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THE REGIONS IN THE 1990s

- Fourth Periodic Report on the Social and Economic Situation and Development of the Regions of the Community -

(presented by the Commission)

PREFACE

This report on the social and economic situation and development of the regions of the European Community was provided for in Article 8 of Regulation (EEC) N° 4254/88 of 19 December 1988 on the reform of the European Regional Development Fund (O.J. N° L374 31 December 1988) pursuant to Article 130D of the EEC Treaty as amended by the Single European Act. It was preceded by the First, Second and Third Periodic Reports published respectively in 1981, 1984 and 1987.

Attention is also drawn to the annual reports on the use of the Structural Funds themselves pursuant to Article 16 of Regulation (EEC) N° 2052/88 (O.J. N° L185 15 July 1988) and Article 31 of Regulation (EEC) N° 4253/88 (O.J. N° L374 31 December 1988), and of the Commission's reports on progress made towards achieving the internal market according to Article 8B of the amended EEC Treaty.

The report was adopted by the Commission after consulting the members of the Advisory Committee on the Development and Conversion of Regions who gave a favourable response to both its form and content.

SUMMARY AND CONCLUSIONS

Scope and issues of the report

1. The Fourth Periodic Report on the social and economic situation and development of the regions in the Community describes the main features of the Community's regional profile and analyses the changes since the Third Report in 1987[1]. The report not only examines the regional trends and regional differences which were the focus of previous reports, but also presents new information and analyses on regional problems and related policy matters. Previous reports also considered a number of specific issues relating to the economic situation of the regions such as the problem of peripherality, differences in infrastructural endowments, regional typologies, differences in disparities between the United States and the Community, etc. The regional implications of these issues continue to be relevant but they have not been examined again in the present report.

2. The report examines the policy response to the Community's regional problems, in particular the reform of the three Structural Funds in 1988. The report also considers a number of broader developments which, in the decade ahead, will have important consequences for the regions, including demographic changes, the political and economic changes under way in Central and Eastern Europe, including German unification, and the effects of the Community's policies to increase integration. A number of uncertainties in relation to energy prices and supply, cuts in defence spending, etc. will also shape the economic environment in which the regions are situated in the years ahead although it has not been possible in every case to assess their likely regional effects at this stage.

3. The report is divided into three parts. The first part describes the major economic trends and regional differences in the Community and considers some of the explanatory factors. The second part concentrates on the policies set in train by the Single European Act in 1987 to strengthen economic and social cohesion in the Community, including the reform of the Structural Funds. The third part of the report is more forward-looking, covering the likely effects of the moves towards greater integration on the Community's regions and providing a first overview of the profound changes in the economies of Central and Eastern Europe.

4. The analyses of the report refer to the results of a number of new studies on:

- long-term population trends and medium-term job requirements in the regions (section 2.3)
- factors determining regional competitiveness based on a survey of 9000 firms (section 3.1 and section 9.3)
- regional differences in the provision of education and training in the Community (section 3.2)
- research and development and the process of innovation in the regions (section 3.3)
- implications for the regions of the completion of the internal market (chapter 9)

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1 These analyses concern the Community before German unification which was formalised on 3 October 1990. The situation in the former GDR, which following unification is now part of the European Community, is examined in chapter 10.

. the situation in the economies and regions of Central and Eastern Europe and in East Germany compared to the Community (chapter 10).

A. Regional disparities and cohesion in the Community

5. The analysis of disparities in income (GDP per head) and productivity (GDP per person employed) provides renewed confirmation of persisting wide differences between the regions of the Community. For example, the ten least developed regions, located mainly in Greece and Portugal, presently have average incomes per head which are less than one third of the average of the ten most advanced regions. As indicated in the Third Periodic Report, regional disparities in incomes per head in the Community are at least twice those in the USA. During the first half of the 1980s there was a slight increase in disparities in the Community although since then they have remained at around the same level.

6. More pronounced have been the changes in levels of employment in the various parts of the Community and the related development of regional disparities in rates of unemployment. During the first half of the 1980s regional disparities in rates of unemployment widened sharply reflecting the differing impact on the regions of heavy job losses, especially in manufacturing. During the second half of the last decade, the picture began to change gradually. Rising employment followed by falling unemployment in the Community resulted firstly in a levelling off, and then the beginnings of a reversal, of the trend towards widening regional unemployment disparities. However, the regional differences remain substantial and in 1990, in the 10 regions with the lowest unemployment, the rate averaged just over 2 1/2%, while in the ten regions with the highest rate, it averaged 22%, the latter being found in Spain and southern Italy.

7. The problem of high rates of unemployment in the less-developed regions is related to demographic trends. Higher birth rates in those regions continue to result in faster growth in the labour force than elsewhere in the Community. Stronger employment growth is therefore needed in Objective 1 regions to offset the relatively faster growth of the labour force before unemployment disparities with the rest of the Community can begin to be reduced.

8. Trends in the population and labour force in the different parts of the Community are also related to the pattern of migration. Some 4.7% of total population of nationality other than that of the host Member State now live in the Community, of whom about one-third come from other Member States. It would appear that the increasing integration of the Community has not been accompanied by large-scale interregional migration across national frontiers. In the 1980's, Ireland has been the only country where significant migration, in this case in a net outward direction, has taken place.

9. For the future, the underlying pattern of slow but persistent inward migration from third countries seems set to continue. In relation to migration between the regions, both within and across national boundaries, this will be linked to regional differences in unemployment and incomes. Continuing wide regional disparities together with increasing labour shortages in the stronger regions of the Community could lead to the re-emergence of regional migratory flows in the 1990s. Given that migrants from both inside and outside the Community tend to be attracted to the urban centres this will further add to problems of congestion. This serves to underline the importance

of efforts in support of achieving a more balanced growth in the Community's regions.

10. The existence - and persistence - of wide regional disparities in GDP per head and unemployment rates can be attributed to deep-rooted differences in competitive advantage which are shaped by a series of factors. Identifying and assessing the relative importance of competitiveness factors is a vital stage in determining the best combination of regional policy measures for particular types of regions. The state of certain infrastructures (in particular transport and telecommunications), the availability of qualified personnel and/or the training facilities to provide them and local credit and taxation conditions are leading factors influencing investment and location decisions in all types of regions. Their relative importance varies somewhat across the regions. In regions whose development is lagging behind and in particular the most peripheral regions, measures to improve basic infrastructures are likely to be most effective in making a lasting impact on the competitiveness of firms in such regions, while measures to improve the availability and lower the cost of credit are also a high priority, especially in the southern Member States. In the older industrial regions, where infrastructures are better developed (even if in need of modernisation) and where financial markets are more efficient, the availability of qualified personnel (including good managers) is particularly important in attracting and retaining investment. Recent surveys (described later in the report) confirm the relative importance of these factors (and a wide range of others) as perceived by businesses in reaching their investment decisions.

11. Shortages of qualified personnel appear to exist in all types of regions in the Community. However, the causes vary. In the stronger regions such shortages are mainly the result of buoyant labour demand. In the older industrial regions, the shortages often reflect a skills mismatch where the qualifications of those seeking work are specific to the requirements of declining industries and unsuited to the demands of the newer industries. Promoting the conversion of the older industrial regions calls for greater efforts in the training and re-training of adults in particular, in view of the fact that these regions are among those most affected by the ageing of population and labour force. In the less-developed regions the inadequate supply of qualified personnel is generally a consequence of poorly-developed education and training systems. For example, the proportion of 15-19 year olds who are in apprenticeship, training or non-university education in the three least developed Member States (Portugal, Greece and Ireland) is little more than half that of the three most advanced countries (Denmark, Germany and the Netherlands). To reduce these differences requires a major regionally differentiated investment in education and training facilities (buildings and equipment) over the long-term. If Community regional policy is to respond to needs in this field, both a widening of measures eligible for support and an increase in resources will be required.

12. A further factor in regional disparities arises from differences in the capacity of firms to innovate in products and processes and the related ability of regions to support research and development. Some 75% of research and development expenditures in 1989 was concentrated in West Germany, France and the UK. In the other Member States wholly or partially comprising objective 1 regions, research and development expenditure is highly concentrated. For example in Portugal, Lisbon and its immediate environs account for 72% of total national expenditure on research and development. If the innovative capacity of weaker regions

is to be increased, it will be necessary to strengthen the research capacity and associated structures of these regions in order to improve their participation in Community programmes in research and development and technology transfer. The broader social and cultural environment and the education system in these regions also have to be such as to attract and retain highly skilled and qualified personnel and their families.

13. The analysis of general competitiveness factors, education and training and innovative activity in the regions, as causes underlying the relatively poor performance of the weaker regions, serves to underline the deep-seated nature of regional disparities. Overcoming these causes of regional disparities will tend to be a slow and incremental process. Historical evidence shows that it is possible for the less-developed regions to raise their growth in GDP per head by one or even two percentage points per year above the Community average, but that this is rarely sustained over more than a few years. With a growth differential of 1 1/2 to 2 percentage points it would take around 20 years for a region with GDP per head of half the Community average to achieve a level equivalent to 70% of the average.

B. Community assistance to problem regions

14. Under Community regional policies, regions whose development is lagging behind have been defined as those with GDP per head 75% or less of the Community average. The experience of this group of regions during the 1980s has been varied, with some convergence towards and some divergence from Community average levels of incomes per head and rates of unemployment . Over the decade, the differences between the less-developed regions themselves, and between these regions as a group and the rest of the Community, have not changed appreciably.

15. The less-developed regions (Objective 1 of Community regional policy) suffer from many of the handicaps discussed above including relatively rapid population and labour force growth. New evidence indicates, however, that population growth will diminish in many cases due to declining fertility rates during the 1980s, so that lagging regions will follow the demographic trends already observed sometime earlier in other parts of the Community. The labour force, however, will only be affected after a further time-lag so that substantial growth will continue in the medium-term. The unemployment problem in less-developed regions will therefore represent a particularly difficult challenge, in addition to the problem of low incomes per head.

16. Areas affected by industrial decline (Objective 2) were characterised by heavy job losses in manufacturing and rising unemployment rates during the first half of the 1980s. In the second half of the 1980s, their unemployment rates declined on average by just over four percentage points, compared to a decline of 2 1/2 percentage points in the Community as a whole. Nevertheless unemployment rates remained generally above the Community average. There have been differences in the timing of cyclical changes in employment and unemployment in the Member States and their regions; any short-term changes need to be confirmed and consolidated over some time before policy changes would be justified.

17. Rural areas (Objective 5b of Community regional policy) contain around one-third of the total area of the Community outside the less-

developed regions. These areas have been adversely affected by rural-urban migration and, at least in the short-term, by the reforms of the Common Agricultural Policy and their economies need to become considerably more diversified, building where possible on their indigenous potential. A lack of data impedes an accurate assessment of the progress made in this direction during the reference period.

18. As well as policies of development and conversion of regions eligible under the Objectives, the Community is also undertaking a number of specific, complementary initiatives in the fields of research and development, the environment, quality standards, border regions, etc. These initiatives are intended to promote the wider diffusion of the benefits of the broad range of Community policy, for example to ensure that the weaker regions are better equipped to innovate and to share in the research and development effort of the Community (the "STRIDE" initiative) in the context of the challenge presented by the completion of the internal market. Community initiatives also attempt where possible to take into consideration the aims and intensity of the national policies of Member States. More remains to be done, however, to coordinate national and Community policies to ensure that these do not reinforce the existing pattern of inequalities in the Community but contribute to bringing up the performance of the weaker regions towards that of the stronger regions.

19. Under the reform of the Structural Funds, the financial resources available for assisting the weaker regions have been both increased and concentrated on specific objectives. Although the absolute level of assistance in northern and more developed parts of the Community has been broadly maintained, the geographical coverage of assisted regions has been reduced (with the exception of the UK) in favour of the less-developed parts, mainly in southern Member States, which now represent more than half the population in assisted areas. In financial terms, almost two-thirds of Structural Funds resources for the period 1989-1993 - which will total 60 billion ECU at 1989 prices - will be directed towards the Objective 1 regions. The reformed regulations provide that the ERDF may devote approximately 80% of its appropriations to these regions.

20. To ensure the effective use of the increased resources, a limited number of medium-term priorities have been defined for each Member State and where appropriate for each region. These priorities, now set out in agreed Community Support Frameworks, seek inter alia to provide a better balance between infrastructure investment on the one hand and incentives and other support for business investment, increased productivity and long-term job creation on the other hand. This rebalancing was necessary since Community and national regional policy expenditure to promote business investment had declined substantially in real terms during the 1980's at a time when increasing regional disparities signalled widening variations in the income and employment generating capacities in problem regions vis-à-vis the stronger regions.

21. The Structural Funds represent a resource transfer adding to disposable income in the Member States and regions themselves. In the Objective 1 regions the Structural Funds represent a transfer estimated to be around 1.2% of GDP in 1989 and 1.6% in 1993. In those Member States wholly eligible under Objective 1 the equivalent proportions are 2.5% and 3.3%, respectively.

In relation to the promotion of investment, Community assistance is considerably more important. In 1989 the ERDF financed around 3% of total investment in all less-developed regions while for Member States entirely covered by Objective 1 (P, IRL, GR) this ratio reached 5 to 7%. By 1993 these figures should increase by a further percentage point given continued growth in investment.

22. It is clear from these ratios that transfers through the Structural Funds can only have a limited immediate impact on income disparities even after the doubling of resources. On the other hand, in relation to promoting investment, transfers under the ERDF do reach sizeable dimensions especially when combined with measures to increase human capital under the Social Fund and the support of the credits of the European Investment Bank. Their impact will also depend on whether recipient regions increase their own investment efforts, and on the extent of the resulting indirect impact on employment and productivity. The long-term impact on regional output and employment growth are therefore difficult to assess precisely at this stage, but under favourable conditions the additional resources will help set the weaker regions on a path to improved economic performance.

C. <u>The future of the regions: economic integration in the Community, the changes in East and Central Europe</u>

23. The Community regions face a number of challenges in the 1990s including the risks and opportunities accompanying greater integration. On the one hand, it is clear that the general effects of economic and monetary union (EMU) and the completion of the single market will be favourable in terms of economic growth in the Community as a whole and growth has tended in the past to have equally favourable consequences in reducing regional disparities in incomes and rates of unemployment. On the other hand, there is the possibility that the particular effects of EMU, involving the need to harmonize budgetary policies and the loss of the exchange rate instrument, may place constraints on the poorer Member States which could impede their efforts to achieve faster growth than the central regions of the Community, which is a necessary condition for their catching up.

24. The reform of the Structural Funds has put in place a comprehensive set of measures which attempt to strengthen the capacity of weaker regions to reap the benefits of the single market. It is clear, however, that in the context of closer integration the Community must demonstrate its readiness to develop and strengthen its regional policy response. In particular, in recognition of the possible risks to the economies of the weaker regions, the Community should prepare itself to respond rapidly to regional problems, implying a need for the development of more flexible forms of Community regional policy intervention.

25. Recent events in Eastern Europe in general and East Germany in particular, place the development of the Community's regions in a new context. German unification has brought into the Community another 16 million persons living mostly in old industrialised regions, or thinly populated rural areas. These regions are characterised by either large industrial enterprises with very low productivity, or an agricultural sector comprising very large and excessively specialized production units, again with much lower productivity than in the Community. In general the service sector is underdeveloped by western standards while the physical infrastructure is largely old and run-down.

26. With unification and accession to the Community the East German economy has been exposed to external competition and adjustment pressures which are without precedent. Practically all sectors including high-tech industries have to face up to the necessity of reducing over-manning, redesigning and modernizing their products and raising productivity, tasks which are all the more difficult in an environment of a fundamentally changing price structure. In the light of this analysis, the resources of the Structural Funds have been increased by 3 billion ECU for actions in East Germany.

27. Central and Eastern European states and regions in general all suffer from a similar syndrome of distorted structures, decay, lagging development and low efficiency. Through various association agreements, these economies will be brought closer to the Community providing significant new markets as well as potential competition for Community regions over the longer-term.

Concluding remarks

28. In order to promote economic and social cohesion in the Community, the reform of the Structural Funds has introduced a number of actions, in partnership with the Member States and regions, designed to promote the development and conversion of the weaker regions. The analyses of the Fourth Periodic Report demonstrate that the problem regions of the Community face not only familiar, but also new challenges in the 1990s. These challenges are of a long-term nature and accordingly related policies must be conceived in a similarly long-term perspective.

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- MAIN REPORT -

A. REGIONAL DISPARITIES AND COHESION IN THE COMMUNITY

Chapter 1 DISPARITIES IN INCOMES AND PRODUCTIVITY: A STABILIZATION?

1. The existence of considerable disparities between the regions of the Community in incomes per head[1] is well recognised. The income per head in the top 10 regions was more than three times that of the bottom 10 in 1988, the most recent year for which data exist. Moreover, international comparison suggests that the disparities in the Community are at least twice as wide as those in the USA[2]. As an integral element of creating a more cohesive Community the reduction over time of these disparities remains a priority.

2. The long-term analysis (from the beginning of the 1960s to the first half of the 1980s) of the trends in GDP per head and GDP per person employed in the Community reveals two distinct phases:

- a period of convergence between Member States and between regions, which came to an end at the time of the economic recession which occurred in the mid-seventies,

- a period when this convergence process, arrested by the low growth and by the recessions which took place at the national and Community levels, gave way to a regressive phase which returned inter-regional disparities to the levels of the beginning of the seventies, or even earlier.

3. During the 1980s, disparities in incomes per head in the Community increased slightly up to 1986 since when they have remained at around the same level. This occured against a background of a return to more vigorous economic growth in the Community from 1984, a trend which has been consolidated during the second half of the decade. Around these general trends there have been significant differences in the experience at the level of Member States and regions.

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1 In the following analysis disparities are measured by Gross Domestic Product per head which indicates the income generated in Member States and regions by the resident producer units. An alternative measure is Gross National Product per head which measures the resources available after the transfer of factor incomes such as interest payments and dividends. However, at regional level, data are only available for GDP per head. Net flows of transfers out of or into a country or region lead to differences between the two measures which may be substantial in the case of smaller countries or regions.

2 Commission of the European Communities (1987), The regions of the enlarged Community. Third periodic report on the socio-economic situation and the development of the regions of the Community, Luxembourg, p.11, based on 1983 data.

4. At the level of the Member States, some of the weaker countries achieved rates of growth above the Community average which is the essential precondition for eventual economic convergence. In Spain, Ireland and Portugal there was a tendency towards very gradual convergence on Community average GDP per head beginning in 1986-1987, whereas in Greece GDP per head continued to worsen in relation to that of the rest of the Community throughout the decade.

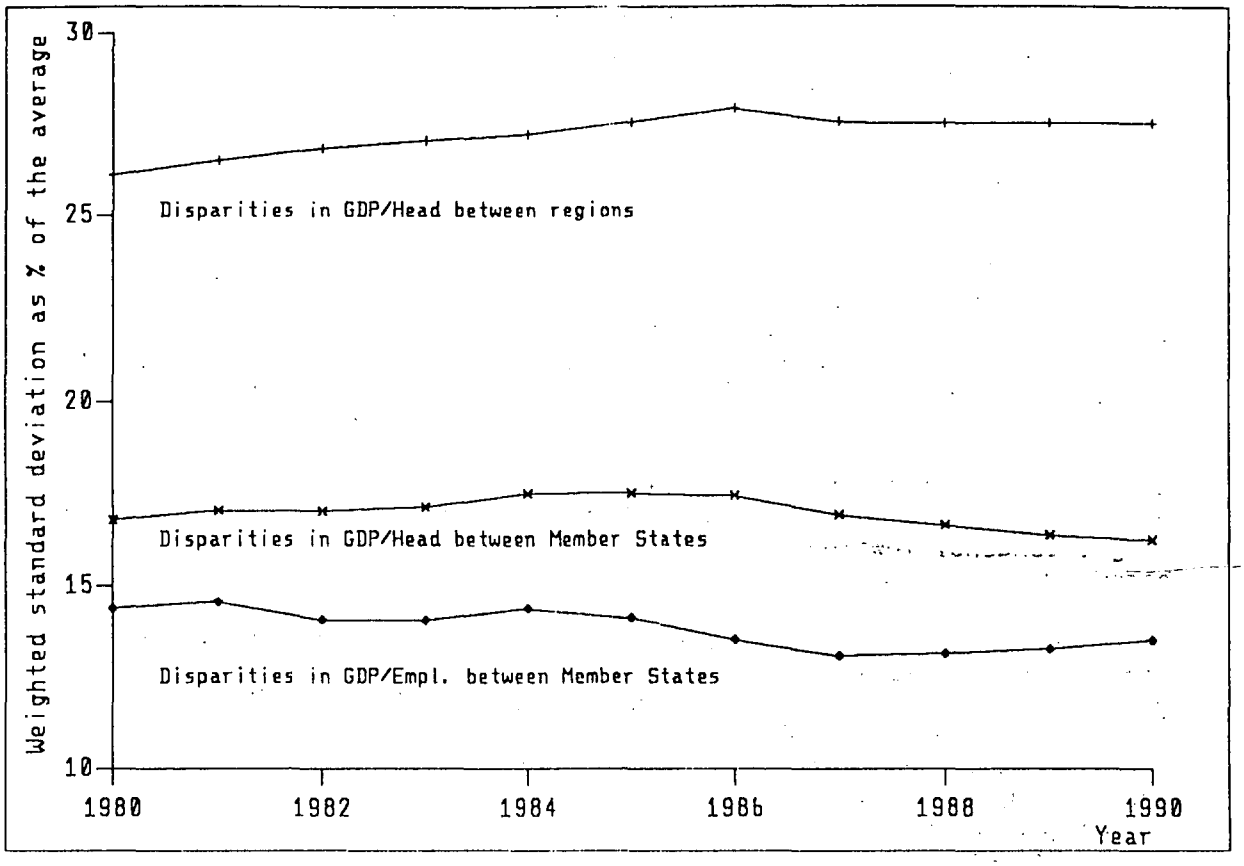
5. At the level of the regions (at NUTS level II), the trend in disparities in income per head, previously tending towards gradual widening, also stabilized around the middle of the 1980s (see graph 1), under the influence of steady growth in Spain, Portugal and Ireland. The average position of the weakest 25 regions has improved slightly with respect to the average GDP per head of the Community, although the average GDP per head of the 10 weakest regions[3] has remained unchanged compared to the Community average since the middle of the 1980s.

6. The level of disparities in relation to productivity developed in a generally similar way to that of per capita incomes (graph 1). A slight tendency towards reduction in disparities between Member States began in 1984, owing to improvements in relative productivity in Portugal and in Ireland. This trend did not however continue beyond 1987, when increases in the rate of economic growth were accompanied by significant increases in employment. Greece did not share the positive growth in productivity, and as well as having the lowest GDP per head it also has the lowest GDP per person employed of the Community. This is a result of relatively poor macro-economic performances following a decline in the rate of investment during the 1980s, in spite of the increasing efforts of the Community, in support of the Member State itself, since its accession (see also chapter 8.2).

7. In sum, recent data indicate a levelling off of the previous trend towards growing divergence between regions and, in the case of certain Member States and regions, a slight tendency towards convergence on the Community average. Even where improvements are perceptible the absolute disparities are of such a size that, even on the assumption of a continuation of recent positive developments, the convergence of the weaker Member States and of the least prosperous regions on the Community average will be a very long term process (see also chapter 4).

3 This includes primarily Greek and Portuguese regions. The regions of the group of the 25 weakest regions comprise these and other Greek and Portuguese regions, as well as Ireland and certain backward regions in Italy and Spain.

Graph 1 : Trends in regional income disparities[1] in the Community, 1980-1990



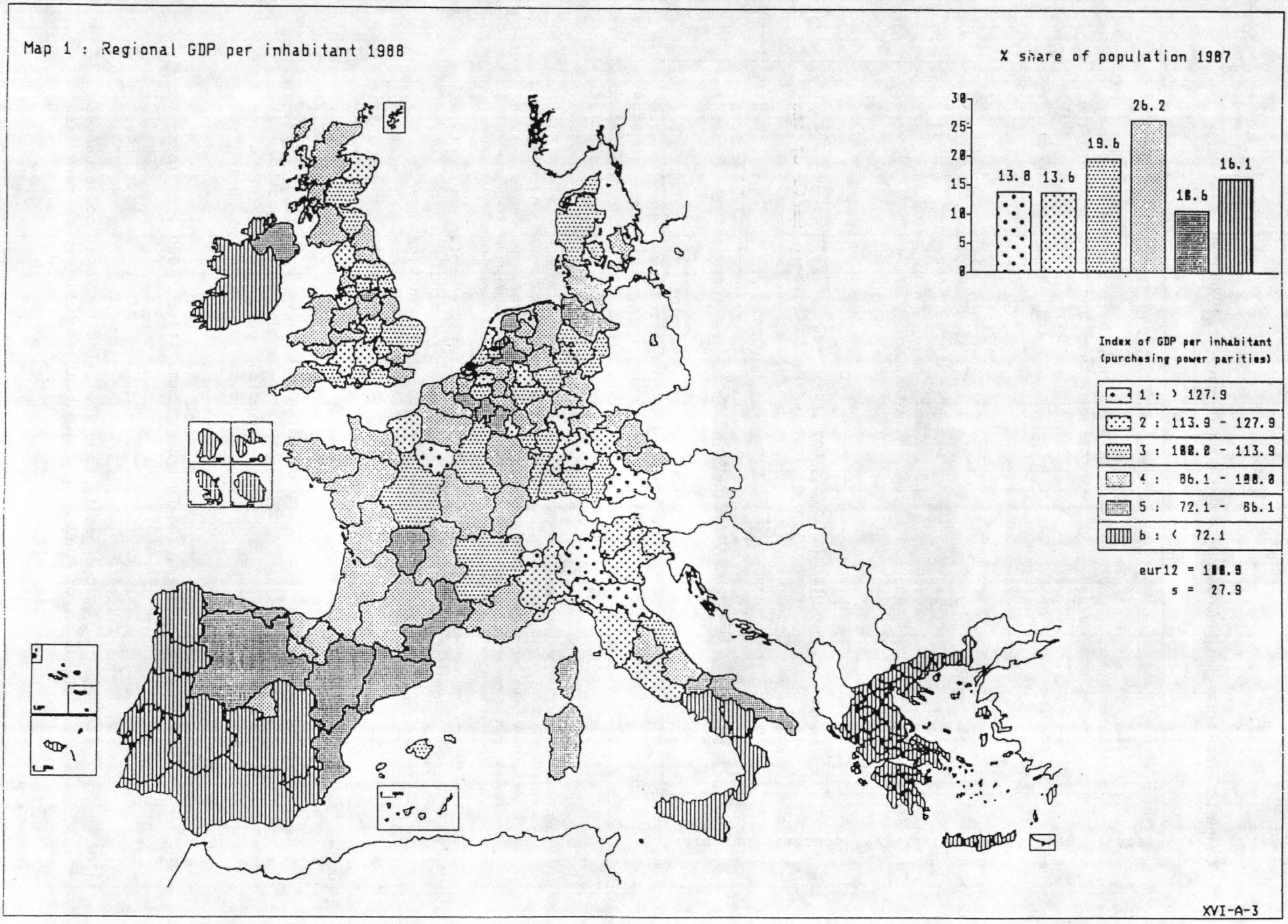
1. Disparities are measured by the weighted standard deviation of regional values for GDP in purchasing power standards. The standard deviation is a statistical measure used variously in this report to measure disparities over time. It is always positive, the higher the value, the greater the degree of dispersion.

In the present context, in order to avoid giving the same weight in the calculation of standard deviation to both large and small regions, it is weighted by the size of the population in each region (or each Member State as appropriate).

The weighted standard deviation is given by: $s = \sqrt{\sum (Xr-X)^2 Wr/W}$ *where X is the average GDP per head (= 100), Xr is the region's GDP per head (expressed as % of EC average) and Wr and W are the size of population in the region and the Community as a whole, respectively.*

GDP per person employed is based on data for Member States.

Map 1 : Regional GDP per inhabitant 1988



Chapter 2 HUMAN RESOURCES

2.1 How different are employment trends between the regions?[1]

1. Employment in the Community as a whole has been rising since 1984 and growth of around 1 1/4% a year between then and 1990 has resulted in a net increase of nearly 9 1/2 million jobs. This has more than offset the net loss of some 3 1/2 million jobs following the recession at the beginning of the 1980s.

2. The favourable trend in employment at Community level especially during the second half of the 1980s has tended to be widely shared. As illustrated in table 2.1, all Member States recorded positive employment growth between 1985 and 1990 although rates of growth vary considerably. Over the decade as a whole, only in Ireland was the recovery in employment insufficient to offset the losses sustained in the early 1980s.

3. Particularly encouraging over the last few years has been the strong growth in employment in certain weaker, southern parts of the Community, especially in Spain, and to a lesser extent, in Portugal. In the North, employment growth over the same period has been relatively strong in the UK where the traditional industrial regions had been severely affected at the beginning of the 1980s by job losses.

4. In sectoral terms, the 1980s can be described in terms of a continued shift in employment away from manufacturing and towards services. Between 1983 and 1988 the share of total employment in the Community accounted for by services increased from 55% to 59% while the share for industrial employment declined from 35% to 33% over the same period[2]. Service employment (much of it part-time) has grown continuously by some 12% over the period 1983-88, whereas industrial employment initially declined by 3% between 1983 and 1987, picking up 1% in the year to 1988 resulting in a net loss over the whole period of some 1 1/2%.

5. Some of this sectoral shift is reallocative, insofar as certain service functions previously undertaken by manufacturing units internally have been sub-contracted to external service agents. The changes also reflect, however, the real effects of a rising service input into manufacturing industry as a result of technological change and innovation with specialist services (consultancy, etc) often being bought-in rather than provided in-house (see section 3.3). Partly because many such activities depend on direct contact with the client the effects of service sector employment growth have tended to be felt throughout the Community. A study of the Commission suggested that this was true of the important financial services sector where increases in employment and value-added have been recorded during the 1980s in all Member States.[3]

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1 See also: Commission of the European Communities (1990), Employment in Europe 1990, Luxembourg.

2 These estimates are based on the results of the Labour Force Surveys of the Statistical Office.

3 P.A Cambridge Economic Consultants (1990), The regional consequences of the completion of the internal Market for financial services. Study financed by the European Commission.

Table 2.1: Employment trends in the Member States, 1980 - 1990

Countries	Annual growth rates[1]		
	80→85	85→90	80→90
B	-0.7	0.9	0.1
DK	0.7	0.6	0.6
D	-0.6	1.1	0.2
GR	1.3	0.8	1.0
E	-1.5	3.3	0.9
F	-0.4	0.8	0.2
IRL	-1.4	0.6	-0.4
I	0.5	0.6	0.5
L	0.3	2.5	1.4
NL	-0.9	1.6	0.3
P	-0.7	1.2	0.2
UK	-0.7	2.1	0.7
EUR12	-0.4	1.4	0.5

[1]*Source: DG II.*

6. Meanwhile, dampening effects on employment have been particularly acutely felt in areas where traditional industries such as coal, steel and shipbuilding have been concentrated. This was the case, for example, in northern regions of the UK and Spain referred to above where rationalisation of older industries at the beginning of the 1980s has been most extensive and the most necessary in the light of weak productivity. Parts of Belgium, Germany, north-eastern France, certain areas in northern Italy as well as many smaller industrial zones in the Community have also been affected by this process. Some less traditionally industrial regions of the Community have been equally affected by manufacturing employment loss, notably Ireland and to a lesser extent, Greece. In Ireland, there has been some rationalisation of the indigenous sector in, for example, the food industry and textiles while some of the many externally-owned companies have been streamlining their activities.

7. As already indicated, the evidence points to a resumption of growth in industrial employment in recent times in the Community. This is particularly the case in Spain and Portugal reflecting the increasing attractiveness of these areas for external capital, since 1987, much of it from other parts of the Community. The available evidence tends to suggest that much of the new capital has gone to existing centres such as Madrid, the cities of northern Spain and the coastal strips leaving traditionally weaker regions comparatively untouched.

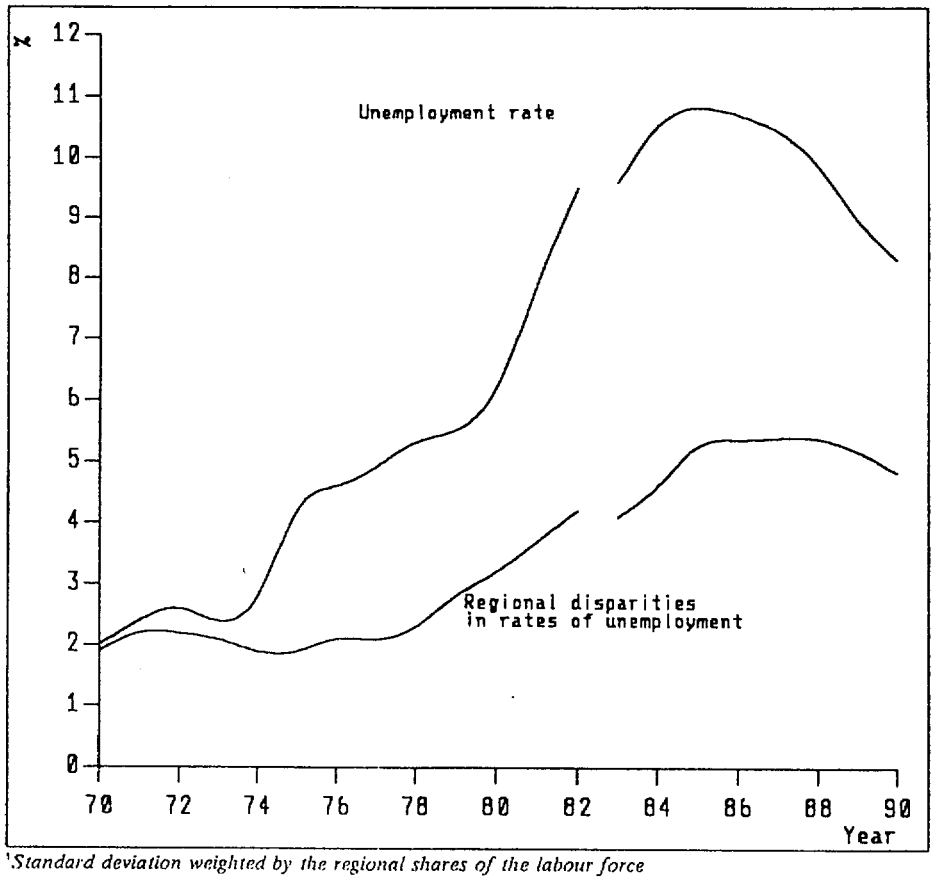
8. Overall, the Community has entered a phase of positive growth in employment. There is, however, no evidence that this employment growth is sufficiently differentiated at regional level in favour of the weaker parts of the Community to reduce the disparities in rates of unemployment.

2.2. Unemployment disparities: the arrest of the previous trend?

9. Preceding periodic reports have highlighted the general upward trend and widening regional disparities in unemployment in the Community in the 1970s and the first half of the 1980s. During this period the rate of unemployment in the Community increased from 2% in 1970 to more than 6% in 1980 and, in spite of steadily increasing rates of economic growth in the first half of the decade, to nearly 11% in 1985 and 1986. Since 1986, the rate of unemployment in the Community has fallen gradually to reach 8.3% in 1990. This somewhat weak and delayed response of unemployment to the recovery in output in the early 1980s was primarily a reflection of the upward pressure of demographic factors on labour supply (see chapter 2.3) together with the general (cyclical) rise in activity rates underpinned by a continuing increase in female activity rates.

10. Disparities between the regions of the Community taken as a whole reached a plateau in 1986 before beginning to decline in 1989 and 1990. The arrest of an upward trend which has prevailed for more than 15 years is the net result of a somewhat intricate pattern of changes in disparities over time both between and within Member States. The regional differences in unemployment rates remain however substantial with, on the one hand, some 12 central regions experiencing rates of less than 3% and, on the other hand, some 19 regions where the rate exceeds 15%.

Graph 2.2 : Trends in regional unemployment disparities[1] in the Community, 1970-1990



[1] *Standard deviation weighted by the regional shares of the labour force*

NB : Data from 1970 to 1982 are based on statistics for registered unemployed. Data from 1983 to 1990 are based on harmonized unemployment statistics. Greece is not included before 1983.

11. A principal factor in the levelling off and then decline in unemployment disparities has been the fairly general fall in rates of unemployment in the Community and especially in the cases of the UK and Spain. In some regions in Spain and the UK, unemployment rates have decreased over the period 1985-90 by more than five percentage points. Such changes in regions of high rates of unemployment could have been expected to lead to an earlier reduction in unemployment disparities in the Community had there not been offsetting movements notably in southern Italy where unemployment has increased by five percentage points or more over the same period. Italy is a special case insofar as in 1990 all the southern regions experienced a rate of unemployment significantly higher than in 1985 whereas many of the northern Italian regions experienced falling unemployment over the same period. Such opposing trends have not been typical of other Member States. As a consequence Italy had in 1990 the largest regional unemployment rate disparities of all the Member States with unemployment rates of under 5% in some northern regions such as Emilia Romagna and Lombardia alongside rates of more than 20% in most of the Mezzogiorno.

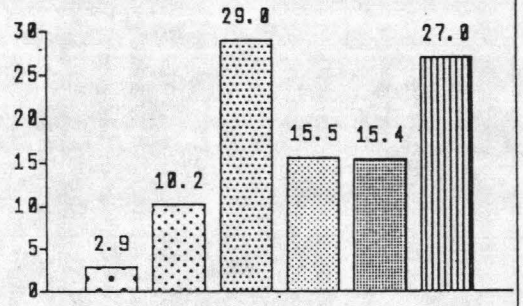
12. For the future a further general fall in the rate of unemployment could result in a further reduction in disparities, not only between Member States, but also between the regions of the Community as a whole. For this to happen, however, southern Member States in particular would have to achieve not only reductions in their national unemployment rates but also, at least, proportional reduction in their weaker regions with the higher unemployment levels.

