GENERAL DISTRIBUTION

OCDE/GD(93)190

REGIONAL INDUSTRIAL RESTRUCTURING:
REPORT ON THE MAASTRICHT SEMINAR

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris 1993

COMPLETE DOCUMENT AVAILABLE ON OLIS IN ITS ORIGINAL FORMAT
Foreword

A seminar on Regional Industrial Restructuring co-sponsored by the Netherlands Government and the Working Party on Regional Development Policies was organised by the OECD’s Centre for Co-operation with the Economies in Transition (CCET) as part of its programme of work which has been providing assistance to the reforming economies since 1990. This programme is carried out in co-operation with the various parts of the Secretariat, including the Directorate for Science, Technology and Industry which as responsible for this project.

The seminar was designed to share OECD experience with the countries of Central and Eastern Europe, and to learn of their problems and policies. Seventeen countries, including the former Czech and Slovak Federal Republic, Hungary, Poland, Romania and the former USSR, as well as the EEC, BIAC and TUAC were represented. Presentations by the Secretariat, BIAC and TUAC were followed by papers from five OECD countries and presentations from the Central and Eastern European countries. The second day was devoted to the study of restructuring South Limburg. Participants’ contributions showed how regional industrial reconversion had been successfully implemented in a former coal-mining area over a twenty-five year period.

The report summarises the key findings of the seminar held in Maastricht on 8-9 October 1991. Written by the rapporteur, Professor Michel Quevit, it has been discussed by the Working Party on Regional Development and has been distributed on the responsibility of the Secretary-General of the OECD.

Salvatore Zecchini
OECD Assistant Secretary-General
Director of the CCET
CONTENTS

Chapter 1. THE REGIONAL RESTRUCTURING POLICY CONTEXT AND IMPLICATIONS FOR CENTRAL AND EASTERN EUROPEAN COUNTRIES 5

1. GLOBALISATION AND TRANSITION TO A MARKET ECONOMY 5
   1.2 The recent economic trend (two developments) 5

2. GENERAL IMPLICATIONS FOR CENTRAL AND EASTERN EUROPEAN COUNTRIES 6
   2.1 The impact of the structural performance of national economies on regional problems 6
   2.2 The transition to a market economy and organisational constraints 8

3. THE GENERAL AND REGIONAL ECONOMIC PROBLEMS OF THE CENTRAL AND EASTERN EUROPEAN COUNTRIES 8
   3.1 General economic problems 9
   3.2 Regional economic problems 10
   3.2.1 A range of regional situations, similar to those in OECD countries 10
   3.2.2 Specific regional problems of considerable magnitude 10
   3.2.3 Agriculture and the future of rural areas: a crucial element 11

Chapter 2. REGIONAL RESTRUCTURING POLICIES: THEIR PARTICULAR CONTRIBUTION 12

Introduction 12

1. GENERAL FRAMEWORK AND STRATEGY OF REGIONAL RESTRUCTURING POLICY 12
   1.1 Linking sectoral and regional conversion policies 12
   1.2 The need for an “integrated” regional policy approach and accommodating social policy 14
   1.2.1 The lessons to be drawn from OECD regional conversion policies 15
   1.2.2 Some implications of integrated regional development policies for the CEECs 15
   1.3 Selective regional development policies 17
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>Development of endogenous potential versus reliance on exogenous economic inputs: striking the right balance</td>
<td>19</td>
</tr>
<tr>
<td>1.4.1</td>
<td>What can be learnt from OECD countries’ restructuring policies?</td>
<td>19</td>
</tr>
<tr>
<td>1.4.2</td>
<td>Some implications for the CEECs</td>
<td>20</td>
</tr>
<tr>
<td>2.</td>
<td>INDUSTRIAL RESTRUCTURING POLICY INSTRUMENTS</td>
<td>22</td>
</tr>
<tr>
<td>2.1</td>
<td>Conventional industrial restructuring instruments:</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>limitations and changes in application</td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Horizontal regional development measures</td>
<td>23</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Innovation policies</td>
<td>24</td>
</tr>
<tr>
<td>2.2.2</td>
<td>Policies of financial support to SMEs and to firms being restructured</td>
<td>25</td>
</tr>
<tr>
<td>2.3</td>
<td>Some implications of the use of conversion policy instruments for the CEECs</td>
<td>25</td>
</tr>
<tr>
<td>3.</td>
<td>REGIONAL RESTRUCTURING POLICIES AND INSTITUTIONAL ARRANGEMENTS</td>
<td>27</td>
</tr>
<tr>
<td>3.1</td>
<td>Organisational capability and management of regional restructuring and conversion policies</td>
<td>29</td>
</tr>
<tr>
<td>3.1.1</td>
<td>Public management capability</td>
<td>29</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Partnership arrangements between the public and private sectors</td>
<td>29</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Achieving a social contract</td>
<td>30</td>
</tr>
<tr>
<td>3.1.4</td>
<td>A new social culture</td>
<td>30</td>
</tr>
</tbody>
</table>

Notes 38
1. Globalisation and Transition to a Market Economy

1.1. **Regional restructuring policies in most OECD countries** were pursued during transition from an economy based on the technical processing of material factors, in which major industrial sectors (coal, iron and steel, chemicals, etc.) were preponderant, to an economy geared more to the use of intangible factors resulting from the interfacing of science and technology.

Regional restructuring policies accordingly went through two main phases:

- **The restructuring of major industrial sectors** to meet the new constraints of world competition (the oil shock, development of the NIES, etc.). This phase, in the 1970s, was characterised by regional sectoral policies tailored to the industrial specialisation of regional economy;

- **The conversion of regional productive systems**, mainly in the 1980s, in response to recent technological and economic changes resulting from globalisation. Typically this phase saw the adoption of more "integrated" regional policies, designed primarily to diversify regional productive systems and adjust them to new technologies(1).

Any approach to regional restructuring policies geared to the special economic circumstances of Central and Eastern Europe is bound to consider the major changes under way in the highly industrialised countries and has to take due account of the new world trade context, and in particular the impact of globalisation.

1.2. **The recent economic trend is marked by the emergence of growth driven by intangible factors, associated with one of two developments:**

- **Globalisation** and inter-firm co-operation, which make for a more complex relationship between the international, national and regional levels of economic decision-making, in particular through the development of world markets regulated by international norms and standards;

- The **techno-industrial system** has reformulated the interlinkages between science, technology and production, doing much to change the way the economy operates:

- the growing **intersectorality** of inter-firm relations due to the crosscutting nature of some technologies, e.g. information technology, biotechnology, composite materials, etc.;
the predominance of intangible factors (human resources, "grey matter", training, design, etc.) over material factors (access to raw materials, energy supplies, etc.) in production systems;

- the growing diversification of the productive fabric, to the detriment of economies with a high degree of industrial specialisation;

- increasing interaction between industrial development and productive services.

2. General Implications for Central and Eastern European Countries

The regional policy implications of these economic and technological changes for the Central and Eastern European countries are two-pronged and concern both:

- the structural performance of their economies and its impact on regional problems; and

- the development of institutional and organisational structures able to cope with the process of change and adjustment to market economy mechanisms.

2.1. The impact of the structural performance of national economies on regional problems

Studies in OECD countries have highlighted the importance of the structural performance of national economies in determining the success or failure of regional restructuring policies; this is what is commonly termed the country effect. To put it differently, regional restructuring policies have been applied in a macroeconomic setting of structural change and renovation of the economy whose outcome has been broadly beneficial for national economies and has assisted the implementation of specific regional policies.

Three examples presented to the Maastricht Seminar illustrated this(2). In the Federal Republic of Germany, restructuring and conversion in the Ruhr benefited from the performance of the economy as a whole, which improved markedly and remained positive despite the worldwide recession in the 1970s. In the Netherlands, the conversion of South Limburg, which was hit by pit closures, was effected alongside efforts to modernise the Dutch economy and encourage innovation. It is telling that GDP grew by 7 per cent between 1980 and 1986 and that industrial output rose 27 per cent over the same period. In Spain, the performance of the Spanish economy since it joined the European Community has accelerated growth in most of the country’s regions, and growth of regional value added has been around the national average (6.06 per cent over the years 1985-1989)(3).

Restructuring policies applied in many ailing regions to specific sectors such as metal working, textiles, shipbuilding and mining have no doubt helped to improve countries’ structural performance. But that was only the case because they were accompanied by modernisation and support for innovation in a wide range of capital- and technology-intensive sectors, such as chemicals, electronics, telecommunications, composite materials, etc.
Most regions in OECD countries, impelled by the structural performance of their national economies, are thus turning to structural adjustment policies in order to be better placed to deal with globalisation. This implies adopting INTRA-INDUSTRY scenarios characterised by:

-- growing diversification of their productive fabric;
-- development of capital- and technology-intensive sectors;
-- integration in worldwide inter-firm partnership arrangements(4).

There are still large regional disparities within the OECD area in this regard, but the dominant regional policy trend is towards such scenarios, as evidenced by the German and Dutch schemes (in the Ruhr and South Limburg)(5).

