongrie, l'efficacité de la production alimentaire devra faire l'objet d'une amélioration significative, en vue de faire face à la concurrence des marchés mondiaux, et notamment à celle de produits étrangers hautement subventionnés.

En deuxième lieu, de grandes portions de la superficie agricole ont été par le passé nationalisées et organisées en coopérative. Le taux de nationalisation varie d'un pays à l'autre : en Tchécoslovaquie et en Roumanie, près de 90% de la superficie agricole a été nationalisée. En revanche, en Pologne, 75% des terres appartiennent à des particuliers; en Hongrie et en Yougoslavie, les chiffres équivalents se montent respectivement à 70% et à 83%. L'agriculture d'Etat était caractérisée par de vastes complexes agricoles. La Bulgarie compte 300 complexes, d'environ 18.000 hectares chacun, couvrant quatre cinquièmes de la superficie agricole. Eu égard à ce qui précède, on peut affirmer - assez paradoxalement - que la redistribution des terres peut avoir pour effet une augmentation de la proportion de travail dans l'agriculture. En effet, la privatisation peut avoir pour effet une croissance de la main-d'oeuvre, un retour à l'agriculture de subsistance notamment dans les pays affectés le plus durement par des problèmes d'emploi et une productivité décroissante.

En troisième lieu, il existe un problème de sous-développement. L'Europe centrale et orientale bénéficie, dans certaines régions, de conditions favorables au développement de l'agriculture (sols fertiles, climat approprié, etc.). On peut citer, à titre d'exemple, le nord-est de la Bulgarie, le sud de la Roumanie, l'est du Danube en Hongrie, la partie le long de l'Elbe (Bohême centrale) et de la Morava (Moravie centrale et Moravie méridionale), la Slovaquie occidentale et orientale en Tchécoslovaquie, ainsi que la partie yougoslave longeant la Save et le Danube (plaine pannonienne). Néanmoins, de nombreuses régions agricoles sont relativement attardées sur le plan de l'efficacité et de la productivité, la raison principale étant encore une fois le manque d'infrastructures et de technologies appropriées. En Hongrie, on estime que les conditions défavorables existant dans les zones de montagne (altitude, pauvreté du sol, technologie inadéquate, etc.) rendraient, dans une économie de marché, l'agriculture non rentable dans 30 à 40 % des unités agricoles. En Pologne, la moitié des 2,75 millions d'exploitations, notamment dans les parties centrales et méridionales, sont d'une taille inférieure à cinq hectares; en Yougoslavie, la taille des exploitations privées avoisine 3,5 hectares.

(3) **Les déficiences infrastructurelles constituent un obstacle majeur à la restructuration économique. Les zones périphériques des pays considérés et les parties orientales de l'Europe centrale et orientale semblent particulièrement mal loties.**

Le manque d'infrastructures est considéré comme la principale cause des problèmes affectant actuellement l'Europe centrale et orientale. Les infrastructures de transport y sont généralement de faible qualité et saturées. Par exemple, les réseaux de chemin de fer sont étendus mais comportent de nombreuses parties à voie unique (en Hongrie, les doubles voies ne représentent que 14 %), leur résistance est faible et bien des sections s'avèrent impropres à de grandes vitesses. Le réseau d'électricité se révèle peu développé et le matériel roulant souffre de sous-investissement. En ce qui concerne le réseau routier, en Tchécoslovaquie aussi bien qu'en Hongrie, les autoroutes représentent moins de 1 % du réseau routier total et bien des chemins d'exploitation ne sont pas revêtus.

Les infrastructures de communication régionales présentent deux caractéristiques en Europe centrale et orientale. En premier lieu, le développement des infrastructures de transport et de télécommunication, dans la plupart des pays, se trouve concentré dans les principales zones urbaines, suivant les axes d'activité économique : Sofia-Varna et Sofia-Bourgas en Bulgarie; Prague-Brno-Bratislava (les seules autoroutes) en Tchécoslovaquie; et dans la zone de Budapest en Hongrie. La concentration du développement urbain/industriel au sud de l'Allemagne de l'Est (et à Berlin) tiennent également aux possibilités accrues d'accès au téléphone et à un espace vital plus étendu. En Pologne, la dotation en téléphones des zones rurales, à l'est du pays (par exemple Ostroleka, Siedlce, Krosno ou Cezestochowa) représente moins de la moitié des équipements de Varsovie, Lodz ou Cracovie. La concentration d'infrastructures dans des régions centrales met en lumière le caractère largement secondaire des infrastructures et services des zones rurales et de leurs liaisons avec les régions périphériques et frontalières. Cela a accentué la concentration des activités économiques et des agglomérations.

La deuxième caractéristique réside dans les disparités ouest-est que présentent les infrastructures; celles-ci diminuent au fur et à mesure que l'on s'éloigne de l'Europe occidentale. Cette situation s'explique par le développement, dans les différents pays, de l'industrie et de l'investissement à des fins militaires. Aussi la densité du réseau routier et ferroviaire s'avère-t-elle relativement élevée dans l'ex-RDA, bien que la qualité de la conception et de l'entretien y soit largement insuffisante. En Pologne, les infrastructures de transport se caractérisent principalement par une densité qui décroît à mesure que l'on va vers l'ouest du pays (diminution des voies ferrées de 12 km à 4 km par 100 km2 et une réduction de la surface de roulement de 70 km à 40 km par 100 km2).

Les infrastructures sociales (enseignement fondamental et soins de santé) semblent inégalement réparties, mais les informations disponibles ne suffisent pas pour tirer des conclusions valables quant aux disparités régionales. Ces deux secteurs sont confrontés principalement à un problème d'ordre qualitatif plutôt que quantitatif; leurs problèmes sont liés aux

sous-investissements et à un manque considérable d'équipements et de matériels.

(4) **Les réformes politiques et la restructuration économique se traduisent par un élément clé : le chômage. Les régions agricoles en ont subi les effets les plus directs, mais certaines régions industrielles souffriront vraisemblablement, à moyen terme, de très fortes pertes d'emploi.**

La reconnaissance officielle du chômage est un phénomène relativement récent en Europe centrale et orientale (à l'exception de la Yougoslavie), alors que le chômage caché a toujours existé. A la fin de 1990, les taux de chômage variaient comme suit : 1-5 % en Bulgarie, Tchécoslovaquie, Hongrie et Roumanie; 5-10 % pour l'ex-RDA et la Pologne, et plus de 10 % pour la Yougoslavie. Néanmoins, il est estimé que le chômage excédera 10 % dans la plupart des pays de l'Europe centrale et orientale pendant les années 1991-1992 et qu'il pourrait atteindre 12 à 14 millions de personnes en Europe centrale et orientale d'ici à l'année 1994.

L'Allemagne de l'Est en particulier est touchée par un phénomène de chômage étendu, dissimulé sous la forme de travail à temps partiel. De nombreux travailleurs à temps partiel devraient être licenciés en 1991. Le sous-emploi total dans ce pays, y compris le chômage et le sous-emploi, était estimé à 30 % de la population active au début de 1991.

A court terme, l'effet le plus direct de la restructuration s'est produit dans le secteur agricole, où l'introduction de la privatisation et l'amélioration de l'efficacité entraînent de considérables pertes d'emploi. Ces régions présentent d'autres éléments caractéristiques: présence d'industries vulnérables, prédominance d'entreprises faiblement présentes sur le marché, perspectives d'emplois alternatifs immédiats moins favorables, faible "pouvoir de négociation" politique. Industrialisation peu développée, infrastructures obsolètes et taux de naissance élevé, tels sont les facteurs qui avaient déjà engendré, dans ces régions, un chômage largement répandu, même avant la restructuration. C'est pourquoi le taux de chômage le plus élevé que l'Allemagne de l'Est ait connu à ce jour a été enregistré dans les zones rurales de Mecklenburg-Vorpommern, et notamment dans les districts de Schwerin et Neubrandenburg. De même, les taux de chômage enregistrés dans les zones agricoles de la Tchécoslovaquie (Slovaquie occidentale et orientale), de la Yougoslavie (Macédoine) et de la Pologne (provinces orientales) sont des plus élevés.

A moyen terme néanmoins, les régions industrielles seront affectées plus durement que les régions agricoles. Des secteurs industriels traditionnels devraient subir, à la suite de la restructuration économique, le chômage de plein fouet, de nombreuses entreprises étant inefficaces, non productives, intensives en main-d'oeuvre et considérablement subventionnées. Les pertes d'emplois les plus graves devraient intervenir dans les régions monostructurelles dotées de matières premières, d'une industrie lourde et fondant leur économie sur les échanges avec l'Union soviétique. Dans ces régions, l'impact de la restructuration a été jusqu'à présent limité, leurs

industries n'ayant pas encore fait l'objet de fermeture à grande échelle; en outre, elles sont confrontées à un phénomène de chômage caché et de sous-emploi (travailleurs à temps partiels).

(5) Les indicateurs démographiques tracent des diagrammes hautement différenciés des modifications démographiques intervenues dans les régions d'Europe centrale et orientale. La distribution de la population révèle une tendance à la concentration dans les grandes villes ainsi qu'un dépeuplement et un sous-développement des régions périphériques. Les flux migratoires interrégionaux et internationaux pourraient accuser une hausse sous l'effet de la restructuration.

En Europe centrale et orientale, les tendances démographiques varient sensiblement d'une région à l'autre. Dans la plupart des pays, certaines régions enregistrent un taux de naissance de plus de 14 pour 1.000. Les taux de mortalité sont également élevés (et se sont accrus récemment), les taux régionaux excédant 12 pour 1.000. Néanmoins, les disparités régionales demeurent considérables, le taux des modifications démographiques variant d'une région à l'autre (de 10 à 20 % en ce qui concerne en particulier l'Allemagne de l'Est et la Tchécoslovaquie).

Le taux de croissance démographique devrait continuer à décliner dans la mesure où les taux de naissance sont en déclin. Les taux de mortalité devraient également diminuer de manière sensible, eu égard à l'amélioration des soins de santé et des conditions environnementales, et le vieillissement de la population qui en résultera donnera probablement lieu à des structures par âge similaires à celles des pays d'Europe occidentale. Néanmoins, les différences de développement économique, l'influence de la religion et la présence de minorités régionales entraîneront le maintien d'une variation géographique considérable de l'évolution démographique entre pays et au sein de ceux-ci (notamment en ce qui concerne les taux de naissance).

La distribution de la population se caractérise par une concentration considérable dans quelques grandes villes. Dans certaines capitales (Prague, Budapest, Sofia), le développement démographique a dépassé les possibilités de fourniture de services. La formation d'agglomérations a eu pour effet le déclin de certaines localités rurales plus petites, notamment celles situées dans les régions frontalières et dans les régions montagneuses ou reculées. Le dépeuplement et le sous-développement constituent une caractéristique commune aux régions périphériques (notamment en Bulgarie et Roumanie), privées de centres de taille et de fonctions suffisamment importantes pour éviter l'exode.

La répartition très inégale de la population, couplée aux graves perturbations résultant de la restructuration industrielle et agricole, aura probablement pour effet d'importants flux migratoires. Les processus de restructuration nécessitent une redistribution significative des facteurs de production découlant de la dissolution des principales entreprises d'Etat, de la fermeture des entreprises non performantes et d'une augmentation de la productivité. La mobilité de la main-d'oeuvre constituera un élément clé de

ces processus, mais les flux migratoires peuvent être également la conséquence d'un manque d'emploi et de la pauvreté.

Par ailleurs, la mobilité de la main-d'oeuvre est freinée par une régression générale des offres d'emploi. Les écarts régionaux croissants entre les prix des loyers (en dehors de la crise générale du logement) réduiront davantage ce phénomène.

Par le passé, le phénomène de migration revêtait un caractère interrégional (à l'intérieur des pays), si l'on excepte le rapatriement de minorités ethniques et les flux migratoires vers l'Ouest consécutifs à des troubles politiques. Les flux migratoires interrégionaux se sont révélés substantiels (gains et pertes régionaux de plus ou moins 10 % sur la période 1980-1988), allant principalement des régions arriérées vers les régions développées et des zones rurales vers les zones urbaines.

Dans l'avenir, le phénomène de migration internationale vers l'Europe occidentale pourrait engendrer, pour l'Europe centrale et orientale, des problèmes aigus de pénurie de main-d'oeuvre dus au départ de personnes jeunes et de personnes qualifiées. A l'intérieur des pays, les zones rurales moins développées pourraient être durement affectées par la persistance de l'exode rural au profit des zones urbaines et de la migration interrégionale, phénomènes auxquels s'ajoutent un taux de naissance décroissant, le vieillissement de la population (en raison de la baisse du taux de mortalité) et des offres d'emploi moins nombreuses.

Néanmoins, la migration n'a pas encore engendré de grandes pénuries de main-d'oeuvre, à l'exclusion de l'Allemagne de l'Est qui, jusqu'ici, a été le pays le plus touché par les flux migratoires. L'action combinée de plusieurs facteurs, tels que le désir d'acquérir des biens de consommation, les écarts salariaux entre l'Allemagne de l'Est et l'Allemagne de l'Ouest (quelque 35 %), le chômage croissant caractérisant l'Allemagne de l'Est et des niveaux de vie très différents, a engendré une migration "intragermanique" d'environ 256.000 personnes pendant l'année 1989 et de 238.000 personnes durant la première moitié de 1990. Durant la période 1989-1990, la majeure partie des nombreux migrants est-allemands quittaient les régions du sud (Sachsen a perdu près de 3 % de sa population durant les années 1989 et 1990). La migration se poursuit à un rythme élevé; au début de 1991, 10.000 personnes par mois quittaient Sachsen.

En Pologne, on a estimé que près de 12 millions de personnes constituent des "migrants potentiels". S'il est peu probable qu'un tel nombre de personnes migrent effectivement, des mouvements migratoires importants pourraient néanmoins intervenir - notamment à partir de la région de Haute Silésie (et zones environnantes) - si la restructuration industrielle engendre un taux de chômage élevé et si les dégâts causés à l'environnement ne sont pas réparés. Plus de 1,3 million de personnes de toute l'Europe centrale et orientale (y compris les citoyens d'Union soviétique) ont migré vers l'Ouest depuis les événements politiques de 1989. Les taux de chômage élevés existant dans ces pays pourraient entraîner une augmentation de ce phénomène, les migrants étant désireux de trouver du travail et des conditions de vie meilleures en Europe orientale.

(6) La pollution environnementale du sol, de l'eau et de l'air est la conséquence d'un processus d'industrialisation intense, combiné à l'utilisation d'une technologie inadéquate et à un phénomène de sous-investissement dans le secteur du traitement des déchets. Certaines régions se ressentent encore plus durement de la dégradation environnementale, bien que les effets les plus désastreux y soient relativement localisés.

L'ampleur et la nature des problèmes environnementaux frappant l'Europe centrale et orientale tirent leur origine d'une industrialisation rapide et d'une exploitation massive des matières premières, avec des contrôles inadéquats en matière d'environnement ou une prise en considération insuffisante de l'impact environnemental. L'utilisation de lignite de qualité inférieure, un tissu industriel et un réseau de transports inefficaces ainsi que des investissements déficitaires concernant les stations d'épuration ont causé de graves problèmes de pollution de l'air et des eaux ainsi qu'une dégradation des forêts et du paysage. La Pologne, la Tchécoslovaquie et l'Allemagne de l'Est semblent être confrontées aux problèmes environnementaux les plus graves et les plus étendus, notamment dans les régions où sont concentrées un grand nombre d'entreprises extractives et de transformation.

Les niveaux de pollution atteints dans une grande partie de ces régions sont largement supérieurs à ceux d'Europe occidentale. Les effets de ce phénomène se manifestent au niveau de la santé de la population : maladies liées à la pollution, taux élevé de mortalité infantile et espérance de vie plus courte. Néanmoins, les cas de pollution extrême (liés à de très fortes émissions de dioxyde de soufre ou à des concentrations de métaux lourds dans des cours d'eau ou dans le sol) ont tendance à se cantonner dans des zones limitées. Celles-ci comprennent la Haute Silésie (Pologne), le nord de la Bohême et le nord de la Moravie (Tchécoslovaquie), Halle et Cottbus (Allemagne de l'Est); la région de Sofia (Bulgarie); Jesenica en Slovénie (Yougoslavie); et Resita et Copsa Mica (Roumanie). Il est incontestable que les politiques concentreront leurs efforts sur ces cas graves de dégâts environnementaux, mais les niveaux de pollution devraient baisser, vu la diminution de la production des industries lourdes.

(7) Avec une liberté politique et sociale accrue, les tensions entre les minorités territoriales et les populations d'accueil pourraient s'accentuer dans certaines régions.

Parmi les problèmes régionaux affectant les pays d'Europe centrale et orientale, figure celui des régions abritant des minorités. Les différences culturelles et sociales s'y sont traduites par de l'hostilité, en particulier là où les minorités ont fait l'objet d'actes de chauvinisme et de répression sous le régime communiste (par exemple la minorité turque en Bulgarie ou les Hongrois en Roumanie). Des libertés politiques et individuelles accrues, combinées à l'effondrement de l'économie, peuvent, dans ce cas également, être à l'origine de tensions sociales et de mouvements migratoires. En Pologne, par exemple, de nombreuses personnes en haute Silésie ont déclaré appartenir à l'ethnie allemande; de tels faits perturbent inévitablement les relations

entre la population majoritaire et la minorité. De manière générale, les multiples pressions politiques régionales et locales, que les anciens régimes maintenaient sous leur coupe, sont maintenant libérées.

Les problèmes atteignent une intensité maximale en Tchécoslovaquie, en Yougoslavie et en Roumanie et sont moins aigus en Allemagne de l'Est et en Hongrie. Le potentiel de tensions sociales en Yougoslavie est particulièrement élevé, ainsi que l'ont montré les troubles et les conflits militaires survenus en 1991. Hormis les différences ethniques existant à l'intérieur des diverses républiques, la population (24 millions) compte des minorités importantes d'Albanais, de Hongrois, de Turcs et de Roumains. Même les pays qui sont épargnés par ce genre de problèmes en subissent les conséquences : arrivée de réfugiés et croissance de l'économie "souterraine" et du marché noir (la Hongrie compte quelque 100.000 migrants, provenant principalement de Roumanie).

(8) Les disparités régionales et les problèmes régionaux vont probablement subir des mutations considérables, même à court terme, à la suite de la restructuration politique et économique.

L'analyse des disparités régionales et l'identification des problèmes régionaux, dans le présent rapport, ont reposé, en grande partie, sur des données illustrant la situation existant dans les pays d'Europe centrale et orientale à la fin des années 80, c'est-à-dire avant que d'importants processus de libéralisation politique et économique ne soient engagés. Comme on l'a déjà signalé plus haut, l'ensemble des pays d'Europe centrale et orientale sont à l'heure actuelle en proie à une grave récession (chute de la production, taux élevé d'inflation et croissance du chômage). A la suite des processus de restructuration, qui produiront des effets négatifs à l'échelon national et régional, les contrastes régionaux risquent de subir des modifications considérables, même à court et à moyen terme, au fur et à mesure de l'introduction des réformes. Trois séries de tendances peuvent être dégagées.

En premier lieu, la restructuration économique pourrait modifier sensiblement les structures d'emploi régionales, se répercutant sur les trois secteurs. La rationalisation de l'agriculture porte en elle le germe d'une régression considérable de la part du secteur agricole dans l'emploi (notamment à l'est du pays), tendance qui s'est déjà manifestée dans les parties septentrionales de l'Allemagne de l'Est. La fermeture d'usines, de mines et de centrales électriques non rentables ou polluantes est en train d'engendrer un taux de chômage élevé (en particulier dans les régions présentant peu de possibilités de diversification). Ces tendances accentueront la mobilité de la main-d'oeuvre (abandon des zones rurales au profit des zones urbaines et mouvements interrégionaux), modifiant à la fois les structures de la population et de l'emploi régionaux et les besoins en infrastructures socio-économiques régionales (bien que le degré de mobilité de la main-d'oeuvre puisse être entravé par le manque d'offres d'emploi). L'assouplissement des restrictions en matière de voyages internationaux offrira la possibilité aux habitants de migrer et de se déplacer à l'intérieur de leur pays.

En deuxième lieu, le développement de zones urbaines, notamment de centres secondaires, va probablement prendre de l'ampleur. Le secteur des services dans les pays d'Europe centrale et orientale, et en particulier les services aux consommateurs et aux producteurs dans les zones urbaines présentent un potentiel de développement très élevé. La réforme des structures territoriales, avec un degré d'autonomie et de responsabilités accru à l'échelon régional, accentuera également le développement de centres administratifs locaux et régionaux, notamment les chefs-lieux de régions. Une nouvelle législation sur la propriété entraînera l'accroissement des demandes de logements privés, favorisant le développement de la banlieue et de petites et moyennes villes.

En troisième lieu, certaines zones périphériques et rurales profiteront de l'ouverture des frontières et des perspectives ouvertes par le commerce transfrontalier et le développement. L'accroissement du tourisme international peut également entraîner l'essor de certaines régions.

(9) **Au-delà des disparités territoriales à l'intérieur des différents pays, l'Europe centrale et orientale présente, dans son intégralité, un potentiel de développement hautement différencié en matière de restructuration. L'évolution des réformes économiques et les différences territoriales dans le domaine socio-économique révèlent que les conditions de développement sont plus favorables dans les parties occidentales de la région.**

Dans l'ensemble des pays d'Europe centrale et orientale, des différences ouest-est et nord-sud risquent de surgir, ces pays subissant un processus de passage à l'économie de marché à des rythmes différents. L'Allemagne de l'Est a été réunie avec l'Allemagne de l'Ouest et intégrée à la CE; la Pologne, la Tchécoslovaquie et la Hongrie ont réalisé des progrès considérables en matière de réforme économique; en Bulgarie, en Yougoslavie et en Roumanie, l'issue des réformes politiques est encore incertaine.

Situées au-delà des zones examinées dans le présent rapport, les républiques occidentales de l'Union Soviétique (pays baltes, Ukraine et Biélorussie) manifestent des velléités de séparation avec l'URSS en pleine crise économique.

Des critères fondamentaux d'ordre socio-économique indiquent également que les conditions de développement régional sont plus favorables dans la partie occidentale de l'Europe centrale et orientale. Les contrastes régionaux les plus patents ont trait à l'évolution démographique et aux structures de l'emploi.

D'après les données démographiques, la croissance démographique pendant les années 80 s'est avérée élevée dans bien des régions de l'Europe centrale et orientale, par rapport aux moyennes communautaires. Néanmoins, les taux de natalité et le pourcentage d'enfants dans la population sont exceptionnellement élevés dans les parties occidentales de la région considérée, à savoir dans une grande partie de la Pologne orientale, dans les

régions orientales de Slovaquie, dans les régions nord-est de Roumanie ainsi que dans les républiques du sud de la Yougoslavie.

La croissance démographique va de pair, dans une certaine mesure, avec le degré de (sous-)développement économique. Le rôle de l'agriculture, des forêts et de la pêche en tant que source d'emploi (très important par rapport aux pays de la Communauté) se révèle plus important dans les zones périphériques des pays en cause et, surtout, dans les parties orientales d'Europe centrale et orientale. L'essentiel des zones industrialisées se trouve plutôt concentré à l'ouest de la région : les districts méridionaux de l'Allemagne de l'Est, la Pologne occidentale, la Tchécoslovaquie centrale, la Yougoslavie septentrionale, le nord-ouest de la Hongrie et les régions occidentales de Bulgarie.

La dotation des régions en infrastructures décline également à mesure que l'on s'aproche de l'est. La même tendance apparaît en ce qui concerne la densité et la qualité des réseaux routiers, ferroviaires et de télécommunications, si l'on en croit les données restreintes disponibles.

Enfin, il convient de mettre en lumière l'importance que revêt l'orientation des liens commerciaux passés et présents. Des régions à l'est de l'Europe centrale et orientale, tournées vers l'Union soviétique, sont en train de perdre un important partenaire commercial, en raison de la dissolution du COMECON et de la chute des échanges avec l'Union soviétique. Les régions à l'ouest se trouvent en revanche dans une situation extrêmement favorable aux échanges, aux investissements étrangers, au développement des infrastructures et aux associations transfrontalières avec l'Europe occidentale.

Par conséquent, si tous les pays et toutes les régions concernés auront à affronter de graves bouleversements socio-économiques, certains sont mieux placés que d'autres. Il se peut que même le consensus actuel sur les objectifs de restructuration ne soit pas de nature à empêcher qu'un climat d'insatisfaction et de démoralisation au sein de la population n'entrave les réformes politiques et économiques. Les contrastes géographiques concernant le degré de transition économique et de développement régional risquent d'avoir une incidence négative sur les relations entre pays et régions. Cela aggravera les problèmes liés à l'histoire de la région (instabilité politique, hostilités nationales et régionales et différences socio-culturelles).

B. POLITIQUES

La partie II du présent rapport examine les réformes structurelles et le développement régional des pays de l'Europe centrale et orientale, sous l'angle des principales composantes des politiques macro-économiques, des stratégies de développement régional passées et des perspectives de politiques régionales.

(1) **Le potentiel de développement de politiques régionales dans l'avenir immédiat pourrait s'avérer limité. Les politiques régionales passées concernaient principalement la distribution à l'échelon régional des ressources de développement planifiées à l'échelon central. Le développement de politiques régionales nouvelles pourrait être entravé par la priorité donnée aux politiques économiques nationales et par l'évolution rapide de la situation économique des régions.**

Il existe d'importants obstacles au développement de politiques régionales axées sur le marché. En premier lieu, dans la phase actuelle du processus de réforme, des pays tels que la Pologne, la Hongrie et la Tchécoslovaquie jugent prématuré de concevoir des stratégies de développement régional, l'objectif initial étant de développer des politiques à l'échelon national. La restructuration économique en cours met l'accent sur des mesures fondamentales telles que la réforme des prix, la privatisation, l'amélioration des conditions en matière d'investissement étranger, les échanges et relations internationales ainsi que les politiques sociales.

En deuxième lieu, l'identification de disparités régionales en tant que base à l'élaboration de politiques pose des difficultés. Dans une situation de mutation rapide et dans un climat d'incertitudes, le "problème régional" reste à dégager et à définir. Il est probable que les hypothèses actuelles deviennent erronées au fur et à mesure de la définition de nouvelles options de développement. Il est donc extrêmement difficile d'établir des pronostics des besoins de développement régionaux.

En troisième lieu, l'expérience de politiques régionales basées sur le marché s'avère limitée. Dans le passé, les stratégies de développement régional portaient en général sur la planification régionale et la mise en oeuvre à l'échelon régional de plans sectoriels. La procédure décentralisée de prise de décision en matière de développement économique était réduite, strictement contrôlée par le centre et pouvait être annulée en période de crise.

Enfin, plusieurs pays connaissent actuellement une procédure de réforme de leurs structures territoriales. La structure des unités territoriales et les rapports entre les instances centrales, régionales et locales font l'objet d'une réorganisation afin de créer des systèmes plus appropriés aux économies de marché. L'accent est mis sur la régionalisation plutôt que sur la politique régionale.

Exceptionnellement, l'Allemagne de l'Est n'a pas tardé à mettre en oeuvre des politiques régionales. En vertu de l'unification, le système

ouest-allemand d'aide économique (Gemeinschaftsaufgabe) a été étendu, parallèlement aux crédits budgétaires alloués dans le cadre du Fonds spécial ERP et d'autres programmes régionaux spécifiques. Initialement, les aides régionales concernaient l'ensemble du pays. L'ampleur des problèmes de développement économique, la nécessité de dégager des disparités régionales et la non-application de critères de détermination précis rendaient la différenciation régionale impossible. Néanmoins, en 1991, un programme régional spécial a été introduit en vue de fournir une assistance aux régions est-allemandes les plus touchées par des problèmes de restructuration.

(2) **A court terme, il conviendra de promouvoir le développement économique des régions présentant un potentiel de développement maximal. Néanmoins, les aides régionales d'urgence pourraient être également destinées aux zones connaissant un taux de chômage élevé ainsi qu'aux zones les plus endommagées du point de vue écologique.**

Eu égard aux impératifs inhérents à la survie de l'économie nationale pendant la phase de transition, il se peut que de faibles ressources soient affectées à la réduction des contrastes régionaux. A l'échelon régional, les politiques de développement économique devront viser le développement de zones dotées d'un potentiel de croissance et les plus aptes à devenir le fer de lance du processus de restructuration. Ces régions sont principalement des régions industrielles diversifiées, bénéficiant d'une structure matérielle et technique relativement bonne, de personnel expérimenté, de bonnes infrastructures et de liaisons internationales. Les autres zones à potentiel de développement sont les régions agricoles fertiles, les pôles d'investissements étrangers, les régions limitrophes de pays à économie de marché développée, ainsi que les zones touristiques présentant un attrait pour le tourisme international.

Néanmoins, l'ampleur du processus de restructuration industrielle et les conséquences sociales qui y sont liées (chômage important, mouvements migratoires) pourraient nécessiter l'octroi d'aides régionales d'urgence à caractère sélectif en vue de pallier les effets les plus préjudiciables produits par les licenciements. Le lancement d'actions immédiates pour remédier aux problèmes environnementaux les plus graves peut également s'avérer nécessaire afin de préserver la santé humaine et les écosystèmes saturés.

(3) **A moyen terme, le développement de politiques régionales nouvelles pourrait englober un large éventail de mesures. Par priorité, il convient d'encourager les investissements d'infrastructure et l'appui à la restructuration locale et régionale.**

Après la mise en place des principales réformes macro-économiques en Europe centrale et orientale dans un nouveau contexte de développement économique national, il sera nécessaire d'examiner les questions de développement régional à plus long terme. Outre les opérations générales de restructuration industrielle et de dépollution, il conviendra d'examiner en

priorité les problèmes de surpeuplement et de surdéveloppement dans les grandes agglomérations urbaines/industrielles, le manque d'investissements et d'infrastructures dans les zones périphériques, ainsi que la nécessité d'une répartition plus équilibrée des logements et des industries.

Parmi les mesures de politiques régionales à envisager, le premier axe prioritaire réside dans le développement des infrastructures nécessaires, en particulier la mise en place de réseaux routiers et ferroviaires nationaux et internationaux, d'aéroports internationaux et de centres de transit régionaux ultra-perfectionnés. Le développement d'infrastructures de télécommunications régionales s'impose également, principalement pour pallier les déficiences des systèmes de commutation et des centraux téléphoniques locaux ainsi que pour faciliter l'accès aux réseaux de téléphone, de fax et de télex. Le deuxième objectif de taille est représenté par la restructuration locale et régionale visant principalement à maintenir la compétitivité de régions industrielles diversifiées, tout en pratiquant une politique de diversification dans les zones monostructurelles, avec des appuis aux PME. Il importe d'assurer la privatisation et la réorganisation des entreprises publiques, en procédant par exemple à la reconversion d'entreprises et à l'octroi d'aides. Les zones les plus arriérées devraient faire l'objet de programmes de restructuration globaux, concentrés et coordonnés, prévoyant des aides aux PME, des mesures d'amélioration environnementale, le développement des infrastructures locales et régionales, des installations sociales et de formation.

Parmi les objectifs de la politique régionale figurent l'amélioration et la protection de l'environnement, la restructuration agricole et le développement de zones rurales, la suppression des contrastes urbains et régionaux ainsi que la coopération internationale et le développement transfrontalier.

(4) La mise en oeuvre d'une politique régionale beaucoup plus efficace et plus performante en Europe centrale et orientale passe par le transfert d'informations et de connaissances à partir de l'Europe occidentale et par la mise sur pied de réseaux ouest-est d'échange d'expertise et d'expérience.

Les pays d'Europe occidentale ont acquis une expérience et des connaissances considérables en matière de développement régional dans le cadre des économies de marché. Les stratégies mises en oeuvre au cours des 40 dernières années ont abordé un éventail de problèmes régionaux à divers échelons du territoire. Un grand nombre de politiques et d'instruments régionaux ont été éprouvés, et les connaissances acquises en ce qui concerne l'efficacité des différents mécanismes - aussi bien au niveau de chacun des pays qu'au niveau de la Communauté européenne.

Ces connaissances pourraient être très utiles aux décideurs régionaux des pays d'Europe centrale et orientale dans le domaine des disparités régionales. Il importe, par conséquent, de mettre sur pied des structures et des réseaux susceptibles de promouvoir et d'organiser le transfert et les échanges d'informations, d'idées et d'expertise entre l'Europe de l'Ouest et l'Europe de l'Est.

(5) **L'Allemagne de l'Est connaît un processus de passage à l'économie de marché beaucoup plus rapide que les autres parties d'Europe centrale et orientale. Bien que l'on puisse tirer-pour les pays voisins-des enseignements des processus et des politiques de restructuration concernant l'Allemagne de l'Est, les comparaisons et le transfert des expériences de développement se heurtent néanmoins à des restrictions considérables.**

Aux fins de la présente étude, l'Allemagne de l'Est a été considérée, en général, comme un "pays", dans l'examen comparatif de la situation économique et sociale des diverses régions d'Europe centrale et orientale. La raison en est qu'une grande partie des données socio-économiques concernent la période antérieure à l'année 1990 (époque où la RDA existait). En outre, la vitesse à laquelle l'Allemagne de l'Est doit s'adapter à l'économie de marché fournit des données appréciables sur les effets des réformes économiques; d'autres pays d'Europe centrale et orientale ont entrepris des mesures de réforme et subissent les effets de la restructuration économique sur des périodes plus longues. En conséquence, les problèmes se sont manifestés plus rapidement en Allemagne de l'Est et avec une intensité accrue : croissance et effets plus apparents du chômage, d'abord dans le secteur agricole, ensuite dans les zones urbaines/industrielles, notamment dans les villes et régions monostructurelles; inefficacité des équipements et sous-investissement; infrastructures déficitaires; aménagement de l'industrie pour satisfaire aux normes environnementales de l'Europe orientale.

Les difficultés auxquelles est confrontée la population est-allemande en raison du passage à l'économie de marché sont également révélatrices à cet égard. Une grande partie de la population de l'ex-RDA connaît des difficultés liées à l'adaptation à la concurrence, à la suppression des aides et à la perte de certains services sociaux ainsi qu'aux critères occidentaux en matière d'entreprise, en dépit de l'aide considérable fournie par les organisations ouest-allemandes. Les autres pays d'Europe centrale et orientale connaissent ces problèmes d'une manière atténuée mais pourraient, à terme, en être affectés plus gravement. On pense, en effet, que si l'ex-RDA - qui était jadis la "vitrine du socialisme" se heurte à des problèmes de transition aussi épineux, cela augure mal des autres pays d'Europe centrale et orientale (qui ne bénéficient pas de l'octroi de ressources substantielles par l'Allemagne de l'Ouest).

Néanmoins, la comparaison entre les problèmes et les perspectives de développement de l'ex-RDA avec ceux des autres pays d'Europe centrale et orientale doit être considérablement restreinte. La dissolution de la RDA a entraîné la suppression d'un certain nombre d'options importantes de politique nationale, notamment liées au commerce et à la politique monétaire (taux des changes, taux d'intérêt, prix, taxation, contrôle des importations etc.), qui auraient pu être utilisées pour assurer un processus de restructuration plus progressif et plus maîtrisé. En outre, alors que l'ex-RDA avait une économie relativement bien développée par rapport aux autres pays d'Europe centrale et orientale, elle est maintenant la seule région à être confrontée à la concurrence directe des pays occidentaux. Elle est donc en proie à certains problèmes de restructuration très spécifiques par rapport à ses anciens partenaires du COMECON.

Il en résulte qu'en dépit des enseignements intéressants tirés de l'analyse des problèmes et des politiques de développement régionaux de l'ex-RDA, le transfert d'expertise et en particulier des politiques doit s'effectuer avec prudence.

CHAPTER 1: INTRODUCTION

1.1 Project background

During late 1989 and early 1990, the countries of Central and Eastern Europe began to initiate far-reaching processes of political liberalisation and economic restructuring. A major concern for the European Commission was the appropriate form of EC response, including the level and sharing out of structural assistance to be provided in the regions of the GDR and other East European countries. In the short term, decisions were required regarding the eligibility of GDR regions for aid under the different objectives of the Structural Funds after German unification, and the priorities for Community assistance. In the longer term, it was envisaged that EC regional policies would have to consider how Central and East European political and economic reforms would affect the regions of the Community.

In support of the preparation and implementation of these decisions, the Commission required a statistical and analytical information base describing the processes, patterns and prospects of regional economic growth and development in Central and Eastern Europe. This information base needed to consider developments under the highly centralised state-controlled economies of the past as well as current restructuring as these economies moved towards a free-market system.

This project was initiated, at short notice, to provide an initial information base for the short-term decisions to be taken during 1990 and 1991 (relating, in particular, to the GDR) and to guide the longer term assessment of the effects of reforms in Central and Eastern Europe on regional development in the European Community.

The following sections of the Introduction describe the terms of reference and methodology of the project, the researchers involved, and the structure of the Final Report.

1.2 Terms of reference

The aim of the project was to provide a review of regional socio-economic conditions and trends, at national and regional levels, in Central and East European countries and regions. The project had the following specific objectives:

(i) to provide a bibliography and review of recent empirical research, publications and institutions dealing with socio-economic conditions and trends in Central and East European countries and regions;

(ii) to collect essential statistics describing the socio-economic conditions in the specified countries and regions;

(iii) to evaluate alternative forms of Community structural assistance to the regions and countries of Central and Eastern Europe; and

(iv) to describe the relative position of the specified countries and regions among themselves and in comparison with the Community regions, and to consider the prospects for development and EC policy options for structural aid.

The above information was to be provided for the regions in the following countries of Central and Eastern Europe: Bulgaria, the German Democratic Republic (integrated into the Federal Republic of Germany in October 1990), Czechoslovakia, Hungary, Poland, Romania and Yugoslavia. As far as possible the regional breakdown was to correspond to those used for national administrative purposes.

1.3 Project methodology

The project was organised in four stages: a bibliographic review; the construction of a statistical database; a comprehensive report of regional disparities in Central and Eastern Europe; and a review of past regional development strategies and future regional policy options.

The first part of the project involved the compilation of a *bibliographic review* covering recent empirical research on socio-economic development. The review comprised a listing of recent publications, a list of researchers and institutions active in Central and Eastern Europe, and a research report.

The bibliography included work on: territorial subdivisions used for macro-economic and spatial planning; the description and interpretation of East European statistics on productivity and income; regional and national economic growth and development; industrial structure; technical infrastructure and capital investment; social infrastructure, environmental problems; and the national and regional impact of the move from state-controlled planning towards a free-market economy. In addition, a list with short descriptions of Central and East European researchers and institutions involved in regional analysis was compiled.

Bibliographic software, based on the package PCFILE+, was used to collate the data and permit retrieval of publications, institutions and researchers. The retrieval system was based on key characteristics of the data eg. author name, subject, keywords etc. The data file consists of c.700 references, c.250 researchers and c.95 institutions. The most important publications were reviewed in an accompanying research report.

The second stage of the project involved the compilation of a *statistical database* on regional socio-economic development in Central and Eastern Europe. Insofar as statistics are available, time series data were collated, at national and regional levels, on: population, age structure, total employment and employment by main sectors; comprehensive economic output, income generation and productivity; the main components of income utilisation; and national and regional investment in infrastructure.

The statistical information was derived from four sources: the specialist research institutes from Central and Eastern Europe

participating in the project; the computer database of the Vienna Institute for comparative Economic Studies; national statistical offices in Central and Eastern Europe; and COMECON data. The data was collated on MS-DOS diskettes using the statistical software package, AS-EASY-AS.

In the third stage of the project, a *comprehensive report* was prepared, highlighting major socio-economic disparities and relative stages of development of the countries and regions of Central and Eastern Europe. Selected statistical data was analysed and integrated in a series of regional reviews relating to population, employment, unemployment, output, income and productivity. Regional reviews based on qualitative information were also prepared addressing foreign investment trends and environmental conditions in Central and Eastern Europe.

The final stage of the project involved a *policy review* of structural reforms and regional development in Central and Eastern Europe. The review comprised an assessment of the main components of macro-economic structural reforms, the national reform conditions in each of the countries, past regional development strategies and the future prospects for regional policies.

The project began in July 1990. An Interim Report containing profiles of territorial structures, economic conditions, and problems and policies in the Central and East European countries was provided in September 1990 along with preliminary bibliographic references and a statistical checklist. A summary paper reviewing regional and industrial structures and regional development problems in "the Six" countries of Central and Eastern Europe was also provided as a contribution to the Fourth Periodic Report *The Regions in the 1990s*. The Policy Review was completed in January 1991 following a seminar of the main project participants held at the Vienna Institute for Comparative Economic Studies. The regional analyses and reviews were completed during February and March 1991, and a Draft Final Report was provided in May 1991. The Comprehensive Report was completed in June 1991, and a summary Final Report was finalised in October 1991.

1.4 Project researchers

The project was managed and coordinated by *John Bachtler* at the European Policies Research Centre (EPRC) University of Strathclyde, Glasgow. Among other EPRC staff, considerable research and administrative support was provided by *Ruth Downes* particularly with respect to the organisation of the bibliography, the bibliographic research report and the country profiles. *Elaine Barclay and Hassan Tchehrazi* developed the software for the bibliographic and statistical databases. Other research assistance was provided by *Elaine Ballantyne, Geraldine McBride, Keith Clement, and Douglas Yuill*. Reports were typed by *Moira Lowe, Rosemarie Rey, Jean Rodger and Elizabeth Davison*.

