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October 1996

Abstract

1. Introduction

This report presents the findings of research which has been undertaken on behalf of the European Commission into the impact of Member States' policies on economic and social cohesion in the European Union (EU).

The report obviously considers policies which have an explicit spatial dimension - including not only "classic" regional policy measures, but also policies that address specific issues such as rural problems, urban deprivation or unemployment blackspots. However, in expenditure terms, such spatially-oriented policies tend to be dwarfed by two other aspects of government activity which are likely to have regional implications: on the one hand, sectoral and horizontal policies that are pursued "proactively" (eg. R&D, employment, defence); and, on the other, the (mainly) automatic, interregional transfers resulting from general public expenditures and central government allocations to subnational authorities.

In considering these four areas of government activity (regional policy; other spatial policies; horizontal policies; and overall government expenditures), the key research questions are:

i. to what extent can policies which have the redress of regional disparities as their *objective* (ie. regional and other spatial policies) be shown to contribute to this end?
ii. to what extent can it be shown that horizontal or sectoral policies contribute to or undermine spatial policy spending and its objectives?
iii. at a global level, what is the spatial distribution of public spending and what is its role in reducing economic and social disparities?

These research questions concern, first, the proactive policies pursued by government, whether or not with spatial objectives in mind, and, second, the largely automatic interregional transfers that are the outcome of the differing spatial distribution of government taxation and spending. The next three chapters focus on the proactive policies of government. They consider, in turn, the regional impact of Member States' regional policies (Chapter 2), other spatial policies (Chapter 3) and selected horizontal policies (Chapter 4). Chapter 5 then reviews those budget-induced interregional transfers which result from government expenditure and taxation policies. A final chapter, Chapter 6, draws together the main findings of the report.

2. Member States' Regional Policies

The aim of this chapter is to provide an assessment of the impact of Member States' regional policies on economic and social cohesion. This is done by reviewing the objectives of regional policy in the different Member States and

the available evidence on the effects of policy, as shown by the regional distribution of national regional policy expenditure and by reviewing recent evaluation studies.

With respect to the *objectives* of Member States' regional policies (see Section 2.1), the chapter distinguishes between four broad groups of countries:

- the four Cohesion countries (*Greece*, *Ireland*, *Portugal* and *Spain*), where issues of economic development are the main preoccupation, but where underemployment and peripherality, and, especially in Spain, unemployment are also concerns.

- *Germany* and *Italy*, which are characterised by the dual nature of their economies. These countries display by far the widest internal disparities and expend by far the most on regional policy; both countries extend the focus of policy beyond the most underdeveloped regions and also operate regional policies in the disadvantaged parts of the more prosperous regions.

- the central and northern EU countries (*Austria*, *Belgium*, *Denmark*, *France*, *Luxembourg*, *the Netherlands* and the *United Kingdom*), where employment issues, especially related to industrial restructuring, tend to dominate. However, the nature of the regional problem in these countries is also characterised by its variety, complexity and susceptibility to change; recent years have seen the emergence of acute urban and rural problems, as well as issues associated with the restructuring of industries such as defence. Moreover, peripherality and rural depopulation are often also concerns. In addition, in some countries, there are special situations to address, notably Northern Ireland within the United Kingdom, and Corsica in France.

- the Nordic Member States (*Finland* and *Sweden*), where peripherality, climate and geography are the principal issues addressed by regional policy.

As far as regional policy *objectives* are concerned, the four Cohesion countries (and especially Greece, Ireland and Portugal) are characterised by the problem of implementing a regional development policy in the context of national economies which are themselves underdeveloped from an EU perspective. This creates tensions between efficiency-related issues and equity-based concerns, between short-term and longer-term considerations and between national prosperity and regional disparity - tensions which have resulted in significant shifts in priorities and changes in the relationship between national industrial development and regional policies over time. Moreover, these tensions reflect the wider picture at the EU level of the potential conflict between competitiveness and cohesion.

A feature of Germany and Italy is their extreme internal regional disparities; this has resulted in considerable policy emphasis on their most underdeveloped regions. In Germany (and in Italy until recently) separate policies are operated for such regions (the *Mezzogiorno* in Italy and the new *Länder* in Germany) in a range of policy areas, although regional policy is also among the instruments used.

In the "northern European" Member States, regional problems tend to comprise a range of concerns, though high levels of unemployment are generally at their core; in these countries regional policy tends to have a relatively low political profile. There are, however, marked differences between countries with respect to both the objectives and substance of policy; at one end of the spectrum is France with the broad concept of *aménagement du territoire*, while at the other comes the United Kingdom with a far narrower policy focus on regional *industrial* policy.

In the Nordic Member States the regional problems to be faced are different in both scale and type (sparsely-populated areas, harsh climates, distance from population centres etc); regional policy in these countries tends to be allocated a higher priority and to include a fairly broad range of policy measures.

With regard to the *instruments* of regional policy, the chapter highlights the considerable variety in policy approaches. In some countries, national regional policy is essentially comprised of financial incentives to firms investing in the problem regions: this is true of Belgium, Luxembourg and the United Kingdom, for example. In others, a range of non-spatial government policy measures are associated with the objectives of regional policy. In France and Finland, for example, regional development legislation makes this link explicit.

There are also considerable differences in the *institutional arrangements* for regional policy between countries. Among the federal or quasi federal states, the role of the subnational level is key. For example, in Belgium, policy is the responsibility of the regional governments; however, in Germany and Spain responsibility is divided between the national and regional governments according to competences defined in the constitution and partnership is a core component of policy delivery. In Austria, the organisation and competence for regional policy is not allocated constitutionally either to the federal government or to the *Länder*. In practice, there is an informal allocation both of legislative competence and of the administration of public activities affecting regional development between different bodies at federal, *Land* and local level. The remaining countries are organised along unitary lines, but there is frequently administrative devolution in the operation of regional policy. This is so, for instance, in France, where the *préfets* play an influential role in regional economic development policy and, more prosaically, in Great Britain where government regional offices are largely responsible for administering regional incentive policy.

As far as *regional policy expenditure* is concerned (see Section 2.2.1), the chapter focuses on regional grant expenditure, in order to obtain comparable and regionally-disaggregated information. A number of points arise from the discussion of the distribution of expenditure at both national and regional levels.

First, in respect of *expenditure trends*, regional capital grant expenditure (and, indeed, regional policy spending more generally) has been in decline in most countries over the 1989-93 period, with particularly significant falls in Italy and Spain; these trends reinforce longer-term developments, especially in the northern Member States where the decline in some countries since 1980 has been more than two-thirds. On the other hand, east Germany stands as an obvious exception to these general trends, with major regional development spending from 1990 onwards. Strikingly, some two-thirds of overall regional grant expenditure relates to east Germany and Italy, just under one-fifth to the Cohesion countries and some 15 percent to the remaining six EU12 countries.

Regarding the *scale* of regional grant spending, this is, in general, significantly higher in the four Cohesion countries than elsewhere in the Member States (except Luxembourg); though spending declined markedly in Spain and increased steeply in east Germany from 1990. However the position at the regional level is more varied. While the broad picture is for regions in the four Cohesion countries, in east Germany and in the Italian *Mezzogiorno* to appear towards the top end of the scale ranking - together with Northern Ireland - certain Spanish and Italian regions are found towards the lower reaches of the ranking. In similar vein, average *per capita* spending in a range of northern European regions (Wallonia, Saarland, Limburg, Wales) is broadly in line with the country averages of Spain and Italy.

When considering the *intensity* of policy, the key point to note is that this involves relating regional incentive spending to the population of those regions actually in receipt of support (the assisted areas). As a result, those countries and regions with only limited assisted area coverage move markedly up the rankings. Thus, the intensity of regional incentive spending in east Germany, Italy (prior to the demise of *Mezzogiorno* policy) and Luxembourg is significantly higher than in the four Cohesion countries, while the intensity of expenditure in Portugal and Spain is not dissimilar to that recorded in many northern Member States. A similarly varied pattern is found at the regional level, with the intensity of regional incentive spending in a number of northern regions exceeding, by some way, that found in many regions in the Cohesion countries.

Turning finally to the review of *evaluation studies* (see Section 2.2.2), in general these provide only limited information on the effectiveness of policy. Econometric exercises tend to be constrained by data availability, by the difficulty of establishing the counterfactual and by problems of determining causality, while survey-based research tends to have a quite specific focus - on a particular incentive or a particular region or a particular development process - which creates difficulties when attempts are made to generalise the results. At the EU level, these difficulties are compounded by the lack of EU-wide comparative data and the plurality of evaluation approaches used. Without good comparative information, the systematic and comprehensive appraisal of the relative effectiveness of national regional policies will remain elusive.

3. Other Spatial Policies Operated by the Member States

In this chapter, the focus is on those spatially-discriminating policies (other than regional policy) which operate in selected Member States (France, Germany, Italy, Portugal, Spain and the United Kingdom). The review is concerned

with *national* government policies. However, it is important to note that, in some areas of spatial policy, subnational levels of government also play an important role; this is particularly true of urban policy. In Germany and Spain, for example, urban policy operates at the subnational level and is not the responsibility of the national government. Moreover, in other areas of spatial policy, EU policies are often important; in some countries, for instance, rural policy is essentially subsumed within EU policies operated under Objective 5b or within the LEADER Community Initiative - again this is true of Spain. Similarly, EU policies are also significant in the context of industrial crisis regions designated under KONVER, RENAVAL, RESIDER and so on.

The spatial policies of Member States identified in this study address a variety of objectives. For the purposes of this report these have been grouped into urban, rural, crisis area and special status area policies. The distinction between regional and other spatial policies is not always a clear one - this is especially so of countries like France which take a broader view of regional development policies within the context of *aménagement du territoire* and where there have been increasing moves to integrate spatial policies within a single framework. Nevertheless, there is a difference in emphasis between regional and other spatial policies; the essence of this lies primarily in the extent to which other spatial policies concern issues of social and political cohesion, rather than essentially economic development objectives. This is not to say that there is not always a mix of rationales and motivating factors underlying policy; however, the four categories of policy identified concern areas where the political dimension of policy tends to be central - certainly more so than is generally the case with regional policy.

As far as *urban policy* is concerned, the discussion in Section 3.1.1 concentrates mainly on the position in France and, especially, the United Kingdom where urban policy has been given a relatively high priority. Indeed, in the UK, the political imperatives arising from growing unrest in areas of extreme poverty and deprivation have seen urban policy expenditure rise to some four times that of the main British regional incentive (Regional Selective Assistance). In similar vein, national urban policy spending in France is broadly on a par with the sum expended on the range of *aménagement du territoire* policies (including measures for rural and "crisis" regions as well as regional policy support). These two country examples underline the significant social and environmental aspects of national urban policy; while economic development instruments are among the measures used, they are generally employed for social and political ends.

Elsewhere in the Member States, urban policy tends to be somewhat different in nature - a response to physical planning and environmental pressures rather than social unrest. Moreover, it is often the responsibility of sub-national levels of government rather than being a national policy initiative. On the other hand, the federal government in Germany can grant supplementary aid for urban measures where the investments serve to improve the conditions for growth in the economy as a whole or to equalise economic strength between the regions.

Regarding *rural policy*, the emphasis in Section 3.1.2 is very much on France where the speed of agricultural change in the post-war period and the stress placed on the rural way of life has resulted in the policy being accorded a high national political profile. Elsewhere, rural issues tend to be less politically-sensitive from a national perspective and, indeed, much of the policy impetus now comes from EU-level policies (in particular, Objective 5b and the LEADER Community Initiative). In general, the objectives of rural policy at the national level tend to reflect social priorities - in particular, the desirability of maintaining population settlements by sustaining standards of living and by assuring the provision of public services. While economic development instruments can play a role in achieving such objectives, the overall focus of policy is more on social than economic cohesion.

Policies for *"crisis" areas* have been a feature in many Member States since the 1980s, particularly in response to increasing problems of structural adjustment arising from job losses in the steel, shipbuilding and (most recently) defence industries (see Section 3.1.3). There is usually a clear economic development objective underlying such policies, reflecting the need to encourage alternative economic activities. However, the intensity of decline (and its spatial focus) is usually such that the policy response also incorporates significant social and political aspects. In the case study countries, examples of "crisis" area policies are provided for Germany, France, the United Kingdom and Italy, all of which have experienced major plant closures in narrowly-defined localities. Over time, such areas tend to be incorporated within designated problem regions.

Finally, policies for *"special status" regions* are considered in Section 3.1.4. In such regions - which include the new *Länder* in Germany, Corsica in France, Northern Ireland in the United Kingdom and (historically) the *Mezzogiorno* in Italy - the primary motivation of policy is to contribute to national *political* cohesion by reducing economic and social disparities. A feature of policies for special status regions is the sheer scale of the transfers involved, underlin-

ing the importance attached to national solidarity and political cohesion. The most striking illustration of this is the scale of transfers to the new *Länder* set alongside the volume of EU spending on the Structural Funds: the gross transfers to the new *Länder* for 1996 alone amount to 101 billion ECU; this compares with Structural Fund spending for *the EU as whole* of 64 billion over *five* years (1989-93).

As far as the *spatial distribution* of expenditure is concerned (see Section 3.2.1), comparative regional-level information has proven difficult to obtain. Even so, the evidence is that most spatially-discriminating policies tend to favour those areas in receipt of regional policy support. This is certainly true of policies for special status regions and it is also generally the case for most "crisis" areas. For rural and urban policy areas there may be less coincidence of policy boundaries with designated regional problem areas. That having been said, both policies are very clearly focused on economic and social cohesion in its wider sense; they aim to tackle the specific problems of urban and rural areas and, in so doing, to reduce sources of national discord.

Considering, finally, the *evaluation studies* reviewed in Section 3.2.2, the available evidence tends to suggest that current policy instruments are of limited impact. In particular, as regards urban policy, the evidence is that property-led urban regeneration initiatives generate a large proportion of low quality temporary employment, ill-suited to the unemployed people within disadvantaged communities. This is a disappointing finding given the significant social component to urban policy objectives. A further, more positive finding, at least for regional policy, is the fact that the cost per job figures attached to many other spatial policies are generally higher than those found for standard regional incentives.

4. Horizontal Policies with Important Regional Impacts

The purpose of this chapter is to consider policies which have no *intended* spatial effects but which, nevertheless, have significant regional impacts. Unlike the next chapter which deals with the regional dimension of general government transfers, the focus of this chapter is on the *proactive* policies of government. Two particular policies are reviewed: policies to promote competitiveness (in effect, R&D-oriented policies) and employment policies.

As far as RTD and innovation policies are concerned, the chapter begins by providing appropriate *background context* (see Section 4.1.1). The point is made that R&D spending in the four Cohesion countries is significantly less than that found elsewhere in the EU Member States - whether measured in relation to GDP or to national population. That having been said, Ireland and Portugal were the only OECD countries in which both public and private expenditure on R&D increased between the periods 1985-9 and 1990-2, an indication perhaps of the stimulating effect of EU policies. With regard to the *regional* dimension of R&D policy, the emphasis within the Cohesion countries is clearly on issues of *national* competitiveness, scarcely surprising given the tensions noted in Chapter 2 between national prosperity and regional disparity.

In considering the objectives of R&D and innovation policies (see Section 4.1.2) the grouping of Germany and Italy together reflects the common regional features of their economies rather than any similarities in the R&D arena. Indeed, the two countries currently take quite different approaches to RTD in their problem regions. While in Germany a major effort is in train to try to establish an efficient research environment in the new *Länder*, in Italy there are now no separate measures for supporting RTD in the problem regions, following the demise of special intervention in the *Mezzogiorno*.

With respect to the "northern European" Member States, the focus is on the two case study countries: France and the United Kingdom. In terms of the emphasis placed on R&D expenditure (as a percentage of GDP or on a *per capita* basis), both countries are very much towards the top end of the EU Member State range, just behind Germany and Sweden (see Chart 4.1). As far as the *regional* dimension is concerned the focus, once more, is on *national* competitiveness. That having been said, examples are to hand in both countries of initiatives which aim to encourage greater participation in innovation in *all* regions. Moreover, in Northern Ireland, a distinct strategy and enhanced funding are available to stimulate RTD in the province.

Summing up the overall contextual position, it is clear that policies to promote RTD and innovation are generally operated with national policy objectives in mind. While there are some attempts to stimulate innovation in the prob-

lem regions, this is primarily in the form of encouraging technology transfer and the uptake of innovation rather than innovation *per se*. This broad picture is hardly surprising: research and development policymakers are understandably unlikely to be willing to jeopardise R&D policy objectives for the sake of promoting less viable projects in the problem regions.

Turning to consider the *regional distribution* of expenditures on R&D, the analysis in Section 4.1.3.1 is restricted to four countries for which relevant data is available: France, Italy, Spain and the United Kingdom. The focus is, first, on the regional-level distribution of *overall* R&D expenditure, distinguishing between the private sector, government and the higher education sector; and, secondly, on the regional-level distribution of so-called business enterprise sector expenditure on R&D (BERD) and the extent to which this is financed by *government*.

With regard to the former aspect - the regional distribution of overall R&D expenditure - a number of common themes apply across the four case study countries. Of perhaps most significance, R&D expenditure tends to be heavily concentrated in more prosperous regions. Thus, Paris (the Île de France region) accounts for 43 percent of all R&D expenditure in France, Piemonte and Lombardia for almost half private and State R&D expenditure in Italy, Madrid for 42 percent of total R&D expenditure in Spain and the South East for some 54 percent of all R&D expenditure in the United Kingdom.

The reverse side of this coin is that R&D expenditure in the poorest regions is generally very low. By way of example, in France the Limousin region accounts for less than 0.2 percent of the national R&D spend and, on a *per capita* basis has expenditure levels 20 times lower than in Paris. In similar vein, the eight regions of the *Mezzogiorno* in Italy account for only 8 percent of private and State R&D funding compared with 36 percent of the national population. The Spanish Objective 1 regions collectively account for 24 percent of the total R&D spend while containing almost 60 percent of the national population. Lastly, in the UK, Northern Ireland represents just 0.7 percent of overall national R&D expenditure but holds 2.8 percent of the national population.

A final interesting point regarding the regional distribution of overall R&D expenditure concerns the distribution of private and public sector spending by region. While there is considerable variation between regions, there are a significant number of instances where relatively prosperous regions benefit particularly from public sector funding. An obvious example is Lazio which, on its own, receives over half of the State funding for Italian R&D. In Spain, too, over three-fifths of State R&D funding is channelled into Madrid.

Moving on to consider the regional distribution of government-funded BERD (business enterprise sector R&D) three general points can be made. The first is that there is a high degree of complementarity between government R&D funding and regional aid at the regional level. Prosperous regions are generally ineligible for regional support but benefit disproportionately from R&D funding; in contrast, poorer regions perform badly in terms of government R&D aid for business but generally do well with respect to regional assistance. Second, notwithstanding the general complementarity shown in Chart 4.5 to Chart 4.8, it is important to note the very different *scales* of R&D and regional spend by country. In general terms, R&D spending is far more significant than regional support in the prosperous Member States while regional aid is more important than government-funded BERD in many poorer Member States. Third, combining these two general points, it is the richest regions in the richest countries and the poorest regions in the poorest countries which benefit most from Member State R&D and regional aid in combination.

Evaluation studies on the regional effects of horizontal policies in general, and competitiveness policies in particular, are fairly limited, hampered by the lack of appropriate regional data and by the difficulties of disentangling the impact of what are often wide-ranging policies from other government policies (see Section 4.1.3.2). As a result, the focus of most studies is less on the regional effects of competitiveness policies and more on assessing the effectiveness of such policies in different geographical contexts. While it is difficult to generalise, a broad conclusion seems to be that competitiveness policies work less well in less-favoured regions.

Turning, finally, to consider *employment policies* (see Section 4.2), there is, in practice a serious lack of empirical evidence on the effects of most of the measures included in the employment programmes being followed by Member States. However, while the effect of present policies on employment growth is uncertain, particularly in terms of its scale, their impact on cohesion is less questionable. A common characteristic of most of the measures in operation or being planned is to reduce disparities in employment opportunities whether between individuals, social groups or regions. While most measures do not have a specific regional dimension, the very fact that many of them are aimed at the unemployed - and within this group at the most disadvantaged of those without work - is likely to

mean that they benefit regions with the most serious problems of unemployment and inadequate rates of job creation more than others, so tending to narrow regional disparities.

5. Interregional Transfes from Central Government Budgets

Public expenditure in the different Member States of the EU represents a significant proportion of the income of the countries concerned; on average, around a quarter of GNP in industrialised countries - more if social security is included. Government funds are generated from obligatory contributions across the regions of the countries concerned and are redistributed in expenditures across the regions. This process involves involuntary but significant interregional transfers. The question is whether this redistribution is in or out of line with the objectives of regional policy. In spite of its importance as a mechanism to promote cohesion, this issue has been understudied. This chapter presents the results of a research effort to assess these interregional transfer mechanisms in seven EU countries: France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom .

A starting point for the discussion of this issue is a simple model of budget-induced transfers (see Section 5.2). This shows that national budgets are likely to transfer large amounts of money from richer to poorer regions. According to the model, these transfers are expected to be larger in those countries where the size of the budget (relative to GDP) is larger, where the tax system is progressive, where the expenditure system is "equalising", and where interregional income disparities are greater.

Measuring interregional transfers induced by a national budget for a given country and a given year is a difficult exercise. The difficulties to be overcome are both conceptual and statistical (see Section 5.3). At a conceptual level, it is often unclear how a particular tax or a particular expenditure should be regionally allocated. Moreover, even if and when it is known how, in principle, to allocate a particular type of revenue or expenditure, there may well be statistical difficulties in practice. The methodology adopted in the present study involves three steps:

- first, detailed national budgets are established. These have to be (i) consolidated (ii) balanced (iii) recent (iv) executed and (v) broken down into as many items of revenue and expenditure as possible.

- second, to allow the regional allocation of these budgetary items, allocation criteria or "keys" are sought for each item. Regional allocation keys are chosen on the basis of their *economic* sense: the research methodology is guided by economic reasoning and by the theory of incidence in the selection of criteria

- third, for each region, the amounts estimated for each item of revenue and of expenditure are summed with a view to indicating how much each region has contributed (in revenues) to the budget and how much it has gained (in expenditures) from the budget.

While of itself simple, the methodology is complicated by two factors. One is that there is often more than one allocation key which may be considered appropriate to any given budgetary item. The procedure adopted in the study is to allocate these alternative regional keys on the basis of 101 randomly selected combinations and to study the distribution of the summed totals. If the distribution of numbers is sufficiently concentrated - that is, if the coefficient of dispersion is reasonably low - the conclusion is that the estimates converge and the median or average value of the distribution is retained. If, on the contrary, the distributions are extremely dispersed, then it is impossible to say much about the contributions to the budget and the gains from the budget for a given region.