In most Central and Eastern European countries (CEECs) the macroeconomic setting is not nearly as favourable, as the reports on the economic situation of the Czech and Slovak Federal Republic, Hungary and Poland show (6). Regional restructuring policies are being pursued in against the backdrop of recession combined with restructuring in the dominant sectors, principally heavy industry. Innovation policies will do little to offset the impact of restructuring, at least in the short and even medium term, owing to these countries’ lack of adequate R&D potential. For instance, while industrial output rose in all three countries during the 1980s, according to the industrial output index it flagged or even declined in real terms in the last three years (1987-1989) due to the mismatch between much of their output and foreign demand (i.e. demand from outside the CMEA area) (see Annex 1).

In reality, most of the regional CEEC economies are characterised by inter-industry development, whose salient features are:

-- strong regional specialisation in traditional mono-industries;
-- labour- and/or capital-intensive industries involving little R&D;
-- merchandise trade heavily geared to the domestic market or to the CMEA area, whose markets and raw material supplies have been totally disrupted(7).

The CEECs’ regional restructuring policies must therefore ensure progress on two fronts: successful introduction of structural adjustment policies aimed at achieving both the structural performance of an inter-industry economy (sectoral restructuring policy) and a gradual transition to an intra-industry economy (conversion and diversification, exposure to the global economy).

One of the major differences between the CEECs and the OECD countries is that the latter have been able to effect these adjustments by stages and over several decades, whereas the CEECs must respond to the demands of both scenarios simultaneously. Structural adjustment in South Limburg in the Netherlands, and the Ruhr, it may be remembered, took over a quarter of a century!

The CEECs are of course having to make this accelerated transition at a time when their economies are in quite poor shape. More fundamentally, regional restructuring is not occurring, as in the OECD countries, as part of an ongoing process in a flexible adjustment policy setting. Modernisation and growth for these countries represents a break with the past in two ways: transition to a market economy
that allows little room for co-existence with central planning, and modernisation of the productive system which means jettisoning not only obsolete productive capacity but also goods that do not match up to foreign demand, for which the CMEA outlet is no longer available(8). One of the factors that accelerated the decline of the economies of, say, the former GDR and Poland was precisely the loss of their domestic markets due to imports of goods from abroad and the obsolescence of the home-produced articles.

2.2 The transition to a market economy and organisational constraints

Another qualitative difference between the OECD countries and the CEECs in their implementation of regional restructuring policies is that the former have institutional structures adapted to regional particularities.

The OECD countries have approached their regional problems in a market economy equipped with democratic and decentralised institutional structures. This is not the case for the CEECs, which must reorganise themselves on two fronts:

-- they must introduce a new form of economic organisation (privatisation) and lay down new economic and social ground rules and bring in new management techniques in the productive sector;

-- they must introduce new democratic institutional structures (decentralisation) in order to tackle regional problems and apply restructuring and conversion policies adapted to the particular industrial make-up of the individual regions.

Given the views expressed by most of the participants in the Seminar from these countries, the transition to a market economy may well be expected to have an adverse impact on the development of some regions and -- at least in the initial stage -- to exacerbate the disparities, which are already considerable, between metropolitan and other regions. Economic debate in these countries will therefore focus on regional restructuring policies, whose success will be crucial in legitimising the new democratic structures.

3. The General and Regional Economic Problems of The Central And Eastern European Countries

Before considering how these countries might benefit from the regional restructuring experience of the OECD countries, a rapid survey of their general and regional economic problems may be useful, to gain a better idea of the magnitude of the task and to see where OECD experience may be relevant. The exchanges of views among participants produced a consensus that, while the restructuring experience of OECD countries may help to clarify and resolve some of the regional problems that the CEECs will encounter, there is no single model that can be applied in its entirety to their situation. This is particularly the case since the structural changes they have to make cannot be equated with the spontaneous recovery of a market economy. These regions have never in fact had one. Political and economic decision-makers in these countries will have to map out the most appropriate courses for their economies as a whole and their individual regions, about which too little is still known today.
3.1. General economic problems

Quite obviously, the problems of the CEECs are complex and very varied. These countries are not a homogeneous bloc. They differ in industrial structures and institutional mechanisms, as well as in pace of transition to a market economy. The economic situation of Hungary, for example, where the process of change began two decades ago, cannot be compared with that of the CSFR and Poland, where the process of reform is still in its infancy. Nonetheless, they are all directly affected by the collapse of central planning and of the market system dominated by the Soviet Union and the CMEA.

Regional restructuring policies will therefore be influenced by the way in which the authorities decide to resolve their common macroeconomic and microeconomic problems(9). The main macroeconomic problems include:

-- falling industrial output;
-- high inflation;
-- declining investment and domestic consumption;
-- the negative impact of the liberalisation of imports on domestic production;
-- higher energy prices (prices previously protected by the State);
-- the breakdown of supplies of material resources from the CMEA area.

The chief microeconomic problems are privatisation (large and small-scale) and building entrepreneurial capacity, in view of:

-- the collapse of the large State-owned enterprises;
-- the low propensity to save and the problems of access to financial resources;
-- the disincentive effect of environmental degradation, and poor transport and communication infrastructures, on business location;
-- the lack of entrepreneurial spirit and managerial skills;
-- the lack of technological awareness and ability to handle a technological culture.

A Slovak business survey identified the following issues:

-- the abandonment of production programmes and the consequent impact on market performance;
-- the impact of higher input prices on business competitiveness;
-- the impact of the loss of some markets (former USSR) on firms’ economic stability;
-- firms’ solvency and its impact on their ability to finance manufacturing;
-- firms’ capability to accumulate resources for their own development or for joint ventures involving foreign capital.

These are obviously problems across the whole economy, but they also require attention when implementing regional restructuring policies, particularly since some regional situations can exacerbate them.
3.2. **Regional economic problems**

The regional development problems of the CEECs are not unlike those experienced by the OECD countries now or in the past. But the pattern of industrial activity shows that national sectoral policies have added to them.

3.2.1. *A range of regional situations, similar to those in OECD countries*

The Seminar identified a number of situations that typify most of the OECD regions, more especially in Western Europe. They fall into three broad groups:

-- *Highly industrialised regions with largely traditional activity* such as energy (coal, brown coal, oil, natural gas or atomic energy), metal-working, textiles, shipbuilding and chemicals. These regions have considerable economic and social problems because of their high population densities and the obsolescence of their plant (see 3.2.2. below);

-- *Heavily urbanised regions* with an imbalance between manufacturing industry and consumer services, as well as serious problems of overcrowding, leading to conurbation economies, as is the case for most capital regions;

-- *Peripheral -- mainly rural -- regions* based on agriculture, with the twin handicaps of low agricultural productivity and low-profit industry, mainly crafts.

These three groups do not cover every case, of course, and regions may display a combination of the features mentioned. But they do point up the wide range of regional problems that no single regional development approach can resolve. In this respect the situation of the CEECs is not all unlike that of the OECD countries which, for the past twenty or thirty years or so, have been endeavouring to frame diversified regional development approaches adapted to the industrial make-up of their regions (see below).

3.2.2. **Specific regional problems of considerable magnitude**

One of the distinctive structural features of the regional economies of the CEECs that sets them apart from the OECD countries is the *high degree of industrial specialisation* in many regions and the predominance of mono-industries controlled by giant State monopolies.

Some examples may be cited:

-- Coal-mining and zinc extraction and metal-working in the region of Katowice, textiles in Lodz, collieries in Walbrzych, metal-working in Cracow, shipbuilding and heavy industry in Gdansk in Poland;

-- Chemicals in Western Slovakia, metal-working in Eastern Slovakia, collieries and metal-working in Northern Moravia, energy and chemicals in Northern Bohemia in the CSFR;
Collieries and steel in the Borsod region in Hungary.

National sectoral policies may therefore be expected to have a very disruptive impact on these regional economies, bringing about a decline in highly populated communities with all the attendant implications for economic and social cohesion across the country.

Moreover, regional problems will be compounded by the difficulties that the CEECs will face in coping in the short run with globalisation, and by hard decisions to foster activity with higher value added and to develop business services in metropolitan areas, especially the capital cities.

3.2.3. **Agriculture and the future of rural areas: a crucial element**

Agricultural development is also a key element in regional restructuring by the CEECs. This sector is vital not only for most of the countries concerned, but also for regions where it is the sole source of development.

Agriculture is still expanding in most of the CEECs, although productivity is low (index of agricultural output in 1989 (1980=100): Hungary 114, CSFR 129, Romania 115, Hungary 115, former Soviet Union 119)(11).