At the Vienna Institute for Comparative Economic Studies, *Peter Havlik* undertook the macro-economic statistical analyses and, together with *Rita Kick*, contributed substantially to the bibliography and statistical database.

Information, data and analyses for individual Central and East

European countries were provided by the following researchers:

Bulgaria:	*Dr Nikolay Grigorov, Hristo Yakimov, Hristo Stanev, Dimiter Kebedjiev, Evgeni Popov, Atana Atanasov* National Centre for Regional Urban Development, Sofia
	Doncho Konakchiev Institute of Management of the Economy, Ministry of Industry, Technology, Trade and Services
	Todor Bojinov University of National and World Economy
	Stefan Hrelev University of Economy, Varna
	Peter Popov Institute of Geography
Czechoslovakia:	*Dr Alois Andrle, Milos Cerveny, Zdenek Vokoun* TERPLAN - Czechoslovak Institute for Regional Planning, Prague
East Germany:	*Dr Hans-Ulrich Jung, Dr Ulrike Hardt* Niedersachsisches Institut fur Wirtschaftsforschung, Hannover
	Dr Scherzinger, Dr Cornielsen Deutsches Institut fur Wirtschaftsforschung, Berlin
Hungary:	*Nora Hoercher, Istran Bartke, Eva Valer* United Nations Centre for Human Settlement (UNCHS) Habitat, Budapest
Poland:	*Professor Antoni Kuklinski, Dr Grzegorz Gorzelak, Dr Miroslav Grochowski, R. Szul* European Institute for Regional and Local Development, University of Warsaw
	Professor Leszek Zienkowkski Regional Centre of the Central Statistical Office, Warsaw
Romania:	*Dr Ioan Ianos, Dr Dan Balteanu, Claudia Popescu* Institute of Geography, University of Bucharest

Yugoslavia: *Peter Dukan, Vladimirt Skendrovic, Ivan Sabo, Zlatan Froehlich, Dubravka Jurlina*
Civil Engineering Institute, Zagreb

All members of the research team contributed to the drafting and editing of the final report.

1.5 Report structure

Following this introduction, the report is divided into 13 further chapters which are grouped into two parts. Part I, covering Chapters 2-10, comprises the analysis of regional socio-economic conditions in Central and Eastern Europe. In Chapter 2, the analysis begins with an outline of the historical development and current reforms of territorial structures in the six countries and East Germany together with a description of the territorial sub-divisions used for the regional analysis.

Chapter 3 examines population and demographic trends relating to the distribution of population in the region, the components of population change, age-sex structures, future trends, and the population patterns within individual countries. Chapter 4 analyses employment patterns and regional disparities, followed by a review of preliminary information on unemployment in Chapter 5.

Chapter 6 addresses the complex issue of output, income and productivity data in Central and Eastern Europe. The chapter provides a detailed critique of various methods of defining, measuring and comparing output statistics, and it assesses national positions, recent trends, future prospects and regional differences.

Chapters 7 and 8 provide a descriptive review of foreign investment trends and environmental conditions in Central and Eastern Europe, and the regional analysis is concluded with an assessment of disparities in key technical and social infrastructure areas - transport, telecommunications, educational facilities, healthcare and energy.

At the end of Part I, Chapter 10 provides a summary of regional development in Central and Eastern Europe and identifies the main categories of regional problems: industrial restructuring, social consequences (unemployment and migration), infrastructure deficits, environmental degradation, agricultural underdevelopment and change, agglomeration and peripherality, and territorial minorities.

In Part II, Chapters 11, 12 and 13 provide an evaluation of structural reforms and regional development in Central and Eastern Europe. Chapter 11 constitutes an overview of the main components of macro-economic structural reforms in Central and Eastern Europe, relating to price liberalisation, privatisation, foreign investment conditions, international trade and relations and social measures.

Chapter 12 reviews regional development policy in Central and Eastern Europe with an examination of past regional development strategies in

centrally planned economies and the contemporary situation, primarily with respect to East Germany where strategies are being developed most rapidly.

Lastly, Chapter 13 speculates on the future prospects for regional policy in Central and Eastern Europe. Potential regional development objectives are proposed for the short term to strengthen national development measures and to provide emergency aid. Strategies for the medium to long term are also suggested, to address the need for infrastructure development, local and regional industrial restructuring, the equalisation of urban and regional development, cross-border development and regional policy research.

The report is completed with three annexes. Annex I provides a series of "country profiles" with a summary of regional socio-economic conditions in each of the countries in Central and Eastern Europe. Annex II comprises a bibliographic review of literature on socio-economic development, and Annex III contains a list of researchers and institutions specialising in regional socio-economic development in Central and Eastern Europe. Finally, Annex IV lists the time series data for each country included in the statistical database.

SOCIO-ECONOMIC SITUATION AND DEVELOPMENT OF THE REGIONS IN THE NEIGBOURING COUNTRIES OF THE COMMUNITY IN CENTRAL AND EASTERN EUROPE

PART I:

REGIONAL DISPARITIES AND PROBLEMS

CHAPTER 2:
TERRITORIAL STRUCTURES

2.1 Introduction

"Economic structures, the territory they cover and their administration are intimately interwoven" (Bennett, 1989, p3). The territorial and administrative structures within Central and East European countries are, at present, undergoing major changes in response to the rapid and fundamental political and economic transformation that has been occurring over the past two years. This section reviews first, the historical development of the territorial administrative structures in Central and Eastern Europe, and describes the principal influences on their formation. The need for new reform in response to recent economic and political transformation is then outlined, and the section concludes with country profiles.

2.2 Historical development

The administrative subdivision of the former CMEA countries reflected the aims and principles of Communist ideology. Centralised government used the territorial units to implement its own aims, including significant industrial development and a strategy of regional equality appropriate to Socialism. The administrative subdivisions also served political objectives by effectively removing any real authority at lower levels, thus lessening regional power and aiding central control.

The administrative subdivision of Central and East European countries did not remain static after the establishment of Communist rule. The restrictive, centrally-oriented administrative hierarchy, was found to constrain economic development and conflict with the demands of economic growth. After about 1960, this realisation led to administrative reform, often of a quite radical nature: "economic regionalization became the dominant objective which, by means of territorial reform, central powers used to make the functional economic regions and administrative boundaries coincide" (Maurel, 1989, p112).

The territorial reforms in the late 1950s and 1960s emulated the VOG-reforms, undertaken by Krushchev in the Soviet Union, which aimed to give the regions a strong position in economic planning. Bulgaria was the first country to initiate territorial reform in 1959, replacing the former 15 regions with 27 departments (*okrag*) and abolishing the districts. The communes were grouped together and halved in number. However, the experiment was not successful from a political viewpoint, and a strongly centralised structure was reintroduced until further reform in 1979. Another early reform experiment occurred in Czechoslovakia, where, in 1960, research was carried out to identify economic nuclei on which to base administrative reform. 135 nuclei were distinguished, of which 46 were subjected to further economic analysis, and ultimately led to the formulation of seven larger economic regions. While this research was not

fully applied to the reform, it did exert a significant influence on the national territorial structure, and the "network was amended in an attempt to create an administrative structure which would conform as closely as possible with that of the spatial pattern of economic activity" (Dawson, 1987, p112).

Among Central and East European countries, a distinction could be made between the countries with a more unitary character (Poland, Hungary, Romania, Bulgaria and the former GDR) and those of a federal nature (Yugoslavia and Czechoslovakia). The latter two countries displayed slightly different administrative characteristics from neighbouring states, although the general ideology and broad central control were the same, and both Yugoslavia and Czechoslovakia developed federal constitutional systems. The strong and clearly defined ethnic groupings in both countries were the basis for these systems, necessitating appropriate territorial division to avoid animosity and conflict. Thus, in Yugoslavia, relatively autonomous regions were created which mirrored the major ethnic divisions (Serbs, Croats, Slovenians, Bosnians, Macedonians, Montenegrins, Hungarians and Albanians), and in Czechoslovakia the main divide was between the Czech and Slovak Republics. Yugoslavia took this concept further, reflecting its comparatively liberal and decentralised economic system, and vested more power at regional and enterprise level than in the other Central and East European countries. In many areas the federal level was, in fact, relatively weak in relation to the individual republics.

2.3 The new reforms

However radical the pre-1989 reforms may have been, they were all formulated and implemented within the scope of the Communist system to serve, to a greater or lesser extent, the associated ideological and political goals. The reforms which are now being designed are of quite a different nature.

The countries of Central and Eastern Europe are adopting a democratic, free-market economy as their goal, and the administrative structure of their countries is being altered to serve this purpose. The main focus of reforms is to decentralise power and functions to lower administrative levels. Under the new economic conditions, it is considered necessary to create regions (and an administrative structure) that facilitate and encourage indigenous economic development. Lower levels of the administrative structure require powers which will allow them to attract and stimulate economic growth, independent of any national plan or central control. For instance, Bulgaria has been attempting to transform the communes (the lower level of a two-tier structure) into "self-governing communities of the people" - essentially independent economic units, able to control individually their economic, social and cultural development - although the idea does not yet operate in practice.

There are a number of other objectives involved in the reorganisation of administrative structures, apart from the creation of efficient economic units - and these may be in conflict. The first objective is also economic and involves the need to create regions that are large enough to be competitive on a European scale (like, for instance, the German *Laender*), and 'visible' on a map of Europe. The second objective of reorganisation is more socially or culturally oriented. It involves the creation or

strengthening of a regional identity which can then stimulate individual responsibility and collective effort at regional level, although it is possible that the fulfilment of this task may conflict with economic goals. In many countries, pre-Communist institutions and functions are being re-introduced because they are believed to be appropriate for the *national* identity.

Additional influences are evident in the reforms being undertaken in Czechoslovakia and Yugoslavia. Confederal structures are allowing republics to develop a more autonomous role and a greater regional identity. The popular desire within the republics to become 'sovereign' and independent of federal control is evident in both countries. The Slovak Republic is seeking independence from Czechoslovakia. Yugoslavia faces more radical disintegration of the confederation, and the full secession of some republics. Political and military events are, at present, overshadowing any thought of planned territorial reform.

The understanding and urgency with which reform in Central and East Europe is pursued seems to depend largely on the general level of economic and political reform in the individual countries. The greater the progress towards a market economy, the more advanced administrative reform seems to be. The exception to this appears to be Bulgaria which, despite being relatively unliberalised from a political and economic point of view, has implemented quite radical administrative reform.

Overall, the countries of Central and Eastern Europe can be grouped into four categories according to the stage of administrative reform: East Germany; Hungary, Poland and Bulgaria; Czechoslovakia and Yugoslavia; and Romania. The following country profiles outline in more detail the administrative structure in each country and the reform process that is being implemented.

2.4 East Germany

East Germany has completed the adminstrative reform of its territory significantly more quickly than elsewhere in Central and East Europe. This reflects the availability of West German experience and expertise in the creation of new institutional structures, and also the existence of the historical *Laender*.

The land area of the GDR was structured, until 1 October 1990, into 15 districts (*Bezirke*) (including the capital Berlin), 26 municipalities (*kreis-freie Staedte*), 189 counties (*Kreise*) and 7,563 communes (1988 position). This was the outcome of an administrative reform implemented in 1952 which had the declared aim of destroying the traditional *Laender* structure. Fourteen districts were formed out of the original five *Laender*. The eastern part of Berlin was later considered as the fifteenth district when it became the capital city (and its urban districts became a county).

The *Laender* were instructed to adapt to this new structure and to transfer their responsibilities to the departments of the districts. The states (*Laender*) *de facto* subsequently ceased to exist but *de jure* were never actually dissolved. The constitutions of the *Laender* were also never annulled. The new administrative structure was aligned to the

parliamentary structures (district council - district parliament, county council - county parliament etc). This territorial structure, formulated in 1952, remained virtually unaltered for more than 37 years, apart from: changes at commune level and small boundary alterations; the creation or dissolution of a few municipalities; the dissolution at different times of four counties (in agrarian areas of the Magdeburg district); and the partial new organisation of the urban area of Berlin (from eight to eleven urban counties).

For regional planning purposes, different groupings were formulated on the basis of the existing regional structure, (eg. northern districts - Rostock, Schwerin and Neubrandenburg; central districts - Potsdam, Frankfurt/O., Magdeburg and Cottbus; southern districts - Dresden, Karl-Marx-Stadt, Leipzig and Halle; south-western districts - Gera, Erfurt and Suhl; and separately categorised - Berlin) or through the delimitation of the central regions. These groupings, however, had no effect on the administrative and spatial structure and were only used as (unofficial) planning regions.

The structure of 1952 was brought to an end by the *Laender* Introduction Law of 22 July 1990. With the setting-up of five *Laender* and the city state of Berlin (in which the western and eastern parts of the city are unified), the reconstruction of the federal system corresponds to the model of West Germany. The city state of Berlin maintains both communal and regional authority like its West German counterparts, Hamburg and Bremen.

In general, the new structure involves the combination of several districts to form a Land although, in achieving this, some boundary alterations have taken place. The previous district boundaries do not correspond exactly with the new Land borders. Prior to reorganisation, the regional and administrative structure of the former GDR was similar to the federal structure of the west German federal territory. This similarity, though, was mainly formal. The links between the districts, counties and communes were much stronger than in western Germany due to the centrally-oriented state organisation.

2.5 Bulgaria, Hungary and Poland

East Germany has benefited considerably from being incorporated into the Federal Republic of Germany and the corresponding help and ready-made structure available to it. The other Central and East European countries do not have such assistance available to them and, therefore, are faced with the much harder task of constructing a suitable administrative structure with little previous experience. Bulgaria, Hungary and Poland have so far formulated the most advanced reforms. Bulgaria and Poland, in particular, had already begun quite far-reaching decentralisation prior to the political transformation in 1989-1990.

In Bulgaria, a new administrative system came into force on 1 January 1988. Although the former two-tier character was retained, the 28 districts (*okrag*) were replaced by nine regions (*oblast*), which now form the largest administrative units. They are essentially identical with the existing economic units, and it is expected that they will help to reduce administrative procedures and promote the country's less-developed regions.

The creation of these regions was associated with the establishment of their administrative centres, but these are not always identical with the centres of economic activity. Hence, some of the centres were considerably upgraded. The regions are subdivided into communes (*obstina*). In the city of Sofia region (Grad Sofija), the administrative reform dissolved the then 12 urban districts (*rajon*), introducing instead 24 communes which hold the same rank as all other Bulgarian communes.

Concomitantly, the communes were transformed into "self-governing communities of the people" (*samoupravljavsti se obstnosti na naselenieto*). This has put them in a position where they can decide independently about their economic, social and cultural development. As a result, the communes have authority over all controlling and planning activity within their territories. Moreover, they are responsible for supplying the population with goods and services, for housing construction, for the provision of infrastructure, for such sectors as public health, education and culture as well as for the promotion of sports and tourism. The communes are independent economic units. The regions, on the other hand, have mainly coordinating and supervisory powers. Within this scope, they also cooperate with other regions and with governmental and economic agencies and help to further self-government in the communes.

The administrative structure in *Hungary* is currently in the process of being reorganised. The following designation outlines the position prior to 1990, and the reforms which were proposed, and introduced in the course of 1990.

Hungary was subdivided from 1 January 1984 (in accordance with the 1983 revised version of the 1972 constitution) into the national capital (*favaros*), the countries (*megve*), the cities (*varos*), and the communes (*kozseg*). The largest administrative units were the counties, of which a total of 19 were designated. The national capital was of equal rank with the counties, and was subdivided into 22 metropolitan districts (*favorosi kerulet*), although these were not included as administrative territories. Both the cities and the communes were directly subordinate to the counties, and the five largest cities were assigned county status (*magyei varos*). These city counties enjoyed budgetary prerogatives, although they were no longer directly subordinate to the central government (as had been the case prior to 1971). They were also subdivided into metroipolitan districts in the same way as the national capital.

The above-mentioned commune/county hierarchy was only partly implemented as, in practice, only so-called large communes with city status (*varosi jogu nagykoszegi*) were actually directly subordinate to the counties. These large communes with city status came into existence on 1 January 1984, following the abolition of the districts (*jaras*), to serve as intermediary agencies beside cities and cities with county status. As only this type of commune was directly subordinate to the counties, all other communes (i.e. large communes without city status (*nagykozseg*) and ordinary communes) were subordinate to one of the three other administrative units: a city with county status, a city, or a large commune with city status. This hierarchy existed within the context of administrative communities of cities and their surrounding areas (so-called suburban communities). There were 139 such communities designated in three groups: firstly, communities involving city counties (*magyei varoskornyek*); secondly, those involving ordinary cities (*varoskornyek*); and lastly, those involving large communes with city status (*nagykozsegkornyek*).

A transformation of the administrative structures has come about as a result of the general social and political changes in Hungary. The Act No. LXV of 1990 on local self-governments, and the subsequent election of local representatives (on 30 September and 14 October 1990) highlights this change in administrative thinking. The preamble to the Act comments on the progressive Hungarian traditions and the relevant requirements laid down in the European Charter on Self-Government. It thus recognises and protects the self-governmental rights of local communities and their independence in self-organisation, and advocates democratic decentralisation of public power.

The Act vests local self-governmental rights in the elective citizens of communes, towns, the national capital, its districts and counties. A municipal (town) government may be given the tasks and authorities of a county government subject to parliamentary approval. County governments, therefore, are responsible for carrying out those tasks which cannot be imposed on communal or municipal governments - i.e. public tasks which do not lie within the exclusive authority of others and do not hurt the interests of the represented communes or towns. It is also possible for the county to enter into a partnership with another county or with the government of any commune or town.

There are now five types of local self government in Hungary:

- self-government of villages (of which there are 3,089)
- self-government of towns (166)
- self-government of countries (19)
- self-government of the capital (1)
- self-government of the capital districts (22)

As local governments now have full rights to initiate both amalgamations and separations of communes, and to form district notaries, the spatial administrative division of Hungary is likely to change following local elections where such decisions are made. Although some tasks have been allocated to specific levels of government, others are still being determined and await legislation.

Poland has experienced several historic changes to its adminstrative structure. From 1950 until 1973 Poland's territorial divisions were as follows: 17 *voivod*ships, over 300 districts (*powiaty*), and over 4,000 communes (*gromady*). During the period 1950-1973 the territorial division of the state did not change greatly. Only the number of the lowest tier units increased constantly, reaching over 8,000 in 1973.

Over the period 1973-1975, a reform of the territorial organisation of the state was introduced. A two-tier system replaced the old three-tiers. The number of *voivod*ships was increased from 17 to 49; the intermediary level of the districts (*powiat*) was abolished; and the number of the basic units was drastically reduced to around 2,500 "*gmina*" (communes).

The reform of the 1970s shaped the present pattern of two-tier spatial organisation of the Polish state. In 1990 there were 49 *voivod*ships, 2,121 rural communes and 830 towns (a "town" denominates a basic-level administrative unit of urban character). Some towns and adjacent rural communes form a joint unit (town-commune) - there are 541 such cases. Warsaw is divided into seven districts which have commune status.

Altogether there are 2,417 basic units of the spatial administrative division of the state.

New legislation (June 1990) introduced another quasi-level of this division, called "*rejon*". This unit, of which there are around 250, is a subdivision of the regional (*voivod*ship) administration. It does not have any tasks and responsibilities of its own, and it only serves as the territorial deconcentration of the regional state administration for purely technical and organisational purposes. Introduction of this new tier (of purely administrative character) begins the process of another reform of the spatial organisation of the Polish state. It is envisaged that a three-tier system will be restored, but the number of *voivod*ships will be dramatically reduced to 10-12. The "*rejons*" will be the nuclei of the reintroduced districts (*powiaty*). The number of communes (rural and urban) will not be seriously changed. Studies of these problems have just begun, and it is too early to specify any final conclusions; the new division will not be introduced before 1992.

2.6 Czechoslovakia and Yugoslavia

The confederal structure of these two countries has meant a different basis for administrative reform. Yugoslavia, as previously noted, is struggling to retain coherence as a country and is not primarily concerned at the present time with any internal administrative reform. Czechoslovakia has planned a reform in which regional identities are playing an important role, and the authority of the lower levels is likely to be increased.

The Czech and Slovak Federal Republic (*Ceska a Slovenska federativnii republika*) is a federation of two constituent republics of equal rank: the Czech Republic (*Ceska republika*) and the Slovak Republic (*Slovenska republika*). Until 31 December 1990, both republics had a three-tier administrative structure, subdivided into regions (*kraj*), districts (*okres*) as well as municipalities and communities (*obec*). The largest administrative units were the regions. The capital of the Czech and Slovak Federal Republic, Prague, (which is also the capital of the Czech Republic) and the capital of the Slovak republic, Bratislava, held the status of a region. Both Prague and Bratislava were organised into urban districts (*mestsky obvod*). The regions were subdivided into districts which in turn consisted of towns (*mesto*) and communities, which constituted the smallest administrative units. The cities of Brno, Ostrava, Plzen and Kosice enjoyed a special status (equal at least to a district level) and were subordinated to regions.

After the abandonment of regions as special administrative units at the end of 1990, their responsibilities are being transferred to districts, or even to towns and communities; in exceptional cases, they may be transferred to ministries. In the Czech Republic a re-establishment of the historical lands (Bohemia and Moravia) is under consideration. The part of Silesia belonging to Czechoslovakia may also be re-introduced as a land, or be administratively bound with Moravia, as it was in the pre-war period. The capital, Prague, may also be granted the same status as a land and be directly subordinated to the Czech government. The final decision will be incorporated into the future constitution of the Czech Republic.

The distribution of powers between the federation and the republics will also be solved in the new constitutions of the federal, as well as of the national republics. Nevertheless, several ministries, which previously existed only at the federal level (ministries of several manufacturing sectors) or on both levels (eg. for agriculture), were abandoned at the federal level, and their responsibilities were fully transferred to the national level. The federal authorities (Federal Assembly and the federal government) currently have the sole responsibility for foreign policy and international agreements, defence, currency and federal legislation, and partial responsibility, together with national republics, for other activities e.g. security, finance, foreign trade, labour and social affairs, strategic planning and economic development, transportation, communications, environment and control. Corresponding ministries exist for these activities in most cases at the federal as well as at national level. On the other hand, ministries for industry, construction, agriculture, education, culture, health, internal trade, tourist travel and justice, exist only as part of the governments of the national republics.

Before the elections of town and community councils in November 1990, a new Act regarding the capital, Prague, and a Towns and Communities Act was promulgated, which considerably increases their authority and responsibilities. However, districts will have no elected council in the future; they will act only as local representatives of the government for administrative matters.

Yugoslavia, in accordance with its 1974 constitution, is a federal state. It consists of the Socialist Republic of Bosnia and Hercegovina, Croatia, Montenegro, Slovenia, Serbia, and the Autonomous Socialist Provinces of Kosovo and Vojvodina. The two autonomous provinces are subordinate to the Republic of Serbia. The republics and autonomous provinces are subdivided only into communes (*opstina/opcina/obcina*), a type of administrative organisation that has been laid down in the constitutions of most republics as well as the two autonomous provinces. Many of the communes, however, have formed urban or regional communities in order to be able to conduct certain matters jointly, but these communities do not constitute an administrative level to which the communes are subordinate. In the Republic of Croatia, all communes have become part of such regional communities (*zajednica opcina*), and so have communes in those parts of the republic of Serbia which do not belong to the autonomous provinces (*meduopstinska zajednica*). Similarly, the large cities are organised into urban communities, which consist not only of municipalities but also include adjacent communes (Grad Beograd, Grad Ljubljana, Grad Novi Sad, Grad Sarajevo, Grad Skopje, Gradska zajednica opcina Split, Gradska zajednica Zagreb, Obcina Maribor). Among these, the city of Belgrade (Grad Beograd) holds a special status in that it is concurrently the capital and administrative centre of the federation.

Article 281 of the constitution vests far-reaching powers in the federation. In reality, however, they are limited to national defence, foreign affairs, matters relating to citizenship, the control of external trade and service transactions as well as national security in general. It also has authority to safeguard uniform economic and social welfare policies as well as a uniform legal system, to regulate the national currency, to control the legal tender as well as the issue of money. In many areas, the federation draws up the basic guidelines only. Thus, its legal position is relatively weak vis-a-vis the republics and autonomous provinces, since they have authority in economic and social policies, in education, science, cultural affairs, sports, public health and welfare.

Moreover, the republics and autonomous provinces are responsible for conservation and environmental protection, territorial and civil defence, and the implementation of foreign policies. They give consent to the conclusion of international agreements, implement federal laws and safeguard the uniformity of rules of law. Since the republics and autonomous provinces have been endowed with such a multitude of responsibilities of their own, a harmonization in certain spheres can be brought about only if the republics and autonomous provinces enact the same laws or if they conclude agreements or reach an understanding.

In accordance with the constitution of Serbia, adopted on 25 February 1974, the two autonomous Serbian provinces had held practically the same authority as the republic itself, ie. they were free to change their constitution, and even the Republic of Serbia could not modify its constitution without the consent of the provinces. A constitutional amendment, however, adopted by Serbia on 28 March 1989, limited the powers of Kosovo and Vojvodina.

The communes occupy a special place because the federal constitution defines them as self-governing and basic socio-political entities. They are grounded in the power and self-government of the working class and all working people. They form independent economic units, control local defence as well as all communal affairs and housing matters. Within the legal fiscal framework, the communes can introduce additional taxes and duties and use these funds independently.

2.7 Romania

Among the Central and East European countries, Romania remains the most backward in terms of economic and political liberalisation and reform. This is reflected in its administrative structure, which continues to be highly centralised. There are, at time of writing, no plans for any reform of this structure.

In accordance with the 1986 constitution, the territory of Romania is divided into counties (*judet*), cities (*oras*) and communes (*comuna*). The administrative system has two levels, with the counties constituting the largest territorial units. There are 40 such counties at the moment, and they comprise cities and communes, the basic subdivisions of the country's administrative system. The Romanian capital, the municipality of Bucharest (*municipiu Bucuresti*), is the 41st county, and consists of six urban sectors (*sector*). In addition, it has jurisdiction over the agricultural sector of Ilfov (*sector agricol Ilfov*). Cities with a larger population and greater importance in economic, socio-political and cultural matters are organised as municipalities (*municipiu*). Therefore, all county seats are municipalities of which thre are currently 56. Cities and communes may, moreover, be administratively part of a municipality or a major city in the immediate vicinity, in which case they are referred to as suburban communities (*comuna suburbana*).

2.8 Territorial sub-divisions used for regional analysis

The comparison of territorial sub-divisions between countries in Central and Eastern Europe is complex given the differing administrative systems, historical conditions and reform processes currently underway. However, insofar as possible, a comparative sub-division of territories has been produced (see Table 2.1) based on three levels which may be broadly equivalent to the NUTS (Nomenclature of Statistical Territorial Units) levels, I, II and III used in the European Community.

The Level 1 (comparable to NUTS I) designation has been applied to the two republics of Czechoslovakia, the five new *Laender* of East Germany plus Berlin, and the eight republics of Yugoslavia (the two Autonomous Provinces are a lower-level subdivision). Level 2 (NUTS II) has been applied to certain regions, districts, counties and provinces, ranging in number from 9 to 50. In Bulgaria, Hungary, Poland and Romania, this level forms the highest order territorial sub-division. In addition, it applies to the districts in East Germany and the regions of Czechoslovakia; the two Automous Provinces in Yugoslavia also fall into this category of territorial unit.

Level 3 (NUTS III) applies to lower order districts, regions and counties, but only in Czechoslovakia, East Germany and Hungary. Elsewhere, there is no significant territorial unit above the level of commune, community or mayorship.

For the purposes of the regional analysis and review in the following sections, Level 2 (NUTS II) regions have been used insofar as possible. The main exception is Yugoslavia where data is only available at the republic level and not for the two Autonomous provinces. The types and number of regions, together totalling 154, are as follows:

	Region type	Total regions
Bulgaria	8 provincial regions plus Sofia	9
Czechoslovakia	10 provincial regions plus two republic capitals, Prague and Bratislava	12
East Germany	15 districts	15
Hungary	19 counties plus Budapest	20
Poland	49 provinces	49
Romania	40 counties plus Bucharest	41
Yugoslavia	8 republics	8
Central and Eastern Europe		154

The regional names are listed by country in Table 2.2, and maps of the countries and regions are provided in Figures 2.1 - 2.8.

TABLE 2.1 : TERRITORIAL SUB-DIVISIONS IN EASTERN EUROPE

	LEVEL 1 (NUTS I)		LEVEL 2 (NUTS II)		LEVEL 3 (NUTS III)	
	Name	(No.)	Name	(No.)	Name	(No.)
BULGARIA				(1)		
			Oblast (region)	9		
CZECHOSLOVAKIA	Republic	2		(2)		
			Kras	12	Okres (district)	107
	- CSR		(region)	8	+ maesto (city)	71
	- SSR			4		36
EAST GERMANY		(3)				
	Land (State)	6	Bezirk (district)	15	Kreis (county)	189
					Kreis-freie Stadt (municipality)	26
HUNGARY				(4)		
			Megye (county)	20	Town - region	139
POLAND						
			Wojewodztwo (Province)	(5) 49		
ROMANIA						
			Judet (county)	(6) 41		
YUGOSLAVIA		(7)				
	Region	8				

Table 2.1: (continued)

Notes:

1) There are eight provincial regions with a total of 253 municipalities/communes plus the city region of Sofia (which has regional status) with 24 communes.

2) In addition to the 10 provincial regions with 107 districts, the two republic capitals, Prague and Bratislava, have the status of a region. There are also four cities (3 in the CSR, 1 in the SSR) which have a 'special status' and are subordinate to the regions. Both the two capitals and the four cities are sub-divided into 39 urban districts (29 in the CSR and 10 in the SSR).

3) The five original Laender (states) were dissolved from 1952 to 1990. During this period the highest administrative authority was the Bezirk (district). In the course of reunification, the five Laender were reinstated (with some modifications to their boundaries and those of the constituent districts). Berlin has land (city status) on the same basis as Hamburg and Bremen.

4) In addition to the 19 counties and the capital Bucharest, there are five cities (Debrecen, Gyor, Miskolc, Pecs, Szeged) with county status. The 139 town-regions, which have taken over the responsibilities of former districts, include 34 large villages with town rank. In 1988, four counties abolished the town-region level as part of a national experiment to create a two-tier (county/commune) administration.

5) The reform of the Polish territorial structure is currently under discussion with the objective of grouping the 49 voivodships into larger regions.

6) In addition to the 40 counties, the capital of Romania, Bucharest, has county status and is sub-divided into six urban sectors. At the lower level there are 56 cities with the designation of municipality (municipiu).

7) The eight regions comprise six republics and two autonomous provinces (Kosovo and Vojvodina) which are subordinate to the Republic of Serbia. The regions are divided into communes, many of which have formed urban and regional communities, e.g. the eight large cities, for certain purposes.

Table 2.2: Regions of Central and Eastern Europe

Bulgaria (Regions)

Grad Sofija
Burgas
Varna
Lovec
Mihajlovgrad
Plovdiv
Razgrad
Sofija
Haskovo

Czechoslovakia (Republics and Regions)

Praha
Stredocesky kraj
Jihocesky kraj
Zapadocesky kraj
Severocesky kraj
Vychodocesky kraj
Jihomoravsky kraj
Severomoravsky kraj
Bratislava
Zapadoslovensky kraj
Vychosdoslovensky kraj
Stredoslovensky kraj

East Germany (Bezirk)

Berlin (East)
Neubrandenburg
Rostock
Schwerin
Cottbus
Frankfurt
Postdam
Halle
Magdeburg
Dresden
Chemnitz
Leipzig
Gera
Erfurt
Suhl

East Germany (Laender)

Berlin
Mecklenburg-Vorpommern
Sachsen-Anhalt
Brandenburg
Thueringen
Sachsen

Table 2.2: (continued)

Hungary (Countries)

Bacs-Kiskun
Baranya
Bekes
Borsod-Abauj-Zemplen
Csongrad
Fejer
Gyor Sopron
Hajdu-Bihar
Heves
Komarom
Nograd
Pest
Somogy
Szabolcs-Szatmar
Szolnok
Tolna
Vas
Veszprem
Zala

Poland (Provinces)

Warszawskie
Bialskopodlaskie
Bialostockie
Bielski
Bygoskie
Chelmskie
Ciechanowskie
Chestochowskie
Elblaskie
Gdanskie
Grozowskie
Jeleniogorskie
Kaliskie
Katowickie
Kieleckie
Koninskie
Koszalinskie
Krakowskie
Kroanienskie
Legnickie
Leszczynskie
Lubelskie
Lomzynskie
Lodzkie
Nowosadeckie
Olsztynskie
Opolskie
Ostroieckie
Pilskie
Piotrkowskie
Plockie
Poznanskie
Przemyskie
Radomskie
Rzeszowskie
Siedleckie
Sieradzkie
Skierniewickie
Slupskie
Suwalskie
Szczechinskie
Tarnobrzeskie
Tarnowskie
Torunskie
Walbrzyskie
Wloclawskie
Wroclawskie
Zamojskie
Zielonogroskie

Table 2.2: (continued)

Romania (Countries)

Alba
Arad
Arges
Bacau
Bihor
Bistrita-Nasaud
Botosani
Brasov
Braila
Buzau
Caras-Severin
Calarasi
Cluj
Constanta
Covasna
Dimbovita
Dolj
Galati
Giurgiu
Gorj
Harghita
Hunedoara
Ialomita
Iasi
Maramures
Mehedinti
Mures
Neamt
Olt
Prahova
Satu Mare
Salaj
Sibiu
Suceava
Teleorman
Timis
Tulcea
Vaslui
Vilcea
Vrancea
Municipiul Bucuresti

Yugoslavia (Republics and (*) Autonomous Provinces)

Bosnia i Hercegovina
Crna Gora
Hrvatska
Makedonia
Slovenija
Srbija
Kosovo/Kosove (*)
Vojvodina (*)

Figure 2.1: BULGARIA: REGIONS

Figure 2.2: CZECHOSLOVAKIA: REPUBLICS AND REGIONS

Figure 2.3: GDR: DISTRICTS (BEZIRKE) AND SUB-DISTRICTS

Figure 2.4: EAST GERMANY: NEW STATE (LAENDER) BOUNDARIES

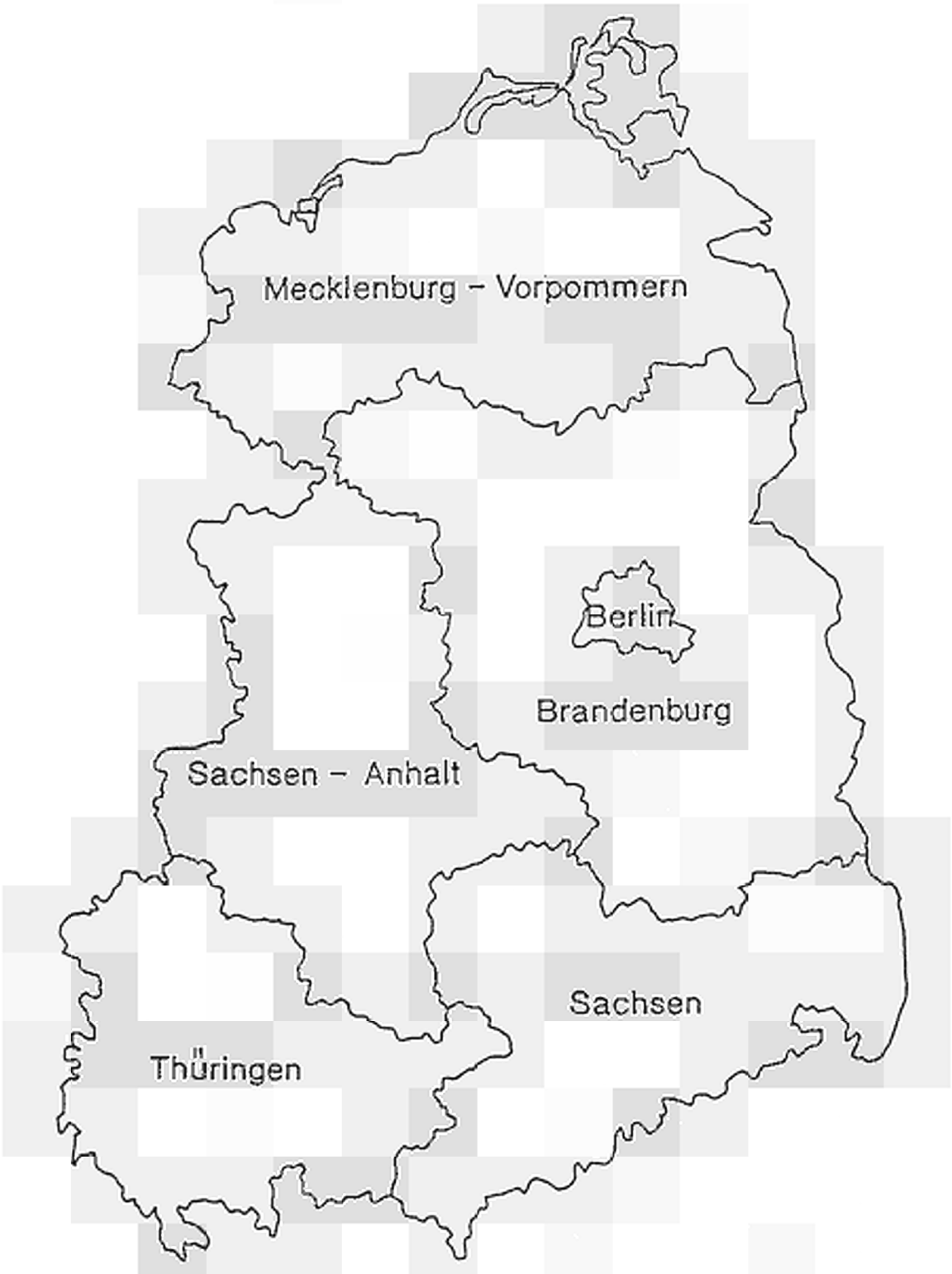


Figure 2.5: HUNGARY: COUNTIES

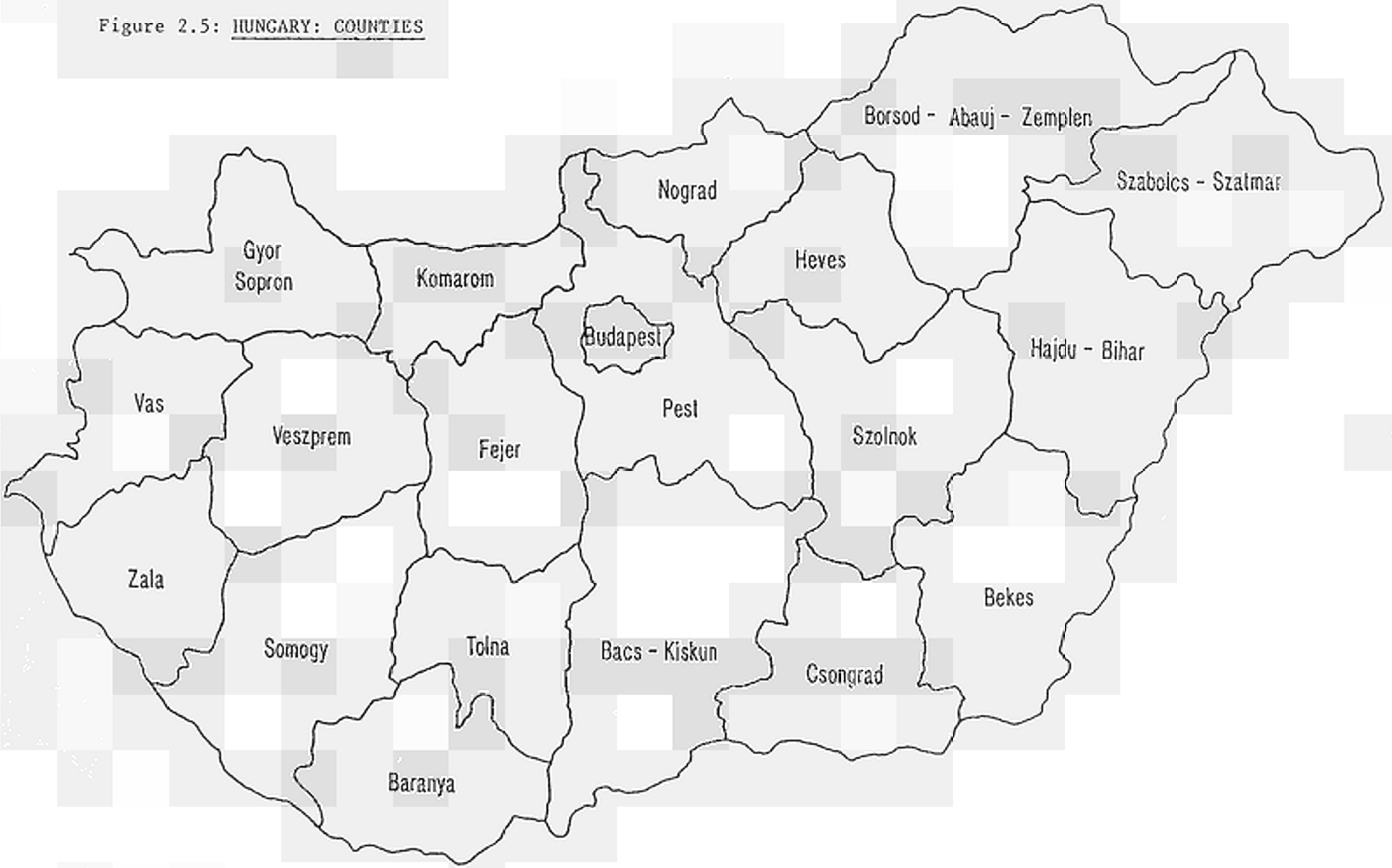
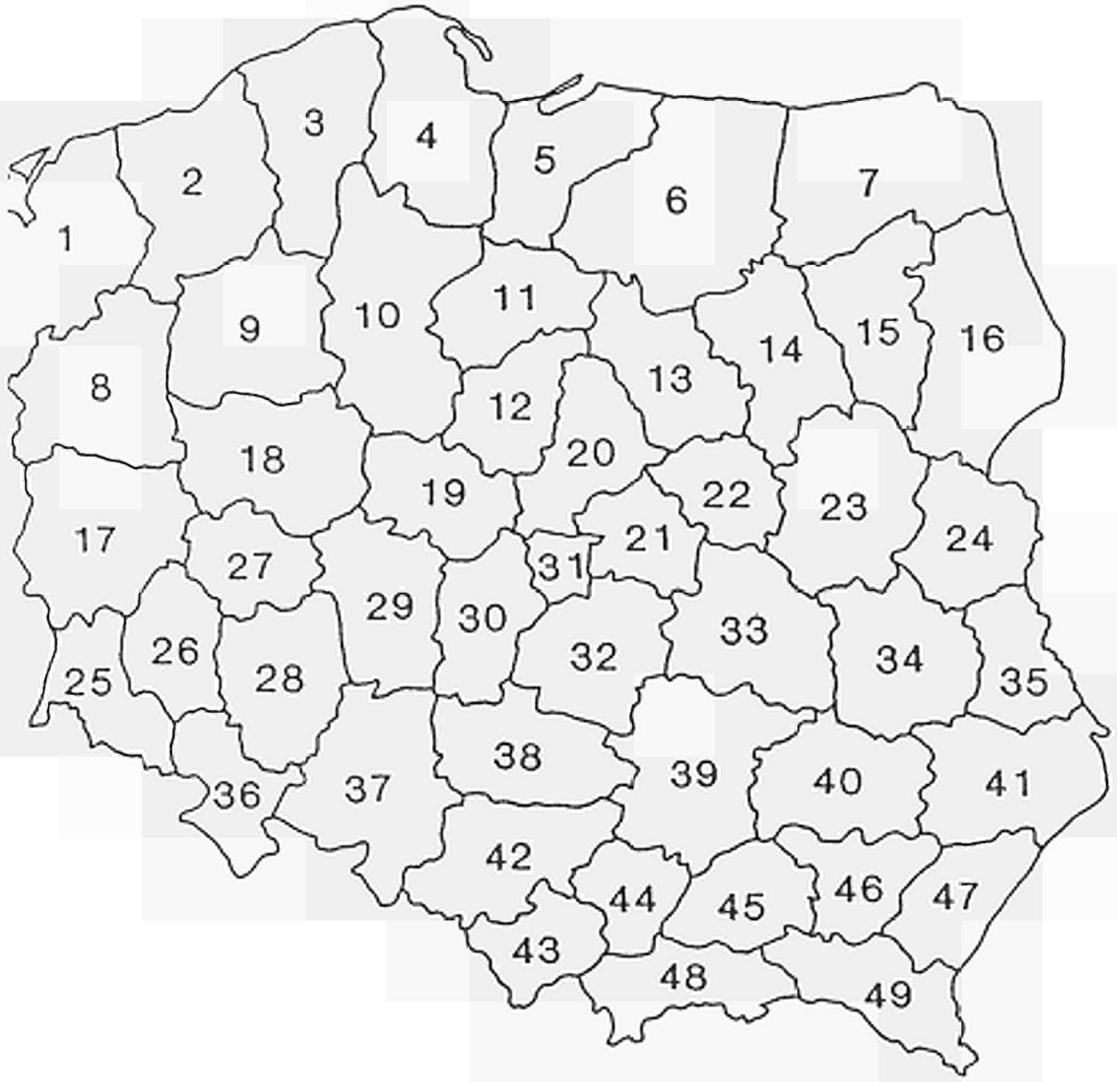