13. In practice, a number of factors might mobilise in favour of such a narrowing of regional unemployment disparities. For example, it can be expected that there will be an acceleration of 'spread effects', with economic growth extending geographically to the regions of high unemployment, especially as labour shortages have now emerged in central regions. There would also seem to be scope for growth in certain types of service activity, such as financial and business services, in the weaker parts of the Community. Many such service industries rely on direct contact with the client. Their extension to the regions could have a significant employment impact.

14. A particularly uncertain factor for the future concerns migratory flows which are discussed in greater detail in section 2.4 below. There is the risk that migration towards central areas with rapidly growing labour demand and low rates of unemployment may recommence. While this would result in an easing of labour market pressure in high unemployment areas, the loss of human resources would damage the long-term development prospects of the weaker regions as well as having other detrimental effects in social terms. The diverging trends within Italy are particularly preoccupying in this context and may trigger a new South-North migration within this country.

15. To sum up, there continue to be very wide disparities in unemployment rates across the regions of the Community. If economic growth in the Community continues, a further decline in these disparities could be anticipated but this will be a gradual process as underlined in the analysis contained in chapter 4. In any case there is always the risk that some weaker regions may benefit less from the general improvement or may even be left comparatively untouched. This is a real risk, as underlined by the continuing outstandingly high levels of unemployment exceeding 15% in quite a number of regions. Moreover, it is in many of these regions that the pressure of

Map 2.2: Regional unemployment rates 1990



Unemployed as %
of the Labour Force

1 :	< 3.4
2 :	3.4 - 5.9
3 :	5.9 - 8.3
4 :	8.3 - 10.8
5 :	10.8 - 13.3
6 :	> 13.3

eur12 = 8.3
s = 4.9

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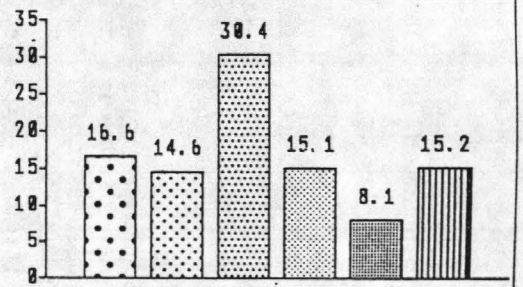
25

Map 2.3: Change in Labour force 1990-1995



% change in Labour Force, without migration

1 :	< -1.5
2 :	-1.5 - 0
3 :	0 - 1.5
4 :	1.5 - 3.0
5 :	3.0 - 4.5
6 :	> 4.5

eur12 = 1.3
s = 2.9

Source: NEI, Demographic Evolution Through Time in European Regions, Rotterdam 1990

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population and labour force growth is strongest as discussed in the following section.

2.3. How different are demographic prospects and job requirements between the regions?

General trends in population

16. The slowing down of population growth in the Community of Twelve has been an established feature since the 1970s. A new study of the Commission[4] suggests that during the 1990s the total population of the Twelve will remain virtually unchanged at a level of 325 million people. After the year 2000, this situation of stagnation is expected to give way to decline averaging some 1 /4% per annum over the period 2000-2015. In absolute terms, the final result in the year 2015 would be equivalent to a reduction of some 12 million people compared to the current (1990) population.

17. The general demographic trend masks considerable differences among the different parts of the Community, especially in relation to timing[5]. Already in the 1990s, the trend towards declining population is expected to become firmly established in certain northern Member States: Germany[6], Luxembourg, Belgium and Denmark while in three southern Member States, Greece, Italy and Portugal, population will remain broadly unchanged to the year 2000 before declining thereafter. In France, Spain, the Netherlands and the UK, the positive growth of the period 1990-2000 will give way to stagnation in the period 2000-2015 with all four countries expected to have a population in 2015 of similar absolute magnitude to that of today. In Ireland population growth is expected to remain positive over both periods, 1990-2000 and 2000-2015. Perhaps of particular note is that many of the weaker regions in southern Spain, southern Italy, Ireland and Northern Ireland (where the problem of unemployment is particularly acute) will have rates of growth of population which, although generally lower than previously expected, are faster than the Community average over the decade ahead. Possible offsetting effects might arise from inter-regional migratory flows although experience has tended to show that such flows fall some way short of eliminating disparities in rates of population growth (see section 2.4 below).

18. In explaining differences in population trends, earlier studies drew attention to fertility rates, which were generally higher in the South and in Ireland compared to the North although the gap was decreasing over time. The new study, using more recent data, suggests that this convergence is stronger than foreseen in the Third periodic report as a result of continuing relatively sharp falls in the fertility rate in the South and in Ireland and a levelling-off of the

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4 These and other demographic projections below are based on a study undertaken for the Commission by the Netherlands Economic Institute (1990) covering the Community of Twelve excluding East Germany

5 Reflecting the experience of the 1980s, the projections assume zero net international migration from the base year (1985) onwards. Exceptions were made in the case of Ireland to reflect the large-scale outmigration of the period 1985-90 and in the case of Germany to reflect the effects of migration from the East over the same period.

6 Continuing migration from Central and Eastern Europe into Germany may offset this underlying trend for sometime.

rate in the North. This is a principal contributory factor in the spread of the movement towards stagnating and later declining population from the North to the South of the Community over the next decades.

19. Accompanying the changes in total population are changes in the age composition. In the Community as a whole the over 65s are expected to rise from 13% to 19% of total population between 1990 and 2015. At the regional level, ageing population will be particularly marked in northern Italy, West Germany, many Dutch and Belgian regions and Denmark. At the other end of the scale the share of young people under 15 years of age in the Community will fall from 20% to 15% between 1990 and 2015. The parts of the Community with 'young' populations - Ireland, Spain and Portugal - will see a considerable decline in the under 15s over the longer-term to proportions which will more closely resemble the Community average. In the medium-term, however, the higher fertility rates of the past in these areas will maintain the relatively rapid growth in the working-age population.

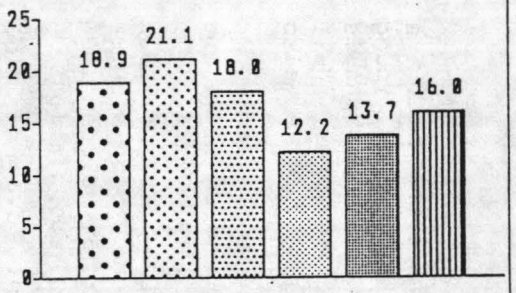
Supply of labour, 1990-2000

20. The supply of labour[7] in the Community will follow the population trends outlined above but with a time-lag of some 15 years as the cohorts of new-born children in each region are translated over time into population of working age. Thus the rate of growth of labour force in the Community as a whole will be slightly positive, at some 0.1% per year over the period 1990-2000. This modest overall change is the net outcome of fairly rapid growth in Ireland, Spain, Portugal and southern Italy in the face of more modest growth or decline expected elsewhere. In absolute terms, the southern areas will experience a labour supply growth of around two million people by the year 2000 which will be partially offset by a net decline in the rest of the Community so that in the Community as a whole labour supply will grow by only 1.5 million. Stronger growth in labour supply in southern regions also reflects the continuing convergence of activity rates, especially in the regions of Ireland, Spain, Portugal and Italy, towards the higher rates experienced in the North. Recent evidence suggests that this convergence is likely to be slower than foreseen in the Third Periodic Report although it is worth bearing in mind that the relatively low activity rates in southern regions and Ireland represent a considerable reserve of labour in these areas.

21. As indicated above, population and labour force developments have implications in the sphere of human resources. The mis-match in labour demand and supply which is reflected on a Community-scale in considerable regional disparities in rates of unemployment (section 2.2 above) will continue to need to be addressed by policies modulated according to the wide variety of regional circumstances. For many of the weaker regions, principally in southern Italy, Spain and Ireland, the problems of an ageing population and labour force are less pressing than the problems of high rates of youth unemployment and the relatively greater flow of young people onto the labour market. Providing the necessary qualifications by which this group can

7 Supply of labour is defined in accordance with International Labour Office concepts and includes those actually working, full-time or part-time, and those who are unemployed but willing to work.

Map 2.4 : Foreign population in the EC 1988



Source: EUROSTAT, Labour Force Survey 1988

No data available for Italy

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participate effectively on the labour market must therefore remain a priority. For the northern regions, the declining number of young people and the associated ageing of the workforce requires an emphasis on the creation of facilities for continuous education during adult life as well as more targeted opportunities for re-training (see also section 3.2 below).

Job requirements 1990-1995

22. The changes in the labour supply noted above can be translated into job requirements when added to the existing numbers of unemployed. On the basis of the present projection, for the medium-term, 1990-1995, the major part of job requirements for the Community as a whole is accounted for by the current numbers of unemployment (over 12 mio) representing around 85% of the total i.e. some 15% of total job requirements will be generated by the growth in the labour force. As a result, the regions of low current unemployment rates in, for example, the southern part of the UK, southern Germany and northern Italy are areas where the supply pressure in the labour market is low. For other parts of the Community, the relatively rapid growth of labour force make it more difficult to reduce unemployment rates. As indicated above such areas include many of the weaker regions in Spain and Portugal and in Ireland where unemployment rates are already high.

2.4 Migration, the trend changes again?

23. Migration can be a potentially important factor in determining the trends in population, labour force and job requirements. This section attempts a fuller assessment of how important this factor has been both between different parts of the Community and between the Community and the outside world. Migratory flows have also determined the settlement patterns within regions which are discussed below.

24. Migration patterns are determined by a complex of economic factors, such as differences in employment opportunities and wage levels as well as a number of other factors such as the policy stance towards migrants and the readiness of persons to change location, language and culture. As the weight and combination of these factors change over time and differ between regions and countries, generalizations for a vast and rather heterogeneous area like the Community need to be treated with some caution[8].

25. Migration from the outside world into the Community has amounted on average to less than 0.1% a year since the 1960's. This relatively small figure does represent, however, a permanent net inflow. As a result, over time the total number of foreigners from third countries has accumulated to around 8 mio persons (1988) representing 3% of Community population[9]. Migration between Member States has added over time another 4.4 mio persons. Overall the number of persons for which country of residence and nationality do not coincide amount to some 12 mio persons, i.e. 4.7% of Community population. The shares of foreigners vary widely between the regions (see map 2.4) and correspond to some degree to their extent of industrialization. The highest

8 Moreover there exist substantial problems of availability and comparability of migration data at national and regional level. EUROSTAT has therefore launched a special research project to develop a methodological concept for mobility measurement.

9 Community population without Italy, for which no data on foreign population is available.

proportions of foreigners are found in Luxembourg and in the industrialized regions of Belgium, France and Germany, whereas in the Southern Member States foreigners represent less than 1% of total population. In Denmark, Ireland and the UK regions foreign population is also fairly low, except in certain urban areas.

26. Looking to present and future migration trends from the outside world to the Community at least two major developments are worthy of note. Firstly, in 1989 the Community registered a historically high inflow (1.2 mio or 0.4% of EC population) essentially determined by immigration for political reasons of a total of around 1 mio persons into the Federal Republic of Germany from both Eastern Germany and other Central and Eastern European Countries (including the USSR), in broadly equal proportions[10]. Most of these migrants have gone to the industrial regions of Western Germany. There has also been a flow of migrants from the USSR to Greece although the numbers involved are not known at present. Moreover, there remains a potential for further migratory flows from Central and Eastern European countries to the west during the 1990's. Secondly, a major uncertainty of the 1990's concerns the potential pressure of legal and illegal migration into the Community for political or economic reasons from more or less developed and newly developing countries in Latin America, Africa and Asia. The destination of these migrants will be determined to some extent by the existence of historical links between these countries and different Member States.

27. The pattern of migration between EC Member States has tended to be dominated by traditional links between the industrialized regions of Belgium, France, Germany, the Netherlands and the United Kingdom and the peripheral regions of Greece, Ireland, Italy, Portugal and Spain. There is no evidence that these flows have undergone systematic changes during the second half of the 1980's. They are marked by moderate flows from the rural periphery to the central regions and continuing return migration. Apart from Ireland, net migration balances for weaker Member States have even been slightly positive or close to zero over the second half of the 1980's (see graph 2.4).

28. Besides these traditional migration patterns, other flows between Member States are fairly weak. Only in those areas with common culture and language as, for example, between parts of the Benelux, France and Germany or between Ireland and the UK, are regional exchanges relatively high. This is an indication that cultural and linguistic barriers are still of considerable importance. Given that freedom of movement already exists within the Community, there is a only low probability that the completion of the Single Market may trigger a wave of migration between Member States but this could change if there were to be a widening of income and unemployment disparities.

29. Interregional net migration rates within Member States, following a decline during the 1970's and early 1980's under the influence of increasing overall unemployment, have been levelling off since then according to the limited available information and data. The result in Italy, for example, is that net migration rates are now half the level at the beginning of the 80's. In Germany the reduction was around one-third in the same period of time. Meanwhile in Spain the destination of migration has also changed during a period of decreasing net migration. Today the former immigration regions like Pais Vasco and Cataluña are losing population to the South.

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10 EUROSTAT, Rapid reports-population and social conditions, 1990/4.

30. On economic grounds alone the wide disparities in rates of unemployment which persist in the Community together with emerging labour shortages in stronger regions would tend to result in increased geographical mobility of labour. This is particularly relevant in Italy where declining unemployment in the North and increasing rates in the South (see 2.2 above) may trigger a new south to north migration within this country. The fact that such migration does not yet appear to have emerged suggests that at least at present other factors such as environmental and housing conditions are having a restraining influence.

31. Overall, inflows from third countries are, and seem likely to remain, a more significant factor than migration within the Community. The many uncertainties surrounding the different components of migration and their determinants make confident forecasts impossible but the present situation appears to contain the potential for a renewed drive of international and interregional migration towards more urbanized areas.

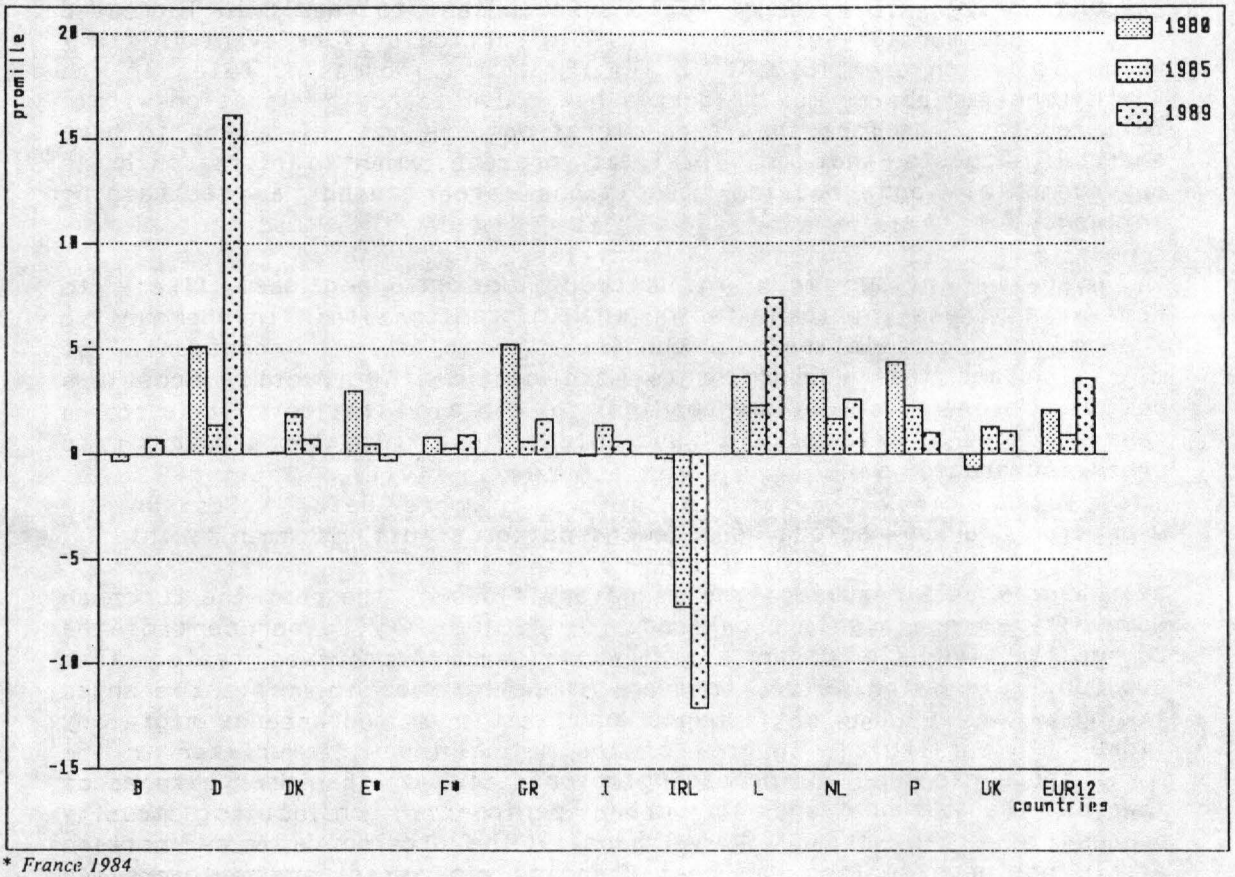
Migration and sub-regional settlement patterns in the Community.

32. Largely as a result of the migratory flows of the past the European Community is now highly urbanised. By 1981 nearly 70 per cent of the Community lived in urban areas whose population was greater than 300,000. Since the 1970s, however, there have been important changes taking place in urban settlements as a result of short-range migratory flows. In particular, in most of the mature industrial cities in the North there has been an increasing movement out of the inner city areas towards the suburbs and the urban periphery, contributing to the process of urban sprawl. More recently the urban settlement pattern within northern regions has been changing with small and medium sized cities growing faster than the larger cities. In the South, the major cities have continued to expand relatively rapidly, reflecting the continuation of a traditional rural-urban migration pattern (although with some slowing down).

33. As noted above, urban areas in general continue to attract migrants, even if the flow may be generally less intense than previously, with the main pressure in the future likely to come from outside the Community. Many of these urban areas have been confronted for some time with problems associated with concentrations of poverty and unemployment, decaying or inadequate infrastructures, overcrowding and pollution. There are continuing problems meanwhile in those rural areas experiencing an outflow of population. Migration from these areas often deprives them of the young and of potential entrepreneurs, while services both to individuals and producers risk becoming unsustainable in remote and sparsely populated areas.

34. The balanced development of the Community, alleviating the problems of congestion in the stronger regions at the same time as (and partly as a consequence of) creating opportunities in the older industrial areas, rural areas and less developed regions of the Community, must therefore remain a priority for national and Community policies, as discussed more fully in chapters 5 and 6 below.

Graph 2.4: Net migration in the Member States (per 1000 of population)



* *France 1984*

* *Spain 1989 EUROSTAT estimates*

Sources: EUROSTAT, Demographic Statistics 1989, Luxembourg 1989 – Theme 3, Series C and EUROSTAT, Rapid reports -population and social conditions, 1990/4

Chapter 3 RECENT EVIDENCE ON SOME CAUSES OF REGIONAL ECONOMIC DISPARITIES

3.1 Determinants of competitiveness

1. The preceeding chapters discussed the development of disparities in the Community in relation to incomes per head and rates of unemployment. This chapter looks at some of the important causes contributing to regional disparities. In general, income and unemployment disparities are a reflection of interregional differences in competitiveness with lower productivity in problem regions tending to result in lower incomes and lower rates of job creation. This section investigates the relative importance of various factors shaping regional competitiveness. Since a well-trained labour force and an innovative research environment appear to be conducive to increased regional investment and economic activity, sections 3.2 and 3.3 consider these particular factors in more detail. Section 3.4 presents a preliminary assessment of the effects of the recent oil crisis on regional disparities within the Community.

2. In an attempt to improve our understanding of the broad range of factors which shape a region's competitiveness, a survey[1] was carried out for the Commission with the aim of identifying those factors which need to be improved most urgently. The survey covered around 9000 companies located in regions suffering from lagging development (Objective 1) or industrial decline (Objective 2). For the purpose of comparison firms in ten more favoured regions, not subject to Community regional policy assistance, were included too. The survey questionnaire listed 37 determinants of competitiveness and asked business managers to identify the 3 determinants with the highest priority for improvement.

3. In lagging regions, the determinant 'cost of credit' was mentioned most frequently. The burden of the high cost of local credit on investment in problem regions was confirmed by another study on the financing of small and medium sized enterprises[2]. In contrast with the increasingly homogeneous financial markets in e.g. the UK and Germany, interregional disparities in the cost of credit appear to be significant in lagging regions. Short term interest rates, for example, were about 2 percentage points higher in the South of Italy than in the Centre and North. In addition, the allocation of credit in some southern Community Member countries is severely constrained by the existence of liquidity controls by the monetary authorities. The financing of private investment in lagging regions is further restrained by imperfections in financial markets caused by long and complex loan and grant application procedures, inadequate management skills of entrepreneurs and deficiencies in the SME-project evaluation skills of local banks. In addition, there is a shortage of flexible financing instruments, including venture capital, leasing and long- and medium-term loans. In view of its importance the study suggests a

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1 Ifo (1990), An empirical assessment of factors shaping regional competitiveness in problem regions. Study financed by the European Commission, Luxembourg.

2 Ernst & Whinney (1990), Financing of small and medium-sized enterprises in assisted regions. Study financed by the European Commission.

number of policy responses at Community level designed to:

- ease the cost of credit and improve the capacity of banks to respond to the investment needs of smaller enterprises (by way of guarantee schemes, innovative financial products, etc);
- improve the operation of regional development grant systems; and
- strengthen the role of business advisory and information services.

4. Next in the ranking of determinants to be improved came priorities which are common to lagging regions, regions in industrial decline and the more favoured regions. They include a lowering of income and corporate tax rates; an increase in the supply of qualified labour (see section 3.2); a decline of indirect labour costs; a deregulation of the labour market; and a higher rate of economic growth. The high priority attached to this last factor is an indication of the importance of a sound macroeconomic policy as a precondition for a successful regional development policy.

5. Among the other factors of note, infrastructural determinants were again of particular concern to firms in lagging regions. The type of infrastructure improvements needed, however, differed sometimes quite substantially from one lagging region to the next. The transport network appears deficient in Ireland, the Italian islands and some of the Spanish regions (e.g. Andalucia, Murcia, Galicia, Asturias and Castilla y Leon). The supply and cost of energy poses serious problems in Portugal, Ireland and Northern Ireland. In the lagging regions on the Italian mainland there appears to be a shortage of suitable industrial sites. Portugal is in short supply in school facilities, while the non-metropolitan areas of Greece are in need of further improvements in their communication systems. These results underline the need for an appropriate mix of general and region specific priorities for support measures of Community regional policy in lagging regions.

6. Business managers in lagging regions in particular also stressed the importance of industrial policy as a means to strengthen the potential for activities in the area of research and development (see section 3.3). Other factors which have a significantly higher priority in lagging regions than elsewhere relate mainly to the local availability of certain business and administrative services and other business supplies.

7. The restructuring of industry in declining industrial regions has led to high levels of unemployment (see section 5.2). In spite of this, business managers place the need for an increased availability of qualified labour and a reduction of labour costs on top of their priority ranking. This provides further evidence for a labour demand and supply mismatch with workers forced out of the declining sectors not having the right skills to find jobs elsewhere. Meanwhile the "insiders" who kept their jobs appear to have been able to maintain their traditionally high levels of wages and benefits. The high labour costs in the declining sectors appear to have set the standard for the regions' other industries with negative consequences for regional competitiveness and job creation. Occupational mobility is another vital factor in the conversion of these regions. Further vocational training of the employed would contribute to the creation of a flexible work force which would be better able to weather future structural change. Those without employment should be encouraged to enroll in

retraining programmes enabling them to obtain the broad range of skills needed to survive in the modern economy.

8. Ranked third amongst priorities for improvement in regions suffering from industrial decline was the overall rate of economic growth. This high ranking illustrates the significant effects on regional competitivenes of the macroeconomic policies followed by the Member States. However, it also underlines the sensitivity of the traditional industrial sectors to business cycle effects. The on-going diversification of these regions' economic base should reduce this sensitivity and improve prospects for a sustained economic growth.

9. These general conclusions were confirmed recently by a small-scale survey of European and foreign businessmen attending a regional policy conference at Dublin Castle. The respondents stressed the importance of a high quality local infrastructure (modern telecommunications in particular) and a good supply of local skilled labour. The supply of qualified labour emerges as a most crucial determinant of regional competitiveness. The ability of regions to educate and attract qualified workers becomes ever more essential in the regions' pursuit of increased socio-economic development and well-being. The following section of this chapter will consequently be devoted to education and training.

3.2 Disparities in education and training

10. As the survey discussed in the previous section indicated, an insufficient supply of qualified labour is a problem faced by companies in stronger and weaker regions alike. In spite of this similarity, the underlying causes of this skills shortage differ quite substantially between types of regions and merit further analysis.

11. For the more favoured regions of the Community the buoyant economic conditions over the recent years have resulted in skill mismatches between what firms themselves require and what even highly developed training systems are providing. Even unskilled labour is becoming increasingly scarce in some of the regions most favoured by an expansion of economic activity and lower unemployment.

12. For industrial regions in decline, where unemployment remains rather high, an improved supply of qualified labour is top priority while an increased availability of unqualified labour ranks visibly lower. This reflects the need for retraining in these areas where apparently qualified labour does not have the particular skills in demand in modern industry (see also section 3.1).

13. A certain mismatch between the nature of the qualifications required for jobs currently available and persons seeking a job is observable in all types of regions. However, in lagging regions and countries, a much larger structural discrepancy exists which contributes to the relatively high unemployment rates in general (see section 5.1) and among persons without occupational training in particular. The lack of an adequate education and training infrastructure, the shortage of qualified teachers, and the lower rates of participation in education and training activities all appear to be contributing to the shortage of skilled workers in the lagging regions of the Community.

14. Map 3.2 shows that the proportion of adolescents in education or training differs substantially between Community Member States and regions[3]. The number of pupils, trainees and apprentices aged 15 - 19 varies from less than 40 % of that age group in Portugal to more than 85 % in Germany, the Netherlands and Denmark. In Belgium and France the share of adolescents in education or training is around 75 %. In countries where all or a large number of regions are classified as lagging (P, GR, IRL, I, and E) and also in the UK the share reaches 60 % at the maximum.

15. As a whole, the gap between regions lagging behind and the rest of the Community emerges quite clearly, perhaps especially in a country like Spain where the average share of adolescents in education or training in the lagging regions is about 15 percentage points below the average share of the remainder of the country.

16. An additional gap can be observed between the central agglomerations of lagging regions and countries and the more remote rural areas where education and training facilities are even less accessible. In the Greater Athens metropolitan area, for instance, the proportion of 15 - 19 year olds in education or training lies more than 6 percentage points above the Greek national average.

17. These regional disparities in youth participation rates in education or training are indicative of the problems experienced by the lagging regions of the Community in particular in developing a quality education and training system. For this reason, Community structural policies have to attach a high priority to developing human resources (see section 6.3). These policies will involve the creation of additional training places as well as an up-grading and re-orientation of the places already available.

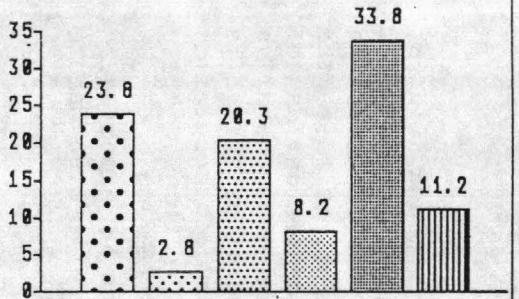
18. To bring education and training infrastructures in lagging regions up to national standards, a major regionally differentiated investment effort is needed. If, for example, the share of adolescents in education or training in the lagging regions of Spain were to be brought up to the level of the other Spanish regions, an extra 320,000 education and training places - an increase of about 30 % on the 1985 total - would be required.

19. The achievement of a Community standard, such as attaining the same share of 15 - 19 year olds in education or training as in Germany, the Netherlands or Denmark would require an even bigger investment effort. For Spain as a whole, around a million education and training places would have to be created, to be compared with the two million places available. Similar long-term efforts would be needed in other countries largely or completely covered under Objective 1 of the Structural Funds. One has to keep in mind that any increase in participation in education or training now will raise labour force quality only after a time lag.

20. Moreover, a simple convergence of the proportion of adolescents in education or training between the Community's regions would not suffice to bring about convergence in terms of labour force quality, productivity and living standards. The quality of the education and

3 Derenbach (1990), Human capital and related infrastructure endowments: investment requirements in problem regions. Study financed by the European Commission.

Map 3.2: Proportion of adolescents in education and training



Participants in secondary general education, initial vocational training and apprenticeship programmes as % of age group 15-19

1 :	> 84.9
2 :	76.5 - 84.9
3 :	68.1 - 76.5
4 :	59.7 - 68.1
5 :	51.3 - 59.7
6 :	< 51.3

mean = 68.1
s = 16.8

Source: Derenbach, Human capital and infrastructure, Bonn 1990. Data for various years between 1984 and 1987. No data available for Luxembourg. XVI-A-3

training offered is at least as important as its quantity. Also, investment in qualified teachers and modern teaching equipment will only pay off in the long term. The demographic decline discussed in section 2.3 would suggest a need to intensify efforts to maximise the effectiveness of the existing workforce. The identification of appropriate actions to be taken should be based on a cooperative effort by local, regional, national and Community authorities active in this field. Meanwhile, the changing age structure of population suggests the need for increased adult training actions. These developments are clearly evident in the northern Community Member States where a decline in the size of the labour force is expected in the next decade. However, the need for similar shifts will also become increasingly evident in the southern Member States over time.

3.3 Innovation and research

21. Regional economic performance depends upon the progressive introduction over time of innovations in products and processes to enhance the competitiveness of the regional economic base in an increasingly competitive world. Process innovations increase productivity and lead normally to cost reductions, whereas product innovations aim at the introduction of new products or a better adjustment of existing ones to demand and tend to improve the market position of firms and regions.

22. Most companies are well aware of the importance of innovation. More than 9 out of 10 firms covered by the above survey (see section 3.1) declared that they had implemented product or process innovations in some form over the last five years. For both types of innovation a decrease in performance in this regard was found moving from stronger regions through industrial regions in decline to lagging regions. However, even in lagging regions more than 8 out of 10 firms gave a positive answer to the question whether they had introduced product or process innovations, although the intensity of such efforts in lagging regions may be less than elsewhere as discussed below.

23. In principle, innovation is not directly dependent on large scale own-research by firms or regions provided information and technology transfers function smoothly. But own-research facilitates such transfers and consequently strengthens the firms' competitiveness. Complex interdependencies between research and development, information flows, qualified labour force, specialised infrastructures, business services and innovation exist at the regional level. As a result of this, a higher involvement of problem regions in research and development tends to improve access to information on innovations and strengthens their attractiveness to qualified personnel[4].

24. Other evidence suggests that lagging Member States employ much lower shares of their labour force in research and development activities and spend much less as a percentage of their GDP for the same purpose. At Community level three quarters of total global (i.e. public and private) research and development expenditure was

4 Goddard and others (1987), Research and technological development in the less favoured regions of the Community (STRIDE), Study financed by the European Commission, Luxembourg; and Higgins and others (1987), STRIDE Science and Technology for regional innovation and development in Europe, Study financed by the European Commission, Luxembourg.

concentrated in Germany, France and the UK in 1989.[5] Highly uneven distributions exists also within Member States. In Italy, 72% of all research and development expenditure and 70% of research and development employment in 1982 were concentrated in the North-West, while the South held only some 5% of research and development expenditure and employment. A high geographical concentration of research was also found in Spain. In 1983 Madrid accounted for more than half of total research and development expenditure followed by Cataluna with some 16%. In Portugal concentration was even more marked with the region around Lisbon accounting for 72%, and the coastal regions of Portugal overall having a share of 93% of the national total. The regional spread of private business expenditure for research and development shows similar results to those for global expenditure (see map 3.3). Further analysis[6] reveals that the technological gap within the Member States is wider than between Member States. Business managers are well aware of this situation and have expressed a demand for an industrial policy which strengthens the potential for research and development (see section 3.1).

25. To a large extent the spatial trends are a result of the historical trends in the innovation process, with modern, technologically advanced and research-intensive industries and firms tending to cluster around a few major cities of the Community while more traditional and less research and technology-intensive industries are at the same time more widely diffused and overrepresented in the less favoured regions. More specifically, the creation and production of new products and (to a lesser extent) the adoption of advanced processes are more frequently found in stronger regions than in weaker regions.

26. There also seems to be a link between the extent of innovation and employment in a region. The above survey confirms this positive impact on employment. Moreover, the link between product innovation based on own-research and employment creation is significantly stronger in small and medium sized companies than in big enterprises. Measures to improve the innovative performance of small and medium sized companies are thus of special importance because they help not only to improve the competitiveness of those companies but also to stimulate the growth of employment in the region.

27. The concentration of research and development activities in the core regions of the Community appears to be an important explanatory factor for the stickiness of regional disparities in income and productivity (see chapter 1). Narrowing these disparities would require relatively higher rates of increase in R&D expenditures and innovative activities in problem regions in general and lagging regions in particular. Catching-up would require the attraction of innovative companies as well as attempts to stimulate the breadth, depth and frequency of innovation in existing firms in weaker regions with a special accent on the encouragement of entrepreneurship in small and medium sized firms. Also basic and applied research and development facilities outside the firms have to be strengthened to create a basis for further technology transfers to the private sector (the STRIDE initiative (see chapter 7) and the Business Innovation Centres represent a Community contribution toward this end).

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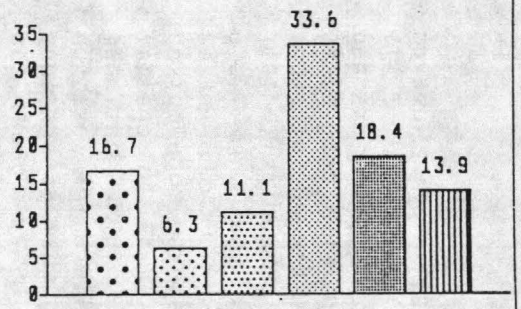
5 Calculations based upon OECD, STIID Data Bank, Paris July 1990.

6 Goddard and others (1987), op. cit. and Higgins and others (1987), op. cit.

Map 3.3: Business expenditure on research and development in the EC 1983



Business Expenditure as % of GVA in industry 1983

1 :	> 178.8
2 :	139.4 - 178.8
3 :	100.0 - 139.4
4 :	60.6 - 100.0
5 :	21.2 - 60.6
6 :	< 21.2

eur12 = 100.0
s = 78.8

Source: Higgins and others, Stride Science and technology for regional innovation and development, Luxembourg 1987

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3.4 Regions of the Community and the 1990 oil shock

28. During the second half of 1990 the world economy has been exposed for the third time since 1973 to a major oil price and supply shock. At the time this report was prepared the extent and duration of the shock were surrounded by considerable uncertainty with the result that only preliminary, global assessments could be attempted.

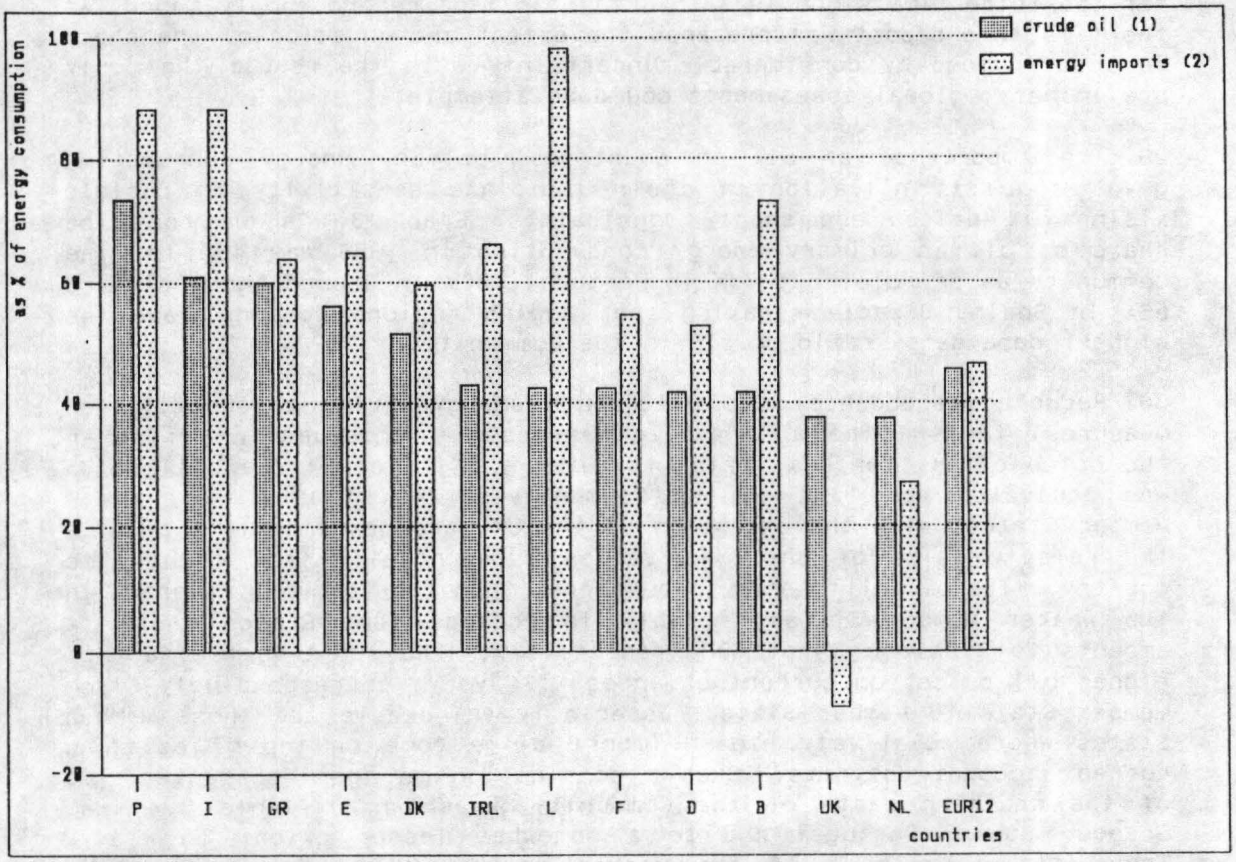
29. The importance of oil in countries' primary energy consumption gives a first indication of their immediate sensitivity to rapidly rising oil prices and supply constraints. Graph 3.4 shows that the share of oil in primary energy consumption in 1988 was 45% for the Community as a whole, but 74% in Portugal, 60% in Greece and Italy and 56% in Spain. Broadly speaking the lagging regions tend to have the highest dependency ratio on oil in the Community.