The CEECs pin great hopes on agricultural trade with the EC countries; since 1980, exports to the EC countries have by and large been rising faster than imports from them, except in the case of Poland and Romania(12). These figures are in contrast to the marginal level of EC/CEEC agricultural trade in the previous decade. Nonetheless, the Community’s common agricultural policy and the probable outcome of the GATT agreements in this area will compel the CEECs to raise agricultural productivity and to modernise the sector. That will entail reductions in their agricultural labour forces, still over 20 per cent of the total labour force in most of these countries, apart from the CSFR (11 per cent). Regions where over 50 per cent of the labour force is still employed on the land are by no means uncommon. It may be noted that in 1989 the rural population still accounted for 46.8 per cent of total population in Romania, 38.4 per cent in Poland, 37 per cent in Hungary and 34 per cent in the former Soviet Union (Annex 2).
Chapter 2

REGIONAL RESTRUCTURING POLICIES: THEIR PARTICULAR CONTRIBUTION

Introduction

Several papers were presented to the Seminar on successful regional restructuring schemes in a number of OECD countries. Some Central and Eastern European countries also described their fledgling regional policies. Discussion of these two complementary approaches, along with the contributions by participants, helped to provide a better grasp of the issues at stake in the regional restructuring in train in the CEECs.

Mention was made time and again of the complexity of the regional problems generated by the current economic, social and institutional changes, and the need for innovative solutions. From this point of view, as participants in the Seminar pointed out, the papers on OECD experience were no more than "markers" given that the search for specific approaches tailored to CEEC backgrounds was essentially a learning process. The CEEC representatives rightly pointed out that their transition to a market economy implied a radical change in social and economic relations leading ultimately to the establishment of a whole new social order.

The reason why the problem is so complex is that the changes call for new institutions and new socio-economic mechanisms; this will require far more than simply adapting existing structures, while at the same time building on social and cultural foundations that are vastly different from those of OECD countries. It is hence by no means evident that the transition to a market economy can be achieved simply by imitating the experience of the industrialised countries -- even through the transition will not be entirely successful unless it goes beyond mere juxtaposition or co-existence of elements from both systems.

1. General Framework and Strategy of Regional Restructuring Policy

Another feature of the proceedings was the concentration not only on regional policy instruments but also and above all on the regional development approaches and methods needed to meet the challenge of regional restructuring. This was judicious given the importance, at this first meeting on the issue between CEECs and OECD countries, of defining the general framework and strategy of restructuring policy at regional level.

1.1. Linking sectoral and regional conversion policies

A salient feature of the regional restructuring policies pursued by most OECD countries is their three-pronged approach, combining the sectoral, social and regional dimensions. Their regional restructuring measures have involved action on three fronts:

-- sectoral restructuring policies in declining sectors such as coal, steel, shipbuilding, textiles, etc.;
accommodating social programmes to cope with the adverse impact of job losses due to restructuring, aimed at limiting social costs and social disparities;

better targeted programmes to assist the most disadvantaged regions, which the modernisation of the economy has passed by.

Most of the OECD countries, however, have found themselves obliged to readjust their regional policies over the years to encompass the aim of diversifying the productive fabric of their regions, once they had restructured their ailing industrial sectors. As evidenced by experience in South Limburg and the Ruhr, rebuilding is the outcome of a long process of structural change over more than two decades, though it took time before any signs of success were apparent.

The crisis in the coal industry in the late 1950s first revealed the structural problems in the Ruhr. Between 1957 and 1967, coal output in the Ruhr fell by over 25 per cent and employment by over 50 per cent. The steel industry experienced similar difficulties, and the situation was compounded by the oil shocks, the general economic recession in Germany, and other factors. The measures which the German authorities took initially did not fully offset the job losses in industry. Accordingly the federal government, in conjunction with the authorities in North Rhine-Westphalia, embarked in the 1980s on a large-scale regional development programme, "Zukunftsinitiative Montanregionen" (ZIM), going beyond sectoral restructuring to diversify the area’s economy(13). The scenario was somewhat similar for the restructuring of Limburg, where the growing losses of the collieries in the 1960s led to their phased closure over the following decade. The Dutch Government took a series of measures. It introduced restructuring instruments and plans: alternative employment opportunities, regional investment grants and incentives, measures to safeguard the financial interests of redundant workers, new communication infrastructures and phased pit closures to avoid the sudden collapse of employment. These measures were taken to cushion and manage the disruptive effects of the crisis as well as to gain time to rebuild a new productive base in the region. But the Dutch authorities realised that the impact of the original measures was not sufficiently rapid to impart new vitality to the regional economy. Recognising that they could not just let the process of structural restructuring take its natural course, the Dutch Government, together with the provincial and local authorities, decided in the late 1970s to set up a development programme and organisational structures to direct regional conversion(14).

One of the key lessons to be learnt from this experience is that radical sectoral restructuring measures, essentially national in scope, must be coupled with more active diversification policies targeting the regional economy. The experience of Germany and the Netherlands has pointed up the need not to confine action to pursuing sectoral policies in isolation over the short term but to combine them with more radical measures to restructure the industrial fabric of the regions over the medium term.

What are the implications of all this for the CEECs? In the transition to a market economy they will inevitably jettison obsolete and uncompetitive capacity in their main industrial sectors. Inevitably too, if the legal and institutional reforms needed to move to a market economy are to be genuinely effective, governments must rapidly set sectoral policies in train. The regional impact of these sectoral policies will be considerably greater than in OECD countries since the industrial sectors, that are being restructured, are heavily concentrated in areas that are economically dependent on the local specialisations. The national economy and the regional economies are thus closely tied together, and sectoral and regional policies must accordingly be linked. More fundamentally, given the high proportion of local mono-industries, national
sectoral policies need to be coupled with active regional and local restructuring policies, not only as a precaution against the negative social impact of restructuring (large-scale structural unemployment, migratory movements and the creation of an industrial wasteland) but to gain time to nurture new productive and entrepreneurial capacity in these regions.

One key question that was raised is whether, as in the OECD countries, sectoral restructuring policies should precede reconversion policies. It is particularly relevant in that the CEECs do not have extensive budget resources to apply to the immediate needs of their economies. Most participants considered, nonetheless, that it was vital to avoid falling into the same error as the industrial countries and *underestimating the importance of the time factor* in the success of reconversion policies. Material investment is needed, but above all intangible investment (training, cultural change, organisation, etc.), which takes a long time to bear fruit. Linkage between sectoral and regional policies is especially necessary in that the magnitude of the regional problems generated by the restructuring of major industrial sectors will be such as to imperil the whole country’s economic and social cohesion unless people rapidly perceive the more structural aspects of the measures being taken. The CEECs may not necessarily be able to count on having as much time ahead of them as the OECD countries have had to redeploy their economies successfully.

Much can be learnt from the experience of Spain following EC entry. Its economy had developed on inter-industry lines, and the country soon faced the need for structural adjustment to cope with the impact of opening its markets and frontiers to international competition(15). The first consequences of the decrease in domestic demand and international trade and the disruption caused by the energy crisis were the loss of over one million jobs during the period 1976-85, a decrease in industrial GDP from 38.9 per cent in 1976 to 35.3 per cent in 1985 a decrease and in industrial employment from 37.1 per cent to 32.1 per cent, a steady stream of company closures, and worsening risks for financial agents and crises in institutions. Due to the critical position of most sectors of Spain’s economy in the early 1980s, and the risk that the crisis might affect a very large group of industries, a choice had to be made between allowing the market to adjust of itself or intervening to support certain sectors(16). The Spanish Government, recognising that the first course would have led to the collapse of a substantial part of the economy, opted virtually from the outset for a sectoral policy of industrial restructuring followed up immediately by regional development policies of an essentially integrated nature, set in place with the assistance of the regional authorities. The outcome has been positive inasmuch as every region, despite the great disparities due to the country’s economic history, is now benefiting from the positive macroeconomic effects, evidenced by the general alignment of regional GDP growth on national GDP growth.

1.2. The need for an "integrated" regional policy approach and accommodating social policy.

The sectoral and conversion policy mix calls for co-ordinated action on the economic, social and cultural policy fronts. This is a complex endeavour demanding national and regional policy co-ordination and the desegregation of government decision-making in all areas of economic activity.

The feature of conversion policies is that they call into play a range of government policies -- on job creation, technological innovation, training and education policies, infrastructure and housing, etc. -- that are often managed by different ministries and agencies.
1.2.1. **The lessons to be drawn from OECD regional conversion policies**

The scant success of OECD countries’ sectoral restructuring policies in revitalising the industrial fabric of the regions has caused national and regional authorities to rethink their regional policy approaches, as emerged from the examples presented during the Seminar.

In Germany, the ZIM or Joint Scheme Programme introduced in the Ruhr was designed primarily to synergise development schemes through an integrated approach. It combined a set of intermeshed programmes in the following areas: training in new occupational skills, employment creation measures, a programme to promote technology and innovation, the creation and renovation of industry-related infrastructures, and energy supply and environmental measures(17).

The same concern to decompartmentalise government policymaking is evident in the three regional development programmes in the Province of Limburg, in which integration is the leitmotiv; they involve both strictly economic measures -- developing SMEs and services -- and policies outside the economic sector: manpower training, culture, social policies, development of transport and telecommunications infrastructures, etc.