Figure 2.6: POLAND: PROVINCES



1. Szczecinskie
2. Koszalinskie
3. Slupskie
4. Gdanskie
5. Elblaskie
6. Olsztynskie
7. Suwalskie
8. Grozowskie
9. Pilskie
10. Bydgoskie
11. Torunskie
12. Wloclawskie
13. Ciechanowskie
14. Ostroieckie
15. Lomzynskie
16. Bialostockie
17. Zielonogroskie
18. Poznanskie
19. Koninskie
20. Plockie
21. Skierniewickie
22. Warszawskie
23. Siedleckie
24. Bialskopodlaskie
25. Jeleniogorskie
26. Legnickie
27. Leszczynskie
28. Wroclawskie
29. Kaliskie
30. Sieradzkie
31. Lodzkie
32. Piotrkowskie
33. Radomskie
34. Lubelskie
35. Chelmskie
36. Walbrzyskie
37. Opolskie
38. Chestochowskie
39. Kieleckie
40. Tarnobrzeskie
41. Zamojskie
42. Katowickie
43. Bielskie
44. Krakowskie
45. Tarnowskie
46. Rzeszowskie
47. Przemyskie
48. Nowosadeckie
49. Kroanienskie

Figure 2.7: ROMANIA: COUNTIES

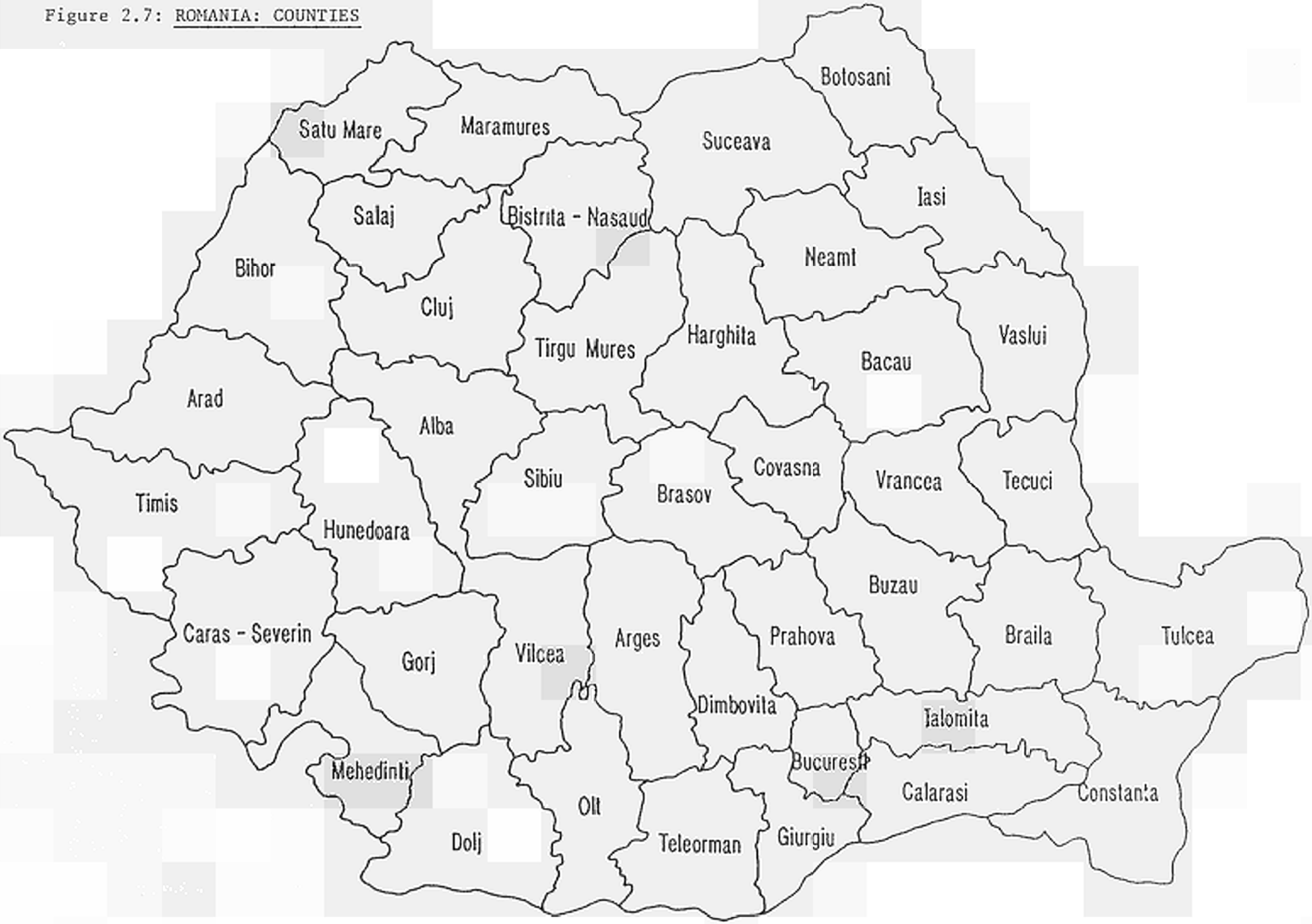


Figure 2.8: YUGOSLAVIA: REPUBLICS AND AUTONOMOUS PROVINCES

CHAPTER 3:
POPULATION AND DEMOGRAPHIC TRENDS

3.1 Introduction

The distribution, growth and composition of the population is fundamental to any analysis of socio-economic development. This section analyses the distribution of population and demographic trends in Central and Eastern Europe. It begins with an outline of the general distribution of population in the region as a whole and within individual countries. The section then examines regional population trends in terms of the components of change: natural increase (birth and death rates) and migration. The age and sex structure of Central and East European regions is also analysed.

Two points relating to the demographic analysis presented here should be noted at the outset. First, the demographic data provided in this section is more comprehensive and comparable than the other parts of the regional statistical analysis. The definitions used for population data are much more straightforward (and directly comparable with EC data) than for employment and, in particular, income and output statistics. Second, in line with the requirements of the project, the analysis provides more comprehensive information on East Germany (which is now a region of the EC) than for other Central and East European countries in the study.

3.2 Distribution of population

The population of Central and East European countries covered in the study amounts to almost 140 million (see Table 3.1). Ranked according to the number of inhabitants, the most populous country is Poland (38 mn) followed by Romania and Yugoslavia (each about 24 mn), East Germany and Czechoslovakia (about 16 mn), Hungary (11 mn) and Bulgaria (9 mn). The total population of the region compares with a total population of 324 million in the European Community (ie. the Central and East European region has c.40 percent of the EC total).

Population density in Central and Eastern Europe is relatively low compared to the European Community. The figure for the Central and East European region is three-quarters of the density in the EC, and only in East Germany is population density comparable to the Community level. Within Central and Eastern Europe, population density ranges from 81 people per sq.km. in Bulgaria to almost double the density in East Germany (154 people per sq. km).

By the end of the 1980s, all Central and East European countries had reached a relatively high level of urbanization. East Germany and Czechoslovakia led with more than 75 percent of the population living in urban areas; elsewhere the proportions ranged between 50 and 70 percent. (However, since there is no standard definition of urban population in any of the Central and East European countries, these figures should be treated with caution).

Table 3.1: National populations in Central and Eastern Europe (1988)

	Total population (mill)	Urban population (mill)	(%)	Area ('000 sq.km)	Population density (per sq.km.)
Bulgaria	9.0	6.0	(67.0)	110.9	81.0
Czechoslovakia	15.6	11.8	(75.6)	127.9	122.2
East Germany	16.7	12.8	(76.8)	108.3	154.0
Hungary	10.6	6.3	(59.4)	93.0	113.9
Poland	37.8	23.1	(61.2)*	312.7	120.8
Romania	23.1	12.6	(54.3)+	237.5	97.3
Yugoslavia	23.6	11.0	(46.5)	255.8	92.1
CEE total	136.4	83.6	(61.2)$	1246.1	109.5
EC total	323.6	-	(53.3)@	2350.0	144.0

Source: COMECON DATA; CEC Fourth Periodic Report
* Estimated data for 1987; + Estimated data for 1986
@ Third Periodic Report, CEC: Functional Urban Regions with population of at least 200,000.
$ There is no standard definition of urban population in Central and Eastern Europe. In East Germany and Hungary, urban population covers settlements with more than 2,000 inhabitants; in Poland and Romania, the definition includes settlements with 5,000 and 3,000 inhabitants respectively. National statistical yearbooks, from which the tabulated figures originate, do not provide definitions for Bulgaria, Czechoslovakia and East Germany. The figures in the table may be exaggerated; for example, an alternative estimate for the urban population in Czechoslovakia is 10.3 million (66.3 percent).

The regional distribution of population varies greatly between countries. In Bulgaria, Hungary and Romania the capital city dominates the population map. In Bulgaria, 40 percent of the population is concentrated in the south-west of the country in the capital Sofia, the surrounding region and the neighbouring region of Plovdiv; Sofia city and region alone account for one- quarter of Bulgaria's population. Elsewhere, the regional distribution is more uniform, each of the remaining six regions containing between 7 and 11 percent of the Bulgarian population.

The population distribution in Hungary is also dominated by the capital city, Budapest, which contains one-fifth of the country's population; a further ten percent is located in the surrounding county of Pest. The other counties have a relatively even distribution of population, with proportions of 3-7 percent of the national population. The exceptions are the peripheral border counties such as Vas, Zala and Nograd. Population density varies between 58.0 and 152.0 people per sq. km. among the counties; in Budapest, the density reaches 4,026 per sq.km. To a certain extent, a north-east/south-west axis divides the country, above which the counties are more industrialized and the population density is generally above-average, while below the axis the situation is reversed. (A west-east divide, along the line of the Danube, relating to infrastructure provision is also relevant - the western part of Hungary having better infrastructure than eastern areas.

In Romania, Bucharest and the south-east region of the country account for almost 40 percent of the national population. In comparison, the

central and western parts of the country have a relatively low population density, apart from major urban centres in Cluj and Brasov. As in Hungary, the peripheral border counties have some of the smallest populations, especially those in the north-west (eg. Satu Mare and Salaj).

The population pattern in Poland is dominated by individual areas, although not by the capital city. The population is generally evenly distributed across the national territory, with the important exception of the Upper Silesia region. The Katowice *voivod*ship (two percent of the country's area) is inhabited by 10 percent of Poland's population - c. 4 million people - which makes it almost twice as large as the capital city region, Warsaw (2.4 million) and nearly four times the size of the next *voivod*ships, Gdansk (1.4 m), Poznan (1.3 m) and Lodz (1.1 m). In regional terms, the highest population densities are in the central and southern parts of the country. Warsaw, Lodz and Katowic e have densities in excess of 400 people per sq.km., whereas the north-western and north-eastern areas of Poland generally have densities of less than 75 people per sq.km.

In contrast to Bulgaria, Hungary, Romania and Poland, the distribution of population in East Germany features inter-regional contrasts rather than domination by a single or few centres. The population map is characterised by a marked regional, north-south divide. The conurbations in the districts of Sachsen (Dresden, Chemnitz and Leipzig), in the south of East Germany, have a population density far above the regional average. The neighbouring *Laender* of Sachsen-Anhalt (Halle and Magdeburg districts) and Thueringen (mainly in Gera and Erfurt) are also relatively densely populated. In contrast, Mecklenburg- Vorpommern and Brandenburg contain less than 30 percent of East Germany's population between them.

The regional distribution of population in Czechoslovakia is relatively equitable among the provinces, much more so than in other Central and East European countries . The regional capitals, Prague and Bratislava, with nine and three percent of the national population respectively, do not dominate the country in population terms. The central and eastern provinces are larger in both area and population, notably South Moravia. Of importance from a constitutional/political perspective is the much larger size of the Czech Republic (which accounts for 66.3 percent of the population) relative to the Slovak Republic. If the proposal (among others) to reconstitute the historical regions of Bohemia, Moravia-Silesia and Slovakia were to be implemented, a still more balanced map of major regions would be created.

Finally, Yugoslavia also has a relatively dispersed map of population. The majority of the population is located in the republics of Serbia (40 percent of the national population) and Croatia (20 percent). With a national population density of 92 people per sq.km., only in the Autonomous Province of Kosovo (in Serbia) does density exceed 100 people per sq.km. In Macedonia and Bosnia & Hercegovina, population density is less than 74 people per sq.km. and in Montenegro under 50.

3.3 Population trends in Central and Eastern Europe

3.3.1 Population change

Population growth in Central and Eastern Europe has been substantial throughout the post-war period. Particularly during the 1970s, the growth rate in the region exceeded the rate for the European Community, although the difference has narrowed during the 1980s (partly due to the accession of Spain and Portugal to the EC). Among the Central and East European countries, there are some north-south differences: the population of the Balkan states in southern Europe has grown faster than the northern countries, with the exception of Poland (see Table 3.2). Romania, Yugoslavia and Poland had population growth rates approaching ten percent between 1970 and 1980, and 4-6 percent over the period 1981-88. In contrast, East Germany has experienced continuous decline, due to outmigration to Western Europe, over of
Hungary has also fallen during the 1980s.

Table 3.2: Population change in Central and Eastern Europe ('000)

	1970	1980	1985	1987	1988	1970-1980	1980-1988
Bulgaria	8,515	8,877	8,950	8,976	8,986	+ 4.3	+ 1.2
Czechoslovakia	14,350	15,289	15,519	15,587	15,625	+ 6.5	+ 2.2
East Germany	17,068	16,739	16,655	16,661	16,675	- 2.0	- 0.3
Hungary	10,352	10,713	10,640	10,604	10,589	+ 3.5	- 1.1
Poland	32,658	35,735	37,341	37,764	37,775	+ 9.4	+ 5.7
Romania	20,253	22,201	22,725	22,940	23,112	+ 9.6	+ 4.1
Yugoslavia	20,371	22,304	23,124	23,417	23,559	+ 9.5	+ 5.6
CEE total	123,567	131,858	134,954	135,949	136,321	+ 6.7	+ 3.4
EC*	303,118	317,906	321,922	323,634	324,646	+ 4.9	+ 2.1

Source: COMECON DATA
(*) Data provided by the European Commission

Although the national growth rates of Central and East European countries may have slowed considerably over the past 20 years, there are substantial regional variations within individual countries (see Figure 3.1). In certain regions, notably within Czechoslovakia, East Germany, Poland and Yugoslavia, a high rate of population growth (10-16 percent) has been maintained over the 1980-88 period (see Table 3.3). The disparities (calculated by subtracting the regional minimum from the regional maximum) between regions are significant: over 21 percentage points for Central and Eastern Europe as a whole, and up to 19 percentage points in Czechoslovakia alone. This reflects the fact that most countries are not only experiencing strong regional population growth, but that they also have regions with declining populations. Limited population growth is particularly evident in Hungary where the *fastest* growing region over the 1980-88 period (2.7 percent) had a growth rate considerably lower than the average for Central and Eastern Europe as a whole. The disparities are magnified in the case of Czechoslovakia, East Germany, Bulgaria and Hungary by the influence of city-regions - Prague, Berlin, Sofia and Budapest -

which tend to have extreme population change values that are untypical of the surrounding region).

Table 3.3: Population change - regional variation (1980-88) (%)

	National average	Regional maximum	Regional minimum	Regional difference
Bulgaria	+1.2	6.5	-5.2	11.7
Czechoslovakia	+2.2	16.1	-2.9	19.0
East Germany	-0.3	11.4	-3.5	14.9
Hungary	-1.1	2.7	-4.7	7.4
Poland@	+6.6	11.5	1.3	10.2
Romania	+4.1	-	-	-
Yugoslavia*	+5.6	10.6	1.8	8.8
CEE region+	+3.4	16.1	-5.2	21.3
EC region$	+2.1	9.9	-5.4	15.3

* Figures for 1985-89; @ Figures for 1980-89
+ Regional figures exclude Romania
$ Data provided by the European Commission

3.3.2 Components of population change - natural increase and decrease

The substantial natural increases in Central and Eastern Europe during the post-war period have slowed down over the past 20 years. Birth rates have fallen rapidly, and death rates also fell until 1980 after which small increases were recorded. Even so, in comparison with much of Western Europe, the rates of natural increase over the past decade have been high. This is especially true of Poland, Yugoslavia and Romania where the population increase has been 5-6 per thousand inhabitants; in the case of Romania this is partly attributable to the peculiarities of birth control policies under the Ceausescu regime. Birth rates were affected by traditional factors such as economic development levels (Bulgaria, Romania, Yugoslavia), religion (Poland, Yugoslavia) or national composition of the population (eg. higher birth rates of Slovaks and Romas in Czechoslovakia, Turks in Bulgaria, Moslems in Yugoslavia).

Birth rates average 14 per thousand population across the Central and East European region, ranging from 15-16 in Poland, Romania and Yugoslavia to less than 12 in Hungary (see Table 3.4). The international regional disparity across Central and Eastern Europe is substantial (15.1 percentage points), extending from 9.1 per thousand in Hungary to 19.5 per thousand in Poland. (This is similar to the international differences in the EC during the 1980s eg. between Ireland and West Germany). The national regional disparities are also greatest within Poland, Czechoslovakia and Hungary reflecting the existence of both economically well-developed regions (eg. Warsaw, Lodz, Prague and Budapest) and backward rural regions such as eastern Poland, East Slovakia and north-east Hungary. Over the period 1970-1988, birth rates have fallen in Central and Eastern Europe by around one-sixth, particularly in Romania and Hungary, and disparities between regions have also narrowed, although by relatively small amounts: in East Germany the disparity has remained almost unchanged. The fall in birth

rates could have been considerably greater but for official policies which attempted to increase the birth rate and the size of the workforce. The liberal approach taken to abortion in Central and Eastern Europe prior to the 1970s was reversed, first in Bulgaria (1966) and Romania (1967) followed by Czechoslovakia (1973), Hungary (1974) and Poland (1981) (Turnock, 1989a). Abortion became very strictly controlled during the 1970s and 1980s, combined with "parenthood education" and cash incentives such as child allowances (Turnock, 1989b). More extreme practices were implemented in Romania where a ban on contraception and abortion was combined with checks on married women to ensure that the required number of children was being produced, resulting in a high level of "backstreet" abortions, abandoned children and female deaths. The infant mortality rate in Romania was also the highest in Central and Eastern Europe: 31.2 per thousand live births in 1977 compared to Bulgaria (21), Czechoslovakia (19.6) and the former GDR (13.1).

Death rates average 11.3 per thousand population in Central and Eastern Europe. The main international contrasts are again between the group containing Poland, Romania and Yugoslavia (9-11 per thousand) and Hungary (13.2), a difference that is somewhat greater than in the EC. Regional disparity is also significant, ranging from almost 17 per thousand in Bulgaria to 6 per thousand in Czechoslovakia. The differences between regions are broadly similar in magnitude to those for birth rates. However, the more developed economies, for example East Germany and Hungary, have more uniform levels of death rates across the country, although the national averages are relatively high.

During the 18-year period from 1970 to 1988, death rates increased in all countries by around two percentage points, with the exception of Czechoslovakia. Apart from East Germany and Hungary, the regional variation within countries has also grown. The rise in death rates runs counter to the longer term post-war trend and reflects inadequate healthcare and environmental problems:

> "the low rate of population growth is now comparable with the West..[but]...there are disturbing rises in the death rate among middle-aged adults and certain categories of children - the result mostly of heavy smoking in the first case and environmental pollution in the second. The health services are badly funded and inefficiently run, so that the death rate is likely to increase rather than decrease" (Wallace, 1990).

The rise in the death rate also reflects the changing structure of the population. As the birth rate falls and the age structure of the population shifts towards greater numbers of older people, the death rate also increases in relative terms.

The implications of the rapidly falling birth rate and the rising death rate suggests that there may be considerable problems of labour shortage, which is already evident, as populations age.

> "the shortage of labour is partly artificial, with enterprises storing up labour reserves in case of need....[but] there is..almost bound to be a growing labour shortage that will not be eased until the East European economies are much more highly mechanized and East European labour is much better trained" (Wallace,1990).

Table 3.4: Birth rates - regional variation (1970 & 1988) (per 1,000)

	1988				1970			
	Nat. average	Reg. max.	Reg. min.	Reg. diff.	Nat. average	Reg. max.	Reg. min.	Reg. diff.
Bulgaria	13.0	14.4	11.3	3.1	16.3	18.3	13.4	4.9
Czechoslovakia	13.6	18.0	10.9	7.1	15.5	20.1	11.4	8.7
East Germany	13.3	14.8	11.3	3.5	14.0	15.3	12.5	2.8
Hungary	11.7	14.8	9.1	5.7	14.7	18.5	12.0	6.5
Poland	15.6$	18.5	10.1	8.4	13.1@	56.6	4.5	52.1
Romania	15.8*	-	-	-	21.1*	-	-	-
Yugoslavia	15.2	18.1	12.5	5.6	19.8	22.9	14.6	8.3
CEE region	14.0	16.4	10.9	5.6	16.2	25.2	11.4	13.9

* 1985 figure; @ 1975 figures; $ 1989 figure; & 1971 figures;
+ CEE regional max., min., and diff. exclude Romania.

Table 3.5: Death rates - regional variation (1970 & 1988) (per 1,000)

	1988				1970			
	Nat. average	Reg. max.	Reg. min.	Reg. diff.	Nat. average	Reg. max.	Reg. min.	Reg. diff.
Bulgaria	12.2	16.9	9.5	7.4	9.1	11.4	7.3	4.1
Czechoslovakia	11.5	13.8	8.7	5.1	11.4	15.0	8.2	6.8
East Germany	12.8	14.9	11.1	3.8	14.1	16.1	12.4	3.7
Hungary	13.2	14.4	11.7	2.7	11.6	13.3	9.9	3.4
Poland	9.5^	12.7	7.5	5.2	7.1@	36.9	2.5	34.4
Romania	10.9*	-	-	-	9.5	-	-	-
Yugoslavia	8.4	11.3	5.8	5.5	8.2$	10.1	6.1	4.0
CEE region+	11.2	14.0	9.1	5.0	10.1	17.1	7.7	9.4

* 1985 figure; @ 1975 figures; ^ 1989 figures; $ 1971 figure;
+ CEE regional max., min., and diff. exclude Romania.

Table 3.6: Natural increase - regional variation (1970-1988) (per 1,000)

				1988		
	1970	1980	1988	Reg. max.	Reg. min.	Reg. diff.
Bulgaria	7.2	3.4	1.2	3.9	-5.6	9.5
Czechoslovakia	4.3	4.1	2.4	8.7	-2.7	11.4
East Germany	- 0.1	0.4	0.1	3.6	-3.6	7.2
Hungary	3.1	0.3	- 1.5	2.3	-4.7	7.0
Poland	6.0@	7.0	6.1^	10.4	-1.1	11.5
Romania	11.6	7.6	4.9*	-	-	-
Yugoslavia	8.2&	8.4$	6.8	11.1	1.2	9.9
CEE region	5.8	4.5	2.9	11.1	-5.6	16.7

* 1985 figure; @ 1975 figures; + CEE regional max., min., and diff. figures exclude Romania. ^ 1989 figure; & 1971 figure; $1981 figure.

The national trends for the natural increase of the population (see Tables 3.6) indicate that the birth and death rates are close to cancelling each other out in several cases, particularly in East Germany and Bulgaria; in Hungary, deaths already exceed births. By contrast, Poland, Romania and Yugoslavia maintain a substantial positive natural increase in population. Poland is remarkable for the fact that only in two of the country's 49 *voivod*ships (Warsaw and Lodz) is the regional natural increase negative. However, the regional figures for Poland, Romania and Yugoslavia indicate that, in some regions, the growth of the natural population is also very marginal. Elsewhere, in Bulgaria, Czechoslovakia, East Germany and Hungary, there are substantial regional deficits in population change.

The regional disparities are wide: across Central and Eastern Europe, the rate of natural increase varies by almost 15 percentage points. Regional disparities are greatest in Poland and Czechoslovakia (>11), but range between 7 and 10 percentage points in other regions also.

3.3.3 Components of population change - migration

In the past, the controlled movement of people in Central and Eastern Europe has been an important instrument of economic development policies:

> "The movement of people is always regulated through registration formalities but migration may well be positively stimulated or constrained. Population movement is encouraged when it is necessary to fulfil the policies of governments, but discouraged when conflicts arise" (Turnock, 1989a).

However, migration in Central and Eastern Europe has, in general, only been inter-regional within countries. The exceptions relate to the repatriatiation of ethnic minorities such as Jews and ethnic Germans or temporary industrial and cultural assignments. In addition, there has been steady migration to the West with significant numbers of people moving after political upheavals eg. 1956 in Hungary, 1968 in Czechoslovakia and 1980/81 in Poland. Organized exchanges or transfers of labour between Central and East European countries have been primarily to the economically more developed countries: to the former GDR (mainly from Poland), to Czechoslovakia (particularly from Poland and Bulgaria) and, to a limited extent, to Hungary (again mainly from Poland).

Only in Yugoslavia has there been significant uncontrolled international movement of people. The estimated 870,000 Yugoslav economic migrants working abroad contrasts with the situation in Bulgaria where, according to official figures, fewer than 1,000 people left the country between 1980 and 1988, (although substantial numbers of Turkish people are known to have left in the late 1980s). Over the past two years, out-migration from East Germany (primarily to West Germany) has also become significant; around 1.5 percent of the population of the former GDR emigrated in 1989 alone. The flows slowed during 1990, but almost 240,000 East Germans emigrated to the western part of the country during the first six months of the year. It is anticipated that international migration is likely to become a serious problem for other Central and East European countries as travel restrictions are eased. Hungary is already experiencing significant problems through an influx of large numbers of immigrants from Romania, mainly of Hungarian nationality, as well as the temporary accomodation of migrants in transit.

Internal migration *within* Central and East European countries has been substantial. The available inter-regional migration data indicates that regional gains and losses have reached +/- 10 percent during the period 1980-88. Exceptionally, in East Germany, regional losses have been as high as -23 percent. Migration movement is dominated by two trends: (i) movement from backward to advanced regions; and (ii) movement from rural to urban areas.

> "The number of people moving from the rural areas to the towns has been so great that the proportion of the population living there has grown substantially in all the countries, while that in the rural area has been stationary or falling" (Dawson, 1987).

In Bulgaria, for example, the national population grew from 6.9 million in 1945 to almost 9 million in the mid-1980s. In parallel, there was a significant rural-urban shift with a reduction in the rural population from 75 to 38 percent of the national population. Between 1965 and 1975 alone, the urban population increased by 1.3 million, 700,000 of whom were rural migrants (Carter, 1987). The experience of the Central and East European countries is that the population of regions adjacent to major industrial centres - particularly village-dwellers - is more likely to migrate to these centres, and the volume of people migrating is increased in regions with a well developed transportation system.

A significant part of the trend is attributable to official government policies which promoted the growth of large towns and cities to provide the labour force for major plants and enterprises. As with other aspects of central planning, the development of settlements was planned and controlled, insofar as possible, in detail. In Hungary and Romania, for example, settlement strategies were developed involving the designation of hierarchies of settlements with population targets. Generally, emphasis was placed on increasing the size of selected towns and villages. An important feature of settlement planning has also been the creation of new towns and cities or the merging of settlements to form new "structural units" eg. in Hungary and Bulgaria. The consequence was migration up the settlement hierarchy from smaller to larger villages and smaller to larger towns.

Part of the rationale for these strategies was to divert development away from the capital cities and the largest cities where population growth was most rapid in the immediate post-war period. To relieve the over-concentration of population at the top of the urban hierarchy, lower tiers of settlements were promoted - with some success:

> "the dominance of the capital cities, as measured by their proportions of the urban population, has been weakened...although in some cases the decline has been very small; and secondly, the proportion of the urban population in the largest settlements has also tended to fall, except in East Germany, thus indicating that in general urban growth has been successfully dispersed to the smaller and middle-sized towns" (Dawson, 1987).

The scale, source and destination of migration has significant implications for the demographic structure of regions. Active migration

causes disproportionate regional birth rates as it leads to a concentration of large masses of people at industrial centres or wide-spread depopulation of large regions. A high percentage of the resettling migrants in Central and Eastern Europe are aged between 16 and 29 years, which seriously affects the age structure of the regions.

3.4 Age-sex structure

The balance of males and females is similar among Central and East European economies (see Table 3.7). Reflecting the greater life expectancy of women, females account for approximately 51 percent of national populations. The highest proportion of women is in East Germany where the the decimation of significant numbers of men during World War II still has some effect. Regional disparity is relatively small, although there are examples - in Romania, Poland and Yugoslavia - of the regional male population exceeding the number of females. The situation is particularly unbalanced in small areas of north-east Poland where the male-female ratio reaches 7:1.

Table 3.7: Population by sex - regional variation (1988) (percentage of total population)

	Males				Females			
	Nat. average	Reg. max.	Reg. min.	Reg. diff.	Nat. average	Reg. max.	Reg. min.	Reg. diff.
Bulgaria	49.4	49.9	48.3	1.6	50.6	51.7	50.1	1.6
Czechoslovakia	48.7	49.2	47.0	2.2	51.3	53.0	50.8	2.2
East Germany	47.9	48.9	47.0	1.9	52.1	53.0	51.1	1.9
Hungary	48.2	49.3	46.6	2.7	51.8	53.4	50.7	2.7
Poland	49.0	49.9	46.4	3.5	51.0	53.6	50.1	3.5
Romania	49.3	50.5	47.9	2.6	50.7	52.1	49.5	2.6
Yugoslavia*	49.4	50.7	48.4	2.3	50.6	51.6	49.3	2.3
CEE region	48.8	50.7	46.4	4.3	51.2	53.6	49.3	4.3
EC+	48.7	50.3	46.7	3.6	51.3	53.3	49.7	3.6

* 1985 figures
\+ Data provided by the European Commission.

Comparisons between population age groups in different Central and East European countries are problematic due to the differences in definition employed for assessing the working population. In East Germany and Yugoslavia, for example, the working population consists of men aged 15-64 and women aged 15-59; in Bulgaria and Czechoslovakia, however, the respective age ranges are 15-59 and 15-54.

In general, the child population comprises between one-fifth and one-quarter of the national population (see Figure 3.2). The figures are very high for Romania, reflecting the birth rate promotion policies of the 1970s and 1980s; this is also evident from the regional figures where the maximum regional child population in Romania is 30 percent. Elsewhere in Central and Eastern Europe, regional differences are relatively small.

Table 3.8: Child population - regional variation (1988) (Percentage of total population)

	Nat. average	Reg. max.	Reg. min.	Reg. difference
Bulgaria	21.0	22.8	18.1	4.7
Czechoslovakia	23.0	27.3	19.3	8.0
East Germany	19.4	22.3	17.6	4.7
Hungary	n.a.	n.a.	n.a.	n.a.
Poland	30.7	34.4	23.5	10.9
Romania	23.7	30.0	15.1	14.1
Yugoslavia	25.4	29.1	21.0	8.1
CEE region*				
EC+	18.4	28.3	11.7	16.6

* Average excluding Hungary. + Data provided by the European Commission.

Table 3.9: Aged population - regional variation (1988) (percentage of total population)

	Nat. average	Reg. max.	Reg. min.	Reg. difference
Bulgaria	21.9	30.2	16.4	13.8
Czechoslovakia	19.4	21.7	15.9	5.8
East Germany	16.2	19.6	12.7	6.9
Hungary	n.a.	n.a.	n.a.	n.a.
Poland	12.8	16.2	9.1	7.1
Romania	13.0	18.9	9.0	9.9
Yugoslavia	10.2	13.1	7.2	5.9
CEE region*				
EC+	14.2	20.1	7.6	12.5

* Average excluding Hungary. + Data provided by the European Commission.

Table 3.10: Working age population population - regional variation (1988) (Percentage of total population)

	Nat. average	Reg. max.	Reg. min.	Reg. diff.	Definitions Males	Females
Bulgaria	57.1	61.7	49.5	11.8	16-59	16-54
Czechoslovakia	57.6	61.5	56.8	4.7	15-59	15-54
East Germany	64.4	67.1	62.3	4.8	15-64	15-59
Hungary	57.3	59.0	55.0	4.0	15-59	15-54
Poland	56.6	61.0	53.1	7.9		
Romania	63.3	69.5	56.8	12.7	15-64	15-60
Yugoslavia	64.2	65.7	62.7	3.0	15-64	15-59
CEE region*						
EC+	67.2	71.2	60.7	10.5	15-14	15-14

* Average excluding Hungary + Data provided by the European Commission

The aged population accounts for c. one-fifth of the national population in Bulgaria and Czechoslovakia. Lower figures in East Germany and Romania are attributable, in the first case, to the considerable numbers of older people allowed to emigrate from the former GDR. In Romania, the figure indicates the lower life expectancy; in one region, the proportion of older people is less than 10 percent. However, as noted earlier, the proportion of older people also has to be seen in context ie. it is affected by the proportion of young people.

Overall, the working population of Central and Eastern Europe numbers 85 million, approximately 61 percent of the total population (see Figure 3.3). The figures are highest in Poland, Romania and Czechoslovakia where birth rates are consistently high.

It is anticipated that the relative proportion of the productive age groups will expand temporarily as the birth rates continue to decrease. However, as noted earlier, the ageing of the population is likely to produce age structures similar to those being experienced in West European countries.

3.5 Future population trends

Estimates in the late 1980s suggested a seven percent increase in the population of Central and Eastern Europe to bring the population of the region up to c.146 million by the year 2000 (see Table 3.12). However, it is likely that this is an overestimate, taking no account of the economic and political liberalisation process leading to the emigration of substantial numbers of East Germans and the abandonment of the Ceausescu birth rate promotion policies in Romania. For example, the current projection for Czechoslovakia is 16.1 million for the year 2000 and 16.9 million for 2030.

Table 3.11: Population projections

	National population		Projected increase	
	1988 (mill)	2000* (mill)	No. (mill)	(%)
Bulgaria	9.0	9.7	0.7	7.8
Czechoslovakia	15.6	16.8	1.2	7.7
East Germany	16.7	16.6	- 0.1	- 0.6
Hungary	10.6	10.9	0.3	2.8
Poland	37.8	41.4	3.6	9.5
Romania	23.1	25.6	2.5	10.8
Yugoslavia	23.6	25.2	1.6	6.8
CEE region	136.4	146.2	9.8	7.2

*Projections from Turnock (1989) based on US forecasts

Currently, population growth in Central and East European countries is projected as being under one percent a year - considerably less than in

past years. The ageing of the population is likely to be an important characteristic of demographic trends, though much less so than in some EC countries. The proportion of people aged over 64 is forecast as increasing from the current level of 11 percent to 16 percent in 2025, with a similar decline in the proportion of children.

Perhaps the biggest population problem for the Central and East European countries is the anticipated loss of people. Birth rates are likely to continue to fall, especially if improved contraception and abortion facilities become available, and death rates should also decline again with better diet and improved hygiene and medical care. Economic growth and urbanisation should continue to encourage smaller families and relatively low marital fertility, as has already occurred in Hungary and East Germany. However, greater freedom to travel is the most immediate significant influence in the distribution of population. The European Community and other West European countries such as Austria are likely to increase border security and tighten immigration laws, but economic migration from Central and Eastern Europe may still be very significant.