30. Reducing dependence on oil (through energy-saving or substitution measures) tends to be a longer-term process. Consequently a rise in the price of oil tends to raise the import bill for oil, a bill which was equivalent to 1.1% of the Community's GDP in 1989. While all Member States, with the exception of the UK, are net importers of oil, the relative size of the bill varies substantially from country to country. The oil bill tends to be higher than the Community average in the weaker Member States, notably in Portugal and Greece where it amounts to 3.5% and 3% of GDP, repectively. The short-term effect of higher oil prices on current balances will vary, correspondingly, from Member State to Member State. Especially vulnerable are those Member States where relatively higher import bills come on top of existing current account deficits. Such a combination is again characteristic of the southern parts of the Community as shown in table 3.4 i.e. Greece, Spain, Portugal and to a somewhat lesser extent in Italy. Thus, it is in most of the weaker parts of the Community where dependence on oil imports and the shock effect of price increases are strongest.

31. Supply and price problems on the world market for oil will also tend to have repercussions on all other traded energy sources (gas, electricity, coal). The dependence on (net) energy imports in total energy consumption therefore gives a somewhat broader picture of medium-term sensitivity to an oil shock. Here again Portugal ranks on top with an import share in total energy consumption (1988) of 88% followed by Italy (82%), and Greece, Spain and Ireland with 64 to 66% (Graph 3.4). These are considerably above the Community average of 46%.

32. Overall lagging Member States and their regions show highest dependency rates on oil and energy imports in the Community. There are, however, also a number of stronger regions of the Community with a concentration of oil or energy intensive sectors which may also have to undergo substantial adjustments. The recent energy shock together with existing energy problems in some regions (see chapter 3.1) therefore implies another shift in relative regional competitiveness and development prospects with, it would appear, the lagging regions likely to be among those most severely affected.

Graph 3.4: Oil dependency of Member States, 1988



(1) % of crude oil in inland consumption of energy

(2) % of net energy imports in gross inland consumption + bunkers

Source: EUROSTAT, Basic statistics of the Community - 27th edition, 1990

Table 3.4: Current account of Member States and dependence on oil, 1989

Member States	Net oil import bill		Balance of payments on current account as % of GDP
	as % of GDP	Difference with EUR12 in % points	
B	1.9	0.8	1.0
DK	0.5	-0.6	-1.8
D	1.1	0	4.5
GR	2.9	1.8	-4.9
E	1.7	0.6	-2.9
F	1.1	0	-0.4
IRL	1.5	0.4	1.6
I	1.3	0.2	1.3
L	2.8	1.7	32.1
NL	1.7	0.6	3.2
P	3.5	2.4	-1.2
UK	-0.1	-1.2	-4.1
EUR12	1.1	-	0.0

Source: DG II

BOX 3.1

FACTORS SHAPING REGIONAL COMPETITIVENESS IN PROBLEM REGIONS

1. In 1988, the Commission charged the Ifo-Institute for Economic Research with launching a study on the regional determinants of competitiveness.[1]

2. The survey, carried out in early 1989, covered about 9000 companies in industry and business services. Its primary focus was on firms located in regions suffering from lagging development (Objective 1) or industrial decline (Objective 2). For the purpose of comparison firms in ten more favoured regions, not subject to Community regional policy support, were included too. The 'lagging regions' of the survey correspond to the regions eligible for Community aid under Objective 1 of the reform of the Structural Funds, with the exceptions of the French overseas departments and the Canary Islands. The regions in industrial decline correspond largely to the areas on the list of Objective 2 regions decided upon later in 1989. The regions covered by the survey were for practical purposes defined at the NUTS 2 level.

3. The primary aim of the study was to identify possible determinants of the competitive position of enterprises and to assess the relative importance of these determinants. Information on the companies' assessments of 37 factors shaping regional competitiveness was obtained directly from corresponding questions in the survey. This broad range of factors covered various aspects of the regional economies: financial markets, the educational system, the labour market, the macroeconomic outlook, infrastructure, national and regional policies and institutions, regional economic structure and social facilities. Company-specific factors were explored indirectly by evaluating the innovation strategies of the respondents. In addition, the survey inquired about the companies' view on regional policy - assessments and priorities - and on the completion of the Single Market by 1992. The results concerning the Single Market are presented in Chapter 9 of this report.

1 Ifo (1990), An empirical assessment of factors shaping competitiveness in problem regions. Study financed by the European Commission, Luxembourg, available from the Office for Official Publications of the EC.

Chapter 4 REDUCING DISPARITIES : A LONG-TERM CHALLENGE

4.1 Income disparities

1. As was seen in chapter 1, disparities between the Community's regions in the level of income as measured by GDP per head remain considerable (GDP per head in the 10 strongest regions of the Community was three times that of the 10 weakest regions in 1988). Reducing these disparities between the regions requires that the weaker regions maintain a faster rate of growth than the stronger regions over time.

2. It is revealing to illustrate this by calculating, using given growth rate differentials, the length of time required to reduce disparities between the regions significantly. For example, a region with a GDP per head which is 70% of the Community average (i.e. an index value of 70) to converge by 20 percentage points to 90% of the Community average must:

- exceed the Community average rate of growth in GDP her head by 1 1/4 percentage points every year for 20 years;

- or exceed the Community average rate of growth in GDP her head by 1 3/4 percentage points every year for 15 years;

3. For a region with GDP per head which is half the Community average to improve its relative position by twenty percentage points to an index of 70 is a somewhat more daunting task. For this to be achieved over 20 years the growth rate differential in favour of the lagging region must be of the order of 1 3/4% while over 15 years the differential must be some 2 1/4%. This underlines the fact that it is those regions with the weakest starting position vis-à-vis the rest of the Community which are faced with the most difficult challenge in catching up.

4. During the period of economic recovery in the second half of the 1980s average Community growth has been around 3 percent per annum. If this trend were to continue, a region with GDP per head of half the Community average would have to grow at more than 5% per annum over 15 years to achieve a level of GDP per head equivalent to 70% of the Community average. For the 20 or so regions of the Community who fit into this category, the clear conclusion is that economic convergence represents a formidable challenge both in terms of the real growth in output required and the length of time over which it must be consistently sustained.

5. Theoretical scenarios apart, it is useful to compare the experience during the 1980s of the group of Member States where income per head is less than 75% of the Community average (Ireland, Spain, Portugal, Greece -'EUR(4)') with the rest of the Community ('EUR(8)').

6. Having recorded a rate of growth of total GDP over the period 1982-85 of 1.9%, almost identical to that of the rest of the Community, the EUR(4) countries as a group established a growth differential with EUR(8) over the period 1986-1990 of 1.2 percentage points per year (i.e. 4.2% pa for EUR (4) less 3.0% pa for EUR(8)). It emerges, however, that in spite of this significantly better performance by the

EUR (4) countries relative to their Community partners, and with rates of growth of population taken into account, the degree of convergence over the period 1985-1990 in terms of GDP per head is relatively modest. The GDP per head of the EUR (4) countries as a group moved from 66% of the Community average in 1985 to 69% in 1990. As indicated in paragraph 3, if a given lagging region, with a GDP per head similar to the average of EUR(4) in 1990 managed to sustain a growth differential with the rest of the Community of around 1 1/4% per year, it would take two decades to achieve GDP per head of 90% of the Community average.

7. The recent relatively modest convergence has been achieved in a period where general economic conditions in the Community have been highly favourable. At the same time, however, factors have already emerged which threaten the continuation of those circumstances. The stability of the economies in the EUR (4) countries needs to be secured by reducing inflationary pressures and avoiding internal and external imbalances, otherwise the generally favourable economic performance of these countries relative to the rest of the Community will not be sustained. In this sense, nominal convergence in the Community is a prerequisite to real convergence.

8. It is also important to note that the relatively high rates of economic growth achieved during the recent past have not been evenly shared among EUR(4) countries. As indicated in chapter 1, Greece in particular has not succeeded in controlling its macro-economic imbalances and has not shared fully in the economic recovery of the other Member States. The result of this is that GDP per head in Greece, falling from 56% of the Community average in 1985 to 53% in 1990, appears to be diverging from rather than converging towards that of her partners despite the increasing efforts of the Comunity's Structural Funds during the 1980s. This contrasts sharply with the position in Spain which has seen its GDP per head rise from 72% to 77% of the Community average over the same period.

9. The levels and trends in regional GDP per head are therefore such that, on any realistic assessment, significantly reduced disparities can only be achieved over a long period. As discussed elsewhere, creating a growth differential sufficient to allow catching up to take place depends on the fulfilment of certain conditions including in particular the maintenance of efforts in the weaker regions to increase the quantity and effectiveness of investment and to improve the quality of human resources.

4.2 Disparities in unemployment

10. In section 2.2 it was seen that, while recent developments offer some encouragement, the level of disparities in rates of unemployment among the regions of the Community remains considerable. In 1990 at one end of the spectrum there were 12 regions of the Community with a rate of unemployment below 3% while at the opposite end of the spectrum there were some 19 regions with a rate of unemployment exceeding 15%.

11. Following similar methodology to the preceding analysis it is possible to estimate, by reference to assumed rates of employment growth, the time-period required to reduce the regional unemployment rate by given amounts.

12. For example, to reduce the unemployment rate by five percentage points from 20% to 15% a given region would have to

- sustain an employment growth of 2 1/4 per cent per year over 5 years
- or, sustain an employment growth of 1 1/2 per cent per year over 10 years.

To reduce the unemployment rate by 10 percentage points a region would have to

- sustain an employment growth of 3 1/2 per cent per year over 5 years.
- or, sustain an employment growth of 2 1/4 per cent per year over 10 years.

13. In order to place these figures in context, even in a situation of strong economic growth the rate of increase in employment in the Community has averaged around 1 1/4 per cent per year (see section 2.1). To reduce the rate of unemployment in a given region by just five percentage points would take 15 years of employment growth of 1 1/4% per annum. The rate of increase in employment required to achieve the same result over 5 years, i.e. 2 1/4% per year, has been seen only in Spain and even there such rates of growth have only been achieved in recent years and are abnormally high by historical standards.

14. It seems clear therefore that significant reductions in the rate of unemployment in the worst-affected regions will take considerable time even under the most favourable conditions. This is without allowing for the fact that a sustained period of employment growth could increase the labour force by more than the 1% per annum allowed for in the simulations above, firstly, as rising opportunities attract new entrants into the job market and, secondly, as positive migratory flows of labour to the region are generated. On the first point, it is worth noting that participation rates in the labour markets of many of the high unemployment regions are at present some 10 percentage points below the Community average. An acceleration in the growth of the labour force as a result of rising participation rates or other causes would of course reduce the effects on the unemployment rate of increasing employment.

15. It is also important to underline that success in reducing the rate of unemployment in the worst-affected regions depends heavily on the characteristics of their regional labour markets. In this regard, the regions of high unemployment include both lagging regions and regions in industrial decline but with an overwhelming preponderance of the former drawn almost entirely from Ireland, Spain and southern Italy. In the lagging regions, among the characteristics of the labour market are a relative sparsity of employment in the secondary and tertiary sectors (high dependence on agriculture), relatively low female activity rates and a relatively high incidence of unemployment among the young.

16. Significant employment growth in the lagging regions implies considerable restructuring of the economy towards the secondary sector (especially manufacturing) and the tertiary sector. As noted in section 2.1, employment growth in the Community in the 1980s has been dominated by the tertiary sector covering a wide range of activities which range on the one hand from computer services, legal and economic advisory services, financial services to retail sales on the other hand. Service industries of the former type tend to demand relatively high quality human resources and regions following this path to employment growth would therefore require long-term investment in the development of their education and training systems (see section 3.2). In services such as retailing, the opportunities have tended to be for women in

particular involving, in many cases, part-time working. The extent to which regions can avail of the opportunities will depend from the supply-side on the flexibility of the labour force and, perhaps, on the possibility of increasing female activity rates (even though this will also, in effect, increase the labour force).

17. Given the existence of high rates of unemployment among the young in the high-unemployment regions, approaching and sometimes exceeding 50%, measures would need to continue to be focused on this group in order to ensure that they are equipped to participate effectively in the labour market.

18. In summary, the nature of the task facing the weaker regions of the Community seems clear. Reducing significantly rates of unemployment in these areas depends both on employment growth and on supply-side improvements to ensure that effective human resources are available to take advantage of opportunities so created. Such efforts will have to be maintained over the longer-term, at least over a decade, in order to achieve results on a scale which would reduce appreciably the current disparities in unemployment in the Community.

19. Meanwhile in relation to incomes, the previous section demonstrated that this may be even more difficult and long-term. Catching up, for example, some 20 percentage points only, i.e. less than half the distance by which the weakest regions are lagging behind the Community average, would require more than two decades even under favourable conditions.

B COMMUNITY ASSISTANCE FOR PROBLEM REGIONS

Chapter 5 THE PROBLEM REGIONS: SITUATION AT THE END OF THE 1980s

1. By restricting the use of the structural funds to the achievement of a limited number of objectives, Community support is concentrated on addressing the most serious regional problems. The selection of the most seriously affected areas of the Community was undertaken using criteria based on harmonized statistics (see section 6.2). While these eligibility criteria represent overall indicators of the principal problems faced by the various groups of regions, a more detailed picture of the situation and development of the areas in question is necessary in order to understand more fully the extent of both the common problems as well as the diversity of situations faced by the assisted regions at the time of the implementation of the reform of the Community's structural actions.

5.1 Lagging regions (Objective 1)

2. The Community has decided to promote the economic development of those regions lagging behind as measured by GDP per head. These have been generally defined as areas where GDP per head is at least 25 % below the Community average. All such regions[1] occupy a peripheral position, to the south and to the west of the Community (see map 5.1). A quarter of the population of these areas live on islands some of which are very small (Greek islands) and very remote (in the cases of Canaries (E), the Azores and Madeira (P) and DOM[2] (F)) which constitutes an additional handicap to their economic development. The population in lagging regions is unequally distributed with a population density by region rising from less than 15 to more than 400 inhabitants per km2. In addition, the population of the three Member States entirely covered by Objective 1 is concentrated in each case in one or two major urban centres of rapid growth in demographic terms, such urban areas accounting for between a third and nearly a half of the total national population (Dublin (IRL), Lisbon and Oporto (P) and Athens and Thessalonika (GR)). This poses important problems in terms of regional planning and in terms of safeguarding the environment, not only in the large and rapidly expanding cities but also in rural zones where other problems exist (depopulation, difficult natural conditions, low productivity and underemployment in agriculture, ...).

3. Population growth in Objective 1 regions increased during the 1980s by a rate of nearly 1% a year on average, four times more than in the remainder of the Community. The reduction in the rate of demographic growth already underway in the other areas will also occur in the backward regions during the 1990s to levels achieved some 10 years earlier in the rest of the Community (i.e. to around +0.2% per year),

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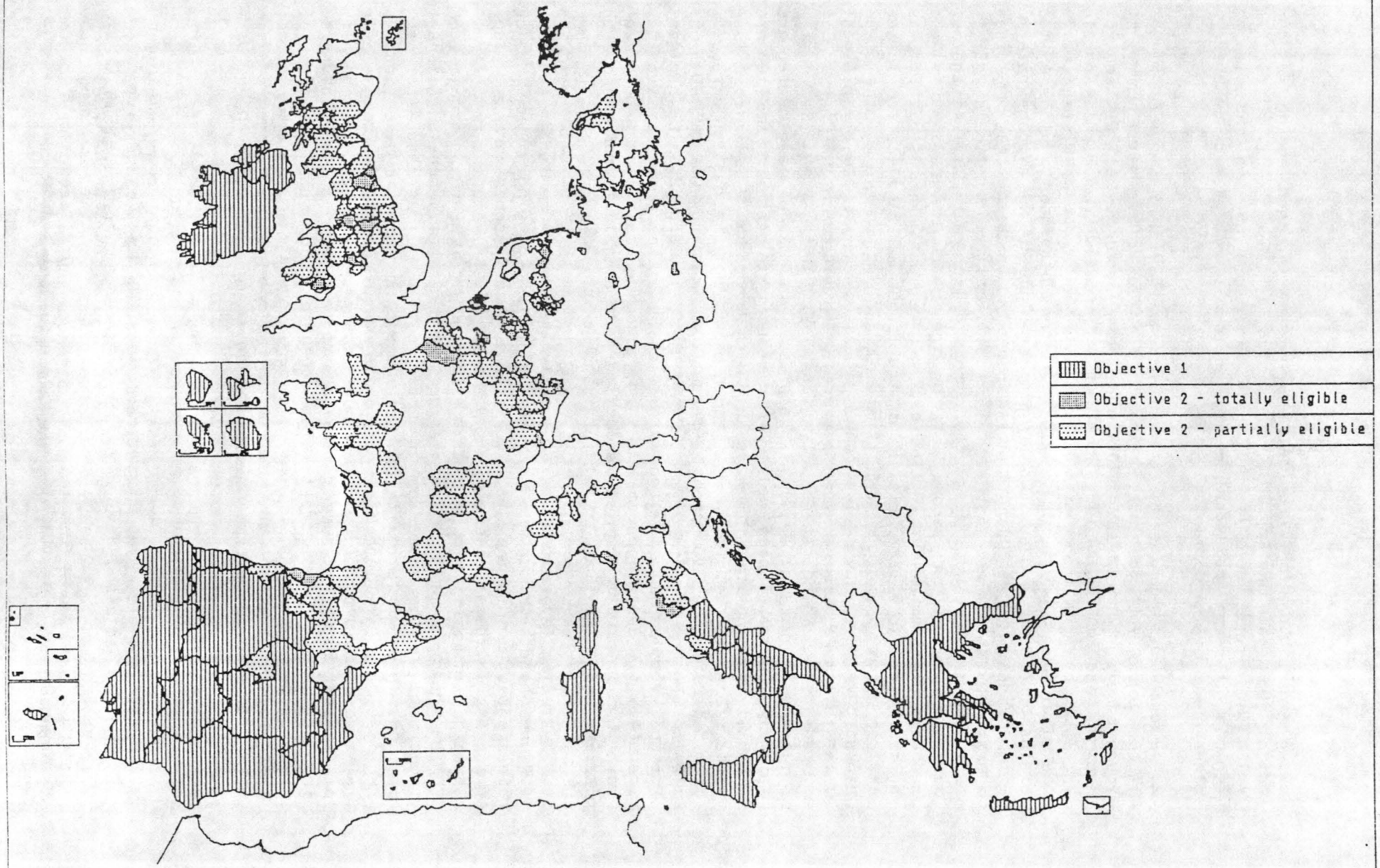
1 Andalusia, Asturias, Castilla y Leon, Castilla-la Mancha, Ceuta y Melilla, Communidad Valenciana, Extremadura, Galicia, Canarias, Murcia, DOM, Corsica, Ellada (all regions), Ireland, Abruzzi, Basilicata, Calabria, Campania, Molise, Puglia, Sardenia, Sicilia, Portugal (all regions), Northern Ireland.

2 DOM includes Guyane which, while not an island, is also very remote from the centres of the Community

Map 5.1: Eligible regions under objectives 1 and 2



owing to falling fertility rates[3]. In some of the lagging regions notably in Greece and Portugal, population may cease to grow altogether while in others, notably in Corsica and some Spanish and Italian regions, there may be a decline similar to what has already occured in other parts of the Community.

4. Nevertheless, during the present decade the rapid increase in the labour force will continue, owing to the flow of a large number of young people, born in the 1970s, on to the labour market. Between now and the end of the century, the labour force of these areas should increase by more than two million people, while it will stagnate in the other areas, which will place additional pressure for jobs on top of the considerable needs already present. Indeed, the average rate of unemployment in the Objective 1 regions is double[4] that of other areas (14 1/4% against 7%). With regard to women, the ratio is 2,3: 1 (21% against 9%) and, for young people, it is 3: 1 (32 1/4% against 11 1/4%). During the second half of the 1980s there was a slight decrease in unemployment in the backward regions. This situation was primarily due to a deterioration of the labour market situation in the Italian areas concerned, while there was an improvement in the other backward regions where in a number of cases (E, P) the unemployment level fell more quickly than the average of the Community.

5. The mean income (GDP per head expressed in PPS) of lagging regions fell by one percentage point with respect to the average of the Community during the five years which preceded the reform (see table 5). As in the case of the labour market noted above, this results from 'divergent' development (Greece, Corsica and the majority of Italian regions concerned) and 'convergent' (Ireland, Spanish regions, Portugal and Northern Ireland) with respect to the Community average. Productivity (GDP per person employed) also increased in a significant way in most of the Spanish regions, in Campania and Abruzzi (I), in Ireland and in Portugal during this same period.

6. By taking into consideration jointly the unemployment rate and the GDP per head, it is possible to distinguish lagging regions which experienced during the 1980s a favourable development overall (see graph 5). In this respect, Portugal (as from 1985) and the majority of Spanish areas can be described as convergent, attaining increases in GDP per head faster than the average together with a more significant reduction in the unemployment rate. Similarly, Ireland, Northern Ireland, three Adriatic Italian regions and most of the other Spanish regions[5] have experienced above average output growth, although their relative unemployment levels worsened somewhat. Greece and the majority of the Italian regions have developed less favourably and have diverged from the Community average both in economic output and labour market terms. For Objective 1 regions considered overall, there was, before the reform of the structural funds, no trend towards convergence since both the mean unemployment rate and level of income per head were

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3 See section 2.3.

4 This divergence would be more marked if the various forms of under-employment could be measured. Taking into account under-employment in agriculture, the unemployment rate in the Objective 1 areas might be adjusted upwards by three percentage points against only one point in the other areas.

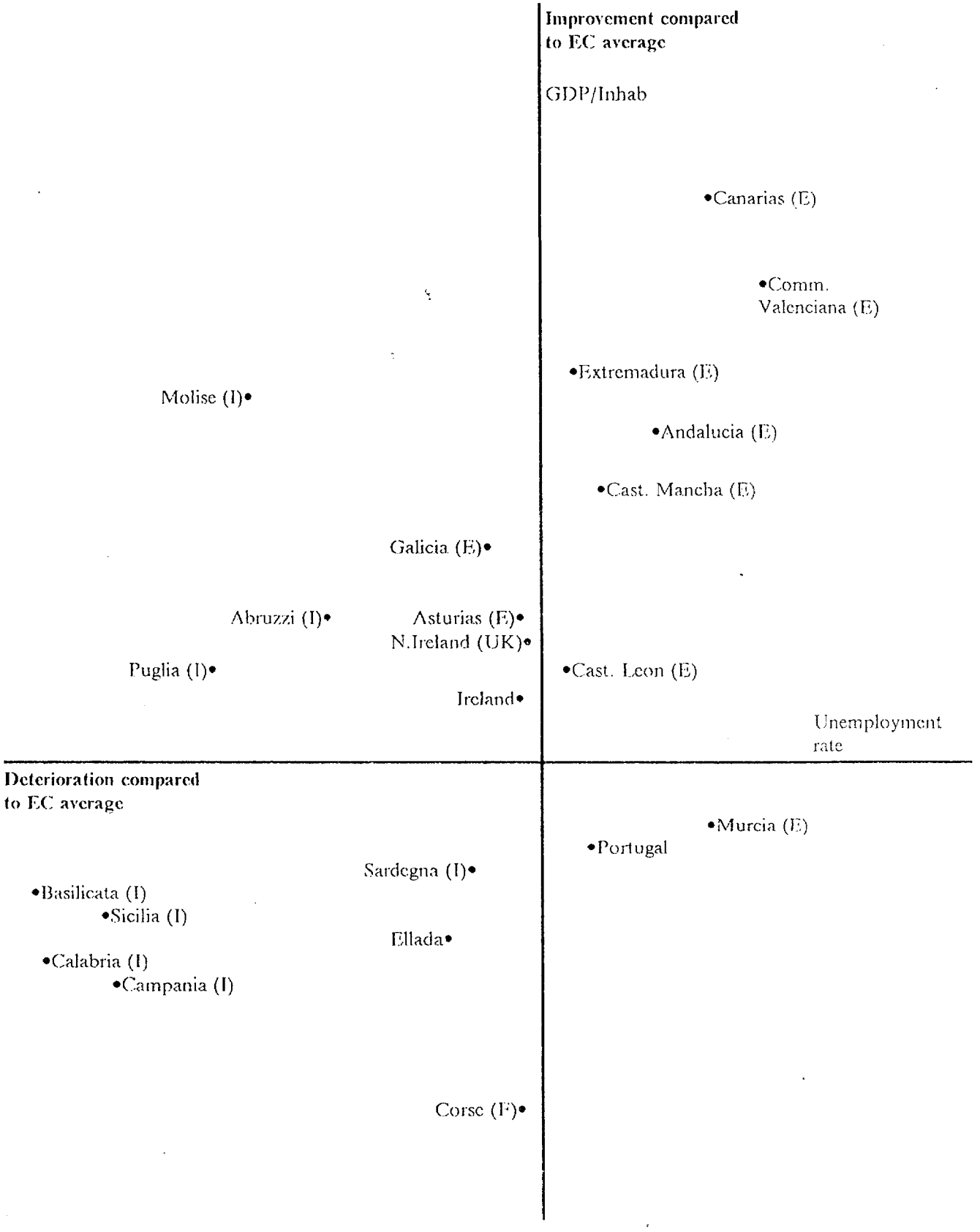
5 Murcia (E) was an exception with a rapid reduction in the unemployment rate but with slightly divergent GDP.

Table 5: Social and economic situation of objectives 1 and 2 regions[1]

Regions	Density Inhab/km² (1987)	Labour market				Economy				
		Participation rate[2] in % (1988)	Unemployment rate			Sectoral structure			GDP EUR12 = 100	
			total in % (1990)	Change in % points (1985-1990)	Average (1988/89/90) EUR12 = 100	Share of sectors in total employment (1985)			Per inhabitant in PPS	
						Agriculture	Industry	Services	1983	1988
Objective 1	76.0	40.0	14.3	-0.3	165.7	21.3	27.5	51.1	67.9	66.9
Other regions[3]	178.0	44.9	6.9	-2.9	84.8	5.2	35.0	59.0	103.1	103.2
Objective 2	271.0[5]	42.9	9.5	-4.2	125.1	3.4	38.2	58.0	91.3	98.1
Other regions[4]	132.0[5]	43.6	8.0	-1.8	94.9	13.2	32.8	54.1	100.7	101.6
Non obj.1 and 2 regions	148.2	44.0	6.2	-2.7	74.0	12.5	33.1	54.4	102.8	104.5
EUR12	143.6	43.5	8.3	-2.4	100.0	8.6	32.3	59.1	100.0	100.0

[1] *Figures for objective 2 regions cover all NUTS 3 regions where at least 50 % is eligible, exception see 5*
[2] *Total labour force as a share of total population*
[3] *Including regions eligible under objective 2*
[4] *Including regions eligible under objective 1*
[5] *Total objective 2 regions and total other regions*

Graph 5: Changes in the position of the objective 1 regions compared to the Community average during the 1980's



not evolving favourably, even if encouraging signs were perceptible in some cases.

5.2 Declining industrial areas (Objective 2)

7. The declining industrial zones eligible for objective 2 are NUTS-3 level regions, or more often, parts of these regions,[6] with the result that statistics comparable with Community definitions are practically unobtainable. The analysis of Objective 2 areas which follows is consequently based primarily on the data for the NUTS-3 regions where at least half of the population is eligible for Objective 2.

8. The industrial areas covered by Objective 2 are on average very densely populated (on average more than twice the average of the Community) with in certain cases densities exceeding 1,000 inhabitants per km2. Consequently this involves zones which are often confronted with important problems of regional planning, such as those connected with congestion, the dereliction of factory sites, and pollution.

9. In 1990, the unemployment rate in Objective 2 regions was more than 1 1/4 percentage points higher than the average of the Community (9.5% against 8.3%, see table 5), although at rates appreciably lower than that of the lagging regions. Between 1985 and 1990, the rate has decreased on average by 4 1/4 percentage points, more quickly than in the Community as a whole (- 2 1/2 points). In general the unemployment rate has tended to react favourably to economic growth in the Community in recent years. Consequently, the list of the areas meeting the eligibility criteria for Objective 2 could change more quickly than, for example, that of Objective 1 regions as time evolves. Provisional statistics suggest that updating the calculation would result in a few changes leading, in net terms, to a certain reduction in population coverage of the basic list. This development will be monitored regularly, to see if this tendency is confirmed. In any event, the zones currently on the list will remain eligible for at least the duration of the Community support frameworks for Objective 2, i.e. to the end of 1991.

5.3 Rural areas (Objective 5b)

10. The rural areas of the Community cover more than four fifths of its territory and around one third of its population. More than half of these rural areas are outside the lagging regions[7]. Those rural areas which are eligible for Objective 5b represent 17% of the territory of the Community but only 5% of its population. The low population density of Objective 5b areas, among which are areas of less than 20 inhabitants per km2, constitutes only one of a number of handicaps. To this handicap limited access can be added (insularity, peripherality

6 Of the 131 NUTS-3 level regions concerned, only 27 are entirely eligible for objective 2. See also Box 5.2.

7 In order to deepen the understanding of the nature of the rural areas of the Community, the Statistical Office is launching a joint study in cooperation with the OECD to define such areas in a Community context and to collect data.

with respect to the economic centres, mountainous situation, etc.) which constitutes a disadvantage both for the development of modern agriculture and for the establishment of new economic activities. These areas include, moreover, certain weaker zones which have experienced depopulation owing to migration of more than half of their population during the last 25 years in some cases, brought about by weak diversification of industries and services and of the lack of new job creation.

11. Rural areas tend not to have high rates of unemployment compared to the rest of the Community. This is often a result, however, of the outmigration of young people from rural areas as well as the existence of under-employment (hidden unemployment) in the agricultural sector. Over time the agricultural sector has become less important. In employment terms it is now about half the size of the production sector in rural areas where an estimated 25-30% of the total employment is to be found, mostly in small and medium sized enterprises.

12. Rural areas eligible under Objective 5b possess a diversity of assets. In particular the ecological endowment of rural areas represents an asset both for rural inhabitants and for urban visitors. This endowment offers the prospect of alternative sources of employment for those wishing to leave the land and alternative sources of income for those wishing to remain on the land. Among the areas for potential development are those in the tourism and craft production sectors (both independent from, and complementary to, agricultural activity) and in the development of small and medium sized, rurally-based enterprises. Measures under Objective 5b will complement those under Objective 5a which aim to add value to local primary production through improvements in the food processing sector, in product marketing, etc.. In the primary production sector itself, there is scope for diversification of production including the exploitation of specialist markets.

BOX 5.2

The delimitation of Objective 2 areas: NUTS 3 regions and labour market areas

1. The areas eligible under Objective 2, (industrial regions in decline), were determined according to three criteria:

(a) the average rate of unemployment recorded over the last three years must have been above the Community average;
(b) the percentage share of industrial employment in total employment must have equalled or exceeded the Community average in any reference year from 1975 onwards;
(c) there must have been an observable fall in industrial employment compared with the reference year chosen in accordance with point (b).[1]

2. Areas meeting these criteria had to represent or belong to NUTS 3 regions and in addition provision was made for the inclusion of: adjacent areas satisfying criteria (a) to (c) above, urban communities with an unemployment rate 50% above the Community average and having experienced a substantial fall in industrial employment and other areas with particularly severe sectoral problems.

3. On the basis of these criteria a list of regions (located in 9 Member States) was drawn up which, in the event, represented a coverage of some 25% of the Community's population. This figure exceeded the guideline that coverage under Objective 2 should be limited to 15% of the Community population[2]. To respect this guideline, the Member States, at the request of the Commission, provided a break-down of the regional figures into the most appropriate sub-regional level in order to identify the parts worst affected by industrial decline. Depending on the context, and the availability of data, a number of different types of sub-regional area were used in the different Member States.

4. In 7 Member States, the sub-regional units were based essentially on administrative areas. In terms of underlying principle, such units differ from NUTS units only in terms of size, since the latter are also based on administrative areas. For 2 Member States, UK and F, the sub-regional units used were functional rather than administrative areas defined according to labour market criteria[3].

5. These functional units are intended, in the countries concerned, to represent relatively self-contained local labour markets so that commuting to and from work occurs to a large degree inside the boundary of any such area. As such, these areas were highly suitable in the identification of problem areas in terms of both employment, and unemployment, change.

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1 Regulation (EEC) No 2052/88, Article 9.
2 Ibid, 18th recital.
3 Labour market areas also exist in West Germany but were not used to identify the worst-affected areas because they are generally bigger than the NUTS 3 administrative units.

6. At present, however, labour market areas exist in only three Member States. Even then, there are differences in the way the concept of labour market area has been operationalised (see table). In view of the potential usefulness of labour market areas in future in Community regional policy the Statistical Office is currently exploring the possibility of extending the concept more widely among the Member States based on harmonised definitions.

Table: Some properties of labour market areas

	D	F	UK
1. Name	Arbeitsmarktregionen	Zone d'Emploi	Travel-to-Work Areas
2. Total number in country	179	365	334
(Total number of NUTS Level 3)	(328)	(100)	(65)
3. Average size			
3.1 population (1985)	341,000	151,000	170,000
3.2 km2	1390	1490	731
4. Self-containment	50%	50%	70-75%
5. Data available	GDP Employment Unemployment Population Wage rates	Employment Unemployment Population	Employment Unemployment Population
6. Spatial 'building block'	Gemeinden	Commune	Ward

Chapter 6 REGIONAL POLICIES OF THE COMMUNITY SINCE 1989

6.1 General elements

1. In the context of the completion of the Single market, as a step on the way to further Community integration, the European Regional Development Fund (ERDF) and Community regional policy were explicitly included for the first time in the treaties (Article 130 C) establishing the European Communities. The guidelines for the implementation of the Community's aims in this regard were outlined initially in the communication of the Commission "to make a success of the Single Act - a new border for Europe"[1] before being presented formally in a framework regulation[2] applying to the three funds and four specific regulations[3]. All of these new regulations came into force on 1 January 1989.

2. The aim of this reform of the structural funds was, on the one hand, to concentrate the actions of the funds on a limited number of priority objectives, and, on the other hand, to establish a new approach to implementation and management.

3. For all of the funds concerned the reform introduced a number of new elements:

- a concentration of the Funds' actions in favour of a limited number of clearly defined objectives among which particular importance was attached to the increased development of the lagging regions (Objective 1);
- a doubling of resources compared to 1987 to be introduced gradually by 1993 (or 1992 in the case of regions covered by Objective 1);
- changes in management regarding the drawing up of Community support frameworks and of the procedures regarding the follow up of implementation and the evaluation of the actions;
- interventions by multiannual programmes rather than by projects, in order to ensure better coherence and effectiveness in the actions undertaken;
- a delegation of powers by the Council to the Commission to allow the launching of programmes on the initiative of the Community (see chapter 7);
- closer coordination between the three structural funds and the other financial instruments of the Community so that the regional support frameworks cover and coordinate the interventions of all the financial instruments concerned;
- an important strengthening of partnership through the participation of the regions in the preparation and implementation of the programmes;
- the use of a variety of forms of financial assistance on the part of the Community with greater flexibility in the granting of advances.

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1 Doc. final COM(87)100.

2 Regulation (EEC) n° 2052/88 of the Council at its meeting on 24 June 1988.

3 Regulations (EEC) n° 4053/88 to 4256/88 of the Council at its meeting on 19 December 1988. Regarding the Community regional policy before 1989, see 3rd periodic report, Chapter 5.

4. For the ERDF itself the reform introduced further new elements. Firstly, it introduced a major concentration of its field of intervention, functionally as well as geographically. In particular, there has been an important concentration of around 80% of appropriations available on Objective 1 regions. Secondly, the system of predistribution determined by the Council was replaced by an indicative distribution between Member States of 85% of the commitment appropriations of the ERDF determined by the Commission (this distribution being to facilitate the programming of the actions).

6.2 Geographical and financial concentration

5. The actions under the ERDF are concerned with the three Objectives of the reform outlined in chapter 5 which are regional in nature. The regions and the zones eligible for these Objectives were determined on the basis of Community statistical criteria and thresholds and according to procedures laid down in the regulations on the structural funds. The ERDF may not intervene outside these areas, with one minor exception. With regard to Objectives 2 and 5b, the eligible zones were delimited on a fine geographical level (regional level NUTS-III, or below) so as to concentrate Community action on the most seriously affected zones, while attempting to avoid dispersing it on small, isolated problem areas.

6. Member States can and do, of course, comprise regions eligible under different Objectives. In this respect, three groups can be distinguished. Firstly, the weakest Member States (GR, P and IRL) are entirely eligible under Objective 1. Particular problems of rural development or of reconversion of industry in these countries are consequently addressed in the CSFs under Objective 1. Secondly, in four Member States (E, F, I and the UK) actions are undertaken involving, according to the region concerned, one or other of all three regional Objectives. In terms of population, the rate of coverage by Community Objectives in these four Member States are, respectively, 83% in the case of Spain, 48% in Italy, 40% in the United Kingdom and 30% in France. Thirdly, the five other Member States contain regions and other areas eligible under Objectives 2 and 5b. Their coverage rates as a proportion of population are generally weaker than in the two other groups (L= 39%, B= 25%, D= 19%, NL= 13% et DK= 7%).

7. Overall, Objectives 1, 2 and 5b cover respectively 21 1/2%, 16 1/2 %[4] and 5% of the population of the Community, making a total of 43% (table 6.2), compared to 44% before the reform.

8. In spite of this apparently limited concentration in terms of overall population coverage, concentration has been achieved from two important points of view. The population coverage in the most lagging Member States increased substantially (see columns 4 and 5 of table 6.2) by inclusion in their entirety under Objective 1. Additionally, the Member States having large backward regions (E and I) also are more comprehensively covered than in the past. On the other hand, the proportion of eligible zones in the most prosperous Member States of

4 0.3 % has to be added to take into account the extension of the list decided in May 1990 within the framework of the Community initiative relating to the economic reconversion of the coal mining areas (RECHAR).