The lesson drawn by the Dutch authorities is that the integrated development approach calls for a forward-looking policy since it involves investment which will give a return essentially in the medium term(18).

The most valuable lessons to be drawn from the OECD countries’ experience with respect to the content of restructuring policies are of two kinds:

--- *infrastructure creation policies and active innovation policies should be pursued not sequentially but concurrently.* The experience of traditional industrial regions in the European Community has demonstrated that, though they were well-endowed with multimodal infrastructures (railways, waterways, motorways, airports, etc.), this was not sufficient to revitalise their economies in the 1970s(19).

--- *strictly economic policies can only create the conditions for industrial regeneration if they are coupled with other -- e.g. social and cultural -- policies of a non-economic nature.*

1.2.2. **Some implications of integrated regional development policies for the CEECs**

Broadly speaking, conversion policies are made up of a package of measures in the following areas:

--- improvement of transport and communications infrastructures (primarily road and rail networks);

--- regional planning: creation of industrial estates, renovation of factory sites and of the housing stock;
-- technological innovation by companies: technology transfers, R&D funding, co-operation with research laboratories, etc.

-- human resource development: schooling and vocational training, continuing training and in-company retraining, etc.;

-- development of business services;

-- facilitating access to funding for the corporate sector: credit, equity investment, investment incentives, etc.;

-- inter-firm co-operation, in particular via joint ventures with foreign firms.

On this point, participants in the Seminar emphasised the need for three types of accommodating policies that are crucial for the structural adjustment of regions: social, environmental and innovation policies.

From the outset, the restructuring of industrial sectors in OECD countries was accompanied by active social policies:

-- social policies to provide income guarantees to redundant workers, e.g. early retirement schemes in Limburg, unemployment benefits, etc.

-- labour market re-entry policy associated with vocational retraining policies.

In the CEECs, such programmes seem essential, indeed crucial, for people that are unaccustomed to structural unemployment and the absence of any accommodating social policies could lead to unrest whose cost in real terms would exceed the policies’ budget costs, putting the internal economic and social cohesion of the countries concerned at risk. There is an obvious need to establish formal structures for negotiations between unions, management and government, and to draw up a social contract (see below).

It should further be borne in mind that conversion policies, especially in regions dominated by heavy industry, would probably not have succeeded had they not been accompanied by extremely active environmental and ecological policies.

The quality of the environment is playing a growing role in business location, especially in the case of high-tech firms. For this reason the authorities in traditional industrial regions such as the Ruhr have been particularly active in developing programmes to enhance the environmental appeal of their region. These involve:

-- **landscaping of vacant industrial sites** and air and water pollution control;

-- an active *land-development policy* to provide housing for recession-hit communities and amenities to enhance the quality of life (residential areas, leisure and sports complexes, nature reserves, etc.)(20).
For the industrial regions of the CEECs, as their representatives were at pains to point out, the challenge is daunting given the scale of the ecological devastation. The magnitude of the problem is such that it cannot be resolved overnight and hard choices will have to be made in the light of countries’ policy priorities. Nonetheless, these regions will not attract foreign firms unless something is done to enhance the quality of their environment. Regions like North Rhine-Westphalia which have acquired technological expertise in this area could assist the CEECs through partnership arrangements.

**Innovation policies** -- which are discussed below in the section on regional policy instruments -- were built into OECD countries’ regional policies at a somewhat later stage. This was due above all to the fact that many regions were slow to recognise how the new technology-based industrial system operated. Today, most regional conversion programmes in the OECD countries give priority to innovation in view of the nature of competition and of international competitive co-operation in an increasingly global economy. The British and Japanese contributions to the Seminar shed some particularly valuable light on the issue (see below)(21).

The CEECs definitely need to consider this factor, for the economic debate over their future is marked by two differing and even crosscutting lines of thought:

-- one tendency is to see the process of economic and institutional change in the CEECs as an opportunity to gain access to new potential markets or to develop low value-added goods for outside markets at production costs that are internationally competitive;

-- the other, taking a more medium-term view of these countries’ prospects in a global economy, recognises the importance of the potential pool of skills that their labour markets could offer for future growth in the industrialised countries and of paying due regard to the transfer of technologies not only in industry but also in environment.

Depending on which argument is preferred, different -- and possibly quite contrasting -- policy priorities will be adopted. The proponents of the first approach will focus on sectoral restructuring, while for advocates of the second the sectoral policy/regional restructuring policy linkages will be the prime consideration. The CEECs are thus faced with a dilemma, since the short-term problems they encounter may obscure the long-term goals.

Participants drew attention to this strategic issue and to the absolute necessity for regional innovation policies, to avoid the CEECs’ industrial regions being relegated to third world status.

**1.3. Selective regional development policies**

The OECD countries’ experience of restructuring and industrial conversion shows that, since regional productive systems differ very widely, *regional development can take many routes*. Governments have accordingly designed selective development strategies that are better attuned to the particular features of the individual regions.

The regional problems that were identified in the course of the Seminar (see Chapter 1, Section 3.2.) suggest that the same will occur in the CEECs. As the representative of the Czech and Slovak Federal
Republic pointed out, the impact of the transition to a market economy on regions and their productive activity will vary from one region to another(22).

In that country the authorities have embarked on an evaluation of regional problems and have identified two major categories(22):

-- *declining industrial regions*, which will be particularly hard hit by the structural economic changes;

-- *border regions* which, because of their unfavourable position and underdeveloped communications infrastructures, lack the impetus for further development.

Nine areas for development were identified on this basis.

In Poland, statistical studies on regional differences have identified at least three categories of region(23):

-- *urban regions* such as Warsaw, Poznan and Gdansk which have a more diversified industrial infrastructure, a better skilled pool of manpower and better international communications;

-- mainly rural *peripheral regions* in the east, north-east and west, far from urban centres and communications networks, lacking any industrial base. Their development is still highly dependent on agriculture (60 per cent of the labour force in the voivodship of Zamoizc, for instance, are still employed in farming).

-- *the traditionally industrial regions* in the south of the country, from Katowice to Walbrzych, which will be hard hit by restructuring, especially since the environment is unattractive, the workforce lacks appropriate skills and there is scant entrepreneurial capability.

The other CEECs too have a highly differentiated regional mix, but the regional statistics so far available in most of these countries can provide only an incomplete picture of the specific social and economic features.

In order to identify the proper development routes for individual regions, the authorities must have a clear picture of local conditions. Otherwise they cannot set appropriate targets for regional development policies.

In the cases of Germany (the Ruhr), the Netherlands (Limburg) and Spain, structural adjustment policies were drawn up on the basis of regional development programmes:

-- comprising an *economic and social analysis* and identifying the particular region’s structural problems in the light of the structural performance of the economy as a whole;
-- defining *priority policy aims* and the ways and means of achieving them in the light of national macroeconomic policies;

-- appraising *financing requirements* and financial appropriations programme by programme in line with the budget estimates of the relevant ministries and regional and local authorities.

Some countries, Poland and the CSFR for instance, have pinpointed their regional problems extremely accurately and are implementing regional plans, but these are confined to setting very broad targets without reference to the means or costs of achieving them.

The ability to take purposeful action and pursue a genuinely selective regional development approach depends on extremely detailed information about social and economic conditions in each region, obtained through a *regional statistical system* (databanks, measurement instruments, economic analysis techniques, etc.). Most of the CEECs have very little such information. The establishment of regional data systems is a prerequisite for framing structural adjustment policies, and must hence be a priority. Governments must move speedily to provide themselves with the basis for sound regional policymaking.

### 1.4. Development of endogenous potential versus reliance on exogenous economic inputs: striking the right balance

#### 1.4.1. What can be learnt from OECD countries’ restructuring policies?

The OECD countries’ experience with restructuring sheds new light on the interaction between the development of endogenous capabilities and outside economic inputs, mainly in the form of inward investment. Initially, governments counted on foreign investment to compensate for job losses and business closures resulting from the restructuring of major industrial sectors. They accordingly developed comprehensive programmes of incentives for foreign investors and new industrial parks to attract business to come to their country and to the areas particularly hard hit by recession.

Few countries, as it turned out, have found this approach effective in converting their ailing regions. Most foreign investors are seeking a comparative advantage from geographical location not in terms of prices but in terms of markets (mostly outside markets) or access to innovative capacity in the country. Foreign investment in Spain is a good illustration. Although most of the peripheral regions enjoy a comparative advantage because of below-average wage levels, over 80 per cent of inward investment over the past 5 years has been concentrated in the metropolitan regions of Madrid and Barcelona, where wages are highest(24). The same is true in Portugal, where the vast majority of foreign investment is concentrated in the capital region of Lisbon, rather than in the Norte region, despite its essential role in the country’s economy(25).

While the contribution of foreign business location should not be minimised, the OECD countries’ experience shows that policies built solely around outside inputs are not enough in themselves to restructure the industrial fabric. They have to be accompanied by measures to develop endogenous potential, giving support to local firms and fostering an environment that is open to innovation and change in the regions. What foreign firms are looking for, first and foremost, is an environment propitious to innovation. With
globalisation, production cost advantages are rapidly being outweighed by innovation advantages.