A second complication arises from the distinction which can be drawn on the expenditure side between a "flow approach" - focusing on where expenditure flows in the first instance - and a "benefit approach", concentrating on where the ultimate beneficiaries of any given expenditure flow are located. Different allocation keys apply depending on whether a flow or benefit approach is being utilised. As a consequence, for any given region, two estimates of budgetary "gain" are produced: one based on the flow concept, the other on the benefit concept. In similar vein, two estimates of budget-induced transfers are produced for each region - "transfers (flow)" (ie. allocated expenditures on the flow concept minus budget contributions) and "transfers (benefits)" (ie. allocated expenditures on the benefit concept minus budget contributions). Neither estimate is "better" than the other: they are of equal interest, viewing the complex phenomenon of budget-induced interregional transfers from different angles.

The main findings from the application of the above methodology are presented in Section 5.4. They are:

- that there is indeed a concentration of results in practice, making it appropriate to utilise the mean results
- that budget-induced interregional transfers are large: irrespective of whether the "flow" or the "benefit" concept is used, it appears that the richer regions of the countries studied transfer significant sums to the poorer or problem regions through public funds
- that the transfers induced by government budgets are clearly related to the GDP per capita of regions: the richer is a region, relative to the national situation, the more its net contribution to the budget; in similar vein, the poorer is a region, the more it receives in transfers from the budget
- that equal regions from an EU perspective are not treated equally: national cohesion machines are unequal at the European level.

Out of these results, it is possible to suggest three broad implications for European regional policies (see Section 5.5). First, taking into account budget-induced transfers produces a new (different) representation of the relative economic situations of the regions of Europe - this point must be borne in mind when designating problem region maps at the EU level. Second, when considering pro-active spatial policies, it is important not to lose sight of the role of budget-induced transfers within countries, particularly in the less-developed Member States. The measurement of budget-induced transfers shows that some of the richest regions of these countries, though relatively poor at the European level, transfer large amounts of money to the rest of their countries. Third, regional policy must take into account the fact that changes in institutional or fiscal policies could have direct implications for the level of the flows of budget-induced transfers. For example, fiscal decentralisation, which is in progress in many countries, has a direct implication for the volume of public funds managed at the national level and, related, for the intensity of the interregional redistribution of income. In another field, the EU convergence criteria which aim to reduce the public deficit (ie. public expenditures) have a direct impact on the scale of interregional transfers. Any harmonisation of national tax systems in European countries could also produce changes in the structure of government revenues, and thus change the spatial progressivity of the fiscal system. As a result, those in charge of regional policies must develop a better understanding of budgetary cohesion mechanisms and become more involved in many, indeed most, non-regional policy changes.

6. Conclusions

This report has focused on two principal categories of government spending that impact on economic and social cohesion in the EU Member States: the automatic transfers induced by government taxation and expenditures; and the spending policies pursued proactively by governments, whether or not with cohesion in mind.

A key point to bear in mind in considering the overall results of the work (see Section 6.1) concerns the scale of the transfers and spending concerned; budget induced interregional transfers are massive compared with spending on proactive government policies. This is best illustrated by example: the value of the transfer flows to Lorraine is about 40 times the spend on regional incentive policy in the region. Moreover, this is a modest example; Lorraine is not even one of the principal beneficiaries of transfers in France (transfer flows to Midi-Pyrénées and Limousin amounted to 5 and 6 percent of regional GDP, respectively compared to just 2 percent for Lorraine), but Lorraine does receive more regional aid as a proportion of regional GDP than any other French region. The same calculation for Limousin shows that transfers are worth 600 times more than regional incentive spending in the region.

The same holds true for expenditure on horizontal policies. In Chapter 4, it was noted that the contribution of EU governments to private sector spending on R&D was of the same broad order of magnitude as their spending on regional incentive policy. In all the countries discussed, this spending is very heavily skewed in favour of the more prosperous regions, even in relation to regional GDP. Taking France as an example again, government funding of private sector R&D in Île de France amounts to around one-fifth of the value of the transfer flows out of the region. Again, this is a very conservative example. Of the countries considered in Chapter 4, government funding of private sector R&D accounts for a higher proportion of regional GDP (0.57 percent) in the Paris region than anywhere else;

the comparable proportions for Madrid and Piemonte are 0.26 percent and 0.13 percent of their regional GDP figures respectively. Moreover, the value of the transfer flows away from these regions are significantly higher than those away from Paris; 10 percent of regional GDP in the case of Piemonte and 9 percent in the case of Madrid. This means that the value of the transfer flows away from Madrid is some 70 times the value of government R&D policy in the region.

In the wider context of cohesion at the European level, these figures are clearly of considerable significance. Not only does Île de France receive substantially more in government funded R&D as a proportion of regional GDP than does Madrid, but the transfer flows away from Madrid are substantially larger than those away from Paris. All this must be set in the context of the fact that the GDP of Madrid is 97 percent of the EU average while that of Île de France is 166 percent of the EU average.

Not only do the expenditures considered in this report differ substantially in scale, they also differ in nature. Automatic transfers are the inevitable outcome of differences between the amount of taxation collected in a given region, which is closely related to the prosperity of that region, and the value of government expenditures in a region, which is more closely related to the population of that region. The pattern of much of this expenditure reflects the needs arising from the demands made on welfare and public services provision, including health, education and unemployment benefits. In consequence, in regional terms, transfers flow, in a neutral way, to those regions where the need arises. In so doing, they remove much of the impact on regional incomes of external economic shocks. Also key, transfer mechanisms are long-term, providing a kind of mutual insurance policy between the regions of a nation. In France, for example, the status of regions as contributors or beneficiaries from the central government has changed over time as the competitive advantage of regions has changed; in the 1960s, the Nord Pas de Calais region was a contributor to the budget - it is now a beneficiary. It is unclear how common this change of status is; however, it is clear that if regions that are beneficiaries are to have any chance of becoming contributors, then government funding must continue to provide for the basic needs of the region, irrespective of how much it currently contributes to the central budget.

Proactive policies contrast sharply with automatic transfers. By their nature, they are explicit and directed at specific developmental objectives; they tend to be implemented on short to medium-term timescales. Far from being neutral and automatic, they frequently involve considerable policymaker discretion and require expert input into policy design, delivery and implementation. Nevertheless, the impact of proactive policies is unclear. The difficulties involved in policy evaluation mean that an understanding of the real effects of the range of government policies (on cohesion or more generally) "remains elusive".

Notwithstanding the differences in the nature and the volume of the expenditures studied, and the difficulties involved in policy evaluation, it can be said that, overall, national expenditures tend to flow from the more prosperous towards the less prosperous regions within a country. Not surprisingly, regional policy spending tends to flow in the direction of the worst-off regions within countries although, as has been shown, the patterns of spend are somewhat uneven. Regional policy spending is buttressed by automatic transfers; the results from this part of the study are unambiguous - the direction of the flows supports economic and social cohesion within the national context. Member States' other spatial policies also support cohesion, although it is notable that, as far as these policies are concerned, the overriding objectives are political and social, rather than economic. The pattern for horizontal policies is less clear cut. Member States' employment policies tend, by their nature, to support social, and perhaps economic, cohesion. However, the pattern of expenditures on policies aimed at improving the competitiveness of national economies by promoting RTD is virtually a mirror image of patterns of regional disparity; the wealthier a region is, the more government tends to spend on promoting R&D within that region. Conversely, the poorer a region is, the smaller the spend on R&D as a proportion of regional GDP.

This study has examined the situation of regions primarily within their national contexts. However, it is important to stress that, taking an EU perspective, there is no direct relationship between the prosperity of a region and its status as a contributor to the national budget or a beneficiary from it; similarly, it does not follow that regions of equivalent prosperity in a European context will be equal beneficiaries of Member States' regional or horizontal policies. The Midi-Pyrénées and Cataluña regions, which have the same level of prosperity in relation to the EU average illustrate this point. Midi-Pyrénées is designated for French regional policy purposes and receives a net flow transfer from the government budget equal to 5 percent of regional GDP; in contrast, Cataluña is not designated for national regional policy purposes and makes a net flow contribution to the government budget of 5 percent of its GDP. More than this, not only does Cataluña receive nothing from the national regional policy budget, but it also receives

less than Midi-Pyrénées in R&D policy spend; the R&D spend in Midi-Pyrénées is worth 0.44 percent of regional GDP; in Cataluña it is worth just 0.06 percent.

Looking to the future (see Section 6.2), the report identifies three sets of issues requiring further work:

- the need to move from a static analysis to take more account of the impact of history on cohesion mechanisms
- the desirability of taking "non-spending" policies more into account, given the obvious differential impact of regulatory and other policies upon different regions
- and the need for the analysis (especially relating to budget-induced transfers) to take more cognisance of the long-term impacts of public expenditures.

Finally, in Section 6.3, the report draws together four general, but important, policy implications. The first is that it is not only regional policy decisions which impact on spatial cohesion: decisions taken in all policy areas have regional and cohesion consequences. Second, the sum of Member States commitments to national cohesion does not add up to EU cohesion; indeed national cohesion policies frequently run counter to European cohesion policies. Third, the role presently played by regional GDP per capita in the design of EU regional policies should perhaps be reconsidered, not least because GDP per capita is an indicator of the wealth of a region *before* national redistributive policies. Lastly, the analysis suggests that more policymaker attention should be given to the longer-term impacts of assistance policies.

Economic and Social Cohesion in the European Union: The Impact of Member States' Own Policies

1. Introduction

1.1 Research Questions

This report presents the findings of research which has been undertaken on behalf of the European Commission into the impact of Member States' policies on economic and social cohesion in the European Union (EU).

Regional disparities within EU countries are often significant; indeed, the internal inequalities expressed in terms of income per head and unemployment or other measures of disadvantage are of sufficient concern for all EU countries to have introduced regional policies that aim to redress such imbalances. In addition to "classic" regional policy measures, many countries are also concerned with other types of spatial problem and operate policies that address specific issues such as rural problems, urban deprivation or unemployment blackspots.

Government policy responses to regional and other spatial problems are often high profile. However, in expenditure terms they tend to be dwarfed by two other aspects of government activity which are likely to have regional implications: on the one hand, sectoral and horizontal policies that are pursued "proactively" (eg. R&D, employment, defence); and, on the other, the (mainly) automatic, interregional transfers resulting from general public expenditures and central government allocations to subnational authorities.

In considering these four areas of government activity (regional policy; other spatial policies; horizontal policies; and overall government expenditures), the key research questions are:

i. to what extent can policies which have the redress of regional disparities as their *objective* (ie. regional and other spatial policies) be shown to contribute to this end?

ii. to what extent can it be shown that horizontal or sectoral policies contribute to or undermine spatial policy spending and its objectives?

iii. at a global level, what is the spatial distribution of public spending and what is its role in reducing economic and social disparities?

These research questions concern, first, the proactive policies pursued by government, whether or not with spatial objectives in mind, and, second, the largely automatic interregional transfers that are the outcome of the differing spatial distribution of government taxation and spending. The next three chapters focus on the proactive policies of government. They consider, in turn, the regional impact of Member States' regional policies (Chapter 2), other spatial policies (Chapter 3) and selected horizontal policies (Chapter 4). Chapter 5 then reviews those budget-induced interregional transfers which result from government expenditure and taxation policies. A final chapter, Chapter 6, draws together the main findings of the report.

1.2 Country Coverage

Given the wide-ranging policy focus of the study, it has proven necessary to limit the range of countries examined in detail. While an overview of the position in EU15 is provided wherever possible - and particularly in the discussion of regional and employment policies - country coverage in most of the chapters which follow is restricted to six countries: France, Germany, Italy, Portugal, Spain and the United Kingdom. However, Sweden is also included as a case study country in the analysis of budget-induced interregional transfers in Chapter 5.

1.3 Relative Policy Weightings

Before turning to the detail of the individual policy chapters, it is necessary to provide an overview of the broad weighting attached to the various elements of policy. A breakdown of government expenditures by *function* is set out in Table 1.1 in respect of the standard case study countries: France, Germany, Italy, Portugal, Spain and the United Kingdom. The data are for 1989, the last year for which information is available for all six countries.

Table 1.1: The Distribution of General Government Expenditure by Main Function[1] (percent)

Services	Portugal	Spain	Italy	Germany	France	United Kingdom
General government	15.2	10.6	15.5	15.7	16.1	19.2
Community and social	35.8	53.0	46.6	59.7	61.8	51.3
Education	13.0	9.6	9.9	9.4	10.5	12.0
Economic	13.3	13.9	11.8	9.2	6.5	7.2
Other	22.8	12.9	16.2	6.0	5.2	10.3

Source: EUROSTAT

The table distinguishes between five broad functional categories. The first heading, General Government Services, includes activities undertaken by government which are not associated with services to persons or to business - including overall monetary and fiscal services, the conduct of external affairs, defence activities and public order and safety. The second heading, Community and Social Services, focuses on services supplied to the community and to households and persons directly. It incorporates health, social security and welfare, housing, community development and cultural services. While education services are normally included within this heading, they have been separated out in the table since educational expenditure can be viewed to have both a social *and* an economic role. The fourth heading, Economic Services, covers government expenditures associated with the regulation and more efficient operation of business. It includes spending in respect of government economic development objectives as well as services for industry relating to research, trade promotion and sectoral regulation. It thus incorporates the proactive policies considered in Chapters 2 to 4. The final heading contains public debt interest charges plus general transfers within government.

Table 1.1 shows clearly the importance of spending on community and social services - generally accounting for over half and, in a number of instances, for around three-fifths of general government expenditure. In comparison, the other four headings tend to be far less significant. In particular, spending on economic services ranges from just 6.5 percent to 13.9 percent of the expenditure total.

A similar picture is shown by Table 1.2 which relates the five categories of general government expenditure to national GDP. The table shows that the average percentage coverage for community and social services within the six case study countries is just over 23 percent compared to an economic services average of less than 5 percent. In considering differences by country, perhaps the most significant point to arise is the far greater emphasis on community and social services (and accordingly less stress on economic services) in the wealthier Member States (and particularly in Germany and France). Whereas community and social service expenditure averaged 3.5 times spending on economic services in the three countries with major Objective 1 regions (Portugal, Spain, Italy), it represented almost eight times economic services expenditure on average in Germany, France and the UK.

It is clear from the tables that policies pursued proactively by Member State governments with economic development objectives in mind (ie. economic services to business) are relatively small-scale when set alongside services supplied to the community and to households and persons directly (including health, social security, welfare and housing). There remains, however, the issue of the relative importance of those proactive policies which have an *explicit* spatial orientation.

One EU-wide source of information on this is the Commission's Fourth Survey on State Aids[2]. This Survey

[1] Information on the functional distribution of government expenditures is contained in the Eurostat publication. *General Government Accounts and Statistics 1981-1992* Eurostat, Luxembourg, 1994. The breakdown of expenditure by function is based on the United Nations Classification of the Functions of Government (COFOG) (see United Nations, *Classification of the Functions of Government*, Statistical Papers, Series M, No. 70, New York, 1980).

[2] *Fourth Survey from the Commission on State Aid in the European Union in the Manufacturing and Certain Other Sectors* (COM (95), 365 final, Brussels, 26.07.1995).

Table 1.2: General Government Expenditure by Main Function as a Percentage of National GDP (1989)

Services	Portugal	Spain	Italy	Germany	France	United Kingdom
General government	6.5	4.5	8.0	6.9	8.0	7.7
Community and social	15.3	22.5	24.1	26.4	30.6	20.6
Education	5.6	4.1	5.1	4.2	5.2	4.8
Economic	5.7	5.9	6.1	4.1	3.2	2.9
Other	9.8	5.5	8.4	2.7	2.6	4.1
Total	42.8	42.6	51.7	44.3	49.6	40.2

Source: EPRC calculations from EUROSTAT data.

covers the period 1990-92 and focuses principally on national aid to the manufacturing sector, though it also contains information on certain other aspects of national aid systems as they relate to agriculture, fisheries, transport (railways and inland waterways) and coal mining[3].

Limitations on the coverage of the data are made clear in the Survey; in particular, the Survey recognises that "the classification of aid is in many cases somewhat arbitrary because it is necessary to decide which of the objectives declared by a Member State is to be considered as the primary objective"[4]. Nevertheless, the Survey is of interest in providing a broad indication of the breakdown of State aid spending by function, distinguishing in particular between regional support, horizontal measures and certain sectoral aids (see Table 1.3).

Table 1.3: State Aid to Manufacturing by Objective (percent) (1990-92)

	Portugal	Spain	Italy	Germany	France	United Kingdom	EU 12
Horizontal	34	50	30	21	71	45	38
Sectoral	55	34	8	8	18	25	12
Regional	11	16	62	72	11	30	50

Source: Fourth Survey, Table 6.

It can be seen that, at the level of EU12, regional objectives account for half of the manufacturing total, with horizontal objectives representing a further 38 percent. Within the horizontal aid grouping (see Table 1.4), most emphasis is placed on research and development (10 percent of the manufacturing total), SME support (9 percent) and export/trade assistance (9 percent). However, these broad percentages mask very considerable variation at the Member State level, no doubt in part due to the somewhat arbitrary allocation of aid by objective. For regional objectives, for instance, the range for the case study countries is from as low as 11 percent (France, Portugal) to 72 percent (Germany), while for horizontal aid the variation is from 21 percent (Germany) to over 70 percent (France).

Table 1.4: Horizontal Aids as a Proportion of Manufacturing State Aid Expenditure (1990-92)

	Portugal	Spain	Italy	Germany	France	United Kingdom	EU 12
R&D	3	17	3	9	27	7	10
Environment	0	3	0	1	0	1	1
SME	1	10	9	4	11	15	9
Trade/export	0	1	9	1	30	15	9
Energy-saving	1	2	3	2	1	0	2
Gen. Investment	18	6	2	0	1	6	2
Other	10	10	5	4	0	0	4

Source: Fourth Survey, Table 6.

[3] It does not deal with aid where the recipients are not actual enterprises (eg. aid to households, the handicapped, infrastructure, universities, vocational training centres). Nor does it cover general aid measures, related, for instance, to differences in national tax and social security systems. Nor does it include aid granted by supranational and multinational organisations, including Community aid. Nor does it extend to certain individual types of aid. Of particular note in the context of the current study, training and unemployment measures are excluded.

[4] *Fourth Survey*, page 20

As well as being aware of the considerable variation in Table 1.3 and Table 1.4 by country, it is also important - given the emphasis in what follows on the spatial orientation of policy - to examine more fully the composition of the regional aid spending. In Table 1.5 regional aid expenditure is presented by country and by country grouping and is related to total regional aid for EU12, to manufacturing State aid in each country covered and to overall State aid by country. As already mentioned, the figures presented are annual averages over the 1990-92 period.

Table 1.5: Regional State Aid Expenditure by Country (Annual Average 1990-92)

COUNTRY	MECU	% of total regional State aid	% of manufacturing State aid	% of overall State aid
Greece	312	2	30	26
Spain	217	1	16	4
Portugal	50	0	11	6
Ireland	213	1	69	38
Cohesion Countries	**791**	**4**	**25**	**10**
Italy	7369	39	62	29
Germany, of which:	8568	46	72	28
-East	4259	23	36	14
-Berlin/ZBA	3663	20	31	12
-West	646	3	5	2
Italy/Germany	**15938**	**86**	**65**	**29**
Belgium	181	1	16	5
Denmark	6	0	2	1
France	573	3	11	3
Luxembourg	38	0	66	13
Netherlands	166	1	18	8
UK, of which:	808	4	30	16
- GB	536	3	20	11
- NI	272	1	10	5
Other EU12	**1773**	**10**	**17**	**6**
TOTAL EU12	**18502**	**100**	**50**	**20**

Source: EPRC calculations from Fourth Survey, Statistical Annex.

The key point to arise from Table 1.5 is that no less than 86 percent of the regional aid spending is attributable to just two countries - Italy and Germany. In contrast, the four Cohesion countries account for just 4 percent of the total. Moreover, "regional aid" in such countries is often very widely spread, reflecting the fact that most or all of the territories of the Cohesion countries are viewed as problem regions for regional policy purposes. While regional aid on average represents around half of the manufacturing total, the proportion varies from almost two-thirds for Italy/Germany to one-quarter for the Cohesion countries and an average 17 percent for the grouping consisting of Belgium, Denmark, France, Luxembourg, the Netherlands and the UK. The picture in respect of overall State aid expenditure is similar. Whereas regional aid amounts to 29 percent of the total in Italy/Germany, it accounts for just 10 percent of overall State aid in the Cohesion countries and around 6 percent in the remaining Member States.

1.4 Concluding Points

A number of conclusions can be drawn from this brief overview of government spending by function:

- most general government expenditure (on average, over three-fifths of the total) focuses on services

supplied to the community and to households and persons directly (in the form of education, health, social security and welfare, housing etc.);

- by comparison, spending on economic services - that is, services for business and services meeting economic development objectives - is relatively small-scale, accounting for around 10 percent of the total;
- the proportion of spending on community and social services compared to economic services is significantly higher in the wealthier Member States than it is in those countries with major Objective 1 regions;
- in the context of those proactive policies which government undertake primarily with economic development objectives in mind, a considerable proportion of expenditure (around half of State aid for manufacturing) can be characterised as relating to regional objectives, with a further 38 percent associated with horizontal aids (in particular, R&D, SME and export/trade measures);
- however, there is considerable variation by country in the spread of State aid spending within manufacturing. Most of the regional spend (over 86 percent) relates to just two Member States - Italy and Germany - with regional aid expenditure in these countries representing 65 percent of the manufacturing State aid total; elsewhere in the Community regional aid is far more limited in scale, averaging one quarter of State aid spending for manufacturing in the four Cohesion countries (Greece, Ireland, Portugal, Spain) and just 17 percent for the remaining Member States.

Having provided a broad indication of the relative importance of different components of government expenditure and, in the context of proactive government policies, of the different weightings attached to State aid policies, the remainder of this report focuses on the spatial impact of four different aspects of policy: Member States' regional policies (Chapter 2), other spatial policies (Chapter 3), selected horizontal policies (Chapter 4) and those budget-induced interregional transfers which result from government expenditure and taxation policies (Chapter 5). The main findings of the study can be found in Chapter 6.

2. Member States' Regional Policies[5]

The aim of this chapter is to provide an assessment of the impact of Member States' regional policies on economic and social cohesion. The chapter first sets out the *objectives* of regional policy in the different Member States (Section 2.1) before considering the evidence which is available on the regional *impact* of policy (Section 2.2). In this latter context, the research has been restricted to *available* evidence and study results. Accordingly, the focus is, on the one hand, on the *distribution* of national regional policy expenditure by region (Section 2.2.1); and, on the other hand, on a *review* of recent evaluation studies (Section 2.2.2). The main points to arise from the chapter are highlighted in a concluding section (Section 2.3).