Figure 3.1: POPULATION CHANGE 1980/89

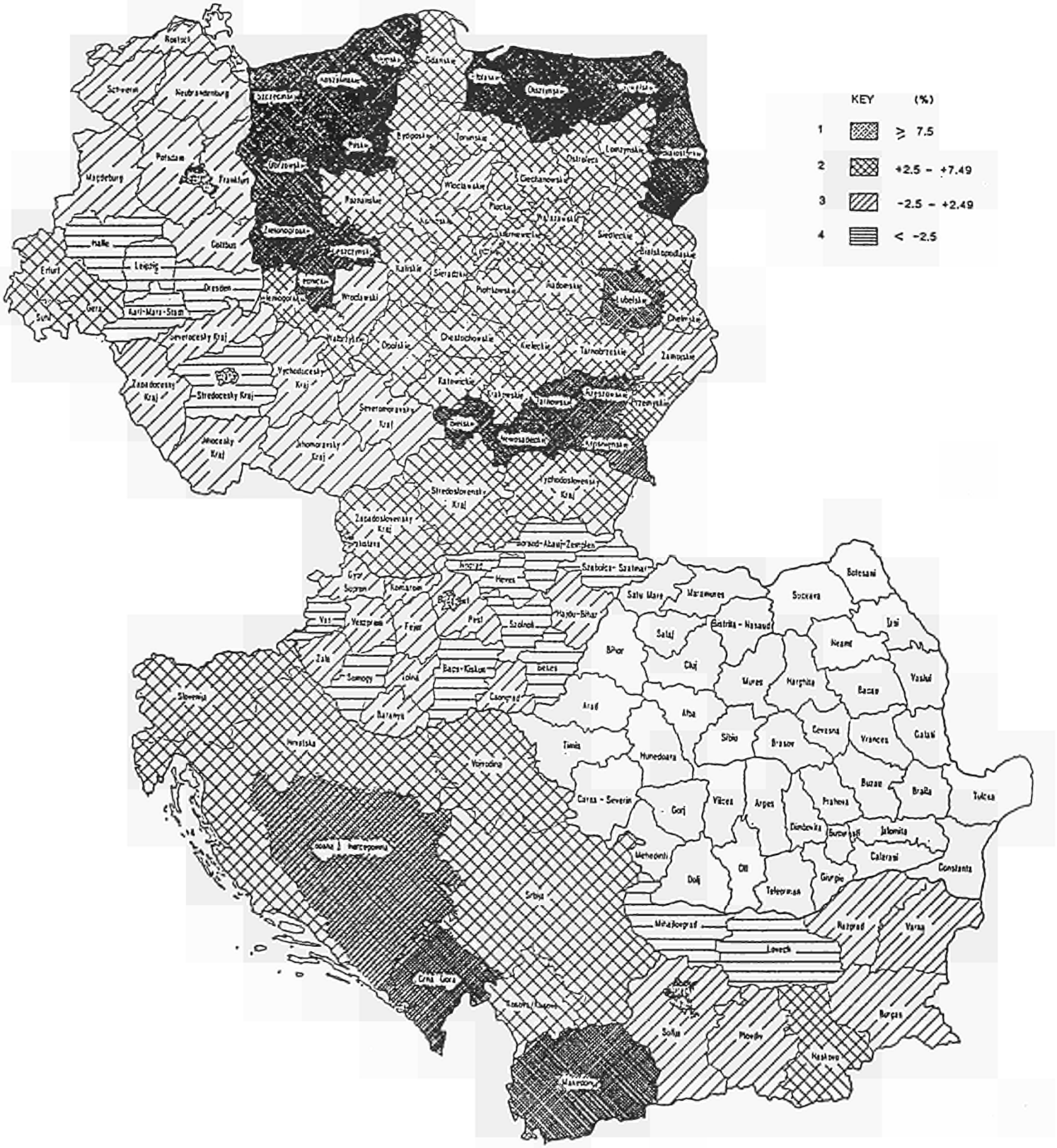


Figure 3.2: CHILD POPULATION 1988/89

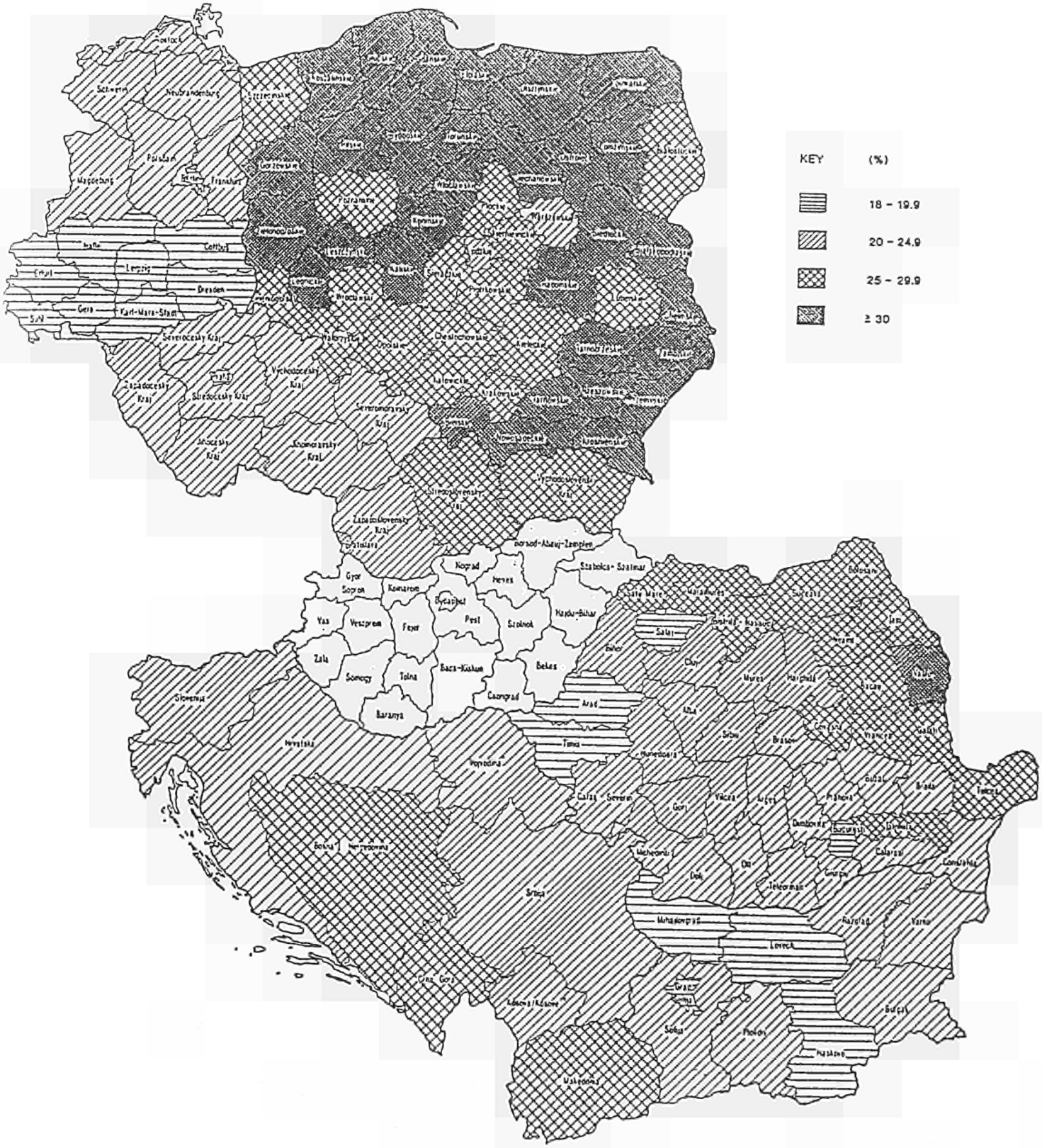
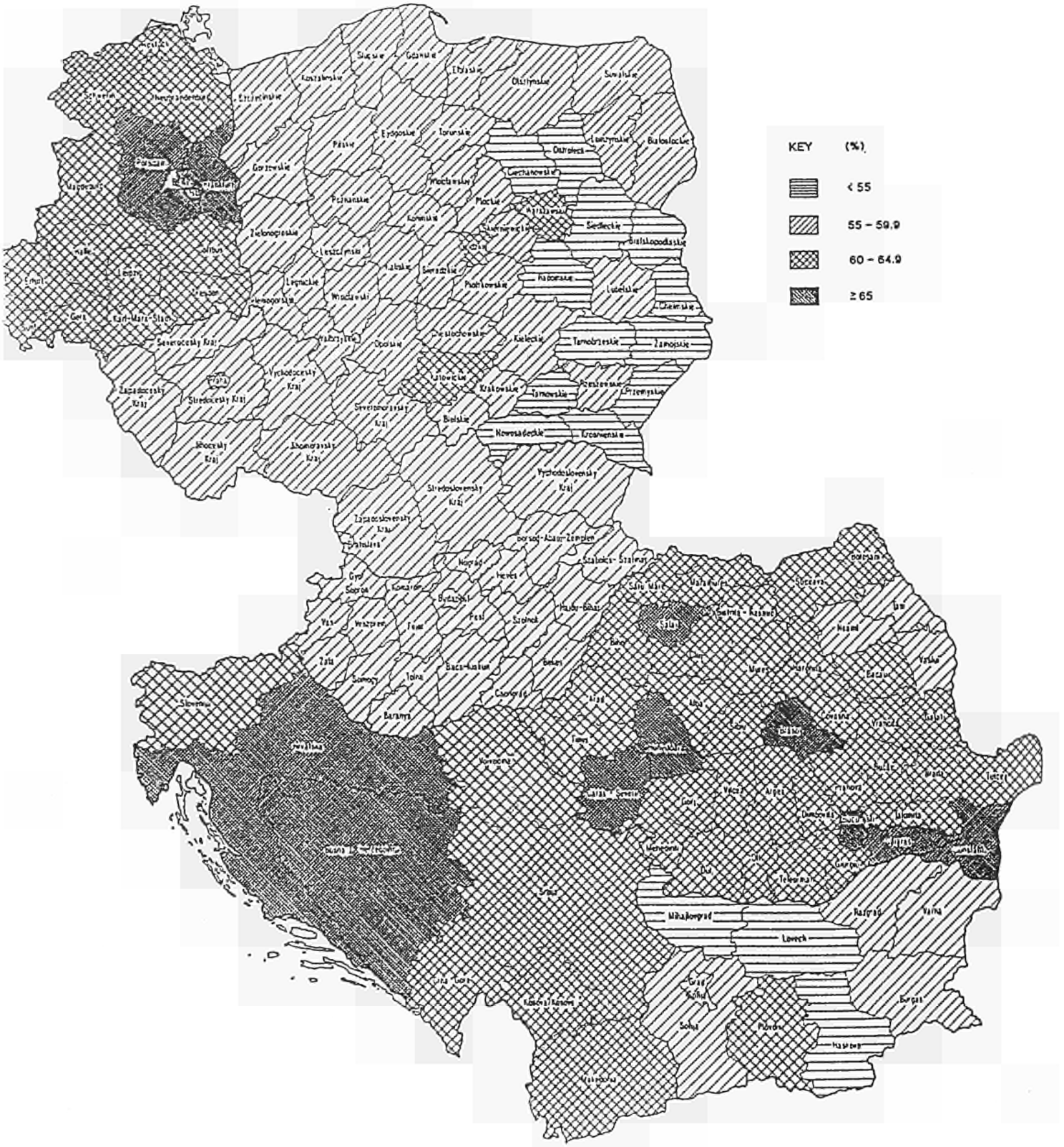


Figure 3.3: WORKING AGE POPULATION 1988/89



CHAPTER 4:
EMPLOYMENT

4.1 Introduction

The structure of economic activity in Central and Eastern Europe is distinguished by the high shares of primary and secondary employment. This section examines regional differences in employment structure among the countries and regions of Central and Eastern Europe. The section is divided into three parts. First, a review of national employment patterns is provided in terms of the main employment indicators and a comparison of employment sectors and industrial and service subsectors. Regional disparities in the main employment sectors are then discussed followed by country-specific details of the main employment characteristics and regional differences within individual countries.

4.2 National employment patterns

All countries in Central and Eastern Europe have relatively high labour participation ratios (the share of employed persons in the total population). The ratios range from 53.5 percent in the former GDR; 49 percent in Bulgaria and Czechoslovakia; 45-47 percent in Poland and Romania; 41 percent in Hungary; and 29 percent in Yugoslavia (but for the socialist sector only). In addition, the labour participation of the female population has been extremely high in virtually all the countries of the region.

The share of industrial employment exceeds 35 percent in all countries except Poland (see Table 4.1). The highest shares (39 percent) are to be found in Czechoslovakia and Yugoslavia. However, a viable comparison is biased by different definitions of employed persons; in general, only the employees of state enterprises are included. The exclusion of the private sector from official statistical reporting did not play a major role until very recently (with the exception of Yugoslavia and countries with a large share of private agriculture such as Poland), but this will be an important issue to be addressed by statistical authorities as the transition to a market economy proceeds.

Taking into account these (and other) methodological deficiencies of available employment data, a more appropriate picture regarding the employment structure is provided by an analysis of data on economically active persons, although such data are also not free from bias. Comparison is hampered by the different age coverage of "active" persons, and also by different numbers of non-active persons (pensioners) who are still working - mainly in agriculture. In Czechoslovakia, for example, employed non-active persons represented almost 10 percent of total employment at the end of the 1980s; in addition, economically active persons include women on maternity leave and army conscripts.

According to the economic activity data (see Table 4.2), the

employment structure of Central and East European countries has at least 30 percent of economically-active persons employed in industry. Bulgaria, Czechoslovakia, East Germany and Romania all have 37-38 percent of the economically active in the industrial category. Hungary, Poland and Yugoslavia have lower industrial shares (29 and 24 percent respectively) mainly because of the greater importance of agriculture, in employment terms, in these countries.

Table 4.1: Main employment characteristics (1988-89)

	Total employment ('000s)	Total employment as total share of population (%)	Industrial employment as share of total population (%)
Bulgaria	4,370	49.3	35.2
Czechoslovakia	7,674	49.0	38.5
East Germany	8,886	53.3	37.3
Hungary	4,338	41.0	32.5
Poland	17,130	45.0	28.6
Romania	10,946	47.2	38.1
Yugoslavia*	6,876	29.0	39.5

Source: WIIW (*) socialist sector only

Table 4.2: Economically-active persons by economic sectors (1989) - sub-sectors as percentage of total employment

	Total employment ('000s)	Ind. (%)	Con. (%)	A.F.F. (%)	Trans. (%)	Comm. (%)	Non-prod. sectors (%)
Bulgaria$	4,468	38.0	8.3	19.3	6.7	8.7	18.1
Czechoslovakia	8,199	37.3	9.9	11.4	6.4	9.9	21.4
East Germany	8,547	37.3	6.6	10.8	7.5	10.3	21.6
Hungary	4,823	30.4	7.0	20.0*	8.3	10.8	22.5
Poland	16,854	29.0	7.8	27.7	5.8	8.7	18.5
Romania	10,946	38.1	7.4+	28.9+	6.8+	5.8+	12.5+
Yugoslavia@	9,359	23.6	7.3	28.7	4.7	8.9	26.7

Source: WIIW
(*) Includes water management; (+) Percentages based on 1985 data.
($) 1988 data; (@) 1981 data.

Table 4.3: Economically-active persons by economic sectors - percentage change (1980-89) in total employment and sub-sectors

	Total employment (%)	Ind. (%)	Con. (%)	A.F.F. (%)	Trans. (%)	Comm. (%)	Services (%)
Bulgaria$	2.4	10.4	-4.0	-18.6	-1.7	10.0	12.2
Czechoslovakia	5.5	3.7	9.3	-12.8	4.8	10.7	17.2
East Germany	3.9	1.9	-3.9	5.1	4.2	3.2	11.6
Hungary	-4.9	-13.6	-16.1	-13.4	-1.7	6.4	13.0
Poland	-2.7	-6.7	-1.4	-11.8	-12.5	-11.8	17.0
Romania	5.8	13.3+	8.2+	-0.9+	1.5+	-0.5+	4.2+
Yugoslavia	-	-	-	-	-	-	-

Source: WIIW ($) 1988 data
(*) Includes water management; (+) Percentages based on 1980-1985 changes.

Key:
Ind = Industry
Con = Construction
AFF = Agriculture, forestry & fishing
Trans = Transport & communication
Comm = Trade & commerce

To analyse the importance of industrial sub-sectors, economic activity data is not available, and figures for "employed persons" have to be used instead. Clearly, there are differences between the total industrial employment figures given in Table 4.4 and those presented in Table 4.2 above. The relative orders of magnitude are, however, the same. According to the data in Table 4.4, the industrial employment structures are similar between Central and East European countries. The major difference is the high concentration of industrial employment in the engineering sector in Romania and Czechoslovakia, and there is a high level of energy employment in East Germany (one-third of Central and East European energy employment), mostly located in the south-east of the region on the Polish and Czech borders.

With respect to the employment share of **agriculture, forestry and fishing** in Central and Eastern Europe, the countries of the region can be divided into three categories. East Germany and Czechoslovakia have the smallest agricultural sectors, with only 10-11 percent of the economically active employed in this sphere. Occupying a "median position" with 19-20 percent are Bulgaria and Hungary. The largest agricultural employment shares are in Poland, Yugoslavia and Romania with percentages of 28-29 percent.

The relatively high share of employment in the so-called "productive sectors" of the economy (agriculture, industry, construction, part of transport, communications and trade) contrasts with low employment shares in **services** (see Table 4.5). These so-called "non-productive" sectors include passenger transport and communications, the housing sector, education, health, culture, financial services and state administration. The non-productive employment shares are generally in the range 18-23 percent of total employment. The exceptions are Yugoslavia where the figure is 27 percent and Romania, where the service sector is extremely small (13 percent).

Table 4.4: Employed persons by economic sectors - industrial sub-sectors (1989) as a percentage of total employment

	Total employ. No.	Total industry (%)	Energy (%)	Ferrous metal (%)	Eng. (%)	Chem. (%)	Text. (%)	Food (%)
Bulgaria	4,061	38.4	0.9	1.0	8.4	2.4	2.9	4.4
Czechoslovakia*	7,033	40.0	1.0	2.5	16.7	2.4	3.0	3.1
East Germany	7,544	42.7	3.0	1.8	12.8	4.4	2.8	3.7
Hungary	3,940	34.4	1.1	1.8	11.2	2.8	2.3	5.2
Poland	11,196	36.2	1.1	1.3	11.6	2.5	2.9	3.7
Romania+	7,661	46.8	0.7	1.9	17.2	3.3	5.3	2.9
Yugoslavia	6,876	39.5	1.3	1.1	11.9	3.0	6.9	4.0

Source: WIIW. (*) 1988 figures. (+) 1985 figures.

Key: Eng = Engineering Chem = Chemicals
Text = Textiles

Table 4.5: Economically-active persons by economic sectors - non-productive sectors (1989) as percentage of total employment

	Total non-prod. sectors (%)	Housing local admin (%)	Science research (%)	Arts Educ. (%)	Health social welfare (%)	State admin. finance (%)
Bulgaria	18.1	2.3	2.0	7.2	4.7	1.9
Czechoslovakia	21.4	4.1	2.3	7.8	5.3	1.9
East Germany	21.6	-	-	-	-	-
Hungary	22.5	-	-	-	-	-
Poland	18.5	3.8	0.6	6.1	5.4	2.6
Romania+	12.5	4.1	1.3	3.9	2.7	0.5
Yugoslavia*	26.7	-	-	-	-	-

Source: WIIW
(+) Percentages based on 1985 data. (*) 1981 data.

Redefining the "services sector" to include transport and communications as well as trade and commerce along with the non- productive sectors produces rather larger shares of service employment. Thus, Czechoslovakia, East Germany, Hungary and Yugoslavia have service employment shares of around 40 percent; Bulgaria and Poland have c.33 percent; and Romania has service employment of 25 percent. However, allowing for differences in data definition, the employment shares for services are still extemely low in Central and Eastern Europe, reflecting the underdevelopment of the service sector in all countries of the region. A recent OECD study on services in Central and East European countries (Zienkowski, 1990) stresses the low share of employment in the service sector (and low share of gross value added) when compared with developed and developing economies. This is particularly true of market services. Whereas the employment share of government services is about the same in Central and East European states and OECD countries, the share of employment in market services is considerably higher in OECD countries. The underdevelopment of the service sector is perceived to constitute a

substantial bottleneck to the efficient functioning of the economy and the development of the private sector, although it also creates a considerable potential for future growth and the absorption of workers laid off by the over-staffed industry.

The employment structure has remained relatively stable over the past decade (see Table 4.3). Although there has been a general trend in most countries for economic activity in industry to increase or, at least, be maintained at a high level, there are "north-south" differences across the region. Over the period 1980-89, among the Balkan states, the share of industrial employment increased by between two and three percent - in Yugoslavia (37 to 39 percent), Bulgaria (35 to 38 percent) and Romania (36 to 38 percent). By contrast, in the north of the region, the industrial share remained almost static (38 to 37 percent in the former GDR and Czechoslovakia) or declined - in Hungary (34 to 30 percent) and Poland (30 to 29 percent).

Over the same period, the share of economically active persons in agriculture (including forestry) declined almost everywhere. Apart from Czechoslovakia, where the agriculture share remained constant (10.8 percent), agricultural employment fell by 2-3 percent, especially in Bulgaria and Romania.

4.3 Regional disparities

The regional disparities in the employed population for the three main sectors are presented in Tables 4.6, 4.7 and 4.8. These relate to industrial employment (comprising industry and construction), the share of agriculture, forestry and fishing, and service employment incorporating the non-productive sector as well as transport and communications and trade and commerce.

The regional industrial employment shares (see Table 4.6 and Figure 4.1) average 41 percent for Central and Eastern Europe as a whole but with an extremely wide regional disparity (of almost 50 percent) ranging from 12 percent in Poland to 61 percent in Poland and Romania (*Brasov*). The very wide range is mostly attributable to the regional differences within Poland where there are several regions with very low industrial employment shares; seven *voivod*ships have an industrial employment share of less than 20 percent (eg. Bielskie, Chelmskie, Ciechan, Lomzyn) all of which are in the eastern part of the country. At the other end of the scale, Poland also has heavily industrialised big city regions, such as Katowice and Lodz with in excess of half of the employed labour force engaged in industry and construction.

In Romania, the very low industrial employment share of 26 percent (in Ialomita) is more exceptional. As the national average indicates, there is a high industrial employment share across the country. Over half of the Romanian counties have an industrial employment share greater than 40 percent, and six (Brasov, Harghita, Hunedoara, Prahova, Sibiu and Bucharest) have more than 50 percent of employees in industry and construction.

Regional disparities in industrial employment are more limited in Bulgaria and Yugoslavia, partly because of the small number and relatively large size of the regions for which data is available. Regional

differences in employment in industry and construction are, therefore, only 10-15 percent. For **Czechoslovakia** and **Hungary**, industrial employment disparities are somewhat higher (20 percent). In Czechoslovakia this is primarily due to the low industrial employment shares of Prague (36 percent) and Bratislava (35 percent) both of which have significant service sectors; excluding these regional capitals reduces the regional disparities to the level of Bulgaria. In Hungary, the capital city has a significant industrial employment share (40 percent), and the country's regional disparity is a consequence of the bias of industrial development towards the northern parts of the country - especially the contrast between regions like Fejer and Borsod-Abauj-Zemplen (where more than 45 percent of employees are engaged in in industry and construction) and the southern counties of Somogy, Szabolcs and Bacs-Kiskun, where industrial employment is around 30 percent or less.

For **East Germany**, the north-south divide that has been referred to in other sections is again evident in regional industrial employment shares. All of the districts (with the exception of Magdeburg) in the southern *Laender* have industrial employment shares in excess of 50 percent - in Chemnitz as high as 59 percent. By contrast, many northern districts have an industrial employment share of 35 percent or less, mainly in the *Land* of Mecklenburg-Vorpommern.

Table 4.6: Regional disparities in employment - industrial employment share of total employment*

	National average (%)	Regional maximum (%)	Regional minimum (%)	Regional difference (%)
Bulgaria	46.3	51.8	41.6	10.2
Czechoslovakia	46.1	55.0	35.3	19.7
East Germany	47.0	58.5	30.1	28.4
Hungary	38.6	47.8	28.2	19.6
Poland	36.4	60.9	12.0	48.9
Romania	40.2	61.4	25.8	35.6
Yugoslavia	33.1	43.1	28.8	14.3
CEE region	41.1	61.4	12.0	49.4

(*) Includes construction.

Table 4.7: Regional disparities in employment - agricultural employment share* of total employment

	National average (%)	Regional maximum (%)	Regional minimum (%)	Regional difference (%)
Bulgaria	19.3	26.2	1.8 (18.1)	24.4 (8.1)
Czechoslovakia	13.7	21.1	2.0 (8.8)	19.1 (12.3)
East Germany	10.8	26.8	1.1 (8.1)	25.7 (16.7)
Hungary	16.0	32.3	0.7 (15.0)	31.6 (17.3)
Poland	28.9	61.3	6.0 (15.6)	55.3 (45.7)
Romania	27.9	48.1	3.8 (11.4)	44.3 (36.7)
Yugoslavia	30.7	38.4	14.6 (@)	23.8 (@)
CEE region	21.0	61.3	0.7 (8.8)	60.6 (52.5)

(*) Figures in brackets are the regional minima excluding the capital city region. (@) No city region.

Table 4.8: Regional disparities in employment - services employment share* of total employment

	National average (%)	Regional maximum (%)	Regional minimum (%)	Regional difference (%)
Bulgaria	34.9	53.0	28.2	24.8
Czechoslovakia	40.2	62.1	35.3	17.1
East Germany	42.3	63.9	35.3	28.6
Hungary	45.5	83.6	37.8	45.8
Poland	34.2	46.6	22.7	23.9
Romania	27.0	43.1	16.8	20.1
Yugoslavia	35.1	49.1	31.2	17.9
CEE region	37.0	83.6	16.8	66.8

(*) Includes transport & communications and trade & commerce.

Note: In the above tables, data relates to: 1989 for Bulgaria, East Germany and Czechoslovakia; 1988 for Hungary; 1990 for Romania; 1986 for Poland; and 1981 for Yugoslavia.

To a certain extent, regional disparities in agricultural and service employment in Central and Eastern Europe mirror those of industrial employment (see Figure 4.2). With respect to agriculture, extremely low regional minima are recorded for agricultural employment in the capital cities or major secondary cities (Bratislava in Czechoslovakia and Katowice and Lodz in Poland). Thus, in Table 4.7 the regional minima have also been calculated excluding the major urban area regions (figures in parentheses).

Across Central and Eastern Europe, the national average for agricultural employment is high - almost one-quarter of all employees are engaged in agriculture, forestry and fishing, and in both Poland and

Romania the share exceeds one third. Regional disparities are relatively limited in most countries (once major city regions are excluded). The most striking exception is Poland where the maximum regional agricultural employment share exceeds 60 percent (in Zamojskie), and eight further *voivod*ships have more than half of all employees working in the agricultural sector. The scale of agricultural employment in Poland, and the potential consequences of restructuring, are evident from the fact that more than half of the country's voivodships have an agricultural employment share of more than one third of total employed persons.

In Romania, agricultural employment is also very significant. Over one-third of Romanian counties have agricultural employment shares greater than 33 percent, and several counties (Botosani, Giurgiu and Ialomita) have almost half of all employees in agriculture. However, elsewhere in Central and Eastern Europe, the areas with higher levels of agricultural employment are more limited: Macedonia and Serbia in Yugoslavia, and Bacs-Kiskun in Hungary.

Lastly, it was noted earlier that the service sector is relatively small in Central and Eastern Europe; the average for the region as a whole is 34 percent (see Table 4.8 and Figure 4.3). The higher shares (of around 50 percent or more) are in the capital city regions - Sofia, Prague, Bratislava, Berlin, Budapest and Warsaw. Outside these cities, the regional service employment shares are considerably smaller - less than 40 percent in Hungary, East Germany and Yugoslavia, and less than 35 percent in Bulgaria, Romania and Poland.

4.4 Employment patterns and trends : national conditions

The preceding discussion has been based on international comparative data provided by the Vienna Institute for Comparative Economic Studies (WIIW). The following review of national conditions is based on country-specific data and information; consequently the definitions and figures may differ.

4.4.1 Bulgaria

Employment in the state sector amounted to 4.96 million in August 1989, approximately 88 percent of the economically active population. Within the state sector, 36.9 percent of employees worked in industry, 18 percent in agriculture, 7.8 percent in construction, 8.9 percent in trade and 12.4 percent in education, health, social services and tourism. The number of working females was slightly higher than that of males, especially in communications, trade, education, health and social service sectors.

During the post-war period, employment has increased as a result of the extensive development of the economy and the increase in the economically active population up to and including 1985. However, the rate of increase has been slowing down since the mid-1960s and, due to the deteriorating age structure of the population, 1988 was the first year to register a lower employment level than the previous year. Demographic projections indicate that the Bulgarian labour force will decline until 2010, a trend which has been aggravated further by the exodus of the

country's Turkish minority.

The recent decline is most apparent in the productive sphere (ie. mainly the primary and secondary sectors), although the industrial component has continued to maintain employment growth. The decrease is most evident in the districts of Lovech, Mihaylovgrad and Bourgas and, more recently, in the districts of Razgrad and Sofia as well.

In contrast to the productive sector, the numbers employed in the non-productive sphere has increased two-fold over the last two decades, and the relative share of the non-productive sector rose from 12.6 percent in 1965 to 18.5 percent in 1988. This trend has affected all the regions of the country, with the largest increases in employment in science, health, social security, sports, tourism, education and culture. Sofia has seen the most significant gains in all these sub-sectors.

4.4.2 Czechoslovakia

Total employment was 7.67 million in 1989, of which over two-thirds (68 percent) was in the Czech Republic and just under one-third (32 percent) in the Slovak Republic. The level of industrialisation has historically been higher in the Czech than in the Slovak Republic. Thus, in 1989 the share of industrial employment, including coal mining, oil extraction and electricity and gas production, amounted to 38.4 percent on average, but was much greater (40.4 percent) in the Czech Republic than in the Slovak Republic (34.4 percent). However, this difference has narrowed considerable during the post-war period: in 1948, the respective industrial employment shares were 34.9 percent (Czech Republic) and 14.8 percent (Slovak Republic).

The converse situation applies to agricultural employment. The national employment share in agriculture and forestry was 13.7 percent in 1989, with figures of 12.4 percent for the Czech Republic and 16.3 percent for the Slovak Republic. The former, extremely high dependency of the Slovak Republic on agriculture is evident from the 1948 employment situation, when 60 percent of employment was accounted for by agriculture (33.1 percent in the Czech Republic).

Among other sectors, the non-productive sector accounted for 33 percent of employment in 1989 with little difference between the two republics.

Disaggregating the available industrial employment data according to the ISIC classification shows the following employment structure (1988) for the manufacturing sector: among the 1.84 million blue-collar workers in national industries, the largest employment share is accounted for by machinery (18 percent) followed by textiles and clothing (11 percent), transport equipment (9 percent), food, beverages and tobacco (9 percent), chemicals (7 percent), metallurgy and mining (each with 8 percent) and electrical machinery (6 percent).

The highest concentration of industrial employment is in North Moravia (49.4 percent), principally in heavy industries which account for more than half of Czechoslovakia's employees in hard coking coal and ferrous metallurgy. North Bohemia has the second largest concentration (45.2 percent) with the largest brown coal deposits, the highest concentration of coal power stations, important chemical plants in its western area, and

textile factories in its eastern area. In Slovakia, the highest share of industrial employment is in Central Slovakia (40.8 percent) where there is a large concentration of the armament industry which is now affected by conversion to civil production, and non-ferrous metallurgy. The South Moravian province, centred on Brno, has 41.1 percent of its workforce engaged in industry, mainly in the engineering sector - 159,500 employees, representing 20 percent of the entire Czechoslovak engineering industry. (Engineering does not include electrical machinery, electronics and "metal working" industries). The textile industry is concentrated in East Bohemia, particularly in the mountainous districts along the Polish border.

In the capital, Prague, 52.6 percent of all employees work in non-productive sectors such as government administration and services of various kinds, but there is also a considerable share of industrial employment (24.5 percent, of which almost half is in engineering).

4.4.3 East Germany

The share of economically active people in the working age population has traditionally been high in East Germany - c.80 percent during the 1980s. Regionally, there is a slight north-south tendency towards a higher labour participation ratio, which is partly a consequence of differences in female employment (especially high in Dresden, Chemnitz and Suhl).

A notable feature of the East German employment structure is the high - and until 1989 even growing - share of industrial employment (1989: 37.4 percent). A further 17 percent was accounted for by non-productive sectors, 13 percent in agriculture and forestry, and 11 percent in trade. Among industrial sub-sectors, the most important was machinery and transport equipment, with 30 percent of all industrial employees; together with light industry (15 percent), the electrotechnical industry (14 percent) and chemicals (10 percent), it accounted for almost 70 percent of industrial employment.

The regional structure is characterized by a high share of industrial employment in the south, especially Sachsen, by the importance of agriculture in the northern part of the region, and by the concentration of the tertiary sector in Berlin.

Among the southern states, Sachsen has the highest concentration of industry (44 percent of employment in 1989) and a heterogenuous industrial structure - machinery, light industry and textiles. The share of industrial employment in Thueringen was only slightly lower (43 percent), the most important sectors being the electrotechnical industry, electronics and instruments as well as light industry. Neighbouring Sachsen-Anhalt also had a high concentration of industry (39 percent), especially in the chemicals sub-sector in the Halle district, where 40 percent of all employees in the East German chemicals industry was based.

Elsewhere in East Germany, industry was less important. Mecklenburg-Vorponnen in the north of the region, had an industrial employment share of only 23 percent in 1989, concentrated in shipbuilding and the food and beverages industries. The notable feature of the area's employment structure was the continued high share of agricultural employment (20.2 percent of employees - rising to over 50 percent in some districts). In Brandenburg, the share of industrial employment is also lower, but primary sector employment in mining (brown coal) and energy is

high. Lastly, in Berlin, industry plays only a minor role (25 percent of employment) with the predominance of administrative, trade and service employment.

4.4.4 Hungary

Total employment in Hungary was 4.82 million at the end of 1989, of which three-quarters was in the productive sector. Industry accounted for 37.5 percent of employment, agriculture and forestry for 18.4 percent, and transport, communications and trade for 22.4 percent. Employment in the non-productive sector (1.04 million) was mainly in education (7 percent of total employment), health (5 percent) and personal services (4 percent).

With respect to the regional employment patterns, in absolute terms the greatest number of industrial employees was in Budapest (300,000 employees) which historically has dominated the industrial structure of the country. Since natural resources available for use as industrial raw materials were located in a concentrated area in the centre-north of Hungary, an uneven regional industrial development pattern emerged - for instance, in 1920, around 48 percent of industrial employees worked in Budapest. The capital's dominance was increased by the break-up of the country. Although a dispersal of industrial employment occurred during the post-war period, the highest concentration of industry has remained in the north of the country, in and around the capital and particularly in the districts of Borsod-Abauj-Zemplen (with an industrial employment share of 41 percent of total employment at end-1988), Fejer (42 percent) and Komarom (40 percent).

Disaggregating the industrial structure, the highest share of employed persons in Hungary was in engineering (33 percent of industrial employees), followed by light industry (23 percent) and the food industry (14 percent) - together comprising 70 percent of all industrial employment. The engineering sector is important in Budapest and Pest, in particular (46 percent of industrial employees) and in Szolnok (39 percent). The metallurgical sector is based mainly in Fejer and Borsod-Abauj- Zemplen (23 percent of industrial employment in each county, and mining is concentrated in Baranya (31 percent), Komarom (30 percent) and Veszprem (21 percent).

Prevalently agricultural counties were in the southern and central parts of the country, notably Bacs-Kiskum (32 percent of total employment were in agriculture and forestry at end-1988), Pest (28 percent) and Bekes (26 percent).

4.4.5 Poland

The number of economically-active persons amounted to 17.8 million in 1988, according to national sources (17.1 million according to CMEA figures). The level has fluctuated considerably during the 1980s due to the sharp fall of more than 400,000 between 1981 and 1982 (probably related to the general economic crisis, changes in social legislation and the imposition of martial law) mainly affecting employment in state industry. Considerable shifts towards non-productive-service-sectors occurred also during the 1980s.

In 1988, the share of economically-active persons in industry (28.6 percent) was about the same as in agriculture (28.5 percent). This is a

unique phenomenon in the whole Central and East European region (except for Yugoslavia) and relates to the traditional importance of private agriculture in Poland. Thus, the figures for the employment structure in the state sector differ considerably: the share of industry amounts to 36 percent, and the share of agriculture only 8 percent. Among other sectors, trade accounted for 11 percent of employed persons, construction - 9 percent, education and culture - 9 percent, and health and social welfare - 8 percent.

Within the (state) industrial sector, the highest employment share was in engineering which had one-third of industrial employment, followed by food processing (10 percent) and textiles (8 percent).

The regional variation in employment structure in Poland reflects the spatial differences in development. Thus, industrial employment shares are higher in the western part of the country where there is a higher level of income and economic development, especially in the belt between Katowice and Szczecin. Also, there are significantly higher industrial employment shares in the larger city regions based on Krakow, Lodz, Poznan, Warsaw, Katowice and Wroclaw.

4.4.6 Romania

The number of economically active persons reached 10.9 million in 1989 and, as in other southern countries of the region, the share of industrial employment has been increasing. During the 1980s, the share of economically active persons rose from 36 percent (1980) to 38 percent (1989). At the same time, agricultural employment remained at a relatively high level (28 percent in 1989). There are no recent data regarding the industrial composition of employment. In 1985 (latest data available), of 3.6 million employed in industry, 37 percent worked in engineering, 12 percent in textiles,and 7 percent in chemicals.

Data on the regional structure of the economically active population (as of the start of 1990) show an extremely high concentration of industry (over 50 percent of all economically active) in the districts of Brasov (61 percent), Sibiu (59 percent), Hunedoara and Prahova (56 percent), and Bucharest (53 percent). Prevalently agricultural districts (more than 30 percent economically active in agriculture) were Botosani and Ialomita (48 percent), Olt (43 percent), Suceava (38 percent), Dimbovita (34 percent) and Arad (33 percent).

4.4.7 Yugoslavia

Census data for 1981 reveal the following structure of the 9.4 million economically active persons in Yugoslavia: industry, 24 percent; agriculture, 29 percent; commerce, 9 percent; and non-productive sectors, 27 percent. However, recent economic data on employment are available for the state sector only, which in 1988 comprised 45 percent of the working age population. Across the country as a whole, 39 percent of employees in the state sector worked in industry, 10 percent in trade, 8 percent in state administration and finance, 9 percent in construction and 7 percent in transport and communication. The share of (state) agricultural employment was only five percent, ie. significantly underestimated because of the exclusion of the private sector.

Within state industry (2.7 million employees in 1988), the employment

structure was dominated by the engineering sector (31 percent), followed by textiles (17 percent) and food (10 percent) industries. Data on the individual republics reveal that the highest share of industrial employment (1988) was in Slovenia and Bosnia and Hercegovina (each with 45 percent), Macedonia (41 percent) and Serbia (40 percent). State agriculture is most prevalent in Macedonia (8 percent of total employment) and Serbia (5 percent). By contrast, in Slovenia and Bosnia and Hercegovina, the respective employment shares are less than two percent.

In terms of trends, employment has been either increasing at a declining rate or even decreasing in individual republics during the second half of the 1980s. In 1988, an absolute decrease of employment was recorded in Montenegro (-1 percent), Croatia (-0.2 percent), Macedonia (-0.4 percent) and Slovenia (- 0.7 percent).