Table 6.2: Share of Member States' population covered by each objective of the Regional Fund[1]

Countries	ERDF after the reform				FEDER before the reform[2]
	Objectif 1	Objectif 2	Objectif 5b	Total	
B	-	22.1	2.7	24.8	33.1
DK	-	4.9	2.1	7	20.7
D	-	11.4[3]	7.4	18.8[3]	37.5
GR	100.0	-	-	100.0	65.7
E	57.7	22.2	2.5	82.6	66.4
F	2.7	17.8	9.7	30.2	40.2
IRL	100.0	-	-	100.0	100.0
I	36.4	6.6	5.0	47.8	38.8
L	-	38.0	0.8	38.8	79.5
NL	-	9.9	3	12.9	14.7
P	100.0	-	-	100.0	100.0
UK	2.8	35	2.6	40.4	37.7
EUR12	21.7	16.4[4]	5.0	43.0	43.8
Population in millions	69.6	52.6	16.0	138.2	140.4

[1] *Based on 1986 population*
[2] *Source: Commission of the European Communities, ERDF, 14th annual report, Brussels 1990*
[3] *Including Berlin(West), representing 3,1% of population of West Germany*
[4] *Without the extension of the objective 2 list in 1990 (RECHAR), which adds 0.3 % points*

the Community was reduced appreciably (B, DK, D, F, L and NL). Noteworthy, however, is the slight increase in population eligible in the United Kingdom.

9. As well as concentration in terms of population in favour of the lagging regions, there is also an important financial concentration. The resources available to the Objective 1 regions, which now cover half of the population eligible for the ERDF, will reach around 80% of the resources of the ERDF compared to approximately 70% of the commitments of the fund during the 1986-1988 period. For the three Funds taken together, the share of commitments in backward regions will also increase from 56% in 1987 to 63 1/2% for the 1989-93 period. There is in other words a double concentration, geographical and financial, which represent essential elements of the effort to strengthen economic and social cohesion in the Community.

10. In relation to corresponding systems of national regional aid, the situation has now changed compared to before the reform when all the zones eligible for the national aid were also eligible for assistance from the ERDF. On the one hand, a number of areas eligible for national aid are no longer eligible for assistance from the ERDF (equivalent to 5% of the Community population). On the other hand, there are certain zones eligible for one or other of the Community Objectives which were not eligible for the national systems of aid at the time of the determination of the Community lists. These zones respresent approximately 4 per cent of the population of the Community.

6.3 Functional guidelines and priorities in the adopted Community Support Frameworks

11. In the framework of supporting actions, mainly taking the form of operational programmes, the ERDF can cofinance investments of very different nature ranging from large communication infrastructures to investments in enterprises themselves. Between these extremes, assisted investments include, for example, those in basic infrastructures such as water and energy supply, or in supporting structures to enterprise development (provision of industrial sites linked to services, commercial infrastructures, telecommunication services, protection measures for the environment, etc), or investments in services to enterprises (consultancy, research and development, etc). In order to maximize their impact, resources have been concentrated on a limited number of priorities within each Community Support Framework. These priorities were determined in partnership with the competent authorities in the Member States and regions. Bearing in mind the specific needs of each region, a balance has been sought between the investments devoted to the infrastructures and those in the productive sector.

12. In a number of regions lagging behind, there exist serious deficiencies in basic economic infrastructures necessary for economic development, to which the ERDF will devote approximately 60 per cent of its expenditure in the Objective 1 regions as a whole. Two-thirds of these are infrastructures to improve access such as transport networks and telecommunication systems. The proportion of ERDF funds devoted to basic infrastructures cofinanced by the regional fund is more than 60%

in Greece, and in the lagging Spanish and French regions, owing to their very peripheral situation and insularity, or simply to their insufficient endowments in this respect.

13. Meanwhile, the accent will be placed on cofinancing investments to improve the productive sector in Portugal and more especially in Italy where this expenditure will amount to 40 per cent of the total expenditure of the fund, considerably more than the average for Objective 1 (30%). The remainder of the expenditure of the ERDF (10 %) will be devoted to local development actions comprising a range of measures to stimulate regional economic development in relation to services to business (financial and non-financial), encouragement of entrepreneurship and the development of human resources in general, and the development of local tourism. These involve priorities for which the contribution from the other structural funds is particularly important. Indeed, for the three Structural Funds taken together, only one third of the expenditure will be devoted to basic infrastructures and one quarter to the productive sector. A further quarter will concern tourism, agriculture, rural development and human resources and the remaining fifth will be used for horizontal (i.e. non-regional) measures (Objectives 3, 4 and 5a).

14. The proportion of ERDF expenditure devoted to basic infrastructures is decidedly lower in Objective 2 areas, amounting to only 16% of the expenditure of the regional fund and involving only three Member States, namely Spain, the United Kingdom and, more marginally, Belgium. More than three-quarters of ERDF expenditure supports investments aimed directly at the improvement of the productive sector in the declining industrial areas, more than half of which will concern direct investments in enterprises or services. In the majority of the Member States concerned, the proportion of investments in the productive sector or activities closely linked to this sector amounts moreover to approximately 90% (B, F and I) or even at 100% (DK, D and L) of the total commitments of the ERDF.

15. Although the distinction between investments in the productive sector and in infrastructures is not precise in the classification of priorities[5], a clear orientation can be discerned towards direct Community support to increase the competitiveness of the productive sector with an emphasis on promoting local initiative. In particular this applies to areas covered by Objective 2. This corresponds to the guidelines concerning Community interventions that the Commission declared before the beginning of the negotiation of CSFs[6]. In a number of cases, the aim registered in the earlier regulation governing the ERDF[7] to allocate 30% of the resources of the fund to investments in industry, artisanal activities and in the service sector is now achieved in the Objective 1 regions and largely exceeded in those of Objective 2.

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5 A part of the investment relating to the support economic activities and to the development of the local and human resources can be devoted to infrastructures. These are however linked to the productive sector.

6 Set of guidelines of the Commission of February 1989 (Doc. C(89) 287 final).

7 Article 35 of the Regulation (EEC) n° 1787/84 of the Council, of 19 June 1984, relating to the ERDF.

Chapter 7 COMMUNITY POLICIES AND COMMUNITY INITIATIVES IN THE REGIONS

7.1 The role of Community initiatives

1. The actions of the Community under the structural funds extend beyond the measures discussed in chapters 5 and 6. In particular, the European Commission is empowered to launch "Community initiatives"[1] designed
- to help resolve serious problems directly associated with the implementation of other Community policies ...;
- to promote the application of Community policies at regional level, or,
- to help resolve problems common to certain categories of region.

2. Whereas the Community Support Frameworks discussed in the previous chapter are based on national development plans, Community initiatives are transnational programmes but with an equally strong accent on the involvement of regional and local authorities in their preparation and implementation. Community initiatives are therefore a further application of the concepts of partnership and of subsidiarity, two key principles underlying the reform.

3. A principle aim of Community regional policy is to ensure that enterprises in lagging regions, as well as those in industrial regions in decline, can seize the opportunities arising from the completion of the single internal market in 1992. For the most part, Community initiatives are directed towards creating a favourable environment for enterprise development adapted to the needs of the single market and the greater intensity of competition.

4. Community initiatives have been conceived as far as possible in such a way as to promote the successful implementation of certain Community policies at the regional level in order to increase the efficiency of these policies in terms of their contribution to the development of the less-favoured regions. For example the STRIDE initiative, which is aimed at strengthening the research capacity of Objective 1 (and certain Objective 2) regions and increasing the participation of both enterprises and centres of research in research programmes financed by the Community, will seek to increase the contribution of Community policies in science and research to the development of capacity in this field in the weaker regions.

7.2 Financing Community initiatives

5. During the period 1989 to 1993, a total of 60,3 billion ECUs (1989 prices) is available in commitment appropriations for the structural funds. Out of this total, an amount of 5,5 billion ECUs has been

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1 Following the Reform of the structural funds, the legal basis for Community initiatives is to be found in Article 11 of Regulation (EEC) 4253/88 and, as regards the European Regional Development Fund (ERDF) more particularly, in Article 3.2 of Regulation (EEC) 4254/88.

earmarked for Community initiatives (about 9% of the total)[2]. In addition, loan finance may also be made available where appropriate.

6. The 5,5 billion ECUs for Community initiatives must, first of all, finance existing Community and non-quota programmes which continue up to 1993: 1,7 billion ECUs of commitment appropriations is estimated to be necessary for this purpose (see box 7.2). The remainder, 3,8 billion ECUs, is available for new Community initiatives, approved after the Reform of the structural funds. A predominant share of finance will come from the ERDF, although no distribution by fund is fixed for any of the programmes in advance of the evaluation by the Commission of proposals submitted.

Box 7.2

Existing Community programmes

1. STAR — Objective: to improve the access of regions lagging behind to advanced telecommunication services

   Community contribution: 780 MECU for the period 1987-1991

2. VALOREN — Objective: to contribute to regional development by a better use of endogenous energy potential

   Community contribution: 400 MECU for the period 1987-1991

3. RESIDER — Objective: to contribute to the conversion of regions affected by the restructuring of the steel industry

   Community contribution: 300 MECU for the period 1988-1992

4. RENAVAL — Objective: to assist the conversion of regions affected by the restructuring of the shipbuilding industry

   Community contribution: 200 MECU for the period 1988-1992

2 The regulations governing the Structural Funds do not set aside specific amounts for Community initiatives. Article 12 of regulation (EEC) n° 2052/88 lays down a number of requirements regarding the distribution of resources which Community initiatives must also respect. In particular, it is stated that the ERDF may devote approximately 80% of its appropriations to Objective 1 regions and also that the Commission will establish, as a guide, the allocation to Member States of 85% of the commitment appropriations for the ERDF: Community initiatives are to be financed, in normal circumstances, from the remaining 15%.

7.3 Community initiatives adopted since the Reform

7. Of the 3,8 billion ECUs available for new Community initiatives, 3,2 billion ECUs is indicatively allocated to objectives of a regional character (1, 2 and 5(b)), and the remaining 0,6 billion ECUs to initiatives for vocational training (1). These initiatives are listed below in box 7.3 together with indicative amounts of Community assistance, and are described briefly thereafter.

Box 7.3

New Community initiatives

Title	Indicative envelope for Community contributions: 1990 to 1993 (MECU)
RECHAR	300
ENVIREG	500
INTERREG	800
REGIS	200
REGEN	300
EUROFORM, NOW, HORIZON	600
STRIDE	400
PRISMA	100
TELEMATIQUE	200
LEADER	400
TOTAL.	3800

RECHAR

8. RECHAR may be considered as the third in a series of actions which began with RESIDER and RENAVAL, directed to helping resolve some of the most acute problems of declining industrial sectors and regions. Zones eligible for RECHAR are defined as small geographical areas characterised by the existence of mining communities. RECHAR aims to accelerate economic adaptation in the coal mining areas most affected by past and probable future job losses. A priority is given to improving the local environment, to the promotion of new economic activities, and to the retraining of former miners.

ENVIREG

9. ENVIREG addresses the environmental problems of the Mediterranean basin, and other Objective 1 regions. Its aim is to demonstrate better methods of dealing with waste water in coastal areas, especially where this imperils the future of tourism as well as the reduction of marine pollution arising from the washing of ship's bilges, and the proper treatment of industrial and other toxic wastes[3]. A special feature of

3 ENVIREG is accompanied by MEDSPA, a programme with similar priorities offering limited financial assistance to cover Mediterranean coastal areas of the Community not eligible for assistance from the structural funds and those of third countries in the Mediterranean basin.

ENVIREG is the attention given both to the selection of technologies and the proper maintenance and operation of installations. In addition to a major effort of technical assistance, new administrative structures will often be needed or existing structures must be reinforced.

INTERREG

10. In view of the abolition of physical frontiers under the programme to complete the internal market, INTERREG is designed to promote cooperation between the areas adjoining existing frontiers to ease the integration of their economies. INTERREG is also intended to help both internal and external border areas overcome special development problems arising from their relative isolation within national economies, and indeed, for external borders, within the Community as a whole. This initiative provides for a wide range of possible actions, laying the emphasis on adapting and reorienting existing agencies rather than sectoral intervention. Particular attention will be given to creating alternative employment opportunities in areas where significant job losses may arise due to changes in customs and other border-related activities following the completion of the internal market. For internal borders, it is intended to create and develop networks of co-operation between private agents and public bodies across borders, including the development of shared institutional or administrative structures, when possible, for joint planning and implementation. For all borders, the full involvement of regional and local authorities, in consultation with national authorities, is promoted as a means of mobilising the local population. Where border areas are seriously deficient in infrastructures, transport and other communications systems are to be developed. Community assistance is concentrated mainly on objective 1 regions, where the problems are greatest, and the tradition of cross-border co-operation least developed. Greece, which is geographically isolated from the rest of the Community and which has many island communities, is a major beneficiary of this initiative. Portugal and Spain which have the longest internal land border in the European Community between two Member States, are also major beneficiaries. In view of its significant interest to the Community, the financial amounts assigned to INTERREG are relatively important.

REGIS

11. Some territories of the Community are especially remote in geographical terms from the rest of the Community: the French DOM, the Canary islands, Madeira and the Azores. REGIS is an initiative which is situated in the general framework of Community actions towards regions in the ultraperiphery whose medium-term aim is to accelerate the diversification of the economies of these regions. Wherever possible, economic co-operation with neighbouring countries is to be fostered as part of this diversification, as well as the development of their access to Community-wide markets, to reduce their dependence on their traditional metropolitan outlets.

REGEN

12. Another drawback of peripherality is a lack of integration into Community-wide transmission networks for gas and electricity. REGEN addresses this problem, with the aim of accelerating the installation of gas transmission networks in Greece, Portugal, Ireland, Corsica and Sardinia, and their interconnection with Community wide networks. The possible interconnection of electricity networks between Greece and Southern Italy may also be taken into consideration. Budget assistance is necessary, but a full use of loan and project finance should keep

requirements for grant aid to a minimum. Although the budget resources available to REGEN are limited, they are sufficient to make a start on the most urgent projects, while ensuring a cost-effective approach.

EUROFORM, NOW, HORIZON

13. These initiatives are concerned with vocational training in the Community as a whole and are not therefore of a regional character in the first instance, although certain measures are directed to regions covered by Objectives 1, 2 and 5b. The aim of the EUROFORM initiative is to add a Community dimension to vocational training by promoting transnational partnerships among professionals engaged in this field. These partnerships will focus on the effectiveness of training and the promotion of employment with particular emphasis on adapting vocational training systems to the development of new skills and to the new technologies. The NOW initiative is aimed at promoting equal opportunities for women in the fields of employment and vocational training to enable them to benefit from economic growth and the development of technology. The HORIZON initiative is targeted on the handicapped and certain other disadvantaged groups to promote their integration into the labour market.

STRIDE

14. The specific aim of STRIDE is to raise the capabilities of the regions in the fields of science technology and innovation (RTD) helping research bodies and industry cross the threshold of excellence enabling them to participate in the Community's RTD framework programme, and in other international action in support of advanced technology. It also seeks to promote collaboration between local scientific, technological and industrial capabilities, so as to create an economic environment more favourable to advanced industry and services, and a better use of local potential. An accent is placed on developing the local demand for pre-competitive research, alongside the development of capabilities to respond to that demand. STRIDE also aims to strengthen networks of co-operation on a national and Community wide basis, and better to adapt education and vocational training to the needs of the productive sector. STRIDE is concentrated mainly on Objective 1 regions, but does not exclude intervention in some Objective 2 regions. It provides the opportunity, in objective 1 regions especially, to pull together the diverse strands of policy for developing RTD demand and capabilities to permit science and research to contribute to regional economic development.

PRISMA

15. The PRISMA initiative is designed to help enterprises in Objective 1 regions meet particular challenges arising from the completion of the internal market: meeting Community-wide quality standards, and gaining access to public procurement outside local areas as markets are opened up. PRISMA also provides for the possibility of special action to help industries presently benefitting from protection under Article 115 (EEC). A large part of PRISMA's effort will be in the field of quality standards and certification in regions where testing and certification centres are inadequate.

TELEMATIQUE

16. Following on from the STAR programme, TELEMATIQUE takes up the challenge in Objective 1 regions of developing advanced telecommunications services for business. As such it complements the action of PRISMA [in relation to public procurement], and of STRIDE in relation to technology transfer. TELEMATIQUE also seeks to accelerate the introduction of advanced services related to telecommunications in

the public sector, where this contributes to regional development. In general, TELEMATIQUE will develop links between regional networks and Community-wide networks of advanced services.

LEADER

17. LEADER is a programme to promote rural development and is intended to foster a "bottom-up" mobilisation of local potential, in order to promote the diversification of rural economies and the maintenance of an adequate social and economic fabric. It provides assistance for networks of local rural development bodies, with delegated management of global grants. It also aims to promote new communications technologies. Its intention is to experiment with innovative solutions, and a better integration of sectoral measures, as a model for assistance proposed in the Community Support Frameworks. The initiative is for rural areas eligible under Objectives 1 and 5(b).

Chapter 8 COMPLEMENTARITY OF MEMBER STATES' AND THE COMMUNITY'S REGIONAL POLICY

8.1 Trends in national and Community policies and expenditure on regional policy.

1. The financial resources devoted to Community regional policy reached 5,4 mrd ECU or slightly more than 0,1% of Community GDP in 1990[1]. Ten years earlier only 1,2 mrd ECU were available for the same purpose. This considerable increase in the importance of Community regional policy is, however, somewhat more apparent than real. Firstly, the largest part of the increase, representing nearly one half, simply compensates for the effects of inflation. Secondly, more than a quarter of the increase occured in 1981 and 1986 and has to be assigned to the needs generated by two enlargements introducing three weaker Member States to the Community. As a result approximately one fifth could be said to represent additional real resources, reflecting the decision to double the Structural Funds by 1993, the first steps in this direction being taken between 1988 to 1990, together with a real increase for other reasons within the range of 1 to 2% p.a. over the last decade.

2. The resources available to Community regional policy have been overwhelmingly devoted towards economic infrastructures. In fact the part of ERDF expenditure devoted to stimulating business investment directly showed a marked downward trend in both relative and absolute terms up until 1988[2]. However, under the reform of the Structural Funds, the Community Support Frameworks adopted by the Commission in agreement with the Member States have struck a new balance between Community expenditures on infrastructure investment and support to business investment.

3. For data reasons[3] national regional policy expenditures refer only to those in relation to stimulating productive investment. In 1980, the Member States together devoted some 5,1 mrd ECU to business investment incentives. This figure increased to 7,2 mrd ECU by 1983, tending to level off thereafter[4]. Allowing for inflation, real expenditure in 1987 was 14% lower than in 1983 and some 8 1/2% lower than in 1980. Nominal and real expenditures by individual Member States experienced substantial short-term ups and downs. The trend

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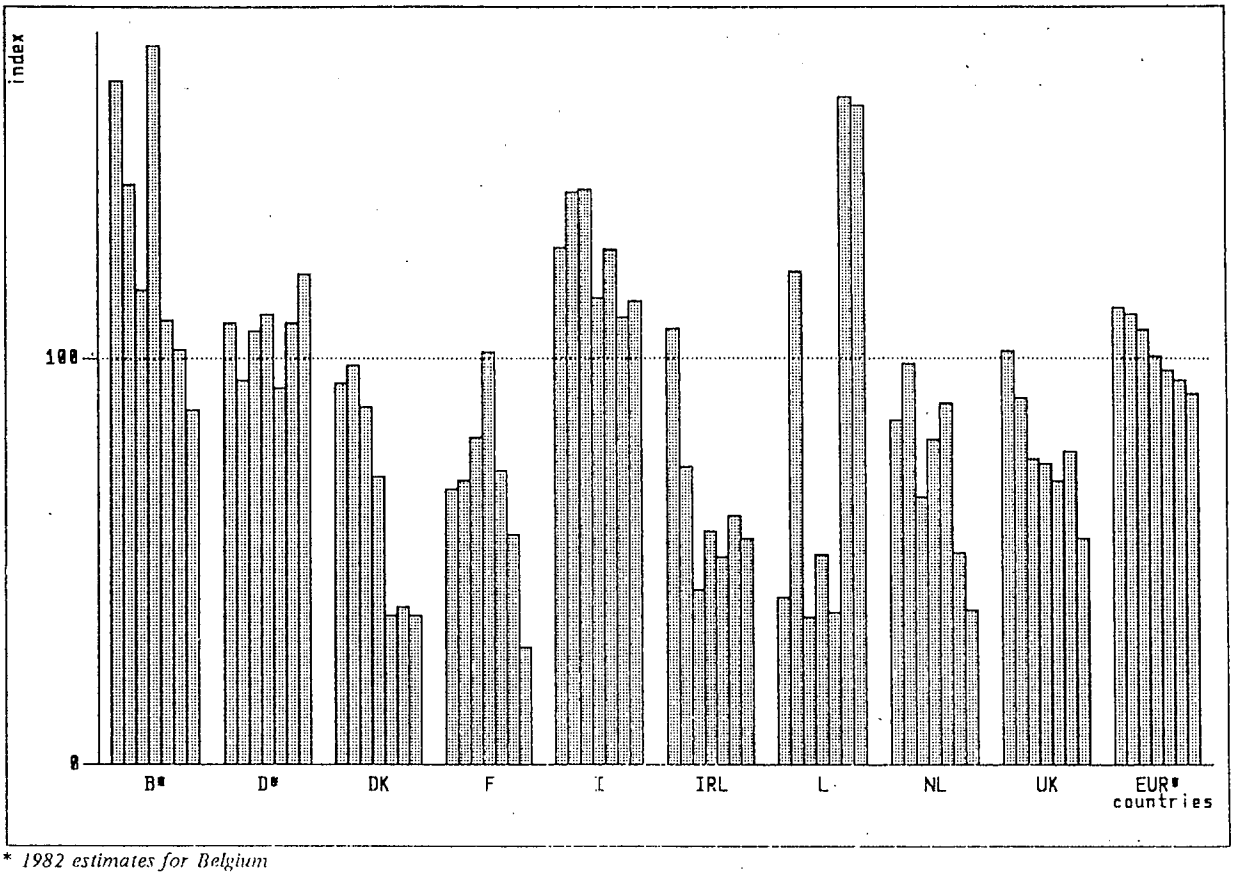
1 For data reasons, the figures relate to the ERDF although the Social Fund and the European Agricultural Guidance and Guarantee Fund also contribute to regional policy under the reformed Structural Funds.

2 ERDF expenditure on business investment incentives declined from 293 mio ECU in 1980 to 263 mio ECU in 1987 (in current prices, equivalent to a real decline of some 40 %).

3 The difficulty of distinguishing systematically between general and regional policy spending of Member States on infrastructures means that data comparable to those for the ERDF given in paragraph 1 are not available.

4 Source : Yuill, Allen, Bachtler, Wishlade, European Regional Incentives, 1990 Edition, London 1990 (MSS.) - Figures refer to EUR (9) excluding Greece, Portugal and Spain for which time series are not available.

Graph 8.1 : Real National Expenditures on Regional Investment Incentives 1981-1987, 1980 = 100



* *1982 estimates for Belgium*

* *1987 completed for Germany*

Source: Calculations after Yuill, Allen, Bachtler and Wishlade, European Regional Incentives 1990 Edition, London (M.S.) with price indices 1980 = 100 and exchange rates 1980 from EUROSTAT

over time is, however, one of real decline in most Member States starting between 1981 and 1983 (see graph 8.1).

4. It is important to note that regional policies in the Member States are generally only one, relatively small, component of aid regimes to the productive sector. Nearly three-quarters of assistance to the productive sector is not of a regional character in the first instance but is horizontal (in the fields of, for example, R and D, SMEs, environment, incentives to exporters, etc) or sectoral in nature including business rescue schemes[5].

5. The decline in public spending in real terms on national regional policy has gone hand in hand with changes in the design of regional investment incentives. In some countries the spatial coverage of regional policy has been reduced (Belgium, Denmark, the Netherlands and the UK) to focus on areas of greatest need. New instruments have been introduced to assist service industries and a new emphasis has been given to internally generated development through the encouragement of new employment opportunities in small and medium sized enterprises. Local agencies have been given the task of promoting regional development supported by centrally administered national incentive schemes. There has also been a substantial shift from automatic to more discretionary measures reflecting the fact that regional policy has become more selective, assisting projects and firms only when it was clear that specific benefits (in terms of additional jobs or output) would be forthcoming.

6. From the above analysis three conclusions emerge. Firstly, while the changes in national regional policy have probably led to more efficiency, the overall result has probably been to reduce their contribution to the solution of regional problems as expenditure has been curtailed[6]. Secondly, the downward trend in Community expenditure on business investment incentives was determined to a large degree by the similar trend in national regional policy orientations which Community regional policy was called upon to support and co-finance. Thirdly, it is the sectoral and horizontal subsidies which account for the major part of expenditures to assist the productive sector tending to maintain and even reinforce the existing pattern of inequalities in the Community.

8.2 The macro-economic weight of Community regional policy

7. The resources available to Community regional policy since the reforms discussed above create new opportunities for the regions. Since these reforms were only introduced in 1988 it is too early to quantify with sufficient precision the effects on the regions. It is possible, however, to indicate the relative importance of the

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5 Source: CEC (1990), Second Survey on State Aids in the European Community in the manufacturing and certain other sectors, Luxembourg. Regional aids represent 26% of the total volume of aids to the productive sector of which 17% are directed towards the least favoured regions (as provided in article 92.3.a of the Treaty) and 9% to other economic areas (article 92.3.c). Figures exclude aids granted to West German regions affected by the former division of Germany.

6 See study of PA Cambridge Economic Consultants (1989), The Efficiency of Regional Policy in Member Countries of the European Community. Study financed by the European Commission, Cambridge.

Structural Funds and to establish the conditions for their successful use in the regions concerned.

8. Community regional policy expenditures influence the development of Member States and their regions in two ways:

a) through the co-financing of physical investment[7] facilitating and stimulating government and business investment, which are prerequisites for a sustainable increase in employment, output and incomes;
b) through the transfer of financial resources alleviating possible balance of payments constraints and allowing a direct increase of available goods through additional imports.

9. On the first point, the contribution of Community regional policy to the financing of physical investment (in economic infrastructures and productive investment) can be illustrated by the ratio of ERDF expenditure to gross fixed capital formation (GFCF) for assisted regions. In 1989 the Regional Fund financed 0,5% of the Community's and more than 3% of Objective 1 regions' GFCF. In lagging Member States (Ireland, Greece and Portugal) it financed 5 to 7% of total investment. In other Objective 1 regions its support varied between 2 and 3% of GFCF. By 1993 these figures for Objective 1 regions should increase by a further percentage point in each case (see table 8.2).

10. In view of the higher volumes of Community expenditure on offer to the regions lagging behind, the argument is sometimes advanced that the latter may be unable to use, or "absorb", the resources available. Given Community definitions of investment expenditures which are eligible for assistance and limits on percentage rates of financial assistance, there is at least a formal risk that a region may be undertaking insufficient eligible investment to absorb the Community resources on offer. However, even where these resources rise to the equivalent of 7% of GFCF, the highest value observed in 1989, the required proportion of total investment which should be eligible in Community terms need be no more than around 20%[8] in order to absorb the financial assistance on offer. In the unlikely event of an absorption constraint arising clearly it could be alleviated by widening the definition of eligibility or increasing the rates of

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7 There exist also other measures to support new business initiatives not related to investment which are of minor financial weight.

8 This may be demonstrated arithmetically. If it is assumed that
- ERDF expenditure on offer is 7% of GFCF
- Aided investments are split 50/50 between business investment and infrastructural investment.
- Rates of Community assistance are
  . 50% for investment in infrastructure,
- . 20% for business investment;

then, to absorb the sums on offer, eligible investment must only be around one-fifth of total investment
(i.e. $0.07 \div (0.5 \times 0.2 + 0.5 \times 0.5) = 0.194$). Given that in Objective 1 regions rates of assistance for infrastructures can be as high as 75%, and given also that assisted investments in infrastructures generally exceed those in the productive sector, the threshold ratio of eligible investment to GFCF is likely to be even smaller.

Table 8.2: Commitments of the ERDF and the three Structural Funds as a percentage of investment and GDP in objective 1 regions, 1989 and 1993

Objective 1 regions	ERDF expenditure as a percentage of				3 Structural Funds as a percentage of GDP	
	Investment (GFCF)		GDP			
	1989	1993	1989	1993	1989	1993
GR	6.8	7.8	1.3	1.7	2.3	2.9
IRL	5.8	6.3	1.0	1.3	2.2	2.7
P	4.9	6.0	1.4	2.1	2.7	3.7
parts of E	2.5	3.0	0.6	0.8	1.1	1.2
F	3.1	10.0	0.7	2.2	3.3	4.6
I	2.1	2.8	0.5	0.6	0.7	0.9
UK	2.6	2.1	0.6	0.4	1.1	0.9
Total	3.1	4.1	0.7	0.9	1.2	1.6
EUR12	0.5	0.6	0.1	0.1	0.2	0.3
Estimations by DG 16						

assistance, or both. Absorption problems also, however, have other origins such as

- organisational and administrative problems at national and regional level;
- inadequate levels of regional investment especially in infrastructures.

11. In general terms problems of the absorption of increasing Community resources could be avoided if Member States increase their eligible expenditure by the same amount as the Community. In that sense the issue of absorption is clearly related to the general issue of the extent to which increases in Community expenditures on structural policies are complemented by increases in equivalent expenditures by the Member State (i.e. the principle of additionality in its broader sense). Whether it is the failure or inability on the part of the Member State to effect such increases, or whether the problem lies among the other causes of absorptive difficulties listed above, can only be assessed on a case by case basis. On the evidence of the past, problems of absorption were mainly related to organisational and administrative questions within Member States and regions.

12. On the second point in paragraph 8, the contribution of Community regional policy expenditures to the external balance and the availability of goods and services can be assessed by relating the ERDF expenditure to the GDP of countries and regions[9] assisted. In 1989 the ERDF supported Objective 1 regions by the equivalent of 0,7% of their GDP. The corresponding figures for the countries entirely covered amounted to between 1 and 1,5% of their respective GDP (Ireland, Greece and Portugal) while Objective 1 regions in other Member States obtained between 0,5 and 0,7% of their GDP (see table 8.2)[10].

13. As the two other Structural Funds intervene also in favour of regional development, the Community support through all three Funds taken together reached 1,2% of Objective 1 regions GDP in 1989. This figure will move up to 1,6% by 1993. For the most lagging Member States (Ireland, Greece and Portugal) total assistance will reach 2.7% to 3.7% of their GDP in 1993.

14. What then will be the real effects of Community resources on recipients production, income and employment levels? If these resources are used for consumption instead of investment in human and physical capital, barely any lasting effects on production potential, output growth and income levels can be anticipated. If instead these resources are used for additional investment in raising labour force qualifications, infrastructures and the real capital stock of firms (actions which are "eligible" in Community terms) substantial lasting effects should materialize. It is of course for this reason that the maintenance of additionality is of such crucial importance. While the direct and indirect dynamic effects of using transfers to enhance economic capacity cannot be quantified at regional level at present for data reasons it can be taken for granted that the increase in regional GDP will exceed substantially the value of the transfer itself

9 GDP figures for Obj. 2 and 5b areas are not available.

10 The difference between these two groups shown up by these figures reflects the methodology used to fix the indicative allocation between Member States (according to GDP per head of regions and GNP per head of their corresponding Member State) and the level of GDP of the regions concerned.

over the medium and longer term and help to set the weaker regions on a path to faster growth consistent with the aim of converging economically on the stronger regions. Of course, in the light of the size of disparities described earlier, and of the time required to reduce these disparities discussed in chapter 4, a marked relative improvement in the situation of the weaker regions remains a long term challenge, even after the doubling of the Structural Funds.

C. THE REGIONAL EFFECTS OF ECONOMIC INTEGRATION IN THE COMMUNITY AND THE CHANGES IN CENTRAL AND EASTERN EUROPE

Chapter 9 THE REGIONAL IMPLICATIONS OF EUROPEAN INTEGRATION

9.1 The internal market programme

1. The results of the detailed micro-economic studies and econometric simulations carried out in the context of the "Cost of Non-Europe" research programme indicate that the removal of all remaining barriers to the free movement of people, goods, services and capital within the Community could, in the medium term, raise Community GDP by 4 to 5 percent, reduce inflation by 6 percent and result in the creation of nearly 2 million new jobs[1]. As indicated in chapter 1 past experience suggests that a buoyant overall performance of the European economy facilitates regional convergence. The general improvement of the economic conditions, brought about by the completion of the internal market, can therefore be expected to enhance significantly the development prospects of the Community's less favoured regions. At the same time, however, the 1992 process carries certain risks as well as opportunities for the regions as discussed below.

9.2 The sensitivity of regions to 1992

2. The sensitivity of a region's economy to the measures contained in the 1992 programme will depend to a great extent on its position in relation to those factors of regional competitiveness described in chapter 3. In a dynamic framework, the exploitation of specific regional advantages to serve specialized product markets Community wide will allow regions to benefit from the opportunities opened up by the Internal Market Programme. In turn this requires a continuous effort to upgrade such basic factors of competitiveness as available infrastructure, the quality of human resources, research and development, the availability of high level business services, infrastructure for certification and testing and specialised factors such as industrial clusters of related firms, specialised institutes of higher research and particular forms of local demand.

3. In attempting to assess the effects on a region's economy of the measures contained in the 1992 programme, one approach - albeit within the limits of a static framework - is to consider the present sectoral structure of the different parts of the Community and how it will be directly affected by the completion of the internal market. On the basis of an assessment of the 1992 programme and of the characteristics of 120 manufacturing sectors of the Community economy, Buigues and Ilzkovitz have identified 40 industries likely to be directly affected[2].

4. The 40 industries represent just over half of total manufacturing employment and around one-eighth of total employment in the Community. Among the most sensitive sectors are those which are heavily dependent

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1 Commission of the European Communities (1988), The economics of 1992, European Economy, Nr. 35.

2 Commission of the European Communities, Directorate-General for economic and financial affairs (1989), Les Etats membres face aux enjeux sectoriels du Marché intérieur.

on public procurement, such as telecommunications and railway equipment. In addition to these industries, there is a wide range of other industries operating in markets which are characterised by the persistence of non-tariff barriers (technical standards, Article 115 import quotas). They include agro-food industries, textiles, shoes and clothing, various branches of mechanical and electrical engineering and the basic chemical industry.

5. Having identified the sensitive sectors, Bulgues and Ilzkovitz found significant variations in their share in total manufacturing employment between Member States reflecting, at least in part, national differences in the level of protection from competition. The highest shares were in Portugal and Greece (respectively 68%, and 61%) while in other Member States, the 40 sensitive sectors represented between 45 and 52 percent of total manufacturing employment, with Germany in between (57%). In other words, the suggestion is that the direct effects of the Single Market for many of the weaker parts of the Community may result in greater adjustment and restructuring than elsewhere.

6. This expectation is supported by a study carried out for the Commission[3] on the impact of 1992 on seven major sectors[4] of the Greek, Portuguese, Irish and Spanish economies. The study confirms that the implementation of the 1992 programme is likely to stimulate modernisation in many of the industries in the southern Member States and Ireland and their regions, resulting in considerable productivity gains and output growth in the medium term. Modernisation will however require restructuring and rationalisation in the short run which may be costly in employment terms. The main reasons for the very low levels of productivity and efficiency found in most of the industries examined are structural rather than sectoral. Apart from the structural factors normally cited to explain the weakness of these economies (poorer quality of the labour force and management, underdeveloped infrastructure and R&D base), the study stresses the negative effect of excessive public sector involvement and the regulatory environment, which have led to stagnation and over-staffing in the industries concerned. In addition, product quality was often a problem and there was a danger that some of the industries (e.g. pharmaceuticals, agro-food) would not be able to meet EC standards. Improvements in this field call for major efforts in training, R&D capacity and testing and certification infrastructures (efforts which are being supported by Community funded programmes - see chapter 7).

7. Specific studies on the regional impact of the liberalisation of financial services[5] and of the opening up of public procurement markets for telecommunications and railway and electricity production

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3 Booz.Allan & Hamilton (1989), Effects of the internal market on Greece, Ireland, Portugal and Spain. Study financed by the European Commission.

4 The seven sectors covered are the agro-food industry, pharmaceuticals, textiles, shoes, construction, financial services and transportation.

5 PA Cambridge Economic Consultants (1990), The regional consequences of the completion of the internal market for financial services. Study financed by the European Commission.

equipment[6] also indicate that 1992 will accentuate recent trends towards corporate restructuring which has resulted in the domination of the markets concerned by transnational alliances of large producers. These studies conclude that the main beneficiaries are likely to be the major metropolitan areas in the most prosperous regions towards which the higher level activities in these sectors would gravitate. As regards the three public procurement industries, take-overs of national firms in southern Member States by the major northern producers are expected to contribute to modernisation of production capacity in the former, although this may be accompanied by some, perhaps limited, job losses. A number of establishments in some lagging regions may be vulnerable to closure at least in the longer run but in the medium term cultural and technical differences and deeply entrenched habits may remain formidable obstacles to a full integration of public procurement markets. As a result, structural adjustment may be more gradual than suggested by some.

8. These studies tend to confirm that the effects of the internal market are also likely to be important in the service sector, where intra-Community penetration has remained very weak because of the continued existence of formidable barriers to trade and market entry. Among the service industries likely to be most affected by the 1992 programme are the financial and other business services[7] (7 percent of total EC employment) and transport and communications[8] (6 percent of total employment) where the range and quality of services can be expected to increase while costs should fall. This will improve business conditions and thus help to strengthen the competitiveness of many of the weakest regions poorly endowed with such services.

9. The position of the traditional industrial regions in relation to the 1992 programme is perhaps more complicated. These regions located mostly in the north of the Community seem at first sight to be less likely to undergo 1992-induced restructuring than other areas. Industry in these regions has not enjoyed a level of protection as great as in southern Member States and has generally been exposed to competitive pressures. As a result, most of their traditional sectors have been extensively rationalised in the recent past, a process which has been accompanied in some regions by considerable job losses. Nevertheless, a large proportion of employment remains concentrated in industries with relatively poor growth prospects, where the average size of firms is relatively large and where there are still considerable economies of scale to be realised. Such firms can expect to undergo some further restructuring, possibly involving take-overs and mergers, a process which will also affect many subcontracting SME's in the areas concerned.