2.1 The Objectives of Member States' Regional Policies

In considering the objectives of Member States' regional policies, a notable feature is the variety of the concerns that are addressed. Taking the European Union as a whole, three principal types of regional inequality can be identified:

- disparities in employment, especially high levels of unemployment resulting mainly from industrial restructuring, but also issues of underemployment, especially in the lagging regions

- economic disparities, expressed in terms of the contribution of regions to national GDP and, related, the structure of economic activity

- demographic and geographical issues, especially peripherality, and, associated, outmigration.

All of these factors are a consideration in most EU Member States. Nevertheless, there are very different emphases in different countries. In this context it is possible to distinguish between four broad groups of countries:

i. The four "Cohesion" countries (*Greece*, *Ireland*, *Portugal* and *Spain*), where issues of economic development are the main preoccupation, but where underemployment and peripherality and, to a lesser extent, industrial decline are also concerns.

ii. *Germany* and *Italy*, which are characterised by the dual nature of their economies; these countries display by far the widest internal regional disparities. On the other hand, there remain problem areas within the more prosperous regions.

iii. The central and northern EU countries (*Austria*, *Belgium*, *Denmark*, *France*, *Luxembourg*, *the Netherlands* and the *United Kingdom*), where employment issues, especially related to industrial restructuring, tend to dominate. However, the nature of the regional problem in these countries is also characterised by its variety, complexity and susceptibility to change; recent years have seen the emergence of acute urban and rural problems, as well as issues associated with the restructuring of industries such as defence. Moreover, peripherality and rural depopulation are often also concerns. In addition, in some countries, there are special situations to address, notably Northern Ireland within the United Kingdom and Corsica in France.

[5] The material in this chapter builds on and develops research on regional policy in the EU undertaken at the European Policies Research Centre at the University of Strathclyde since the late 1970s.. The latest published output is Yuill D, Bachtler J and Wishlade F, *European Regional Incentives: 16th Edition*, Bowker-Saur, London, 1996.

iv. The Nordic Member States (*Finland* and *Sweden*), where the effects of peripherality, climate and geography are the principal issues addressed by regional policy.

This breakdown is in no sense a rigid categorisation, but rather is intended to provide a framework for identifying commonalities and trends across the EU.

2.1.1 The "Cohesion" Countries

It is important to recall here that this report is concerned with the policies of the *Member States*; on the other hand, the scale of EU Structural Fund expenditure in the Cohesion countries (and the influence of the European Commission over how this money is expended) makes it difficult to disentangle EU regional policy from the implementation of what are ostensibly national policy measures. Analysis of the Community Support Frameworks (CSFs) agreed for Objective 1 regions over the 1989-93 period shows that, within the Cohesion countries, Structural Fund support for the productive environment (industry and services) is very significant - varying from 50 percent of the total spend in Spain to over 65 percent in Portugal. Given such levels of EU funding, national and EU regional policy are obviously very closely interrelated in the Cohesion countries.

The four Cohesion countries are characterised by the problem of implementing a regional development policy in the context of national economies which are themselves underdeveloped from an EU perspective. In such an environment, arguments for regional policy are often hard to sustain: the capital city and other relatively developed areas are, realistically, the only parts of the country that are likely to be able to compete internationally, at least in the short term. It is easy, therefore, to argue that the policy focus should be concentrated on enabling at least part of the country to be competitive, instead of spreading resources thinly throughout the country, thereby diluting the concentration of expenditure and its potential impact. However, there are also strong arguments for operating regional polices in the context of underdeveloped economies. First, there are equity-based concerns: that it is simply unjust to abandon large tracts of a country and its population to the pressures of market forces and desertification. Second, there are efficiency-related issues: long-term emphasis on the development of already-prosperous regions may result not only in uneven levels of development, but also in congestion and pollution problems, as well as potential inflationary pressures, as a consequence of inter-regional migration and the overconcentration of activities.

This tension between national prosperity and regional disparity is reflected particularly in the objectives of the regional policies of Greece, Ireland and Portugal. Over time, all three have experienced a significant shift in priorities and changes in the relationship between national industrial development and regional policies.

In *Greece*, regional and industrial development policies are provided for within a single legislative framework. However, the priority accorded to regional policy in comparison with national industrial policy has declined over the past decade or so. Initially, the aim of the legislation (Law 1262/1982) was to encourage industrial development outside the Athens and Thessaloníki areas (Region A); projects in these areas could only qualify for assistance if they met certain special criteria, such as environmental protection or investment in new technologies. *General* regional aid was not available in Region A. The objective of this approach was two-fold: first, to encourage industrial development in the less-developed parts of the country; and second, to ease congestion in the developed areas, especially Athens, by supporting environmental protection investment and relocation projects. At the same time, there was an important national industrial development dimension to policy insofar as support for research and development and investment in new technologies (so-called "special investment") remained available nationwide.

Over time, the regional policy dimension to the legislation in Greece has been eroded. The list of exceptions to the general rule that Region A does not qualify for general regional aid has been progressively extended. The most recent changes to Greek industrial and regional policy legislation took place in 1994 and continued the trend of reinforcing the assistance available in Region A and, by implication, reducing the advantages supposedly conferred on the problem regions. Law 2234/1994 added large investment projects aimed at improving the international competitiveness of Region A firms to the list of project eligible for general regional aid, together with a number of other specified project types.

In *Ireland*, there is currently little emphasis placed on regional policy. Since the 1920s, the main objective of Irish industrial policy has been the industrialisation of the country; regional policy has, to a large extent, been viewed simply as an extension of industrial policy. In the early 1950s, regionally-differentiated industrial incentives were introduced, marking a commitment to rectify regional imbalances within the Irish economy. However, rising unemployment and large-scale emigration led to a re-evaluation of policy later in the decade. Consequently, there was a shift to an export-led strategy requiring greater participation in the international economy, supported by an active industrial policy and with reduced emphasis on issues of re-

gional inequality. This approach has been at the centre of Irish economic policy ever since, with regional policy subservient to the pursuit of national economic growth, although in the 1970s there was perhaps more emphasis on influencing the location of industrial investment than there is at present.

Reflecting the low priority given to regional development policy in Ireland, measures for promoting indigenous development and for attracting inward investment are operated more or less on a nationwide basis. Although higher levels of assistance are, in theory, available in designated areas, in practice, little or no differentiation is made. The approach of the Irish authorities is amply illustrated in the 1994 IDA Ireland Annual Report which states that:

> "IDA Ireland cannot, realistically, expect to deliver overseas investors in any great volume to regions of the country which do not have the population or infrastructure from which to operate competitively in international markets. If a conflict arises between winning an investment project at all and our regional development responsibility our priority must be to secure the investment for Ireland."

Where there *is* an emphasis on the regional problem in Ireland, this tends to be in the context of other policies, for example, measures for the *Gaeltacht* regions.

In *Portugal* regional policy has a higher profile than in either Greece or Ireland and is now essentially distinct from national industrial policy. The tensions between national economic development and regional policy are evident in the recent history of the relationship between the two policy areas. Portuguese regional policy was substantially reformed following membership of the EU and provided for assistance (the SIBR) to be available throughout the country, but to favour the interior. In the late 1980s, a special EC-funded development programme for Portuguese industry, the PEDIP, was introduced and there were concerted efforts to co-ordinate and dovetail the two policies. The objective was to maintain consistency between the two policy areas (notably by applying the same industrial policy criteria), whilst ensuring a suitable differential between the underdeveloped and the more prosperous areas by offering higher levels of assistance and operating less stringent award conditions in the problem regions. In consequence, the SIBR was restricted to the interior of the country, while the PEDIP provided investment assistance in the more prosperous areas, albeit with lower levels of support.

In practice, however, it was argued that the "competitive edge" of the regional policy package was insufficient in the context of the (EC-funded) industrial support which was available nationally; in particular, the award differential was considered inadequate to offset the disadvantages of locating in the interior of the country. More significantly, perhaps, the co-ordinated approach led to the criticism that regional policy was being driven by industrial policy criteria and not by discrete regional development objectives. These and other related criticisms informed the review of regional and industrial policies in Portugal that took place in 1992/3.

The most significant aspect of the resulting reform was the explicit separation of regional and industrial policies. The main features of the reformed regional policy, the so-called SIR are: first, the emphasis on encouraging indigenous development (assistance is restricted to small projects undertaken by small firms); and second, the extent to which support is shaped by regional development priorities - regional policy takes account of industrial policy in order to avoid policy conflicts, but assistance is operated according to the needs and potential of the assisted areas. The focus of Portuguese regional policy is, then, the encouragement of indigenous SME development in the interior of the country. However, it is also worth noting that the revised industrial policy, the SINDEPEDIP also comprises a regional development dimension; eligible projects located in the assisted areas qualify for higher levels of support than in the more prosperous regions.

The dilemma facing all three of these countries in operating regional policies is the inherent conflict between national industrial competitiveness and regional development. Moreover, the difficulties in resolving this conflict are heightened by the requirements of the Maastricht convergence criteria, since the situation is particularly acute when resources are limited, forcing governments to choose between various policy options. Within these three countries, the dilemma is reflected in the choice between supporting indigenous (usually small) industry and attracting mobile (usually large) investments as the main objective of regional policy.

Problems of economic development predominate in much of *Spain* (most of Andalucía, Galicia, Extremadura, Castilla-León and Castilla La Mancha). Reflecting this, a large part of Spain is designated as Objective 1 while the remainder is mostly covered by Objectives 2 and 5b. However, from a domestic perspective, the nature of the regional problem in Spain is somewhat different from the other three Cohesion countries. First, Spain is a significantly larger country and is less geographically peripheral than the other three; these two factors have contributed to making Spain an attractive location to potential inward in-

vestors. Second, the nature of the regional problem is more diverse; the country comprises regions where the issues are more akin to those faced in northern European countries, notably the restructuring of heavy industry. Third, the role of the subnational level of government, the Autonomous Communities, is significant; this reinforces the tension between equity and efficiency arguments for regional policy, with growing pressure for a greater independence of action from the more prosperous regions. On the other hand, there is, in Spain, a constitutional commitment to balanced regional development.

The constitution specifies that the public authorities will "promote the conditions favourable to a more equitable distribution of income" and that to guarantee the realisation of the principle of solidarity the state will "oversee the establishment of a fair and adequate level of economic equilibrium between the different parts of the country". As in the other Cohesion countries, Spanish national regional policy is closely related to EU policy. Taking account of the Cohesion Fund and spending under the three spatial Objectives, EU regional policy spending in Spain is far higher than the national spend. The main instrument of regional policy in Spain is the regional investment grant. This is operated by central government in partnership with the Autonomous Communities. An interesting feature of the implementation of the scheme is that it is not made available in all the areas authorised by the Competition Policy Directorate, DGIV; instead, the Spanish authorities restrict national regional policy assistance to regions where it is considered that the Autonomous Communities are unable to fund financial assistance themselves. In consequence, national regional policy assistance is not offered in País Vasco or Cataluña, even although DGIV authorised regional aid in these areas.

2.1.2 Germany and Italy

Germany and Italy are characterised by extreme internal regional disparities; it is interesting that they should both be among the youngest nation states in the EU. In Italy, GDP per head in the poorest region (Calabria) is just 46.7 percent of that in the richest region (Lombardia); in Germany, the differences are yet more dramatic. GDP per head in Thüringen is just under one fifth of that in Hamburg. Indeed, these two regions represent the extremes of EU prosperity; with GDP per head at 38 percent and 196 percent of the EU average, respectively, they are the poorest and the richest regions in Europe. The dual nature of the Italian and German economies means that the emphasis of regional policy in both countries is very much on the underdeveloped regions. On the other hand, both countries also operate policy in problem areas within their more prosperous regions; Germany has continued to assist the west since reunification and Italy has recently moved away from a policy focused exclusively on the south (the *Mezzogiorno*).

Regional policy in *Italy* has undergone radical change since 1992. Its objectives and approach have been transformed in this period. From the 1950s until the early 1990s, Italian regional policy was synonymous with *Mezzogiorno* policy. The emphasis on the development of the south was reflected in the existence of quite distinct policies (the so-called *intervento straordinario* or special intervention) and the establishment of separate institutions to manage them. The intention was that special intervention should be applied in the *Mezzogiorno* over and above standard government policies for industry, environment etc. Whether or not this really took place is a matter of some dispute; some argue that there was a significant substitution effect with standard (supposedly nationwide) government policies in areas such as industrial policy being focused on the north. Nevertheless, 1992 saw the demise of special intervention and the special institutions and the introduction of policies for development areas *throughout* the country (*aree depresse del territorio nazionale*). The legal basis for this change is Law 488 of 19 December 1992; however, the text of the law contains no clear expression of the objectives of policy. Moreover, the law is scarcely a coherent basis for regional policy; it provides for financial incentives in development areas in Italy and measures for water management, but its essential purpose is to assure a co-financing counterpart to EU regional policy. Reflecting this point, the spatial coverage of designated areas under Law 488 was closely related to the EU's Objective 1, 2 and 5b areas and indeed was amended in the course of 1995 to take account of the new Structural Fund map. As a consequence, the coverage of the new Italian regional policy map is 48.9 percent of the national population compared with 36.6 percent under the previous *Mezzogiorno* legislation (Law 64).

In *Germany*, the lines of responsibility for regional policy are clearly demarcated; the German constitution gives *primary* responsibility for regional policy to the *Länder* and the districts. The role of the Federal government is to provide "a suitable framework" for the restructuring and development activities of the *Länder* and, where appropriate, to offer supporting assistance. The rationale for Federal intervention is to assist the regions with structural problems that cannot be overcome by the regions alone. The core of the regional policy activities of the Federal government lies in the operation of a partnership arrangement with the *Län-*

der, the so-called *Gemeinschaftsaufgabe (GA) 'Verbesserung der regionalen Wirtschaftsstruktur'*, or "Joint Task". The main policy instrument under this system takes the form of financial assistance to firms, the so-called investment grant (*Investitionszuschuß*). Some 90 percent of GA spending takes the form of incentive support; the remaining 10 percent is in the form of business-related infrastructure.

The main objective of German regional policy is to ensure that structurally weak regions can take an equal part in the general economic development of the country through a reduction of their locational disadvantages. Regional policy is also designed to support a growth and employment policy. The rationale behind the provision of an active regional policy is that structural change can negatively affect regional development to such an extent that regions are unable alone to overcome structural bottlenecks. From a national economic viewpoint, it is more effective to provide regional assistance for restructuring to those regions particularly affected by structural change, rather than provide subsidies to threatened sectors or enterprises. The creation of alternative jobs in sectors not affected by crisis and the improvement of regional infrastructure provision can alleviate the structural crisis and provide better preconditions for future regional growth.

Underlying this philosophy is the existence in Germany of the so-called "primary effect" as a central condition for firms applying for assistance within the GA. The primary effect exists when the goods and services produced by an enterprise are exported predominantly outside the region and there is a consequent significant, long-term increase in the income of the local/regional economy. Investments made by firms exporting outside the region and facing international competition tend to create the greatest number of jobs and broaden the income base of the region. Assistance to exporting firms provides compensation for any locational disadvantages of the region, whereas aid to locally producing firms can distort internal regional competition without contributing to regional job creation.

The reunification of the Germany has placed new demands on structural and regional policy. The economic transformation of the new *Länder* requires an all-encompassing structural policy. The concept for this process rests on three main areas: reconstruction and maintenance of a competitive industrial core; an active labour market policy to overcome the time gap between the breakdown of the old and the establishment of the new structures; and, an active regional policy to improve the locational conditions and create new competitive jobs. Indeed, the GA is one of the primary instruments of investment assistance in the new *Länder*, and contributes to the renewal of outdated capital stock, a central precondition for the creation of new competitive jobs and a self-generating economic upturn.

2.1.3 The "Northern European" Member States

In this group of countries the regional problem tends to comprise a range of concerns; however, a common theme is the preoccupation with levels of unemployment arising from industrial restructuring and associated technological and labour market developments. Moreover, for the most part, regional policy has a relatively low political profile. There are, nevertheless, marked differences between countries with respect to the *objectives* of regional policy, as well as in the *substance* of policy itself.

At one end of the spectrum is *France* with the broad concept of *amènagement du territoire*, which encompasses spatial development policies in the widest sense of the term. New regional development legislation in France, the 1995 *loi d'orientation pour l'amènagement du territoire*, describes regional development policy as contributing to national unity and solidarity and identifies two main objectives: first, to ensure equal opportunities throughout the country and to create the conditions for equal access to "knowledge" (*accès au savoir*); and second, to achieve balanced national development. To these ends, regional development policy aims to reduce disparities in living standards linked to the geographical situation and its demographic, economic and employment consequences. Policy is to compensate for regional disadvantage by adjusting levels of taxation and reducing the disparities in the resources available to local authorities. Moreover, other policies (economic development, social, cultural, sports, education, environment, etc.) are to contribute to the objectives of regional development. Reflecting these broad objectives, the new legislation refers to a wide variety of existing and new policy instruments, ranging from regionally-differentiated business taxation to infrastructure and public service provision, as well as regional incentive policy measures common to virtually all EU countries. The main regional incentive in France is the regional policy grant (*prime d'aménagement du territoire*, PAT). However, as noted earlier, regional policy in France is very wide-ranging; as a result, the PAT accounts for only a relatively small proportion of that expenditure which might be attributed to the regional policy budget. This is illustrated by the table below.

Table 2.1: Breakdown of Regional Development Spending in France 1989-93

Local employment initiatives (FRILE)	6.5 %
Decentralisation (FAD)	1.4 %
Regional policy grant (PAT)	27.4 %
Rural SME aid (AIIZR)	1.3 %
Regional development (FIAT)	33.1 %
Rural development (FIDAR)	19.9 %
Mining areas (GIRZOM)	7.5 %
Other including mountain areas (FIAM)	2.9 %
Total (FF9.2 billion - 1,388 MECU)	100.0 %

Source: DATAR
Notes: Figures refer to actual payments. The FAD and the AIIZR did not run for the whole period considered.

In contrast with the situation in France, regional policy in the *United Kingdom* is narrowly defined in terms of its objectives and comprises few policy instruments. The objectives of regional policy in the Great Britain were reformulated as follows in the 1983 White Paper *Regional Industrial Development*:

> "Although an economic case for regional policy may still be made, it is not self-evident. The Government believe that the case for continuing the policy is now principally a social one with the aim of reducing, on a long term basis, regional imbalances in employment opportunities."

This statement remains the current basis for regional policy; it was restated in 1988 and most recently in 1995, although with a greater emphasis on the issue of regional competitiveness. The government has also stressed that regional industrial policy should be seen as part of the wider government approach to "regeneration policy" which has an explicitly-stated objective of competitiveness. (In this context, it is important to note that urban policy spending has become of increasing importance in the United Kingdom, an issue discussed further in Section 3.1.1). Policies for Northern Ireland are operated separately, but here too there has been growing policymaker interest in stimulating competitiveness.

Unlike France, where regional policy comprises a wide range of instruments and approaches, regional policy in the United Kingdom is equated directly with financial incentives to firms for investment and job creation in the assisted areas. The main policy instrument in Great Britain is Regional Selective Assistance, a capital grant scheme; in addition, more low-key support is available in the form of business premises and Regional Enterprise Grants to small firms in the assisted areas. Selective Financial Assistance provides broadly similar, but higher value, support to firms in Northern Ireland.

The remaining five "northern European" countries fall somewhere between France and the United Kingdom within the policy spectrum. In considering policy objectives, it is useful to divide these countries into two groups: the federal countries (Austria and Belgium); and the remaining centralised states (Denmark, Luxembourg and the Netherlands).

The two federal states present quite different regional policy experiences, although the involvement of the subnational level is, not surprisingly, a notable feature of both.

In *Austria*, clear objectives for regional policy are difficult to isolate because of the fragmentation of competence across different levels of government and organisation; however, in terms of breadth of objectives, the Austrian approach tends more towards the French notion of *amènagement du territoire* than the narrower UK view of regional policy. Nevertheless, it should be stressed that regional policy has a relatively low political profile in Austria and that regional disparities are not considered significant. The so-called ÖROK concept (*Österreichische Raumordnungskonferenz* - Austrian conference on regional planning) presents three broad requirements for regional economic policy:

- that it should cover not only regional subsidies to firms, but also support for the business environment and locational factors such as transport, education, quality of life;
- that regional enterprise promotion should encompass more than investment subsidies, given that areas such as overcoming regional barriers to information and advice and creating co-operative networks are key to enterprise development; and
- that regional investment assistance should aim to support endogenous development potential as well as attracting mobile investment.

Regional policy in *Belgium* is the responsibility of the regional governments of Flanders and Wallonia (there are no assisted areas in the Brussels region). Policy is based on the (national) 1970 Economic Expansion Law, but the regional governments are responsible for the implementation of policy within their jurisdictions. This means that, in practice, the concern is with regional disparities at the subnational level, ie. *within* the regions. For the most part, the regional problem in both Flanders and Wallonia is a consequence of the restructuring of heavy industry notably coalmining in Limburg and steel-making in the more extensive development areas in Wallonia. In the case of Hainaut, industrial decline is long-standing and its problems were considered of sufficient severity to merit Objective 1 designation. In considering the assisted areas map as a whole, it is noticeable that most of the border areas are designated. Moreover, the designation of the European Development Pole is shared between Belgium and neighbouring areas in France and Luxembourg.

In terms of policy instruments, Belgium is very much towards the United Kingdom end of the spectrum. The 1970 Economic Expansion Law provides for a package of incentives comprising grants, interest subsidies and associated tax relief measures; these constitute the main instruments of regional policy. These incentives are implemented somewhat differently in the two regions. In Flanders, the emphasis has increasingly been on encouraging investment of "strategic importance" involving, for example, new production methods or the establishment of R&D facilities, but employment creation also plays a key role. In Wallonia, employment creation is the main criterion for assistance, but more "strategic" factors, such as the application of new technologies, also play a part.

In the three remaining countries (Denmark, Luxembourg and the Netherlands) regional policy has a lower profile and priority than elsewhere. This is in part associated with the relative prosperity of the countries concerned, their small geographical size and the absence of severe regional disparities.

In *Denmark,* concern at nationwide levels of unemployment led to the abolition of all regional policy measures in 1991; the assisted areas map was retained as a precautionary measure to enable assistance to be offered to large mobile investments on an *ad hoc* basis (in practice, this facility has not been used). The objectives of Danish regional policy are to identify the strengths and opportunities existing in the assisted areas. However, aside from EU regional policy operated under Objectives 2 and 5b, the only regional policy instruments that can be identified relate to business support through the creation of enterprise zones and regional development companies; in practice, the implementation of these measures has progressed only slowly.