Most regions in OECD countries, accordingly, have successfully adjusted their productive systems through a mix of foreign capital and development of their own resources. They have pursued a two-pronged policy, combining incentives for inward investment and support for existing local firms. During the 1980s the European Community gave strong encouragement to Member States to take this course by substantially amending the regulations governing the European Regional Development Fund (ERDF) to give greater emphasis to endogenous development(26).

This mix of exogenous inputs and endogenous development is today a fundamental part of regional conversion and restructuring policy in EC countries. It will gain still further prominence with the reform of the structural funds and completion of the single market. It has spawned a host of industrial co-operation ventures and partnership networks between local and outside firms. Co-operation has in fact taken a wide variety of forms, depending on the problems to be tackled:

-- Co-operation between large firms and SMEs under subcontracting arrangements;

-- Co-operation between firms with complementary functions, to manufacture goods and/or win outside markets;

-- Multilateral co-operation between firms and research centres in a given area of technology (access and acquisition of appropriate technologies), etc.

1.4.2 Some implications for the CEECs

Given the scale of their general economic problems, the CEECs will clearly be unable to tackle them satisfactorily without inputs from foreign firms. Most of them have accordingly launched an urgent and fundamental recasting of the statutory framework within which their enterprises operate (reform of property rights), in order to foster co-operation with foreign enterprises (large-scale privatisation), and are providing an extensive package of financial incentives to attract inward investment (see below).

This strategy can hardly be faulted, since it seems a vital means to enable their firms to take their place in a market economy. Yet it would be mistaken to think that this policy alone will overcome their regional problems. There are at least two reasons for this:

-- The aim of major multinationals in the short term is to exploit the comparative advantage that the CEECs currently have in terms of market share, wage levels and technical skills. As the German Government has rightly stressed in its restructuring programme for the new Länder, *comparative wage advantage is likely to be very short-lived* since wages will progressively align on Western levels. The loss of this comparative advantage, at a pace depending on how long the transition to a market economy takes, could lead firms to relocate outside the region unless its productive system has been modernised by streamlining production, upskilling the labour force, enhancing the quality of communications and living conditions, promoting general awareness of technology, etc.
Most large foreign firms will tend to locate in major urban areas (proximity of markets and economies of scale associated with conurbations) or the most diversified industrial areas (access to varied and/or more highly skilled manpower). Although location there will be beneficial to the development of the particular regions and the economy as a whole, it is by no means clear that it will have any positive spin-off for regions with severe structural handicaps in terms of their environment, accessibility and living conditions and the quality of their labour force.

It is still too early for any recent assessment of broad trends in the location of inward investment in the CEECs. The few incomplete studies of joint ventures launched between 1985 and 1990 do suggest, however, that the considerations outlined above are well-founded. A recent survey of joint ventures in Hungary is informative in this respect(27). It may be noted first of all that the great majority of joint ventures in the CEECs today are concentrated in Hungary and Poland. In Hungary alone, the number increased five-fold between 1989 and 1990 to a total of over 5 000 (it was nearly 8 000 by July 1991). By contrast, so far just 60 have been set up in the CSFR. While the figures should be treated with caution, they do indicate that the pattern of foreign direct investment differs greatly from country to country.

While the expansion of joint ventures in Hungary is indeed spectacular, it would be unwise to draw over-hasty conclusions about their impact on restructuring there. The survey notes that the bulk of ventures (over 50 per cent) were in domestic and international trade, with very few in manufacturing. Most, in addition, are small-scale. As the authors point out, there are of course several reasons for this: low initial capital requirements, ease of personal co-operation and high immediate returns due to the expansion in both internal and external demand, not to mention immigrants’ readiness to invest in their country of origin. Yet it would be fanciful to think, as OECD countries did in the 1970s, that a massive inflow of foreign capital will in itself be sufficient to convert industry in regions undergoing restructuring.

Here again, the Spanish example is instructive. Economists all agree that EC membership has acted as a catalyst in Spain’s economic growth. Yet it was not due solely to the inflow of foreign capital. Of far greater significance was the striking capacity of Spanish firms to adjust and innovate, and hence exploit the growth both at home and abroad generated by opening up to the rest of Europe. The Spanish government accepts that the most decisive factors for the country’s present growth were not the flows of inward investment but Spain’s policy of adjustment to consolidate the financial position of firms in every sector of the economy and the removal of arrangements that sheltered non-competitive industries(28).

There is a danger that CEECs could rely overmuch on foreign investment, and neglect measures to develop endogenous entrepreneurial capability, especially in regions that will be severely hit by industrial restructuring or the changes in agriculture. The possibility of a “two-tier economy” developing should not be underestimated. That would sharpen tensions between regions and parts of regions, given the high degree of economic specialisation there. It is accordingly vital for central governments, together with regional and local authorities, to think carefully about ways of combining endogenous development and exogenous inputs, and to work out complementary policies for endogenous development centred on fostering local entrepreneurial capability.
2. Industrial Restructuring Policy Instruments

A review of government policies for industrial restructuring in OECD countries clearly indicates a shift of emphasis during the 1980s from conventional policy to support economic activity towards more selective, targeted measures to diversify and renovate the industrial fabric of particular regions.

2.1 Conventional industrial restructuring instruments: limitations and changes in application

Three types of instruments were initially set in place by all OECD countries to implement their regional restructuring policies:

-- tax incentives for investment;
-- direct aid to productive investment;
-- spending on infrastructure.

These instruments are well enough known for detailed description to be superfluous here(29). As early as the 1960s governments were applying all three categories not simply as a basis for regional policy but as a vector of industrial policy as well. The only difference, as between regional and industrial policy measures, was the scale of assistance to areas selected on the basis of the gravity of their economic problems. For this reason it is by no means easy to appraise their impact on regional development reliably, especially since there has been little or no research on the subject apart from the regular OECD reviews of regional development policies and problems in Member countries.

Tax incentives have been used to foster regional development in all OECD countries, though the practice is more recent in Europe than in the United States. They are now being introduced more broadly, in preference to industrial investment subsidies, in most countries. One aspect that is relevant here concerns the "free zones" set up in the 1980s. The aim was to channel investment to regions in need of outside assistance to rekindle economic activity. Although opinions differ on the true economic impact they have had on regional development, most analysts share the view that, to be fully effective and genuinely attractive to outside investors, the zones should be concentrated in a fairly small number of regions(30). In general, it is interesting to note a major shift in the use of tax instruments, towards closer targeting on specific local development objectives. This is so in the United States, for instance, where the federal tax system encourages local solidarity in the form of limited partnership ventures(31). A similar course is being taken in the new German Länder, where firms taking up an equity stake are allowed to set reserves against tax to cover losses from the start-up of new activities(32).

OECD countries have always favoured financial assistance to productive investment as a regional policy instrument. Here again the effectiveness is difficult, if not impossible, to assess, since such assistance is also used to support industrial policy across the country. As observers of regional policy have pointed out, there is nothing to show that a project qualifying for financial assistance would not have located in a restructuring area in the absence of regional assistance. In fact, regional policy became generally applicable, meaning that regional assistance were no longer selective enough to steer firms towards locations in areas facing serious economic problems. There is now a shift of emphasis in allocation. Assistance is being channelled more directly towards medium and long-term structural adjustment objectives, and hence more closely targeted on ventures that meet these objectives(33). The
approach now is not to assist business development across the board, but to give selective assistance to ventures that will genuinely boost regional value-added and promote modernisation. This is the approach taken, for instance, in the United Kingdom, where the Regional Development Grant Scheme, offering automatic support to business, has given way to Regional Selective Assistance(34).

*Infrastructure investment* accounts for the largest portion of government budgets for regional policy measures. It was chiefly concentrated on transport or communications programmes, new energy capability and environmental schemes. Here again, the economic effects are difficult and complicated to assess, since the justification for infrastructural spending depends heavily on such factors as the remoteness of regions and their environmental appeal. There seems to be no dispute that such investment is very often a prerequisite for the development of a given region, but a new approach is again seeking to target it towards direct support for productive activity and to relate it more specifically to the development of intangible factors. In most OECD countries, regional and local development policies are including two new categories: infrastructure that "structures" productive activity (e.g. business parks, "nursery" facilities for firms starting up, etc.) and infrastructure giving access to integrated telecommunications systems.

The traditional industrial regions of Western Europe provide an example of a policy overly based on infrastructural development to the detriment of direct support for productive activity. A recent survey of the way these regions have utilised the Community funds (ECSC, European Investment Bank and ERDF) shows that in most of them over 80 per cent of EC funding over the period 1960-1980 had gone on infrastructure projects, even though they lie in the heart of Europe, with the best communications infrastructures in the Community. The same survey indicates that these regions have a substantial technology lag because they failed to anticipate the changes in the techno-industrial system and have been unable to assimilate the new technology culture(35).