Figure 4.1: SHARE OF TOTAL EMPLOYMENT IN INDUSTRY AND CONSTRUCTION 1988/89

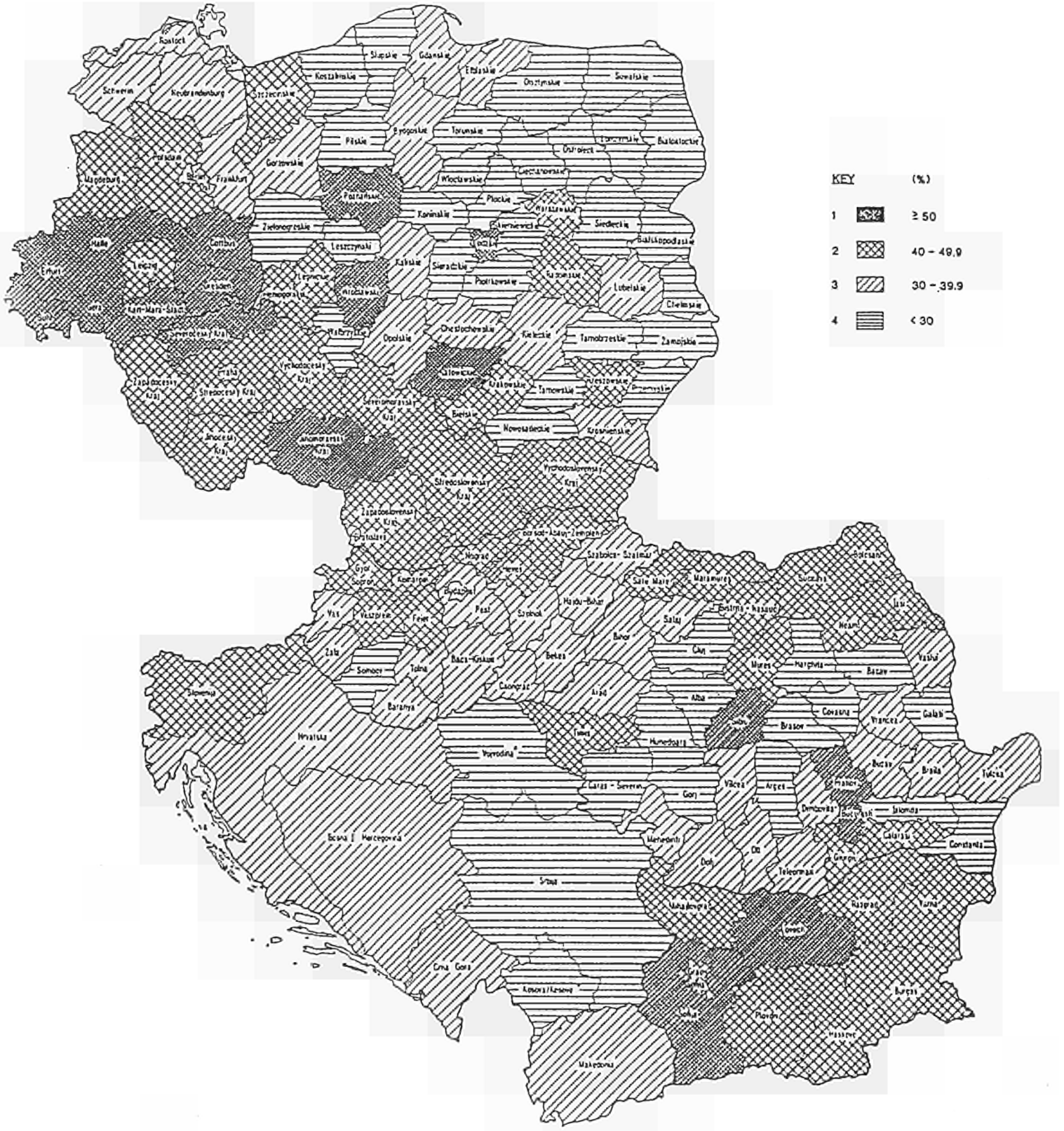


Figure 4.2: SHARE OF TOTAL EMPLOYMENT IN SERVICES 1988/89

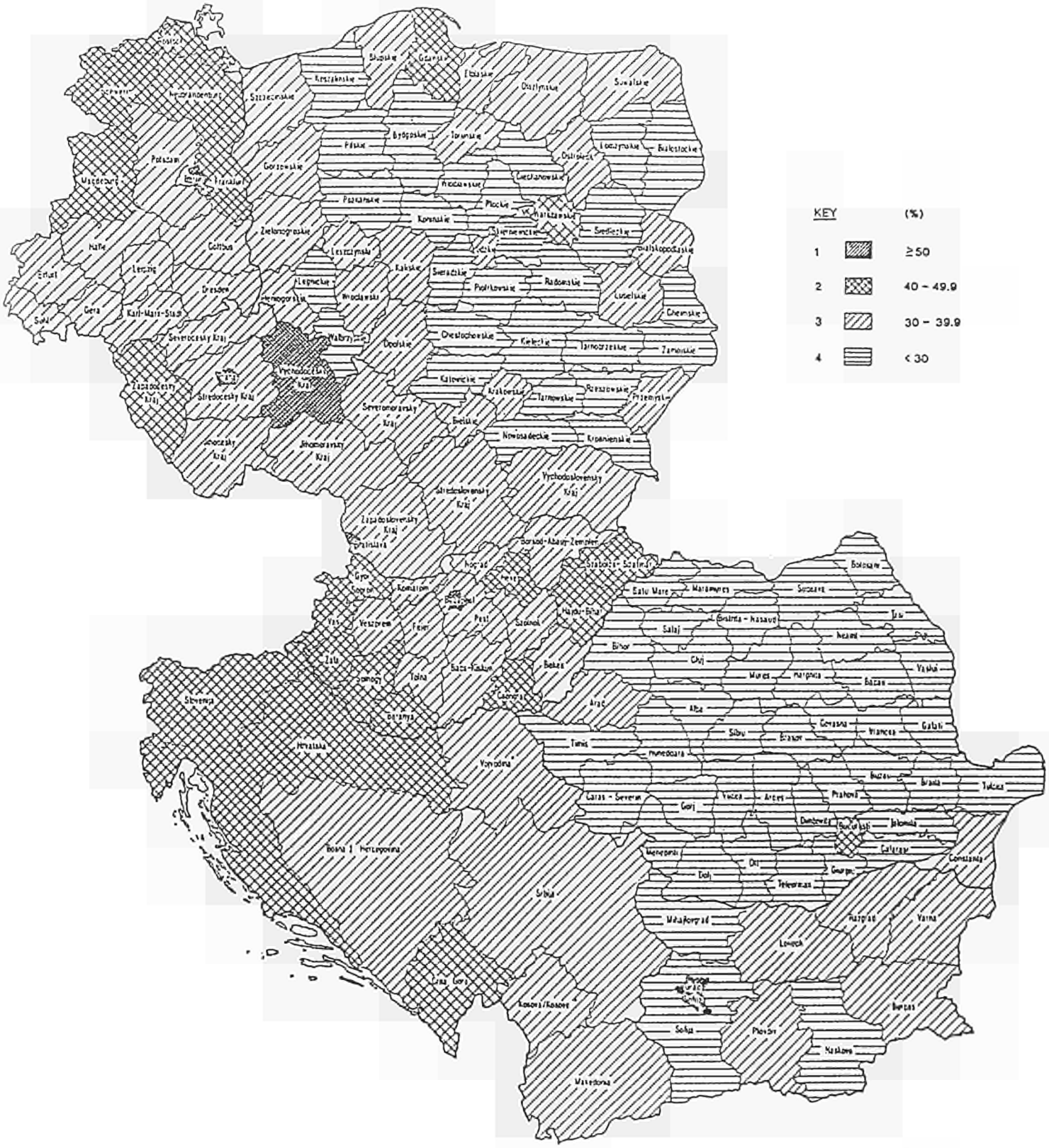
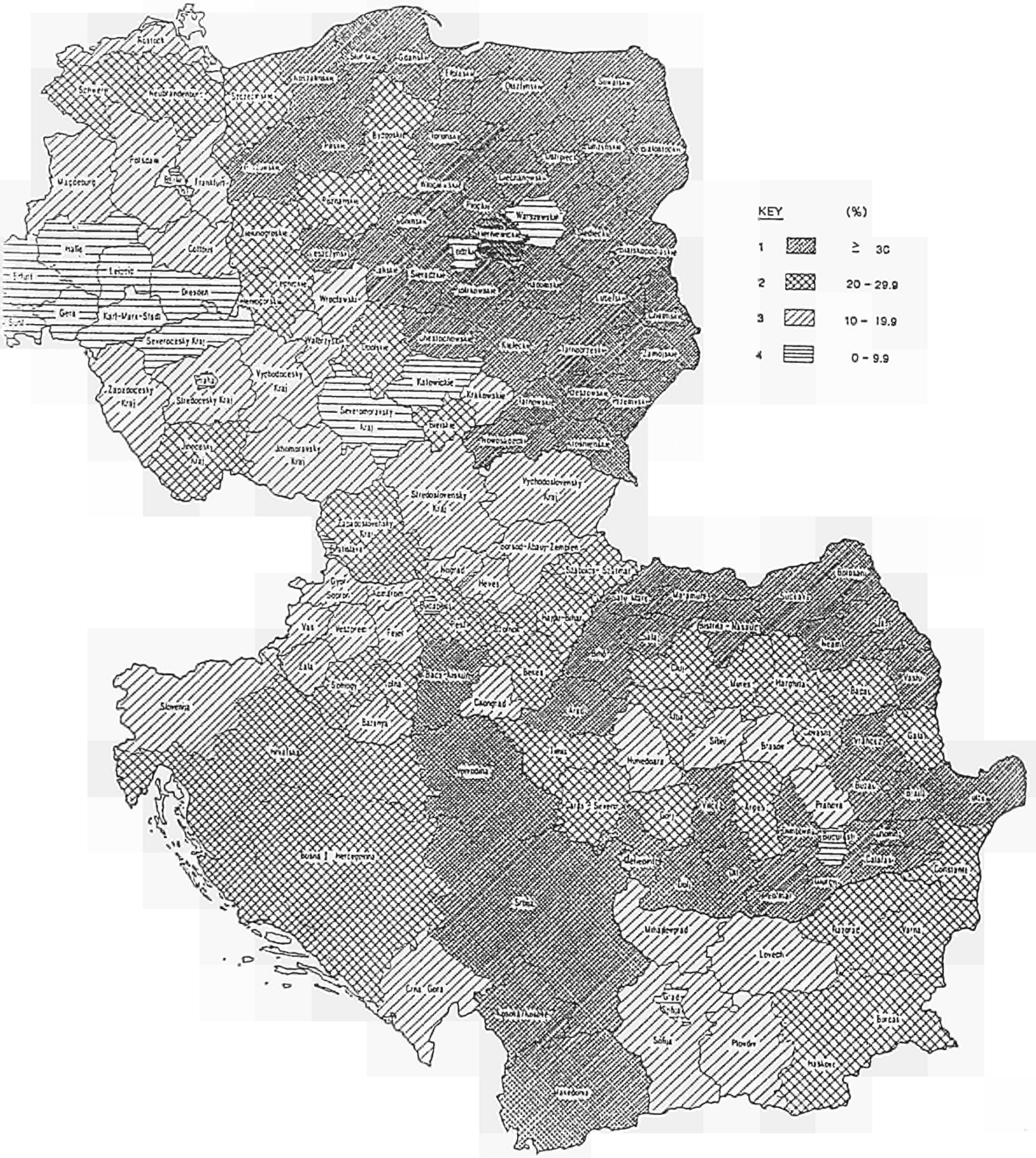


Figure 4.3: SHARE OF TOTAL EMPLOYMENT IN AGRICULTURE, FORESTRY AND FISHING 1988/89



CHAPTER 5:
UNEMPLOYMENT

5.1 Introduction

Unemployment is becoming one of the most serious problems facing Central and East European countries. Under socialist control, unemployment was never acknowledged, although its existence in some form is almost beyond doubt. With the transition to market economies, open unemployment is being confronted for the first time, with its associated economic and social implications. It has been estimated that unemployment could reach 12-14 million in Central and Eastern Europe by 1994 (*Financial Times* 19.12.90; 27.12.90, based on Eurostrategy analysis by Morgan Stanley). This section examines experience of so-called "hidden" unemployment in Central and East European countries and the reasons for its existence. The appearance of open unemployment, and its effects on economic sectors, regions and society are then examined in more detail, including analysis of the causes and the particular problems which will be encountered in this area.

5.2 A new phenomenon?

Unemployment is a feature of Western society but in Central and Eastern Europe open unemployment is a relatively recent phenomenon. However, there is evidence that "hidden" unemployment existed in these countries despite the negligible rates which were officially quoted. The phenomenon of hidden unemployment is attributable to a number of factors: under-employment; a change of employment with a significant time-lapse between the end of one job and the start of the next; people for whom it would not be advantageous to register as unemployed; part-time workers; and, people in "alternative" employment. In a 1990 study, *Euromonitor* estimated that the underlying unemployment figure for the region as a whole could be as high as 10-20 percent (for individual country figures, see Table 5.1).

In the former GDR, individual companies were required by law to look after their employees. If jobs were lost, the employees had to be offered other jobs in the same or another company. Re-training, if required, also had to be arranged by companies. Given this legal basis, there was very little unemployment, although full employment was only maintained by very inefficient use of labour. However, even in the former GDR, "hidden" unemployment is estimated to have been as high as 15 percent of the labour force.

Yugoslavia was the only Central and East European country to admit unemployment openly. The country's generally more liberal economic approach allowed an open-border policy to encourage greater efficiency in the labour-intensive industries of Yugoslavia. This allowed labour migration to the West, principally affecting the population in northern regions which were geographically closer to West European countries, better informed and more prepared to take the risk of leaving. The official

national unemployment rate of Yugoslavia in 1984 was 13.5 percent, although significant regional variations existed, the rates ranging from 33.3 percent in Kosovo to 1.9 percent in Slovenia.

The present transition to a system of market economy being undertaken by all the Central and East European countries has led to the first appearance of open unemployment. The inefficient, labour-intensive industries of the socialist economies, which were deliberately overstaffed to absorb some of the labour surplus, will be significantly affected by new market forces. Many industries are likely to become non-viable and will be shut down. Most others will be rationalised and converted into more capital-intensive rather than labour-intensive enterprises. This process will have - and has already begun to have - a devastating effect on employment.

The reforms undertaken during 1990 have already had an effect on unemployment rates. As Table 5.1 indicates, rates in some countries are already estimated to have reached double figures, and the projections for 1991 indicate further increases. Unemployment will rise significantly in those countries where the government is implementing strict reforms, and as these reforms really begin to affect the economy.

Table 5.1: Unemployment rates in Central and Eastern Europe (1990)

	Euromonitor (%)	WIIW (%)	Press and project sources (%)	Projection (%)
Bulgaria	5.0	<2.0		{ 6.0 (1991) {10.0 (1992) {11.1 (1993)
Czechoslovakia	10.0	0.7	1.2	8-10 (1991)
East Germany	25.0	7.3	7.0	17.5 (1991)
Hungary	-	1.7	2.1	-
Poland	10-12	6.1	7.0	11.7 (1991)
Romania	-	-	2.8*	-
Yugoslavia	-	16.0	10.5	-

Sources: Euromonitor (which refers to "hidden" unemployment); WIIW: Vienna Institute for Comparative Econ. Studies; Jackson 1990(a), p35; various press and project sources.

5.3 Sectoral Impact

The restructuring of economic sectors within Central and Eastern European countries is likely to be associated with significant unemployment in three main areas: traditional industrial sectors; armament and associated industries; and agriculture.

First, the socialist industrialisation strategy targeted a number of principal, heavy industrial sectors and concentrated development in these areas, often locating the plants in regions with the appropriate raw material base. This centrally planned strategy has led to the development

of so-called "monostructure" regions in which a significant proportion of employment is dependent on one industrial sector, with few other employment opportunities. The main sectors in question are coal and metal ore mining, heavy engineering, chemicals and textiles. It is primarily these sectors which are likely to suffer under economic restructuring, for several reasons: they tend to be inefficient and labour-intensive; they are expensive to run with low productivity; they are often very heavily subsidised, and these subsidies are now being removed; they are uncompetitive on a European scale; and, the products are often of a poor quality. Frequently, these sectors dominate the industrial employment structure, eg. in Czechoslovakia metal-working and machinery industries represent 40 percent of all manufacturing employment.

Second, the break-up of the Warsaw Pact and the removal of Soviet control of Central and East European countries will have a "knock-on" effect on employment through the loss of certain industries and their auxiliaries. The conversion of the armaments industry to civil production will cause particular difficulties, as well as in related industries such as heavy machinery, chemicals, electronics and metal-working industries. Czechoslovakia will be most seriously affected since, until recently, the arms trade accounted for half of the country's hard currency earnings, and much of the country's other industry was geared to producing subsidiary parts eg. rubber, chemicals and steel. The problem is especially severe in the Slovak Republic, which recently defied a ban placed by the Czech government on the production and export of heavy weapons as it threatened over 70,000 Slovak jobs. The abolition of various military bodies and a lowering of the number of professional staff in the army will also affect employment levels. The inevitable reorientation in trading links away from the Soviet Union is estimated to cost certain regions up to 50 percent of production, which has obvious implications for employment.

Third, the restructuring of agriculture is a potential cause of major unemployment - a feature that is already making itself apparent as an immediate effect of economic reforms eg. in East Germany. In the majority of Central and East European countries, the proportion of labour engaged in agriculture is very high (by West European standards). Areas in Mecklenburg-Vorpommern in East Germany still have more than 50 percent of the labour force in agriculture, and some Polish regions display similarly high levels. The introduction of privatisation, technology and efficiency improvements is likely to result in serious job losses for this labour-intensive sector. Many agricultural regions are relatively backward, and in a free-market situation may become unprofitable. The small size of many of the agricultural holdings (eg. in Poland, half of the 2.75 million farms are less than five hectares) may also lead to their non-viability. This will also have an effect on unemployment. More specific analysis is not possible, at this stage, due to the severe lack of data concerning this area.

The pace of economic change, and particularly the rate at which different industrial sectors are liberalised, will affect unemployment levels and the impact on individual sectors. At present, unemployment seems to be having the greatest impact in areas of least industrial/urban development, implying that the effects of industrial restructuring have, so far, not been substantial. In Poland, for example, the regional unemployment rates range from 2-3 percent in Warsaw to 15-18 percent in the underdeveloped regions in the east. However, if strict economic reforms are adhered to, the effects of restructuring on industrial employment are likely to become severe, possibly rising to in excess of 30-50 percent in

some industrial areas of Poland. This can already be observed in East Germany, the most advanced part of Central and Eastern Europe in terms of economic restructuring, where areas dependent on heavy industry such as textiles and chemicals are being severely affected by unemployment.

5.4 Regional Impact

Unemployment will have differential regional effects in accordance with the uneven distribution of economic development across countries and regions. As noted in the previous section, the socialist era has led to the development of monostructure regions, with a one-sided industrial structure concentrated particularly in heavy industry and mining, in a limited number of areas within each country. Certain regions are also very heavily dependent on agriculture or armaments. These regions will suffer disproportionately due to higher levels of employment in "crisis" sectors.

In **East Germany**, in the course of unification, it was anticipated that the required structural adaptation in East Germany would involve a significant level of unemployment, notably in the manufacturing and agricultural sectors. In order to reduce the number of job losses, the possibility of "short-time working" was introduced in East Germany (as in West Germany); enterprises in difficulty may place their employees on short-time work. In addition to the short-time work payments, many of the wage agreements made after economic union (1 July 1990) contained "rationalisation protection" agreements which meant that employees could not be made redundant until the end of June 1991. Consequently, the number of short-time workers has increased considerably. For the future, it can be anticipated that, after the rationalisation protection agreements expire, a significant number of short-time workers will be made redundant and become unemployed. This is likely to occur even though the regulation under "paragraph 63(5)" (introduced during the unification negotiations to prevent redundancies for one year after unification) was extended by six months. Many enterprises which do not see any improvement in their economic or market situation are expected to dismiss unnecessary personnel.

The under-employment in East Germany, comprising unemployment and short-time working, is estimated to have reached 30 percent of the economically-active population in February 1991. This involved 787,000 (8.9 percent of the workforce) and an additional 1.9 million people (21.5 percent of the civilian labour force) on short-time working. Unemployment figures (recorded since January 1990) show a steadily increasing trend for all regions. However, many regional differences are evident. Over the period May 1990 - July 1991 1990 Mecklenburg-Vorpommern and Berlin (East) displayed the highest unemployment rates. The new *Land* of Sachsen maintained the lowest unemployment rate for the entire period under review.

Table 5.2: Regional unemployment rates in East Germany

	Unemployment rate*				Short-time working rate+		Underutilisation of labour£	
	May 1990 (%)	Sept 1990 (%)	Nov. 1990 (%)	Jan. 1991 (%)	Nov. 1990 (%)	Jan. 1991 (%)	Nov. 1990 (%)	Jan. 1991 (%)
Meck'burg-Vor.	1.4	6.2	8.2	10.9	16.1	18.4	16.3	20.1
Brandenburg	1.1	5.1	6.8	8.4	20.9	21.9	17.3	19.4
Sachsen-Anhalt	1.1	4.7	6.3	8.1	21.4	23.6	17.0	19.9
Sachsen	-	4.2	5.8	7.6	20.6	20.9	16.1	18.1
Thueringen	1.1	5.4	6.8	8.7	21.1	23.1	17.4	20.3
Belin (East)	2.3	6.1	8.4	10.1	9.8	11.7	13.3	16.0
East Germany	1.1	5.0	6.7	8.6	19.4	20.9	16.4	19.1

Source: NIW/DIW; European Commission.
* Registered unemployed as a percentage of the civilian labour force.
+ On average, working only 50 percent of normal time.
£ Registered unemployed + 50% of short-time workers as a percentage of the civilian labour force.

In **Czechoslovakia** the spatial impact of restructuring in heavy industry and mining (both coal and metal ore mines) is likely to coincide, as the location of heavy industrial plants is often the same as mining areas. This will have a singularly great impact on regional unemployment. The most major effects will be, firstly, in the Ostrava coal basin (northern Moravia) which has coking coal, metal and other heavy industries, as well as other minor coal basins where the coal is of considerably poorer quality and where mining may be terminated. The following regions may also be affected: Kladno (central Bohemia) which is based on metal industries; Handlova (central Slovakia) with large power generation and chemical industries; and Hodonin (southern Moravia).

In the north Bohemian coal basin, there is huge extraction of brown coal accompanied by power plants, chemical, glass and other industries. In this region, the environmental conditions are the worst in the whole country. Almost all metal ore mines may be closed also, due to poor economic prospects in central Slovakia (districts Banska Bystrica, Ziar nad Hronom), and eastern Slovakia (districts Spisska Nova Ves, Rudnany). Other areas with heavy industries are Kosice (metal) and Plzen (automobiles - Skoda works). Serious problems arising from the conversion of the armaments industry to civil production will affect central Slovakia (Martin and Povazska Bysterica districts) most severely. The effect of the decline in armaments production accounts for a significant proportion of the higher unemployment in the Slovak Republic relative to the Czech Republic.

Table 5.3: Regional unemployment rates in Czechoslovakia

Region	Unemployment rate Dec. 1990 (%)	Feb.1991 (%)
Prague	0.64	1.11
C. Bohemia	0.66	1.34
S. Bohemia	0.76	1.41
W. Bohemia	0.55	1.18
N. Bohemia	0.65	1.44
E. Bohemia	0.62	1.22
S. Moravia	0.70	1.43
N. Moravia	1.18	1.94
Bratislava	0.82	1.78
W. Slovakia	1.39	3.17
C. Slovakia	1.35	2.77
E. Slovakia	2.26	4.28
Czech Republic	0.75	1.43
Slovak Republic	1.54	3.18
Czechoslovakia	1.00	1.99

Overall, the projected national unemployment rate in Czechoslovakia is estimated to be reaching up to ten percent, and the worst situation in the country is found in East Slovakia (10,378 unemployed in October 1990 out of a national total of 55,900). According to data for December 1990 and February 1991 (see Table 5.3), , there is a clear east-west gradient in terms of the effect of unemployment from the worst-affected province of East Slovakia (where unemployment exceeded four percent) to the Bohemian provinces around Prague, where unemployment was around one percent.

In **Hungary**, the principal areas of unemployment risk are heavy-industry dominated regions on the so-called energy axis running from the north-east to the south-west of the country. The North Hungarian heavy industrial region is a depressed area, and closures and industrial problems are expected in certain North and Middle Transdanube regions and in the county of Baranya. The counties of Borsod-Abauj-Zemplen, Nograd and Komarom Esztergom, previously prosperous areas having a large proportion of the mining and metallurgy jobs, have lost their main economic base, with corresponding effects on employment. Hungary is making some attempt to counteract the effects of unemployment in these sectors, and innovation parks have been set up in the capitals of the counties of Csongrad, Hajdu and Borsod-Abauj-Zemplen in an attempt to stimulate new industry and technology. Budapest, as the capital, is also being promoted as a major innovation and R & D centre.

The national Hungarian unemployment rate is estimated to be about two percent, but is increasing steadily. In July 1990 the most serious unemployment situation was found in Borsod-Abauj-Zemplen and Szabolcs-Szatmar, and unemployment worsened between July and September 1990 in the counties of Baranya, Bekes, Pest and Szolnok.

The national unemployment rate in **Poland** is estimated at around 10-12 percent. Upper Silesia, the largest industrial- urban agglomeration in

Poland (and also in Central and Eastern Europe as a whole), is likely to be the worst region affected. The region's industrial employment structure is dominated by the high risk sectors of mining and heavy engineering (coal, ferrous and non-ferrous metal ores, and engineering). It is considered highly inefficient, with a 15-20 year technological lag compared to West European counterparts, which creates problems in becoming competitive on a European scale. Other problem areas are again within the high risk sectors: mining in the Old Polish Basin and in the Sudetes; iron and steel mills in Warsaw and Cracow; metal and machine-tool industries in large towns in western Poland; and the textile industry in Lodz and Bielsko-Biala.

Yugoslavia and **Bulgaria** display a more balanced spread of industry, and thus the regional impact of industrial closure and restructuring, and the consequent effects on unemployment, are likely to be more evenly distributed. Bulgaria has an estimated national unemployment rate of about five percent. New and expanding centres of industry on the Black Sea Coast (Varna-Devnya, Burgas-Kameno and the Dimitrov shipping complex) and in the Danube area may, however, provide alternative employment opportunities to absorb some of the redundancies from other sectors. Most of the industrial potential lies within the central part of the country, and it is, therefore, likely that the majority of job losses will be experienced in this area; at the same time, it may hold the greatest potential for the redevelopment of industry and thus new employment opportunities.

The national unemployment rate in Yugoslavia was at least 14 percent in 1988 and may now be as high as 16 percent. The dispersed pattern of industrial development and the more autonomous nature of the regions, means that the regional effect of industrial restructuring and unemployment may not be as marked.

Table 5.4: Regional unemployment rates in Yugoslavia

Region	Unemployment rate (1988) (%)	
Bosnia-Hercegovina	19.2	
Montenegro	20.6	
Croatia	7.7	
Macedonia	20.9	
Slovenia	2.4	
Serbia	17.0	
- Serbia Proper		15.2
- Kosovo		36.0
- Vojvodina		12.3
Yugoslavia	14.0	

According to 1988 statistics, unemployment is most serious in Kosovo, Macedonia, Montenegro and Bosnia-Hercegovina, with rates at around 20 percent. In the course of major industrial restructuring, the northern industrialised republics may be badly affected, especially Bosnia (Zenica-Vares) and Slovenia (Ljubljana), although heavy industrial sectors are spread relatively evenly throughout the country at Zenica (Bosnia), Sisak and Rijeka (Croatia), Jesenice (Slovenia), Smederevo (Serbia), Niksic (Montenegro) and Skopje (Macedonia). There is also a relatively high

proportion of skilled unemployment, indicating significant mismatches between labour demand and supply on both a geographical and professional basis.

CHAPTER 6: OUTPUT, INCOME AND PRODUCTIVITY

6.1 Introduction

Of all the issues being examined in this regional statistical analysis, output, income and productivity are the most difficult to assess. Problems of data availability and comparability are very considerable even at the national level. Computational methods and assessments vary between the national and CMEA calculations undertaken in Central and Eastern Europe, and the methodologies used by Western organisations such as the United Nations, research institutes such as the WIIW and DIW, and intelligence bodies such as the CIA. At the regional level, the potential for meaningful international comparison is still more limited.

This section examines the available data on output, income and productivity in Central and Eastern Europe. It first addresses the problems of data comparability, the availability of output data and estimates, and the validity of various computational methods. The section then assesses the rank order of Central and East European countries according to GDP and recent trends in output. Finally, the section reviews the availability of data on GNP (or industrial production) at the regional level in the various countries and indicates the major regional differences in productivity within individual countries.

6.2 Problems of data comparability

International comparisons of the level of real incomes have gained an importance which extends beyond academic interest. Financial contributions to international organizations, preferential customs duties, access to soft term credits, and other preferential conditions in international relations have traditionally been dependent upon the economic strength of nations. Currently, an appropriate assessment of the economic development level of the former Eastern Bloc countries is also required for the assessment of potential Western help, and for estimating the time period required by these countries for closing the gap with the West. This is not a new problem. A pioneering study comparing GDP levels in Western Europe and the USA was inspired by needs of international organizations (OECD, at that time OEEC, coordinating the Marshall Plan - see Gilbert and Kravis (1954)), and by practical problems with assessing the contributions of member and associated states. The conflicting interests of individual governments are not only ideological but also involve substantial sums of money. Given this variety in economic and political interests (in addition to methodological and conceptual problems) it is not surprising that a uniformly accepted comparison approach has, hitherto, been neither developed nor applied in East-West comparative economic studies.

Although there is a fairly standard point of reference today in the form of the methodology elaborated within the UN-sponsored International Comparison Project (ICP), the unequivocally accepted data on comparative economic levels between market economies of the West (MEs) and the

centrally planned economies (CPEs) of Central and Eastern Europe and the USSR are still lacking. Such levels can only be identified through various statistical proxies which approximate, to a degree, the intended measures. The lack of reliable information results from a mix of factors - political differences, methodological variations, and differences in the coverage between statistical systems. The problems are further aggravated by the differences in socio-economic systems and in understanding what is considered as output. In MEs, everything with a market price, as well as various non-market services (eg. government), are treated as output; in the CPEs, only the production of tangible goods (and services related to the production of goods) enter the national income statistics. Further, prices in CPEs are mostly fixed artificially and bear little relation to costs and scarcities.

The statistical information generally published by the CPEs suffers from various inadequacies regarding the quantity and reliability of available data. Reporting bias may result both from national interests and from specific interests of the statistical reporting units. At the national level, most CPEs presented incomes which, until very recently, tended to exaggerate the true position. However, a desire to obtain favourable credit conditions from international financial institutions has also led some CPEs to present their real incomes as low as possible. The discussions connected with the applications from Hungary, Poland and Romania for membership of the World Bank and IMF at the beginning of 1980s illustrate this latter point. At the level of statistical reporting units (enterprises), it can be observed that CPE enterprises often tended to over-report the main plan target (eg. gross output, or net output) in order to gain premia for plan-fulfillment. By contrast, in MEs there is a tendency to under-report profits in order to avoid taxation.

6.3 The availability of GDP data (in national currencies) for centrally-planned economies (CPEs)

The commonly used statistical measures of the level of economic activity differs between East and West. The Gross Domestic Product (GDP) measure (the value of final goods and services produced in a country in a certain period) has not been published, until very recently, by CPEs which generally used an indicator of **Net Material Product** (NMP) for similar purposes. The NMP concept is based on Marxian perception of value and productivity and, as such, is narrowly defined since it includes the value of goods and services produced only by the so-called "productive sectors" of the economy, ie. a large part of services is excluded from the NMP. Moreover, the NMP is net of depreciations. Since parts of the GDP and NMP overlap (eg. some "final consumption of non-productive sectors"), the conversion of GDP into NMP and vice versa is not straightforward. Such methodological differences between GDP and NMP are well documented (eg. Comparisons of the System (1981)), and individual attempts to recalculate GDP into NMP and vice versa have been undertaken (United Nations (1981), Havlik and Levcik (1985)). However, the conversion from NMP to GDP is by no means easy since the necessary data are not generally available. Experience shows that the GDP may be as much as 10-50 percent higher than the corresponding NMP - the difference being greater in countries with higher incomes (and with a more developed service sector). The difference is also growing over time and may vary depending on the rules for establishing the depreciation charges. The diverging coverage of both

indicators has, of course, an impact not only on absolute levels but on growth rates as well. The available data on GDP/GNP in national currencies are listed in the Table 6.1 below.

Most countries of the former Eastern Bloc - now undergoing a transition from command to market economy - plan to switch to the system of statistical reporting which would correspond to internationally standardized System of National Accounts (SNA). East European participants at the recent Conference on Statistics of Central and Eastern European Countries (Paris, 10-12 September 1990), organized jointly by the OECD and the UN Economic Commission for Europe, declared the switch to the SNA system one of their statistical priorities. Clearly, the technical prerequisities for such a switch differ in each country of the region: Hungary has already probably achieved the standard of OECD countries, whereas Bulgaria and Romania have yet to solve numerous conceptual and technical problems. The introduction of the SNA in Czechoslovakia could proceed without great problems given the substantial amount of conceptual work already done. However, the problems of transition, even in the field of statistical reporting, cannot be underestimated: in East Germany, it will take at least two years before statistical systems are united and comparable with those of West Germany.

6.4 Convertibility problems

The pure conversion of NMP into GDP in the national currency of an individual country unfortunately does not solve the problem of international comparisons of real income levels since the conversion of GDP (in national currency) into some common unit (eg. US dollars) is a more difficult task. The problem of international GDP (productivity, income, etc.) comparisons may be reduced to a considerable degree by a proper convertor from national currency into some common unit. It can be assumed that ordinary exchange rates (ERs) do not serve such purposes well, even in MEs, since they do not reflect the real purchasing power parities (PPPs) of national currencies. This applies even more to deliberately-set exchange rates among countries with non-convertible currencies (ie. all CPEs), and with respect to countries with multiple exchange rate systems (until 1990 all former socialist countries except Hungary and Poland).

Research into the problems of PPPs shows that, apart from perhaps speculative reasons which may have played a role in recent sharp fluctuations of the dollar exchange rate with respect to other major Western currencies, other "purely economic" factors may have come into play as well. Differences in productivity between high- and low-income countries in tradeable and non-tradeable goods as well as economic policy reasons (eg. interest and budgetary policies, efforts to promote tourism or exports, etc) may be just as important. Naturally, in the case of the former CPEs, market criteria play a much smaller role in establishing their official exchange rates, and such exchange rates are often suited neither to securing a balanced current account nor to reflecting purchasing power parities: this finds its ultimate appropriate reflection in the non-convertibility of the currencies of CPEs (Havlik (1990). The establishment of proxy exchange rates for CPE currencies thus forms the most serious bottleneck in undertaking East-West GDP comparisons.

Table 6.1 : Gross Domestic Product - National Data

A: Gross Domestic Product

	1985	1986	1987	1988	1989
Bulgaria (NMP, at curr.prices, in	25.5 billion	26.9	28.3	29.4	30.0 Leva)
CSFR (GDP, at market prices, in	677.0 bill.of	694.7	711.1	740.0	754.8 curr.Kcs)
GDR (GDP, at effective prices, in	311.8 billion	321.9	332.8	346.1	353.3 Mark)
Hungary (GDP, at curr.prices, in	1033.7 billion	1088.8	1226.4	1409.5	1706.0 Forint)
Poland (GDP, at curr.prices, in	10444.8 billion	12953.0	16939.9	29628.7	119107.4 Zloty)
Romania (GNP, at curr. prices, in	billion		823.2	854.3	793.7 Lei)
Yugoslavia (GDP, at market prices, in	11951.3 bill.	23399.8	52339.7	158328.3	Dinar)

B: Population in (thousands persons)

	1985	1986	1987	1988	1989
Bulgaria	8950	8967	8976	8987	8993
CSFR	15519	15553	15587	15625	15651
GDR	16655	16640	16661	16675	16434
Hungary	10640	10621	10604	10589	10568
Poland	37341	37572	37764	37775	37931
Romania	22725	22824	22940	23112	23152
Yugoslavia	23124	23274	23417	23566	23690

C: Employed Persons (in thousands)

	1985	1986	1987	1988	1989
Bulgaria	4095	4076	4108	4078	4061
CSFR	6892	6962	7001	7035	7022
GDR	7552	7559	7566	7587	7544
Hungary	3939	3939	3963	3931	3941
Poland	11674	11769	11756	11632	11446
Romania	7661	7752	7790	7843	7965
Yugoslavia	6516	6716	6866	6884	6876

Table 6.1 (continued)

D: Gross Domestic Product per capita
(thousands of national currency, current prices)

	1985	1986	1987	1988	1989
Bulgaria (NMP)	2.849	3.000	3.153	3.271	3.336
CSFR	43.624	44.667	45.621	47.360	48.227
GDR	18.721	19.345	19.975	20.756	21.498
Hungary	97.152	102.514	115.654	133.110	161.431
Poland	279.714	344.751	448.573	784.347	3140.107
Romania (GNP)	.	.	35.885	36.963	34.282
Yugoslavia	516.835	1005.405	2235.116	6718.505	-

Sources: National statistical yearbooks and the IMF.

E: Gross Domestic Product per employed Person
(thousands of national currency, current prices)

	1985	1986	1987	1988	1989
Bulgaria (NMP)	6.227	6.600	6.889	7.209	7.387
CSFR	98.230	99.785	101.571	105.188	107.491
GDR	41.287	42.585	43.986	45.618	46.832
Hungary	262.427	276.415	309.463	358.560	432.885
Poland	894.706	1100.603	1440.958	2547.172	10406.028
Romania (GNP)	.	.	105.674	108.925	99.648
Yugoslavia	1834.147	3484.187	7623.027	22999	.

Sources: National statistical yearbooks and the IMF.

Table 6.2 : GDP of Central and Eastern European countries

(Relative ranking according to PPP-based GDP per capita in current international dollars, geometric averages)*/

Country	GDP in 1975 $	% EC12 average	GDP in 1980 $	Ecu	% EC12 aver.	GDP in 1985 $	Ecu	% EC12 aver.
USA	6324	141	10018	7202	134	12870	16890	134
Central and Eastern Europe								
Bulgaria	3167	70	5535	3979	74	7474	9808	78
Czechoslovakia	4048	90	6588	4736	88	8153	10699	85
G.D.R.	4258	95	7050	5068	95	8993	11802	94
Hungary	3610	80	5881	4228	79	7431	9752	77
Poland	3233	72	5241	3768	70	6441	8453	67
Romania	2739	61	4623	3324	62	5852	7680	61
Yugoslavia	2675	60	4555	3275	61	6022	7903	63
Soviet Union	3485	78	5847	4203	78	7328	9617	76
European Community								
Belgium	5262	117	8576	6165	115	10422	13677	108
Denmark	5054	112	8244	5927	111	10585	13891	110
France	4732	105	8065	5798	108	10552	13848	110
F.R.G.	4875	108	8137	5850	109	10411	13663	108
Greece	3167	70	5496	3951	74	7332	9622	76
Ireland	4100	91	6830	4910	92	8403	11028	87
Italy	3953	88	6604	4748	89	8822	11577	92
Netherlands	5066	113	8196	5892	110	10443	13705	109
Portugal	2889	64	4910	3530	66	6247	8198	65
Spain	3783	84	6418	4614	86	8082	10606	84
United Kingdom	5026	112	8060	5794	108	10312	13533	107
Other OECD								
Australia	5552	124	8990	6463	121	11245	14757	117
Austria	4705	105	7853	5646	105	10682	14018	111
Canada	5882	131	9437	6784	127	12006	15756	125
Finland	5085	113	8289	5959	111	11226	14732	117
Japan	4290	95	7369	5298	99	9767	12818	102
New Zealand	5423	121	8161	5867	109	10405	13655	108
Norway	5021	112	8346	6000	112	11144	14625	116
Sweden	5448	121	8705	6258	117	11602	15226	121
Switzerland	4768	106	7880	5665	106	10641	13965	111
Turkey	1684	37	2693	1936	36	3151	4135	33
Other								
Argentina	3200	71	5142	3697	69	6170	8097	64
Brazil	2034	45	3554	2555	48	4398	5772	46
Egypt	1343	30	2266	1629	30	2852	3743	30
India	709	16	1140	820	15	860	1129	9
Israel	3973	88	6369	4579	85	8256	10835	86
South Korea	1710	38	3429	2465	46	4919	6455	51

Source: WIIW

* Calculated as simple geometric averages from partial estimates of economic development based on 27 indicators in 1975, 30 in 1980 and 27 in 1985.

6.5 Assessment of national positions

Taking into account the fact that every comparison of this kind is prone to a degree of uncertainty, perhaps the most attractive option for assessing internationally comparable income levels is the Physical Indicators Global (PIG) method; it involves relatively modest costs and can be applied (to all CPEs uniformly) without close cooperation with CPE statistical offices. The PIG approach, originally devised by Hungarian scholars (Ehrlich, 1966), was based on an intuitive notion of a relationship between various physical indicators and the level of per capita GDP in MEs. Assuming that the level of income is sufficiently represented by the GDP per capita in US dollars, the relationships between GDP and selected physical indicators can be established for countries for which both sets of data are available. On the basis that the estimated functions adequately model the actual relationships between GDPs and individual physical indicators within the core sample, aggregate partial GDP estimates can be aggregated in order to obtain global GDP estimates for the core sample countries.

However, for the time being, it has to be accepted that there is reliable evidence only for the ranking of GDP per capita in Central and East European countries. Under this approach, the former GDR is in the leading position, followed by Czechoslovakia, and then by a group comprising Hungary and Bulgaria; at the bottom of the list are Yugoslavia and Romania. A further conclusion that can be made is that the disparities in GDP per capita in Central and East European countries are similar to those between the countries of the European Community. The ratio between the highest and lowest GDP per capita country in the EC (Luxembourg and Greece) was 2.37 in 1989; the same ratio for Central and East European countries (East Germany and Romania) amounted to 2.81 (according to the CIA estimate) and, according to Havlik estimates to 1.62 (calculated from data in Table 6.2).

The national GDP position for the various Central and East European countries is, therefore, impossible to verify with certainty at the present time. It has to be accepted that there are no uniformly accepted data regarding comparable GDP levels with respect to Western countries. A crucial problem is whether, for example, the Polish GDP per capita level amounted either to 21 or 45 percent of the US level in 1989. As with many similar questions, the truth may be somewhere in between.

6.6 Recent trends

As with the national output position, establishing recent trends is fraught with difficulties. CMEA figures suggest that the annual average growth rate for Central and Eastern Europe was 2.5 percent for the period 1981-1988, ranging from 4-5 percent in Romania, the GDR and Bulgaria, 1-2 percent in Hungary and Czechoslovakia, and less than one percent in Poland and Yugoslavia. However, according to Bulgarian national data, the CMEA figure for Bulgaria (3.9 percent) represents a considerable under-estimate from the national official statistics (5.3 percent). By contrast, the CMEA figure for Czechoslovakia (2 percent) over-estimates the national statistic (1.7 percent).

Aside from data inconsistencies, the process of economic restructuring means that historical output statistics are of limited value. It is perhaps useful, therefore, to limit the discussion of recent trends to contemporary developments. During 1990, the general picture was one of declining output and industrial production; the Central and East European countries averaged a decline in output of -12 percent and a fall in industrial production of -16 percent (see Table 6.3). The impact was greatest in East Germany where the figures for output and industrial production were -29 and -22 percent respectively, but Poland, Romania and Bulgaria were also affected by severe recession conditions. Hungary and Czechoslovakia were least affected, although growth rate figures for both countries were also negative.

The decline appeared to be intensifying in the course of 1990. In the third quarter of the year, most Central and East European countries reported a stronger decline in industrial production than in the first half of 1990. The exceptions are Poland, recording a slight recovery after a steep decline in the first part of the year, and Yugoslavia, where stagnation was reported.

Table 6.3: Recent trends in output and industrial production - estimated annual growth rates for 1990

	Industry (%)	GDP (%)
Bulgaria	- 13	- 12
Czechoslovakia	- 4	- 3
East Germany	- 29	- 22
Hungary	- 5	- 5
Poland	- 23	- 12
Romania	- 20	- 10
Yugoslavia	- 6	- 10

Source: National statistics; WIIW estimates.

6.7 Future Prospects

The prospects for the Central East European economies in 1991 depend mainly on the type of recession (a more or less deep recession seems to be inevitable during the first stages of transition from the command to a market economy). Where there is a recession by "adjustment" the potential for growth in a former command economy may recover fastest. Thus, for East Germany a slight recovery in industry as early as the second half of 1991 can be expected, but stagnation on a yearly basis. For Poland, prospects depend on the decisions taken by the new government. If economic policies promote structural change, a recovery in the second half of 1991 is possible, but if policies are limited to bringing inflation under control, a further decline of production is likely.