The nature and objectives of regional policy in *Luxembourg* are fundamentally affected by the small size of the economy and the fact that the whole country is effectively a border region. The regional problem is mainly associated with the restructuring of heavy industry, especially steel, in the south-west of the country where Luxembourg shares the designated European Development Pole with neighbouring Belgium and France; however, there are also areas affected by the decline in agriculture, especially in the north. The main instrument of regional policy is financial assistance to firms in the form of capital grants, and, to a lesser extent, tax relief. However, the way in which assistance is administered reflects issues arising from the size of the economy. In particular, very large projects are treated with considerable caution because of the potential negative impacts of subsequent withdrawal or rationalisation. In addition, sectoral issues are considered very carefully; the number of firms involved in a given activity is likely to be small, so the domestic competition implications of subsidising one firm may be considerable, especially if the products involved are primarily for domestic consumption. Moreover, the fact that the Luxembourg frontier is entirely surrounded by assisted areas in countries with comparable or lower labour costs means that border effects are acutely felt.

Regional policy in *the Netherlands* has been broadened in scope in recent years so that it now tends towards the wider French philosophy of *amènagement du territoire*. Indeed, the current basis for Dutch regional policy is the 1995 Memorandum on *Spatial* Economic Policy; in the past, this has been known as the *regional* policy memorandum. The principal focus of Dutch regional policy is on the north of the country, reflecting the good economic development progress made by the central regions that were previously designated. However, it is interesting to note that parts of the south, notably in Limburg, remain designated as assisted areas (even if only on a temporary, transitional basis). The designation of such areas does not reflect domestic regional policy considerations, but rather is justified by the fact that the neighbouring regions of Belgium and Germany are assisted; a further instance of border effects in northern Europe.

The aim of Dutch spatial economic policy is to create the physical conditions which best support growth in employment, the principal policy goal in the Netherlands. In consequence, the recent Memorandum on Spatial Economic Policy is primarily con-

cerned with infrastructure provision, the focus of which is not necessarily on the assisted areas; for example, key objectives include the strengthening of Schiphol airport and the port of Rotterdam. The main instrument of regional policy *per se*, as in the United Kingdom, is the provision of financial incentives to firms under the investment premium (IPR). This accounts for only just over one-third of Dutch expenditure on spatial economic development, as the table below shows.

Table 2.2: Breakdown of Future Spatial Development Spending in the Netherlands (1995-99)

Space for economic activity (StiREA)	25.6%
Northern development programme (ISP)	25.5%
Investment premium (IPR)	35.5%
Regional development companies (ROMs)	4.5%
Co-financing	7.0%
Research and evaluation	1.7%
Total (Fl 1,430 million - 656 MECU)	100.0%

Source: Dutch Ministry of Economic Affairs

2.1.4 The Nordic Member States

Enlargement of the EU to encompass two of the Nordic countries brought with it regional problems of a scale and type previously unknown in the European Community; this is borne out by the fact that EU competition policy rules on regional aid had to be adapted to take account of the specific circumstances of the new Member States. Both Finland and Sweden contain vast sparsely-populated areas which have harsh climates and are distant from the main population centres and national and international markets. However, both countries also share some of the employment problems arising from industrial restructuring. This has been an issue in parts of central and southern Sweden. Similarly, the south-west of Finland is affected by industrial restructuring and consequent high levels of unemployment; moreover, in the south-east of the country, the impact of structural adjustment in traditional heavy industries has been exacerbated by the loss of the Soviet market.

The objectives of regional policy in *Finland* embrace both efficiency and equity considerations. The priority attached to these twin aims has tended to vary according to the prevailing economic climate. In the current situation of high national levels of unemployment, priority is given to macroeconomic policies as a means of promoting regional economies; however, in the past, when the economic situation has been more favourable, measures to reduce regional disparities (in income, for example) have tended to be viewed more sympathetically. The current legal basis for regional policy in Finland is the 1994 Regional Development Act; this outlines three aims for regional policy:

- balanced regional development;
- independent development activities of regions; and
- job creation.

To achieve these objectives, the law states that regional policy should focus on:

- the improvement of living conditions and the availability of basic services;
- the infrastructure necessary for regional development;
- the renewal of the production structure of the regions, improvement of the operating conditions of firms and the creation of new jobs; and
- the reinforcement of the regional economy and the skills of the population

Regional policy is viewed as important in the Finnish context; indeed, legislation requires that sectoral policies take account of regional development objectives. Moreover, regional policy in its broad sense is considered to extend beyond regional economic measures aiming at industrialisation and structural adaptation to include the spatial dimension of the Nordic welfare state.

Historically, regional policy in *Sweden* was aimed at ex-

panding industrial production to help the lagging areas. Peripheral area problems have been a regional issue since the 1950s, with regional policy seeking to achieve a regional balance, rather than promoting the development of all regions simultaneously. Priority was given to the more locationally-disadvantaged regions (ie. the peripheral areas), resulting in a north-south dichotomy which placed large parts of the country outside the designated areas. Policy initiatives in the early years were directed mainly at stimulating jobs in manufacturing in the designated areas, with the goal of contributing towards more evenly-spread economic growth.

Over time, Swedish regional policy has become more ambitious, incorporating a focus on social conditions (ie. people have the right to public sector financial support, the right to continue living in the area they were born etc.) and environmental questions. Often based on the theme of territorial equality for all parts of Sweden, the highest point was reached four years ago, with the stated objective of creating regions which were "economically, ecologically, industrially and socially equal".

Whereas Swedish regional policy until recently emphasised freedom of choice for individuals with regard to type and location of work (resulting in a special focus on rural areas), the latest regional policy legislation formulated by the new Social Democratic government and approved by Parliament in June 1995 identifies the need to support sustained economic growth, equality of opportunity for different regions and the even distribution of wealth.

2.2 The Impact of Regional Policy

In addition to providing an overview of the objectives of Member States' regional policies, this project involves an assessment and summary of available evidence and study results with a view to determining the impact of Member States' regional policies. For these purposes, *impact* refers to:

i. the *distribution* of national regional policy expenditures between the regions; and

ii. the *effect* of these expenditures.

These are now discussed in turn.

2.2.1 The Regional Distribution of Expenditure

This section considers regional incentive expenditure in the EU of twelve. It will have become clear from the discussion above that, in many countries, the scope of regional policy extends well beyond the provision of financial incentives to firms. Nevertheless, in all EU countries (with the exception of Denmark since 1991) regional incentives are a key instrument (sometimes the only instrument) of regional policy and as such, analysis of this expenditure is a useful focus for comparisons.

A key objective in this part of the work has been to obtain an accurate picture of regional incentive spending in the recipient regions. To this end, regional breakdowns (to NUTS II where possible) have been sought and obtained for all but one of the countries where this is relevant (the exception is Greece); for the most part this data has not hitherto been published. The observations made here are based on the tables and charts provided in Annex I.

The study focuses on three aspects of regional incentive expenditure:

- first, *trends* in regional incentive spending. Has expenditure been increasing or decreasing in the period under review and are there significant differences in expenditure trends both between and within countries?

- second, the *scale* of regional incentive spending. How significant is the level of regional incentive expenditure in relation to population at the national and regional levels and in relation to national and regional GDP?

- third, the *intensity* of regional incentive spending. How does regional incentive expenditure relate to the population in the *assisted areas* of those regions in receipt of support?

Before considering these issues a number of cautionary points must be borne in mind. One is that the data in the tables and charts in Annex I generally relate to expenditure committed under the main regional capital grant(s) of the countries concerned (EU 12). The focus is on capital grants for two main reasons: first, such grants are far and away the most significant regional incentive measure in nearly all of the countries covered; and second, it is only in respect of regional capital grants that information is available at the regional level on the spatial distribution of expenditure.

In Annex I, the coverage of the data in the tables and charts is reviewed in detail, country-by-country. Information on the broad relationship between regional capital grant expenditure and regional incentive spending more generally is provided in the Fourth Commission

Survey on State Aids[6]. This shows, over the 1990-92 period, between 97 percent and 100 percent of regional State aid spending took the form of grant support in five countries: Denmark, Luxembourg, the Netherlands, Spain and Portugal. In a further two countries (Belgium and Great Britain), around 90 percent of expenditure was grant-based, while in another four countries (Ireland, west Germany, Northern Ireland and Greece) around three-quarters of the regional State aid spend was attributable to grants. Only in parts of three countries - Germany (in the east and along the now-defunct Zonal Border Area), France and Italy - have grants played a lesser role in expenditure terms. In general, grants very much represent the mainstay of regional incentive spending across the EU Member States.

Another cautionary point to note is that some of the expenditure on national regional incentives may be co-financed by the Structural Funds, particularly in Objective 1 regions. Unfortunately, information on this is not readily available. Statistics have, however, been produced on the degree of Structural Fund support for the productive environment (industry and services) over the 1989-93 period as part of the CSFs agreed for Objective 1 regions. The percentage contribution of the Structural Funds is set out in Table 2.3.

Table 2.3: Structural Fund Contribution to Support for Productive Investment

Country Grouping	Objective 1 CSF	Percent
Cohesion countries	Greece	62.2
	Ireland	61.7
	Portugal	65.8
	Spain	50.0
Italy/Germany	Italy	42.5
	Germany	50.0
Other Member States	Northern Ireland	54.8
	Corsica	50.0

Source: Directorate-General for Regional Policy

While these percentages give some indication of the potential for Structural Fund support for the main regional incentives on offer in those regions which qualify for Objective 1 support, no information is available on the actual levels of co-financing which have taken place.

A final note of caution in relation to the tables and charts in Annex I concerns the extent to which meaningful international comparisons can be made. One problem area relates to the fact that, in some regions and in some years, very large awards to single projects may lead to a distortion of both overall trends and the mean level of expenditure. A further issue concerns the various adjustments which must be made to the data to allow international comparisons (for details, see Annex I). In addition, for most countries there are specific qualifications which must be borne in mind when analysing the data (again detailed in Annex I). Notwithstanding these cautions, the picture presented in the annex is such that it remains possible to draw clear and robust comparative conclusions - albeit focusing on *broad* trends and *broad* country groupings rather than on the specific detail of individual cases.

[6] *Fourth Survey from the Commission on State Aid in the European Union in the Manufacturing and Certain Other Sectors* (COM (95), 365 final, Brussels, 26.07.1995).

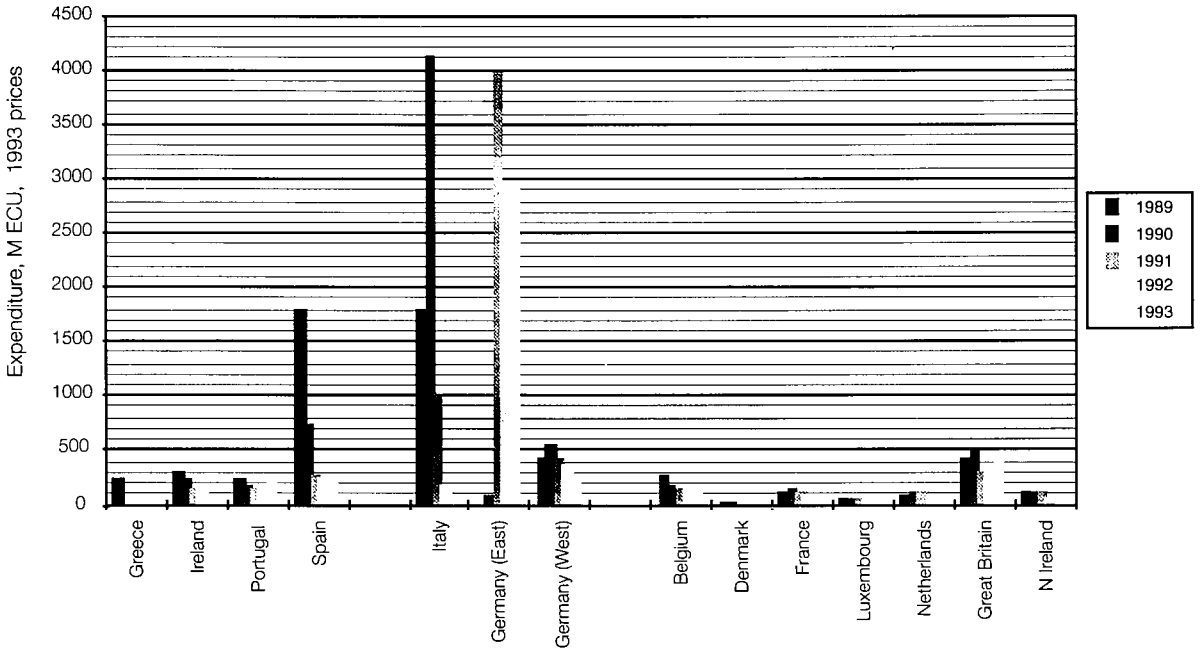
2.2.1.1 Regional Incentive Expenditure Trends

As far as *regional incentive expenditure trends* are concerned, these are best reviewed initially at the country level. Although regional-level trends are obviously more variable, in the main they tend to mirror the overall spending pattern for the nation as a whole (see the regional charts in Annex I).

Trends in overall levels of spending can be seen from Table 1b and the associated chart (reproduced here as Chart 2.1). The chart groups the EU countries into the three categories identified earlier as being of relevance to EU12: the four Cohesion countries; Italy and Germany; and the remaining northern European countries. With respect to trends, the clear development across all categories has been for regional capital grant spending to decline, often from a 1990 peak. Decline has been particularly significant in Italy, as a consequence of the demise of the previous *Mezzogiorno*-based policy in 1992/93 and the delay in implementing the new legislation (Law 488/1992), and also in Spain, following particularly high expenditure in 1990. Only in east Germany has expenditure risen since 1989 - an obvious consequence of re-unification.

Chart 2.1

Main regional incentive expenditure trends in the Member States, 1989-1993 (1993 prices, ECU, millions)
See Member State Table 1b



The clear picture, then; has been for the emphasis on direct financial support for the problem regions in the form of capital grants to be in decline. This view is confirmed also when a longer-term perspective is taken. In many countries, and particularly those in the northern European group, regional incentive spending has fallen markedly since the early 1980s. This is especially true in countries like Denmark, the Netherlands and the United Kingdom where the decline over this period has been more than two-thirds (Yuill *et al* 1995, CEC 1994).

As well as highlighting trends in regional capital grant expenditure, Table 1b and the associated chart (in Annex I) display the breakdown of expenditure by country. Over the 1989-93 period, two-thirds of the expenditure recorded was in respect of east Germany and Italy, with a further quarter being accounted for by Spain, west Germany and Great Britain. While expenditure in Spain was high in the early part of the period, it fell to the broad level of the other Cohesion countries after 1990. As a group, the four Cohesion countries represent less than one fifth of the overall regional grant expenditure total.

2.2.1.2 The Scale of Regional Incentive Expenditure

Moving on to consider the *scale* of regional incentive spending - that is, the volume of expenditure adjusted to take account of country size - two measures of scale are utilised in the tables and charts of Annex I: one which relates regional incentive spending to GDP in the recipient country or region; and the other which focuses on per capita spending by country and region.

The results on both measures are broadly similar, as the Annex I charts based on Tables 2 and 3 illustrate. These charts are reproduced here as Chart 2.2 and Chart 2.3. They show that, over the 1989-93 period, the scale of regional capital grant expenditure in the four Cohesion countries was, in general, significantly higher than elsewhere in the EU, particularly when measured in relation to GDP. However, a number of qualifications must be made to this broad picture. First, as already mentioned, the scale of spending in Spain fell markedly after 1990 and, thereafter, was on a par with a number of the northern Member States. Second, the scale of Italian expenditure was not dissimilar to the Cohesion countries in 1990 but in subsequent years was significantly reduced prior to the ending of *Mezzogiorno*-based policy in 1992/93. Third, the high scale of expenditure in Luxembourg directly reflects the size of the country. Finally, from 1990 onwards, per capita spending levels for east Germany are noteworthy, underlining the major emphasis placed on the development of the new *Länder* following unification.

At the regional level, it can be seen from the Annex I charts that there is considerable variation around the country averages. Some of this variation reflects large "one-off" expenditures in particular regions in particu-

lar years. In Italy, for instance, there was massive regional incentive spending in parts of the northern *Mezzogiorno* prior to the de-designation of certain areas over the 1990-92 period (see, for instance, the entries for Lazio, Abruzzi and Marche in 1989 and 1990). In Spain, the figure for Murcia in 1989 is almost one hundred times higher than the entry for subsequent years; in similar vein, spending in Asturias in 1990 was well over ten times the average figure recorded for the remainder of the period. In France, too, expenditure in the Pays de la Loire region in 1990 was some ten times subsequent spending levels.

Chart 2.2

Expenditure on main regional incentives 1989-93, as a percentage of national GDP
See Member States Table 2

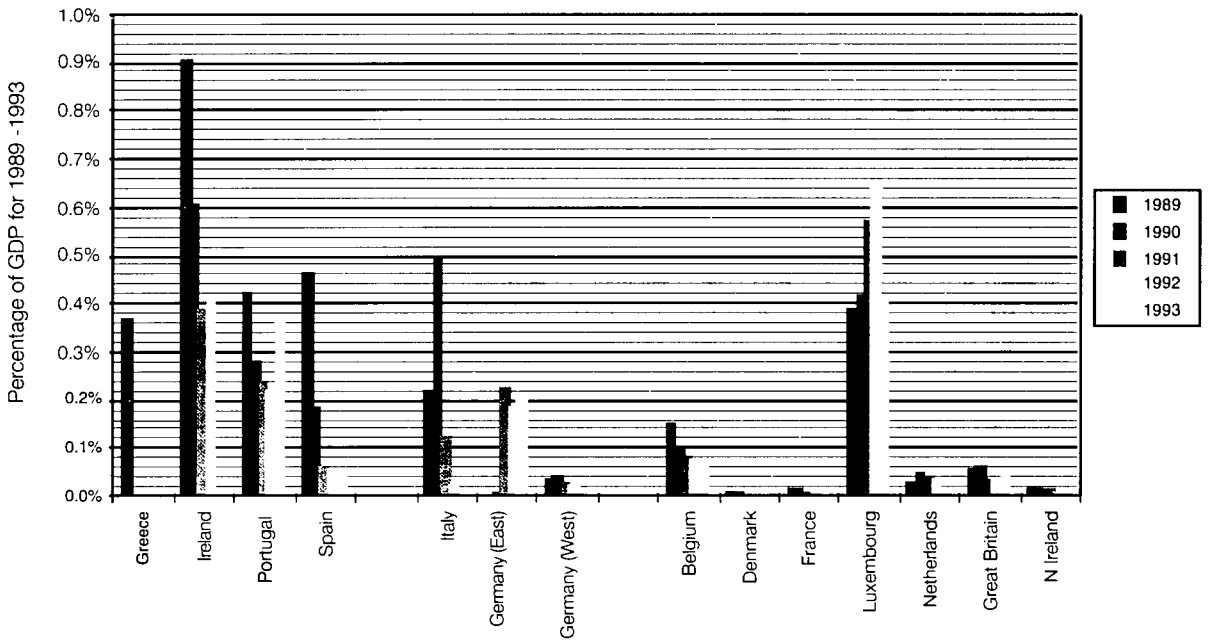
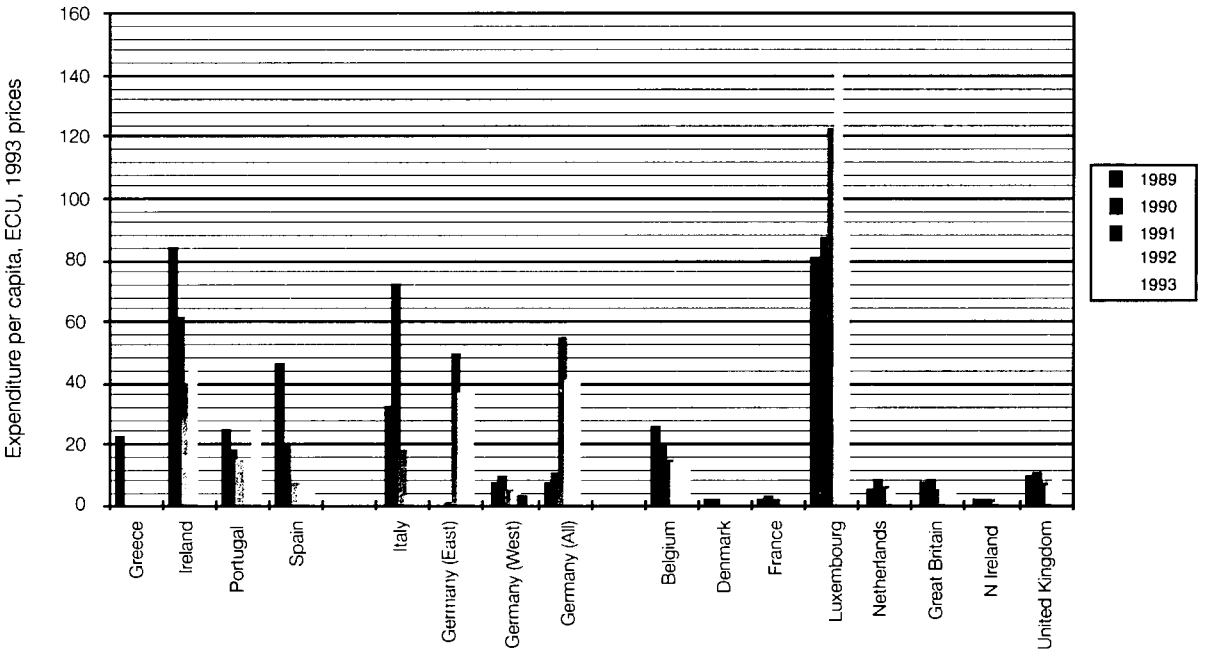


Chart 2.3

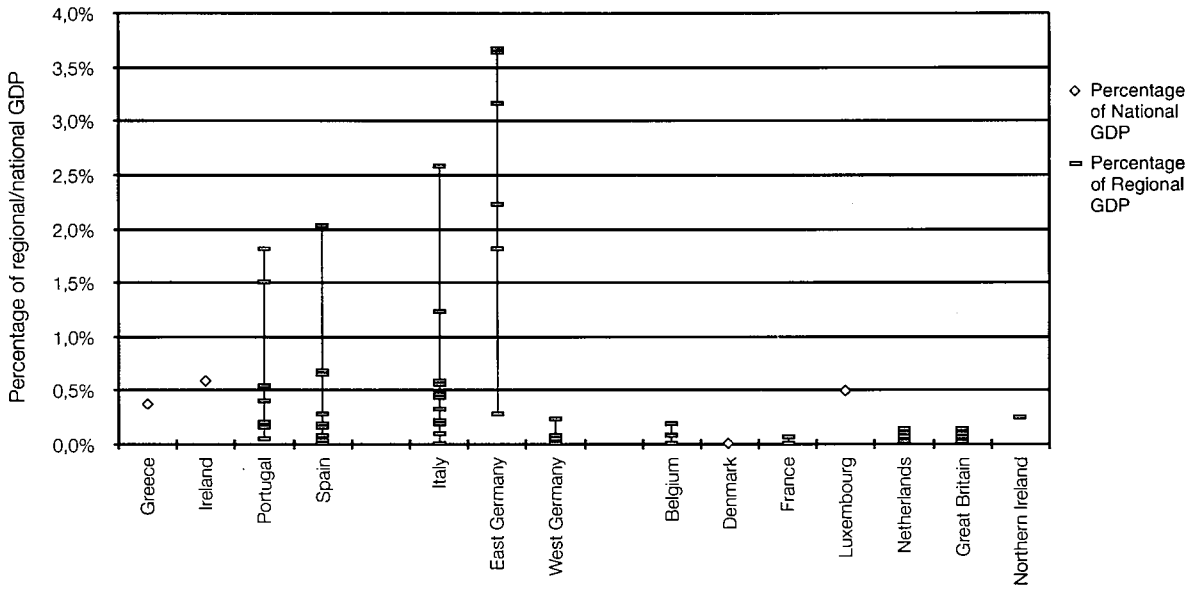
Main regional incentive expenditure in the Member States, per capita of the national population, 1989-1993 (ECU, 1993 prices)
See Member States Table 3



Notwithstanding the above, the broad picture is for regions in the Cohesion countries, as well as in Italy and, particularly, east Germany, to appear towards the top end of the scale ranking (see Chart 2.4). That having been said, a significant number of regions in Spain (especially) and in the Centre-North of Italy are also found towards the lower reaches of the ranking. By the same token, average per capita spending in northern European regions like Saarland in Germany, Wales in the UK, Limburg in the Netherlands and Wallonia in Belgium are broadly in line with the country averages of Italy and Spain.