10. In order to take advantage of the opportunities offered by the completion of the internal market, regions with a traditional industrial structure (of low growth industries) need to innovate and diversify. In these regions, however, traditional and more inward looking ways of thinking often prevail, with the result that new ideas

6 Cegos-Idet (1989), Les conséquences régionales de l'ouverture des marchés publics; le cas des secteurs des télécommunications, du gros matériel éléctrique et du matériel ferroviaire. Study financed by the European Commission.

7 PA Cambridge Economic Consultants (1990), op cit.

8 Cegos-Idet (1989), op cit.

are slower to be put into practice. Available investment resources and research and technological development capacities tend to be used in a predominantly defensive way and education and training remain ill-adapted to the needs of modern industry and services. A specific risk for the more peripheral traditional industrial regions in Spain and the UK is that they will be bypassed by the new telecommunications and rapid transport networks and thus become more isolated[9].

11. To sum up, the general conclusion to emerge from the studies available at present is that the effects of the completion of the internal market will be consistent with, and reinforce, past and recent trends towards increasing internationalisation of production and distribution and a growing geographical specialisation along functional lines. As such, the 1992 process is associated with the changes resulting from the current wave of technological progress which greatly reduces the friction of distance and increases the locational flexibility of firms. By lifting remaining barriers to trade, the single market programme will expose hitherto protected sectors and markets to greater competition, and in doing so speed up the modernisation process. It is clear that modernisation will require adjustments, which could give rise to considerable costs in social terms, at least in the short term. This will certainly be true for some of the weakest regions of the Community where the full force of competition has not been felt in the past, delaying structural adjustment in many industries. In pin-pointing the regions which will be most affected by increased competition and the resulting restructuring it should be borne in mind that sectoral analysis can be a relatively blunt instrument. Thus even in sectors where demand is growing slowly regions which concentrate on particular markets within these sectors can achieve high growth, as discussed more fully below. This could explain why even in regions lagging behind managers who perceive mainly threats arising from the single market represent less than a fifth of the total while almost twice as many expect increased opportunities. At the same time, however, a higher proportion of managers in these regions perceive threats to their company arising from the internal market than in the rest of the Community (see box 9.2).

9.3 Regional comparative advantage and 1992

12. A further attempt to gain insight into the existing and potential comparative advantages of regions and Member States may be made through the notion of 'revealed comparative advantage', as reflected in the existing trade and specialisation patterns of individual Member States. According to Buigues and Ilzkovitz[10] and Neven[11] there are significant differences between the trade patterns of the central and peripheral Member States. Trade between the former (Benelux, France,

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9 Université Catholique de Louvain (1989), Conséquences socio-économiques de l'achèvement du Marché Intérieur pour les régions de tradition industrielle de la Communauté Européenne. Study financed by the European Commission.

10 Commission of the European Communities, Directorate-General for economic and financial affairs (1989), Les Etats membres face aux enjeux sectoriels du Marché Intérieur.

11 D. Neven (1990), EEC integration towards 1992: some distributional aspects, Economic Policy, April, pp.14-62.

Germany and the UK in particular) is mainly of the intra-industry type, suggesting that their economies are already highly integrated and relatively homogeneous in terms of comparative advantages, factor endowments and industrial specialisation profiles. Trade between these central countries and the more peripheral Member States, on the other hand, is much more of an inter-industry type and reflects significant differences in the level of development and in factor endowments between these two groups of countries. Generally speaking, northern Member States hold considerable comparative advantages in the physical and human capital intensive activities and southern Member States (Portugal and Greece in particular) in the more labour intensive ones with a low technology content.

13. With the completion of the internal market, the exploitation of existing comparative advantages would suggest that the Community's lagging regions deepen their specialisation in labour intensive industries with a low technological content (traditional consumer industries such as textiles, clothing and footwear and other assembly operations), whereas central regions would increasingly specialise in R&D and capital intensive activities. Estimates made by Neven suggest that for the southern regions this could yield substantial benefits whilst minimizing adjustment efforts in the short term[12]. In the longer run, however, this course of action is not to be recommended. Maintaining labour intensive, low technology production would accentuate the existing spatial division of labour within the Community, and therefore effectively perpetuate present regional inequalities between the centre and the periphery. In addition, it would make the Community's lagging regions extremely vulnerable to increased competition from developing countries and Eastern Europe, where wage levels are often significantly lower than they are in southern Europe. Recent deterioration of the export performance of southern Member States in the textiles, clothing and footwear industries is an indication that this threat is a very real one[13].

14. For the Community's less developed regions a more sound strategy would be to seek to exploit specific regional competitive advantages to serve specialised product markets. There may be possibilities in particular to establish niche positions based on the exploitation of local advantages which would not have been viable in a regional or national market context but become so in the context of a single European market. This strategy needs to be underpinned by the effort to upgrade basic factors of competitiveness outlined above. This approach, which emphasises the importance of the overall business environment draws attention to the limits of a static sectoral analysis of the likely regional effects of the Single Market. Industrial sectoral specialisation is certainly not in itself a sufficient guide to these effects. Technological change has become so widespread that the distinction between "high technology" and "low technology" sectors has lost much of its former meaning. Rather, it is the characteristics of the product itself, the way it is made and how it is marketed which

12 Neven estimates that a 2.5% reduction in intra-Community trade costs for footwear and clothing would result in a 14% increase in output in Southern Europe, wich would be equivalent to about 0.6% of GDP in Portugal and Greece and 0.3% of GDP in Spain.

13 Booz.Allen & Hamilton (1989), Effects of the internal market on Greece, Ireland, Portugal and Spain. Study financed by the European Commission.

often distinguish successful industries from the rest. In regions where firms are successful in searching out and exploiting specialised markets, it is possible to achieve high growth even within those sectors where overall demand is growing only slowly. By exploiting available industrial expertise and competitive advantages to the full, in order to widen and deepen their regional economic base and acquire new skills, regions can reach higher levels of development.

15. The need to upgrade the economic base is recognised by many of the weaker regions themselves. In Ireland, and possibly now also in Portugal and Spain, this has taken the form of a vigorous policy to attract foreign investment in new advanced industries. However, while foreign investment can be an external catalyst for local business to set about upgrading their activities there is also the risk of creating a dependent economy with little stimulus to indigenous development. The Irish experience is very instructive in this respect where the new activities from outside (e.g. pharmaceuticals, computers, telecommunications, consumer durables) have not forged links with the domestic sector, resulting in a kind of dual economy where the growth of a competitive sector of national firms has not been stimulated significantly.

16. It is clear that there are no easy solutions to problems of the Community's less favoured regions in adapting to the 1992 programme. These regions must build on their comparative strengths and attempt to upgrade production in order to become more competitive. For this to be successful, a major, broadly-based effort using an appropriate mix of indigenous resources and foreign investment will be required to improve these regions' endowment in human and fixed capital over the longer term.

9.4 Regional consequences of economic and monetary union

17. The move towards economic and monetary union (EMU) will undoubtedly generate additional pressures for structural adjustment in the lagging regions. However certain effects of EMU will benefit the lagging regions more than the rest of Community such as the elimination of transaction costs and the reduction of interest rates presently bearing exchange risk premia. As revealed in a Commission study[14] the overall effects on the Community's regions do not appear to be clearcut. On the one hand, there are economy of scale advantages which will accrue to the central regions while, on the other hand, lower labour costs and potentially faster growth in productivity will bring benefits to the least favoured regions. The study concludes that it is therefore difficult to predict, a priori, the geographical pattern of gains and losses. It is clear, however, that the loss of the nominal exchange rate instrument as well as stricter discipline imposed on national budgetary policies will be more important to economies undergoing deep structural change. Greece and Portugal, and to a less extent also Ireland, Spain and Italy, thus face new challenges in the process of economic and monetary union, not least in regard to their ability to steadily improve their endowment in human and physical capital.

14 "One market, one money. An evaluation of the potential benefits and costs of forming an economic and monetary union", European Economy N° 44, October 1990.

18. The final shape of eonomic and monetary Union will be decided by the intergovernmental Conference which opened on 12 December 1990. The Conference will have to address the regional aspects of economic and monetary union. The Commission advocates[15] that in the final stage of economic and monetary union there might be the need to further strengthen Community structural policies. For the Structural Funds, consideration should be given to widening the eligibility criteria and to endowing them with a greater capacity to respond more quickly and more flexibly to adverse economic shocks affecting specific regions. Furthermore, the Commission proposes that a specific financial support scheme should be created to cope with major economic problems and to favour convergence within the Community. In this context, it is worth noting that the Community budget currently represents only about 1% of community GDP or 3% of public expenditure in the Community. This obviously places a limit on the economic impact of the Community's cohesion policies.

15 Communication of Commission of 21 August 1990 on Economic and Monetary Union.

BOX 9.2

Perception of enterprise managers of the impact of the Single Market

1. Companies in all Community Member States expect to benefit from the completion of the Single Market. This is the outcome of a survey[1] of 9000 enterprise managers throughout the Community conducted for the Commission in early 1989. About one-third of the managers surveyed expect their company to prosper in the post-1992 Community. Only one in six foresee that the dangers of an increasingly competitive market place will overshadow the various opportunities arising in the larger and unified Community market. The remaining respondents, about one-half of the total, either perceive the threats and opportunities as evenly balanced or, are not sufficiently aware of the Single Market programme to make a sound judgement.

2. As a whole the industry and business services sectors appear to be optimistic about their prospects in the Single Market. However, some noteworthy regional differences do emerge (see table 9.2).

Table 9.2: Managers' expectations of the effects of the completion of the Single Market on their company (as a percentage of replies).

	Lagging regions	Regions in industrial decline	Favoured regions
Increased opportunities (a)	36	32	38
Opportunities and threats about equal	29	37	37
Don't know	16	18	13
Increased threats (b)	19	14	13
Total	100	100	100
(a) : (b)	1.9 : 1	2.3 : 1	2.9 : 1

1 Ifo (1990), An empirical assessment of factors shaping regional competitiveness in problem regions. Study financed by the European Commission, Luxembourg.

3. Managers with companies in lagging regions and regions in industrial decline are less optimistic about the effects of the Single Market on their company than their colleagues in more favoured regions. The ratio of managers seeing increased opportunities as opposed to growing threats is less than two to one in lagging regions whereas it reaches a value of almost three to one in favoured regions.

4. The assessments of the impact of the Single Market by firms in lagging regions are more polarized than elsewhere. The percentage of firms feeling threatened by the Single Market (19%) is particularly high. For many companies the risks of foreign incursions in their traditional markets outweigh the benefits (of efficiency gains and market expansion) related to the completion of the Single Market. On the other hand, the percentage of enterprise managers which expect increased opportunities (36%) is roughly comparable to the values observed elsewhere.

5. In regions which suffer from industrial decline, the opportunities offered by the completion of the Single Market appear to be relatively limited as only 32 percent of enterprise managers expects the advantages of the 1992 programme to outweigh the disadvantages. This percentage is 6 points less than the figure for the more favoured regions. The percentage of firms seeing increased threats (14%) is roughly the same as in favoured regions. This means that on balance the companies expecting to benefit from the 1992 programme are still more than twice as numerous as those expecting to lose.

6. Managers in favoured regions seem to be especially well informed about the different aspects of the move towards the Single Market. Only 13 percent of them had not yet formed an opinion about the Single Market's effects. This compares favourably to the percentages recorded in lagging regions (16%) and in industrially declining regions (18%). It implies that the already favoured regions seem best-placed to take advantage of any new opportunities emerging in the process.

7. These differing perceptions about the impact of the completion of the Single Market will have real effects, since planned job creation and investment are dependent on a positive perception of the future. This points to the risk that the differing expectations in the three types of regions considered turn into self-fulfilling prophecies. The creation of a positive awareness of the benefits to be derived from the Single Market is thus of major importance.

8. These results convey two main messages: The completion of the Single Market is overwhelmingly perceived as having positive effects. The degree of optimism and the expected benefits vary however visibly between regions justifying doubts on the future path of convergence and suggesting continued structural policy actions to support cohesion.

Chapter 10 ECONOMIC AND SOCIAL ASPECTS OF CENTRAL AND EASTERN EUROPEAN STATES AND REGIONS

10.1 The economies of Central and Eastern Europe

1. The fundamental political and economic changes underway in the countries to the East of the Community will lead them, in the relatively near future, into closer relations with the Community. In this section, the economies of the six countries of Central and Eastern Europe[1] are discussed (hereinafter referred to as "the Six") with particular reference to the regional level[2].

2. In general, the economies of the Six are highly industrialised, the industrial employment share comfortably exceeding the Community average (33%) in every case. The figures, however, conceal the existence of an industrial sector in the Six which is almost uniformly obsolete and in decline. This situation is the result of centralised industrial planning, where industry has been almost entirely state-owned, where decision-making has been influenced by political imperatives and where the finances of enterprises have been burdened by a complex structure of economically irrational production levies and heavy subsidies. Under these conditions the profits and losses of enterprises were not an expression of competitiveness and were meaningless for investment decisions. This situation is also intimately connected to the effects of the system of administered prices which generally did not correspond to the relative scarcity of capital, materials, skills and other resources. As a result, industry is highly inefficient compared to that in the Community, with considerable overmanning, and is oriented towards physical production rather than towards meeting the requirements of the user resulting in poor quality output and widespread shortages, even of basic goods.

3. Switching from a centrally-planned to a market economy in the Six requires a fundamental regime change to alter the expectations, responsibilities and behaviour of economic agents. This regime change implies basic reforms in four broad areas to bring them into line with western economies:

- the legal, accounting and other framework conditions which govern private business activity and entrepreneurial decisions;
- the process of price formation and price structure;
- the banking and credit system;
- the system of public finance, taxes, levies and subsidies.

Reforms in these areas at national level are already underway although at different speeds in the Six. Such reforms are crucial to the regeneration of sectors and regions and especially to encourage the emergence of new firms, particularly of small and medium size, to create new competitive activity and employment. The main current features of the sectors (including agriculture) and regions in the Six are discussed in the next section.

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1 namely: Poland, Yugoslavia, Romania, Czechoslovakia, Hungary, Bulgaria (in order of size of population). Information on the Rumanian economy and regions is, however, particularly lacking.

2 See also: Commission of the European Communities (1990), Employment in Europe 1990, Luxembourg, chapter 1.

Table 10.1: Indicators for countries in Central and Eastern Europe, and in EUR12

Indicators	Units	Bulgaria	Czechoslovakia	GDR	Hungary	Yougoslavia	Romania	Poland	EUR12
Population	000s (1988)	8981	15608	16666	10597	23560	23112	37862	324011
Area	000 km²	110	130	108	90	260	240	310	2253
Density	inhab/km² (1988)	81	122	154	114	92	97	121	144
Population change 1980-88	1988 index(1980 = 100)	101.3	101.9	99.6	98.9	118.3	104.1[1]	106	102.1
Age structure									
under 15	% of total (1987)	21.5	24.4[1]	19.2	21.1	:	24.7[1]	25.6	18.9
60/55 and over	% of total (1987)	21	19.3[1]	21	21.7	:	17.4[1]	13.2	14.0[3]
Employment									
total	000s (1988)	4444	7911	8952	4845	6866	11070	17705	125913
agriculture	% of total (1988)	19	12	11	19	:	29	28	8
industry	% of total (1988)	47	48	50	38	:	45	37	33
Infrastructure									
length of road network	000 km (1985)	36.5	73.9	47.2	29.8	117.7	72.8	253.9	2632.1[2]
length of railtracks	000 km (1986)	4.3	13.1	14	7.9	9.2	11.2	26.8	125.4
Social conditions									
new dwellings aver. per year	per 10.000 inhab. 1981-85	77	69	71	69	60	63	52	52
doctors	per 10.000 inhab. (1988)	37.5	36.6	32.7	33.2	:	21.1	25.6	32.3
hospital beds	per 10.000 inhab. (1988)	98	103	100	93	:	93	70	84
private cars	per 1.000 inhab. (1986)	121	175	208	145	122[1]	:	105	341

[1] *1985*
[2] *1987*
[3] *Age group 65 and over*
Sources: Eastern European Countries: Statistical Office GDR, Die DDR in internationalen Vergleich, Berlin November 1989
EUR12: Population: Eurostat, Rapid reports - Population and social conditions 1990/4, Luxembourg 1990
Age structure: Eurostat, Basic statistics of the Community, 27th edition, Luxembourg 1990
Employment: Eurostat, Labour Force Survey, 1987, Luxembourg 1989
Infrastructure: Regions Statistical yearbook, 1988, Luxembourg 1989
Social conditions: calculations based upon Statistical Office FRG, Statistisches Jahrbuch BRD 1989, Wiesbaden 1989 and Eurostat, Regions Statistical yearbook 1988, op.cit.

Sectoral and regional aspects of the Six[3]

4. The industrial structures of manufacturing among the Six are characterised by a concentration of employment in heavy manufacturing industry (shipbuilding, iron and steel, mining engineering and chemicals) involving a heavy use of raw materials and energy. The organisation of industry features a considerable degree of vertical integration with large production units. In Hungary, for instance, more than 80 percent of manufacturing employment is accounted for by some 1,140 state owned enterprises with an average of more than one thousand employees.

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

6. However, state planning has also attempted to impose more centrally-determined patterns of industrial location. Since 1950, the Polish government has developed five new industrial areas in the central and southern parts of Poland (Konon, Legnica-Glogow, Tarnobrzeg, Pulawy and Plock), based on coal, copper, sulphur and energy resources, in order to provide some counter-balance to the concentrations of industrial growth in older industrial regions. In Bulgaria, 80 percent of industrial capacity is located within an area defined by an elliptically-shaped transport route (based in the centre of the country but running through all the Bulgarian regions) which has been used to determine the location of industrial enterprises and centres. State planning in Hungary has also attempted to distribute industry more evenly - away from the capital Budapest (where its share of total industrial employment has been reduced by more than one-third since the 1960s), and southwards from the northern "energy axis" to cities like Szeged, Pecs and Debrechen.

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

8. In agriculture, there are fewer common features among the Six. In Poland, for example, the share of total employment accounted for by the agricultural sector is 30 percent; in Czechoslovakia by contrast the

3 The following is based on the preliminary results of a new study: European Policies Research Centre (1990), Socio-economic situation and development of the regions in the neighbouring countries of the Community in Central and Eastern Europe. Study financed by the European Commission.

share is only 12 percent. For both Poland and Yugoslavia, the collectiveness of agriculture along Soviet lines was not implemented as extensively as elsewhere among the Six. The proportion of the agricultural sector in state ownership, therefore, varies greatly: in Yugoslavia, some 80 percent of agricultural land is in private hands compared to less than 10 percent in Hungary and Czechoslovakia. The differences in ownership involve considerable variation in farm structure. In Poland, half of the 2.75 million farms (mainly in the central and southern parts of the country) are less than 5ha in size; the average size of the state-owned farms in the north and west of Poland is in excess of 3,000 ha.

9. In general, the service sector in the Six is dominated by central government services, often organised in hierarchies according to settlement size. The producer service sector is not well-developed; state banks have tended to have a monopoly position, and commercial services such as consultancy, legal and accountancy businesses have been relatively basic.

10. At the same time as the reforms discussed above are introduced to enable the development of market economies in the Six, major investment is required in the industrial sector to replace outdated and technologically-obsolescent industrial plant and machinery, and the import of technology. Much of this investment will come from private sources which is why the rapid and successful implementation of the reforms is so important. As already indicated the development of small and medium sized enterprises is especially important, requiring not only the framework conditions for the existence of such business but also efforts to raise the organisational and managerial skills of potential entrepreneurs. In Hungary, Czechoslovakia and Poland the process of privatisation of state enterprises is already underway along with efforts to encourage the participation of foreign investors while the right to own property is being established. Particular problems have arisen as a result of the degradation of the environment where uncertainties over the responsibilities for, and the costs of, cleaning up make the major industrialised parts of the Six less attractive to potential outside investors.

11. In the agricultural sector Czechoslovakia and Hungary are taking steps to privatise farms with the objective of increasing both production and productivity. The splitting-up of state-owned farms, however, presents significant problems of reorganisation because of the scale of combines and cooperatives, the division of labour, and the highly specialised nature of some agricultural activity, especially livestock farming facilities. Major problems for agriculture may arise from price reforms as the centrally-determined price controls are gradually removed. The anticipated reductions in prices and producer subsidies will cause considerable adjustment problems for producers.

12. In the service sector liberalisation is promoting a greater diversity in new financial and business service institutions, enhanced by the break-up or privatisation of public service organisations in areas such as design, architecture and civil engineering. More consumer services - particularly shops, restaurants and other entertainment activities - are developing also as liberalisation proceeds.

Infrastructure

13. Transport infrastructure among the Six is generally of poor quality and over-loaded. For example, rail networks are extensive but significant parts are one-track (in Hungary only 14 percent is double track), the load-bearing capacity is low, and many sections are only capable of supporting limited-speed travel. Electrification is limited and the rolling stock suffers from under-investment. With respect to the road network, in both Czechoslovakia and Hungary less than one percent of the total road network consists of express highways; many rural roads are not metalled. Transport routes will need reorientation, with greater emphasis on links with the peripheral regions and, in the context of increased trade with the outside world in general and the Community in particular, more (and better) cross-border connections. In Czechoslovakia, for example, most road and rail links are east-west; to improve international transit traffic along the Scandinavia-Italy axis, more north-south routes are required. In Bulgaria also, links with the other Balkan countries are seen as a priority. In telecommunications, the state of technology is considerably behind the Community with problems of reliability and poor levels of service especially in contacts with the outside world.

Regional development problems

14. In spatial terms, many of the Six suffer a "core/periphery" regional problem: the concentration of development in industrial urban complexes, axes and agglomerations has left peripheral or border areas relatively under-developed. A long term objective of regional development is likely to involve redirecting economic development away from the planned urban-industrial concentrations to avoid further depopulation of rural areas, inter-regional migration and congestion in the core areas as well as to avoid social and political divisions among different language groups. Considerable potential may be derived in some of the peripheral regions from tourism which is currently a growth sector and a major foreign currency earner for several of the Six. Opportunities may also stem from the development of frontier districts, through cross-border cooperation, both among the Six themselves and between the Six and Western Europe eg. between Czechoslovakia, Germany and Austria.

15. In the short term, the most serious regional problems are expected to arise as a result of unemployment. Many areas will be affected by industrial or agricultural restructuring. Major job losses are anticipated from the closure of industrial plants and the rationalisation of employment. Reduction of employment will also occur in the public sector through the abolition or contraction of government agencies. Smaller armed forces and shorter conscription times will also raise unemployment; this may be exacerbated by the difficulties associated with the conversion of defence industries to civilian production. In Poland, unemployment is expected to reach one million (eight percent of the labour force outside agriculture) by the end of 1990.

16. The changes in the Six call for a regional policy response not least to promote social cohesion in the face of rising unemployment and also to ensure that changes being introduced have a regional coherence. Hungary is one of the most advanced in this field among the Six since it has initiated development programmes for the most under-developed regions with the aim of strengthening economic structures, to improve

the productivity of the population and to increase employment opportunities (primarily in north-east Hungary, South Transdanube, and various lowland regions). A regional development "concept" has also been developed for the North-Hungarian region to provide strategic guidelines for economic reconstruction. Yugoslavia has operated a system of "supplementary financing" of investments by the regions as part of the federal system with the objective of developing backward agrarian areas. However, as in other countries such as Bulgaria, a market-based regional policy (as opposed to a regional development strategy involving the centrally-planned allocation of resources and activities among regions), and even the identification of regional disparities, has yet to be clarified.

10.2 East Germany and her regions

17. As in the case of the Six discussed in the previous section the East German economy and its regions are mainly characterized by "material production sectors" (agriculture, industry, transport and trading), suffering from the same problems induced by centralised planning as in the other countries. The fundamental analysis therefore remains the same and the following is intended to add some further empirical and analytical information specific to this new part of the European Community.

18. The former GDR was a small to medium-sized country on a European scale. At the end of 1989 its population - some 16 million - was about a quarter, while its surface area is nearly half, of that of West Germany. For historic reasons, population and industry are concentrated in the south while the northern parts are very thinly settled. Since the end of July 1990, the country has once again been divided into the 5 Länder (Mecklenburg-Vorpommern, Brandenburg, Sachsen-Anhalt, Sachsen, Thüringen) which existed before 1952[4]. Below the Länder-level, 189 Landkreise and 38 Stadtkreise which were already in place form a further levels of administration. The former, only, are in turn divided into some seven and a half thousand municipalities.

19. Population density is slightly higher than the average of the Community, but less than one-third of that of West Germany. The population is very unevenly distributed: 48% live in the five densely populated areas: East Berlin, Halle, Leipzig, Dresden, Chemnitz. Meanwhile, 25% of the population is still living in rural settlements with less than 2000 inhabitants. On average the East German population is younger than that of West Germany but with the mass emigration of 1989 and 1990, when more than 500,000 people (3% of the population) left the country, this has probably changed. According to estimates, 5% of the labour force left the country including in particular the younger and well-qualified people and their children[5].

20. Activity rates in the former GDR are higher than in the Community. At 86% of the female population of working age, the activity rate for women is one of the highest in the world while the equivalent figure for males, at 81%, is also comparatively high. The labour force of some

4 The 15 Bezirke which were created in 1952 have been provisionally maintained. Their future remains to be decided by the new Länder governments.

5 For initial estimates, DIW, Beschleunigter Produktionsrückgang in der DDR, DIW-Wochenbericht 33/90 vom 16.8.90.

9.1 mio people is highly qualified with three out of four members of the working population having had vocational training, 20% of which have graduated from universities or polytechnics. While a number of these qualifications might now be inappropriate, they generally provide a sound basis for the fundamental adjustment of human resources to the new economic situation to take place. Unemployment did not officially exist prior to July 1990 although there is little doubt that there was widespread hidden unemployment or underused labour.

21. Just under half (47%) of the labour force in East Germany works in industry (including construction), 11% in agriculture and only 42% in the service sector[6]. Large units predominate in industry and agriculture while small and medium sized enterprises have existed only in crafts.

22. Estimates suggest that GNP per capita in East Germany in 1989 was about 60% of the level in West Germany[7]. Productivity in the different economic sectors is well below West German levels and in the course of 1990 productivity levels have declined even further. The West German Institute for Economics (DIW) has estimated that as a consequence one third of the industrial production is competitive in the world market, one third has no chance of surviving in a market economy while the rest would be able to become competitive but with state-aid after a transition period[8]. The latest reports and much of the anecdotal evidence indicate that the situation may be even more serious.

23. In terms of regional economic structure, industry in general is concentrated in the south of the country and in East-Berlin, with nodal points of industrial activity existing in other parts of the country often dependent on only one or two large industrial plants. Agriculture, although not insignificant in the South is most important in the North. The service sector is more developed in the northern regions than in the South due to the lack of manufacturing. Some regions of the GDR are extremely specialized in certain industrial branches: energy and basic industries are located in the South and the East. Electronics, data processing and precision engineering are mainly concentrated in East-Berlin and in the South. Textiles and consumer goods are found in the southwest. Food processing is sited mainly in the North and in the centre of the GDR. Mechanical engineering and construction of motor vehicles are however relatively widely dispersed, except in the East. As in the Six, industry has been responsible for environmental pollution with the East German chemical industry

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6 For comparison: Italy has nearly the same share of employment in agriculture (10.5 %); West Germany's share of industrial employment is lower (42,5 %); the share of the service sector is smaller than that of Greece and Portugal - the smallest in the EC.

7 This estimate is based on an estimate of GDP (in Ostmarks) produced by the statistical bureau of the former GDR early in 1990. Such estimates are, however, extremely difficult to make between radically different economic regimes and price structures. Differences in statistical classification and definitions add to the problem of meaningful comparison.

8 DIW (1990), Leistungsfähigkeit der DDR-Industrie, Study for the European Parliament, Berlin, see also Directorate General for Research of the European Parliament (1990). The Impact of German Unification on the European Community, Working Document No 1, Luxembourg.

representing a particularly serious case in the southern part of the country.

24. While relatively extensive infrastructure exists much of it is in poor condition. Due to the regional concentration of investment in infrastructure around new industrial sites the regional distribution of infrastructure is very uneven both in quantity and quality. The South has a developed network in both transport and utilities, but it is outdated and in very bad condition. The North is not sufficiently supplied with infrastructure because of the difficulties associated with its sparse population and dispersion of settlements. To bring the infrastructural provision in East Germany up to a standard comparable with West Germany requires broadly based investments (in telecommunications, transport, water, sewage, etc) involving considerable outlays[9]. In the telecommunications sector alone, modernisation and development of the network in East Germany will the subject of a seven-year plan costing nearly 4 billion ECU per year.

25. While generally regarded as among the highest in the former Eastern Bloc, the standard of living in East Germany is much lower than in West Germany according to the available evidence. Thus in 1988, only 52 per cent of private households had a car (97 per cent in West Germany), typically small in size, 52 per cent a television set (94 per cent) and only 9 per cent a telephone (98 per cent). The dwelling space per inhabitant was 27 square metres against 35 1/2 square metres in West Germany but as the housing stock is dilapidated, the difference in quality and living comfort is significantly greater. Similarly, there is widespread anecdotal evidence of inferior product quality and mismatches between goods supplied and demanded, indicating that the utility derived from consumption is substantially lower than the statistics suggest.

26. The unification of Germany which was formalised on 3 October 1990 has conferred certain advantages on East Germany in its transition to a market economy when compared to the problems facing the Six outlined above. East Germany has in effect become the weakest region, or collection of regions, of the strongest economy in the Community and will benefit from interregional transfers of income of the German state. In addition, East Germany will benefit from the extension of policies of structural intervention to regenerate its regions. These include: grants to productive investment, including in small and medium sized enterprises, soft loans, grants for economic and for local infrastructures. Also, as part of the European Community, East Germany will benefit from the expertise and financial assistance mobilised under the Structural Funds.

27. While the outlook for East Germany is perhaps more positive than in the Six it is clear that there are also risks associated with the adjustment pressures arising from the simultaneous effects of monetary union with West Germany and the transition from a centrally-planned to a market economy. For example, with the removal of national trading barriers which followed monetary union in July 1990, there is a danger that East Germany will become mainly a market for western products

9 DIW, Quantitative Aspekte von Wirtschaft und Finanzen in der DDR, DIW-Wochenbericht 17/90 vom 26.4.1990, DIW, Tendenzen der Wirtschaftsentwicklung 1990/91, DIW-Wochenbericht 26/90 vom 28.6.90 and DIW, Bauwirtschaft und Wohnungswirtschaft in der DDR, Lage und Perspektiven, DIW-Wochenbericht 28/90 vom 12.7.90.

rather than a location for their production. Also, if wage rates in East Germany rise too rapidly towards those in West Germany this will have adverse effects on the competitiveness of East German enterprises unless productivity levels are raised sufficiently in parallel. Monetary union with West Germany therefore demands a relatively rapid transition in East Germany to a competitive market economy with inevitable short-term adjustment costs, which are already emerging, in the form of growing unemployment and short-time working. Much therefore remains to be done to restructure the East German economy and her regions to make this transition a success and to achieve and sustain an acceptable regional balance.

- STATISTICAL ANNEXES -

Symbols and abbreviations	Symboles et abréviations	Zeichen und Abkürzungen
EN	FR	DE
: not available	non disponible	nicht verfügbar
0 less than half of the unit	inférieur à la moitié de l'unité utilisée	kleiner als die Hälfte der verwendeten Einheit
- none	néant	nichts
( ) uncertain figure	donnée incertaine	unsichere Angabe

ANNEX

List of tables, graphs and maps

Annex 0 DEFINITION, LEVEL AND SIZE OF REGIONS[1]

1. The Nomenclature of Territorial Units for Statistics (NUTS) was established by the Statistical Office of the European Communities, in cooperation with the Commission's other departments, so as to provide a single, uniform breakdown of territorial units for the production of Community regional statistics. Moreover, in accordance with Council Regulation (EEC) No 2052/88 on the tasks of the Structural Funds, the Nomenclature forms the basis for the identification of regions whose development is lagging behind, declining industrial areas and rural areas eligible for Community assistance (see O.J. L 185 of 15 July 1988).

2. Various systems of territorial division are possible:

- normative regions (administrative boundaries)
- analytical regions
  - functional[2] (aggregations of complementary zones)
  - homogenous (aggregations of zones with similar characteristics)

For practical reasons to do with data availability and the implementation of regional policies, the NUTS nomenclature is based primarily on the **institutional divisions** currently in force in the Member States.

The **NUTS** lists of regional units of a general character; it thus excludes territorial units serving specific purposes and local units. It employs a **three-level hierarchical classification** of regions for each Member State (NUTS 1 - NUTS 2 - NUTS 3).

The NUTS nomenclature subdivides each Member State into a whole number of level 1 regions, each of which is in turn subdivided into a whole number of level 2 regions, which are themselves subdivided onto a whole number of level 3 regions. The only exception to this principle is in the division of Belgium at levels 1 and 2, the Brussels region (level 1) forming only a part of the province of Brabant (level 2).

3. The present NUTS nomenclature subdivides the territory of the European Community into 66 regions at level 1, 174 at level 2 and 829 at level 3 (see table 0.1).

Despite the aim of ensuring that regions of comparable size all appear at the same NUTS level, each level still contains regions which differ greatly in terms of area, population, economic weight or administrative powers (see table 0.2).

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1 Source: EUROSTAT (1990) Regions, Nomenclature of territorial units for statistics, Luxembourg.