The other countries, which have yet to launch the transition process, have to expect a further strong decline of production in 1991. An acceleration of the decline must be anticipated first of all in Czechoslovakia, where, for 1991, the CSFR officially expects a 10 percent

decrease of GDP and an inflation rate of at least 30 percent, although this prognosis may turn out to be too optimistic. Additional sources of decline will be created by the collapse of the CMEA, by higher oil prices, the slow-down in the world economy, and higher interest rates on international financial markets. The recession will diminish the chances to earn cash by exports to be utilised for higher interest payments - this will put a burden especially on Poland, Hungary and Bulgaria. If there are no possibilities of refinancing, higher interest rates and a higher oil price will reduce the growth potential. Lastly, the recession will most likely deepen unless political and national unrest in some countries (eg. Yugoslavia, Bulgaria, Romania) can be contained.

6.8 Regional trends

The data problems for establishing output and productivity figures at the national level are compounded at the regional level by the absence, inadequacy and lack of comparability of data. For this study, little regional product data comparable to other Net Material Product or GDP indicators are available. Consequently, the regional level of analysis is dependent on output or production statistics.

The difficulties regarding data are well illustrated by the situation in Poland. The regional level statistics suffer from the general deficiences of the Polish statistical system: greater stress is placed on inputs than outputs; much detailed data is expressed in physical units with few synthetic measures; data on flows and relativities are limited; certain statistical categories appropriate for market economies have hitherto been absent; the availability of time-series is limited due to frequent changes in classification and the real contents of particular variables; and statistical services are poorly computerised, which limits retrieval and access.

Regional statistics suffer from all these deficiences plus some additional specific features: the existing sample surveys do not have a regional component due to the limited sample sizes; regional statistics are not completed in long time series due to frequent changes in the administrative divisions (see Chapter 2: Territorial Structures), and the statistical information prior to the current territorial structure consists of estimates and recomputations; the monetary synthetic categories (national income, consumption, productivity etc) are completed in long time intervals (traditionally every five years, but for the new administrative division, only two surveys were conducted, for 1976 and 1986, and no decisions have yet been made for the anticipated survey in 1991); and regional statistics are published much later than national statistics eg. the regional yearbook with data for 1989 is being published only in 1991.

These methodological problems are typical of other former CMEA countries. Nevertheless, in Poland, Bulgaria and Yugoslavia, it has been possible to derive output figures by region and for a range of sectors eg. industry, construction, agriculture, forestry, transport, communications and trade. The regional output figures for Poland are dominated by the big agglomerations, notably Upper Silesia - the traditional "heart" of Polish industrial output. For the most part, this pattern has remained unchanged since the early part of the 20th century; socialist industrialisation has tended to strengthen 19th century capitalist spatial investment patterns,

despite the creation of many new "counter-balancing" centres in the 1960s and 1970s. Thus, the 10 *voivod*ships with the highest industrial output are (in descending order): Katowice, Waraw, Lodz, Gdansk, Krakow, Plock, Poznan, Wroclaw, Bielska-Biala and Opole. Between them, these centres account for 56 percent of Poland's total industrial production (1988, in current prices). It is in these areas that the fall in output noted above is having the greatest impact.

The regional distribution of the Polish private sector, which is experiencing, a growth in output (according to WIIW figures), is also dominated by the bigger cities - mainly in Warsaw but also in Poznan, Gdansk, Lodz and, to a lesser extent, in Upper Silesia. The development of the private sector is taking place not only within the conurbations themselves but also in "rings" around the agglomerations.

Regional gross social product data for **Bulgaria** indicates a more even distribution of output. Seven of the country's nine regions each has a share of national gross product of between 10 and 15 percent, the exceptions being Mihaylovgrad (6.4 percent) and Razgrad (8.7 percent). As in Poland, the distribution of output is closely associated with urban-industrial agglomerations. The city of Sofia and its surrounding region, for example, account for more than one-quarter of national gross product. During the 1980s the concentration of output appears to have increased. Increases of 1-2 percentage points in the share of national output were recorded by Sofia, Haskovo and Plovdiv (where high-tech industries such as electronic industry facilities are located) at the expense of Bourgas in particular.

The regional disaggregation of output for **Yugoslavia** is dominated by the republics of Serbia and Croatia. With social product shares of 38 and 26 percent respectively, they account together for almost two-thirds of Yugloslav economic output. Slovenia and Bosnia & Hercegovina have a further 30 percent, leaving Macedonia and Montenegro with only six and eight percent respectively. Serbia dominates in all regional sectors for which data is available, with the exception of forestry, catering and arts/crafts, where Croatia has greater output shares. The output dominance of the Serbian and Croatian republics has been reinforced during the late 1980s. While other republics have been experiencing significant annual reductions in output (eg. -4.4 percent in Montenegro in 1987; -3.2 percent in Macedonia in 1988), Serbia and Macedonia have recorded decreases of around one percent or less.

Analysis of regional output trends and patterns in East Germany, Hungary and Romania is reliant on data for industrial production. In **East Germany**, there has been no regional subdivision of the national accounts of the former GDR to district level, nor is it possible to subdivide the "model accounts" produced by western research institutes (such as the DIW) into districts. Thus, it is only possible to provide a crude outline of calculations at the regional level.

Despite evaluation difficulties, industry was certainly the sector with the highest performance. Thus districts with high industrial composition were at the top of the national list. Indicators of the regional industrial composition showed a north-south divide: the more agricultural northern districts against the industrialised southern districts.

Two criteria can be used to determine the industrial composition: the

number of industrially employed and industrial production. Both criteria show a similar sequence for the 15 districts; the main difference is the position of the district of Frankfurt. According to the number of industrially employed this district is at the bottom of the list, while holding a position in the middle based on industrial production.

Using the respective percentage of the population and the total number of persons working as a basis, the industrial composition can be explained with the deviation of these rates from the total percentage of persons working and of total production in industry. The 15 districts can be roughly subdivided into three categories:

- districts with below average industrial strength:
  Berlin, Rostock, Schwerin, Neubrandenburg, Potsdam.

- districts with average industrial strength:
  Cottbus, Magdeburg, Erfurt, Gera, Suhl, Dresden, Leipzig.

- districts with above average industrial strength:
  Frankfurt, Halle, Chemnitz.

This gives an approximate picture of certain regional structures in East Germany. Districts with an industrial composition or strength below average include, firstly, Berlin (East). Although Berlin is a traditional industrial location, its role as the capital and seat of many science and administration centres has always left its mark on the employment structure of this region. The other districts with an industrial composition below average are in the north. They are more thinly populated than the average with an above average proportion of agriculture. The sectoral structure of industry shows some typical features: the chemical industry has below average representation, while the food and consumer goods industries are strongly represented. Despite a common basis, there are marked deviations even in this group of districts. Of particular note is the district of Potsdam with a very high proportion of the metal goods industrial sector.

The districts with average industrial composition are the traditional industrial regions in the south, which because of their great weight within the entire industry also influence the overall average. Typical of these regions is a diverse industrial structure based on mechanical and vehicle engineering; in addition Thueringen is the traditional location for electrical engineering and the precision engineering and optics sector. Some of the regions in this group also have a considerable chemical industry. The district of Cottbus is a special case. Its strong industrial composition is based exclusively on the concentrated sector of energy and fuel (brown coal mining and generation of electricity). Thus, this district shows more signs of belonging to the following group of regions.

The districts with an above-average industrial make-up stand out from the other groups because of special growth points. These include Halle and Chemnitz, as well as Frankfurt. Frankfurt and Halle are centres for the chemical industry. Both, especially Frankfurt, also have strong metal goods sectors. Judging from its structure, Chemnitz belongs more to the traditional industrial districts, but has a very strong focus on light industry.

The classification of certain types of areas shows that even the fifteen former districts were never homogeneous. The same is also true for the new East German *Laender*. The greatest homogeneity is found in Mecklenburg-Vorpommern; this *Land* consists of agricultural districts (Rostock, Schwerin, Neubrandenburg) with an industrial composition that is below average. In Brandenburg, Potsdam is an agriculturally structured district, and its other districts are the "special cases" with a strong industrial focus (Frankfurt: chemicals and metals; Cottbus: energy). Sachsen-Anhalt combines Magdeburg (average industrial composition) and Halle (focus on chemicals and metals). In Thueringen, Erfurt, Gera and Suhl form part of the traditional industrial locations of the south; this is even more true for Sachsen (Dresden, Leipzig, Chemnitz).

For the new *Laender*, an approximate estimate of the social product is possible. It shows in principle the characteristics outlined above. The north has a larger percentage of the population and working persons than of gross national product, whereas in the middle and in the south - with the exception of Thueringen - the reverse is the case.

It should be noted that all structural data essentially reflect the past in the former GDR. What chances the GDR economy has against international competition is so far not even vaguely recognisable. The old industrial structure is in many parts only a "symbol" for the policy of self-sufficiency pursued in the former GDR. Structural changes have taken place on far too small a scale; there are generally too many old, inefficient and pollution-causing production growth points. For this reason, the sector will be faced with drastic decline and structural changes. This will variously affect the large industrial sectors and, to a greater extent, the different sub-sectors. Depending on industrial growth points and sectors, the ranking of the districts and *Laender* might change in the future.

In both **Hungary** and **Romania**, the regional distribution is significantly dominated by the capital cities of both countries. In Hungary, Budapest accounted for 24 percent of industrial production in 1987; this increases to one-third if the surrounding county of Pest is included. The industrial production statistics reinforce the significance of the north-east/south- west "energy axis" which has been referred to elsewhere; a further quarter of industrial production is contained within four northern counties - Borsod-Abauj-Zemplen, Fejer, Csongrad, and Gyor-Sopron - where there is considerable export-oriented industry such as machine-engineering and chemicals. Along with the capital, these are also areas where contemporary industrial development and innovation is concentrated. By contrast, many of the southern counties eg. Bekes, Somogy, Vas and Zala, have less than three percent of national industrial production.

The dominance of the capital city is less marked in Romania - Bucharest accounts for 13 percent of Romanian industrial product value. However, this represents a considerable concentration when compared to the shares of the next most important counties: Prahova (seven percent) and Galati (5.2 percent). In spatial terms, the regional distribution of industrial product value is a core-periphery pattern. A row of counties in the centre of the country - Timis-Hunedoara-Sibiu- Brasov-Prahova-Bucharest - are historically and currently the most developed zones of the country. Although there are several regions, such as Timis and Bacau, which contain major industrial areas, the peripheral counties have a relatively weak level of industrialisation, especially counties adjoining the northern and

southern borders of the country.

Finally, for **Czechoslovakia**, the potential for regional analysis is extremely limited. Some indication of regional output can be provided by using the NMP ratios between the Czech and Slovak republics, but no statistical data is available for the regional NMP, and no reliable estimates have been obtained for the provinces. In considering the republic ratios, it should be noted that the sum of the totals for the Czech Republic and the Slovak Republic is lower than the total for Czechoslovakia as a whole. This highlights the situation that the product of foreign trade (considered a "material product") is included in the data for Czechoslovakia, but not for the national republics. Thus, the share of the Czech Republic or the Slovak Republic in the total economic capacity of Czechoslovakia cannot be calculated by a simple division of the data recorded for the national republics by the data for the country as a whole.

However, the relative ratio of both republics may be illustrated by a comparison of the Czech Republic and the Slovak Republic in the generated NMP and that of their populations.

Ratio CR : SR

	1948	1960	1970	1980	1988
NMP	4.2:1	3.3:1	2.8:1	2.4:1	2.3:1
Population	2.6:1	2.4:1	2.2:1	2.1:1	2.0:1
NMP : Population	1.6:1	1.4:1	1.17:1	1.17:1	1.16:1

The data clearly indicates a considerably higher growth of NMP, and a simultaneously higher growth of population, in Slovakia. The per capita product was about 60 percent higher in the Czech Republic than in the Slovak Republic in 1948, but the difference is declining - to only 16-17 percent in the 1980s.

Up to 1988, a dominant part of industrial production was concentrated in the centrally-planned so-called "national enterprises" (92.1 percent of total employment in manufacturing). A considerably lower part (7.9 percent of employment) was represented by "local industries", subordinated to local governments of province, district or town, or by cooperative industries. The private sector, with very rare exceptions, did not exist. The most industrial provinces are Northern Moravia (mining of coking coal, metallurgy and related industries) and Northern Bohemia (the dominant coal power stations and chemical plants in the western part of the province).

6.9 Productivity

In summarising regional patterns of output among the Central and East European countries, it is useful to consider the disparities in productivity inasfar as the data permits. In Table 6.5 and Figure 6.1, the nearest available data for output and employment have been combined to produce indices of output per employed person. For each country, the national output per employed person equals 100. Therefore disparities relate to regional differences *within* not between countries. Also, the

output and employment data are based on different national definitions and relate to different years. Consequently, the comparisons of productivity have to be approached with caution, although the data provide some indication of the relative magnitudes between countries.

Overall, the most dramatic disparities in productivity are in Romania and East Germany with a regional difference of 151 and 130 respectively between those regions with the highest and lowest productivity index values. Regional differences in index values also exceed 100 in three other countries - Czechoslovakia, Hungary and Poland. Only in Bulgaria and Yugoslavia are the differences minor, although this is partly determined by the small number of regions (six and nine respectively) in these countries - compared to 40-50 regions in Poland and Romania.

In most countries, the highest productivity values are in the capital cities or the surrounding regions. This applies to:

- East Germany (where the highest productivity value is in the Frankfurt district east of Berlin);
- Czechoslovakia (Bratislava and the region of Central Bohemia surrounding Prague);
- Poland (Warsaw and the adjoining *voivod*ships of Plockie and Radomskie);
- Hungary (the county of Fejer, west of Budapest); and
- Romania (the regions of Prahova, Brasov and Arges to the north and west of Bucharest).

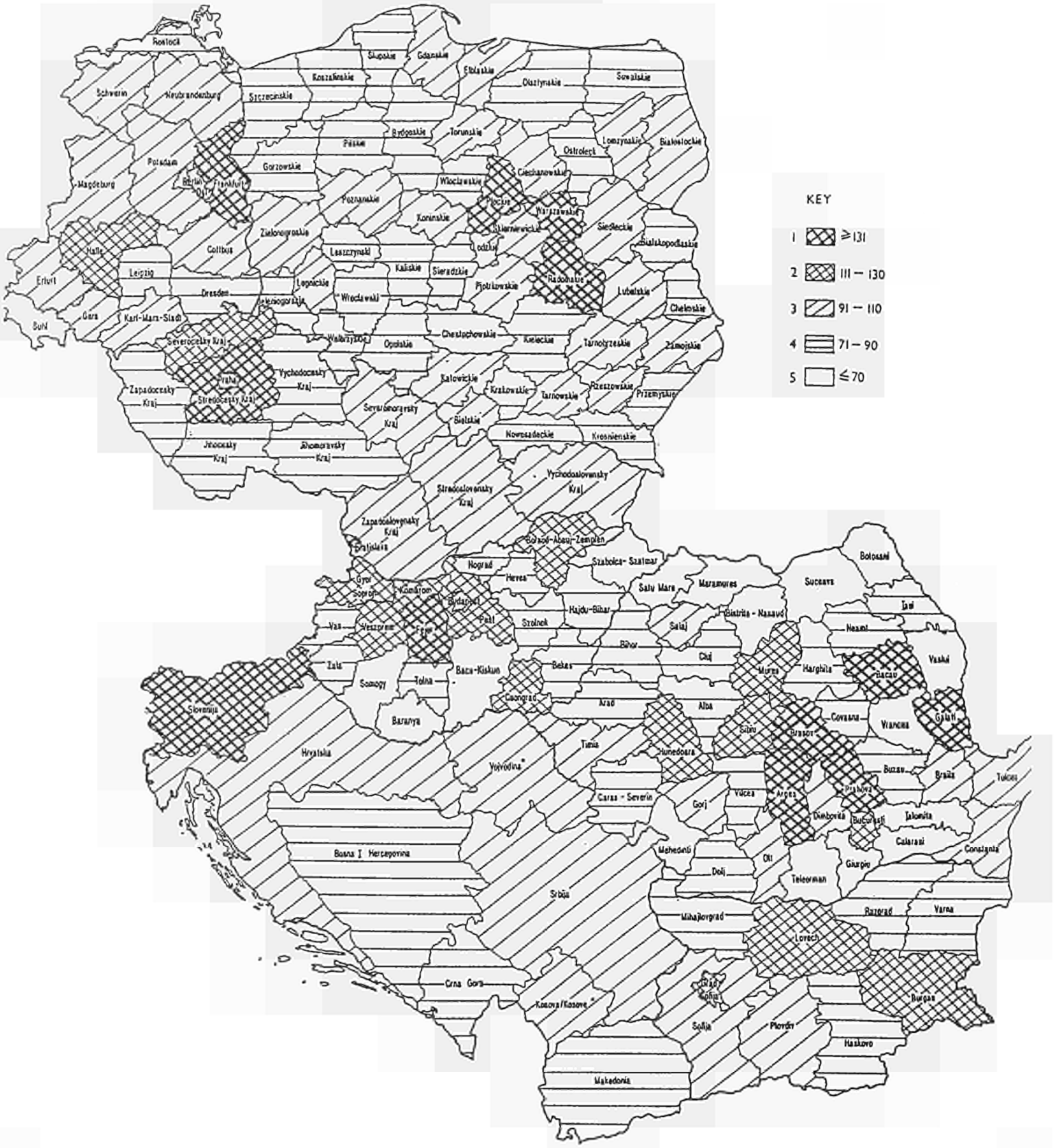
In Bulgaria, the large size of the regions means that detailed patterns of productivity are masked, but the highest productivity values are in the capital region, Sofia as well as Lovech and Bourgas. In Yugoslavia, Slovenia has the highest productivity value, followed by Croatia. All other regions have values lower than the national average.

In some countries, the output per employee values correspond to the level of industrial employment and output. Thus, in Hungary the higher productivity regions are the more industrialised northern parts of the country. The same applies to Slovenia in Yugoslavia and, to a certain extent, in Bulgaria. However, in other countries, the heavily industrialised regions appear to have very low productivity levels; this is true of the Leipzig and Dresden districts in East Germany; Upper Silesia in Poland; and southern Moravia and western and eastern Bohemia in Czechoslovakia. Other regions with low productivity tend to be more predictable, notably peripheral and rural regions such as Rostock and Suhl in East Germany, northern Poland, southern Hungary, north-east Romania and Macedonia in Yugoslavia.

Table 6.5: Productivity in Central and Eastern Europe - Indices of output per employed person

	National figure	Regional maximum	Regional minimum	Regional difference	Data year
Bulgaria	100	128	79	49	1988
Czechoslovakia	100	185	81	104	1988/9
East Germany	100	195	65	130	1989
Hungary	100	158	54	104	1987/8
Poland	100	185	73	112	1985/6
Romania	100	196	45	151	1989/90
Yugoslavia	100	134	73	61	1988

Figure 6.1: OUTPUT PER EMPLOYEE 1988/89



CHAPTER 7: FOREIGN INVESTMENT

7.1 Introduction

The task of attracting foreign investment into the emerging market economies of Central and Eastern Europe is perceived to be one of the most important tasks faced by these countries. This section examines historical attitudes in Central and Eastern Europe to the possibility of foreign investment, the growing recognition of its importance, and the legislative moves which have been made accordingly. Finally, this section provides a country-by-country outline of the present situation regarding foreign investment.

7.2 Past experience

An understanding of the need to attract foreign investment for economic strength and development is not entirely new to the Central and East European countries. Since the early 1970s, Hungary and Romania passed legislation allowing the establishment of joint ventures, and Poland created so-called "Polonia" firms - private companies owned by foreign nationals of Polish ethnic origin, which principally served the domestic market. Joint ventures were also technically legal in Bulgaria in 1980. These attempts to attract foreign investment, however, were generally unsuccessful.

During the 1980s, efforts to promote joint ventures increased with reforms eg. Czechoslovakia in 1988, and Poland, which passed new laws in 1986 again concentrating on Polonia-type enterprises but with the aim of creating hard currency through the production of exports. However, the response was still limited. The reluctance of foreign companies to invest in Central and East European countries was partly attributable to the still quite restrictive nature of the legislation. In Poland, the Polish participant in the enterprise had to maintain majority ownership, while in Czechoslovakia, only state enterprises could seek foreign partners. Other problems included an excessive amount of "red tape", and a common requirement that a percentage of hard currency earnings had to be sold to the state or a state bank. In general, foreign investment was not fully accepted, and national systems were certainly not equipped to cope with the needs of private enterprises.

7.3 New Perspectives

The transformation of the formerly centrally-controlled economies of Central and Eastern Europe to a system of market economy has led to a new perspective on foreign investment. Joint ventures are now seen to be an effective way of stimulating economic growth, creating much-needed hard currency earnings, and introducing new technology and working methods into

the changing industrial and economic climate.

This new attitude towards foreign investment is leading, in most Central and East European countries, to amendments of relevant laws and legislation, which aim to create a more attractive investment environment for foreign companies. Restrictions on the sectors and activities in which foreign investment is permissible are being lifted. Joint ventures are being encouraged where this was not previously the case, and foreign companies are being allowed to hold the majority stake. Restrictions on reinvestment or profit repatriation are being eased, although not always fully lifted. Companies established solely by foreigners who own 100 percent of the capital are also being licensed in many countries, including Romania.

With the easing of previous restrictions, the number of joint ventures and the level of foreign investment is now growing. Many foreign companies perceive Central and Eastern Europe as an expanding new market and a production base for supplying Western Europe, with the advantage of cheap labour. "Eastern Europe is an unsatisfied market, a source of inexpensive labour, and a reservoir of European skills" (Wallace 1990, p459).

Reliable statistics on foreign investment are difficult to obtain. According to the United Nations Economic Commission for Europe (ECE), in January 1990 there had been 2,090 new joint ventures involving Central and East European former CMEA members and Yugoslavia during 1989. The i.w.d. estimates the growth to be somewhat greater (see Table 7.1), reporting a total of 3,790 joint ventures in January 1990 (compared to 930 in January 1989), rising to 6,520 by July 1990. Based on national statistics, the WIIW considers the growth to be greater still; the total number of authorised joint ventures in Central and Eastern Europe was put at almost 15,000 in late 1990. Despite the variation in numbers, the common message is clear: foreign investment in Central and Eastern Europe is rising very rapidly.

Table 7.1: Growth in Joint Ventures in Central and Eastern Europe

Year	Number of joint ventures
1987 (January)	100
1988 (January)	400
1989 (January)	930
1990 (January)	3,790
(March)	4,700
(May)	5,700
(July)	6,520

Source: iwd, 23.8.90

Similar data problems occur in trying to assess the trends within individual countries. In Table 7.2, it is clear that the basis for assessing joint ventures differs greatly between the i.w.d. and WIIW, notably for Hungary and Czechoslovakia. However, both data sets agree that the greatest number of joint ventures are operating (or have at least registered) in Hungary, Yugoslavia and Poland. By contrast, foreign

investment in Romania and Bulgaria is limited. Specifically, Poland experienced the fastest growth, the number of joint ventures rising from 13 in January 1988 to 400 in October 1989 and to more than 2,600 by the end of 1990. However, not all firms are operating: out of 2,615 registered Polish joint ventures in December 1990, 1,645 (two-thirds) were operating in Poland in December 1990).

Hungary witnessed a growth in joint ventures from 102 to 600 over the 1988-89 period and, according to Hungarian authorities, to more than 5,000 by late 1990. The number of joint ventures has also been rising rapidly in Czechoslovakia - to 1,200 by the end of 1990 according to the WIIW.

Table 7.2: Joint ventures in Central and Eastern Europe

	1989 (Oct.)	1990 (July) (i.w.d.)	1990 (Dec) (WIIW)
Bulgaria	30	30	110
Czechoslovakia	50	85	1,200
East Germany	-	-	-
Hungary	600	1,600	>5,000 (*)
Poland	400	1,550	2,615 (+)
Romania	5	5	570
Yugoslavia	386	1,450	3,521

Sources: WIIW, UN, OECD, Stefanowski (1990)
(*) Figure relates to permits issued; not all firms are yet operating. (+) Figures relate to operational firms

While the amount of foreign investment is increasing, there are still many problems involved for foreign companies in establishing joint ventures, particularly in the countries which are less advanced in terms of economic reform. As noted above, Romania and Bulgaria, lag behind in terms of foreign investment. As in some other countries, bureaucracy and "red tape" continue to be a major hindrance, and, despite recent reforms, the establishment of joint ventures still involves negotiations with a number of different ministries and institutions. Another major problem, from the viewpoint of investors in all the Central and East European countries, is the difficulty in securing a return in hard currency. The plunging, and often greatly fluctuating, value of most of the Central and East European currencies (particularly the Polish zloty and the Yugoslav dinar) has been a severe deterrent to most investment strategies.

7.4 The main investment sectors

Foreign investment has tended to centre on certain industrial sectors which have particular advantages for the investor, but which are not necessarily of greatest value for individual Central and East European countries. Consequently, many countries are emphasising the attraction of investment in industrial manufacturing, particularly in small and medium sized enterprises. This trend is reflected in the legislation of many of the countries, which offers the greatest flexibility to companies employing 50 or fewer employees.

Tourism has, so far, been the principal recipient of foreign investment. Central and Eastern Europe has been "opened up" for tourism over the last few years, becoming an increasingly popular holiday region. Foreign investment in tourism has brought advantages for the recipient country in terms of infrastructure improvement, either as a natural side effect or, as in the case of Yugoslavia, undertaken by the investor as part of the foreign investment agreement. Among others, Czechoslovakia is now trying to deflect foreign investment away from tourism and encourage it in other areas, particularly industrial manufacturing.

The automobile industry has also benefited from a high degree of foreign investment. A considerable consumer market exists for cars, and foreign companies have been quick to recognise the potential. The main Japanese investments have been the $150 million Suzuki car assembly plant near Budapest and the $750 million Daihatsu plant in Poland. Other major car manufacturers have also invested heavily in joint ventures in Central and Eastern Europe. Volkswagen completed a DM 9.5 billion deal with Skoda in Czechoslovakia at the end of 1990, and plans other investment in East Germany. General Motors already has facilities in Eastern Europe including an Opel Vectra assembly line under construction in East Germany, and an engine and passenger car assembly plant due to open in Hungary in 1992, although recent negotiations with Bratislava Automobile Association (BAZ) in Czechoslovakia for investment of at least DM 600 million have not been successful. Poland is attempting to obtain the latest car technology in order to export strongly in this sector after 1991, and Fiat have offered a $2 billion investment in exchange for exclusive manufacturing rights in Poland. Other sectors which at present seem to have attracted investment include glass, food processing and finance.

Among other industrial sectors of relevance to foreign investors, major market potential appears to exist for foreign investment in agricultural machinery, pharmaceuticals, and computer equipment (particularly mainframes and minicomputers). There is also a large market for consumer goods such as video recorders, televisions and telecommunication equipment. These may, therefore, be sectors which will attract future investment as they serve a virtually guaranteed market.

7.5 National experience and regional concentration

Foreign investment levels have not been uniform throughout Central and Eastern Europe. Hungary, Poland, and East Germany appear to have progressed furthest in terms of legislation allowing foreign investment, and actually attracting foreign companies. Currently, most of the data regarding the location of investment is at the national level.

Foreign investment in East Germany appears to be extremely limited to date. According to a recent analysis completed by the five major economic research institutes in Germany, total investment in East Germany in 1990 amounted to DM 48.2 billion, of which 3.95 billion (eight percent) is attributable to foreign direct investment. The following discussion of trends and patterns, therefore, has to be considered in this context.

Of the limited foreign investment that has taken place, the majority is accounted for by west German firms. Between March and December 1990,

the press reported over 1,000 investment ventures, of which 90 percent were west German initiatives. Foreign investors have been reluctant to invest mainly due to uncertainty over property rights and concern about the level of risk. Aside from investment by west German firms, around two-thirds of all foreign (non-German) investment has been undertaken through subsidiaries in west Germany; 40 percent of foreign investment has come from other EC member states, notably France (18 percent) and the UK (11 percent).

Regional data on joint ventures is limited. However, most foreign investment is known to have been made in the regions of Sachsen and Thueringen.

Joint ventures with Western companies have been permitted in Bulgaria since 1980, but legislation in January 1989 opened up possibilities by allowing companies to establish joint ventures in their own right or to set up wholly-owned subsidiaries. There are, however, a number of major deterrents to foreign investors including a taxation rate of 40 percent, the need for government approval to establish foreign shareholdings of more than 49 percent, and a quite unstable political situation. No information is available on the regional distribution of joint ventures, but the main beneficiary is assumed to be Sofia.

A number of new bills have been passed in **Czechoslovakia** to encourage foreign investment. The Joint Venture Act which came into force in January 1989 extended the scope of possible investment targets to industry and certain services; amendments in May 1990 allowed foreign participation to represent 100 percent. Further legislation in March 1990 allowed foreign investors to open or take over small businesses. However, the lack of effective currency legislation discourages many prospective investors, as it is still illegal to export koruna-dominated earnings, except in the instance of prearranged bilateral agreements. Other impediments are the proviso that 30 percent of hard currency profits must be offered for sale to Czechoslovak banks, and the continuing constraints on profit repatriation. The tax rate is also very high. Despite these restrictions, Czechoslovakia has attracted some large investment projects and joint ventures (see Table 7.3), particularly in the sectors of tourism and cars. Further changes occurred at the start of 1991 related to the introduction of "internal convertibility" and the ability of foreign enterprises to participate in the "big" privatisation.

Table 7.3 Joint Ventures in Czechoslovakia (January 1991)

Country	Number of joint ventures
Austria	463
West Germany	453
Switzerland	124
USA	74
Italy	63
Great Britain	46
France	38
Canada	32
Total	1,586

Hungary is generally considered to have the best investment prospects of the Central and East European countries, partly due to its greater experience with market economic conditions (joint ventures have been legal in Hungary since 1972) and its stage of economic reform. After recent reforms, Hungary now offers favourable tax holidays and the 100 percent purchase of local enterprises, as well as the repatriation of profits. This has led to a very rapid growth in the number of joint ventures (see Table 7.4); according to the government, there are now over 5,000 joint ventures operating with a total capital investment of over US$ 1 billion. The non-convertibility of the forint until 1992-93 may be the main obstacle to Western investors, and it is likely that in 1990-91 any foreign investment will principally involve the creation of export products.

Table 7.4: Joint Ventures in Hungary (August 1990)

Country	Number of joint ventures
West Germany	1,117
Austria	960
USA	264
Switzerland	230
Italy	176
Great Britain	149
Sweden	147
Other	1,386
Total	4,429

Poland has allowed joint ventures since 1976, but legislation passed in December 1988 was designed to liberalise properly laws governing foreign investment. The key feature of this legislation was that it now allowed the investor to hold a majority share in the enterprise. Further legislation in December 1989 was intended to encourage investors through the provision of greater security, more benefits, and the easing of some previous restrictions on profit repatriation. The limited convertibility of the zloty is also a hindrance to investment. Despite these new laws, investment has not been substantial in Poland. While there are more than 2,600 registered joint ventures in Poland, only around two-thirds of these are actually operational. Poland's geographical location means that the country has a tradition of foreign trade and international contact, but the largely superficial laws enacted so far, and the still notable degree of state intervention, has meant that this tradition has not been fully utilised.

With respect to the regional location of foreign investment, data is available for September 1990 relating to the distribution of 747 joint ventures in Poland. The location of foreign enterprises is dominated by the agglomerations; almost 52 percent of joint ventures are located in five cities - Warsaw (containing 23 percent alone), Poznan, Lodz, Gdansk, Krakow and Katowice. A further 20 percent is located in seven other large towns.

In Romania, two types of joint venture are technically possible:

joint-stock or limited-liability companies; and, companies established solely by foreigners, holding 100 percent of the capital. Both types may be founded in any economic sector, and the government can approve joint ventures in other areas (eg. education, health care) on request. Certain tax exemptions are also available. While taxes are comparatively low, there are strict limits on the repatriation of profits amde in local currency. Only four joint ventures were known to be already in place at the start of 1990 under the terms of the old regulations. Although the number of joint ventures has increased rapidly in the course of 1990 (to c.570 joint ventures), the present political climate is perhaps the most serious setback to increasing foreign investment in Romania.

Direct foreign investment has been permitted in Yugoslavia since 1968, but new legislation in 1988 extended the scope for investment and allowed 100 percent ownership for foreign companies. British and West German companies have shown particular interest in Yugoslavia, but the USA and Japan have remained very reserved. Export oriented goods and tourism (a very large source of foreign investment) are the only really viable sectors due to the extreme instability of the dinar. Again, the political situation is, at present, the main deterrent for foreign investors. The uncertainty about the future of the Yugoslav federation, and the likelihood of secession by at least two republics, is bound to lead to reluctance by foreign companies to invest in the country.

CHAPTER 8: ENVIRONMENTAL PROBLEMS

8.1 Introduction

The scale of the environmental problems in Central and Eastern Europe is vast. Rapid industrial development, the large-scale, crude exploitation of raw materials, obsolete technology and few environmental controls have all contributed to serious environmental degradation in certain areas. Pollution is affecting not only the atmosphere, water and land area, but also the health and living conditions of the population. This section outlines why the problem is so severe, the different areas of environmental pollution, and finally examines which countries and regions are worst affected.

8.2 The socialist inheritance

Economic development in the socialist era concentrated predominately on rapid industrialisation and the exploitation of raw materials to use in the expanding industrial sector. The environmental impact of such a strategy was given comparatively little consideration. The functioning of a planned economy could, in fact, have had a number of advantages in containing environmental pollution - central control of the economy could have led to a mix of industries being developed which would have the least adverse environmental impact; consumer disposable goods and private cars, the cause of much environmental damage in the West, were less generally available; surplus labour could have been utilised in the collection of waste and environmental projects.

In fact, the degree of environmental damage appears to be worse than in capitalist nations. "A primary factor...comes from the socialist decision-makers who regard the environment in terms of potential productivity rather than potential habitability" (Rugg 1985, p318). The importance of economic and industrial development, and the attempts to achieve regional equity, were placed above the social costs of environmental degredation. Obsolete and environmentally damaging technology was often used, and particularly harmful raw materials such as lignite and brown coal were the principal sources of energy. There was a lack of investment in purification plants and waste processing facilities.

The largest industrial agglomerations, with a concentration of heavy industrial plants and urban development, have suffered the worst environmental problems. In Central and Eastern Europe as a whole, the following regions are particularly affected: Sofia (Bulgaria); North Bohemia and North Moravia (Czechoslovakia); Halle and Cottbus (East Germany); Miskolc area (Hungary); Upper Silesia (Poland); Resita and Copsa Mica (Romania); and Jesenica in Slovenia (Yugoslavia).

8.3 Types of environmental degradation

Atmospheric and water pollution are the two types of environmental problem which are particularly serious in Central and Eastern Europe, although the damage to agricultural land, countryside, and forestry is also an area of great concern eg. 64 percent of the Polish forest area is affected by industrial pollution.

Atmospheric pollution is primarily a result of the use of low-grade brown coal as a principal source of energy in power stations and industrial plants. Inefficient and poorly designed cars and vehicles also contribute to this form of pollution. The problem is particularly serious in the industrial axis running from the southern regions of the former GDR to Upper Silesia and the Krakow area in Poland, and including Ostrava, Prague and North Bohemia in Czechoslovakia.

Very high levels of pollution have also been recorded in other relatively localised and contained areas. This is the case in some of the Balkan countries, which have a generally lower level of pollution, but with certain areas suffering particularly badly. These areas include: Sofia, Burgas, Devnya, Dimitrovgrad, Kardzinali and Pirdop (Bulgaria); Bicaz and Copsa Mica (Romania); and, Bor, Trepca and Zenica (Yugoslavia). The prevailing winds also carry much of the atmospheric pollution from the source country to neighbouring states. Thus, for example, the environmental situation in southern Poland is exacerbated by pollution from Czechoslovakia and the former GDR, while the majority of Hungary's pollution originates in neighbouring countries.

Water pollution is a particular problem in several areas of Central and Eastern Europe. The lack of purification facilities in all countries has led to much untreated sewage and industrial waste being dumped directly into waterways, causing serious environmental harm. It is estimated that up to 40 percent of Poland's waterways fall below any environmental standard and are unusable for any economic purpose. The cause of water pollution is not always industrial - in Hungary, Lake Balaton faces a serious threat from tourist development, and the same situation is found on the Adriatic coast of Yugoslavia and on the Baltic coast in Poland. In Romania, the Danube delta also suffers from severe ecological damage.

CHAPTER 9: INFRASTRUCTURE DEVELOPMENT

9.1 Introduction

This chapter examines some of the key indicators of infrastructure development in Central and Eastern Europe. Although a considerable amount of data is available on infrastructure conditions in the various countries, the regional information is highly country-specific. This chapter provides a relatively brief overview of the infrastructure situation in five main areas - transport, telecommunications, education and healthcare and energy.

9.2 Transport infrastructure

The transport infrastructure in Central and East European countries is characterised by five main features. First, the infrastructure in the region is generally of poor quality and over-loaded. For example, rail networks are extensive but significant parts are one-track (in Hungary only 14 percent is double-track), the load-bearing capacity is low, and many sections are not capable of high-speed travel. Electrification is limited, and the rolling stock suffers from under-investment. In East Germany, it has been estimated that at least 50 percent of the rail network (total length 14,000 km) will have to be modernized, especially with respect to electrification and high-speed rail.

Road networks are also dense but again are in need of upgrading. In Hungary and Czechoslovakia, the proportion of express highways and main roads is comparable to some European Community countries, but the condition of road surfaces (especially on secondary roads) is of poor quality, and many rural roads are not metalled. The transport system is particularly poor in Romania and Yugoslavia.

Second, infrastructure development relating to transport in most countries has concentrated on the major urban areas and the axes of economic activity: eg. Sofia-Varna and Sofia-Bourgas in Bulgaria; Prague-Brno-Bratislava (the only express highway links) in Czechoslovakia; and within the Budapest region in Hungary. International links tend to have been neglected and inappropriately oriented (for the post-liberalisation period). For example, the Hungarian transport system has a domestically-oriented radial character, connecting Budapest with other Hungarian cities, but international connections (especially the road system) are not yet completed. Most Czechoslovak rail lines and highways are aligned in an east-west direction but, since transit transport is growing in importance, north-south connections will have to be expanded significantly. The same is true for Bulgaria where the rail network is highly concentrated on the industrially developed and central regions of Sofia, Lovech and Razgrad.

The third characteristic is the west-east difference in infrastructure provision within Central and Eastern Europe. The

availability and quality of infrastructure decreases with distance from Western Europe. This reflects the history of industrialization in different countries, and investment for military purposes. Thus, the density of road and rail network is relatively high in East Germany in comparison with other countries in the region (although the quality of construction and maintenance is very poor). Within Poland, infrastructure density decreases from the western to eastern regions of the country eg. a decrease of railway track from 12km to 4km per 100 sq.km. and a decrease in road surface from 70km to 40km per 100 sq.km.

Fourth, the transport system in most countries in the region shows a distinct bias towards freight and public transportation. Private passenger transport is relatively underdeveloped, and public transportation prevails for both freight and passengers. The share of the private sector also declines along a west-east gradient across Central and Eastern Europe, associated with levels of economic development. This can can be indirectly illustrated by the (generally low) stocks of passenger cars - decreasing from a maximum of 214 cars per 1,000 inhabitants in East Germany, 190 in Czechoslovakia, 169 in Hungary, 120-133 in Bulgaria, Poland and Yugoslavia, and 44 in Romania.

With economic restructuring, the public/private balance of transport usage is likely to change. Hitherto, public passenger transport (both rail and road) has been heavily subsidized. Since the major subsidies to public transport are currently being reduced, considerable shifts between various modes of transport can be expected to result from tariff changes for both freight and passenger transport.

Lastly, freight and passenger transport in Central and Eastern Europe is dominated by rail and road transport (see Tables 9.1 and 9.2). In the freight sector, rail movement is the dominant mode of transport followed by road transportation. Water and air transport are much less significant. The proportion of transport moved by rail varies greatly. Railroads accounted for 40-60 percent of transport volume in Bulgaria, Hungary and Yugoslavia; 70-80 percent in Czechoslovakia, East Germany and Poland; and 90 percent in Romania. In terms of per capita transported rail freight, the most "transport intensive" countries have been Czechoslovakia and East Germany (in East Germany this indicator even increased between 1980 and 1989 to more than 20 tonnes per capita - about twice the level in Hungary and Poland, and six times more than in Yugoslavia). In general, the volume of railroad freight transport remained more or less constant in most Central and East European countries over the period 1980-1989 except for Hungary and Poland where a drop by about 20 percent has been observed.