Chart 2.4

Main regional incentive expenditure as a percentage of regional GDP (1989-93)



2.2.1.3 The Intensity of Regional Policy Expenditure

Turning, finally, to the intensity of regional incentive spending, as noted earlier, this measure involves relating national and regional-level expenditure not to *all* of the population in the nation/region but only to *that proportion* of the population located in designated assisted areas. A feature of regional incentive policy in countries where spending is anyway low (and falling) is that there is often an attempt to focus assistance on those areas where it is viewed to be most needed. Accordingly, assisted area coverage can often be quite limited in such countries. By way of example, according to DGIV figures, the Dutch problem regions (the IPR areas) currently hold just 17.3 percent of the national population, while in Ireland the entire country is eligible for support (see Table 2.4). Taking such differences in coverage into account can significantly influence the ranking of countries and regions in terms of policy intensity.

Table 2.4: Population Coverage of National Designated Areas Approved by DGIV

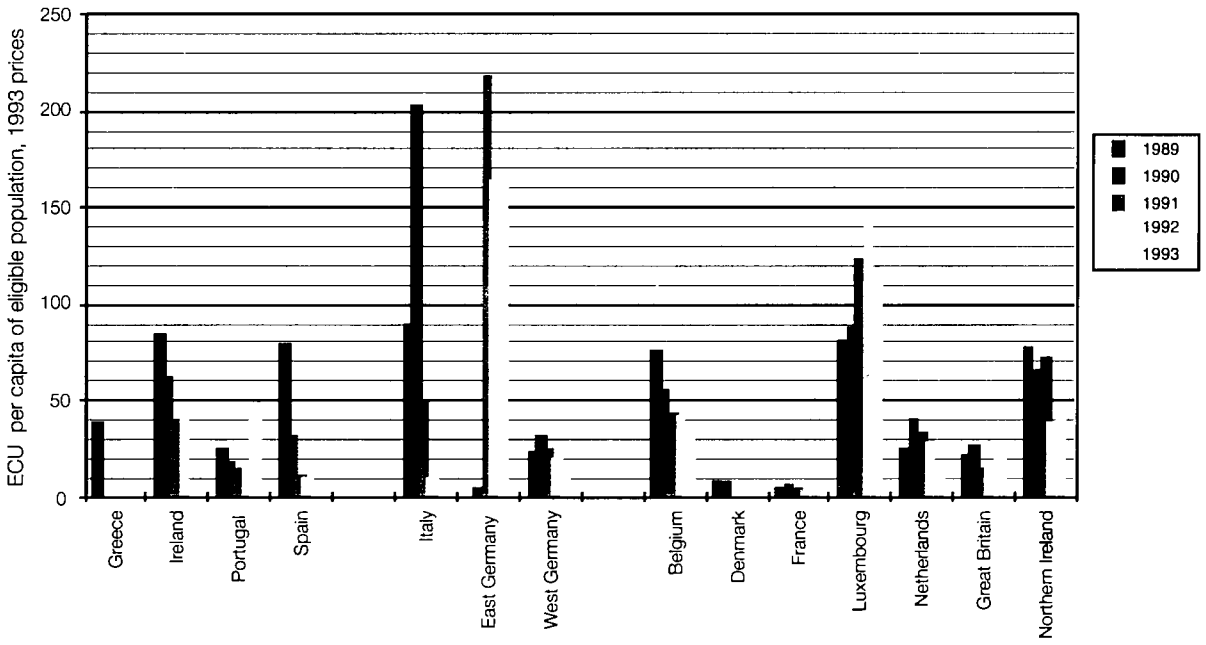
		PERCENTAGE COVERAGE		
COUNTRY GROUP	COUNTRY	OVERALL COVERAGE	ART 92 3(a)	ART 92 3(c)
Cohesion Countries	Greece	100.0	100.0	0
	Ireland	100.0	100.0	0
	Portugal	100.0	100.0	0
	Spain	75.9	59.6	16.3
Germany/Italy	Italy	48.9	34.2	14.7
	Germany	37.6	20.8	16.8
Centre/North	Luxembourg	42.7	0	42.7
	France	42.4	2.5	39.9
	UK	38.1	2.9	35.2
	Austria	35.2	3.5	31.7
	Belgium	35.0	0	35.0
	Denmark	19.9	0	19.9
	Netherlands	17.3	0	17.3
Nordic Countries	Finland	41.6	0	41.6
	Sweden	18.5	0	18.5

Source: Directorate-General for Competition

As far as country groupings are concerned, it can be seen from Table 4 and the associated chart in Annex I (reproduced here as Chart 2.5) that the intensity of spending in east Germany, in Italy (prior to the demise of *Mezzogiorno* policy) and in Luxembourg is significantly higher than in the four Cohesion countries. More than this, the intensity of expenditure in at least two of the Cohesion countries - Portugal and Spain - is not dissimilar to that recorded in many northern Member States. Indeed, the intensity of spending in both Belgium and Northern Ireland generally exceeds that found in most Cohesion countries.

Chart 2.5

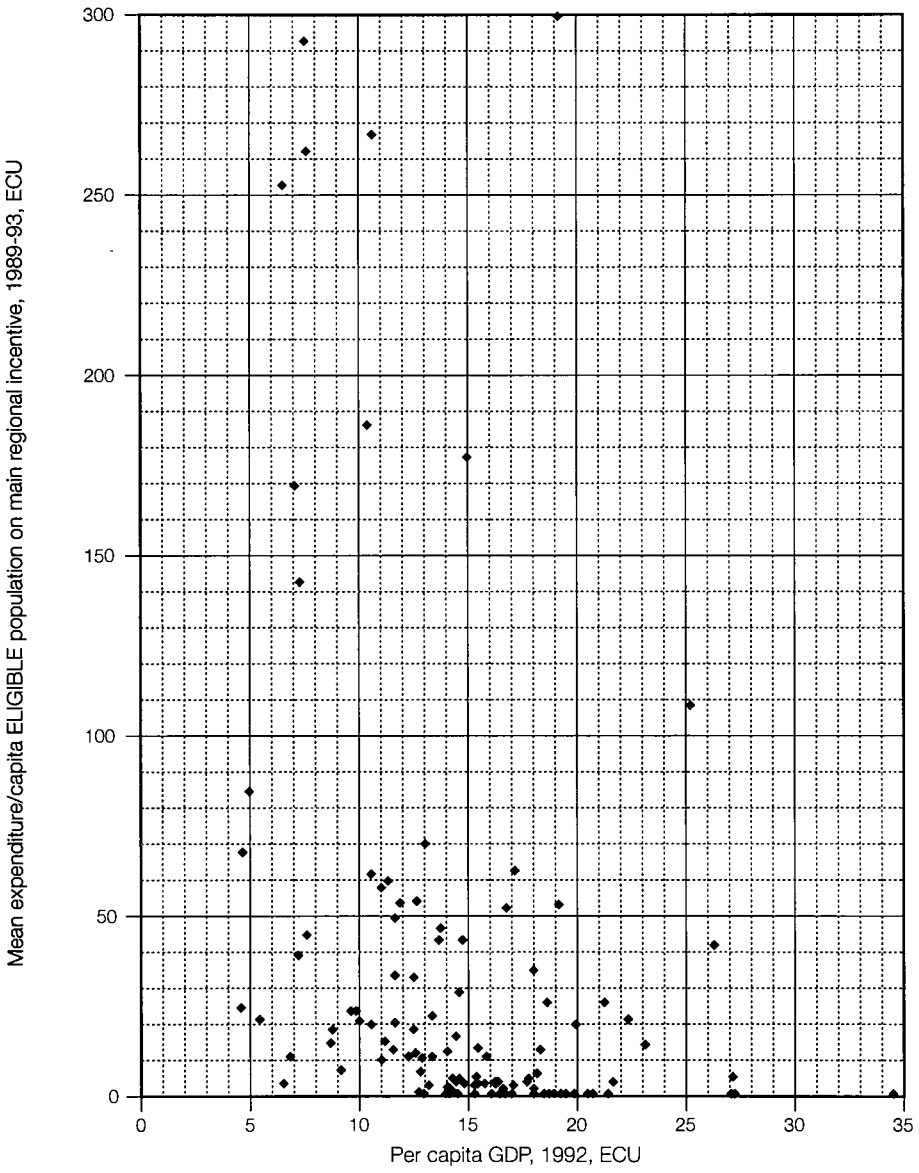
Main regional incentives: Expenditure per capita in the recipient assisted areas only, 1989-93 (ECU, 1993 prices)
See Member States Table 4



A similar pattern is found at the regional level, with certain regions in more prosperous countries (where policy is often more spatially focused) moving markedly up the intensity listing. For instance, average regional incentive spending in Flanders over the 1989-93 period rises to be on a par with spending in regions like Sardinia and Campania in Italy and Asturias in Spain once account is taken of the relatively narrow spatial coverage of policy in Flanders. In similar vein, the intensity of policy in a number of west German *Länder* moves above that found in most of the Autonomous Communities in Spain. An overview of policy intensity at the regional level is provided on a country-by-country basis in Annex I (Chart 5). This relates expenditure at the regional level to the population located in designated problem areas within those regions. While the intensity of policy is generally higher in poorer regions - most obviously the east German regions - the chart shows clearly that there are a significant number of regions in the northern Member States where policy intensity is comparable with or above that found in many Cohesion country regions. This point is underlined by Chart 2.6 which sets out the relationship between the *intensity* of regional incentive spending (as measured by relating expenditure to the population of those assisted areas in receipt of aid) and regional GDP per capita.

Chart 2.6

Regional incentive expenditure per head of eligible population versus regional GDP



2.2.2 The Effect of Regional Policy

In the previous section, the impact of Member States' regional policies on cohesion was considered in terms of the regional *distribution* of national regional policy expenditures. In this section, the emphasis is on reviews of recent *evaluation literature*. Existing evaluation studies can usefully be broken down into two groups: those commissioned and undertaken on behalf of policymakers; and those undertaken more or less independently by academic researchers.

As far as policymaker-driven studies are concerned, little in the way of systematic evaluation is carried out by EU Member States. The apparent paucity of the information available partly reflects the relatively low priority accorded to evaluation by regional policymakers in many countries. The United Kingdom does have a now long-standing practice of evaluating government policies; however, policymakers in other EU countries tend to be more sceptical about the reliability of evaluation results and are quick to identify the disadvantages inherent in the different methodological approaches. In consequence, in many countries (such as France and Spain) there are no "official" or commissioned evaluation studies on the effects of national regional policy. There are signs that this may change in the future if policymakers are influenced by the evaluation requirements of the Structural Fund regulations. However, for the time being, there is little national policymaker commitment to systematic evaluation.

In contrast with the virtual absence "official" studies at the national level, in most countries there is a growing body of evaluation work by academics. Such studies use a variety of research methods, policy indicators and spatial scales, when examining regional policy. Broadly speaking, however, there are two main types of evaluation conducted on national regional policy:

- quantitative or macro-level studies examining policy outputs such as employment creation, cost per job or the movement of industry

- qualitative or micro-level studies using various qualitative research techniques detailing the effects regional policy has on particular localities

Research methods used in the former usually take a highly aggregated approach towards data analysis. Longitudinal government statistics are used to track the way regional policy affects the performance of various indicators in assisted areas. Common measurements used to evaluate the effectiveness of regional policies are employment levels or measurements of the movement of industry. Econometric techniques involving regression analysis and other quantitative research techniques are then used to establish the outputs achieved by any given policy (eg. employment creation, cost per job and regional growth). Owing to the degree of statistical aggregation, this type of study provides only preliminary insight into the effectiveness of regional policy. For example, it says little about the causality between policy instruments and the behaviour of firms. Industrial surveys, on the other hand, can improve knowledge of the motivational forces underpinning either location decisions or issues which generate corporate growth.

One seminal study, Moore *et al* (1986), examined the effectiveness of British regional policy using time series data over the period 1960-81. The authors claim that during this period regional policy created a total of 430,000 manufacturing jobs in assisted areas. According to their research, nearly 2000 manufacturing establishments are estimated to have moved to the assisted areas during this period as a result of regional policy instruments (ie. investment incentives, labour subsidies and location controls in non-assisted areas). In common with other evaluation studies, Moore *et al* calculated the cost per job of Britain's regional policy instruments, suggesting that Regional Selective Assistance (RSA) had a much lower cost-per-job than most other investment incentives such as the, now defunct, Regional Employment Premium.

The optimistic findings of the study (Moore *et al*, 1986) were in sharp contrast to the British government's declared objective of reducing the extent and remit of national regional policy during this period. Nevertheless, other work undertaken on the efficacy of British regional policy (see, eg. Wren and Waterson, 1991) concurred with the study that RSA was the most cost-effective policy instrument. More recently, an evaluation of British RSA (PACEC, 1993), discovered that the cost-effectiveness of RSA had been maintained and that, on average, the cost per job in assisted areas was between £5,000 and £7,000. Although selective policy instruments are generally deemed most cost-effective, it is difficult assessing the reliability of the figures given the inherent fallibility of cost per job data. Another problem with this type of historical data is the time-lag between research publication (1993) and the time period scrutinised (1985-1988).

Typically, policy evaluation has focused on the cost-effectiveness of capital subsidies as a policy instrument. However, studies have also investigated the efficacy of labour subsidies in assisted areas. Roper and O'Shea (1991), for example, use a full econometric model to

analyse the historical effects on jobs and output of labour subsidies in Northern Ireland. According to the authors, whilst effective in stimulating jobs and output, labour subsidies have only a small effect on unemployment. This owes to the fact that the subsidies led to a reduction in out-migration from the province. The increased supply of labour in the province partially negated the positive effects of the policy in creating jobs (Roper and O'Shea, 1991).

Although there has been academic debate over which policy instrument is better equipped at promoting regional development, the problems of measuring policy outputs are equally onerous for both labour and capital subsidies. One method increasingly used when evaluating such instruments is to undertake industrial surveys. This approach has the benefit of being able to provide qualitative information on a sample of firms in receipt of incentives, thus giving insights into how much the aid altered firm behaviour. A major European Commission sponsored study, evaluating national regional policies throughout the EU, used this methodology (PACEC, 1990). The benefit of this study was its use of the same methodology throughout all EU Member States. Not only does this help to address some of the problems associated with the reliability of findings, it also allows for comparative examination of national regional policies.

Overall, the study claims that the cost-effectiveness of regional policy varied considerably across EU Member States. Essentially the researchers found that the less developed the economy and the less favoured the regions within it, then the less effective or efficient was regional policy. Basically, Member States with high levels of economic development are not required to lever in the private sector to the same degree that less favoured regions must do. It was also suggested that the most cost-effective incentives were those which were paid as one-off subsidies on capital investment and those which contain employment creation criteria. Overall, more companies favour capital subsidies than favour labour subsidies; however, this is not the case for the Mediterranean countries where the preference is reversed (PACEC, 1990).

A benefit derived from survey research is the findings they provide on the motivational reasons firms have for investing. For example, around 30 percent of respondent firms reported that between 40 percent and 50 percent of their investment was attributable to regional policy (PACEC, 1990). Hypothetical questions allow policymakers insight into how location incentives interact with possible future location decisions. The PACEC (1990) study revealed how cross country differences arose in this respect. For example, in Belgium only 39 percent of firms said they would be influenced by the offer of assistance, while in Britain 80 percent of companies indicated they would be strongly influenced in their location decisions by the availability of regional policy.

Although PACEC (1990) is a rare example of pan-European evaluation, the poor response rate of the survey, together with reliance on the attitudes of individual respondents, must circumscribe the reliability of the data collected. Although industrial surveys provide useful information on certain qualitative issues, they suffer some drawbacks (e.g. respondent bias etc.). Another failing of all the studies mentioned above is the lack of information generated on the exact nature of employment developed through regional policy. Indeed, given the problems associated with regional policy evaluation more generally, it is perhaps unsurprising that little quantitative evaluation work is currently undertaken by many EU Member States.

A second strand of academic evaluation research - and one in tune with the shift towards more discretionary regional policies throughout the EU Member States - aims to evaluate the level and nature of industrial development arising from regional policy incentives using micro-level data collected via qualitative research techniques. Rather than trying to quantify the efficacy of any given regional policy instrument, these studies commonly aim to understand the qualitative nature of development generated by regional policy, using interview methods and case studies.

A major study undertaken for the European Commission (Amin *et al*, 1994) evaluated the role played by inward investment in stimulating regional development in order to gauge whether regional incentives were economically effective. Given that the attraction of FDI remains the central thrust of regional industrial policy for many of Europe's less favoured regions (see Section 2.1), evaluation of this kind seems particularly pertinent. Amin *et al* (1994) discovered that the quality of FDI varies significantly throughout Europe's regional economies. Whereas the Rhone Alpes is inhabited by a number of "quality" plants displaying high levels of decision-making autonomy, innovative capacity in terms of R&D, considerable stress on human resource development, and extensive high quality localised supplier linkages, Objective 1 regions such as Brandenburg and Portugal were characterised by lower quality plants with heavily-truncated decision-making structures, often displaying low levels of material integration.

Countries and regions with a longer history of FDI attraction had benefited from pro-active regional development agencies in developing the qualitative nature

of incoming FDI. Hence, countries such as Ireland and Scotland fell somewhere between the two extremes highlighted above. This variegated picture is particularly stark between core regions such as the Rhone Alpes and peripheral Objective 1 countries such as Portugal. This in-depth empirical work provides evidence of the weak development effects generated by FDI in many of Europe's less favoured regions.

The report concludes that intense inter-regional competition for FDI results in high levels of deadweight regional incentive spending on behalf of less favoured regions. This was particularly acute in very weak industrial milieus such as Portugal. In regions offering a variety of locational attributes (particularly skilled labour) over and above financial incentives, such as Scotland and Ireland, incentives were found to play a less central role (Amin *et al,* 1994). One of the study's main conclusions, therefore, was the need to calibrate discretionary regional incentives towards upgrading the 'quality' of FDI in Europe's less favoured regions: "to attract investments likely to have the potential to contribute to the build-up and improvement of a region's knowledge, research and skill-base, its management and entrepreneurial capability, and the quality of its business services and supplier firms" (Amin *et al,* 1994, p. 52).

Numerous other studies have attempted to evaluate the role played by inward investment in regional economic development throughout Europe. As with previous evaluative research most of this work is concentrated on empirical data from the UK's peripheral regions. This is not surprising given the UK's disproportionate share of incoming FDI. In practice, most evaluation studies seek to provide fresh empirical evidence of multiplier effects or indirect effects generated by FDI in Europe's regional economies, often using survey methods. The findings of these surveys generally confirm the view that regions such as the Northern Region in England and Scotland face continuing problems associated with weakly embedded multinationals (Phelps, 1993; Turok, 1993). These sourcing patterns dramatically reduce the economic impact FDI has on a region.

While these studies provide useful data on aggregate sourcing trends, case study analysis has tended to reveal more in-depth information on the underlying dynamics affecting intra-regional linkage formation. This includes analysis of industrial organisation factors which currently shape linkage configuration. In fact, the trend towards global sourcing, coupled with an increased intra-corporate division of labour, is arguably leading to a situation of increased dependency on branch plant subsidiaries with low levels of decision-making autonomy. Empirical evidence from firms within the automotive industry in Spain (Lagendijk and van der Knaap, 1995) and various branch plant sectors in the *Mezzogiorno* (Giunta and Martinelli, 1995) confirms this picture and reveals continuing weak material integration in Europe's less favoured regions. Giunta and Martinelli (1995) claim that branch plants in these areas exhibit certain organisational attributes:

- the absence of strategic functions at the plant level
- subordinate status of plants within the corporate division of labour
- low propensity to stimulate local linkages

Such results cast obvious doubt on the efficacy of FDI as a "solution" to regional development ills and, by implication, on the role of regional policy in the attraction of FDI.

Having briefly highlighted some key evaluative studies, it is worth commenting on their effectiveness in assessing regional policies. It was noted earlier how quantitative evaluations often lacked sufficiently robust data with which to assess fully the effectiveness of regional policies. The problem of additionality is particularly difficult to resolve because any evaluation is faced with obvious counterfactual problems: namely, what would have happened if the policy had not been implemented? Determining how much expenditure is 'additional' and how much is 'dead-weight' is extremely difficult. One final problem is the lack of EU-wide comparative data and the plurality of evaluative approaches used in different studies. Without good comparative data, systematic and comprehensive appraisal of the relative effectiveness of different national regional policies remains elusive.