2 For example, labour market areas as discussed in Box 5.2.

Table 0.1: Correspondence between NUTS levels and national administrative divisions in the Community

Member State	NUTS 1		NUTS 2		NUTS 3	
Belgique/België	Régions	3	Provinces	9	Arrondissements	43
Danmark[1]	-	1	-	1	Amter	15
BR Deutschland[2]	Länder	11	Regierungsbezirke[3]	31	Kreise	328
Ellas	Groups of development regions[4]	4	Development regions	13	Nomoi	51
España	Agrupacion de comunidades autonomas	7	Comunidades autonomas + Mellila y Ceuta	18	Provincias	52
France	Zeat + D.O.M.	8 1	Régions	22 4	Départements	96 4
Ireland	-	1	-	1	Planning regions	9
Italia	Gruppi di reggioni[4]	11	Regioni	20	Provincie	95
G.D. Luxembourg	-	1	-	1	-	1
Nederland	Landsdelen	4	Provincies	12	C.O.R.O.P. - Regio's	40
Portugal	Continente + Regioes autonomas	3	Comissaoes de coordenaçao regional + Regioes autonomas	7	Grupos de Concelhos	30
United Kingdom	Standard regions	11	Group of counties[4]	35	Counties/Local authority regions	65
EUR12		66		174		829

[1] *A breakdown of Denmark into three regions is given in most of the tables and maps*
[2] *Regions of the former GDR not yet included (5 Länder, 15 Bezirke, 218 Kreise)*
[3] *26 Regierungsbezirke + 5 Länder not subdivided into Regierungsbezirke*
[4] *Grouping for Community purposes*

Table 0.2: Area and population of the regions of the Community, 1987

	Area (1000 km²)											
	NUTS 1				NUTS 2				NUTS 3			
	Number	Min.	Max.	Ave.	Number	Min.	Max.	Ave.	Number	Min.	Max.	Ave.
B	3	0.2	16.8	10.2	9	2.40	4.4	3.4	43	0.10	2.0	0.7
DK	1	43.1	43.1	43.1	3	2.90	33.3	14.4	15	0.10	6.2	2.9
D	11	0.4	70.6	22.6	31	0.40	17.5	8.0	328	0.04	2.9	0.8
GR	4	3.8	56.7	33.0	13	2.31	19.1	10.1	51	0.33	5.4	2.6
E	7	7.2	215.0	72.1	18	0.03	94.2	28.0	52	0.01	21.7	9.7
F	8	12.0	145.6	71.1	26	1.10	91.0	24.6	100	0.11	91.0	6.4
IRL	1	68.9	68.9	68.9	1	68.90	68.9	68.9	1	3.30	12.1	7.7
I	11	13.6	44.4	27.4	20	3.30	25.7	15.1	95	0.21	7.6	3.2
L	1	2.6	2.6	2.6	1	2.60	2.6	2.6	1	2.60	2.6	2.6
NL	4	7.3	11.3	10.4	12	1.40	5.3	3.5	40	0.11	3.5	1.0
P	3	0.8	88.9	30.7	7	0.80	26.1	13.1	30	0.80	8.8	3.2
UK	11	7.3	78.8	22.2	35	0.70	31.7	7.0	65	0.40	26.1	3.8
EUR12	66	0.2	215.0	35.6	176	0.03	94.2	13.3	829	0.01	91.0	2.8

	Population (1000)											
	NUTS 1				NUTS 2				NUTS 3			
	Number	Min.	Max.	Ave.	Number	Min.	Max.	Ave.	Number	Min.	Max.	Ave.
B	3	972	5691	3290	9	226	2221	1097	43	37	975	230
DK	1	5127	5127	5127	3	587	2825	1709	15	47	608	342
D	11	660	16712	5552	31	472	5068	1970	328	33	2012	186
GR	4	939	3492	2498	13	179	3492	768	51	21	3492	196
E	7	1443	10505	5548	18	126	6773	2158	52	57	4894	747
F	8	3928	10290	6327	26	87	10290	2190	100	72	2504	569
IRL	1	3543	3543	3543	1	3543	3543	3543	1	83	1335	394
I	11	1591	8881	5213	20	114	8881	2867	95	93	3980	604
L	1	372	372	372	1	372	372	372	1	372	372	372
NL	4	1592	6856	3666	12	190	3197	1222	40	54	1258	367
P	3	253	9687	3416	7	253	3577	1464	30	79	1901	342
UK	11	1575	17318	5175	35	274	6770	1627	65	73	6770	876
EUR12	66	372	17318	4904	176	87	10290	1839	829	21	6770	390

Table 1.1: GDP per inhabitant[1] in Member States, 1980 - 1990
(in PPS, EUR12 = 100)

Member States	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
B	104.5	103.0	104.0	102.7	102.9	101.6	101.1	100.6	101.2	102.4	103.0
DK	109.0	108.3	111.0	112.3	114.8	117.0	118.0	113.8	109.5	108.0	107.2
D	113.8	114.0	112.7	113.2	114.4	114.4	114.4	113.5	113.2	113.3	113.4
GR	58.2	57.8	57.4	56.5	56.5	56.8	56.0	54.3	54.4	54.0	53.0
E	73.4	72.7	72.7	72.6	72.1	71.8	72.2	74.0	74.8	75.7	76.3
F	111.9	112.8	114.4	113.1	111.8	110.7	110.0	109.2	108.7	108.5	108.6
IRL	64.5	65.9	66.3	64.8	65.7	65.1	63.4	64.3	64.6	66.0	67.3
I	102.5	103.8	103.2	102.4	103.2	103.6	104.0	104.4	104.8	105.1	105.2
L	115.6	115.3	116.3	118.0	122.6	124.0	126.3	125.5	127.4	128.0	128.7
NL	111.0	109.7	107.0	106.6	107.3	107.2	106.4	104.5	103.2	103.5	103.1
P	54.2	54.5	55.1	54.5	52.2	52.1	52.8	53.7	53.8	54.5	55.4
UK	101.1	100.1	100.8	103.2	102.7	103.7	104.2	105.2	105.7	104.6	103.7
EUR3[2]	57.5	57.7	57.8	56.9	56.1	56.1	55.8	55.6	55.7	56.0	56.2
EUR9[3]	103.2	103.2	103.2	103.3	103.4	103.4	103.4	103.4	103.4	103.4	103.4
Disparity[4]	16.8	17.0	17.0	17.1	17.5	17.5	17.5	16.9	16.7	16.4	16.2

Source: DG II

[1] *Gross Domestic Product per head indicates the income generated in Member States and regions by the resident producer units. An alternative measure is Gross National Product per head which measures the resources available after the transfer of factor incomes such as interest payments and dividends. At regional level, data are only available for GDP per head. Net flows of transfers out of or into a country or region lead to differences between both measures which may be substantial in the case of smaller countries such as Ireland and Luxembourg or in certain regions where all or most of their national production in a particular industry is concentrated (eg. the energy-producing regions of Groningen and Highlands and Islands)*

[2] *GR,IRL,P*

[3] *Others*

[4] *Weighted standard deviation*

Table 1.2: Disparities in GDP per inhabitant between the regions[1] of the Community, 1980 - 1988
(in PPS, EUR12 = 100)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Average 10 weakest regions	47	46	46	45	45	45	45	45	45
Average 10 strongest regions	145	146	147	149	149	150	151	151	151
Average 25 weakest regions	57	57	56	56	55	56	55	56	56
Average 25 strongest regions	135	136	136	136	137	138	138	137	137
Disparity[2]	26.1	26.5	26.8	27	27.2	27.5	27.9	27.5	27.5

[1] *NUTS 2; DOM, Açores and Madeire not included for data reasons*
[2] *Weighted standard deviation*

Table 1.3: GDP per person employed in Member States, 1980 - 1990
(in PPS, EUR12 = 100)

Member States	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
B	110.9	110.3	111.5	110.6	110.6	108.8	107.9	107.7	108.3	109.9	110.4
DK	90.6	89.8	90.5	90.4	90.7	90.6	89.5	86.8	84.7	84.6	84.3
D	106.6	106.0	105.3	106.1	106.6	106.0	105.4	104.8	105.7	105.8	106.3
GR	63.4	59.6	59.3	57.6	57.7	57.8	57.1	56.8	57.1	57.3	56.7
E	94.0	94.9	95.3	95.3	97.1	98.8	98.0	96.6	96.4	96.0	95.3
F	110.3	110.7	111.1	109.9	110.1	110.3	110.5	110.5	111.1	111.3	111.4
IRL	75.4	77.5	77.9	77.5	80.6	82.6	80.7	83.5	83.7	86.0	87.1
I	104.9	104.5	102.4	100.6	100.9	100.8	100.7	101.5	101.7	102.2	102.7
L	110.1	106.3	107.5	106.1	107.1	107.9	107.6	103.0	102.3	102.4	102.6
NL	130.7	130.0	129.1	130.5	131.6	130.5	128.1	125.7	124.8	125.5	126.1
P	52.9	52.5	53.7	53.0	51.6	52.1	54.7	56.5	57.5	58.6	59.3
UK	89.6	90.8	92.5	94.8	92.9	93.1	94.2	95.1	93.8	92.6	91.7
EUR3[1]	60.3	58.8	59.3	58.2	58.0	58.4	59.1	60.1	60.7	61.5	61.7
EUR9[2]	102.9	103.1	103.1	103.1	103.1	103.1	103.0	102.9	102.8	102.7	102.7
Disparity[3]	14.4	14.6	14.1	14.1	14.4	14.1	13.6	13.1	13.2	13.3	13.5

Source: DG II
[1] *GR,IRL,P*
[2] *Others*
[3] *Weighted standard deviation*

Map 2.2.1: Change in regional rates of unemployment 1985-1990

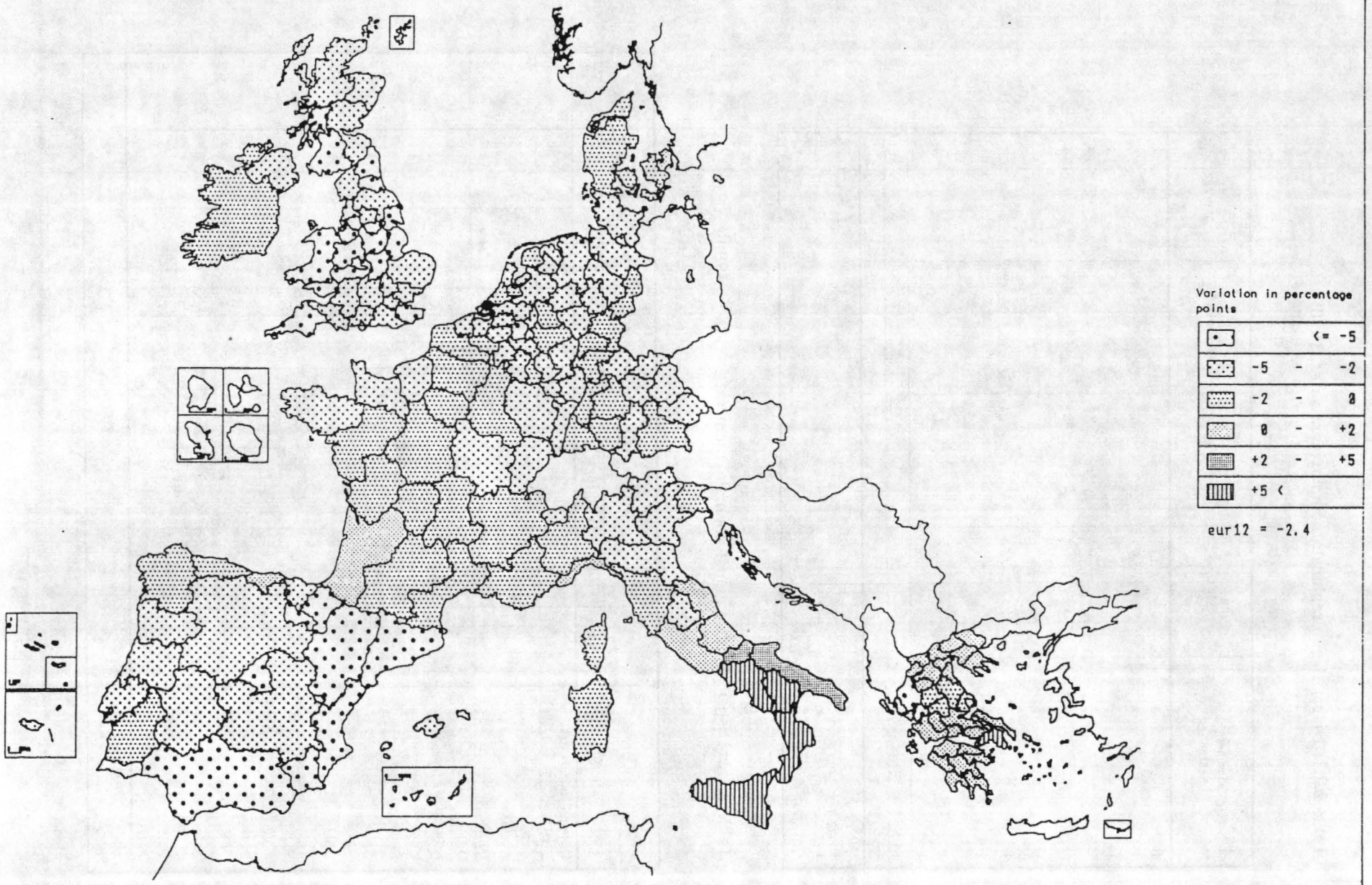


Table 2.2.1: Disparities in regional unemployment rates, 1990[1]

Member States	Max.	Min.	Disparity[2]	Average
B	13.1	3.8	2.7	7.6
DK	9.1	6.8	0.9	7.9
D	10.4	2.7	1.8	5.2
GR	9.4	2.6	:	7.5
E	28.9	7.3	4.9	16.1
F	12.9	4.5	1.3	8.7
IRL	-	-	-	16.4
I	22.6	2.4	6.3	10.2
L	-	-	-	1.5
NL	11.3	5.6	0.8	8.0
P	12.6	2.8	:	5.1
UK	15.7	2.2	2.5	6.3
EUR12	22.0[3]	2.6[3]	4.8	8.3
EUR12	17.8[4]	3.1[4]	4.2	8.3

[1] *NUTS 2*
[2] *Weighted standard deviation*
[3] *Average of 10 regions with highest or lowest values*
[4] *Average of 25 regions with highest and lowest values*

Table 2.2.2: Disparities in regional unemployment rates[1], 1983 - 1990

	Year							
	1983	1984	1985	1986	1987	1988	1989	1990
Unemployment rates EUR12	9.6	10.6	10.7	10.7	10.5	9.9	9.0	8.3
Average 25 highest	18.3	21.0	22.7	22.2	21.6	20.6	19.3	17.8
Average 25 lowest	5.3	5.4	5.2	4.5	4.3	3.9	3.2	3.1
Difference	13.0	15.7	17.5	17.8	17.4	16.7	16.1	14.7
Disparities[2]								
between Member States	3.1	3.7	4.1	4.1	4.0	3.9	3.5	3.2
between all regions	3.7	4.4	4.7	4.9	5.1	5.0	4.1	4.2
within Member States								
B	1.3	1.5	1.8	2.3	2.6	2.6	2.5	2.7
DK	1.5	1.2	1.0	0.7	0.9	1.0	1.0	0.9
D	1.6	1.9	2.1	2.0	2.0	2.0	1.9	1.8
GR	2.2	2.8	2.8	2.7	2.7	2.8	:	:
E	3.8	5.4	5.1	4.9	5.7	4.6	5.1	4.9
F	1.4	1.7	1.8	1.6	1.6	1.6	1.6	1.7
IRL	-	-	-	-	-	-	-	-
I	2.5	2.7	2.7	3.6	4.4	5.9	6.7	6.3
L	-	-	-	-	-	-	-	-
NL	1.8	1.4	1.1	1.0	1.0	0.9	1.3	0.8
P	2.5	2.9	2.9	2.9	2.6	2.2	3.1	:
UK	3.1	3.1	2.9	3.0	3.1	3.0	3.0	2.5

[1] *NUTS 2; DOM, Açores and Madeira not included for data reasons*
[2] *Weighted standard deviation*

Table 2.4: Population of foreign nationality in Member States, 1988
(as a percentage of total population)

Countries	Other EEC countries	Non EEC countries	Total
B	4.9	3.5	8.4
DK	0.4	1.3	1.7
D	2.2	5.0	7.2
GR	0.1	0.6	0.7
E	0.2	0.1	0.3
F	2.6	4.4	7.0
IRL	1.9	0.5	2.4
I	:	:	:
L	24.1	2.5	26.6
NL	1.2	2.6	3.8
P	0.1	0.5	0.6
UK	1.4	2.6	4.0
EUR11	1.7	3.0	4.7
Foreign population in millions	4.4	7.8	12.2

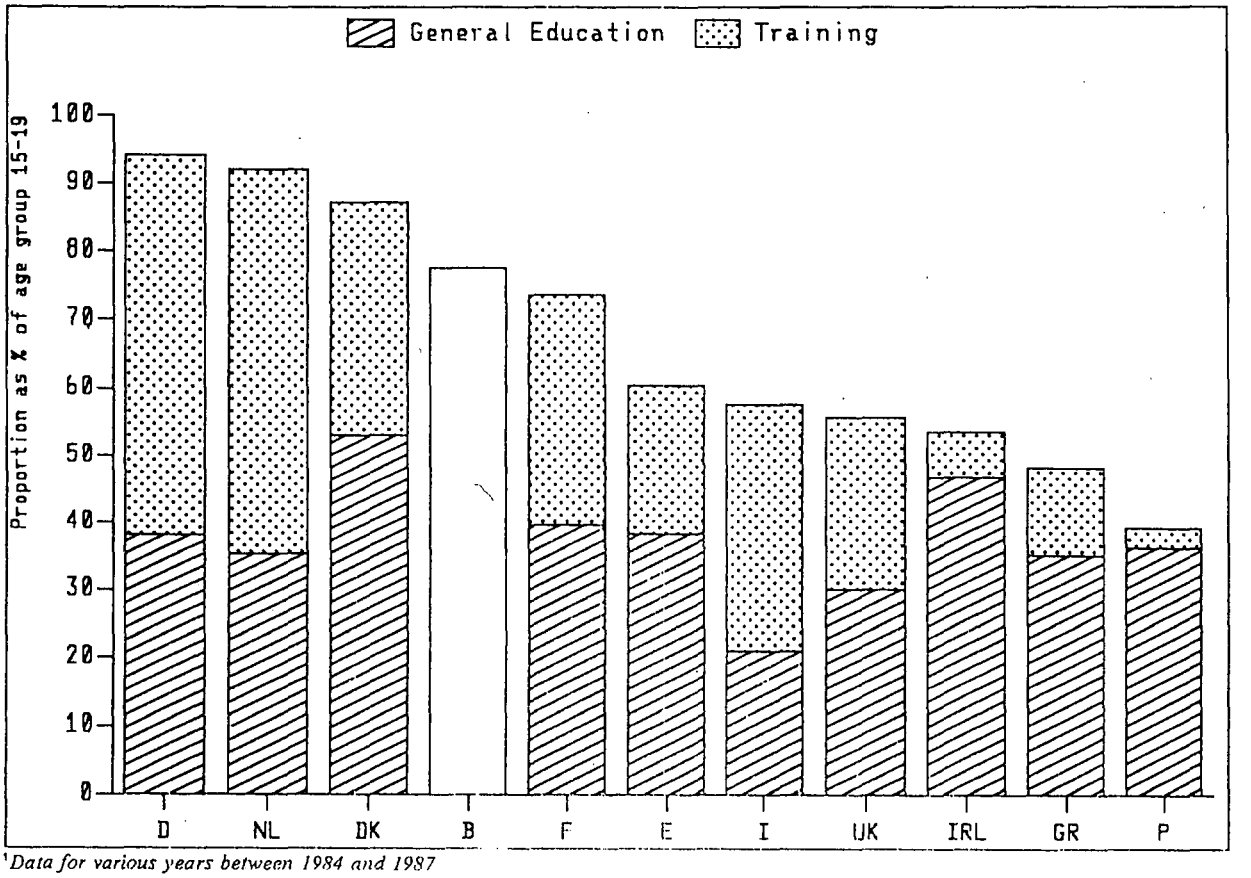
Source: Calculations based on Eurostat, Labour Force Survey 1988.

Table 3.1: Firms' priorities for improvement of determinants of regional competitiveness[1]

Determinants of competitiveness	Lagging regions	Regions in industrial decline	Favoured regions
Financial markets			
1. Cost of credit	1	6	6
2. Income/corporate taxes	2	5	3
3. Exchange rates	10	8	8
4. Availability of risk capital	20	19	23
Educational system			
5. Supply of qualified labour	3	1	2
6. School facilities	15	26	26
7. Proximity of training facilities	28	33	33
8. Supply of unskilled labour	30	15	11
9. Proximity of 3rd level education	34	33	29
Labour market			
10. Indirect labour costs	4	1	1
11. Regulation of the labour market	5	8	6
12. Wages and salaries	13	4	5
Macroeconomic outlook			
13. Rate of economic growth	5	3	4
14. Sector medium term outlook	12	10	9
Infrastructure			
15. Transport network	7	11	10
16. Supply & cost of energy	8	12	18
17. Industrial sites	14	17	25
18. Communication system	17	23	14
19. Supply & cost of waste disposal	26	21	14
National policies and institutions			
20. Industrial policy	9	18	12
21. Administrative procedures	16	25	20
22. Other national determinants	25	28	32
23. Legal regulations	29	22	19
Regional policies and institutions			
24. Regional policy incentives	11	14	20
25. Cooperation of local authorities	24	20	24
26. Other regional determinants	31	32	31
27. Local taxes	33	7	12
Regional economic structure			
28. Servicing machinery	18	31	27
29. Proximity of suppliers	19	23	28
30. Proximity of customers	21	15	22
31. Banks, insurance, lawyers	22	30	33
32. Business culture	26	26	30
33. Advertising & consulting	36	36	35
Social facilities			
34. Social climate	23	12	17
35. Cost of housing	31	29	16
36. Cultural & social facilities	35	35	36
37. Leisure facilities	37	37	37

[1] *Ranking according to the frequency of company replies in response to the request to list the 3 determinants of competitiveness with the highest priority for improvement.*
Source: Ifo, An empirical assessment of factors shaping regional competitiveness in problem regions. Study financed by the European Commission, Luxembourg 1990

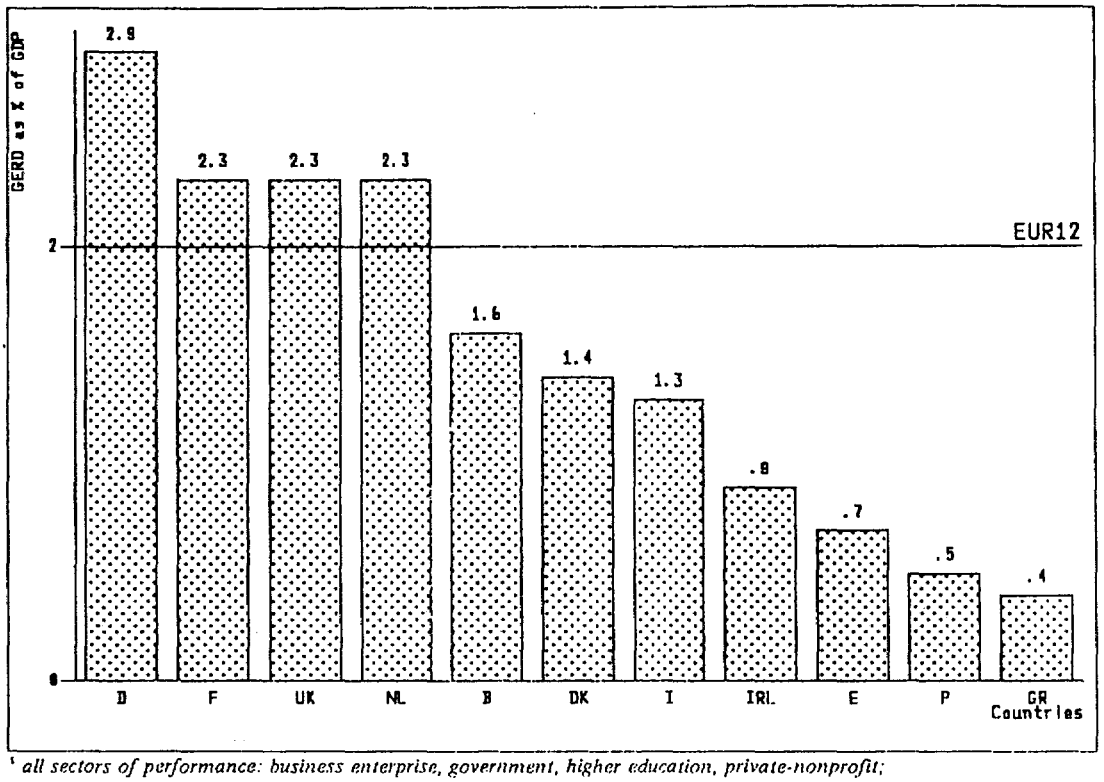
Graph 3.2 : Proportion of adolescents in education and training in the Member States[1]



[1] *Data for various years between 1984 and 1987*

Source: Derenbach, Human capital and infrastructure, Bonn 1990

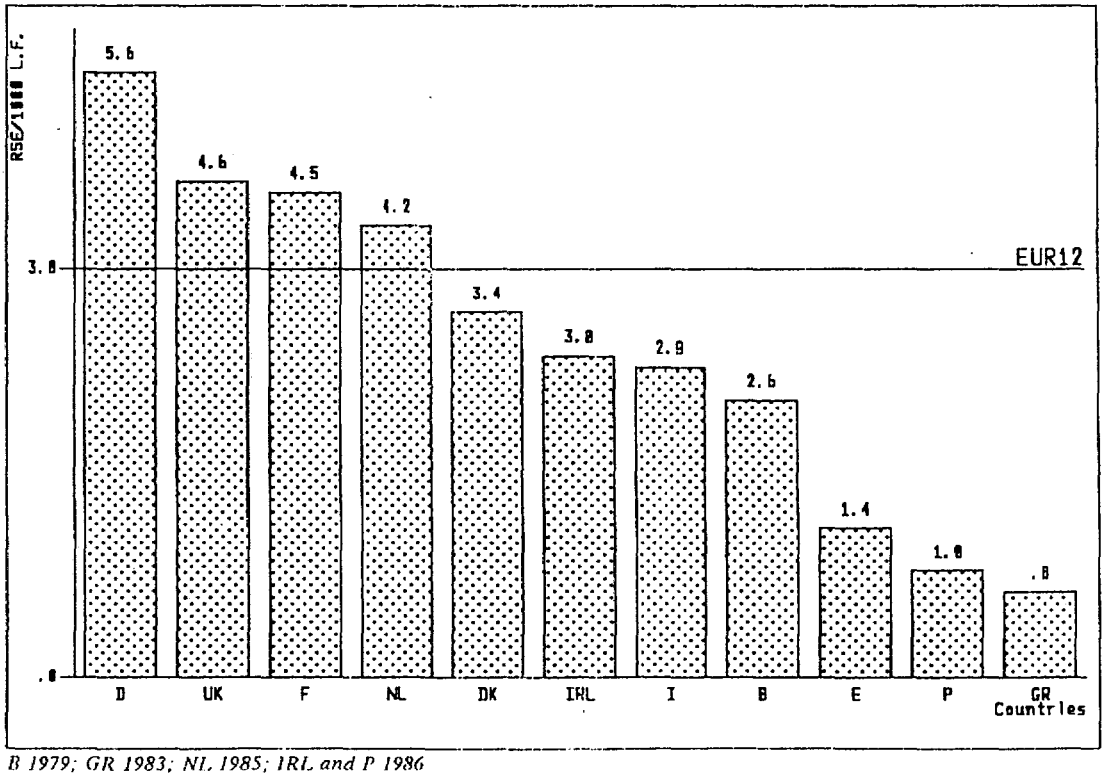
Graph 3.3.1: Gross domestic expenditure on research and development as a percentage of GDP,1989[1]



[1] *all sectors of performance: business enterprise, government, higher education, private-nonprofit; P 1986; DK and UK 1987; B, GR, IRL and NL 1988*

Source: OECD, Main Science and Technology Indicators, July 1990

Graph 3.3.2: Research scientists and engineers per 1.000 of the Labour Force, 1987



B 1979; GR 1983; NL 1985; IRL and P 1986

Source: OECD, Main Science and Technology Indicators, July 1990

Table 4.1.1: Requirements for regional convergence: economic growth

Change in the GDP per head index (EUR12 = 100)		Time period (years)		
		10	15	20
From (A)	To (B)	Required deviation of regional growth from the EC average[1]		
50	70	3 ½	2 ¼	1 ¾
50	90	6 to 6 ½	4 to 4 ½	3
70	90	2 ½	1 ¾	1 ¼

[1] *Such estimates can be made using the following formula: $(Gr - G) = (1 + G) \times (\sqrt[t]{B/A} - 1)$ where Gr and G are the growth rates in the region and the Community, respectively, A is the index GDP per head of the region (EUR12 = 100) at the start, and B the equivalent index at the end of the time period t.*

How to read the table: For a region with an index of GDP per head half the Community average (50) to move to 70 within 10 years the region's growth of output per head must be 3 ½ points higher than the average growth rate of the Community. Assuming the EC growth per head is 2% p.a. over this time span, the region's rate would have to be 2 + 3 ½ = 5 ½ p.a.

Table 4.1.2: Trends and differences in GDP and GDP per head in Member States in the 1980's

Countries	Annual growth rates in								GDP/Head (EUR12 = 100)	
	GDP							Population		
	82→85	86→90	1986	1987	1988	1989	1990	86→90	1986	1990
GR	1.6	1.8	0.8	-0.1	4.0	2.9	1.6	0.3	56	53
E	1.8	4.5	3.3	5.5	5.0	4.9	3.8	0.4	72	77
IRL	1.5	3.7	-0.3	4.9	3.7	5.7	4.6	0.1	63	65
P	0.9	4.5	4.1	5.3	3.9	5.4	4.0	0.3	53	56
total (EUR4)	1.9	4.2	2.9	4.8	4.7	4.8	3.6	0.3	66	69
other (EUR8)	1.8	3.0	2.6	2.6	3.7	3.2	2.9	0.3	108	107
EUR12	1.8	3.1	2.6	2.9	3.8	3.4	3.0	0.3	100	100

Source: DG II

Table 4.2: Requirements for regional convergence: employment growth

Change in unemployment rates (%)		Time period (years)		
		5	10	15
From (A)	To (B)	Required employment growth (% per year)[1]		
20	15	2 ¼	1 ½	1 ½
20	10	3 ½	2 ¼	1 ¾

[1] *Such estimates can be made using the following formula: Ge = (1 + Gl) × $\sqrt{(1-B)/(1-A)}$ - 1 Where Ge is the rate of growth in employment, A is the rate of unemployment before and B is the rate of unemployment after time period t and Gl is the rate of growth of labour force (assumed to be 1% per annum).*

Table 5.1.1: Population, population density and demographic development in objective 1 regions

Regions	Population (1987)			Area		Density Inhab./km² (1987)	Growth rate of the population % per year	
	1000	EUR12 = 100	M.S.[1] = 100	1000	EUR12 = 100		(1977/1987)	(1990/2000)[2]
Ellada	9990	3.1	100.0	132	5.6	76	0.8	0.0
España								
Galicia	2845	0.9	7.3	29	1.2	98	0.4	-0.1
Asturias	1135	0.4	2.9	11	0.5	103	0.3	-0.2
Castilla Leon	2621	0.8	6.7	94	4.0	28	0.5	-0.1
Castilla Mancha	1688	0.5	4.3	79	3.4	21	0.5	0.1
Extremadura	1094	0.3	2.8	42	1.8	26	0.5	0.2
Comm. Valenciana	3754	1.2	9.7	23	1.0	163	0.9	0.1
Andalucia	6773	2.1	17.4	87	3.7	78	1.1	0.6
Murcia	1007	0.3	2.6	11	0.5	92	1.4	0.6
Ceuta y Melilla	126	0.0	0.3	0	0.0	4053	1.3	:
Canarias	1443	0.4	3.7	7	0.3	206	0.7	0.6
Total objective 1	22486	6.9	57.7	383	16.3	59	0.8	0.2
France								
Corse	247	0.1	0.4	9	0.4	27	0.9	-0.1
D.O.M.[3]	1323	0.4	2.3	96	4.1	14	:	:
Total objective 1	1570	0.5	2.7	105	4.5	15	:	:
Ireland	3543	1.1	100.0	70	3.0	51	0.9	0.5
Italia								
Campania	5711	1.8	10.0	14	0.6	408	0.8	0.6
Abruzzi	1256	0.4	2.2	11	0.5	114	0.5	-0.0
Molise	334	0.1	0.6	4	0.2	84	0.3	-0.0
Puglia	4035	1.2	7.0	19	0.8	212	0.7	0.4
Basilicata	621	0.2	1.1	10	0.4	62	0.2	0.3
Calabria	2143	0.7	3.7	15	0.6	143	0.6	0.5
Sicilia	5127	1.6	8.9	26	1.1	197	0.7	0.4
Sardegna	1648	0.5	2.9	24	1.0	69	0.6	0.3
Total objective 1	20875	6.5	36.4	123	5.2	170	0.7	0.3
Portugal	10250	3.2	100.0	92	3.9	111	0.9	0.0
United Kingdom								
Northern Ireland	1575	0.5	2.8	14	0.6	113	0.9	0.8
Total/Average for objective 1	70289	21.7		919	39.1	76	0.8	0.2
Total/Average for other regions	253344	78.3		1431	60.9	178	0.2	-0.0
EUR 12	323633	100.0		2350	100.0	144	0.3	0.0

[1] *Member State*
[2] *Source: NEI study, see map 2.3.*
[3] *National sources*

Table 5.1.2: Economic activity and unemployment in objective 1 regions

Regions	Participation rate[1] in % (1988)	Unemployment rate (1990)			Unemployment rate change (in points of %) (1985/1990)			Increase in Labour forces % per year (1990/2000)[2]	Agricultural under employment[3] (1987)	Adjusted unemployment rate[4]
		Total	Youth	Women	Total	Youth	Women			
Ellada	40.7	7.5	24.8	12.4	-0.3	1.0	0.7	0.2	39.1	12.1
España										
Galicia	41.1	11.8	24.1	14.5	-1.3	-9.2	3.6	0.5	30.9	15.9
Asturias	37.9	17.0	39.9	25.7	-1.7	-11.4	3.2	0.3	20.9	21.0
Castilla Leon	37.6	15.3	34.4	27.2	-3.2	-8.7	0.5	0.3	31.3	21.2
Castilla Mancha	35.9	13.1	22.6	23.9	-4.3	-11.8	2.7	0.6	39.4	20.7
Extremadura	35.8	24.8	42.6	38.8	-3.1	-8.2	7.9	0.6	29.2	29.6
Comm. Valenciana	38.9	13.9	22.7	22.0	-7.1	-21.2	-4.0	0.9	43.1	23.2
Andalucia	35.1	25.4	41.6	37.2	-5.2	-12.5	7.3	1.2	38.3	34.0
Murcia	36.6	15.5	28.9	26.4	-5.5	-19.2	-0.1	1.3	39.8	24.5
Ceuta y Melilla	37.1	28.9	54.5	45.0	:	:	:	:	:	:
Canarias	38.1	22.7	36.7	31.9	-5.2	-17.8	-1.7	1.4	40.8	26.9
Total objective 1	37.3	18.4	33.5	27.2	-4.4	-13.8	2.4	0.8	35.8	25.3
France										
Corse[5]	33.1	10.1	18.7	15.2	-2.0	-8.7	-2.5	-0.2	11.9	12.2
D.O.M.[5]	56.0	:	:	:	:	:	:	:	:	:
Total objective 1	52.4	:	:	:	:	:	:	:	:	:
Ireland	38.0	16.4	22.2	18.5	-1.7	-3.1	-0.8	1.6	7.9	18.8
Italia										
Campania	40.2	19.8	57.4	32.2	6.9	12.3	11.0	1.1	45.7	23.3
Abruzzi	40.9	10.2	32.8	17.2	2.1	-0.4	5.4	0.2	47.6	13.5
Molise	44.2	12.1	40.8	18.2	3.8	9.3	2.8	0.3	55.0	20.2
Puglia	36.8	14.4	41.2	23.6	4.1	5.8	6.2	1.1	55.1	18.9
Basilicata	41.1	21.5	58.8	33.9	12.2	29.6	18.2	0.7	51.0	23.8
Calabria	38.0	22.6	60.8	34.5	8.3	16.0	11.1	1.0	55.0	23.6
Sicilia	37.4	21.7	57.6	40.0	8.1	9.6	13.9	0.8	61.2	21.6
Sardegna	38.7	19.0	49.8	32.5	-0.2	0.4	0.8	0.9	45.2	20.6
Total objective 1	38.7	18.8	52.5	31.3	6.0	9.6	9.6	0.9	53.6	21.2
Portugal	46.3	5.1	11.7	7.5	-3.5	-8.1	-4.6	0.7	17.5	8.3
United Kingdom										
Northern Ireland	43.1	15.7	19.2	14.4	-2.1	-6.3	-1.7	1.0	10.7	19.1
Average for obj. 1	40.0	14.3	32.3	21.1	-0.3	-3.3	2.9	0.8	38.2	18.6
Average for other regions	44.9	6.9	11.3	9.1	-2.9	-8.4	-2.6	-0.0	23.2	9.8
EUR 12	44.8	8.3	15.5	11.1	-2.4	-7.2	-1.6	0.1	31.4	11.4

[1] *Total labour force as a share of population of working age.*

[2] *Source: NEI, Demographic Evolution Through Time in European Regions, Rotterdam 1990*

[3] *Share of farmers without other activities who are working less than 50 % of normal hours. Source : Community farm structure survey in 1987.*

[4] *Harmonised unemployment rate increased by underemployed farmers measured in man-years.*

[5] *National sources*

Table 5.1.3: Employment, gross value added, income and productivity in objective 1 regions

Regions	Sectoral structure of economy						GDP in PPS EUR12 = 100			
	Share of sectors in total employment (1986)			Percentage of GVA coming from			Per inhabitant		Per person employed	
	Agriculture	Industry	Services	Agriculture	Industry	Services	1983	1988	1983	1988
Ellada	28.5	26.2	45.3	:	:	:	56.4	54.5	57.5	57.1
Espana										
Galicia	43.7	21.3	34.9	11.7	34.7	53.6	62.5	64.7	65.5	70.1
Asturias	21.2	35.7	42.8	4.4	45.0	50.6	78.3	79.2	92.4	95.3
Castilla Leon	26.3	28.4	45.2	12.0	35.6	52.3	71.5	72.0	86.6	90.1
Castilla Mancha	25.9	31.6	42.2	14.4	34.9	50.7	58.4	61.6	80.0	85.6
Extremadura	30.4	21.0	48.4	15.1	29.8	55.2	44.1	49.7	66.8	75.5
Comm. Valenciana	13.0	36.3	50.4	5.6	35.8	58.6	71.8	78.4	96.1	95.7
Andalucia	19.6	24.0	56.2	10.5	29.0	60.5	56.3	58.3	89.4	92.0
Murcia	18.4	31.0	50.5	8.8	36.4	54.8	67.0	66.7	96.6	92.6
Ceuta Y Melilla	:	:	:	1.2	14.9	83.9	49.5	53.9	112.4	87.0
Canarias	14.3	20.3	64.6	6.6	20.5	72.9	64.9	73.0	92.6	107.1
Total objective 1	23.9	27.5	48.6	9.6	33.1	57.3	63.2	65.9	85.3	89.0
France										
Corse	6.4	17.9	75.7	3.3	22.5	74.2	81.4	76.2	94.3	91.6
D.O.M.[1]	9.9	20.4	69.7	:	:	:	41.6	41.6	:	:
Total objective 1	16.0	20.1	70.4	:	:	:	48.3	47.0	:	:
Ireland	16.0	29.6	53.9	10.6	34.9	54.5	64.8	65.1	77.9	83.7
Italia										
Campania	15.8	24.9	59.4	7.1	32.7	60.2	70.3	67.0	81.7	82.3
Abruzzi	14.1	26.9	59.0	8.2	36.3	55.5	88.0	88.9	87.3	90.2
Molise	23.7	22.2	54.0	10.1	37.5	52.4	74.3	79.1	83.2	80.2
Puglia	20.5	25.9	53.6	11.5	33.7	54.8	72.0	72.8	83.7	80.7
Basilicata	22.5	27.2	50.3	11.4	39.6	49.0	65.3	64.1	72.6	72.1
Calabria	20.0	20.3	59.7	8.1	30.4	61.5	61.5	58.8	76.7	75.7
Sicilia	18.6	22.2	59.2	8.9	30.1	61.0	71.6	70.2	90.7	88.5
Sardegna	13.0	24.7	62.3	7.3	34.3	58.4	76.0	75.0	90.2	88.8
Total objective 1	17.8	24.2	58.0	8.8	32.7	58.5	71.5	70.1	84.5	83.6
Portugal	21.5	33.9	44.5	8.0	37.1	54.8	54.6	54.0	52.8	57.5
United Kingdom										
Northern Ireland	4.6	28.9	63.6	4.5	35.4	60.0	78.8	79.9	83.6	83.3
Average for obj. 1	21.3	27.5	51.1	:	:	:	67.9	66.9	74.5	75.8
Average for other regions	5.2	35.0	59.8	:	:	:	103.1	103.2	103.6	103.6
EUR 12	8.1	33.7	57.7	:	:	:	100.0	100.0	100.0	100.0

[1] *National sources*

Table 6.3.1: Functional structure of ERDF resources devoted to objective 1 regions[1], 1989-1993

	GR	E	F	IRL	I	P	UK	Total
I. Basic infrastructures	77	67	67	56	48	37	56	58
- improved communications	49	52	36	44	15	29	45	37
- energy and water equipments	26	12	19	8	32	7	1	18
- social infrastructure	2	3	12	4	1	1	10	3
II. Direct improvement of productive activities	19	24	27	33	42	42	28	32
- increasing of productivity	17	12	16	33	24	30	28	21
- other support for infrastructures linked to economic activities	2	11	11	-	18	13	-	11
III. Others (including the development of local and human resources, technical assistance,...)	4	9	6	11	10	21	16	10
Total	100	100	100	100	100	100	100	100

[1] *Excluding multiannual actions decided before the reform of Structural Funds, amounting to 809 Mecu*

Table 6.3.2: Functional structure of ERDF resources devoted to objective 2 regions[1], 1989-1991