Table 9.1 : Goods transport by rail, motor vehicles and inland waterway - 1980 and 1989

	Railroad Freight				Railroad Freight			
	1980 in bill.tkm	1989(1)	1980 in mill.tons	1989(1)	1980 in tkm per capita	1989(1)	1980 in tonnes per capita	1989(1)
Bulgaria	17.7	17.0	77.8	77.3	1993.9	1890.4	8.8	8.6
CSFR	72.6	72.0	286.0	283.7	4748.5	4600.3	18.7	18.1
GDR	56.4	59.0	311.6	339.3	3369.2	3590.1	18.6	20.6
Hungary	24.4	19.8	129.8	104.5	2277.6	1908.4	12.1	10.1
Poland	134.7	111.1	482.1	388.9	3769.4	2920.8	13.5	10.2
Romania	75.5	74.2	274.6	283.4	3400.7	3265.1	12.4	12.5
Yugoslavia	25.0	25.9	84.9	84.8	1121.7	1094.2	3.8	3.6

	Motor Vehicle Freight				Motor Vehicle Freight			
	1980 in bill.tkm	1989(1)	1980 in mill.tons	1989(1)	1980 in tkm per capita	1989(1)	1980 in tonnes per capita	1989(1)
Bulgaria	15.9	17.5	816	943	1790.0	1942.6	91.9	104.9
CSFR	21.3	23.8	1235	1258	1395.1	1522.6	80.8	80.4
GDR	21.0	16.9	730	541	1255.7	1026.5	43.6	32.9
Hungary	11.4	13.2	584	546	1064.1	1273.3	54.5	52.6
Poland	44.6	38.5	2168	1348	1246.7	1010.8	60.7	35.4
Romania	11.8	6.0	451	362	529.7	264.0	20.3	15.9
Yugoslavia	19.0	21.8	202	125	851.7	920.1	9.0	5.3

	Inland Waterway Freight				Inland Waterway Freight			
	1980 in bill.tkm	1989(1)	1980 in mill.tons	1989(1)	1980 in tkm per capita	1989(1)	1980 in tonnes per capita	1989(1)
Bulgaria	2.6	2.0	4.9	3.4	294.0	216.8	0.6	0.4
CSFR	3.6	5.1	10.5	13.5	234.8	325.9	0.7	0.9
GDR	2.2	2.3	16.3	20.4	129.0	139.3	1.0	1.2
Hungary	1.9	2.2	3.5	3.9	174.6	211.1	0.3	0.4
Poland	2.3	1.2	22.3	14.0	65.2	31.3	0.6	0.4
Romania	2.4	2.4	12.3	18.4	105.9	106.1	0.6	0.8
Yugoslavia	5.0	5.0	26.0	19.3	223.1	211.4	1.2	0.8

(1) 1985 figures for Romania.

Source: National statistics.

Table 9.2 : Passenger transport by rail, motor vehicles and inland waterway - 1980 and 1989

	Railroad				Railroad			
	1980	1989(1)	1980	1989(1)	1980	1989(1)	1980	1989(1)
	in bill.pkm		in mill.persons		in pkm per capita		in persons per capita	
Bulgaria	7.1	7.6	100.0	99.0	794.8	845.2	11.3	11.0
CSFR	18.0	19.7	415.6	411.0	1180.1	1256.7	27.2	26.3
GDR	22.0	23.8	607.0	592.0	1315.8	1448.9	36.3	36.0
Hungary	14.7	12.7	389.0	323.0	1368.4	1228.0	36.3	31.1
Poland	46.3	55.9	1101.0	952.0	1296.5	1469.3	30.8	25.0
Romania	23.2	31.1	347.9	460.3	1045.9	1367.7	15.7	20.3
Yugoslavia	10.4	11.7	107.0	117.0	465.9	491.9	4.8	4.9

	Motor Vehicles				Motor Vehicles			
	1980	1989(1)	1980	1989(1)	1980	1989(1)	1980	1989(1)
	in mill.pkm		in mill.persons		in pkm per capita		in persons per capita	
Bulgaria	15.4	19.9	730.4	936.7	1735.4	2210.9	82.3	104.2
CSFR	33.8	39.7	2134.6	2320.3	2207.6	2537.1	139.6	148.3
GDR	29.6	30.2	3490.0	3463.0	1768.8	1837.6	208.5	210.7
Hungary	21.9	22.0	2413.0	2828.0	2044.2	2120.5	225.2	272.6
Poland	49.2	58.1	2379.0	2564.0	1377.4	1526.4	66.6	67.4
Romania	24.0	21.7	1033.7	837.3	1081.8	954.1	46.6	36.8
Yugoslavia	29.6	26.2	938.9	804.3	1328.2	1107.4	42.1	33.9

	Inland Waterway				Inland Waterway			
	1980	1989(1)	1980	1989(1)	1980	1989(1)	1980	1989(1)
	in bill.pkm		in mill.persons		in pkm per capita		in persons per capita	
Bulgaria	39.0	12.0	0.4	0.1	4.4	1.4	0.0	0.0
CSFR	11.7	8.6	0.5	0.4	0.8	0.6	0.0	0.0
GDR	205.0	189.0	6.8	7.4	12.2	11.3	0.4	0.5
Hungary	77.0	67.0	4.0	3.6	7.2	6.3	0.4	0.3
Poland	127.0	68.0	9.4	5.8	3.6	1.9	0.3	0.2
Romania	79.0	78.0	1.7	1.8	3.6	3.4	0.1	0.1
Yugoslavia	20.0	1.0	0.1	0.0	0.9	0.0	0.0	0.0

(1) 1985 figures for Romania.

Source: National statistics

Motor vehicle freight transport has been gaining in importance in Bulgaria and Czechoslovakia (an increase of transport volume by 10 percent and 12 percent respectively between 1980 and 1989), but declined by 20 percent in East Germany, by 14 percent in Poland and by almost 50 percent in Romania. In Hungary and Yugoslavia, there has been a decline in transport volume in terms of tonnage, but an increase of transport distances (the transport volume increased by about 15 percent in terms of tkm during the period). Bulgaria and Czechoslovakia show the highest per capita motor vehicle transport intensity (with 105 and 85 tonnes per capita) - the former about twice as high as Hungary (53 tonnes), three times as high as the former GDR (33 tonnes) and Poland (35 tonnes).

As with freight, public passenger transport is concentrated on rail and road transport in all Central and East European countries, and the importance of water and air transport is negligible. Rail transport is, however, less important than for freight; rail accounts for about 20-40 percent of passenger transport volume in Bulgaria (the rest is accounted for by motor vehicle transport), Czechoslovakia, Yugoslavia and Hungary, 40-50 percent in East Germany and Poland; and 59 percent in Romania. In per capita terms, the highest movement of persons using rail transport was observed in Poland and East Germany, followed by Romania, Czechoslovakia, Hungary and Bulgaria. The latter three countries, however, displayed a much greater usage of public motor road transport which was much less common in Romania.

9.3 Telecommunications

Telecommunication services, in most cases provided exclusively by the state, have traditionally belonged to the so-called "non-productive sector". This sector (like infrastructure in general) has traditionally been neglected as far as the allocation of centrally distributed investment resources is concerned. In Bulgaria, which reports the highest number of telephones per 1,000 inhabitants of all the Central and East European countries as a result of official telecommunications policy (leading to an annual increase of telephone connections of 10 percent), capital investment in telecommunications still only amounted to about 1.5 percent of total investment over the period 1975-1985, and there is still no national digital network. Overall, low density and poor quality is characteristic of Central and East European telecom networks. Towards the end of the 1980s, there were on average about 170 telephones per 1,000 inhabitants in Central and Eastern Europe (see Table 9.3) - much lower than the equivalent figure for Western Europe.

During the 1980s, there was a relatively rapid expansion of Central and East European telephone systems. In Czechoslovakia, for example, automisation of the telephone system is almost complete; in 1988, there were 3.98 million telephones in Czechoslovakia, 99 percent of which are connected with automatic telephone exchanges, and only one percent with manual exchanges. However, only 1.4 million telephones were in homes in 1988 (i.e. 255 telephones per 1,000 people) which represents a considerable lag in comparison with other developed countries. 266,000 applications for instalment of new telephones have not been satisfied, and the supply does not cover the growing demand.

Thus, Central and East European countries still have lower telephone stocks than the EC countries at the end of the 1970s. Bulgaria, which had the highest level of telephone provision in the region in 1988, still had fewer stocks than any EC country with the exception of Portugal and Spain. These figures do not fully reflect the extent of the East-West development gap as they refer to main telephone lines only (CMEA countries: number of telephones in use), and the quality of the service is not taken into account.

There are considerable regional differences in the telecommunications infrastructure of Central and East European countries (see Table 9.4). In particular, there is a marked urban-rural development gap. In Czechoslovakia, there were 264 telephones per 1,000 inhabitants in 1989, but the figure for Prague was 671 compared with the figure of 176 for West Slovakia. Similarly for Hungary in 1988, the figure for Budapest was 204 but only 29 in Szabolcs-Szatmar. In Poland, the worst situation is found in the eastern part of the country eg. in the *voivod*ships of Ostroleka, Siedlce, Krosno or Cezestochowa the number of telephones per 1,000 population falls below 45; and in Yugoslavia (1989), the national average was 188 telephones per 1,000 inhabitants, with regional differences ranging from 322 in Slovenia to 149 in Bosnia-Hercegovina.

Finally, in East Germany, there were relatively few regional differences, with the exception of East Berlin where, in 1989, 424 households in every 1000 had a telephone, although even this figure is very low by western standards. Across the former GDR, 160 households in every 1,000 had a telephone facility in 1989; the telephone network was least dense in Rostock (115 per 1,000) and in Potsdam (118 per 1,000), with the greatest density in Schwerin and Leipzig (174 per 1,000).

The scale of the upgrading required is illustrated by the anticipated growth in telecommunications in East Germany envisaged by the German telecoms authority, Telekom: from 100,000 telephone connections in 1990 to five million in 1990; from 10,000 to 260,000 telefax connections; and from 5,000 to 74,000 data transmission (Datex) lines. Due to the current bottlenecks in telephone communication between West and East Germany, the financial resources made available up to the end of November 1990 for these "priority programmes" had been revised twice, rising first of all from DM 4.5 billion to DM 5.5 billion and then to DM 7.3 billion.

More advanced telecom services, provided through the digitization of the network (especially data transmission and linkage of computers), is virtually unknown in Central and Eastern Europe. Modern trends for digitization, decentralisation and diversification have thus been almost completely missed, and the sector now, in many respects, resembles the situation of the EC countries in the 1950s and 1960s when telecommunications had been regarded as a slow-growing and loss-making public sector utility.

Table 9.3: Telephone stocks in the CMEA and selected EC countries (per 1,000 population)

	1978	1988	Growth in %
Bulgaria	103	266	258
Czechoslovakia	197	246	125
East Germany	177	239	135
Hungary	107	158	148
Poland	88	128	145
Romania	59	90	152
Yugoslavia	-	188	-
CEE region	114	169	148
France	225	446	198
Germany	282	445	158
UK	272	389	143
Greece	215	347	161
Italy	202	333	165
Portugal	92	161	175
Spain	167	264	158

Sources: COMECON Data 1989, WIIW, The Macmillan Press Ltd. 1990, p166 and "Performance Indicators for Public Telecommunications Operators". SDTI/ICCP/TISP/89.10, OECD, 1990

Table 9.4: Regional disparities in telephone stocks (per 1,000 population) - 1989

	National average	Regional minimum	Regional maximum	Regional disparity
Bulgaria	258	-	-	-
Czechoslovakia	264	176	671	495
East Germany	160	115	424	309
Hungary	148	29	204	175
Poland	128	< 45	-	-
Romania	90	-	-	-
Yugoslavia	188	149	322	173

Source: National statistics; WIIW.

Unsatisfactory development of the telephone network system also forms a hindrance for the creation of unified database systems, for the creation of a computer network and for the introduction of modern communication facilities. In data transmission, the problems are aggravated not only by unavailability of terminals but also by the poor quality and unreliability of communications networks. Hungary, for example, has only recently introduced its first line-switched data transfer system for 200 subscribers with up to 1,100 such lines planned to be in operation during the early 1990s. The package-switched networks will be introduced with the help of Western firms.

Computer networking and data communications lines are almost unknown owing both to systemic reasons (eg. underdeveloped banking sector, high degree of centralization etc) and equipment bottlenecks. Most Central and East European countries list the underdevelopment of telecommunications services as one of the key areas hindering future development.

9.4 Education infrastructure

The educational level of the population in most countries of Central and Eastern Europe is believed to be satisfactory, and education in general can certainly not be considered a serious bottleneck to development. Overall, illiteracy is said to be virtually non-existent, school enrolment is high and, according to most official indicators related to the education sector, there is virtually no quantitative gap relative to the EC countries. The educational level in technical disciplines is considered to be particularly good.

The main problems are in the quality of the educational infrastructure and in the need to adapt to new conditions after the recent political changes. The latter will require a re-orientation of the curriculum to incorporate the conditions of a market economy, mainly in the humanities, at both secondary and university levels (eg. economics, management and similar disciplines). The lack of appropriately trained teaching personnel is a problem which cannot be solved in a short period of time, even with external technical assistance.

Pupils' enrolment in primary and secondary schools reached high levels in the 1980s: in 1988 Poland had 1,466 pupils per 10,000 inhabitants, Bulgaria 1,378, Czechoslovakia 1,383, Hungary 1,293, Romania 1,320, East Germany 1,233 and Yugoslavia 1,204. However, there are greater differences in the enrolment rates for secondary vocational schools and universities. In all the Central and East European countries there is a widespread system of night courses both at secondary and university levels.

9.5 Healthcare infrastructure

The basic indicators for the health services of Central and Eastern Europe imply a generally satisfactory level of health care, but again the quality differences are not taken into account. The number of hospital beds per 10,000 population varies from 61 in Yugoslavia to 103 in Czechoslovakia (1988). During the 1980s, the stocks of hospital beds remained more or less unchanged in Czechoslovakia, Poland, Romania and Yugoslavia; it has declined slightly in East Germany, but increased in Bulgaria and Hungary. Similar development trends can be observed in the number of medical practitioners (including dentists). The levels reached by the end of the 1980s are, at least nominally, quite satisfactory: the number of medical practitioners per 10,000 population amounted to 38 in Bulgaria, 37 in Czechoslovakia, 33 in East Germany and Hungary, 26 in Poland, 23 in Yugoslavia, and 21 in Romania.

The main problems in the health sector in all the Central and East European countries lie not in the lack of personnel (or even in insufficient qualifications), but rather in the non-availability of equipment and pharmaceuticals. Virtually all the Central and East European countries have serious shortages of even basic medicines, hygiene articles etc, and also a lack of hard currency necessary for imports. Another factor affecting the efficiency of the health sector is the extremely low level of wages, usually significantly below the national average. Considerable organisational and institutional problems will have to be solved as the whole system of social insurance is yet to be established.

Significant problems of the health sector (related to its quality, efficiency as well as to environmental problems) in all the Central and East European countries become apparant on examination of infant mortality and life expectancy figures. Life expectancy is lower by five to seven years in comparison to West European levels, and in some countries eg. Czechoslovakia, the figure has even declined recently. Recent figures have indicated the following levels: 72 years in Bulgaria; 71 in Czechoslovakia; 73 in East Germany; 70 in Hungary; 72 in Poland; 70 in Romania; and, 72 in Yugoslavia. Infant mortality rates have been as high as 25 per 1,000 live births in Yugoslavia and Romania, 16 in Hungary and Poland, 14 in Bulgaria, 12 in Czechoslovakia, and eight in East Germany.

Considerable regional differences also exist. In Bulgaria, the availability of hospital beds varies from 52 (per 10,000 inhabitants) in Sofia to 97 in the districts of Lovech and Haskovo. Characteristically, fewer hospital beds are available in larger Bulgarian cities. In Czechoslovakia, the national average was 79 hospital beds per 10,000 inhabitants (hospitals under local authority supervision only - all hospital beds: 103 in 1988), but the figures were 85 in East Bohemia and only 56 in Bratislava. There were also regional differences in the number of medical practitioners (particularly disturbing in the polluted regions of North Bohemia and Moravia). In Hungary, the availability of hospital beds is somewhat lower than in Czechoslovakia (93-96 per 10,000 population in 1988) and the regional differences were more striking. The levels stood at 143 beds in Budapest (with only 45 in the neighbouring region of Pest) and more than 100 in the western regions of Vas, Veszpren, Zala and Gyor-Sopron, and around 80 in the south-east regions like Szabolcs-Szatmar, Hajdu-Bihar and Bekes. The number of medical practitioners ranges between 51 per 10,000 inhabitants in Budapest (37 in Baranya, 40 in Csongrad), 17 in Szabolcs-Szatmar and 20 in Bekes (national average is 29.4). The available health indicators for East Germany are no longer relevant; about 1,800 doctors and dentists as well as 5,000 other medical personnel emigrated to the West during 1989 alone, and the situation in the hospitals especially has become critical. In Yugoslavia, the regional differences relating to the number of medical practitioners are not very large (national average is 23 per 10,000 population, with a somewhat better situation in Croatia and Slovenia). The differences in the number of hospital beds, however, is considerable: 80 in Croatia and Montenegro, but only 50 in Macedonia and 40 in Bosnia-Hercegovina (national average is 61).

9.6 Energy infrastructure

Energy consumption in Central and Eastern Europe in 1987 was 441.5 million tonnes of oil equivalent. The per capita final energy consumption in the region in kilogram oil equivalent, is higher than in Western Europe, in large part due to the history of post-war economic development. In common with other industrializing countries, Central and Eastern Europe has a higher percentage of industrial users than Western Europe (52 percent as against 34 percent). Differences in the dependence on oil between Eastern and Western Europe are also notable. Following the two global oil shocks, reliance on oil in Western Europe fell from 60 percent of total energy consumption to 45 percent between 1973 and 1984, while it remained constant at 22 percent in Central and Eastern Europe during that period (except in Yugoslavia, which showed a decline comparable to Western Europe). Differences also exist within Central and Eastern Europe: for example, per capita energy consumption in East Germany is 46 percent higher than in Hungary.

Energy in Central and Eastern Europe is based on exploitation of local resources and reliance on imports from other countries, most notably the Soviet Union. The principal local energy source in Central and Eastern Europe is coal, particularly low-grade brown coal. Coal reserves are unevenly distributed among the different countries - for example, East Germany has 13 times the per capita energy reserves compared to Romania, largely the result of the East Germany's coal deposits. Despite extensive exploration in the region, oil and gas has not been found as plentiful as in the Soviet Union (only in Romania have substantial oil and gas reserves been discovered and developed). Consequently, energy production continues to be based on coal. In spite of the apparent abundance of coal reserves, all the countries in the area are net importers of energy.

Total energy production in Central and Eastern Europe in 1987 was 336 million tons oil equivalent. In meeting their energy needs, the countries of the area have striven to be self-sufficient. However, because of their high energy consumption and the difficulties in extracting the poor quality coal of the area, Central and Eastern Europe has traditionally relied heavily on oil and gas imports from the Soviet Union. The balance between locally-produced and imported energy has shifted considerably over the last few decades. In the 1960s and 1970s, most Central and Eastern European countries were dependent on Soviet oil and gas as a matter of official policy, but this strategy was abandoned as a result of the oil shock of the early 1980s. With the rapid rise in the world price of oil as well as a decrease in the proportion of this price that the Soviet Union was prepared to subsidize, the expense of imported energy forced Central and Eastern European governments to reconsider their energy policies. The Soviet Union's insistence on Central and Eastern European contributions to oil exploration and development projects was a further burden on these countries. Finally, oil exports from the Soviet Union were increasingly being diverted to the West in order to increase their hard currency earnings.

In consequence, Central and Eastern European countries have begun developing their own energy resources more rapidly over the last decade. In most cases, this involved an expansion of coal production programmes, but governments have also been looking to alternative energy sources because of the rapid depletion of those coal areas which can be profitably mined and the environmental damage caused by the use of brown coal and

lignite. Many countries have started nuclear energy programmes and extended the use of alternative energy sources, such as hydroelectric power. However, efforts to find new sources of energy have proven difficult. Nuclear power programmes have been subject to cutbacks and cancellations due to public concern about the safety of nuclear power technology in the wake of the Chernobyl disaster in 1986. Hydroelectric power is limited to the availability of sufficient water resources, restricting its feasible development to the southern countries in the area.

Due to these problems in trying to find new sources of energy, there has been increasing pressure to cut down on the high degree of energy wastage. All the governments of Central and Eastern Europe have been trying to devise methods of reducing energy consumption, particularly in industry, through the introduction of new usage standards and pricing systems. However, they have been hampered by the economic pressures placed on the industrial sector to become competitive with the introduction of free market reforms.

Currently, electrical power is transmitted between the Central and Eastern European countries and the Soviet Union through the Integrated Electricity Grid, which has its headquarters in Prague. The principal energy flows are between the Soviet southern electricity grid and Hungary, Bulgaria and Czechoslovakia. The system is vulnerable to local supply difficulties; this has occurred, for example, in Romania since the mid-1980s as the country has exceeded its agreed quotas at the expense of Yugoslavia and Hungary.

CHAPTER10: REGIONAL DEVELOPMENT PROBLEMS IN CENTRAL AND EASTERN EUROPE

10.1 Introduction

The previous chapters in Part I of this report have examined regional disparities and conditions for a range of socio-economic indicators - population, employment, unemployment, output, foreign investment, environmental conditions and infrastructure in Central and Eastern Europe. This chapter integrates the main issues arising from the analysis and identifies the most important categories of regional problems.

The starting point for this review of regional economic problems in Central and Eastern Europe is to consider the broader scenario in the region as a whole. From this perspective, there is a clear opportunity for west-east (and north-south) differences to emerge as the region undergoes a transition to a market economy at varying rates of progress. East Germany has been reunited with West Germany and absorbed into the EC; Poland, Czechoslovakia and Hungary have made considerable progress with economic reform; in Bulgaria, Yugoslavia and Romania, the outcome of political reforms is still uncertain; and the Soviet Union's western republics (the Baltic States, Ukraine and Byelorussia) are showing signs of seceding from the USSR amidst a major economic crisis.

The danger of these variations in stage of economic transition is the negative impact on the relationship between individual countries. This compounds the problems derived from the region's history of political instability, national and regional hostilities and socio-cultural differences. Some countries are better placed than others, but all are expected to suffer significant economic and social dislocation. Clearly, there is a risk that, even with current consensus on the objectives of restructuring, political and economic reforms will be obstructed by dissatisfaction and demoralisation among the population. The scale of the restructuring task is evident from the experiences of the former GDR, at one time the "shop-window of socialism"; if East Germany is experiencing such severe transitional problems, then the prospects for other Central and East European countries (which have no access to the substantial resources of West Germany) may be worse, although the rate of restructuring may be more managed. Under these circumstances, the potential for international tension requires economic development strategies to consider the problems of Central and Eastern Europe on a region-wide basis.

With respect to regional economic conditions in the individual countries, the following section outlines some of the main categories of economic development problems in Central and Eastern Europe: industrial restructuring, social problems, infrastructure deficits, environmental degradation, agricultural underdevelopment and change, agglomeration and peripherality, and territorial minorities.

10.2 Industrial restructuring

The regional economic problems of Central and Eastern Europe are dominated by the effects of industrial restructuring. The main feature of industrial structures has been a concentration of employment in heavy manufacturing industry (mining, iron and steel, textiles, chemicals, engineering and shipbuilding) involving the intensive use of raw materials and energy. Industry has been almost entirely in state-ownership, operated through centrally-planned "national enterprises".

The organisation of industry featured a considerable degree of vertical integration and the organisation of manufacturing in large production units. In Hungary, for instance, more than 80 percent of manufacturing employment was accounted for by 1,140 state-owned enterprises with an average of more than 1,000 employees.

The spatial distribution of industry is based on major industrial-urban agglomerations in the form of industrial "zones" or "axes". For the most part, these equate with the availability of raw materials. In addition, state planning has attempted to impose more centrally-determined patterns of industrial location.

The large scale and organised division of industrial operations based on individual, or a limited number of heavy industrial sectors has given rise to so-called "monostructure" regions involving significant dependency of employment with few alternative job opportunities. Many of these sectors are now at risk from economic restructuring giving rise to potentially severe regional problems in areas dominated by coal and metal ore mining, heavy engineering, chemicals and textiles. The closure of particular industrial plants, or the decline of production, with redundancies as a natural consequence, are likely to cause some of the most serious regional problems. Even if output rises, the productivity increase arising from investment in new machinery will lead to job losses. Further disdvantage may arise from the cessation of armaments production or the conversion of armament factories to civil production. Although alternative production may safeguard some jobs, it is likely to yield considerably lower earnings for employees. The reorientation of trading relationships away from trade and barter agreements with the Soviet Union could also be significant; it has been estimated that, for some regions, this could involve a loss of production of up to 50 percent.

Figure 10.1 maps the location of many of the regions facing potentially serious industrial restructuring, including southern areas of East Germany, the Upper Silesian district of Poland (including the regions of Katowice, Krakowskie and Bielskie), and the eastern areas of Hungary. Taking the Central and Eastern European region as a whole, there is a large area of industrial restructuring stretching from southern Poland through the Slovak Republic to central Hungary.

The scale and concentration of development, and the close spatial linkages between raw material extraction, energy production and the location of industry, increase the potential impact of restructuring on particular regions. For example, in Czechoslovakia, the spatial impact of restructuring on mining and heavy industry will coincide. Mining industry regions are expected to be especially badly affected, and many coal mines in Czechoslovakia in northern and central Bohemia (eg. the Kladno basin), central Slovakia (Handlova) and northern and southern Moravia (Ostrava,

Hodonin) may become unprofitable. The majority of metal ore mines are also at risk of closure, mainly in eastern Slovakia (Spisska Nova Ves), northern Moravia (Bruntal) and central Bohemia (Pribram). The declining heavy industries may affect, in particular, Ostrava and surrounding districts (northern Moravia), Kosice (eastern Slovakia) and Plzen (western Bohemia). Conversion of armament production affects mainly central Slovakia (Martin and Povazska Bysktrica). Districts with significant employment in heavy machinery, electronics and chemical industries will also be affected, and the outdated textiles industry (eastern Bohemia) will require major modernisation.

The areas of **East Germany** most affected by industrial restructuring are concentrated in the south of the region, with major industrial centres at Chemnitz (textiles), Halle (chemicals), Suhl (light industry) and Dresden (engineering and electronics). Structurally-weak regions dominated by single industries include parts of Sachsen, notably Zwickau (textiles and vehicle engineering), Borna (energy and fuel), Eisenhuettenstadt and Riesa (steel), Thueringen (the Thueringen-Sachsen uranium mines), Erfurt and Gera (electronics), and Cottbus in Brandenburg, where the dominant sectors are energy and fuel, including brown coal mining.

In **Hungary**, the primary "crisis-sensitive" regions are those heavy-industry dominated regions on the so-called energy axis running from the north-east to the south-west of the country. The North Hungarian heavy industrial region is a depressed area, and industrial problems are also expected in certain North and Middle Transdanube regions and in the county of Baranya. To a certain extent, the dominance of Budapest has been reduced through planning measures since the 1960s to achieve a more even spread of industry. Consequently the proportion of industry in Budapest has been reduced by almost one-third. However, Budapest still dominates the industrial sector excessively, in particular as a centre for manufacturing. The city region has 60 percent of the textile industry, 70 percent of woollen mills and 90 percent of pharmaceutical output.

For **Poland**, Upper Silesia is the largest industrial-urban agglomeration in Poland and in Central and Eastern Europe. Its concentrated industrial structure (coal mining, ferrous and non-ferrous metal ores and engineering) is perceived to be inefficient and to have a 15-20 year technological lag with West European counterparts; and the area suffers from a heavily polluted environment and deficient technological infrastructure. Other areas at risk are the mining operations in the Old Polish Basin and in the Sudetes, iron and steel mills in Warsaw and Cracow, the metal and machine-tool industries concentrated in the major towns of Western Poland, and the textile industy in Lodz and Bielsko-Biaka.

Contrary to the position in some other Central and East European countries, regional industrial concentration in **Bulgaria** is decreasing with newer centres of growing industrial importance on the Black Sea Coast (mainly at Varna-Devnya, Burgas-Kameno and the Dimitrov shipping complex) and in the Danube area, notably at Silistra. However, Sofia still dominates the industrial geography of the country, and 75 percent of industrial potential lies within an area bounded by a major road route passing through Sofia, Plovdiv, Stara Zagora, Burgas, Varna, Shumen, Veliko Tarnovo, Pleven, Botevgrad and returning to Sofia. Within this area, industrial production is based on a network of six major industrial complexes.

In Yugoslavia, the dispersed pattern of industrial development among the constituent republics means that the regional problems arising from restructuring may be less concentrated than in other countries. A major impact is likely to be experienced in the northern republics which are most highly industrialised, notably in Bosnia (Zenica-Vares) and Slovenia (Ljubljana). However, concentrations of heavy industrial sectors such as steel (which is obsolete and in need of modernization) are located throughout the country at Zenica (Bosnia), Sisak and Rijeka (Croatia), Jesenice (Slovenia), Smederevo (Serbia), Niksic (Montenegro) and Skopje (Macedonia).

10.3 Social problems: unemployment and migration

One of the most immediate economic and social effects of restructuring is rising unemployment. The reform processes will affect social groups, industrial sectors and areas differentially. Evidence from Poland, Hungary and Yugoslavia indicates that the poorest segments of society will bear the greatest burden of government attempts to overcome the economic crisis. Regions with industrial monostructures face the prospect of closure of major enterprises, high unemployment and few alternative employment opportunities. Concentrations of major unemployment could entail significant socio-political tensions that might seriously hinder economic reform. Labour unrest is already evident in several countries (notably Yugoslavia and Poland) in the face of the effects of privatisation and wage freezes.

At the end of 1990, unemployment in four of the countries in Central and Eastern Europe and East Germany stood at the following levels, in terms of numbers and percentages of the labour force:

- Bulgaria	68,354	
- Czechoslovakia	77,000	(1.0 percent)
- East Germany	642,182	(7.3 percent)
- Hungary	81,379	(1.7 percent)
- Poland	1,126,000	(6.1 percent)

In East Germany a further 1.8 million workers were on short-time working in December 1990, of which 300,000 were only working 0-25 percent of the time. The total of short-time workers increased again by 160,000 by February 1991.

These unemployment figures are expected to rise significantly during 1991 - projections for Hungary estimate unemployment exceeding 200,000 (four percent of the labour force), and for Poland a total of at least two million people (11.7 percent).

The regional effects of unemployment depend on the nature and pace of the reform programme, in particular the rate at which different sectors or activities are liberalised. So far, it appears that the effects of industrial restructuring have not yet been substantial. In Poland, for example, the differential pattern of unemployment is currently based on differences in urban/industrial development. Regional unemployment rates range from 2-3 percent in Warsaw to 15-18 percent in the less developed

regions of eastern Poland. Similarly, in Yugoslavia, the south-north distribution of unemployment reflects industrialisation (from two percent in Slovenia; 20 percent in Bosina-Hercegovina, Macedonia and Montenegro; and 55 percent in Kosovo). Figure 10.2 provides a map at regional scale of the areas of potentially serious unemployment. The worst areas include eastern Poland, northern and eastern areas of East Germany, and eastern Czechoslovakia and Hungary. There were no available data for Romania.

Once restructuring gets underway on a significant scale, these patterns are likely to change considerably. Estimates of the possible impact of unemployment in the future suggest that industrial areas will experience sharp rises in unemployment, possibly in excess of 30-50 percent in some industrial areas of Poland. Already, in East Germany, those areas dependent on heavy industry such as chemicals are being affected by restructuring, and unemployment is greatest in Neubrandenburg, Schwerin and east Berlin. Recent data (July 1991) for Poland indicates that the locations of the worst unemployment are shifting towards the urban and industrial areas.

With respect to population migration, the restructuring processes imply a significant reallocation of production factors arising from the break-up of major state enterprises, the closure of loss-making firms and increases in productivity. The mobility of labour will be an essential part of the process, yet significant population migration could also be an undesirable consequence of lack of jobs and poverty.

In the Central and East European region, this problem has hitherto affected East Germany most. A combination of the desire for consumer goods, wage differentials of around 35 percent (between West and East Germany), rising unemployment in East Germany and major differences in living standards has caused "intra-german" migration of about one million people during 1989 and 238,000 in the first half of 1990. During 1989-90, much of the high level of emigration from East Germany originated in the southern regions (Sachsen lost almost three percent of its population during 1989-90). The outmigration continues at a high rate; 10,000 people per month are leaving from Sachsen alone.

In Poland it has been estimated that up to 12 million people are "potential migrants", particularly from the Upper Silesia region and surrounding area to reduce the excessive conentration of industry and people (although it is clear that not all of these people will actually move). In Central and Eastern Europe as a whole, more than 1.3 million people (including citizens of the Soviet Union) have migrated to the West since the political events of 1989. The high levels of unemployment may increase this flow as people seek employment opportunities and higher living standards in Western Europe.

10.4 Infrastructure deficits

The shortage of infrastructure is considered the major causal factor of most of the present problems in Central and Eastern Europe. Transport infrastructure in the region is generally of poor quality and overloaded. For example, rail networks are extensive but significant parts are one-track, the load-bearing capacity is low, and many sections are not capable of high-speed travel. Electrification is limited, and the rolling

stock suffers from under-investment. With respect to the road network, in both Czechoslovakia and Hungary less than one percent of the total road network consists of express highways, and many rural roads are not metalled.

There are two main characteristics of regional infrastructure provision in Central and Eastern Europe. First, infrastructure development relating to transport and telecommunications in most countries has concentrated on the major urban areas and the axes of economic activity. The concentrations of urban/industrial development in the southern parts of East Germany (and in Berlin) are also associated with higher levels of telephone ownership and living space. In Poland, the provision of telephones in rural, eastern parts of the country is less than half the level in Warsaw, Lodz or Krakow. The concentration of infrastructure in core regions means that infrastructure and services in rural areas, and connections with peripheral and border regions, are very secondary. This pattern has in turn encouraged further concentration of industrial location of economic activities and agglomeration.

The second characteristic is the west-east difference in infrastructure provision; the availability of infrastructure increases with proximity to Western Europe. This reflects the history of industrialization in different countries and investment for military purposes. Thus, the density of road and rail network is relatively high in East Germany, although the quality of construction and maintenance is very poor. In Poland, the main feature of transport infrastructure is that its density decreases from western to eastern regions of the country.

10.5 Environmental degradation

The pattern of industrial development outlined above is frequently associated with environmental degradation, caused by the rapid expansion and massive development of urban-industrial agglomerations and the concentration of major chemicals and raw material processing facilities. Soil, water and air pollution is a consequence of inadequate technology and lack of investment in purification plants and waste processing facilities.

In general, the worst environmental problems are again concentrated in the larger urban and industrial areas. The combination of industrial production, power generation and motor vehicle emissions causes serious air pollution with a concentration of dangerous materials 3-4 times that permitted under West European standards. In Bulgaria, on the basis of known heavy pollution in major towns and cities, environmental problems are estimated to affect more than 4,300 sq. km of the national territory - predominantly highly urbanized areas where 38 percent of the population live. Sharp increases of morbidity and high death rates have been observed. It is estimated that more than 20 (ie. some 40 percent) of industrial agglomerations are in need of urgent measures to combat life-threatening environmental damage from raw material processing, energy and chemical industries.

Environmental problems are closely associated with mining activities, particularly the preference given to brown coal in primary energy consumption. The excavation in the northern Bohemian area of

Czechoslovakia has caused the worst devastation of landscape and environment in the whole country. In East Germany, also, some of the worst pollution is in Sachsen-Anhalt where 40 percent of the workforce is employed in primary industries. Similarly in Romania, environmental degradation exists in areas with lignite surface mining in Oltenia and the non-ferrous mining centres of Baia Mare, Copsa Mica, Zlatna and Slatina. Severe adverse effects are also associated with power production, for example in the Bulgarian republics of Mihaylovgrad (Kozloduoy), Haskovo (Maritsa Istok) and Sofia (Bobov Dol) due to air pollution and the accumulation of millions of tonnes of solid waste. The chemical industry is another major source of pollutants, notably air pollution and groundwater and soil degradation, eg. the sites of the chemical industry in Sachsen-Anhalt (Halle) in East Germany.

Fluvial systems have been a major casualty of pollution damage. In Romania, the area with some of the greatest problems is the Danube Delta which suffers from severe environmental degradation and is in urgent need of the restructuring of water channels, the improvement of water circulation among rivers and lake basins and the re-establishment of "ecological equilibrium" in certain badly-degraded areas.

Figure 10.3 maps the areas of serious environmental degradation in the region of Central and Eastern Europe. These coincide in many cases with areas associated with mining or large-scale industrial or urban development. Areas of particularly severe pollution include the Upper Silesia area in southern Poland, southern parts of East Germany, northern Hungary, and central and eastern areas of Romania.

In Poland, gross environmental pollution has resulted in the identification of 27 areas of "ecological disaster", covering 11 percent of the country's surface area and 35 percent of the population. Four of these areas are considered unfit for human habitation, and environmental pollution has been identified as one of the main causes of relatively high infant mortality rate and low average life expectancy.

10.6 Agricultural underdevelopment and change

There are several inter-related regional development problems relating to agriculture, all of which could lead to a rise in unemployment as a consequence of restructuring. Privatisation and efficiency improvements such as greater use of technology and improved local infrastructure could lead to significant job losses and outmigration.

First, the proportion of employment engaged in agriculture is very high (by West European standards) in parts of Central and Eastern Europe. Agriculture is the dominant employer in the north of East Germany in Mecklenburg-Vorpommern (Neubrandenburg and Schwerin), and some areas still have more than 50 percent of people employed in agriculture. A similar position exists in Poland. Some regions have in excess of 47 percent of employment accounted for by agriculture with relatively few industrial employment opportunities eg. in Biala Podlaska and Komza. The process of agricultural change is likely to reduce the labour intensity of agriculture considerably.

Second, significant agricultural land has, in the past, been

nationalised and organised into cooperatives. This varies between countries: in Czechoslovakia and Romania, almost 90 percent of agricultural land was nationalised. In contrast, in Poland 75 percent of the land is privately owned; in Hungary and Yugoslavia the equivalent figures are 70 and 83 percent respectively. State-owned agriculture is characterised by vast agricultural complexes. Bulgaria has 300 complexes, averaging 18,000 ha each, which cover four-fifths of the agricultural land.

Third, there is the problem of underdevelopment. In parts of Central and Eastern Europe, conditions for agriculture are good with fertile soils and favourable climate, for example in north-east Bulgaria, southern Romania, east of the Danube in Hungary, and along the rivers Elbe (central Bohemia), Morava (central and southern Moravia), and in western and eastern Slovakia, in Czechoslovakia. However, in terms of efficiency and productivity, many agricultural regions are relatively backward, again mainly because of lack of appropriate infrastructure.

10.7 Agglomeration and peripherality

The process of industrialisation in Central and East European countries has led to concentration and excessive development in some major cities. Capital cities such as Prague, Budapest and Sofia have seen population development out-stripping the provision of services. In the case of Hungary, the main problem is the lack of other cities that could compete with Budapest, whereas in Bulgaria, the attempted deconcentration of development has been inter-urban rather than inter-regional; hence, there is now a series of Bulgarian centres where infrastructure provision has not kept pace with industrial development, notably Plovdiv, Varna, Bourgas, Rouse, Pleven and Stara Zagora.

The consequence of industrialisation and concentration leading to agglomeration has been the deprivation or neglect of smaller rural localities, particularly those in border areas and remote or upland regions. Depopulation and underdevelopment is a common characteristic of peripheral regions (especially in Bulgaria and Romania) which were deprived of centres large enough in size and functions to counter negative migration processes.

10.8 Territorial minorities

Finally, one of the distinctive regional problems of Central and East European countries are regions with territorial minorities. Cultural and social differences have been translated into hostility, especially where the minority has been subject to chauvinist pressures and repression under communist rule eg. the Turkish minority in Bulgaria or Hungarians in Romania. The combination of greater political and personal freedoms, together with economic dislocation again has the capacity for causing social tension and migration flows. In Poland, for example, many people in Upper Silesia have declared themselves to be ethnic Germans; the creation of a local Polish-German association, and proposals for German aid to construct an airport or to provide educational facilities

inevitably distort relationships between the majority population and the regional minority. More generally, many regional and local political pressures were kept subdued under former regimes, and these are now being released.

The problems are most apparent in Czechoslovakia, Yugoslavia and Romania - less so in East Germany and Hungary. The potential for social tensions in Yugoslavia is especially great. Aside from the ethnic variation among the various republics, the country's population of 24 million also includes significant minorities of Albanians, Hungarians, Roma, Turks and Romanians.

Figure 10.1: AREAS OF HIGH UNEMPLOYMENT

Figure 10.2: PRINCIPAL AREAS OF INDUSTRIAL RESTRUCTURING

Figure 10.3: AREAS OF SEVERE ENVIRONMENTAL DEGRADATION

SOCIO-ECONOMIC SITUATION AND DEVELOMENT OF
THE REGIONS IN THE NEIGHBOURING COUNTRIES OF
THE COMMUNITY IN CENTRAL AND EASTERN EUROPE

PART II:
POLICY RESPONSES

CHAPTER 11: MACRO-ECONOMIC STRUCTURAL REFORMS: OVERVIEW

11.1 Introduction

In all Central and East European countries, there is currently debate over the pace of economic transition, the most appropriate measures and the consequent economic and social costs. In certain cases, basic agreement still has to be reached on the need for economic reform. As noted for Bulgaria: it is "quite difficult to look forward to the future while still engaged in squabbles about the past and identifying who is to blame for the present state of the economy". This problem is most apparent in Romania where the political and economic restructuring process is less advanced. The reform programme has set limits on moves towards a market economy because of the social risks and costs, a continuing belief in the capability of national planning, and ideological opposition to extensive privatization. Instead, "the National Salvation Front and the government aim to rationalize central planning and use it to accomplish structural changes in production and technology" (Jackson, 1990a).