2.3 Concluding Points

The aim of this chapter has been to provide an assessment of the impact of Member States' regional policies on economic and social cohesion. This has been done by reviewing the objectives of regional policy in the different Member States and the available evidence on the effects of policy, as shown by the regional distribution of national regional policy expenditure and by reviewing recent evaluation studies.

With respect to the *objectives* of Member States' regional policies, the chapter distinguishes between four broad groups of countries:

- the four Cohesion countries (*Greece*, *Ireland*, *Portugal* and *Spain*), where issues of economic development are the main preoccupation, but where underemployment and peripherality, and, especially in Spain, unemployment are also concerns.

- *Germany* and *Italy*, which are characterised by the dual nature of their economies. These countries display by far the widest internal disparities and expend by far the most on regional policy; both countries extend the focus of policy beyond the most underdeveloped regions and also operate regional policies in the disadvantaged parts of the more prosperous regions.

- the central and northern EU countries (*Austria*, *Belgium*, *Denmark*, *France*, *Luxembourg*, *the Netherlands* and the *United Kingdom*), where employment issues, especially related to industrial restructuring, tend to dominate. However, the nature of the regional problem in these countries is also characterised by its variety, complexity and susceptibility to change; recent years have seen the emergence of acute urban and rural problems, as well as issues associated with the restructuring of industries such as defence. Moreover, peripherality and rural depopulation are often also concerns. In addition, in some countries, there are special situations to address, notably Northern Ireland within the United Kingdom, and Corsica in France.

- the Nordic Member States (*Finland* and *Sweden*), where peripherality, climate and geography are the principal issues addressed by regional policy.

As far as regional policy *objectives* are concerned, the four Cohesion countries (and especially Greece, Ireland and Portugal) are characterised by the problem of implementing a regional development policy in the context of national economies which are themselves underdeveloped from an EU perspective. This creates tensions between efficiency-related issues and equity-based concerns, between short-term and longer-term considerations and between national prosperity and regional disparity - tensions which have resulted in significant shifts in priorities and changes in the relationship between national industrial development and regional policies over time. Moreover, these tensions reflect the wider picture at the EU level of the potential conflict between competitiveness and cohesion.

A feature of Germany and Italy is their extreme internal regional disparities; this has resulted in considerable policy emphasis on their most underdeveloped regions. In Germany (and in Italy until recently) separate policies are operated for such regions (the *Mezzogiorno* in Italy and the new *Länder* in Germany) in a range of areas, although regional policy is also among the instruments used.

In the "northern European" Member States, regional problems tend to comprise a range of concerns, though high levels of unemployment are generally at their core; in these countries regional policy tends to have a relatively low political profile. There are, however, marked differences between countries with respect to both the objectives and substance of policy; at one end of the spectrum is France with the broad concept of *amènagement du territoire*, while at the other comes the United Kingdom with a far narrower policy focus on regional *industrial* policy.

In the Nordic Member States the regional problems to be faced are different in both scale and type (sparsely-populated areas, harsh climates, distance from population centres etc); regional policy in these countries tends to be allocated a higher priority and to include a fairly broad range of policy measures.

With regard to the *instruments* of regional policy, the chapter has highlighted the considerable variety in policy approaches. In some countries, national regional policy is essentially comprised of financial incentives to firms investing in the problem regions: this is true of Belgium, Luxembourg and the United Kingdom, for example. In others, a range of non-spatial government policy measures are associated with the objectives of regional policy. In France and Finland, for example, regional development legislation makes this link explicit.

There are also considerable differences in the *institutional arrangements* for regional policy between countries. Among the federal or quasi federal states, the role of the subnational level is key. For example, in Belgium, policy is the responsibility of the regional governments; however, in Germany and Spain responsibility is divided between the national and regional governments according to competences defined in the constitution and partnership is a core component of policy delivery. In Austria, the organisation and competence for regional policy is not allocated constitutionally either to the federal government or to the *Länder*. In practice, there is an informal allocation both of legislative competence and of the administration of public activities affecting regional development between different bodies at federal, *Land* and local level. The remaining countries are organised along unitary lines, but there is frequently administrative devolution in the operation of regional policy. This is so, for instance, in France, where the *préfets* play an influential role in regional economic development policy and, more prosaically, in Great Britain where government regional of-

fices are largely responsible for administering regional incentive policy.

As far as *regional policy expenditure* is concerned, the chapter has focused on regional grant expenditure, in order to obtain comparable and regionally-disaggregated information. A number of points arise from the discussion of the distribution of expenditure at both national and regional levels.

First, in respect of *expenditure trends*, regional capital grant expenditure (and, indeed, regional policy spending more generally) has been in decline in most countries over the 1989-93 period, with particularly significant falls in Italy and Spain; these trends reinforce longer-term developments, especially in the northern Member States where the decline in some countries since 1980 has been more than two-thirds. On the other hand, east Germany stands as an obvious exception to these general trends, with major regional development spending from 1990 onwards. Strikingly, some two-thirds of overall regional grant expenditure relates to east Germany and Italy, just under one-fifth to the Cohesion countries and some 15 percent to the remaining EU12 countries.

Regarding the *scale* of regional grant spending, this is, in general, significantly higher in the four Cohesion countries than elsewhere in the Member States (except Luxembourg); though spending declined markedly in Spain and increased steeply in east Germany from 1990. However the position at the regional level is more varied. While the broad picture is for regions in the four Cohesion countries, in east Germany and in the Italian *Mezzogiorno* to appear towards the top end of the scale ranking - together with Northern Ireland - certain Spanish and Italian regions are found towards the lower reaches of the ranking. In similar vein, average *per capita* spending in a range of northern European regions (Wallonia, Saarland, Limburg, Wales) is broadly in line with the country averages of Spain and Italy.

When considering the *intensity* of policy, the key point to note is that this involves relating regional incentive spending to the population of those regions actually in receipt of support (the assisted areas). As a result, those countries and regions with only limited assisted area coverage move markedly up the rankings. Thus, the intensity of regional incentive spending in east Germany, Italy (prior to the demise of *Mezzogiorno* policy) and Luxembourg is significantly higher than in the four Cohesion countries, while the intensity of expenditure in Portugal and Spain is not dissimilar to that recorded in many northern Member States. A similarly varied pattern is found at the regional level, with the intensity of regional incentive spending in a number of northern regions exceeding, by some way, that found in many regions in the Cohesion countries.

Turning finally to the review of *evaluation studies*, in general these provide only limited information on the effectiveness of policy. Econometric exercises tend to be constrained by data availability, by the difficulty of establishing the counterfactual and by problems of determining causality, while survey-based research tends to have a quite specific focus - on a particular incentive or a particular region or a particular development process - which creates difficulties when attempts are made to generalise the results. At the EU level, these difficulties are compounded by the lack of EU-wide comparative data and the plurality of evaluation approaches used. As mentioned earlier, without good comparative information, the systematic and comprehensive appraisal of the relative effectiveness of national regional policies will remain elusive.

3. Other Spatial Policies Operated by the Member States

In this chapter, the focus is on those spatially-discriminating policies (other than regional policy) which operate in selected Member States (the six case study countries identified earlier: France, Germany, Italy, Portugal, Spain and the United Kingdom). The review is concerned with *national* government policies. However, it is important to note that, in some areas of spatial policy, subnational levels of government also play an important role; this is particularly true of urban policy. In Germany and Spain, for example, urban policy operates at the subnational level and is not the responsibility of the national government. Moreover, in other areas of spatial policy, EU policies are often important; in some countries, for instance, rural policy is essentially subsumed within EU policies operated under Objective 5b or within the LEADER Community Initiative - again this is true of Spain. Similarly, EU policies are also significant in the context of industrial crisis regions designated under KONVER, RENAVAL, RESIDER and so on.

The spatial policies of Member States identified in this study address a variety of objectives. For the purposes of this review these can usefully be grouped as follows:

- urban policy
- rural policy
- policies for "crisis" areas, essentially closely-defined areas seriously affected by closures in a dominant sector in the region
- policies for particular regions, especially those enjoying a special status arising from a particular historical or political context

The chapter is in three main sections. The first, Section 3.1, considers the broad objectives of Member States' spatial policies, focusing in turn on each of the above policy areas (urban, rural, "crisis" areas and "special status" regions). Section 3.2 then reviews the evidence available on the spatial impact of these various policies. As was the case with Member States' regional policies, the review centres on two main aspects: the *distribution* of national expenditures on other spatial policies (Section 3.2.1); and *evaluation studies* on the effect of such expenditures (Section 3.2.2). The concluding section, Section 3.3, brings together the main points made.

3.1 The Objectives of Member States' Other Spatial Policies

The distinction between Member States' regional policies and other spatial policies is not always a clear one. This is particularly true of France where, as described in the last chapter, a broad view of regional development policy is taken within the concept of *aménagement du territoire*. In this context, the 1995 regional development framework law in France makes reference to, and provides for, the designation of three types of assisted area: regional development areas; priority rural development areas; and urban regeneration areas. In contrast, in the United Kingdom, other spatial policies are, for the most part, designed and operated separately from regional policy.

Although the distinction between regional policy and other spatial policies is not always immediately apparent, there *is* a difference in emphasis between the two. The main objective of Member States' regional policies is economic development and economic development instruments (ie. subsidies to businesses) are the main

measures in place. For other spatial policies, social and political objectives are more immediate; although economic development instruments are usually among the measures used, they are primarily employed for social and political ends.

The multiplicity of policy objectives often appears to be reflected in the policies themselves. For the most part, urban, rural and, to a lesser extent, crisis area policies are characterised by the disparate nature of the policy instruments utilised, the large number of agencies involved in the delivery of policy and the apparent absence of policy co-ordination. On the other hand, a notable recent trend is the degree to which this lack of policy coherence appears to be being addressed. In the United Kingdom, for example, the so-called Single Regeneration Budget has brought together a wide range of funds and governments agencies with a view to rationalising the implementation of regeneration policy. Similarly, in France, a more co-ordinated and integrated approach has been sought by incorporating measures within the five-year State-Regional planning contracts; these provide for so-called PACTs (concerted territorial action programmes) which seek to address rural and urban policy objectives.

3.1.1 Urban Policy

In countries where urban policy is given a high priority, the impetus for policy often stems from the political imperatives arising from growing unrest in areas of extreme poverty and deprivation. There is frequently an economic development aspect to the objectives of policy but, where this is so, the emphasis is often on *local* employment initiatives, partly in recognition of the limited extent to which large-scale manufacturing projects can readily be assimilated within an urban environment.

Among the case study countries, national urban policy measures are of most significance in the United Kingdom. Indeed, during the course of the 1980s and 1990s, urban policy expenditure has risen at the same time as regional policy expenditure has declined. By 1991-2, Department of the Environment spending on the range of urban regeneration policies had reached an estimated £884 million (1,133 MECU); this compares with regional aid spending of around £210 million (269 MECU) under Regional Selective Assistance in the same period. In France too, national urban policy has been of growing importance. Expenditure on urban policy (other than major urban projects) doubled to FF 9.5 billion (1,432 MECU) for the period 1994-99, compared with 1989-93. This is broadly similar to the sum expended on the range of *aménagement du territoire* policies in 1989-93 (which include measures for rural and "crisis" regions). Given the relative importance of national urban policy in the UK and France, the remainder of this section focuses mainly on these two countries.

The basis for urban policy as currently operated in *France* was introduced in 1988. Responsibility for policy is "interministerial" and involves a number of institutions. This reflects the various objectives of urban policy which encompass both the physical environment and social issues. The policy focus is on priority areas which are designated on the basis of socio-economic criteria such as levels of unemployment, the size of the youth population and the proportion of immigrants. Policy is operated in a "deconcentrated" manner involving local representatives of central government in multi-annual partnership arrangements with local authorities. The latter are primarily responsible for policy implementation.

Policy is operated through two main programmes: urban contracts (*contrats de ville*); and major urban projects (*grands projets urbains*, GPU). Urban contracts date back to 1992 and followed on from a previous programme of urban social development. The contracts are now incorporated into the wider State-region planning contracts (*contrats de plan État-Régions*). For 1994-99, 214 contracts have been concluded involving some 1,300 areas. The GPU aim at the radical transformation of large residential areas and improvements in physical infrastructure. Central government commitment for the period 1994-98 is FF 2.25 billion (339 MECU). The interministerial committee for urban policy has designated 12 areas for the GPU policy: eight in the Paris region; two in Rhône-Alpes; one in Provence-Alpes-Côte-d'Azur; and one in Nord-Pas-de-Calais.

In addition to these two major urban programmes, an "urban solidarity grant" (*dotation de solidarité urbaine*, DSU) was established in 1990. The DSU is aimed at disadvantaged suburban areas and is not financed by central government but rather by a levy on the receipts of the more prosperous regions. In 1994 around 100 towns contributed to the fund (Paris being the main one) and some 500 communes benefited from it. In 1995 the value of the fund was FF 1.3 billion (196 MECU). Finally, certain residential areas in France have been designated as urban renewal areas under the 1995 framework law for regional development. These areas already benefited from a range of fiscal and financial measures which will be enhanced with the implementation of the new law.

In the *United Kingdom*, as in France, urban policy is primarily concerned with social objectives and the im-

provement of the physical environment. A different range of urban policy measures is operated in the four parts of the United Kingdom, although in practice there is substantial common ground between them. A notable characteristic of UK urban policy is the large number of measures being implemented, the range of organisations involved in policy and the apparent lack of co-ordination between them.

This multiplicity of policy frameworks has been the source of criticism in the past. In response to this, urban regeneration initiatives in *England* were rationalised in April 1994 along with a range of other economic development initiatives. The so-called Single Regeneration Budget (SRB) was introduced to integrate the various existing initiatives, many of which will be phased out over time. At the same time, the regional offices of four government departments were integrated with a view to improving the delivery of programmes at the local level and ensuring "flexible and effective use of public money". The *objectives* of the initiatives within the SRB are intended to:

- "enhance the quality of life of local people
- improve the physical environment
- attract private sector investment
- harness the talents of the voluntary sector and the community" (Department of Environment Annual Report, 1995).

The key urban policy measures now subsumed within the SRB and the expenditure incurred in 1993-4 are set out in Table 3.1.

Table 3.1: Main Urban Policy Measures and Spending in England

Measure	1993-4 Outturn £ million	MECU
Urban Development Corporations and Docklands Light Railway	371.2	476
English Partnerships	24.2	31
City Grant	24.4	31
Derelict Land Grant	104.3	134
Housing Action Trusts	78.1	100
Estate Action	357.4	458
City Challenge	206.6	265
Urban Programme	166.5	213
Inner City Task Forces	18.0	23
City Action Teams	3.4	5

Source: Department of the Environment Annual Report, 1995.

The table illustrates clearly that the main items of expenditure are the Urban Development Corporations (1993-4 expenditure on the Docklands Light Railway was some £28 million - 36 MECU) and Estates Action. Together, these accounted for well over half of the 1993-4 urban policy spend in England.

The twelve *Urban Development Corporations* are limited-life bodies that are all due to be wound up between March 1995 and 1998. Their objectives are the regeneration of designated areas by bringing land and buildings into effective use; the encouragement of industrial development; the improvement of the environment; and ensuring that housing and social facilities are available to encourage people to live and work in the area. The UDCs are currently responsible for the regeneration of some 16,000 hectares of inner city land which was previously derelict. The *Estates Action* programme is different in nature; it aims to assist local authorities in transforming unpopular housing estates. It provides resources to improve the physical condition and the management of estates, to secure greater tenant involvement and provide greater variety and choice of housing.

Of the remaining measures listed in Table 3.1, the two most significant are the City Challenge scheme and the Urban Programme, accounting for 15.3 percent and 12.3 percent respectively of the 1993-4 urban policy expenditure total. The *City Challenge* scheme involves allocating funds to local authorities on a competitive bidding basis. The aim is to encourage the submission of "ambitious and realistic" proposals for the revitalisation of key areas of urban deprivation. The *Urban Programme* is the longest-running of the government programmes dealing with urban deprivation in England; however, since 1993-4, the programme has only been meeting its existing commitments. The pro-

gramme is targeted at some 57 designated inner city areas and aims to revive local economies, foster enterprise, improve the environment, rebuild confidence and encourage investment. Grants are given through local authorities to support a range of projects in the field of health, education, job creation and training, and environmental improvement.

In *Scotland,* most central government-led urban policy is carried out under the aegis of the Scottish Office Industry Department, although schemes that are concerned only with housing are directed by the Scottish Office Environment Department. Key features of recent initiatives are the multi-faceted approach which has been adopted and the promotion of partnership across a wide range of agencies. Regeneration in Scotland has followed similar patterns to that in England and has even led the way in terms of integrated regeneration, with the experimental GEAR project in the East End of Glasgow in the 1980s. The 1988 Scottish Office publication *New Life for Urban Scotland* signalled a shift in the emphasis of urban policy away from the inner cities to the peripheral housing estates. In 1993-4, urban policy expenditure in Scotland amounted to £65 million (83 MECU), most of which was allocated to the *Urban Programme*. This aims to tackle multiple deprivation in urban areas of exceptional need and gives priority to projects which have a strategic focus and are part of a multi-agency approach.

In *Wales*, the main urban policy measures are as set out in Table 3.2.

Table 3.2: Main Urban Policy Measures in Wales

Measure	1993-4 Outturn £ million	MECU
Urban Programme (now the Strategic Development Scheme)	16.7	21
Urban Investment Grant	n.a.	n.a.
Cardiff Bay Development Corporation	46.9 (net)	60

Source: Welsh Office Departmental Report, 1995.

The Welsh *Urban Programme* aims to promote economic, social and environmental developments which benefit areas of social need and assist local authorities with funding for capital projects that cannot be met out of their own budgets. The *Urban Investment Grant* is intended to encourage private sector development on derelict or run-down sites to assist the economic regeneration and environmental improvement of deprived urban areas of Wales. Last, the *Cardiff Bay Development Corporation* was set up to enhance the image and economic well-being of the city and to establish its international profile; most of the funding allocated by the Corporation is assigned to infrastructure projects, including housing.

Urban policy in *Northern Ireland* is principally operated by the Department of the Environment for Northern Ireland. A key feature of policy is that it is implemented through programmes directed at specific areas, notably parts of Belfast and Londonderry as well as some smaller settlements. These include the *Making Belfast Work* scheme; *Belfast Action Teams;* and the *Laganside Corporation.* In addition, there is a large number of apparently disparate programmes involving relatively small sums of expenditure.

Finally in this country review, it is worth making brief mention of urban policy in the *Federal Republic of Germany.* In Germany, urban policy is primarily a matter for the *Länder.* Nevertheless, the federal government can grant supplementary aid for urban measures where the investments serve to improve the conditions for growth in the economy as a whole or to equalise economic strength between the regions. Such measures are intended to contribute to the following objectives:

- developing the physical environment to meet social, public health, economic and cultural needs
- developing the structure of residential areas in line with environmental requirements and the needs of the population
- preserving, renovating and developing existing localities.

These various country examples help underline the significant social, environmental and, in some instances, political aspects of national urban policy. As mentioned earlier, although economic development instruments are usually among the measures utilised, they are employed mainly for social and political ends.

3.1.2 Rural Policy

Like urban policy, rural policy combines economic and social cohesion objectives although, once more, it can

be argued that the latter are the prime motivating force for policy. Economic development instruments have a role in reducing social disparities, especially in reducing levels of underemployment and encouraging alternatives to agriculture. Again, however, as is the case with inner urban areas, large scale industry is unlikely to be suited to rural areas and the emphasis is often on the development of crafts and tourism. Moreover, the objectives of rural policy are generally as much political or social as economic. The speed of agricultural change in predominantly rural countries like France in the post-war period has often resulted in unrest and in rural issues being given a high political profile. Furthermore, the emphasis of policy often has a significant social component, associated with maintaining population settlements by sustaining standards of living and by assuring the provision of public services.

Among the case study countries, national rural development policy is of most significance in *France*. Rural areas cover 80 percent of the French national territory but contain just 20 percent of the population. Moreover, the rural population in France continued to decline into the 1980s. In practice, however, the characteristics of rural areas in France, and, associated, the nature of the rural problem, vary widely. A study by DATAR in 1993 established a socio-economic typology of cantons and identified the following:

- certain cantons are dynamic (mainly those in the bassin Parisien: Île de France; Picardie; Champagne-Ardennes)

- certain cantons are in an "intermediate situation" (these are spread throughout the country)

- other cantons are deemed to be "fragile" (these are mainly in the west and south-west: Basse Normandie; Bretagne; Pays de la Loire; Poitou-Charentes are particularly affected)

- last, a number of cantons are considered to be in a crisis situation (mainly in Limousin; Auvergne; Corse; and Languedoc-Roussillon).

Until relatively recently the policy response to rural problems in France tended to be sectoral in approach. Under the influence of EC policies, such as the IMPs, recent policy has adopted a more integrated approach. This is reflected in the main policy decisions taken by the CIDAR (interministerial committee for rural development) at its June 1993 meeting. These involved the following measures:

- economic development that encourages "pluriactivity" (incentives for collaboration between employers, relaxation of the rules on indebtedness in the case of young farmers, start up assistance for firms in the agricultural sector, and the development of the hotel and tourism industries)

- the designation of priority rural development areas (TRDPs) as the basis for government policy in rural areas. These areas qualify for contributions from various interministerial funds, for tax concessions and for certain financial measures

- land and forest management (a three-year programme involving FF 80 million (12 MECU), of which FF 39 million (6 MECU) is contributed by central government)

- housing (including tax exemptions for vacant property put up for rent; some FF 300 million (45 MECU) for 150 housing improvement projects; and an increase in the rate of housing improvement grants in communes with fewer than 5,000 inhabitants).

- public services (updating and reinforcement of the departmental plans for the organisation and improvement of public services; establishment of contracts for the maintenance of the education services in rural areas; improvement of health services).

The main instruments of French rural policy are:

- the FIDAR (interministerial fund for rural development - now subsumed into the national regional development fund, FNADT) which amounted to FF 1.8 billion (271 MECU) for the period 1989-93

- the FGER (rural area management fund, provided for under the new regional development framework law) for which the initial 1995 allocation of FF 500 million (75 MECU) was reduced to FF 313 million (47 MECU) in June 1995.

- the DDR (rural development allocation), distributed through the budget of the ministry for the interior and modified under the new framework law for regional development; the measure seeks to promote economic development by encouraging collaboration between communes (*intercommunalité*). A quarter of the budget is allocated to communes with fewer than 10,000 inhabitants and three-quarters to groups of communes with fewer than 35,000 inhabitants.

Rural policy in the *United Kingdom* has a lower profile than policy in France, in large measure reflecting earli-

er industrialisation processes in the UK and the small proportion of the population still engaged in agriculture. In addition, for the most part, the United Kingdom is considerably more densely populated than France. As with urban policy, the instruments and implementation of rural policy differ between the different parts of the United Kingdom. Of most interest are the policy approaches in England and Wales.