For that reason, when reforming the structural funds, the EC Commission proposed that only 13 per cent of Community funding for the traditionally industrial regions should go on basic infrastructure, as against 87 per cent on productive activity and horizontal schemes for local development and upskilling there(36).

2.2 *Horizontal regional development measures*

While not contesting the utility of the conventional instruments, governments are recognising that their impact on adjustment has moderated now that the importance of intangibles in the production process, and globalisation, are the dominant forces for growth in the highly industrialised countries. They are progressively moving towards more horizontal forms of regional development. Two particular instruments which OECD country representatives described at the Maastricht Seminar deserve particular attention in view of their relevance to regional problems in the CEECs:

-- innovation policy instruments;

-- instruments to provide financial support to SMEs and to firms being restructured.
2.2.1 Innovation policies

With the growing importance of intangibles and the new linkages between science and technology and productive activity, innovation policies have become a priority for highly industrialised countries. A host of measures emerged during the 1980s, ranging from the technopolis to the science and technology park as tools to promote regional development. As the United Kingdom paper showed, innovation and its impact on regional development is a complex question and needs careful examination(37).

Technological research and development could well become a major determinant of regional disparities in the decades ahead, as a recent study by the EC Commission suggested. It is true that high-tech productive activities are currently concentrated in central or metropolitan regions, given the scope they offer for economies of scale and the potential for high-level scientific research(38).

It would be unwise to draw over-hasty conclusions about the impact of technological innovation on regional modernisation, however; innovation has many varied facets. As the United Kingdom paper rightly noted, innovation can spring from a wide range of sources other than the development of high-tech enterprises(39). A fundamental distinction has to be drawn between two dimensions of the innovation process: the creation of generic technologies, primarily arising out of the direct application of scientific discoveries to productive activity (technology push), and the technological adaptation of products in response to competition and market trends (demand pull). These two dimensions generate courses of development with different spatial configurations(40). The first leads to the emergence of the technopolis, which, as an OECD study has clearly demonstrated, will prove successful only in very specific circumstances. The second concerns regions that have managed to establish an environment that is receptive to technological culture and technology transfers(41). Individual regions should accordingly determine their own technological paths, in the light of their potential for technological R&D, rather than opting straight away for the technopolis model.

This is the approach taken in a number of current regional policy instruments to support innovation such as the United Kingdom Regional Innovation Grant to promote the transfer of technology to SMEs seeking to enter new markets(42). The Japanese approach in projects such as Technopolis, the Research Core concept and the Development of Traditional Industrial Arts again reflects the concern to differentiate the spatial pattern of technological R&D(43). Another objective is to develop small local industries considering the development of basic technologies together with R&D activities promoted by local governments. In most OECD countries, the 1980s saw the emergence of a wide range of local innovation agencies, designed chiefly to help local firms to innovate successfully and win new markets(44).

At the same time, a technological R&D policy is very expensive and its outcome will depend a great deal on ability to accumulate a critical mass of technological resources and funding which is quite beyond the reach of given regions, and indeed many countries. Accordingly, in Europe in particular technological R&D policies are usually implemented through partnership arrangements between companies and research institutions in the framework of transnational Community programmes (such as ESPIRT, EURAM, and BRITE).
2.2.2 Policies of financial support to SMEs and to firms being restructured

Funding the creation of innovative firms or modernisation in companies being restructured is a further key sphere of regional policy action in OECD countries. Access to funds (particularly seed money and venture capital) can be a considerable problem for small firms or traditional enterprises having to introduce new technology(45). Conventional forms of financial assistance (government guarantees, interest-rate relief, etc.) are no longer sufficient and novel public/private funding schemes have been run successfully in a number of regions restructuring their economies:

- a regional equity investment corporation (such as the Société Régionale d'Investissement de Wallonie -- SRIW -- in Belgium);
- programmes to finance industrial ventures and provide innovation consultancy services to business through agencies such as the US business development companies, the UK regional technology centres and Limburg Province’s regional development company LIOF, to mention just a few examples presented at the Seminar;
- regional or local capital markets for business creation or share listings for local companies (such as SIPAREX in the Rhône-Alpes region of France).

2.3 Some implications of the use of conversion policy instruments for the CEECs

Taking example from the West, the CEECs too have developed a very wide range of assistance for productive investment and infrastructure. These include all the conventional forms of financial assistance: tax relief, loan facilities and grants. The papers by CEEC representatives provided much detail, which need not be repeated here. This general report will simply mention two good examples of how these instruments are currently being employed.

Entrepreneurs in Hungary have tax rebates on their investment in ailing regions in any given year. Through the regional development fund, a major programme of grants is being applied to develop infrastructure. Other measures include aid for job creation through an employment fund, and grants and loans to foreign investors for development projects. While all these measures have produced around 30 000 new jobs, the government considers that they focus too closely on responding to immediate problems. It is having difficulty in meshing regional incentive systems with other aspects of industrial policy. The co-ordinating machinery that this calls for appears to be lacking, so that the impact is dissipated(46). At present they propose to review their approach to regional development, channelling it more towards long-term objectives such as developing human and material resources, support for SMEs, and setting up business services and vital infrastructure networks.

Germany is taking an entirely different approach. Both the instruments and the procedures of the Joint Scheme (ZIM) have been extended to all the new Länder. Three-quarters of the Joint Scheme funding are being allocated to the five new Länder and East Berlin. In addition, the federal government has set up a special programme for the new Länder, the Joint Upswing East Programme for restructuring regions. It embodies the same incentives and the same approach as adopted in the Ruhr. The bulk of funding at present goes on infrastructure development, considered the highest priority, but the programme combines
with a range of others covering assistance to SMEs, technological R&D, environment, energy, training and upgrading of occupational skills, etc.(47).

In view of the recent changes in the ways OECD countries are using their regional development instruments, participants raised a number of questions about their relevance and whether they could deal successfully with the enormous restructuring problems that the CEECs face. Representatives of OECD countries were particularly concerned to draw attention to mistakes they had seen made at home, and to warn of the dangers of incomplete, short-termist responses to the economic problems in the CEECs.

One comment concerns the interaction between the short-term objectives of restructuring policy and the medium-term aims for regional conversion touched on earlier. The scale of regional problems generated by restructuring will demand swift and radical action by the authorities. Their first, legitimate response could well be just to put the fire out, without thinking about how to rebuild the economy later on. There is accordingly a danger that the conventional instruments will have short-term, scattered targets, not structural adjustment objectives which call for a comprehensive view of the strategic objectives and approaches of industrial policy. Experience in OECD countries demonstrates clearly that regions which have carefully considered their future in structural terms were able to convert their economies ten years and more ahead of others where initial circumstances were similar (e.g. North Rhine-Westphalia compared with the Nord-Pas de Calais region in France).

A second warning more directly concerns the use of regional policy instruments. The funding requirements of industrial enterprises, and infrastructure projects, may mean that the bulk of the funds available are funnelled into one-off investment assistance schemes or infrastructure projects, as occurred in OECD countries in the early days of restructuring. It could well be more advisable, from the outset, for financial assistance of this kind to be be allocated under multi-year regional development programmes of integrated and comprehensive design. The example of the Community Support Framework used by the EC Commission for reshaping the structural funds may provide pointers on means of achieving these development objectives(48).

A third key question about the use of restructuring instruments is whether the incentives will actually lead to renovation of the productive fabric. The OECD countries’ experience suggests considerable caution is needed here. Most of them have shifted emphasis towards programmes to develop human resources and foster innovation, so giving priority to enhancing intangibles. Should the initial stress be on investment in plant and infrastructure, waiting for economic recovery before bringing other policies into play? This crucial question is by no means simple, as many participants observed, since budget options are severely constrained by governments’ lack of funds. But experience in OECD countries, with Spain being a significant example, does show that despite the dearth of resources, regional restructuring policies have achieved satisfactory results in diversifying the productive fabric in those regions which have struck a balance between material and intangible investment, especially schemes to enhance firms’ innovation capabilities and human resources (training, occupational skilling, etc.). It is accordingly vital that the CEECs should apply part of their budgets to intangible investment programmes as soon as they launch their restructuring policies, in order to provide for the requirements of conversion. In this respect it should be borne in mind that the fundamental objective of their restructuring policies is to ready them to take their place in the global economy within a far shorter period than the OECD countries, which did not have that challenge to face when they embarked on restructuring.
CEEC governments should devote particular attention to innovation policy. Here again the optimum path of development has to be selected, between creating generic technologies and using current technology to win markets. The characteristics of their technological R&D potential would seem to argue, initially at any rate, for the second course. In their policies on technological R&D, the CEECs should first and foremost target the technological innovation capability of existing industrial firms, establish technology transfer services, so as to gain access to outside markets by developing new and really competitive products. From this standpoint, information and advice about innovation, and its funding, should be directed at local firms, particularly SMEs, and networking should be encouraged through co-operative ventures between them and major firms being restructured.