	B	DK	D	E	F	I	L	NL	UK	Total
I. Basic infrastructures	3	-	-	45	-	-	-	-	20	16
- improved communications	3	-	-	45	-	-	-	-	20	15
- energy and water equipments	-	-	-	-	-	-	-	-	-	1
- social infrastructure	-	-	-	-	-	-	-	-	-	-
II. Direct improvement of productive activities	94	100	100	55	91	88	100	71	64	76
- increasing of productivity	84	73	57	35	49	64	100	44	25	43
- other support for infrastructures linked to economic activities	10	27	43	20	42	24	-	28	39	32
III. Others (including the development of local and human resources, technical assistance,...)	3	-	-	-	9	13	-	29	15	8
Total	100	100	100	100	100	100	100	100	100	100

[1] *Excluding multiannual actions decided before the reform of Structural Funds*

Table 6.3.3: Functional structure of the three Structural Funds' resource devoted to objective 1 regions', 1989-1993

	GR	E	F	IRL	I	P	UK	Total
I. Basic infrastructures	36	43	31	25	33	19	24	33
- improved communications	22	33	17	20	11	13	20	21
- energy and water equipments	12	8	9	3	22	3	1	10
- social infrastructure	2	2	5	2	1	3	4	2
II. Improvement of productive activities	18	18	12	28	34	24	18	24
- increasing of productivity	17	11	7	28	19	17	18	17
- other suppport for infrastructures linked to economic activities	1	7	5	-	14	7	-	7
III.Others (including the development of local and human resources, technical assistance,..)	46	39	57	47	33	57	58	43
- of which horizontal actions	30	18	20	22	16	18	36	20
Total	100	100	100	100	100	100	100	100

'Excluding multiannual actions decided before the reform of Structural Funds

Table 6.3.4: Functional structure of ERDF and ESF resources devoted to objective 2 regions', 1989-1991

	B	DK	D	E	F	I	L	NL	UK	Total
I. Basic infrastructure	2	-	-	36	-	-	-	-	15	13
- improved communications	2	-	-	36	-	-	-	-	15	13
- energy and water equipments	-	-	-	-	-	-	-	-	-	-
- social infrastructure	-	-	-	-	-	-	-	-	-	-
II. Improvement of productive activities	94	100	99	64	91	87	100	81	68	79
- increasing of productivity	84	81	54	47	58	67	100	66	37	52
- other support for infrastructures linked to economic activities	10	19	45	16	33	19	-	15	31	27
III.Others (including the development of local and human resources, technical assist....)	4	-	1	1	9	13	-	19	16	8
Total	100	100	100	100	100	100	100	100	100	100

'Excluding multiannual actions decided before the reform of Structural Funds

Table 8.2.1: ERDF commitments, investment and GDP by country and for objective 1 regions, 1986 - 1993

Member States	Investment (GFCF) as % of GDP				ERDF expenditure as % of									
					GDP					Investment (GFCF)				
	1986	1987	1988	1989	1986	1987	1988	1989	1993	1986	1987	1988	1989	1993
B	15.7	16.3	18.0	19.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
DK	20.7	18.8	17.7	17.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
D	19.5	19.4	19.8	20.7	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
GR	18.5	17.4	17.9	18.8	0.8	0.7	0.8	1.3	1.7	4.1	4.2	4.2	6.8	7.8
E	19.2	20.7	22.5	24.4	0.3	0.3	0.3	0.4	0.5	1.4	1.3	1.1	1.5	1.6
of which obj.1	19.9	21.5	(23.4)	(25.3)	0.5	0.5	0.4	0.6	0.8	2.7	2.4	(1.8)	(2.5)	(3.0)
F	19.1	19.4	20.1	20.5	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.2
of which obj.1	20.4	(20.7)	(21.5)	(21.9)	0.7	1.5	0.9	0.7	2.2	3.5	(7.0)	(4.0)	(3.1)	(10.0)
IRL	18.4	17.4	17.0	17.9	0.5	0.6	0.5	1.0	1.3	2.7	3.7	3.2	5.8	6.3
I	20.0	19.9	19.8	20.1	0.1	0.1	0.1	0.1	0.2	0.7	0.7	0.7	0.6	0.8
of which obj.1	21.0	21.3	(21.2)	(21.5)	0.5	0.5	0.5	0.5	0.6	2.4	2.6	(2.5)	(2.0)	(2.8)
L	20.9	22.6	22.3	22.5	0.0	0.1	0.0	-	0.0	0.1	0.3	0.1	-	0.2
NL	20.1	20.3	21.6	22.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
P	22.4	25.3	28.1	29.7	1.3	1.2	1.2	1.5	2.1	5.8	4.8	4.3	4.9	6.0
UK	16.9	17.3	18.8	18.8	0.1	0.1	0.1	0.1	0.1	0.6	0.6	0.4	0.4	0.3
of which obj.1	19.0	21.3	(23.2)	(23.2)	0.5	0.5	0.5	(0.6)	(0.4)	2.7	2.2	(2.0)	(2.6)	(2.1)
EUR12	19.0	19.2	20.0	20.6	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.5	0.6
of which obj.1	(20.3)	(21.0)	(21.9)	(23.0)	0.6	0.6	0.6	0.7	0.9	3.0	(2.9)	(2.6)	(3.1)	(4.1)
others	(18.8)	(19.0)	(19.8)	(20.3)	0.0	0.0	0.0	0.0	0.0	0.2	(0.2)	(0.2)	(0.1)	(0.2)

( ) = provisional estimates

Sources: -GDP and investment (GFCF) at national level 1986-1989: DG II annual report
-ERDF commitment 1986 to 1988: ERDF in figures, 1988, Luxembourg 1989;1989: DG 16
-GDP and investment (GFCF) at objective 1 regional level:
. Italia: Conti economici regionali (serie 1983-87) : Istituto centrale di statistica
. . GDP for España, Corse, Northern Ireland (1986 and 1987) : REGIO data base
. GFCF for España, Corse, D.O.M., Northern Ireland and GDP for D.O.M. : National sources

Table 8.2.2: The three Structural Funds' commitments as percentage of GDP by country and for objective 1 regions from 1986 to 1993

Member States	1986	1987	1988	1989	1993
B	0.1	0.1	0.1	0.1	0.1
DK	0.1	0.1	0.1	0.1	0.1
D	0.0	0.0	0.0	0.1	0.1
GR	1.5	1.5	1.6	2.3	2.9
E	0.5	0.5	0.5	0.6	0.8
of which obj.1	:	0.8	:	1.1	1.2
F	0.1	0.1	0.1	0.1	0.1
of which obj.1	:	3.7	:	3.3	4.6
IRL	1.7	2.0	1.5	2.2	2.7
I	0.3	0.3	0.2	0.2	0.3
of which obj.1	:	0.7	:	0.7	0.9
L	0.2	0.2	0.2	0.1	0.2
NL	0.1	0.1	0.1	0.1	0.1
P	2.1	2.6	2.4	2.7	3.7
UK	0.2	0.3	0.2	0.2	0.2
of which obj.1	:	1.5	:	1.1	0.9
EUR12	0.2	0.2	0.2	0.2	0.3
of which obj.1	:	1.1	:	1.2	1.6
others	:	0.1	:	0.1	0.1

Table 10.1.1: Population and employment in the regions of Eastern Germany, 1989

Regions	Population 1.1.1990 (1000)	Population Density 1.1.1990	Total change per 1000 1989	Natural change per 1000 1989	Share of sectors in total employment[1] 1989		
					Agriculture	Industry	Services
DDR	16434	152	-14.7	-0.4	10.8	47.0	42.2
Länder							
Mecklenburg-Vorpommern	1964	82	-7.6	2.6	19.6	33.0	47.4
Brandenburg	2641	91	-10.6	0.6	15.3	43.2	41.5
Sachsen-Anhalt	2965	145	-13.3	-1.0	12.2	48.0	39.8
Thüringen	2684	165	-14.7	-0.7	10.2	51.9	37.9
Sachsen	4901	257	-23.2	-2.4	7.3	54.1	38.6
Bezirke							
Rostock	910	129	-7.4	2.9	14.6	33.9	51.5
Schwerin	590	68	-8.5	2.2	22.1	33.9	44.0
Neubrandenburg	616	56	-7.6	1.9	26.8	30.0	43.2
Potsdam	1111	88	-11.3	0.5	16.3	41.3	42.4
Frankfurt	706	98	-10.8	1.5	15.8	39.9	44.3
Cottbus	876	104	-10.5	0.5	10.7	51.6	37.7
Magdeburg	1238	107	-9.4	-0.5	15.1	42.2	42.7
Halle	1748	199	-16.3	-1.4	9.8	52.4	37.8
Erfurt	1223	166	-14.3	-0.1	11.2	50.8	38.0
Gera	728	182	-19.2	-0.6	9.6	50.6	39.8
Suhl	545	141	-7.7	-1.5	7.9	56.8	35.3
Dresden	1713	254	-25.9	-1.8	8.1	52.4	39.5
Leipzig	1333	269	-20.8	-2.2	8.4	49.9	41.7
Chemnitz	1817	253	-21.3	-3.7	6.0	58.5	35.5
Berlin-Ost	1279	3174	-4.2	2.8	1.1	35.1	63.8

[1] *Persons in employment (without apprentices), September 1989*

Source: Statistical Office GDR, Statistical data 1989 on the Länder of the GDR, Berlin 1990.

Table A: Principal indicators for the regions in the EC (Nuts 2)

Regions	Demography				Labour market				Economy					
						Unemployment rate			Share of sectors in total employment (1987)			GDP Average 1986-87-88 EUR12 = 100		
	Population (1988) EUR12 = 100	Growth rate of population %/year (1978-1988)	Density inhab/km² (1988)	15-64/ tot.pop. % (1987)	Parti cipation rate (1988) %	Total 1990	Average 88-89-90 EUR12 = 100	Change 1985-1990 in % points	Agric.	Industry	Services	/inhab in PPS	/empl. in PPS	/empl. in ECU
Belgique-België	3.0	0.0	323	67.4	39.7	7.6	94.2	-3.5	3.2	31.4	65.5	100.7	108.0	112.2
Vlaams Gewest	1.8	0.2	421	68.2	40.6	5.5	72.5	-4.4	3.2	34.9	61.9	101.3	114.8	119.3
Région Wallonne	1.0	-0.0	190	66.8	38.6	10.8	127.8	-2.1	3.9	27.6	68.5	83.4	104.3	108.5
Bruxelles-Brussel	0.3	-0.6	6022	65.2	37.9	9.9	118.3	-2.4	0.2	20.2	79.6	154.2	92.8	96.5
Antwerpen	0.5	0.1	553	68.0	39.0	6.5	83.4	-4.4	2.3	37.0	60.8	124.8	127.2	132.3
Brabant	0.7	-0.0	661	67.2	39.8	6.7	82.8	-3.2	2.0	23.8	74.2	112.0	96.7	100.6
Hainaut	0.4	-0.3	336	66.6	37.7	13.1	152.4	-1.4	2.9	28.5	68.5	77.6	101.4	105.4
Liège	0.3	-0.2	257	67.2	40.2	11.0	128.8	-2.4	3.2	29.8	67.0	95.9	107.8	112.1
Limburg	0.2	0.6	304	70.1	39.8	8.8	114.7	-5.8	3.2	39.2	57.6	93.1	115.5	120.1
Luxembourg	0.1	0.3	51	65.2	37.4	5.9	80.9	-3.4	9.9	21.9	68.2	80.3	103.4	107.5
Namur	0.1	0.5	113	66.4	37.6	9.9	118.7	-2.2	5.1	23.4	71.5	78.4	102.3	106.4
Oost-Vlaanderen	0.4	0.0	446	67.5	41.7	5.3	68.9	-4.2	3.1	35.7	61.2	94.4	112.2	116.6
West-Vlaanderen	0.3	0.2	349	67.3	40.9	3.8	51.3	-4.4	5.0	36.5	58.5	99.3	106.9	111.2
Danmark	1.6	0.1	119	66.8	56.3	7.9	79.9	0.0	5.8	27.1	67.1	112.5	87.0	113.1
Hovedstadsregionen	0.5	-0.2	600	68.4	:	6.8	66.5	0.3	:	:	:	132.6	96.1	124.9
Øst for Storebælt	0.2	0.2	84	65.3	:	9.1	94.4	-0.0	:	:	:	94.7	84.9	110.4
Vest for Storebælt	0.9	0.3	85	66.0	:	8.4	85.5	-0.1	:	:	:	104.0	82.6	107.4
Deutschland	18.9	-0.1	246	70.1	47.8	5.2	62.0	-2.0	4.5	40.5	55.0	113.6	105.3	125.4
Schleswig-Holstein	0.8	-0.1	162	70.1	47.7	6.2	71.8	-2.2	5.4	29.5	65.1	94.5	100.5	119.6
Hamburg	0.5	-0.6	2110	70.1	49.1	8.0	97.2	-2.6	1.0	26.3	72.7	182.7	133.7	159.2
Niedersachsen	2.2	-0.1	151	69.4	46.9	6.8	78.5	-2.7	6.5	36.6	56.9	97.8	98.7	117.5
Braunschweig	0.5	-0.4	196	69.5	47.2	7.8	84.6	-1.8	3.1	45.8	51.1	109.8	:	:
Hannover	0.6	-0.3	221	69.5	47.3	6.8	80.2	-2.4	3.0	35.8	61.2	110.8	:	:
Lüneburg	0.4	0.1	94	69.5	48.6	5.9	66.0	-2.3	10.2	30.6	59.2	77.5	:	:
Weser-Ems	0.7	0.2	142	69.2	45.2	6.6	81.1	-4.0	9.7	34.8	55.4	90.5	:	:
Bremen	0.2	-0.7	1633	69.5	46.4	10.4	116.8	-2.4	0.3	32.6	67.2	146.8	116.0	138.1
Nordrhein-Westfalen	5.2	-0.2	491	70.6	44.7	6.9	82.1	-2.0	2.3	43.6	54.1	109.1	107.5	128.1
Düsseldorf	1.6	-0.4	958	70.8	45.4	7.3	87.0	-1.6	1.7	43.6	54.8	121.5	:	:
Köln	1.2	-0.0	523	71.8	45.0	6.5	78.5	-1.5	1.2	39.8	58.9	110.7	:	:
Münster	0.7	-0.1	346	70.6	43.1	7.2	83.9	-2.5	5.4	40.4	54.2	92.6	:	:
Detmold	0.6	-0.0	275	68.7	45.8	5.6	65.3	-2.5	3.1	47.4	49.5	103.4	:	:
Arnsberg	1.1	-0.3	451	70.1	44.2	7.3	86.6	-2.5	2.1	47.8	50.1	103.7	:	:
Hessen	1.7	-0.1	261	70.4	48.9	4.1	47.9	-1.5	2.6	37.6	59.8	128.2	115.5	137.6
Darmstadt	1.0	0.0	456	71.2	50.1	3.5	42.5	-1.3	1.7	36.9	61.4	148.9	:	:
Gießen	0.3	-0.1	177	70.0	47.2	4.5	51.7	-1.5	3.6	39.1	57.4	90.2	:	:
Kassel	0.4	-0.2	140	68.4	46.5	5.8	61.6	-2.0	4.7	38.7	56.7	99.4	:	:
Rheinland-Pfalz	1.1	-0.0	183	69.6	47.0	4.5	52.9	-2.3	5.1	40.9	54.0	101.1	101.2	120.6
Koblenz	0.4	-0.1	167	68.8	46.7	4.5	51.1	-2.6	3.8	39.6	56.6	93.8	:	:
Trier	0.1	-0.0	96	68.6	44.0	5.1	60.3	-2.6	8.6	32.7	58.7	86.2	:	:
Rheinhessen-Pfalz	0.6	-0.0	265	70.4	48.0	4.3	52.4	-2.1	5.2	43.7	51.1	110.5	:	:
EUR 12	100.0	0.3	144	67.1	44.8	8.3	100.0	-2.4	7.6	33.2	59.2	100.0	100.0	100.0
Weighted Standard Deviation		0.4	210	2.4	5.0	5.2	59.4	3.1	8.1	7.6	9.3	27.8	18.4	28.4

Table A: Principal indicators for the regions in the EC (Nuts 2)

Regions	Demography				Labour market				Economy					
						Unemployment rate			Share of sectors in total employment (1987)			GDP Average 1986-87-88 EUR12 = 100		
	Population (1988) EUR12 = 100	Growth rate of population %/year (1978-1988)	Density inhab/km² (1988)	15-64/ tot.pop. % (1987)	Participation rate (1988) %	Total 1990	Average 88-89-90 EUR12 = 100	Change 1985-1990 in % points	Agric.	Industry	Services	/inhab in PPS	/empl. in PPS	/empl. in ECU
Baden-Württemberg	2.9	0.2	260	70.4	49.1	3.0	35.4	-1.2	4.8	47.0	48.2	119.9	102.7	122.3
Stuttgart	1.1	0.2	331	70.4	49.8	2.7	31.5	-0.8	3.7	49.4	47.0	133.8	:	:
Karlsruhe	0.7	0.1	346	71.0	48.6	3.7	43.4	-1.3	2.0	43.2	54.7	120.1	:	:
Freiburg	0.6	0.1	200	70.1	49.5	2.8	35.1	-1.8	5.6	48.6	45.9	104.9	:	:
Tübingen	0.5	0.3	172	69.5	47.6	2.8	32.3	-1.3	11.0	45.3	43.8	106.6	:	:
Bayern	3.4	0.1	155	69.8	51.2	3.4	41.4	-2.2	7.7	41.1	51.2	113.6	100.1	119.3
Oberbayern	1.1	0.0	205	71.5	51.5	2.8	37.7	-1.9	4.8	35.6	59.6	135.1	:	:
Niederbayern	0.3	0.4	99	68.3	51.2	3.6	41.4	-2.5	12.8	44.9	42.3	90.9	:	:
Oberpfalz	0.3	0.0	100	69.1	50.8	4.6	54.1	-3.0	9.9	41.1	48.9	90.7	:	:
Oberfranken	0.3	-0.2	143	68.4	51.8	4.1	45.2	-2.6	9.5	48.6	41.8	97.8	:	:
Mittelfranken	0.5	0.1	210	70.0	52.7	3.8	45.7	-2.0	7.4	45.5	47.2	122.3	:	:
Unterfranken	0.4	0.1	141	69.1	49.4	3.6	41.9	-2.1	8.4	41.7	49.9	94.7	:	:
Schwaben	0.5	0.2	155	68.2	50.3	2.8	34.6	-2.4	8.3	41.9	49.7	107.8	:	:
Saarland	0.3	-0.3	411	71.1	42.1	7.2	89.3	-3.5	1.9	41.6	56.5	104.6	101.1	120.4
Berlin (West)	0.6	0.4	4192	67.9	51.7	6.9	77.7	-1.2	1.0	30.6	68.5	125.1	104.9	125.2
Ellada	3.1	0.6	76	66.1	40.7	7.5	83.0	-0.3	26.6	25.4	48.0	54.8	56.9	37.1
Voreia Ellada	1.0	0.5	57	:	42.0	7.0	76.3	0.9	35.8	25.9	38.3	52.5	53.2	34.5
Anatoliki Makedonia, Thraki	0.2	0.3	41	:	45.6	8.7	86.7	:	46.9	20.3	32.7	56.1	53.9	35.0
Kentriki Makedonia	0.5	0.7	86	:	41.3	6.6	74.9	:	29.9	28.0	42.1	52.8	53.1	34.5
Dytiki Makedonia	0.1	0.6	32	:	40.3	5.8	65.3	:	34.6	34.0	31.4	46.7	56.7	36.8
Thessalia	0.2	0.2	50	:	41.5	6.7	74.4	-0.6	40.5	22.8	36.7	51.6	51.5	33.5
Kentriki Ellada	0.7	0.2	43	:	43.6	6.0	65.1	-3.2	45.9	19.2	34.9	54.7	55.5	36.0
Ipeiros	0.1	0.1	35	:	40.9	4.9	50.0	-6.2	42.3	17.5	40.1	41.9	44.7	29.0
Ionia Nisia	0.1	0.0	78	:	44.4	3.3	34.5	:	45.1	13.1	41.8	50.2	44.1	28.6
Dytiki Ellada	0.2	0.1	57	:	44.7	7.1	80.9	2.1	48.6	16.3	35.1	50.0	47.3	30.7
Sterea Ellada	0.2	0.7	36	:	40.6	6.7	71.3	:	37.9	29.1	33.0	67.3	78.8	51.2
Peloponnisos	0.2	0.0	37	:	46.3	5.6	58.8	:	51.7	17.3	31.0	56.4	55.7	36.1
Attiki	1.1	0.9	926	:	37.6	9.7	103.0	5.9	1.6	31.4	67.0	58.5	63.6	41.3
Nisia	0.3	0.4	54	:	41.6	4.2	43.3	:	35.4	17.5	47.1	48.5	50.2	32.6
Voreio Aigaio	0.1	:	51	:	35.7	5.3	63.6	:	28.4	17.7	53.9	39.9	43.9	28.5
Notio Aigaio	0.1	0.5	45	:	38.7	5.0	53.2	:	13.0	23.2	63.8	55.6	60.5	39.2
Kriti	0.2	0.6	62	:	45.6	3.4	32.4	:	47.2	15.1	37.7	48.5	48.0	31.2
España	12.0	0.7	77	65.4	37.8	16.1	196.6	-6.0	14.3	32.6	53.2	73.6	96.9	74.8
Noroeste	1.4	0.3	99	65.3	39.8	13.6	159.8	-1.0	33.2	26.1	40.7	68.3	77.7	60.0
Galicia	0.9	0.3	97	64.9	41.1	11.8	137.3	-1.3	39.3	22.8	38.0	63.7	69.7	53.8
Asturias	0.4	0.2	107	66.3	37.9	17.0	200.2	-1.7	21.6	33.3	45.1	78.0	94.6	73.0
Cantabria	0.2	0.6	99	65.0	36.8	16.6	205.5	1.7	18.4	31.9	49.7	72.3	90.1	69.5
Noreste	1.3	0.4	59	67.2	38.1	14.5	177.9	-6.8	9.2	39.7	51.2	86.6	105.2	81.1
Pais Vasco	0.7	0.3	302	68.6	38.4	19.0	222.6	-4.5	4.4	41.6	54.0	89.0	111.6	86.1
Navarra	0.2	0.6	50	66.2	37.3	10.8	133.2	-9.1	10.9	41.5	47.5	88.3	99.0	76.4
EUR 12	100.0	0.3	144	67.1	44.8	8.3	100.0	-2.4	7.6	33.2	59.2	100.0	100.0	100.0
Weighted Standard Deviation		0.4	310	2.4	5.0	5.2	59.4	3.1	8.1	7.6	9.3	27.8	18.4	28.4

Table A: Principal indicators for the regions in the EC (Nuts 2)

Regions	Demography				Labour market				Economy					
						Unemployment rate			Share of sectors in total employment (1987)			GDP Average 1986-87-88 EUR12 = 100		
	Population (1988) EUR12 = 100	Growth rate of population %/year (1978-1988)	Density inhab/km² (1988)	15-64/ tot.pop. % (1987)	Parti cipation rate (1988) %	Total 1990	Average 88-89-90 EUR12 = 100	Change 1985-1990 in % points	Agric.	Industry	Services	/inhab in PPS	/empl. in PPS	/empl. in ECU
Rioja	0.1	0.7	51	65.6	38.3	7.3	110.7	-10.2	15.6	37.7	46.7	90.0	99.1	76.5
Aragón	0.4	0.4	25	65.4	37.7	9.2	128.6	-9.3	14.9	36.1	49.0	80.7	98.1	75.7
Madrid	1.5	0.9	612	66.3	36.5	12.4	157.1	-9.4	1.4	30.4	68.2	84.8	111.2	85.8
Centro	1.7	0.4	25	64.7	36.7	16.5	198.9	-3.4	24.1	28.7	47.2	63.3	86.3	66.6
Castilla - León	0.8	0.4	28	65.4	37.6	15.3	184.8	-3.2	23.9	28.7	47.4	70.9	90.3	69.7
Castilla - La Mancha	0.5	0.4	21	63.9	35.9	13.1	163.2	-4.3	22.3	33.9	43.8	60.7	85.0	65.6
Extremadura	0.3	0.4	26	64.3	35.8	24.8	289.1	-3.1	27.9	19.4	52.7	49.0	76.8	59.2
Este	3.2	0.6	174	65.8	39.9	12.8	169.1	-8.9	7.1	40.5	52.4	82.5	103.9	80.2
Cataluña	1.9	0.5	190	66.5	40.5	12.5	171.6	-10.6	4.7	44.2	51.1	83.9	105.0	81.0
Comunidad Valenciana	1.2	0.8	161	65.0	38.9	13.9	174.3	-7.1	11.2	36.3	52.5	75.3	97.0	74.8
Baleares	0.2	0.9	134	64.4	39.9	10.0	118.2	-3.5	6.3	31.2	62.5	109.2	131.2	101.2
Sur	2.4	1.0	80	63.9	35.3	24.1	284.9	-5.2	18.0	26.3	55.7	58.5	92.4	71.3
Andalucia	2.1	1.0	78	63.9	35.1	25.4	300.0	-5.2	18.4	25.3	56.2	57.5	88.1	68.1
Murcia	0.3	1.2	89	63.6	36.6	15.5	180.6	-5.5	17.2	33.2	49.5	65.9	93.1	71.8
Ceuta Y Melilla	0.0	1.2	4054	64.8	37.1	28.9	351.6	:	0.9	10.8	88.3	53.2	87.7	67.6
Canarias	0.4	0.7	199	65.4	38.1	22.7	248.1	-5.2	10.0	23.3	66.7	72.1	107.2	82.7
France	17.2	0.5	102	65.9	44.6	8.7	101.5	-1.2	7.2	30.0	62.8	109.3	110.8	120.7
Ile de France	3.2	0.3	857	68.9	49.9	7.2	84.3	-0.3	0.5	26.3	73.2	165.6	139.6	152.1
Bassin parisien	3.1	0.5	70	64.8	43.8	8.9	105.1	-1.6	9.5	33.7	56.8	100.1	103.8	113.1
Champagne-Ardenne	0.4	0.1	53	65.3	44.7	9.3	110.4	-2.0	10.8	32.8	56.4	101.7	105.9	115.4
Picardie	0.5	0.5	92	65.2	41.3	10.0	117.4	-0.6	6.4	37.4	56.3	95.3	106.8	116.4
Haute-Normandie	0.5	0.5	138	65.4	45.1	9.8	116.7	-2.5	6.2	35.3	58.5	115.7	118.4	129.1
Centre	0.7	0.7	60	64.4	44.1	8.4	96.8	-0.5	10.6	35.1	54.3	101.8	102.6	111.8
Basse-Normandie	0.4	0.5	79	64.6	44.0	8.0	93.2	-3.0	15.3	31.1	53.6	87.2	87.6	95.4
Bourgogne	0.5	0.2	51	64.0	43.9	8.1	97.2	-2.1	8.3	29.3	62.4	96.2	99.4	108.4
Nord - Pas-de-Calais	1.2	0.0	316	64.5	39.5	11.8	138.6	-0.6	4.3	36.0	59.7	87.8	104.6	113.9
Est	1.6	0.2	105	66.8	43.9	6.4	81.4	-3.0	4.1	37.1	58.8	99.4	106.6	116.2
Lorraine	0.7	0.0	99	66.8	41.3	8.0	98.1	-3.1	4.7	34.4	60.9	92.2	104.6	114.0
Alsace	0.5	0.5	194	67.8	47.4	4.5	57.6	-3.2	3.0	37.8	59.1	112.7	113.0	123.2
Franche-Comté	0.3	0.1	67	65.3	43.9	6.7	89.0	-2.3	4.7	41.7	53.6	94.9	100.4	109.4
Ouest	2.3	0.6	87	64.3	44.1	9.0	103.8	-2.2	13.4	29.2	57.3	90.9	95.8	104.4
Pays de la Loire	0.9	0.8	95	64.2	44.0	9.0	105.2	-2.0	13.1	31.8	55.1	94.3	98.2	107.0
Bretagne	0.9	0.5	102	64.6	44.5	8.4	96.8	-2.5	13.9	26.1	60.0	88.8	93.9	102.3
Poitou-Charentes	0.5	0.4	62	64.0	43.6	9.9	114.2	-1.9	13.2	29.9	56.9	88.0	94.3	102.7
Sud-Ouest	1.8	0.5	56	65.1	44.2	9.5	107.9	-0.1	14.3	25.7	59.9	93.4	97.3	106.1
Aquitaine	0.8	0.6	66	65.1	44.1	10.7	122.2	0.2	14.1	26.0	59.9	100.2	105.2	114.6
Midi-Pyrénées	0.7	0.4	52	65.5	44.7	8.7	97.6	-0.1	14.0	24.6	61.5	88.2	91.6	99.8
Limousin	0.2	-0.0	43	63.7	42.3	8.0	90.7	-0.7	16.4	28.9	54.7	85.2	87.2	95.0
Centre-Est	2.0	0.5	94	66.2	45.2	7.5	88.1	-0.8	6.6	34.0	59.4	105.2	100.6	109.7
Rhône-Alpes	1.6	0.7	119	66.4	45.1	7.2	84.8	-0.9	4.6	34.7	60.7	109.6	108.2	117.9
EUR 12	100.0	0.3	144	67.1	44.8	8.3	100.0	-2.4	7.6	33.2	59.2	100.0	100.0	100.0
Weighted Standard Deviation		0.4	210	2.4	5.0	5.2	59.4	3.1	8.1	7.6	9.3	27.8	18.4	28.4

Table A: Principal indicators for the regions in the EC (Nuts 2)

Regions	Demography				Labour market				Economy					
						Unemployment rate			Share of sectors in total employment (1987)			GDP Average 1986-87-88 EUR12 = 100		
	Population (1988) EUR12 = 100	Growth rate of population %/year (1978-1988)	Density inhab/km² (1988)	15-64/ tot.pop. % (1987)	Participation rate (1988) %	Total 1990	Average 88-89-90 EUR12 = 100	Change 1985-1990 in % points	Agric.	Industry	Services	/inhab in PPS	/empl. in PPS	/empl. in ECU
Auvergne	0.4	0.0	51	65.4	45.8	8.7	101.2	-0.3	14.8	31.2	54.1	88.1	91.1	99.2
Méditerranée	2.0	1.0	96	65.1	41.3	11.6	131.6	-1.4	7.9	21.7	70.4	94.5	109.1	118.9
Languedoc-Roussillon	0.6	1.3	75	64.6	39.1	12.9	148.0	-1.6	11.8	21.7	66.5	85.7	104.9	114.3
Provence-Alpes-Côte d'Azur	1.3	0.9	132	65.3	42.5	11.0	125.2	-1.3	6.2	21.9	71.9	99.9	112.0	122.1
Corse	0.1	0.8	28	65.5	33.1	10.1	110.7	-2.0	11.9	13.1	75.0	76.8	91.4	99.6
D.O.M.[1]	0.4	0.0	14	:	56.0	:	:	:	9.9	20.4	70.4	41.6	:	:
Ireland	1.1	0.8	51	60.4	38.0	16.4	187.4	-1.7	15.8	28.7	55.6	64.5	82.9	81.5
Italia	17.7	0.3	190	68.2	41.9	10.2	118.3	1.0	9.8	32.2	58.0	103.5	101.3	96.2
Nord Ouest	1.9	-0.4	183	68.9	43.1	6.6	79.7	-0.9	7.8	36.7	55.5	119.3	109.4	103.9
Piemonte	1.4	-0.3	173	69.1	44.5	6.0	74.2	-1.8	8.3	41.5	50.2	119.0	107.7	102.3
Valle d'Aosta	0.0	0.1	35	70.7	43.4	2.4	39.0	-2.0	8.9	29.0	62.1	133.8	101.8	96.7
Liguria	0.5	-0.5	324	68.1	39.5	8.5	97.7	1.7	6.3	23.4	70.3	119.1	114.5	108.8
Lombardia	2.7	0.1	372	70.5	45.5	3.4	44.4	-2.8	3.6	43.4	53.0	137.3	121.9	115.7
Nord Est	2.0	0.1	162	69.4	43.7	4.1	55.8	-3.2	8.3	36.7	55.0	116.5	100.6	95.5
Trentino-Alto Adige	0.3	0.2	65	68.9	43.6	2.7	39.0	-3.2	12.0	26.0	62.0	117.8	91.3	86.7
Veneto	1.4	0.2	238	69.8	44.3	3.9	54.9	-3.8	8.3	40.0	51.8	116.4	102.0	96.9
Friuli-Venezia Giulia	0.4	-0.2	155	68.4	41.8	5.7	72.4	-1.1	5.4	32.3	62.3	116.1	103.2	98.0
Emilia-Romagna	1.2	-0.0	178	69.2	46.3	4.3	55.9	-2.9	11.2	36.5	52.3	127.6	108.8	103.3
Centro	1.8	0.1	141	68.1	42.9	7.3	86.8	-0.7	8.4	37.0	54.6	111.3	97.6	92.7
Toscana	1.1	:	155	68.2	42.0	7.6	88.7	-0.4	6.8	37.0	56.2	116.1	101.4	96.3
Umbria	0.3	0.3	97	68.1	41.5	8.2	100.0	-3.7	9.5	32.9	57.6	99.3	93.0	88.3
Marche	0.4	0.3	147	68.0	45.7	6.3	75.4	0.3	11.4	39.1	49.5	106.1	90.8	86.2
Lazio	1.6	0.4	298	69.9	41.3	10.9	120.0	1.3	5.2	19.0	75.8	117.3	110.4	104.8
Campania	1.8	0.7	420	66.0	40.2	19.8	240.4	6.9	13.2	24.1	62.6	66.9	81.2	77.1
Abruzzi-Molise	0.5	0.4	104	66.9	41.6	10.6	116.4	2.4	18.1	28.3	53.6	86.9	87.7	83.2
Abruzzi	0.4	0.4	116	67.1	40.9	10.2	110.3	2.1	15.6	29.2	55.1	89.0	89.5	85.0
Molise	0.1	0.2	75	65.9	44.2	12.1	139.0	3.8	26.9	25.0	48.1	78.9	80.7	76.7
Sud	2.1	0.6	153	65.9	37.6	17.7	202.6	6.2	19.3	22.0	58.7	67.4	78.9	75.0
Puglia	1.2	0.7	209	66.1	36.8	14.4	165.9	4.1	17.3	24.4	58.3	72.5	82.0	77.9
Basilicata	0.2	0.2	62	65.9	41.1	21.5	234.1	12.2	22.9	24.7	52.4	64.0	72.6	69.0
Calabria	0.7	0.6	142	65.5	38.0	22.6	259.4	8.3	22.1	16.3	61.6	58.7	74.6	70.8
Sicilia	1.6	0.6	199	65.9	37.4	21.7	228.8	8.1	16.2	21.4	62.4	70.0	88.0	83.6
Sardegna	0.5	0.6	68	67.3	38.7	18.9	207.6	-0.2	13.4	23.9	62.8	75.3	89.3	84.8
Luxembourg (Grand-Duché)	0.1	0.3	144	69.8	42.5	1.5	19.2	-1.5	3.5	29.2	67.3	121.7	104.4	104.3
Nederland	4.5	0.6	350	68.9	45.4	8.0	94.2	-2.2	4.9	26.5	68.6	104.2	126.1	131.4
Noord-Nederland	0.5	0.4	145	67.1	42.0	9.4	112.5	-2.4	6.4	29.8	63.8	123.6	175.7	183.0
Groningen	0.2	0.2	188	68.2	43.1	11.3	135.0	-2.3	4.6	29.7	65.7	183.1	246.5	256.9
Friesland	0.2	0.5	112	65.7	41.3	9.4	112.2	-1.8	6.8	28.9	64.3	84.6	127.3	132.7
Drenthe	0.1	0.6	162	67.5	41.4	7.5	87.8	-2.9	8.4	31.1	60.5	100.7	142.3	148.3
Oost-Nederland	0.9	1.0	279	68.1	44.4	8.5	96.8	-2.2	6.4	29.4	64.2	86.6	113.2	118.0
EUR 12	100.0	0.3	144	67.1	44.8	8.3	100.0	-2.4	7.6	33.2	59.2	100.0	100.0	100.0
Weighted Standard Deviation		0.4	210	2.4	5.0	5.2	59.4	3.1	8.1	7.6	9.3	27.8	18.4	28.4

Table A: Principal indicators for the regions in the EC (Nuts 2)