In *England*, rural policy is the responsibility of the Rural Development Commission (RDC), a government agency grant-aided by the Department for the Environment. The RDC's stated goals are that the countryside should be a place where:

- people both live and work, and villages and small towns provide for the varied needs of people in a wide range of circumstances;
- the economy of all rural areas provides a broad range of job opportunities and makes the most effective possible contribution to the national economy;
- residents are not unduly disadvantaged as a result of living in rural areas, while rural communities have reasonable and affordable access to services; and
- development respects and, wherever possible, enhances the environment.

In 1993-4 RDC expenditure amounted to £38.3 million (49 MECU) - little more than one tenth of the expenditure committed under Regional Selective Assistance to firms in the same year. Policy instruments include the provision of funded workspace; small business support; and loans to rural businesses.

Reflecting the different geography of the country, rural policy in *Wales* is markedly more significant than in England. Rural development policies are co-ordinated under the *Rural Initiative*, the aim of which is to "create a self-supporting market economy in rural Wales". The Welsh Office works in co-operation with local authorities, government agencies and other bodies, including the Welsh Development Agency and the Development Board for Rural Wales. The total Welsh budget for rural support in 1992-3 was around £56 million (72 MECU).

Finally in this rural policy review, it should be noted that in *Spain*, national rural policy is largely subsumed within wider measures undertaken in the context of the Objective 1 and 5b plans. In addition, a number of measures are provided for in the LEADER Community Initiative. There is, however, no national rural development policy that is distinct from EU measures.

3.1.3 Policies for "Crisis" Areas

Policies for crisis regions are those operated in areas that have generally been dominated by a single industry that has undergone often rapid restructuring and, sometimes, terminal decline. There is usually a clear economic development objective underlying such policies in the sense that their primary purpose is to encourage alternative economic activities. However, the intensity with which such policies are implemented (usually the focus is on closely-defined areas and for a set time period) reflects concerns at the devastating effects on the community at large of the collapse of the dominant, sometimes the only, industrial activity. As with urban policy, there is an important social and political aspect to the motivation for action, although in the case of crisis regions the main policy instruments tend to be primarily economic.

In *Germany*, it was noted in Section 2.1.2 that regional policy is the responsibility of a joint Federal-*Land* partnership arrangement, the so-called *Gemeinschaftsaufgabe* (GA). During the 1980s, the rundown of the steel and shipbuilding industries created severe problems of structural change in specific localities which resulted in a series of special fixed-term programmes. Although to some extent distinct from standard regional policies, these programmes made use of GA policy instruments and funding. Their prime objective was to create alternative employment opportunities outside of those sectors experiencing industrial decline.

Such programmes were at their peak in the late 1980s and early 1990s. They included a Steel Location Programme (1982-90) for the creation of alternative employment opportunities outside the iron and steel sectors, a Special Programme for Bremen (1984-89) responding to problems created by job losses in the shipbuilding and steel sectors, a more general Shipbuilding Area Programme (1987-89) and a Special Programme for Aachen-Juelich (1988-91) reflecting coalmine closures (OECD, 1989). More recently, special measures have been adopted in response to more general decline in the coal-mining and defence sectors, often with EU support (RESIDER, KONVER). A feature of these measures is their increasingly close relationship to the GA. In particular, it is no longer the case that such crisis areas can be designated *additional to* the GA Areas. Instead, and this was made explicit in the last area designation review approved by the European Commission, the designation of such areas must fall within the overall population ceiling for GA Area coverage agreed between the GA and the Com-

mission. In other words, should the need arise for new crisis areas to be designated this will only be allowed at the expense of the de-designation of previously-designated areas, leaving the overall population coverage of those areas approved for regional aid purposes unchanged.

In *France*, policies for crisis areas had a profile in the early to mid-1980s, although a special fund for the restructuring of mining areas (the GIRZOM) had been in place earlier. The main focus of policy was the designation of a number of *pôles de conversion*; (for the most part, the areas concerned were affected by the restructuring of the coal, steel and shipbuilding sectors). The interest of this as a policy approach lies in the fact that no new policy instruments were introduced, but that existing measures were co-ordinated and focused on closely-defined areas of industrial decline - involving, for example, accelerated award procedures under the regional policy grant (PAT) scheme and the establishment of a small task force based in the locality.

Although *pôles de conversion* have never been formally dedesignated, policy has been relaxed over time; in some of the areas there was considerable success in attracting new investment and in redeploying the workforces affected by restructuring. In others, the crisis has remained severe and additional policy measures have largely superseded the *pôles de conversion* policy. Between 1987 and 1993 enterprise zones were operated in three shipbuilding closure areas. In 1993 two "privileged investment zones" (ZIP) were designated in mining areas in the Nord-Pas de Calais region, providing automatic tax relief for the three years following establishment.

Besides these relatively high-profile approaches to focusing policy on closely-defined areas, a number of other measures are operated more widely and are often incorporated within the State-region planning contracts. These include:

- the use of the regional development fund (FIAT) for derelict land and site clearance

- the industrial redevelopment fund (FRI) which provides assistance to SMEs in areas undergoing restructuring (FF458 million - 69 MECU - over the period 1989-92)

- the GIRZOM, involving FF700 million (106 MECU) in 1989-93

- the industrialisation of mining areas (FIBM) which allocated funding of FF1.8 billion (271 MECU) over a decade (1984-94)

- and the industrialisation of the Lorraine region (FIL) which involved FF1.3 billion (196 MECU) for the period 1984-92.

In addition to these measures, which are primarily targeted at economic development, a significant spend was allocated to a wide range of essentially social measures providing for early retirement, mobility, long-term retraining, etc.

In the *United Kingdom*, policies for crisis regions have also tended to have a high profile. There is a now long-standing policy of designating *enterprise zones* covering closely-defined areas affected by acute industrial decline. The aim of enterprise zone status is to stimulate private investment in target areas by lifting certain financial burdens and administrative controls. The main incentives take the form of tax relief and a concession on business rates; these apply for a period of ten years from the date of designation. In addition, the planning regime is greatly simplified: developments conforming to the published scheme for each zone do not require individual planning permission, and, where planning regulations remain in force, procedures are accelerated.

The first round of enterprise zones were created in 1981 and expired in 1991-2; the second round expired in 1993-4. There have been 28 zones designated to date. Current zones include Sunderland, Inverclyde and Lanarkshire; and extensions in North West Kent and Swansea. Further zones are being designated in the colliery closure areas of East Midlands, Dearne Valley and East Durham.

A separate initiative, the *Programme for the Valleys*, was launched by the Welsh Office in 1993. This covers some 2,230 square kilometres and a population of 700,000 (about 25 percent of the Welsh population), comprising some of the most disadvantaged communities in an area formerly dominated by the coal and steel industries. The programme aims to improve the "social, environmental and economic well-being of the Valleys" through job creation, training, environmental improvements and improvements in health and housing provision. Total public expenditure on the programme in 1993-4 was £345 million (442 MECU); the programme is expected to involve £1 billion (1,282 MECU) over its lifetime and aims to attract a similar sum in private sector investment.

In *Italy* support for steel closure areas is provided for under Law 181 of 1989 in Terni and Genoa in the Centre-North and Taranto and Naples in the *Mezzogiorno*.

As elsewhere, the main objective is to provide alternative activities for those made jobless by the decline in the steel sector.

3.1.4 Policies for Special Status Regions

A final category of spatially-oriented policies arises from the special status of certain regions. Although there is an economic and social cohesion dimension to policy, the primary motivation is to contribute to national *political* cohesion by reducing economic and social disparities. Moreover, such is the priority accorded to this form of solidarity that separate transfer mechanisms as well as explicit policy measures are usually in place, with the consequence that public expenditure per head in such regions is significantly above the national average.

France, Germany, Italy and the United Kingdom all operate (or have operated) distinct policies for particular parts of their territories. In France, Corsica has a separate legal status from the remaining 21 regions and special economic development measures are in place to reflect this and the particularities that arise from its island status. In Germany, following reunification, special measures apply in the so-called new *Länder* aimed at facilitating the adjustment process. In Italy, the emphasis on the development of the south (the *Mezzogiorno*) from the 1950s to the early 1990s was reflected in the existence of quite distinct policies (the so-called *intervento straordinario* or special intervention) and the establishment of separate institutions to manage them. In the United Kingdom, for well-known political reasons, distinct packages of measures are operated in Northern Ireland in many areas of government policy.

The most significant policies in this category are operated in *Germany* in the context of reunification. Indeed, in terms of scale, the provisions made for the new *Länder* overshadow any regional or other spatial policy in the European Union. The central objective of policy is to overcome the internal division in standards of living. It was apparent even before unification that the existing system of horizontal and vertical fiscal equalisation would be overwhelmed by the inclusion of the new *Länder*, with most western *Länder* becoming net contributors. When the Unification Treaty was drawn up the western *Länder* negotiated the provision of special arrangements for the new *Länder*, in compensation for a five year exclusion of the new *Länder* from the fiscal equalisation schemes provided for in the Basic Law. The resultant Unity Fund (*Fonds Deutsche Einheit*), which ran from 1990 to 1994, was initially to be financed in three equal parts by the western *Länder*, the eastern *Länder* and the federal government. However, when the full scale of the financial burden became clearer, alterations were made in 1992 which increased the total funding volume from DM 115 billion to DM 146.3 billion (75,413 MECU) and allowed the new *Länder* to retain their full VAT revenue. These sums are extremely significant when set alongside total general government expenditure of DM1,084 billion (558,763 MECU) in 1990 and regional incentive spending of just DM110 million (57 MECU) in the same year. A further special fund, the *Gemeinschaftswerk Aufschwung Ost* provided for a further DM 12 billion (6,186 MECU) in both 1991 and 1992 for investment and work programmes.

The Unification Treaty provided for the following:

- a special programme of economic assistance for the new *Länder*
- measures to improve the general economic conditions in the communes, with particular emphasis on infrastructure
- measures to encourage the rapid development of SMEs
- measures to promote the modernisation and restructuring of the economy
- debt relief for enterprises.

A key feature of the approach under the Unification Treaty is that all formerly west German federal laws and institutions were applied to the east; with the exception of the *Treuhand*, there are no separate institutional structures with responsibility for policy in east Germany. A further notable feature is the explicit decision to use regional policy as a component of policy (this is reflected in the very high levels of spend discussed in Section 2.2.1 above).

Policy for the new *Länder* based on the Unification Treaty is centred around a range of instruments, some of which are exclusive to east Germany and some of which involve enhancements to measures that are available throughout the Federal Republic. The key measures include:

- tax relief in the form of an investment allowance (*Investitionszulage*)
- a special depreciation allowance
- soft loans from the Credit Bank for Reconstruction (*Kreditanstalt für Wiederaufbau*, KfW); the German

Equalisation Bank (*Deutsche Ausgleichsbank*, DtA); and the ERP Fund (*ERP Sondervermögen*)

- product development measures aimed principally at SMEs
- measures to improve sales of east German products
- a package of research and development measures together with the establishment of Fraunhofer and Max-Planck Society institutions in the new *Länder*
- wage cost reductions in respect of recruitment in specific areas

According to a report by the *Deutsche Bundesbank* (7/95) gross transfers to the new *Länder* amounted to DM 840 billion in the period 1991 to 1995. The flow of payments has increased steadily each year, as has the share of spending by the federal government (from 54 percent in 1991 to 75 percent in 1995). In 1991, DM 139 billion (71,649 MECU) was transferred: DM 75 billion from the federal government, DM 5 billion from the western *Länder* authorities, DM 31 billion from the Unity Fund, and the remainder from the EC budget and the federal labour office. By 1995 it is estimated that transfers will rise to DM 200 billion (over 103,000 MECU), with DM 151 billion coming from the federal government and DM 14 billion from the western *Länder* and local authorities, the rest from the EC, federal labour office and statutory pension insurance institutions.

In the *United Kingdom*, separate measures are operated for *Northern Ireland* in most spheres of government policy and implemented through a system of administrative devolution. According to the expenditure plans for Northern Ireland[7], "The government's policies for law and order, political and social affairs... ...must be recognised as making complementary contributions to meeting the overall objective of achieving peace, stability and prosperity in Northern Ireland."

The Secretary of State for Northern Ireland has discretion to allocate resources within the so-called NI Block (with the exception of social security benefits which are mainly determined by the level of demand) in response to local needs and priorities. The NI Block amounted to over £7 billion (8,974 MECU) in 1993-4; in addition, social security spending involved a further £0.52 billion (667 MECU). These sums are used to operate distinct policies for the province, except, obviously, in the sphere of general government affairs such as defence and external relations which are UK-wide policies.

Separate arrangements and, to a lesser extent, separate policies are also operated for *Scotland* and *Wales* where the allocations to the Scottish and Welsh Offices are calculated on the basis of the so-called Barnett formula. In part, this is intended to take account of the disadvantage resulting from peripherality and, for much of Scotland, long distances and low population density. As for Northern Ireland, however, there is also an important political dimension to the special public expenditure provisions made; indeed, the formula was devised shortly after an upsurge of support for independence in both countries.

The UK arrangements are, however, far from representing transfers along the lines of the system for the new *Länder*. The NI Block constitutes the bulk of government spending with respect to Northern Ireland. Similarly, for Wales and Scotland, the funding relates to policies that are implemented by the respective territorial administrations in place of, and not in addition to, UK-wide policies. Nevertheless, it is the case that the formulae applied result in higher *per capita* levels of spend in Northern Ireland, Scotland and Wales than in England.

The political dimension has also been central in *France* where special measures for *Corsica* have encompassed both institutional reform and special funding provisions. In 1991 Corsica's status as a local authority (*collectivité locale*) was reinforced by the *loi Joxe* which provided for greater autonomy for Corsica in the fields of education, energy, culture and communications. Since 1992, central government has adopted a more interventionist stance to economic development in partnership with the Corsican authorities. The objectives are to create the conditions for economic development through structural reforms and the achievement of the 15 year social, cultural and economic development plan approved by the Corsican assembly in September 1993.

There are three principal types of measure operated in Corsica:

- the State-local authority planning contract for Corsica and the additional measures
- the fiscal status of Corsica
- the "territorial continuity" grant

The planning contract for Corsica is broadly similar to those concluded with the other 21 French regions.

[7] *Expenditure Plans and Priorities, Northern Ireland, The Government's Expenditure Plans 1995-6 to 1997-8*, Cm 2816, March 1995.

However, the element of central government funding is significantly higher than for other regions: for 1989-93, the total State contribution was FF517 million (78 MECU). This amounted to FF2,068 (312 ECU) per inhabitant; in only one other region (Limousin) did the State contribution exceed FF 1,500 per head. For the 1994-98 contract, central government funding has been raised to FF695 million (105 MECU). In addition, a further FF380 million (57 MECU) has been committed by central government to priorities decided by the Corsican authorities; most of this (FF250 million) will be allocated to a road-building programme.

Legislation passed in December 1994 accorded special fiscal status to Corsica with a view to compensating for geographical handicaps and promoting economic and social development. The main measure involves contributing to local authority budgets to enable local business tax rates to be reduced by 60 percent. Moreover, there is corporation tax relief available to new activities and a portion of the duty on fuel sales is received by the Corsican authorities. These measures together cost central government some FF350 million (53 MECU). In addition, the so-called "territorial continuity" grant (*dotation de continuité territoriale*), which has been in place for some 20 years, aims to compensate for the additional transport costs associated with island status. The 1995 allocation to this fund was FF850 million (128 MECU).

In *Italy*, it was noted earlier that, over most of the post-war period, policies for the development of the south (the *Mezzogiorno*) took the form of "special intervention" (*intervento straordinario*), with quite distinct policies and separate institutions to manage them. However, over time, the issue of the cost and effectiveness of policies for the *Mezzogiorno* became a growing theme in Italian politics and the source of considerable antagonism between the north and south of the country. At the same time, there was significant dissatisfaction with the institutional structure operating *Mezzogiorno* policy, part of a wider antipathy towards the role of the public administration in the Italian economy. The combination of these domestic tensions with European Commission pressures for there to be a review of Italian regional policy resulted in the demise of a distinct *Mezzogiorno* policy in 1992 and of the related *Mezzogiorno* institutions as from 1 May 1993. Thus, while the *Mezzogiorno* clearly represented a "special status" region for more than 40 years, it is no longer in that position.

Finally in this review of regions with special status, it is worthwhile returning to the theme highlighted at the start of the section - namely the significant *political* motivation for such policies in the context of national solidarity. As just noted, three of the Member States studied currently operate special policies in respect of parts of their territories: France (Corsica); Germany (new *Länder*); and the United Kingdom (Northern Ireland). In all three cases, the policies lead to a very significantly higher level of spending per capita than would otherwise be the case. However, the scale of the transfers are not always in evidence. In the United Kingdom, for example, little is made of the scale of funding for Northern Ireland. Similarly, in Corsica, funding is provided through a range of sources so that the scale of funding is not immediately apparent and, as for Northern Ireland, it is not always easy to distinguish the extent to which special policies and measures are substituting for nationwide ones. In contrast, the scale of the transfers to east Germany is frequently the subject of media reports, a fact which is leading to increased dissent in some sections of the west German population. Interestingly, it might be argued that the high profile of the special policies for the *Mezzogiorno*, together with the absence of concrete evidence on the effectiveness of policy, was a major factor in growing political opposition to special policies for the south of Italy and to their ultimate demise.

3.2 The Impact of Member States' Other Spatial Policies

In addition to providing an overview of the objectives of Member States' other spatial policies, this research involves an assessment and summary of available evidence and study results with a view to determining the impact of those policies. For these purposes, *impact* refers to:

i. the *distribution* of national expenditures on other spatial policies between the regions; and

ii. the *effect* of these expenditures.

These are now discussed in turn.

3.2.1 The Regional Distribution of Expenditure

A broad indication of overall levels of expenditure can be found in the discussion of the objectives of other spatial policies provided above. However, going beyond this presents a number of methodological problems and a number of cautionary remarks are in order, especially with respect to the regional breakdown of such information.

First, it has proven difficult to obtain detailed expenditure data in many areas. This reflects the disparate na-

ture of many of the policies concerned and the frequent use of tax concessions where levels of revenue foregone are seldom calculated. Second, it is not always evident where there are overlaps in policy expenditure and to what extent transfers *substitute for* rather than are *additional to* general government spending; this is particularly true of policies operated for special status regions. Third, a regional breakdown of such expenditure does not always provide a useful indication of the significance of spending in relation to issues of economic and social cohesion. For example, the data below show high levels of urban policy spending in Île de France and south-east England, the richest regions in France and the UK respectively. However, this is not necessarily indicative of an inappropriate distribution of resources since both regions contain some of the worst urban problems. A further difficulty is that, unlike the analysis of regional policy spending, it has not proven possible to obtain the information necessary to measure the *intensity* of other spatial policy spending. Little or no data is available on the proportion of the national population covered by other spatial policies, and none is to hand on the proportion of regional populations covered.

In spite of the constraints on the analysis of the data, there is still evidence that other spatial policy spending tends to flow towards the problem regions. Although in France, under the *contrats de ville* programme, the Île de France region is the principal beneficiary, receiving over a quarter of total funds, along with Rhône-Alpes, Nord Pas de Calais and Provence Alpes Côte d'Azur (PACA), it has to be recognised that these four regions are the most urbanised regions in France. Moreover, the least prosperous of the four, Nord-Pas de Calais, is the principal beneficiary in terms of expenditure per head. The extent to which cohesion is favoured is more marked in the context of the DSU. The Paris region, again along with Nord-Pas de Calais and PACA, is the principal beneficiary. However, when the data is viewed in *per capita* terms, the main beneficiary is Nord-Pas de Calais, followed by Corsica, PACA and Languedoc-Roussillon. In addition, among the more urbanised of the French regions, Île de France and Alsace are net contributors to the fund.

Under the PACTs contained in the State-region planning contracts which encompass some of the policies for crisis areas, urban areas and rural areas described above, a similar pattern is in evidence. Average per capita spending under the PACTs is FF 210 (32 ECU); however, the levels of spend are significantly higher in Corsica (FF 890 - 134 ECU), Limousin (FF 422 - 64 ECU), Lorraine (FF393 - 59 ECU) and Nord Pas de Calais (FF302 - 46 ECU), all regions with significant rural, urban or industrial reconversion problems and regional per capita GDP of less than the national average.

The statistics available (which are limited) are more difficult to interpret for the United Kingdom, partly because urban and rural policies are the responsibilities of different territorial administrations. In addition, the nature of urban problems is such that they concern geographically small areas for which data are frequently not available. Information available on the regional breakdown of urban policy measures shows the following shares for London (figures are not available for the Urban Programme which involved expenditure of £166.5 million (213 MECU)):

Table 3.3: London's Share of Urban Policy Expenditure

Programme	Total 1993-4 Outturn (MECU)	% allocated
Housing investment programme	2,263	30
Estate Action	450	24
Housing Partnership Fund	38	4
Housing Action Trusts	96	41
Flats over Shops	12	20
Derelict Land Grants	134	4
City Action Team	4	15
Task Forces	23	28
Urban Development Corporations	440	31
City Challenge	295	23
Docklands Light Railway	36	100

Source: EPRC calculations based on Secretary of State for the Environment response to Parliamentary question.

These figures show that London receives a significant proportion of urban spending in the United Kingdom, and a particularly large share of the larger sums. This appears to sit uneasily with the fact that Greater Lon-

don accounts for just 14 percent of the English population and that per capita GDP is 143 percent of the EU average compared with just 98 percent for the UK as a whole. However, on other measures, notably those relating to social deprivation, *parts* of London are acutely disadvantaged, in spite of their location within a region that is prosperous overall. Any consideration of the extent to which such expenditure is consistent with cohesion must take account of this policy context.

The most striking levels of expenditure on other spatial policies concern special status regions. The gross transfer to the new *Länder* for 1996 amounts to some DM 196.5 billion (101.3 billion ECU); this compares with Structural Fund spending for the *entire period* 1989-93 of 64 billion ECU for the EU *as a whole*. The force of political considerations and issues of national solidarity are also in evidence in the high levels of spend in Corsica compared to the French average and in Northern Ireland, and to a lesser extent Scotland and Wales, in the United Kingdom, where specific transfer mechanisms are in place.

More generally, the point is worth making that most spatially-discriminating policies tend to favour those areas in receipt of regional policy support. This is certainly true of policies for special status regions, all of which are located firmly within nationally-designated problem regions (and, indeed, also within EU Objective 1 areas). It is also true of the vast majority of "crisis" areas. While such areas occasionally are located outside national problem regions, this generally is resolved the next time the assisted areas are reviewed. More than this, with the recent move towards agreed population ceilings for nationally-designated problem regions, it is increasingly common for any short-term designation of areas outside previously-agreed problem region boundaries to be accompanied by the de-designation of assisted areas (see, for instance, the 1993 agreement between the Commission and the German authorities).