It is important to see that the bulk of technological R&D budgets are not diverted to generic technology, science parks and technology complexes. This does not rule out the development of scientific research. It means taking that course only where certain preconditions are met: potential for excellence in research, of a high level by international standards, government readiness to provide substantial and sustained funding to reach the critical mass that is essential, and selection of a specific field of technology under arrangements for international co-operation with high-tech enterprises.

It seems clear that these fundamental conditions are unlikely to be fulfilled at the same time at many points across the CEECs. The reluctance of the European Community to move very quickly or very far into co-operation partnerships under its own technological R&D programmes (ESPRIT, BRITE, SPRINT, etc.) can largely be put down to the CEECs' leeway in science and technology. The EC programmes are based on criteria of international scientific competitiveness, not designed to help countries or regions of Europe to make good their technology deficit. At the same time, it would be highly desirable for CEEC science and technology to develop primarily through international co-operation, designed to show solidarity and help them catch up. It would be valuable if programmes such as STRIDE, set in place to help bring EC regions up to a standard of scientific and technological skill where local enterprises and research centres can join more readily in major European programmes, were developed on a broader basis.

3. Regional Restructuring Policies and Institutional Arrangements

A further significant aspect of the application of regional conversion policy lies in the role of government.

Nearly all OECD countries made use of decentralised institutional structures to implement their conversion policies, sectoral policy generally being a matter for central government except in federal countries.

The Netherlands provides an interesting example. To combine their efforts to convert industry in the Province of Limburg, the central government and regional authorities drew up a joint policy programme, the South Limburg Prospects Paper, and established a regional development agency (LIOF) to implement it.
Spain’s experience may also be mentioned here. When its new democratic structures were established, regional bodies (the autonomous communities) were also formed, with powers, decision-making structures and budgets of their own. The return to democracy, and devolved political structures, along with EC membership, gave a spectacular boost to Spain’s economy and most of its regional economies, as can be seen from recent structural performance compared with the past. The lessons here are especially significant since even in the recent past its economy was heavily dominated by an inter-industry mode of development quite similar to that in the CEECs.

In their efforts to convert the new Länder, the German authorities have also laid emphasis on concerted measures involving co-ordination across the various tiers of policy-making (federal government, Länder, local government). This involves:

--- the Joint Scheme involving the federal government and the Länder, with a planning committee where each partner has an equal say in approving programmes;

--- concerted action involving the Länder and local authorities, with functions allocated on a complementary basis by statute.

Drawing on past experience, and wanting a consistent institutional framework for industrial policy, the federal government established new Länder as one of its first decisions following unification. At the same time local government was reorganised, with wider powers and a system of administration more suited to its function of promoting regional and local development.

It accordingly seems beyond dispute that democratic, devolved structures have been a major factor in the success of regional restructuring policies in most OECD countries.

The CEECs hence face a major institutional challenge: establishing democratic ground rules and new political institutions at local, regional and national levels. The new arrangements may take a variety of forms, which will most probably flow from each country’s history and earlier political experience.

Two broad principles stand out from the lessons of decentralisation in OECD countries:

--- *the principle of additionality*, which postulates joint contributions by central government and the regional and even local tiers. Putting this principle into practice requires formal structures of co-operation, with the powers and duties of each partner being duly observed;

--- *the principle of subsidiarity*, which means that action should not be taken by a higher decision-making tier whenever it can clearly be done better by a lower tier. Putting this principle into practice entails a clear definition of powers and duties at each level, and suitable co-ordinating machinery.

The CEEC representatives accepted the urgent need for decentralisation. They referred to tentative institutional arrangements which, though very modest, demonstrate a political readiness for devolution in the countries concerned.
3.1 Organisational capability and management of regional restructuring and conversion policies

The success which OECD countries have had in industrial restructuring does not hinge solely on the economic policy they adopted. It further depends on organisational capability to implement them. This is a crucial aspect of industrial conversion policy, and involves a number of factors discussed during the Seminar:

-- public management capability;
-- partnership arrangements between public and private sectors;
-- a proper social contract between government, employers and unions;
-- a new social culture.

3.1.1 Public management capability

It is difficult for countries that have been run for decades on a centralised basis, with a planned economy, to acquire public management capability. Government inefficiency is a major problem for business. Officials at present have no experience of how a market economy works, and no experience of applying the new administrative and legal rules governing investment (corporation law, investment incentives, building permits, approval of new firms, industrial parks, etc.). In addition, government services simply lack the equipment to cope with their increased responsibilities. A wide-ranging public management programme accordingly needs to be developed:

-- management training for national, regional and local officials;
-- briefing officials on administrative practice associated with government economic and social measures, in particular through visits or secondments to government and regional and local authorities in OECD countries, or secondments of experienced OECD country officials;
-- data processing equipment, and modern management methods for the public service.

3.1.2 Partnership arrangements between the public and private sectors

One of the innovative features of successful regional regeneration policies in OECD countries has certainly been the action programmes agreed among all the economic, social and political agents under contract or partnership arrangements. Partnership structures have been set in place, usually by regional authorities, to serve the public interest in regional development schemes covering most spheres of conversion policy. An example is the Special Joint Scheme (ZIM) involving the federal and North Rhine-Westphalia governments, local authorities, business and unions.

Such arrangements are not confined to relations among institutional agents. They also cover a wide range of partnerships in technology, finance, education and vocational training, etc.
3.1.3 Achieving a social contract

Structural unemployment is likely to increase steadily in the CEECs, as the result of sectoral policies aimed at restructuring major industries and the removal of the shelter that uncompetitive firms had under central economic planning. This is bound to worsen matters for some segments of the population, already precariously placed. As some CEEC representatives noted, it would not be wise to underestimate the risk of grave upheavals in the labour force unless active social policies are introduced, together with machinery for government, business and unions to meet and consult. Social strain may have a more pronounced regional dimension than in OECD countries, because of the high degree of industrial specialisation in CEEC regions and the resurgence of strong ethnic loyalties.

Consultation of this kind would benefit from having an official and contractual footing, and from encompassing all aspects of conversion policy: deciding the strategic lines along which the region should develop, conditions and ground rules for fostering development, and durable structures for where development agents can meet. The Michigan Strategic Group, for conversion in Detroit, and the social consultations in connection with the Malmo shipyard restructuring in Sweden, are successful examples of this approach(51).

3.1.4 A new social culture

Transition to a market economy, at first sight apparently a simple matter of restructuring and converting the business sector, turns out in fact to be a radical process of social change going deep into the value systems of society and the population. This link between culture and regional development is nothing new. That can be seen from the cases of restructuring in some parts of OECD countries; changes in economic structure led to sharp cultural shifts in the way that economic and social policymakers, and the general public, viewed the future of their society. Many regions had to surmount cultural obstacles to modernising their economic structures: these included resistance to job cutting, priority to preserving industries that had once made the region prosper, suspicion of new technology and new forms of work organisation, and a general sapping of people’s confidence with the future so uncertain.

The CEECs clearly face a cultural challenge of considerable magnitude. The social changes that transition will bring about extend to all aspects of society: economic organisation and the social realities of the world of work, the operation of political institutions, collective and individual lifestyles. Three aspects of this cultural dimension merit particular attention:

-- instilling a new civic sense throughout society, based on community solidarity and the involvement of every citizen in the economic recovery of his or her country and region;

-- opening the way for a social culture resting on initiative and creativity so that people regain their readiness to undertake projects, to take risks and to assume responsibility for their lives, and learn how to manage a new kind of society;

-- opening the way to a technological culture (without rejecting the cultural values handed down through history), and to the development of cultural pluralism through interchanges with the outside world.
In that connection, OECD countries have much to learn from the way the CEEC regions have preserved their cultural roots, despite systematic policies to impose uniformity. It is vital that their essential cultural allegiances do not simply become an escape from economic failure, but give the people greater readiness to take up responsibility for their future.
Annex 1

Table 1

Industrial Production Index

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>124</td>
<td>129</td>
<td>134</td>
<td>141</td>
<td>144</td>
</tr>
<tr>
<td>Poland</td>
<td>100</td>
<td>105</td>
<td>108</td>
<td>114</td>
<td>113</td>
</tr>
<tr>
<td>Romania</td>
<td>122</td>
<td>131</td>
<td>137</td>
<td>142</td>
<td>134</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>119</td>
<td>125</td>
<td>129</td>
<td>134</td>
<td>136</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>114</td>
<td>118</td>
<td>120</td>
<td>123</td>
<td>124</td>
</tr>
<tr>
<td>Hungary</td>
<td>111</td>
<td>113</td>
<td>117</td>
<td>117</td>
<td>114</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment good production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>126</td>
<td>131</td>
<td>137</td>
<td>144</td>
<td>146</td>
</tr>
<tr>
<td>Poland</td>
<td>99</td>
<td>103</td>
<td>107</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Romania</td>
<td>120</td>
<td>131</td>
<td>134</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>119</td>
<td>125</td>
<td>130</td>
<td>134</td>
<td>135</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>115</td>
<td>119</td>
<td>122</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Hungary</td>
<td>107</td>
<td>109</td>
<td>113</td>
<td>113</td>
<td>110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer/goods production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>121</td>
<td>125</td>
<td>128</td>
<td>135</td>
<td>142</td>
</tr>
<tr>
<td>Poland(\textsuperscript{1})</td>
<td>103</td>
<td>108</td>
<td>110</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Romania</td>
<td>124</td>
<td>132</td>
<td>144</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>120</td>
<td>123</td>
<td>128</td>
<td>135</td>
<td>141</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>112</td>
<td>115</td>
<td>116</td>
<td>119</td>
<td>122</td>
</tr>
<tr>
<td>Hungary</td>
<td>116</td>
<td>117</td>
<td>122</td>
<td>120</td>
<td>117</td>
</tr>
</tbody>
</table>