Thus, distinctions exist between Central and East European countries with regard to the transition of economic systems. First, for East Germany, unification means a "rapid, make-it-or-bust conversion to market-economy structures at great social cost" (Hoehmann and Meier, 1990). Second, in Poland, Hungary and Czechoslovakia, political agreement has been established regarding progress towards a market economy, and reform programmes have been initiated. Third, in Bulgaria and Romania (and also Yugoslavia which is already, to some extent, market-oriented), the transition is in various stages of development but lacking political concensus or superseded by other political problems.

The following chapter examines the macro-economic structural reforms in Central and Eastern Europe. It describes the challenge of responding to severe economic development problems and it reviews the major component of reform programmes.

11.2 The challenge of restructuring

The current phase of economic restructuring is more fundamental than at any time since 1945, since its stimulus was a reform of political conditions, most notably the much-reduced influence of the Soviet Union over former socialist countries in Eastern Europe. The common goal of the restructuring process is a transition to a market economy.

However, the economic development problems facing Central and Eastern European countries are considerable. The low efficiency of plant and machinery is associated with comparatively low productivity levels, inefficient and wasteful energy consumption and outdated technological infrastructure. Heavy industry predominates with an emphasis on heavy engineering, iron and steel, energy and raw materials production.

Dependency on trade with the USSR means that international trade links beyond the Central and East European area are weak. State planning and management has created monopoly suppliers of goods and services, large production units with highly vulnerable organisational structures, a high level of under-employment or "hidden unemployment", and industrial management with limited experience of commercial decision-making. Market competition functions very inefficiently, and the small firms sector outside agriculture contributes a very low proportion of total output. Environmental degradation of ground, water and air quality has frequently been severe. Currencies lack complete convertibility, major price reforms are required, and there is the threat of increasing inflation. Foreign debts in some countries are running at high levels.

Thus, while the goal of restructuring may be straightforward, the means are much less so. The problems and potential policy responses, taken individually, are considerable, but their interlinkage means they must be addressed together. Macro-economic stabilization requires a diversion of resources to promote exports generating hard currency, but based on exchange rate convertibility and domestic price reform. The development of capital markets to permit the reallocation of resources needs to be accompanied by privatisation, new property rights and a new institutional and legal framework to allow the private sector to operate (and to be protected). The fall in real incomes and unemployment associated with the reforms also necessitates social protection. Accordingly, the problems require radical solutions, but in the context of societies and economies that may not be able to withstand radical measures (Rollo *et al* 1990).

The restructuring of economic systems in the Central and East European countries has five major elements in common - price reforms, privatization, foreign investment, international trade and relations and social measures - although clearly there are many other measures being introduced such as institutional reform, the decentralised management of regional and settlement development, and environmental reform. In the remaining sections of this chapter these issues are discussed in turn. It should be noted that the discussion largely ignores East Germany where the macro-economic situation is totally different. Comparisons of inflation rates, price fluctuations or privatisation between East Germany and the countries of Central and Eastern Europe are not meaningful.

11.3 Price reforms

Price reforms are being introduced to provide a system of price-setting for goods, services and factors of production that operates on the basis of free-market supply and demand rather than state decisions. Price distortions, which are partly the result of protecting loss-making industries and enterprises, are to be phased out as enterprises are privatised or efficiency improvements initiated. In several countries, notably Poland, Czechoslovakia and Hungary, controls on the prices of commodities are being removed, generally in stages, beginning with some foodstuffs, housing (rents), energy and transport.

Price liberalisation has inevitably led to rapid growth in price levels. In consequence, legislation has been introduced to avoid uncontrollable price rises. As prices have increased, parallel steps have

been taken to limit inflation. Subsidies to enterprises have been eliminated, wages and income policies have been designed to freeze the wages of public sector employees, and fiscal policy measures have encouraged savings and investment. Nevertheless, all countries (except East Germany) have been experiencing major inflation. Although the extremely rapid rises may have been reduced in some countries during the course of 1990, by the end of the year, *monthly* inflation rates were still 2-8 percent. Estimated rates for 1990 ranged widely from 10 to 600 percent.

11.4 Privatization

Privatisation is the second important area of economic reform. A distinction is drawn between "small-scale privatisation", involving the formation of small firms through the transfer of ownership of shops, small workshops, service facilities and other small establishments; and "large-scale" privatisation which involves the reorganisation and transformation of major state enterprises into joint-stock companies. A further aspect of privatisation is the restitution of property, nationalised under communist rule, to the former owners or their heirs.

Estimates of the scale of privatisation are difficult to verify. It has been suggested that there are approximately one million small businesses in Central and Eastern Europe, mostly one-person or family operations; 2,000-3,000 large firms, generally in the form of joint stock companies; and approximately 10,000 joint ventures with foreign capital. Most rapid progress is being made in Czechoslovakia, East Germany, Hungary and Poland. Overall, private businesses probably account for only 10-15 percent of non-agricultural production.

There are several problems within the privatisation programmes. First, there is a high failure rate associated with new private firms. Second, there are practical obstacles to privatisation. Bureaucratic impediments have meant that the privatization of large state companies has been particularly slow in Poland and Hungary; and the very labour-intensive process has been further delayed by the shortage of qualified accountants and lawyers. Third, new social tensions are generated by privatization. The removal of central support is inevitably linked with job losses and the prospects of further increases in unemployment.

11.5 Foreign investment conditions

New decrees are opening up the possibility of participation in international capital flows, and stimulating joint ventures and foreign capital investment. First, restrictions on the sectors or activities in which foreign investment is permissible are being lifted. Second, the association and combination of domestic and foreign capital (ie. joint ventures) is being permitted. Third, restrictions on reinvestment or export of profits are being eased, but not always completely liberalised.

The response of foreign investors is difficult to assess. Data on

the number of joint ventures varies greatly, and the definitions used variously refer to the number of new permits issued, the number of company registrations or the number of actual investments. Clearly the number of joint ventures has been growing, but much more in countries such as Hungary and Poland than in Romania or Bulgaria (Further details on the response of foreign investors are provided in Part I, Chapter 7).

Hungary is offering favourable tax holidays to foreign investors and now permits the purchase of up to 100 percent of a local enterprise and the repatriation of profits. This has led to a very rapid growth in the number of joint ventures during 1990; according to the Government, there are now more than 5,000 joint ventures operating in Hungary with capital invested of more than US$ 1 billion. Much of the investment is accounted for by Germany, Austria and the US.

For some other countries, the level of foreign investment has been disappointing. The main criticism by foreign investors has been the degree of bureaucracy encountered. In Romania, for example, a decree-law passed in March 1990 allows joint ventures and new foreign investment, but it entails bureaucratic procedures, fees and taxes, prohibitive provisions on the transfer of profits abroad, and there are problems of political stability arising from the slow progress towards a market economy and democratization (Gafton, 1990). Similarly in Bulgaria, the utilisation of foreign investment is still expected to involve specified projects and be undertaken through negotiations with the appropriate state enterprises and institutions.

11.6 International trade and relations

In addition to promoting foreign investment in the CEE countries, increased trade and contacts with Western countries and membership of international organisations are regarded as a priority. The generation of hard currency, the development of investment and finance markets, and the receipt of Western assistance and know-how are important motivating factors. The maintenance and rescheduling of substantial foreign debts is also significant, especially in Poland (where hard currency debts amount to US$ 47 billion), Bulgaria (US$ 10 billion) and Hungary (US$ 21 billion). There are no rescheduling requirements in Yugoslavia and Czechoslovakia.

In support of these objectives, currency convertibility has been a major step, generally in stages - internally at first, then internationally. This has meant a significant devaluation in the value of currencies. Other common policy measures include the ratification of agreements and participation in international organisations, notably the World Bank and IMF. The liberalisation of foreign trade has meant the loosening of import controls and foreign exchange regimes, the simplification of the opening of foreign currency accounts, and permission for enterprises and citizens to purchase foreign currency and to hold foreign currency accounts.

11.7 Social measures

The primary social concern of governments in Central and Eastern Europe is the dislocation that economic reforms could create and the prospect of high unemployment exacerbating socio-political tensions. With unemployment rising, the prices of consumer goods being increased and wages of public sector employees being frozen, the potential for social discontent is significant.

In response, policy measures have been designed to provide basic social security and unemployment benefit. Networks of employment offices have been set up throughout Poland and Czecholsovakia to provide information on jobs and to disburse benefits; and in Hungary, public works programmes to provide employment and to encourage labour mobility are being considered.

CHAPTER 12: REGIONAL DEVELOPMENT STRATEGIES IN CENTRAL AND EASTERN EUROPE

12.1 Introduction

The contribution or participation of the regions in structural reforms, and the speed with which market-based regional policies can be initiated, depends partly on the degree of regionalisation of economic development strategies in the past. This chapter examines the nature of regional development strategies in centrally-planned economies, national experiences with regional development and current approaches to regional policy, notably in East Germany.

12.2 Regional development strategies in centrally-planned economies

In the past, the centralised control and allocation of resources has given Central and East European governments potentially far greater leverage to reduce regional disparities than their Western counterparts. They have been able to implement regional policies very effectively "through their near monopoly over investment so that the required discrimination can be imposed on appropriate branches of the economy" (Turnock, 1989b). It has been possible, for example, to direct the location and spatial linkages of large firms. Although the agglomerations and concentrations of heavy industry have maintained their importance, light industry has frequently been used to develop backward areas and to promote the growth of regional centres (Turnock, 1989a). The Central and East European countries have also been ideologically committed to equality and regional equity.

However, regional development in Central and Eastern Europe is confronted by the same dichotomy that is faced in all countries: the relative priorities given to national growth and regional development. The requirements of national economic development have inevitably meant prioritising key sectors, and regional plans have often been subordinated to sectoral plans.

"In practice, therefore, communist governments have been obliged to compromise on equity in order to maximise output: disparities between regions and income groups have been reduced only slowly and significant variations remain" (Turnock, 1989b).

Especially in the earlier periods of industrialization, the main task of regional public administration was to implement the aims of central government. Regional administrations, and most industrial enterprises, were directly subject to sectoral ministries. In the drive to industrialize as rapidly as possible, social issues as well as structural and regional distortions to the economy tended to be ignored (Perger, 1989).

The nature of command economies under Communist governments involved

very significant spatial centralisation of economic activity and control functions in particular. The size and scale of very large, vertically-organized agricultural and industrial enterprises and infrastructure required organization at the national level rather than regionally or locally. There tended to be a much greater reluctance (than in Western countries) to establish industries in smaller towns and to develop marginal areas given the distance from the centre of administration and the additional problems arising from poor transport and power supply (Turnock, 1989a). Where regional development was given greater priority in Central and Eastern Europe, programmes and policies were undertaken primarily through spatial planning. The objectives have generally been to equalize socio-economic development - to prevent migration or to promote decentralization from capital cities; and to promote new resource exploitation or industrialization. However, the plans for individual territorial units have usually been components of more general national and sectoral plans. Decentralized decision-making for economic management has been limited, tightly controlled from the centre, and subject to reversal at times of economic crisis or political instability.

The implementation of regional planning and regional policy in Eastern Europe has to be seen through the same political lens as other aspects of economic reform. Although regional development may have been implemented in response to economic motives, political factors have also been important, in particular the need to suppress or satisfy regional interests such as territorial minorities. The reorganization of regional administrations, for example, involving the subdivision or redefinition of regions, can be seen as a classic means of reducing the influence of regional interests. The devolution of economic management to the regional level, which (to varying degrees and generally during periods of economic growth) has been part of several economic reform experiments in the past, was frequently halted or reversed when the economic climate worsened or political control was tightened.

12.3 National experiences with regional development

The degree to which regional policy or regional planning was given priority in Central and Eastern Europe was closely related to the nature of macro-economic policies. Reflecting its comparatively liberal, market-style economy, Hungary has undertaken the most progressive regional policy among Central and East European countries. The Hungarian regional strategy, implemented during the 1970s and early 1980s, involved a regional equalisation policy which allocated central government funds to very "disadvantaged" regions, assistance to support employment in "crisis" regions, as well as the provision of a fund for new start-ups. However, regional policy was implemented over a period when the objectives of national economic policy changed significantly - from the inception of the New Economic Mechanism in 1968 and the policy of regional equalisation and decentralisation, to the period of retrenchment after 1979 and reconstruction in richer, already developed regions. This inevitably affected the vigour with which regional policy was implemented.

The main aims of regional policy in **Hungary** have been varied: the prevention of rural depopulation; the expansion of medium-sized cities to alleviate the problems of overcrowding and overloaded infrastructure in

Budapest; the equalization of regional incomes and living standards; and greater freedom for local government. Policy measures have been largely based on settlement and industrial planning. The National Settlement Development Strategy, launched in 1971, classified 1,100 settlements into a four-tier functional hierarchy, each tier having population and development targets. However, the abandonment of some 2,000 settlements not included in the Strategy led to its overhaul and redesign in 1981 in favour of a more uniformly based settlement plan (Carter, 1989).

Official support or discouragement has effectively determined the location of firms. Despite the growing self-control of financial investment by enterprises since 1968, the central supervision of industrial investment remained dominant. Thus, certain types of enterprise, especially those associated with environmental pollution, were actively decentralised from Budapest and relocated in areas like the Great Hungarian Plains. New plants were sited in small towns and villages to create jobs for women and redundant agricultural workers (Carter, 1989).

A further regional development measure was infrastructure investment, undertaken jointly by central and county governments. However, infrastructure investment was determined by the level of government grants to the counties. Since the richer counties within the regions secured larger grants, over a 20-30 year period 80 percent of infrastructure investment was allocated to prosperous regions in the north of the country, and historical north-south divisions within the country were largely maintained.

With a switch in government policy, the regional convergence achieved during the 1970s was reversed in the 1980s as a result of national development priorities replacing regional objectives. The equalisation strategy was superseded by "differentiation" tendencies which led to greater development of the more prosperous industrial areas (of greater importance to national economic development). "This suggests that the degree of achievement of regional policy objectives has depended less upon spatial policies than upon macro-economic and labour market policies" (Sillince, 1987).

The regional equalisation approach has also been applied in Yugoslavia where development measures for the less developed republics and provinces were an important component of Yugoslav economic development policy. Early economic reform in the 1950s and 1960s involved some devolution of decision-making regarding state investments to republic or community levels. The initial strategy to address considerable regional inequalities involved the large-scale transfer of resources to under-developed regions through the direct allocation of investment and plan targets for income distribution. This was replaced in 1965 by a special fund for the Development of Insufficiently-Developed Areas, based on the categorisation of republics and provinces into "developed" (Slovenia, Croatia, Vojvodina, Serbia Proper) and "less developed" (Montenegro, Bosnia-Hercegovina, Macedonia and Kosovo). The policy involved the allocation of up to two percent of the social sector economy's gross material product to the development of the less developed regions as well as the inter-regional reallocation of resources (Flaherty, 1988; Bazler-Madzar, 1988).

It is important to note that the Yugoslav development policy retained significant central control over the allocation of regional expenditure; it maintained the principle of central decision-making over

enterprise-related investment despite the self-management of enterprises. Indeed, federal economic management increased again during the 1980s. In terms of the results of policy, considerable development gains were achieved in the less-developed regions, but the divisions between the two classes of region remained. Regional disparities increased continuously, eg. in 1960, Slovenia's social product per capita was 4.8 times higher than in Kosovo, and by 1989 this had increased to 7.5 times. Consequently, over the past few years the adequacy of the present system has been questioned as being too arbitrary and crude: "there has never been a detailed regional development plan" (Dawson, 1987).

The central control of regional development is still more evident in some of the other Central and East European countries. In **Poland,** regional development has taken the form of regional planning or the regional allocation of centrally-determined funds. The planned location of industry was an important instrument under these policies and it was utilised to promote the development of five new industrial areas in central Poland (Konin, Plock and Pulawy), in the south-west (Legnica-Glogow) and south-east (Tarnobrzeg). Government agencies (the Central Planning Office and the Ministry for Physical Planning and Construction) were responsible for formulating and implementing "regional" or "spatial" policies, but they generally involved only the production of economic, physical and urban plans relating to land use. As elsewhere in Eastern Europe, regional expenditure was determined by the allocations to regional authorities (*voivod*ships) from the central government. However, there has been a relationship between the proportion of central contributions to regional budgets and the level of economic development in the regions. To a certain extent, this indicates some encouragement of regional equity through a reduction of economic development differences between the regions (Ciechocinska, 1989).

In Bulgaria also, measures have been undertaken to promote regional development but firmly within the context of centrally-designed and administered planning. The goals of spatial planning have been to reduce regional differences in socio-economic development and to equalize regional incomes. As a result, various specialised industries and activities were often located within separate regions. Regional issues were also dealt with centrally, especially in matters concerning national and international markets. "Regional policy...is used for the redistribution of resources, for the formation of enterprises from which socio-economic development is organized and for the delimitation of territorial-production complexes...in particular regions...planned with respect to economy, society and ecology" (Popov and Demerdijev, 1989). Where specific regional programmes have been introduced, they were associated with special objectives such as the regulation of population migration and the exploitation of new natural resources eg. in south-eastern Bulgaria, notably the Strandja and Sakar regions.

The picture is the same in Czechoslovakia where regional policy has been an indisputable part of the general economic strategy, but so-called (economic) regional policy was organised as a part of direct (administrative) regional planning. In **East Germany,** the primary objective of planning was to combine sectoral and territorial administration. Economic management was based on decisions of sectoral ministries, operating through *Kombinate* comprising various numbers of enterprises. Investments and developments within regional and other territorial units were undertaken almost wholly on the basis of central planning and plan targets; the allocations to the districts (*Bezirke)* or

counties (*Kreise*) were based on central assessments of territorial requirements. However, there was "no separate regional development planning for achievement of either increased or more equal development between regions of places of work or infrastructure" (Braeuniger, 1989).

Lastly, regional development in **Romania** was perhaps more of a political action than anywhere else in Eastern Europe. As with other aspects of Romanian economic reform announced in the mid-1960s, the devolution and deconcentration of central planning was very limited, and the spatial dimension of "concentrated decentralization" produced only a few large local centres. The most significant feature of the regional development process began in the early 1970s with the policy of "systematization". An artificial hierarchy of settlements was established which distorted the historical settlement system, involving the development of selected towns and neglecting others. "These reforms were dominated by political objectives: the main purpose was to suppress regional or national minority interests" (Perger, 1989). In response to economic difficulties, even the limited decentralization of industrial development authority was reversed by the early 1980s. Central management became progressively stricter until complete autarky was in force by 1985 with each individual territorial unit subject entirely to central control.

12.4 Current regional development approaches

The current situation regarding the development of regional policies in Central and Eastern Europe has to be seen in the context of two sets of factors - historical and administrative. First, it is important to appreciate the role of historical factors in Central and Eastern Europe and their effect on regional development. The break-up of the Austro-Hungarian empire and the designation of new borders left Hungary with no major cities to rival Budapest. In Poland, it has to be recognised that the country disappeared for over 100 years and only reappeared after 1918. The country has had relatively little time to readjust, and the impact of the 19th century is still apparent. Also, after 1945 the boundaries of the country shifted westwards. This led to major differences in agriculture, for example between large-scale farms of the former Prussian estates in the north and the very small-scale agriculture in the south of the country.

Second, the reform of territorial structures is in progress in several countries. As noted earlier, the structure of territorial units under Communist political rule and central planning is not necessarily appropriate for market economies. In Poland, the former map of 17 provinces was split up into 49 *voivod*ships in 1973, primarily for political reasons since it was easier to maintain central control of a large number of weaker regions. Currently, several former CMEA countries are reassessing their regional structures. An important task is the creation of regions that are large enough to be competitive on a European scale and that are "visible" on a map of Europe. A further objective is to give people a regional identity as part of the need to stimulate individual responsibility and collective effort within units which are smaller than the state as a whole. This reasoning underpins the rapid reorganisation of territorial structures in East Germany with the creation of five *Laender* from the 15 districts (*Bezirke*) that formerly represented the largest territorial units. Territorial reform is also evident at the local level;

in both East Germany and Poland, the *Kreise* and communes are considered to be too small and are in the process of being enlarged.

The relationships between central and regional government levels are also being restructured. There is a commitment to the ideal of government only intervening where absolutely necessary but, after 40 years of strong and pervasive state control, there is a considerable amount of learning and experience necessary.

At the start of this report, it was noted that the countries of Central and Eastern Europe can be classified into three groups on the basis of their progress with economic and political reform. The same three-fold categorisation is also relevant to the current situation regarding the development of regional policies.

In the first category, East Germany has inherited a comprehensive set of market-based economic development instruments; some are extensions of West German policy measures, and others have been specifically designed for East Germany. At the other extreme, is the group of Bulgaria, Romania and Yugoslavia which retain elements of central planning and control; to a certain extent, regional development is still considered in terms of the central allocation of regional expenditure and centrally-determined regional planning. The remaining countries - Poland, Czechoslovakia and Hungary - are in between: central planning has been abolished and market reforms introduced, but the restructuring process does not yet involve a market-based regional policy.

12.4.1 East Germany

In East Germany, regional policy (beyond the macro-economic structural policy measures outlined above) comprises special adjustment assistance for industry and special infrastructure programmes. Regional economic aid is available through the *Gemeinschaftsaufgabe (GA) "Verbesserung der regionalen Wirtschaftsstruktur"* (Joint Task for the Improvement of Regional Economic Structures), the framework for regional policy which has operated in West Gemany for over 20 years. The entire area of the former GDR has been designated as eligible for GA assistance, initially for five years.

Within the designated GA area of East Germany, the Federal Government and the new *Laender* are providing DM 3 billion per year for **investment grants** for trade and industry; the regional allocation of the funds is being provisionally undertaken according to population. Under GA regulations, the investment grants may provide support of up to 23 percent (of investment costs) for new start-ups, 20 percent for expansion projects and 15 percent for reorganisation and rationalisation projects. The grants may be cumulated with other investment aid which is not defined as "regional" (such as the investment allowances described in section 10) up to a maximum level of 33 percent of investment costs.

To supplement the standard GA regional aid, it was decided during early 1991 to provide further resources for those parts of the *Laender* of Mecklenburg-Verpommern, Brandenburg, Sachsen-Anhalt, Thueringen and Sachsen (as well as the eastern area of Berlin) which are particularly affected by structural change. A "special programme" with a Federal budget of DM 1.2 billion (and matching *Land* assistance) has been made available for 1991 and 1992 for the creation and safeguarding of new jobs.

The new employment assisted under the programme should be associated primarily with private sector investment projects which contribute to the diversification of regional economic structures and accelerated application of product and process innovations.

The allocation of the special programme expenditure is as follows:

Land	DM mill
- Mecklenburg-Vorpommern	150
- Brandenburg	180
- Sachsen-Anhalt	200
- Thueringen	220
- Sachsen	360
- Berlin	90
Total	1,200

Most of the areas eligible for the additional regional aid are in the southern part of east Germany: Sachsen and Thueringen alone account for almost half of the aid. However, in order to ensure that the assistance is concentrated where structural change is most severe, the eligible areas in any one state are restricted to a maximum of 40 percent of the *Land* population.

In addition to industrial investment support, GA funds are being used to supplement communal investment in local economic infrastructure eg. industrial estates and utilities. Although the communes are expected to make some contribution of their own, GA funding may support up to 90 percent of the infrastructure financing cost. The grants are awarded predominantly on a "first-come-first-served" basis (there is no legal entitlement) and, for 1991, are already fully utilised.

Further support for communal investment is available through a loan programme approved under the Unification Treaty as well as additional aid of more than DM 50 billion, agreed in early 1991, which is partly available for infrastrauctur development. Over the period 1991-1993, a budget of DM 10 billion has been made available from the ERP Special Fund. (The ERP originated in the European Recovery Programme, part of the post-war Marshall Plan, which was initially used for reconstruction and, since 1953, has promoted economic development in West Germany.) The Fund will be apportioned between the *Kreditanstalt fuer Wiederaufbau,* KfW (the Credit Bank for Reconstruction), the *Deutsche Ausgleichsbank* (German Equalisation Bank) and the *Berliner Industriebank* (Berlin Industry Bank) to provide lending to local authorities for investment in environmental protection, industrial sites and estates, transport facilities, urban development and social infrastructure. Private investment may also qualify for loan support insofar as it is of benefit to the local area. Debt financing and funding for projects already underway are only available under exceptional circumstances. The duration of loan funding is a maximum of 20 years with up to five years free of principal repayment; the current rate of interest is 7.5 percent. By the end of

1990, around one quarter of the available funding had been committed.

To encourage links between the **former border areas**, a *Grenzraumprogramm* (Border Area Programme) has been created. This provides DM 200 million (of which DM 50 million is from the Federal Government) for 1990-1991 for the West and East German *Laender* situated on either side of the former inter-German border, and also for Berlin. The fund is being used to expand and improve the infrastructure of the zonal border area of the former GDR. The projects to be financed under this programme have already been established, and the funds have been completely exhausted.

As part of the **privatisation** programme, the *Treuhandanstalt* (Trust Office) is making available loans and guarantees based on extensive authorisation to borrow up to DM 25 billion in support of redevelopment and privatisation ventures. It is anticipated that the interest payments will be met from the proceeds of privatisation.

The improvement of the East German **housing stock** is being addressed by the KfW with loan funding of DM 10 billion (at an interest rate some three percent below the market rate) over the period 1990-1993. The loans take the form of expenditure grants with an award rate of up to DM 500 per square metre or a total value of DM 400,000.

Further national measures in support of structural adjustment are provided through a range of other budgets including advice on restructuring, trade fair assistance and retraining and qualification measures.

International aid has been provided primarily by the EC through the Structural Funds and the PHARE programme. Supplementary to the EC Structural Fund resources already allocated to Germany for the period up to 1993 (which do not take East Germany into account), an additional EC special programme, with funding of ECU 3 mrd, has been made available for the next three years. The special programme is designed for joint programmes with the Federal Republic, and a detailed plan of how the resources could be used was formulated by the Federal Government in early 1991.

Under the PHARE programme, a total of ECU 35 million was made available for East Germany during 1990 in three seperate stages. Of the total, ECU 20 million was designated for environmental measures (notably in Sachsen), ECU 14 million for regional economic development, and a further ECU 1 million for training in further education.

Apart from the Border Area Programme and the special regional programme, the above assistance is available throughout East Germany. However, it is anticipated that within three years, the emergence and identification of regional disparities will permit (and require) more regional differentiation of aid, for three main reasons. First, the scale of region-wide funding is too great to be maintained beyond the short term. Second, the costs in the medium term will be at the expense of economic development in the less prosperous parts of West Germany. Third, particular regions in East Germany are at special risk and are in need of more concentrated help.

Within the GA programme, there is a quantified series of designation criteria, although developed hitherto for use in West Germany, that will be adapted for nation-wide use to allow the designation of eligible areas.

Under the ERP and KfW programmes, some loan funding for sectoral purposes may remain available throughout East Germany, but regional differentiation may also be expected - either through spatial restrictions or interest rate preferences for specified areas.

There is an important political dimension to any new regional policy that evolves in the united Germany. In recent years, West Germany - as one of the more prosperous countries of the EC - has been under great pressure from the European Commission (through DGIV) to reduce the spatial coverage of its GA designated areas. The four-yearly German redesignation exercises have had to make successive reductions in the GA areas and to amend the area designation system accordingly. The *Laender* in West Germany are now concerned that any new regional policy that includes East Germany in the assessment of regional disparities will produce a GA assisted area map under which many West German problem areas will lose out.

However, the application of any sophisticated designation system, similar to that which has been used hitherto in West Germany, will take some time. It will take several years for the regional development trends in East Germany to become apparent, and change is currently proceeding very rapidly. Only when the development process stabilises and trends become somewhat more predictable will it be possible to use statistical indicators for assessing regional disparities.

12.4.2 Other Central and East European countries

Outside East Germany, the regional emphasis of economic development is on regionalization rather than regional policy. As noted above, this process is involving the creation of new regions and territorial units appropriate to the administration of a market economy, but also reflecting the pressures from formerly latent regional interests. For example, Czechoslovakia is considering re-establishing the historical regions of Bohemia and Moravia; more fundamentally, the question of separation of the Czech and Slovak republics has been raised. In Yugoslavia, it was expected that the development of a confederal system could lead to current republics becoming "sovereign" states with independence for creating and implementing economic development. However, recent hostilities between the republics has thrown all previous assumptions and predictions into doubt.

The creation of new regional structures will take considerable time. The rapid completion of the process in East Germany reflects the existence of historical *Laender* and the availability of West German administrative experience in creating new institutional structures. Elsewhere in Central and Eastern Europe, where this expertise is not immediately available, the process is taking place much more slowly.

With respect to the design of regional policies or instruments, the current situation in most countries is that regional policy is "passive" without any distinct outlines. Direct economic planning has ceased to exist and, as a result, direct regional (economic) planning is no longer viable. However, replacements have not yet been found or decided. The majority of national policies currently do not contain a "regional dimension".

Regional incentives, comparable to those being applied in East

Germany, are not yet feasible in Central and East European countries, since an appropriate institutional infrastructure is not yet in place. New banks are only beginning to appear to replace the former dominance of "national banks", and lending to private business is a relatively new experience. Special foundations are being set up with government support to provide advice and finance.

Insofar as a regional dimension to national restructuring policies does exist, it is oriented towards the problem of unemployment and environmental degradation. In Hungary and Poland, some state programmes are being designed, though not yet fully implemented, to counter unemployment on a regional basis. Networks of regional employment agencies (250 in Poland) have been established throughout the country, acting as clearing houses for those seeking work and offering jobs. Local agencies for economic initiatives, aimed at creating new jobs, are being designed, but few results have been obtained as yet. To a certain extent, priority is being given to regions likely to suffer most from regional restructuring but with few resources. For example in Yugoslavia, as noted above, the relatively small sum of US$ 150 million is being allocated to the poorer parts of the country, mostly in the south and generally in the form of social security and unemployment benefits. In Poland, central and regional governments are cooperating to construct a "skeleton" of regions where environmental conditions are favourable and which can be used to set standards that can be emulated by regional environmental action elsewhere.

These examples of employment or environmental initiatives at the regional level cannot be considered as regional policy. At this stage, they are regionalised aspects of national policy initiatives.

CHAPTER 13: FUTURE PROSPECTS FOR REGIONAL POLICY

13.1 Introduction

The development of regional policies in the countries of Central and Eastern Europe is highly problematic given the lack of experience with market-oriented regional development strategies and the rapidly changing nature of regional problems. However, it is important that the "regional dimension" is not neglected in the process of structural reform; regional policy has a significant role to play in both the short and medium to long terms. The following chapter examines the obstacles to regional policy, possible short term regional development objectives and the tasks for regional policy in the longer term.

13.2 Obstacles to regional policy

There are two main difficulties in developing market-based regional policies at this point in time. First, there are objections from the *policy* perspective. At the current stage in the economic reform process, countries such as Poland, Hungary and Czechoslovakia perceive it to be premature to discuss important regional economic development strategies. The initial priority is clearly to develop strategies at the national level. Surviving the economic changes is considered to be of paramount importance rather than distributional or equity issues.

The second major set of objections to the development of regional development policies relate to the difficulties in identifying regional *problems*. An important issue is that the "regional problem", during and following a period of economic transition, still has to become apparent and to be defined, ie. the disparities in the development of regions (districts, provinces, counties etc) and the diverse processes and events taking place within them. In Hungary, a new government ministry (Ministry of the Environment) has only recently been created to establish a new land use physical framework plan and to establish a new data set on important regional indicators which can be used for planning and policy-making at different levels.

There is the likelihood that current assumptions may become erroneous if new development possibilities emerge. For example, the district of Mlada Boleslav in Czechoslovakia may be significantly at risk due to its unfavourable one-sided industrial structure (transportation machinery), but agreements with foreign investors could increase its development potential very rapidly. Furthermore, there can be no single map of regional disparities. According to the "economics of shortages", every change will lead to significant problems for some groups and areas. Thus, it is argued that policy-makers should wait for a "transformation period" of 1-2 years until restructuring in manufacturing becomes clearer.

Against this background, prognoses of regional development

requirements in Central and Eastern Europe are difficult to make. The following outline of potential objectives for regional policy, therefore, is highly speculative. It divides possible economic development action at the regional level into two groups: policy measures over the short term (1-2 years), and policies for the medium to long term.

13.3 Short-term regional development objectives

In the short term, there are two potential areas for regional-level action by policy-makers - firstly, to support and strengthen national economic development with complementary regional measures, and secondly, to provide emergency aid to relieve the worst regional effects of restructuring.

13.3.1 Strengthening national development measures

It is evident from the above discussion that, at this stage, the main national priorities are national economic survival during the transition phase. There is relatively little scope for policy measures aimed at the reduction of regional disparities and addressing the difficulties of problem regions. The majority of economic development policies will be applied nationally and nationwide. The threats to the cohesiveness of the Central and East European countries, especially Yugoslavia and Czechoslovakia reinforce the necessity of applying policies that promote rather than diminish national cohesion. Furthermore, the difficulties of identifying and defining spatial disparities at a time of rapid economic change present major difficulties for the development of any regional policy.

In this situation, insofar as regional discrimination is possible in the application of policy measures, the regional component of initial economic policies during the transition period should promote potential **growth regions**. Regional policies should support national economic development measures by promoting those regions that can take a lead (and respond positively) in the restructuring process. Since all regions will be facing considerable difficulties in adjusting to the new, market-oriented economic environment, it may be necessary to concentrate regionalised resources on those regions and activities which are crucial for international competitiveness and trade. Based on the current map of regional development, and assumptions about how the restructuring processes may proceed, it is possible to identify various eligible "areas of potential" that may remain - or become - growth regions during and following the transition period.

First, there are regions of **industrial development potential**. These are likely to be diversified industrial regions with a relatively good material and technical base and experienced personnel (in sectors such as chemicals, machine-tools and electronics), good infrastructure and international links; the best examples of these areas are generally the capital city regions.

Second, the "areas of potential" include regions dominated by primary sectors; in Hungary (lowland areas), north-east Bulgaria and elsewhere in

the region, there are considerable areas of agricultural development potential. Third, major opportunities should be available to areas with foreign investment potential. In the most advantageous position will be capital cities and other urban/industrial centres. Requirements include a relatively diversified and modern industrial base and good technical infrastructure, but also efficient public and private support services.

Fourth, regions of geographical potential are areas sharing borders with developed market economies eg. the western border areas of Poland, the Baltic Sea regions with links to Scandinavia, Czechoslovak regions bordering Germany and Austria, and Hungarian regions on the border with Austria (all Hungarian border regions are expected to benefit except those on the border with Romania). Lastly, there are areas of tourism potential where the environment is relatively unspoiled and which will provide novel tourist locations for western visitors in particular. Examples include the coastal areas and the lakes in northern Poland, the Adriatic coastline and mountains of Yugoslavia (already relatively well exploited).

13.3.2 Emergency aid

Earlier it was noted that the scale of industrial reorganisation could have significant and damaging social consequences in the form of high unemployment and population migration. In Western Europe, the reaction to the closure of major plants in old-industrialised regions has been to initiate strategies for the creation of replacement jobs. Such strategies inevitably take time and, at present, the countries of Central and Eastern Europe may not have the time, resources or expertise to implement appropriate measures.

In the short term, it will be necessary to employ some emergency or "firefighting" measures to contain the worst effects of restructuring in the monostructure problem regions where unemployment could potentially be greatest. An analogy to this may be the *Notstandsgebiete* (Emergency Areas) delineated in Germany after the Second World War to reconstruct areas with severely damaged productive capacity and to alleviate high local levels of unemployment. Policy measures were aimed at clearing away war damage and reconstructing plant and infrastructure which had been damaged or dismantled.

In the context of Central and Eastern Europe, there would be two main tasks for policy in such "Emergency Areas" in the short term: to ameliorate the worst effects of national economic policies, notably unemployment; and to help overcome the worst environmental disasters that have been created over the past 40 years. After 1-2 years, it can be anticipated that there would be scope for reassessment and the initiation of a medium to long-term regional development strategy. To contain unemployment in the Emergency Areas over the short term and to alleviate the effects of job losses, consideration could be given to continuing government support - in certain areas - for existing industries and enterprises. This should allow time for a controlled phasing of restructuring, notably privatization and improvements in productivity, and the preparation of strategies for the creation of replacement jobs. Such an approach would also help to stabilise the movement of population and discourage excessive inter-regional and international migration that could exacerbate economic and social tensions. It is likely that mining and agricultural areas would be most immediately in need of such emergency aid.

Immediate action to start solving the most severe environmental problems is also necessary. Although the problems of industrial restructuring and environmental degradation are closely inter-linked and will have to be addressed as part of a longer term strategy, short-term response to pollution will be necessary. As noted above, in several parts of Central and Eastern Europe, the level of dust, gases or other noxious emissions and the pollution of water sources have become threatening to human life, as well to overloaded local ecosystems. This task is of international interest, since the effects of environmental damage frequently transcend regional and national borders.

13.4 Medium and long term regional development objectives

Once major macro-economic reform measures are in place with a new framework of national economic development, it will be necessary to consider longer term regional development issues. In addition to the general task of industrial restructuring and environmental clean-up, key problems include congestion and over-development in the large urban/industrial agglomerations, the lack of investment and infrastructure in peripheral areas, and a more balanced distribution of settlement and industry.

Potential regional policy measures for Central and Eastern Europe can be divided into six groups: infrastructure development, aid for local and regional restructuring, agricultural restructuring, the equalisation of urban and regional development, international cooperation and cross-border initiatives, and the promotion of regional policy research.

The first important priority should be **infrastructure development** - physical, telecommunications, administrative and service. With respect to **physical infrastructure**, it was noted earlier that the road and rail network in Central and Eastern Europe is generally of poor quality and in urgent need of upgrading. In several countries, only the most important centres are connected by fast road and rail links. The priorities are threefold - international, national and regional road and rail infrastructure. A further aspect of physical infrastructure development is airports policy. Particularly for foreign investment and business contact, the region of Central and Eastern Europe lacks major international "hub" airports comparable to Frankfurt and Schiphol. Regional transit airports would help to reduce the relative isolation of centres some distance from capital cities.

The priorities for **telecommunications infrastructure** are somewhat different. The long-distance, international connections need to be urgently upgraded, but a more important immediate deficit is at the local level eg. the efficiency of local switching systems and telephone exchanges, telephone connections, and fax and telex access. The evidence from East Germany indicates that the main deficit is not in longer-distance networks but in the "final kilometre" - the connectivity and accessibility of local systems. Other areas of infrastructure development include administrative infrastructure, the public and private services infrastructure, and basic utilities, particularly in Hungary and Romania, where investment in services such as water supplies, sewage treatment facilities and waste disposal is necessary.

The second major target for regional policy is **local and regional industrial restructuring** - aiding restructuring by maintaining the competitiveness of diversified industrial regions but diversifying in areas dominated by mono-structures. Assistance should be targeted at industrial diversification and the creation and maintenance of small and medium-sized firms. Insofar as the transformation process can be "managed", the privatisation and reorganisation of state-owned enterprises can play an important part in the creation of replacement jobs eg. by making available resources such as buildings, machinery and equipment, and by establishing training and retraining facilities. Examples from Western Europe that may be of relevance are the "reconversion companies" set up by large firms in France or the "enterprise subsidiaries" created by nationalised industries in the United Kingdom.

As noted earlier, the most important point that applies to regional development throughout Central and Eastern Europe is that restructuring problems and environmental pollution need to be considered together. The most severe problem areas should be the focus of comprehensive, concentrated and coordinated restructuring programmes that include a range of components such as small and medium-sized enterprise support, environmental improvement measures, local and regional infrastructure development, training measures and social facilities.

As part of the restructuring process, **environmental improvement and protection** is important for all countries in the region, partly to redress the effects of past pollution, but also to improve production methods. In addition to investment, the main requirements are for the transfer of technical knowledge and technology eg. the provision of purification, refuse-disposal and recyling technology, and the modernisation of production in the chemicals, energy, heavy engineering and mining industries.

Alongside the reform of industrial enterprises, **agricultural restructuring** is a priority. To a certain extent, the problems and solutions are similar to those faced by industrial sectors since state-owned agricultural cooperatives were often operated as agro-industrial complexes with a high level of specialisation and division of labour. However, agriculture in Central and Eastern Europe also faces some distinctive problems, especially associated with under-developed, private agricultural holdings.

In the longer term, once a market economy has been firmly established, the objectives of regional policy in Central and Eastern Europe are likely to be the **equalisation of urban and regional development** with respect to urban and industrial areas. This would encompass reducing congestion and concentration in major agglomerations, promoting the development of small-and medium-sized towns, and encouraging growth in peripheral and under-developed regions.

International cooperation and **cross-border development** should be a further area of regional policy activity. Within Central and Eastern Europe, the withdrawal of Soviet political and military influence and the replacement of communist governments has been accompanied by the collapse of the economic CMEA agreements, and particularly trade and barter agreements with the Soviet Union. Thus, opportunities should be sought for interaction and exchange of experience in economic development among Central and East European countries. In the regional development field,

organisations and arrangements should be used to promote cross-border initiatives. A further area of potential cooperation relates to links between regions and cities of the Community and those in Central and Eastern Europe. The creation of links and networks between West and East European regions and cities could provide a useful channel for assistance.

Lastly, regional policy research within Central and Eastern Europe should be encouraged to monitor, evaluate and improve any regional development measures employed. Research institutes in Central and Eastern Europe should be encouraged to work intensively on regional development and regional policy issues ie. "help for self-help", by assisting the expansion of research facilities and the provision of technical equipment. Consideration should be given to the establishment of a pan-European forum that would sponsor applied research of practical value to regional policy-makers in Central and Eastern Europe and allow the transfer of ideas, knowledge and experiences from West to East.

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