Regions	Demography				Labour market				Economy					
						Unemployment rate			Share of sectors in total employment (1987)			GDP Average 1986-87-88 EUR12 = 100		
	Population (1988) EUR12 = 100	Growth rate of population %/year (1978-1988)	Density inhab/km² (1988)	15-64/ tot.pop. % (1987)	Participation rate (1988) %	Total 1990	Average 88-89-90 EUR12 = 100	Change 1985-1990 in % points	Agric.	Industry	Services	/inhab in PPS	/empl. in PPS	/empl. in ECU
Overijssel	0.3	:	295	67.5	43.2	8.5	96.6	:	6.1	33.2	60.7	90.2	118.4	123.4
Gelderland	0.5	:	346	68.6	45.3	8.5	96.7	:	6.0	28.1	65.8	86.5	110.1	114.7
Flevoland	0.1	:	89	66.2	42.8	8.5	99.9	:	11.3	21.8	66.8	68.1	117.1	121.9
West-Nederland	2.1	0.4	598	68.7	46.7	7.5	90.0	-1.7	3.8	21.8	74.5	111.6	125.6	130.9
Utrecht	0.3	0.9	685	69.3	47.9	6.6	79.2	-1.8	3.0	20.9	76.1	101.8	112.7	117.4
Noord-Holland	0.7	0.2	641	69.6	48.7	7.5	93.2	-2.6	3.1	20.9	76.0	120.0	129.0	134.4
Zuid-Holland	1.0	0.5	952	68.3	45.6	7.5	89.5	-1.4	4.3	22.1	73.6	109.3	126.2	131.5
Zeeland	0.1	0.5	117	65.6	41.0	5.6	68.4	-1.6	6.2	28.0	65.8	103.4	133.2	138.7
Zuid-Nederland	1.0	0.6	445	70.8	45.4	7.5	90.0	-3.6	5.2	33.0	61.8	95.0	118.7	123.7
Noord-Brabant	0.7	0.7	423	70.5	45.9	7.5	88.2	-3.1	5.5	33.3	61.2	96.9	119.1	124.1
Limburg	0.3	0.3	495	71.3	44.5	7.5	93.7	-4.4	4.5	32.5	63.1	91.3	117.8	122.8
Portugal[2]	3.2	0.8	112	64.3	46.3	5.1	58.5	-3.5	21.2	34.6	44.1	53.6	56.4	30.0
Continente	3.0	:	106	64.6	47.0	5.2	59.1	-3.5	21.2	34.8	44.1	53.6	56.4	30.0
Norte	1.1	:	169	64.1	47.4	3.1	35.7	-3.9	23.8	42.3	33.9	41.9	44.7	23.8
Centro	0.6	:	76	63.1	46.4	3.1	35.9	-2.7	35.7	30.9	33.4	50.2	50.1	26.7
Lisboa e vale do Tejo	1.1	:	289	66.5	47.1	7.4	84.7	-3.5	10.1	31.2	58.7	69.7	74.4	39.6
Alentejo	0.2	:	21	62.5	42.4	12.4	141.1	-0.9	27.2	24.5	48.3	45.9	46.4	24.7
Algarve	0.1	:	68	62.9	38.9	3.3	43.3	:	13.6	20.2	66.2	46.0	49.6	26.5
Acores	0.1	:	113	58.1	38.0	2.8	27.6	-3.4	24.6	24.6	50.8	:	:	:
Madeira	0.1	:	343	60.4	47.2	5.9	59.6	-2.5	21.0	37.7	41.3	:	:	:
United Kingdom	17.6	0.1	233	65.6	50.2	6.3	82.4	-5.2	2.4	32.8	64.9	106.5	94.3	82.4
North	1.0	-0.2	200	65.8	48.6	9.0	120.2	-6.8	2.3	36.3	61.4	92.2	91.2	79.7
Cleveland, Durham	0.4	-0.3	382	:	:	9.6	126.7	-7.7	:	:	:	87.0	:	:
Cumbria	0.2	0.1	71	:	:	5.1	72.0	-5.0	:	:	:	120.1	:	:
Northumberland, Tyne/Wear	0.4	-0.3	258	:	:	10.0	131.3	-6.6	:	:	:	89.2	:	:
Yorkshire and Humberside	1.5	-0.0	318	65.5	48.9	7.3	96.6	-5.0	2.1	36.4	61.6	96.8	89.6	78.3
Humberside	0.3	-0.1	241	:	:	8.3	107.1	-5.3	:	:	:	100.5	:	:
North Yorkshire	0.2	0.6	85	:	:	4.1	56.8	-4.1	:	:	:	102.3	:	:
South Yorkshire	0.4	-0.2	830	:	:	9.3	125.4	-5.2	:	:	:	86.1	:	:
West Yorkshire	0.6	-0.1	1007	:	:	6.8	88.0	-5.0	:	:	:	100.4	:	:
East Midlands	1.2	0.4	252	66.0	50.7	5.3	71.5	-5.1	2.3	40.6	57.1	100.2	88.5	77.3
Derbyshire, Nottinghamshire	0.6	0.2	402	:	:	6.1	85.0	-5.1	:	:	:	96.6	:	:
Leicestershire, Northampton	0.4	0.6	293	:	:	4.0	52.3	-5.2	:	:	:	110.6	:	:
Lincolnshire	0.2	0.6	97	:	:	5.7	75.7	-5.2	:	:	:	89.0	:	:
East Anglia	0.6	1.0	160	64.7	51.8	3.9	50.1	-4.5	5.2	31.7	63.1	104.2	90.1	79.7
South East	5.4	0.2	536	66.2	52.3	4.3	55.6	-4.5	1.4	28.1	70.5	128.3	101.3	88.6
Bedford, Hertfordshire	0.5	0.5	527	:	:	2.7	35.7	-3.9	:	:	:	111.3	:	:
Berks, Bucks, Oxfordshire	0.6	1.1	337	:	:	2.2	27.9	-4.0	:	:	:	118.3	:	:
Surrey, East-West Sussex	0.7	0.4	439	:	:	2.4	31.2	-3.5	:	:	:	107.0	:	:
Essex	0.5	0.6	414	:	:	3.7	47.3	-4.9	:	:	:	96.8	:	:
EUR 12	100.0	0.3	144	67.1	44.8	8.3	100.0	-2.4	7.6	33.2	59.2	100.0	100.0	100.0
Weighted Standard Deviation		0.4	210	2.4	5.0	5.2	59.4	3.1	8.1	7.6	9.3	27.8	18.4	28.4

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Table A: Principal indicators for the regions in the EC (Nuts 2)

Regions	Demography				Labour market				Economy					
						Unemployment rate			Share of sectors in total employment (1987)			GDP Average 1986-87-88 EUR12 = 100		
	Population (1988) EUR12 = 100	Growth rate of population %/year (1978-1988)	Density inhab/km² (1988)	15-64/ tot.pop. % (1987)	Participation rate (1988) %	Total 1990	Average 88-89-90 EUR12 = 100	Change 1985-1990 in % points	Agric.	Industry	Services	/inhab in PPS	/empl. in PPS	/empl. in ECU
Greater London	2.1	-0.4	4288	:	:	6.3	80.8	-4.9	:	:	:	164.0	:	:
Hampshire, Isle of Wight	0.5	0.6	400	:	:	3.7	48.9	-4.3	:	:	:	109.0	:	:
Kent	0.5	0.4	405	:	:	3.9	51.9	-5.4	:	:	:	97.1	:	:
South West	1.4	0.7	192	64.3	50.3	4.4	58.9	-5.0	4.0	29.0	67.0	101.3	94.3	83.4
Avon, Gloucester, Wiltshire	0.6	0.5	271	:	:	3.9	52.4	-4.8	:	:	:	113.7	:	:
Cornwall, Devon	0.5	0.7	142	:	:	5.7	77.5	-5.5	:	:	:	87.0	:	:
Dorset, Somerset	0.3	1.0	180	:	:	3.6	47.7	-4.7	:	:	:	100.8	:	:
West Midlands	1.6	0.0	399	66.2	50.4	6.3	86.2	-7.0	2.6	39.9	57.5	95.9	85.7	74.9
Hereford, Worcs, Warwick	0.4	0.6	195	:	:	3.8	55.5	-6.3	:	:	:	92.0	:	:
Salop, Staffordshire	0.4	0.4	229	:	:	4.4	65.7	-6.5	:	:	:	89.6	:	:
West Midlands (County)	0.8	-0.4	2919	:	:	8.4	110.7	-7.4	:	:	:	102.1	:	:
North West	2.0	-0.3	869	65.3	49.6	8.2	106.7	-5.8	1.1	35.4	63.6	98.7	94.6	82.7
Cheshire	0.3	0.4	409	:	:	5.6	76.4	-6.0	:	:	:	118.2	:	:
Greater Manchester	0.8	-0.3	2005	:	:	7.9	102.2	-5.7	:	:	:	101.7	:	:
Lancashire	0.4	-0.0	451	:	:	6.2	83.0	-5.9	:	:	:	94.2	:	:
Merseyside	0.5	-0.8	2235	:	:	12.6	157.4	-5.8	:	:	:	86.0	:	:
Wales	0.9	0.1	137	64.7	45.4	6.9	95.6	-6.9	3.5	33.8	62.7	87.8	92.6	80.9
Clwyd,Dyfed,Gwynedd,Powys	0.3	0.4	64	:	:	6.4	91.0	-6.7	:	:	:	87.4	:	:
Gwent, Mid-S-W Glamorgan	0.5	-0.0	480	:	:	7.2	98.4	-7.1	:	:	:	89.4	:	:
Scotland	1.6	-0.2	65	66.4	49.1	9.2	119.0	-4.8	3.6	32.4	64.0	99.9	92.1	80.5
Bord-Centr-Fife-Lothian-Tay	0.6	-0.1	102	:	:	8.1	104.8	-4.5	:	:	:	101.9	:	:
Dumfries-Gall., Strathclyde	0.8	-0.5	123	:	:	11.0	140.4	-5.5	:	:	:	94.2	:	:
Highlands,Islands	0.1	0.6	9	:	:	8.7	118.4	-4.6	:	:	:	98.9	:	:
Grampian	0.2	0.9	57	:	:	4.7	68.6	-2.8	:	:	:	124.5	:	:
Northern Ireland	0.5	0.2	112	62.7	43.1	15.7	184.2	-2.1	5.1	28.4	66.4	80.6	85.0	74.3
EUR 12	100.0	0.3	144	67.1	44.8	8.3	100.0	-2.4	7.6	33.2	59.2	100.0	100.0	100.0
Weighted Standard Deviation	:	0.4	210	2.4	5.0	5.2	59.4	3.1	8.1	7.6	9.3	27.8	18.4	28.4

[1] *National sources, employment 1986*
[2] *15-64/total population 1985*

Explanatory remarks on table A

Population: average population as a percentage share of Community population, 1988;

Growth rate of population: average annual rate of change between 1978 and 1988;

Population density: inhabitants per km^2, 1988;

15-64/total population: population at 1 January aged 15 to 64 years as a percentage of total population, 1987;

Participation rate: total labour force (persons in employment plus the unemployed) as a percentage of total population, 1988 Community labour force survey;

Unemployment rate: number of unemployed persons as a percentage of the labour force, 1990 (harmonized regional unemployment rates of EUROSTAT);

Average of unemployment rates: average of unemployment rates for 1988, 1989 and 1990, expressed as a percentage of the Community average (harmonized unemployment rates of EUROSTAT); in those cases where regional data are not available for all 3 years, the average is based on those years available;

Change in unemployment rates: difference in percentage points between 1985 and 1990 rates (harmonized unemployment rates of EUROSTAT);

Share of sectors in total employment: persons in employment by sector of activity as percentage of total employment, 1988 Community labour force survey;

GDP/inhabitant (PPS): Average of gross domestic product per inhabitant, for 1986, 1987 and 1988 expressed as a percentage of the Community average, in purchasing power parities;

GDP/per person employed (PPS): Average of gross domestic product per person employed, for 1986, 1987 and 1988 expressed as a percentage of the Community average, in purchasing power parities;

GDP/per person employed (ECU): Average of gross domestic product per person employed, for 1986, 1987 and 1988 expressed as a percentage of the Community average, at current prices and ECU exchange rates.

Weighted standard deviation

In those cases where regional data are not available for NUTS II regions, the weighted standard deviation is calculated using the next higher regional level, NUTS I or Member State. Therefore the weighted standard deviation is not strictly comparable between the different indicators.

Table B: Regions of the Community ranked according to their level of GDP per head[1] (average 1986-87-88, in PPS, EUR12 = 100)

Rank	Region		GDP/head in PPS Average 1986-87-88 EUR12(14730) = 100	Unemployment rate Average 1988-89-90 EUR12(9.1%) = 100	Population 1988	
					total (millions)	cumulative % share
1	Voreio Aigaio	(GR)	39.9	63.6	0.2	0.1
2	D.O.M.[2]	(F)	41.6	325.6	1.3	0.5
3	Norte	(POR)	41.9	35.7	3.6	1.6
4	Ipeiros	(GR)	41.9	50.0	0.3	1.7
5	Alentejo	(POR)	45.9	141.1	0.6	1.8
6	Algarve	(POR)	46.0	43.3	0.3	1.9
7	Dytiki Makedonia	(GR)	46.7	65.3	0.3	2.0
8	Kriti	(GR)	48.5	32.4	0.5	2.2
9	Extremadura	(ESP)	49.0	289.1	1.1	2.5
10	Dytiki Ellada	(GR)	50.0	80.9	0.7	2.7
11	Centro	(POR)	50.2	35.9	1.8	3.3
12	Ionia Nisia	(GR)	50.2	34.5	0.2	3.3
13	Thessalia	(GR)	51.6	74.4	0.7	3.6
14	Kentriki Makedonia	(GR)	52.8	74.9	1.7	4.1
15	Ceuta Y Melilla	(ESP)	53.2	351.6	0.1	4.1
16	Notio Aigaio	(GR)	55.6	53.2	0.2	4.2
17	Anatoliki Makedonia, Thraki	(GR)	56.1	86.7	0.6	4.4
18	Peloponnisos	(GR)	56.4	58.8	0.6	4.5
19	Andalucia	(ESP)	57.5	300.0	6.8	6.6
20	Attiki	(GR)	58.5	103.0	3.5	7.7
21	Calabria	(I)	58.7	259.4	2.1	8.4
22	Castilla - La Mancha	(ESP)	60.7	163.2	1.7	8.9
23	Galicia	(ESP)	63.7	137.3	2.8	9.8
24	Basilicata	(I)	64.0	234.1	0.6	9.9
25	Ireland	(IRL)	64.5	187.4	3.5	11.0
26	Murcia	(ESP)	65.9	180.6	1.0	11.3
27	Campania	(I)	66.9	240.4	5.7	13.1
28	Sterea Ellada	(GR)	67.3	71.3	0.6	13.3
29	Flevoland	(NL)	68.1	99.9	0.2	13.3
30	Lisboa e vale do Tejo	(POR)	69.7	84.7	3.5	14.4
31	Sicilia	(I)	70.0	228.8	5.1	16.0
32	Castilla - León	(ESP)	70.9	184.8	2.6	16.8
33	Canarias	(ESP)	72.1	248.1	1.4	17.2
34	Cantabria	(ESP)	72.3	205.5	0.5	17.4
35	Puglia	(I)	72.5	165.9	4.0	18.6
36	Sardegna	(I)	75.3	207.6	1.6	19.1
37	Comunidad Valenciana	(ESP)	75.3	174.3	3.8	20.3
38	Corse	(F)	76.8	110.7	0.2	20.4
39	Lüneburg	(D)	77.5	66.0	1.4	20.8
40	Hainaut	(B)	77.6	152.4	1.3	21.2
41	Asturias	(ESP)	78.0	200.2	1.1	21.6
42	Namur	(B)	78.4	118.7	0.4	21.7
43	Molise	(I)	78.9	139.0	0.3	21.8
44	Luxembourg	(B)	80.3	80.9	0.2	21.9
45	Northern Ireland	(UK)	80.6	184.2	1.6	22.3
46	Aragón	(ESP)	80.7	128.6	1.2	22.7
47	Cataluña	(ESP)	83.9	171.6	6.1	24.6
48	Friesland	(NL)	84.6	112.2	0.6	24.8
49	Madrid	(ESP)	84.8	157.1	4.9	26.3
50	Limousin	(F)	85.2	90.7	0.7	26.5
51	Languedoc-Roussillon	(F)	85.7	148.0	2.1	27.1
52	Merseyside	(UK)	86.0	157.4	1.5	27.6
53	South Yorkshire	(UK)	86.1	125.4	1.3	28.0
54	Trier	(D)	86.2	60.3	0.5	28.1
55	Gelderland	(NL)	86.5	96.7	1.8	28.7
56	Cornwall, Devon	(UK)	87.0	77.5	1.5	29.1
57	Cleveland, Durham	(UK)	87.0	126.7	1.2	29.5
58	Basse-Normandie	(F)	87.2	93.2	1.4	29.9
59	Clwyd, Dyfed, Gwynedd, Powys	(UK)	87.4	91.0	1.1	30.2
60	Nord - Pas-de-Calais	(F)	87.8	138.6	3.9	31.4
61	Poitou-Charentes	(F)	88.0	114.2	1.6	31.9

Table B: Regions of the Community ranked according to their level of GDP per head
(average 1986-87-88, in PPS, EUR12 = 100)

Rank	Region		GDP/head in PPS Average 1986-87-88 EUR12(14730) = 100	Unemployment rate Average 1988-89-90 EUR12(9.1%) = 100	Population 1988	
					total (millions)	cumulative % share
62	Auvergne	(F)	88.1	101.2	1.3	32.3
63	Midi-Pyrénées	(F)	88.2	97.6	2.4	33.1
64	Navarra	(ESP)	88.3	133.2	0.5	33.2
65	Bretagne	(F)	88.8	96.8	2.8	34.1
66	Abruzzi	(I)	89.0	110.3	1.3	34.5
67	Lincolnshire	(UK)	89.0	75.7	0.6	34.7
68	Pais Vasco	(ESP)	89.0	222.6	2.2	35.3
69	Northumberland, Tyne and Wear	(UK)	89.2	131.3	1.4	35.8
70	Gwent, Mid-S-W Glamorgan	(UK)	89.4	98.4	1.7	36.3
71	Salop, Staffordshire	(UK)	89.6	65.7	1.4	36.7
72	Rioja	(ESP)	90.0	110.7	0.3	36.8
73	Overijssel	(NL)	90.2	96.6	1.0	37.1
74	Gießen	(D)	90.2	51.7	1.0	37.4
75	Weser-Ems	(D)	90.5	81.1	2.1	38.1
76	Oberpfalz	(D)	90.7	54.1	1.0	38.4
77	Niederbayern	(D)	90.9	41.4	1.0	38.7
78	Limburg	(NL)	91.3	93.7	1.1	39.0
79	Hereford, Worcs, Warwick	(UK)	92.0	55.5	1.1	39.4
80	Lorraine	(F)	92.2	98.1	2.3	40.1
81	Münster	(D)	92.6	83.9	2.4	40.8
82	Limburg	(B)	93.1	114.7	0.7	41.1
83	Koblenz	(D)	93.8	51.1	1.4	41.5
84	Lancashire	(UK)	94.2	83.0	1.4	41.9
85	Dumfries-Galloway, Strathclyde	(UK)	94.2	140.4	2.5	42.7
86	Pays de la Loire	(F)	94.3	105.2	3.0	43.6
87	Oost-Vlaanderen	(B)	94.4	68.9	1.3	44.0
88	Schleswig-Holstein	(D)	94.5	71.8	2.6	44.8
89	Øst for Storebælt,Ex.Hovedst.	(DK)	94.7	94.4	0.6	45.0
90	Unterfranken	(D)	94.7	41.9	1.2	45.4
91	Franche-Comté	(F)	94.9	89.0	1.1	45.7
92	Picardie	(F)	95.3	117.4	1.8	46.2
93	Liège	(B)	95.9	128.8	1.0	46.5
94	Bourgogne	(F)	96.2	97.2	1.6	47.0
95	Derbyshire, Nottinghamshire	(UK)	96.6	85.0	1.9	47.6
96	Essex	(UK)	96.8	47.3	1.5	48.1
97	Noord-Brabant	(NL)	96.9	88.2	2.1	48.8
98	Kent	(UK)	97.1	51.9	1.5	49.2
99	Oberfranken	(D)	97.8	45.2	1.0	49.5
100	Highlands,Islands	(UK)	98.9	118.4	0.3	49.6
101	Umbria	(I)	99.3	100.0	0.8	49.9
102	West-Vlaänderen	(B)	99.3	51.3	1.1	50.2
103	Kassel	(D)	99.4	61.6	1.2	50.6
104	Provence-Alpes-Côte d'Azur	(F)	99.9	125.2	4.1	51.8
105	Aquitaine	(F)	100.2	122.2	2.7	52.7
106	West Yorkshire	(UK)	100.4	88.0	2.1	53.3
107	Humberside	(UK)	100.5	107.1	0.8	53.6
108	Drenthe	(NL)	100.7	87.8	0.4	53.7
109	Dorset, Somerset	(UK)	100.8	47.7	1.1	54.0
110	Champagne-Ardenne	(F)	101.7	110.4	1.4	54.5
111	Greater Manchester	(UK)	101.7	102.2	2.6	55.3
112	Centre	(F)	101.8	96.8	2.3	56.0
113	Utrecht	(NL)	101.8	79.2	1.0	56.3
114	Bord-Centr-Fife-Lothian-Tay	(UK)	101.9	104.8	1.9	56.8
115	West Midlands (County)	(UK)	102.1	110.7	2.6	57.7
116	North Yorkshire	(UK)	102.3	56.8	0.7	57.9
117	Zeeland	(NL)	103.4	68.4	0.4	58.0
118	Detmold	(D)	103.4	65.3	1.8	58.5
119	Arnsberg	(D)	103.7	86.6	3.6	59.6
120	Vest for Storebælt	(DK)	104.0	85.5	2.8	60.5
121	East Anglia	(UK)	104.2	50.1	2.0	61.1
122	Saarland	(D)	104.6	89.3	1.1	61.5

Table B: Regions of the Community ranked according to their level of GDP per head[1]
(average 1986-87-88, in PPS, EUR12 = 100)

Rank	Region		GDP/head in PPS Average 1986-87-88 EUR12(14730) = 100	Unemployment rate Average 1988-89-90 EUR12(9.1%) = 100	Population 1988	
					total (millions)	cumulative % share
123	Freiburg	(D)	104.9	35.1	1.9	62.0
124	Marche	(I)	106.1	75.4	1.4	62.5
125	Tübingen	(D)	106.6	32.3	1.5	62.9
126	Surrey, East-West Sussex	(UK)	107.0	31.2	2.4	63.7
127	Schwaben	(D)	107.8	34.6	1.5	64.2
128	Hampshire, Isle of Wight	(UK)	109.0	48.9	1.7	64.7
129	Baleares	(ESP)	109.2	118.2	0.7	64.9
130	Zuid-Holland	(NL)	109.3	89.5	3.2	65.9
131	Rhône-Alpes	(F)	109.6	84.8	5.2	67.5
132	Braunschweig	(D)	109.8	84.6	1.6	67.9
133	Rheinhessen-Pfalz	(D)	110.5	52.4	1.8	68.5
134	Leicestershire, Northampton	(UK)	110.6	52.3	1.4	68.9
135	Köln	(D)	110.7	78.5	3.9	70.1
136	Hannover	(D)	110.8	80.2	2.0	70.7
137	Bedford, Hertfordshire	(UK)	111.3	35.7	1.5	71.2
138	Brabant	(B)	112.0	82.8	2.2	71.9
139	Alsace	(F)	112.7	57.6	1.6	72.4
140	Avon, Gloucester, Wiltshire	(UK)	113.7	52.4	2.0	73.0
141	Haute-Normandie	(F)	115.7	116.7	1.7	73.5
142	Toscana	(I)	116.1	88.7	3.6	74.6
143	Friuli-Venezia Giulia	(I)	116.1	72.4	1.2	75.0
144	Veneto	(I)	116.4	54.9	4.4	76.4
145	Lazio	(I)	117.3	120.0	5.1	77.9
146	Trentino-Alto Adige	(I)	117.8	39.0	0.9	78.2
147	Cheshire	(UK)	118.2	76.4	1.0	78.5
148	Berks, Bucks, Oxfordshire	(UK)	118.3	27.9	1.9	79.1
149	Piemonte	(I)	119.0	74.2	4.4	80.4
150	Liguria	(I)	119.1	97.7	1.8	81.0
151	Noord-Holland	(NL)	120.0	93.2	2.3	81.7
152	Karlsruhe	(D)	120.1	43.4	2.4	82.4
153	Cumbria	(UK)	120.1	72.0	0.5	82.6
154	Düsseldorf	(D)	121.5	87.0	5.1	84.1
155	Luxembourg (Grand-Duché)	(L)	121.7	19.2	0.4	84.3
156	Mittelfranken	(D)	122.3	45.7	1.5	84.7
157	Grampian	(UK)	124.5	68.6	0.5	84.9
158	Antwerpen	(B)	124.8	83.4	1.6	85.4
159	Berlin (West)	(D)	125.1	77.7	2.0	86.0
160	Emilia-Romagna	(I)	127.6	55.9	3.9	87.2
161	Hovedstadsregionen	(DK)	132.6	66.5	1.7	87.7
162	Valle d'Aosta	(I)	133.8	39.0	0.1	87.8
163	Stuttgart	(D)	133.8	31.5	3.5	88.8
164	Oberbayern	(D)	135.1	37.7	3.6	89.9
165	Lombardia	(I)	137.3	44.4	8.9	92.7
166	Bremen	(D)	146.8	116.8	0.7	92.9
167	Darmstadt	(D)	148.9	42.5	3.4	93.9
168	Greater London	(UK)	164.0	80.8	6.8	96.0
169	Ile de France	(F)	165.6	84.3	10.3	99.2
170	Hamburg	(D)	182.7	97.2	1.6	99.7
171	Groningen	(NL)	183.1	135.0	0.6	99.8[1]

[1] *NUTS 2, except D.O.M. (NUTS 1), excludes Açores and Madeira for which no GDP/head are available*
[2] *National figures*

Table C: Regions of the Community ranked according to their level of unemployment[1]
(average 1988-89-90, EUR12 = 100)

Rank	Region		Unemployment rate Average 1988-89-90 EUR12(9.1%) = 100	GDP/head in PPS Average 1986-87-88 EUR12(14730) = 100	Population 1988	
					total (millions)	cumulative % share
1	Ceuta Y Melilla	(ESP)	351.6	53.2	0.1	
2	D.O.M.[2]	(F)	325.6	41.6	1.3	0.4
3	Andalucia	(ESP)	300.0	57.5	6.8	2.5
4	Extremadura	(ESP)	289.1	49.0	1.1	2.9
5	Calabria	(I)	259.4	58.7	2.1	3.5
6	Canarias	(ESP)	248.1	72.1	1.4	4.0
7	Campania	(I)	240.4	66.9	5.7	5.7
8	Basilicata	(I)	234.1	64.0	0.6	5.9
9	Sicilia	(I)	228.8	70.0	5.1	7.5
10	Pais Vasco	(ESP)	222.6	89.0	2.2	8.2
11	Sardegna	(I)	207.6	75.3	1.6	8.7
12	Cantabria	(ESP)	205.5	72.3	0.5	8.9
13	Asturias	(ESP)	200.2	78.0	1.1	9.2
14	Ireland	(IRL)	187.4	64.5	3.5	10.3
15	Castilla - León	(ESP)	184.8	70.9	2.6	11.1
16	Northern Ireland	(UK)	184.2	80.6	1.6	11.6
17	Murcia	(ESP)	180.6	65.9	1.0	11.9
18	Comunidad Valenciana	(ESP)	174.3	75.3	3.8	13.1
19	Cataluña	(ESP)	171.6	83.9	6.1	14.9
20	Puglia	(I)	165.9	72.5	4.0	16.2
21	Castilla - La Mancha	(ESP)	163.2	60.7	1.7	16.7
22	Merseyside	(UK)	157.4	86.0	1.5	17.1
23	Madrid	(ESP)	157.1	84.8	4.9	18.7
24	Hainaut	(B)	152.4	77.6	1.3	19.0
25	Languedoc-Roussillon	(F)	148.0	85.7	2.1	19.7
26	Alentejo	(POR)	141.1	45.9	0.6	19.9
27	Dumfries-Galloway, Strathclyde	(UK)	140.4	94.2	2.5	20.6
28	Molise	(I)	139.0	78.9	0.3	20.7
29	Nord - Pas-de-Calais	(F)	138.6	87.8	3.9	21.9
30	Galicia	(ESP)	137.3	63.7	2.8	22.8
31	Groningen	(NL)	135.0	183.1	0.6	23.0
32	Navarra	(ESP)	133.2	88.3	0.5	23.1
33	Northumberland, Tyne and Wear	(UK)	131.3	89.2	1.4	23.6
34	Liège	(B)	128.8	95.9	1.0	23.9
35	Aragón	(ESP)	128.6	80.7	1.2	24.3
36	Cleveland, Durham	(UK)	126.7	87.0	1.2	24.6
37	South Yorkshire	(UK)	125.4	86.1	1.3	25.0
38	Provence-Alpes-Côte d'Azur	(F)	125.2	99.9	4.1	26.3
39	Aquitaine	(F)	122.2	100.2	2.7	27.1
40	Lazio	(I)	120.0	117.3	5.1	28.7
41	Namur	(B)	118.7	78.4	0.4	28.8
42	Highlands,Islands	(UK)	118.4	98.9	0.3	28.9
43	Baleares	(ESP)	118.2	109.2	0.7	29.1
44	Picardie	(F)	117.4	95.3	1.8	29.7
45	Bremen	(D)	116.8	146.8	0.7	29.9
46	Haute-Normandie	(F)	116.7	115.7	1.7	30.4
47	Limburg	(B)	114.7	93.1	0.7	30.6
48	Poitou-Charentes	(F)	114.2	88.0	1.6	31.1
49	Friesland	(NL)	112.2	84.6	0.6	31.3
50	West Midlands (County)	(UK)	110.7	102.1	2.6	32.1
51	Rioja	(ESP)	110.7	90.0	0.3	32.2
52	Corse	(F)	110.7	76.8	0.2	32.3
53	Champagne-Ardenne	(F)	110.4	101.7	1.4	32.7
54	Abruzzi	(I)	110.3	89.0	1.3	33.1
55	Humberside	(UK)	107.1	100.5	0.8	33.3
56	Pays de la Loire	(F)	105.2	94.3	3.0	34.3
57	Bord-Centr-Fife-Lothian-Tay	(UK)	104.8	101.9	1.9	34.9
58	Attiki	(GR)	103.0	58.5	3.5	35.9
59	Greater Manchester	(UK)	102.2	101.7	2.6	36.7
60	Auvergne	(F)	101.2	88.1	1.3	37.1
61	Umbria	(I)	100.0	99.3	0.8	37.4

Table C: Regions of the Community ranked according to their level of unemployment[1] (average 1988-89-90, EUR12 = 100)

Rank	Region		Unemployment rate Average 1988-89-90 EUR12(9.1%) = 100	GDP/head in PPS Average 1986-87-88 EUR12(14730) = 100	Population 1988	
					total (millions)	cumulative % share
62	Flevoland	(NL)	99.9	68.1	0.2	37.5
63	Gwent, Mid-S-W Glamorgan	(UK)	98.4	89.4	1.7	38.0
64	Lorraine	(F)	98.1	92.2	2.3	38.7
65	Liguria	(I)	97.7	119.1	1.8	39.3
66	Midi-Pyrénées	(F)	97.6	88.2	2.4	40.0
67	Hamburg	(D)	97.2	182.7	1.6	40.5
68	Bourgogne	(F)	97.2	96.2	1.6	41.0
69	Centre	(F)	96.8	101.8	2.3	41.7
70	Bretagne	(F)	96.8	88.8	2.8	42.5
71	Gelderland	(NL)	96.7	86.5	1.8	43.1
72	Overijssel	(NL)	96.6	90.2	1.0	43.4
73	Øst for Storebælt,Ex.Hovedst.	(DK)	94.4	94.7	0.6	43.6
74	Limburg	(NL)	93.7	91.3	1.1	43.9
75	Basse-Normandie	(F)	93.2	87.2	1.4	44.3
76	Noord-Holland	(NL)	93.2	120.0	2.3	45.1
77	Clwyd, Dyfed, Gwynedd, Powys	(UK)	91.0	87.4	1.1	45.4
78	Limousin	(F)	90.7	85.2	0.7	45.6
79	Zuid-Holland	(NL)	89.5	109.3	3.2	46.6
80	Saarland	(D)	89.3	104.6	1.1	46.9
81	Franche-Comté	(F)	89.0	94.9	1.1	47.3
82	Toscana	(I)	88.7	116.1	3.6	48.4
83	Noord-Brabant	(NL)	88.2	96.9	2.1	49.0
84	West Yorkshire	(UK)	88.0	100.4	2.1	49.7
85	Drenthe	(NL)	87.8	100.7	0.4	49.8
86	Düsseldorf	(D)	87.0	121.5	5.1	51.4
87	Anatoliki Makedonia, Thraki	(GR)	86.7	56.1	0.6	51.5
88	Arnsberg	(D)	86.6	103.7	3.6	52.7
89	Vest for Storebælt	(DK)	85.5	104.0	2.8	53.5
90	Derbyshire, Nottinghamshire	(UK)	85.0	96.6	1.9	54.1
91	Rhône-Alpes	(F)	84.8	109.6	5.2	55.7
92	Lisboa e vale do Tejo	(POR)	84.7	69.7	3.5	56.8
93	Braunschweig	(D)	84.6	109.8	1.6	57.3
94	Ile de France	(F)	84.3	165.6	10.3	60.4
95	Münster	(D)	83.9	92.6	2.4	61.2
96	Antwerpen	(B)	83.4	124.8	1.6	61.7
97	Lancashire	(UK)	83.0	94.2	1.4	62.1
98	Brabant	(B)	82.8	112.0	2.2	62.8
99	Weser-Ems	(D)	81.1	90.5	2.1	63.4
100	Dytiki Ellada	(GR)	80.9	50.0	0.7	63.6
101	Luxembourg	(B)	80.9	80.3	0.2	63.7
102	Greater London	(UK)	80.8	164.0	6.8	65.8
103	Hannover	(D)	80.2	110.8	2.0	66.4
104	Utrecht	(NL)	79.2	101.8	1.0	66.7
105	Köln	(D)	78.5	110.7	3.9	67.9
106	Berlin (West)	(D)	77.7	125.1	2.0	68.5
107	Cornwall, Devon	(UK)	77.5	87.0	1.5	69.0
108	Cheshire	(UK)	76.4	118.2	1.0	69.3
109	Lincolnshire	(UK)	75.7	89.0	0.6	69.4
110	Marche	(I)	75.4	106.1	1.4	69.9
111	Kentriki Makedonia	(GR)	74.9	52.8	1.7	70.4
112	Thessalia	(GR)	74.4	51.6	0.7	70.6
113	Piemonte	(I)	74.2	119.0	4.4	72.0
114	Friuli-Venezia Giulia	(I)	72.4	116.1	1.2	72.3
115	Cumbria	(UK)	72.0	120.1	0.5	72.5
116	Schleswig-Holstein	(D)	71.8	94.5	2.6	73.3
117	Sterea Ellada	(GR)	71.3	67.3	0.6	73.4
118	Oost-Vlaanderen	(B)	68.9	94.4	1.3	73.9
119	Grampian	(UK)	68.6	124.5	0.5	74.0
120	Zeeland	(NL)	68.4	103.4	0.4	74.1
121	Hovedstadsregionen	(DK)	66.5	132.6	1.7	74.6
122	Lüneburg	(D)	66.0	77.5	1.4	75.1

Table C: Regions of the Community ranked according to their level of unemployment[1]
(average 1988-89-90, EUR12 = 100)

Rank	Region		Unemployment rate Average 1988-89-90 EUR12(9.1%) = 100	GDP/head in PPS Average 1986-87-88 EUR12(14730) = 100	Population 1988	
					total (millions)	cumulative % share
123	Salop, Staffordshire	(UK)	65.7	89.6	1.4	75.5
124	Dytiki Makedonia	(GR)	65.3	46.7	0.3	75.6
125	Detmold	(D)	65.3	103.4	1.8	76.2
126	Voreio Aigaio	(GR)	63.6	39.9	0.2	76.2
127	Kassel	(D)	61.6	99.4	1.2	76.6
128	Trier	(D)	60.3	86.2	0.5	76.7
129	Peloponnisos	(GR)	58.8	56.4	0.6	76.9
130	Alsace	(F)	57.6	112.7	1.6	77.4
131	North Yorkshire	(UK)	56.8	102.3	0.7	77.6
132	Emilia-Romagna	(I)	55.9	127.6	3.9	78.8
133	Hereford, Worcs, Warwick	(UK)	55.5	92.0	1.1	79.2
134	Veneto	(I)	54.9	116.4	4.4	80.5
135	Oberpfalz	(D)	54.1	90.7	1.0	80.8
136	Notio Aigaio	(GR)	53.2	55.6	0.2	80.9
137	Rheinhessen-Pfalz	(D)	52.4	110.5	1.8	81.5
138	Avon, Gloucester, Wiltshire	(UK)	52.4	113.7	2.0	82.1
139	Leicestershire, Northampton	(UK)	52.3	110.6	1.4	82.5
140	Kent	(UK)	51.9	97.1	1.5	83.0
141	Gießen	(D)	51.7	90.2	1.0	83.3
142	West-Vlaanderen	(B)	51.3	99.3	1.1	83.6
143	Koblenz	(D)	51.1	93.8	1.4	84.1
144	East Anglia	(UK)	50.1	104.2	2.0	84.7
145	Ipeiros	(GR)	50.0	41.9	0.3	84.8
146	Hampshire, Isle of Wight	(UK)	48.9	109.0	1.7	85.3
147	Dorset, Somerset	(UK)	47.7	100.8	1.1	85.6
148	Essex	(UK)	47.3	96.8	1.5	86.1
149	Mittelfranken	(D)	45.7	122.3	1.5	86.6
150	Oberfranken	(D)	45.2	97.8	1.0	86.9
151	Lombardia	(I)	44.4	137.3	8.9	89.6
152	Karlsruhe	(D)	43.4	120.1	2.4	90.4
153	Algarve	(POR)	43.3	46.0	0.3	90.5
154	Darmstadt	(D)	42.5	148.9	3.4	91.5
155	Unterfranken	(D)	41.9	94.7	1.2	91.9
156	Niederbayern	(D)	41.4	90.9	1.0	92.2
157	Trentino-Alto Adige	(I)	39.0	117.8	0.9	92.5
158	Valle d'Aosta	(I)	39.0	133.8	0.1	92.5
159	Oberbayern	(D)	37.7	135.1	3.6	93.6
160	Centro	(POR)	35.9	50.2	1.8	94.2
161	Bedford, Hertfordshire	(UK)	35.7	111.3	1.5	94.6
162	Norte	(POR)	35.7	41.9	3.6	95.7
163	Freiburg	(D)	35.1	104.9	1.9	96.3
164	Schwaben	(D)	34.6	107.8	1.5	96.8
165	Ionia Nisia	(GR)	34.5	50.2	0.2	96.8
166	Kriti	(GR)	32.4	48.5	0.5	97.0
167	Tübingen	(D)	32.3	106.6	1.5	97.5
168	Stuttgart	(D)	31.5	133.8	3.5	98.5
169	Surrey, East-West Sussex	(UK)	31.2	107.0	2.4	99.3
170	Berks, Bucks, Oxfordshire	(UK)	27.9	118.3	1.9	99.9
171	Luxembourg (Grand-Duché)	(L)	19.2	121.7	0.4	100.0

[1] *NUTS 2, except D.O.M. (NUTS 1)*
[2] *National figures*

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