(1) Public and co-operative sector only
Table 2

Electric Power Plant Available Production

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>8 197</td>
<td>10 243</td>
<td>10 743</td>
<td>11 309</td>
<td>11 103</td>
</tr>
<tr>
<td>Poland(1)</td>
<td>25 292</td>
<td>30 107</td>
<td>31 316</td>
<td>32 056</td>
<td>31 999</td>
</tr>
<tr>
<td>Romania</td>
<td>16 109</td>
<td>19 576</td>
<td>21 731</td>
<td>22 377</td>
<td>22 904</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>266 757</td>
<td>314 888</td>
<td>332 266</td>
<td>338 929</td>
<td>341 397</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>17 229</td>
<td>20 323</td>
<td>21 667</td>
<td>21 697</td>
<td>21 670</td>
</tr>
<tr>
<td>Hungary</td>
<td>5 407</td>
<td>6 411</td>
<td>7 333</td>
<td>7 363</td>
<td>7 359</td>
</tr>
</tbody>
</table>

Sources: Eurostat 1991
### Annex 2

#### Table 3

Demographic Breakdown: Urban and Rural Areas (*)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in 1 000</td>
<td></td>
<td></td>
<td>in % of the total population</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Urban population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>5 546</td>
<td>5 808</td>
<td>6 080</td>
<td>62.5</td>
<td>64.9</td>
<td>67.6</td>
</tr>
<tr>
<td>Poland</td>
<td>20 979</td>
<td>22 486</td>
<td>23 419</td>
<td>58.2</td>
<td>60.2</td>
<td>61.6</td>
</tr>
<tr>
<td>Romania(1)</td>
<td>10 308</td>
<td>11 370</td>
<td>12 352</td>
<td>46.2</td>
<td>50.2</td>
<td>53.2</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>168 132</td>
<td>180 511</td>
<td>190 583</td>
<td>63.1</td>
<td>64.8</td>
<td>66.0</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>11 106</td>
<td>11 530</td>
<td>11 810(1)</td>
<td>72.6</td>
<td>74.3</td>
<td>75.6(1)</td>
</tr>
<tr>
<td>Hungary</td>
<td>6 477</td>
<td>6 600</td>
<td>6 669(1)</td>
<td>60.5</td>
<td>62.0</td>
<td>63.0(1)</td>
</tr>
<tr>
<td><strong>Rural Population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3 331</td>
<td>3 142</td>
<td>2 912</td>
<td>37.5</td>
<td>35.1</td>
<td>32.4</td>
</tr>
<tr>
<td>Poland</td>
<td>14 756</td>
<td>14 855</td>
<td>14 623</td>
<td>41.3</td>
<td>41.3</td>
<td>38.4</td>
</tr>
<tr>
<td>Romania(1)</td>
<td>11 136</td>
<td>10 653</td>
<td>10 859</td>
<td>50.0</td>
<td>50.0</td>
<td>46.8</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>98 392</td>
<td>98 063</td>
<td>98 041</td>
<td>36.9</td>
<td>36.9</td>
<td>34.0</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>4 183</td>
<td>3 989</td>
<td>3 814(1)</td>
<td>27.4</td>
<td>27.4</td>
<td>24.4(1)</td>
</tr>
<tr>
<td>Hungary</td>
<td>4 236</td>
<td>4 040</td>
<td>3 920(1)</td>
<td>39.5</td>
<td>39.5</td>
<td>37.0(1)</td>
</tr>
</tbody>
</table>

(*) End of the year situation
(1) Not including suburban population until 1985
(3) 1988
Table 4

Some Big Town’s Population

BULGARIA
(In 1 000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofia, capital</td>
<td>1 032</td>
<td>1 057</td>
<td>1 094</td>
<td>1 115</td>
<td>1 137</td>
</tr>
<tr>
<td>Plovdiv</td>
<td>333</td>
<td>350</td>
<td>373</td>
<td>342</td>
<td>364</td>
</tr>
<tr>
<td>Varna</td>
<td>279</td>
<td>291</td>
<td>295</td>
<td>302</td>
<td>306</td>
</tr>
<tr>
<td>Burgas</td>
<td>164</td>
<td>168</td>
<td>184</td>
<td>183</td>
<td>200</td>
</tr>
<tr>
<td>Ruse</td>
<td>169</td>
<td>173</td>
<td>181</td>
<td>184</td>
<td>191</td>
</tr>
<tr>
<td>Stara Zagora</td>
<td>131</td>
<td>136</td>
<td>145</td>
<td>151</td>
<td>158</td>
</tr>
<tr>
<td>Pleven</td>
<td>118</td>
<td>128</td>
<td>140</td>
<td>130</td>
<td>136</td>
</tr>
<tr>
<td>Tolbuchin</td>
<td>93</td>
<td>96</td>
<td>102</td>
<td>109</td>
<td>113</td>
</tr>
<tr>
<td>Sliven</td>
<td>95</td>
<td>98</td>
<td>102</td>
<td>103</td>
<td>109</td>
</tr>
<tr>
<td>Sumen</td>
<td>91</td>
<td>95</td>
<td>104</td>
<td>100</td>
<td>108</td>
</tr>
</tbody>
</table>

Source: Eurostat 1991
Annex 3

Table 5

**Agricultural Production Index**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total production per capita</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>94</td>
<td>104</td>
<td>99</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>Poland</td>
<td>105</td>
<td>112</td>
<td>105</td>
<td>105</td>
<td>108</td>
</tr>
<tr>
<td>Romania</td>
<td>106</td>
<td>116</td>
<td>106</td>
<td>114</td>
<td>111</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>105</td>
<td>111</td>
<td>109</td>
<td>108</td>
<td>110</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>116</td>
<td>117</td>
<td>118</td>
<td>125</td>
<td>126</td>
</tr>
<tr>
<td>Hungary</td>
<td>107</td>
<td>109</td>
<td>109</td>
<td>115</td>
<td>116</td>
</tr>
<tr>
<td><strong>Of which food products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>95</td>
<td>107</td>
<td>101</td>
<td>100</td>
<td>101</td>
</tr>
<tr>
<td>Poland</td>
<td>110</td>
<td>118</td>
<td>111</td>
<td>113</td>
<td>115</td>
</tr>
<tr>
<td>Romania</td>
<td>108</td>
<td>119</td>
<td>109</td>
<td>118</td>
<td>116</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>110</td>
<td>119</td>
<td>118</td>
<td>117</td>
<td>121</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>117</td>
<td>119</td>
<td>121</td>
<td>127</td>
<td>129</td>
</tr>
<tr>
<td>Hungary</td>
<td>107</td>
<td>109</td>
<td>108</td>
<td>114</td>
<td>115</td>
</tr>
<tr>
<td><strong>Food production per capita</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>94</td>
<td>106</td>
<td>100</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>Poland</td>
<td>105</td>
<td>112</td>
<td>105</td>
<td>106</td>
<td>108</td>
</tr>
<tr>
<td>Romania</td>
<td>106</td>
<td>116</td>
<td>106</td>
<td>114</td>
<td>111</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>106</td>
<td>112</td>
<td>110</td>
<td>109</td>
<td>112</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>116</td>
<td>117</td>
<td>118</td>
<td>125</td>
<td>126</td>
</tr>
<tr>
<td>Hungary</td>
<td>107</td>
<td>109</td>
<td>109</td>
<td>115</td>
<td>116</td>
</tr>
</tbody>
</table>

*Sources:* Eurostat 1991
NOTES

1. OECD. The Regional implications of industrial restructuring, November 1989.


21. ROBERTSON J. Regional restructuring and the role of innovation, OECD Seminar on Regional Industrial Restructuring, Maastricht 1991;
MIYAKAWA Y. The restructuing of regional industries and the metamorphosis of regional development policies in Japan, ibid.


33. OECD. Current trends in the regional situations and policies of Member countries, Note by the Secretariat (restricted document), 1989.

34. OECD, ibid., 1989.

36. CEC. The regions in the 1990s: fourth periodic report on the social and economic situation and development of the regions of the Community, Brussels, 1991.


38. GODDARD and others. Research and technological development in less favoured regions of the Community (STRIDE), CEC Studies, Luxembourg 1987.


42. ROBERTSON J. op.cit., 1991.


44. OECD. Local innovation policies, 1990.