For rural and urban policy areas there may be less coincidence of policy boundaries with designated regional problem areas, not least because rural and urban policies generally have a significant social and environmental component and are less-focused on large-scale economic development than is often the case with regional policy. That having been said, the focus of both policies is very clearly on economic and social cohesion. Urban policy in the United Kingdom, for instance, is very closely related to the need to remove the causes of social unrest in various inner city areas. In similar vein, rural policy generally reflects the need to retain a degree of balance between rural and non-rural activities and to help maintain otherwise fragile population settlement structures.

3.2.2 The Effect of Other Spatial Policies

This section highlights recent evaluation studies in respect of other spatial policy instruments. For the most part, the evaluation focus has been on urban policy measures, though certain policies for crisis areas are also covered. Given the significant increase in the importance attached to urban policy in Great Britain (and the concomitant decline in the significance of regional policy) it is perhaps unsurprising that most evaluative work has been concentrated on the UK.

As with regional policy instruments (see Section 2.2.2), official evaluation work in respect of urban policy has often taken a relatively narrow perspective, measuring effectiveness according to a narrow range of policy input and output criteria. Typical of this approach is early work evaluating the Urban Development Grant (UDG) in Britain. Eligible for a number of designated local authority areas with "serious social needs", the UDG is allocated on a competitive basis to projects (industrial, commercial, housing or recreational) providing employment opportunities in depressed inner city areas.

One important evaluative study (PSMRU, 1988) examined the operation of the UDG between 1982 and 1986 and discovered a significant level of deadweight spending on projects assisted under the programme. For the projects studied, the cost per job seemed relatively high in comparison with British regional policy instruments (ie. between £11,800 and £16,500). The study found that most jobs were filled by residents living in or near inner city areas, although only 18 percent of the jobs created employed previously unemployed people. This may reflect the high number of temporary construction jobs (ie. 2478 person-years) generated by the UDG projects (PSMRU, 1988). Although the study concluded that the scheme be retained, the researchers felt better appraisal techniques were needed to reduce deadweight spending on projects that could have gone ahead without assistance. PSMRU claim that, without better scrutiny of project additionality, governments are able to overestimate job creation levels attributable to public policies.

Interestingly, a follow up study was conducted on the UDG - now the City Grant - by Price Waterhouse (1993). Although the Price Waterhouse research followed a similar methodological route as the PSMRU study, greater emphasis was laid on net additional job creation as the key evaluative criteria. The study discovered that the net public sector cost per job was £14,280. Interestingly this falls mid-way between the

cost per job range estimated by the earlier study by PSMRU (1988). Overall, the research concluded that the UDG/City Grant compares favourably with other public sector job creation initiatives. It is important to note that the Price Waterhouse study included a telephone survey component, not normally deemed as reliable as traditional survey techniques. However, the study was useful because it provided additional longitudinal data with which to compare the effectiveness of policy instruments over a number of years.

Further studies of the grant in specific localities took a different approach. Cebulla's (1995) study of the operational effectiveness of the UDG in Belfast sought to evaluate the programme by comparing UDG-assisted businesses with non-assisted businesses. This study claims that, although halting the decline of indigenous businesses, UDG-assisted firms did not generate greater employment growth. According to Cebulla, both national economic forces and indigenous economic strengths play a larger role in explaining firm growth. The strength of Cebulla's Belfast case study was the insight this gave into the local economic and property market circumstances of one particular locality. Given the limitations of property-led economic development strategies in alleviating inner city deprivation (see, Turok, 1992), the UDG seems to be a limited policy instrument if unaccompanied by more comprehensive policy action.

Another component of spatially-targeted policy in Britain was the designation of enterprise zones. Enterprise zones provide firms with a host of fiscal and property-related incentives. Although enterprise zones also operate in France, the majority of evaluative work has been conducted in Britain. One of the key official evaluations undertaken in Britain (PACEC, 1987) examined the effectiveness of the zones during the early 1980s. Between 1981 and 1986, the study found that 63,000 jobs were located in the twenty-three zones studied. Of these, about 35,000 were a direct result of the enterprise zone policy. However, the study found quite high levels of displacement (23.7 percent) among firms which had moved into the enterprise zone. In other words, incoming firms were damaging local businesses quite considerably. Another problem when evaluating enterprise zones is the fact that many local firms move short distances into the designated areas in order to take advantage of the various tax concessions available. Such displacement of employment clearly erodes the overall contribution of an enterprise zone in its sub-regional economic context. Rather than generating new employment, zones may actually redistribute employment through opportunistic 'boundary-hopping'

An important aspect of this study was the inclusion of secondary factors when evaluating the economic impact zones had on the local economy. Secondary factors take account of the two main multiplier effects (supplier and income) created by developments in the zone. In comparison with other evaluation studies a low supplier multiplier was identified for enterprise zones (ie. 0.048). This is possibly due to the high proportion of externally-owned plants which locate in enterprise zones which in turn have highly globalised procurement structures. The direct or income multiplier was line with other evaluation studies (ie. 1.1). Although inclusion of secondary effects in the evaluation provides a better picture of the overall economic impact produced by the zones, it does not inform policymakers about the reasons supplier linkages remain low or the qualitative nature of employment generated in firms.

More recently, a study sponsored by the British government evaluated 22 of the 25 enterprise zones (HMSO, 1995). Overall the study analysed similar indicators (employment, number of firms established and property impact analysis) as the study outlined above (see, PACEC, 1987). This data allows the evolution of the programme to be compared over different time periods. The recent study estimates that the zones created 125,700 jobs of which 58,000 jobs were additional to those which would have been created. The cost per job at 1994/95 prices is estimated to have been in the region of £17,000, which is high in comparison with British regional policy instruments such as RSA. Notwithstanding the problems of calculating 'true' additionality, the study depicts a relatively positive view of enterprise zones and their efficacy.

Urban Development Corporations (UDCs) have now taken over from enterprise zones as Britain's key spatially targeted policy instrument. Primarily, these were designed to stimulate the private sector property market in areas of severe economic and social hardship by redeveloping areas of derelict urban land. Owing to the institutional nature of UDCs, assessing the effectiveness of these bodies is difficult. Usually, a case study approach is adopted. Owing to their politically-sensitive role vis-à-vis local authorities, many academic evaluations have taken a highly critical 'political economy' approach when assessing their effectiveness. This partly owes to the lack of objective data on their performance outputs.

One such study (Robinson *et al*, 1994) evaluated two UDCs in the northern region of England: Tyne & Wear and Teeside. Robinson *et al* claim that the employment creation impact of both UDCs was relatively low. The study also suggests that official UDC figures ex-

aggerate their employment creation impact. While the UDC claim that 3,143 jobs have been created on Newcastle Business park, a survey conducted by the authors found only 2,447 new jobs. Of 17 firms surveyed, 11 firms had relocated from elsewhere in Tyne & Wear or from other parts of the region - suggesting a high level of displacement. The authors also found that the most expensive flagship projects, e.g. Teesdale shopping centre and Hartlepool Marina, were particularly weak in generating new employment. Finally, the authors believe that poor official data coupled with the problem of disentangling the work done by UDCs from other publicly funded bodies reduces current knowledge of the policy's overall effectiveness.

Another case study assessment of UDCs (Atkinson and Moon, 1994) looked at the London Docklands Development Corporation (LDDC). This flagship UDC is well known for the Canary Wharf project and is generally viewed as an excellent example of property-led urban regeneration. Using data published by the LDDC, the researchers found that 41,000 jobs had been created in the area; 17,000 of which were new. There had also been a 56 percent increase in the local population from 39,400 to 61,000. According to the authors, these figures represent quite dramatic economic and social restructuring. On the downside, only 9 percent of construction workers on the Canary Wharf project were from the local Borough of Tower Hamlets. In line with other property-led regeneration projects, LDDC paid very little attention to matching the employment needs of developers with local unemployed people through training etc. There are also some doubts over the low quality nature of the 'back-office' jobs which the property has attracted. Finally, the researchers criticise the LDDC for being insensitive to the needs of local authorities over local planning issues

On the whole UDCs and other private-sector-led regeneration institutions have come in for considerable criticism from the research community. The general view is that the overall effectiveness of property-led urban regeneration must be open to question. Owing to the speculative nature of projects such as Canary Wharf, success depends heavily on the vagaries of national and international economic factors outwith the control of local economic development institutions. The policy instrument is susceptible to outside variables and local economic development is heavily dependent on the trickle-down of wealth and employment. In the absence of a fully-rounded measures designed to obtain maximum benefit for the local economy, UDCs tend to be viewed as unlikely to achieve their objectives of aiding the local regeneration process. Nevertheless, the ten year life-span of UDCs makes a comprehensive assessment impossible until they are finally wound up near the end of the century.

Other national spatially-oriented policies include those designed to aid the process of economic restructuring in regions experiencing severe economic disadvantage. Areas such as these receive heavy levels of subvention from national governments to ensure social stability. A good example of this is Northern Ireland where public spending per capita is substantially above the national average. The fiscal transfer from Whitehall at the end of the 1960s amounted to 5 percent of regional GDP, but by the start of the 1990s it stood at about 37 percent (Teague, 1994). According to one observer, this level of subsidy can generate false assumptions among local businesses: "the existence of extensive subsidies has created a climate of dependency and has sapped the competitive vigour of many firms" (Teague, 1994, p. 284). Clearly, evaluating this type policy is more difficult than assessing the impact of more targeted policy instruments, a problem made the more difficult by the interplay of identifiable public expenditure with less regionally-sensitive areas of public expenditure.

The above evaluation studies illustrate some of the problems when trying to assess the effectiveness of other spatial policies. Few studies have tried to understand the full complexity of forces generating spatial inequalities and how policy interacts with these factors. Instead, the easier option of measuring certain quantifiable policy outputs has been the preferred method of evaluation. Although giving some insight into the short term impact policy has on areas of economic disadvantage, this narrow view does not allow the sort of in-depth understanding needed to improve spatial policy-making. The relatively new status of some policy instruments may account for this situation however.

Notwithstanding this, available evidence shows current policy instruments to be of limited impact. In particular, the effectiveness of British urban policies seems to be questionable: placing too much emphasis on the private sector property market as a source of wealth and employment creation. Property-led urban regeneration initiatives often generate a large proportion of low quality temporary employment, ill suited to the unemployed people within disadvantaged communities. This result is disappointing given the heavy social component of urban policy objectives. Also worth noting (though any such comparisons must be treated with caution) is the considerably higher cost per job figures which have been calculated for both UDGs and enterprise zones. At least within the UK, the standard regional policy incentive, RSA, appears to be a more cost-effective economic development instrument.

3.3 Concluding Points

The focus of this chapter has been on spatially-discriminating policies other than regional policies. For the purposes of this report these have been grouped into urban, rural, crisis area and special status area policies. The distinction between regional and other spatial policies is not always a clear one - this is especially so of countries like France which take a broader view of regional development policies within the context of *aménagement du territoire* and where there have been increasing moves to integrate spatial policies within a single framework. Nevertheless, there is a difference in emphasis between regional and other spatial policies; the essence of this lies primarily in the extent to which other spatial policies concern issues of social and political cohesion, rather than essentially economic development objectives. This is not to say that there is not always a mix of rationales and motivating factors underlying policy; however, the four categories of policy identified concern areas where the political dimension of policy tends to be central - certainly more so than is generally the case with regional policy.

As far as *urban policy* is concerned, the discussion in Section 3.1.1 concentrates mainly on the position in France and, especially, the United Kingdom where urban policy has been given a relatively high priority. Indeed, in the UK, the political imperatives arising from growing unrest in areas of extreme poverty and deprivation have seen urban policy expenditure rise to some four times that of the main British regional incentive (Regional Selective Assistance). In similar vein, national urban policy spending in France is broadly on a par with the sum expended on the range of *amenagement du territoire* policies (including measures for rural and "crisis" regions as well as regional policy support). These two country examples underline the significant social and environmental aspects of national urban policy; while economic development instruments are among the measures used, they are generally employed for social and political ends.

Elsewhere in the Member States, urban policy tends to be somewhat different in nature - a response to physical planning and environmental pressures rather than social unrest. Moreover, it is often the responsibility of sub-national levels of government rather than being a national policy initiative. On the other hand, and as already mentioned, the federal government in Germany can grant supplementary aid for urban measures where the investments serve to improve the conditions for growth in the economy as a whole or to equalise economic strength between the regions.

Regarding *rural policy*, the emphasis in Section 3.1.2 is very much on France where the speed of agricultural change in the post-war period and the stress placed on the rural way of life has resulted in the policy being accorded a high national political profile. Elsewhere, rural issues tend to be less politically-sensitive from a national perspective and, indeed, much of the policy impetus now comes from EU-level policies (in particular, Objective 5b and the LEADER Community Initiative). In general, the objectives of rural policy at the national level tend to reflect social priorities - in particular, the desirability of maintaining population settlements by sustaining standards of living and by assuring the provision of public services. While economic development instruments can play a role in achieving such objectives, the overall focus of policy is more on social than economic cohesion.

Policies for *"crisis" areas* have been a feature in many Member States since the 1980s, particularly in response to increasing problems of structural adjustment arising from job losses in the steel, shipbuilding and (most recently) defence industries (see Section 3.1.3). There is usually a clear economic development objective underlying such policies, reflecting the need to encourage alternative economic activities. However, the intensity of decline (and its spatial focus) is usually such that the policy response also incorporates significant social and political aspects. In the case study countries, examples of "crisis" area policies are provided for Germany, France, the United Kingdom and Italy, all of which have experienced major plant closures in narrowly-defined localities. Over time, such areas tend to be incorporated within designated problem regions.

Finally, policies for *"special status" regions* are considered in Section 3.1.4. In such regions - which include the new *Länder* in Germany, Corsica in France, Northern Ireland in the United Kingdom and (historically) the *Mezzogiorno* in Italy - the primary motivation of policy is to contribute to national *political* cohesion by reducing economic and social disparities. A feature of policies for special status regions is the sheer scale of the transfers involved, underlining the importance attached to national solidarity and political cohesion. The most striking illustration of this is the scale of transfers to the new *Länder* set alongside the volume of EU spending on the Structural Funds: the gross transfers to the new *Länder* for 1996 alone amount to 101 billion ECU; this compares with Structural Fund spending for *the EU as whole* of 64 billion over *five* years (1989-93).

As far as the *spatial distribution* of expenditure is concerned (see Section 3.2.1), comparative regional-level information has proved difficult to obtain. Even so, the evidence is that most spatially-discriminating policies

tend to favour those areas in receipt of regional policy support. As mentioned earlier, this is certainly true of policies for special status regions and it is also generally the case for most "crisis" areas. For rural and urban policy areas there may be less coincidence of policy boundaries with designated regional problem areas. That having been said, both policies are very clearly focused on economic and social cohesion in its wider sense; they aim to tackle the specific problems of urban and rural areas and, in so doing, to reduce sources of national discord.

Considering, finally, the *evaluation studies* reviewed in Section 3.2.2, the available evidence tends to suggest that current policy instruments are of limited impact. In particular, as regards urban policy, the evidence is that property-led urban regeneration initiatives generate a large proportion of low quality temporary employment, ill-suited to the unemployed people within disadvantaged communities. As noted above, this is a disappointing finding given the significant social component to urban policy objectives. A further, more positive finding, at least for regional policy, is the fact that the cost per job figures attached to many other spatial policies are generally higher than those found for standard regional incentives.

4. Horizontal Policies with Important Regional Impacts

This chapter deals with policies which have no *intended* spatial effects. The focus is on policies for competitiveness and employment, reflecting not only the principal policy concerns of many Member States, but also the key themes of the Commission's recent White Paper[8].

These two policy areas cover a wide range of government activities aimed at influencing the business environment and the labour market. It is important to stress that this chapter focuses on the *proactive* policies of government; in other words, those policies that are intended to improve the climate for firms and affect the way in which the job market functions. Policies in these two areas are operated largely without reference to their spatial effects; in contrast, the previous two chapters have been concerned with policies which specifically address spatial disparities. Nevertheless, in practice, spatial cohesion, employment and competitiveness are intrinsically linked and potentially in conflict.

The regional policy chapter of this report (Chapter 2) described the policy dilemma faced by the poorest EU Members in balancing short-term competitiveness against internal regional disparity, a dilemma exacerbated by the poverty of the countries concerned in an EU context. However, such policy choices are by no means limited to the poorer EU countries. A problem common to *all* Member States is that policies to promote competitiveness may, in the short term, have detrimental effects on regional economic disparities and a negative impact on the labour market. Similarly, there is a perception that policies that aim to promote regional and social cohesion may, at least in the short term, jeopardise competitiveness by diverting resources. The promotion of economic cohesion, social cohesion and competitiveness might be conceptualised as a triangle of policy tensions where the pursuit of each objective impacts directly on the other two.

This chapter considers policies to promote competitiveness and employment policies in turn. The discussion of competitiveness policies in Section 4.1 focuses on the spatial impact of RTD and innovation policies in the Member States. It deals first with the context for such policies (Section 4.1.1), then with the objectives of policy (Section 4.1.2) and finally with their regional impact (Section 4.1.3). A review of employment policies is provided in Section 4.2. The final section, Section 4.3, draws together the main points made in the chapter.

4.1 Policies to Promote Competitiveness

In recent years growing attention has been paid to the promotion of "competitiveness". This is reflected in a range of government reports and policy statements including *Competitiveness: Helping Business to Win* in the UK, and the German *Bericht der Bundersregierung zur Zukunftssicherung des Standortes Deutschland* (the safeguarding of Germany's future as an industrial location), as well as the Commission's own White Paper.

Although the term "competitiveness" has entered into common parlance among policymakers, there is no clear definition of its meaning in policy terms and no definitive listing of the policy instruments designed to

[8] Commission of the European Communities (1993) *Growth, Competitiveness and Employment: The Challenges and Ways Forward into the 21st Century*, OOPEC, Luxembourg.

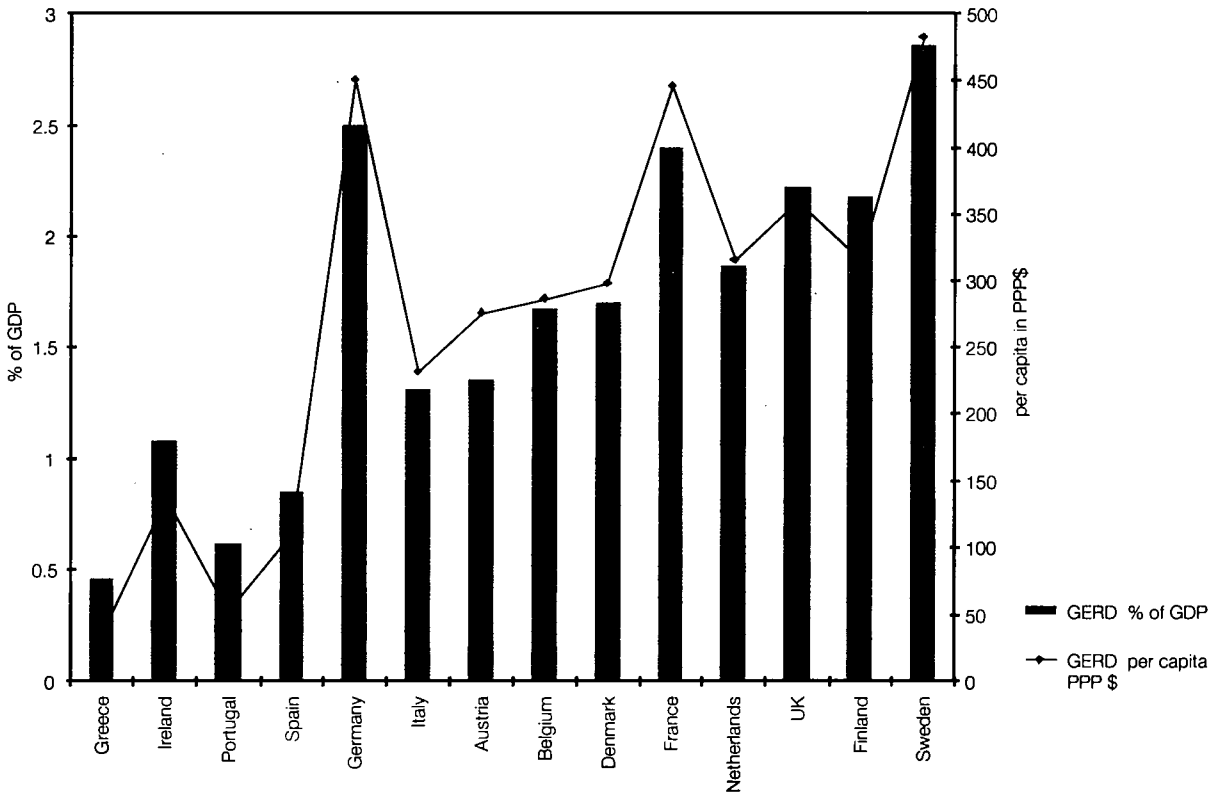
promote competitiveness. Nevertheless, a common theme among the policies that fall within the scope of "competitiveness" policies concerns research and development, technological change and the capacity to diffuse R&D results into products and processes. This section takes the science and technology policies of the Member States as its main focus.

4.1.1 RTD and Innovation Policies in Context

Spending on research and development by government, universities and the business sector is significant; in 1991 it accounted for 2.1 percent of GDP in the European Union. However, there is a striking variation in levels of overall spend on R&D across the EU: Germany spends five times as much on R&D relative to its GDP as does Greece. Indeed, the four Cohesion countries form a clear grouping, all spending around 1 percent or less of GDP on research and development. Italy and four of the smaller continental Member States (Austria, Belgium, Denmark, the Netherlands) each spend between 1.3 percent and 1.9 percent of GDP on R&D. A third grouping comprises France, Germany, the UK and the two Nordic Member States, which all spend in excess of 2 percent of GDP on research and development. Sweden is the only EU country where R&D expenditure as a proportion of GDP exceeds that of the United States. Variations in spending as a proportion of GDP are broadly mirrored in expenditure per head of population. Both of these indicators are illustrated in Chart 4.1. Following the approach adopted in Chapter 2, this chart groups countries into four broad categories: the Cohesion countries, Germany/Italy, the "northern European" countries and the Nordic Member States. The first three of these groupings are also utilised in the discussion of policy objectives which follows. Given the focus of this report, the policies of the three new Member States are not considered further in this section.

Chart 4.1

Gross Domestic Expenditure on R&D



Source: OECD (1995)

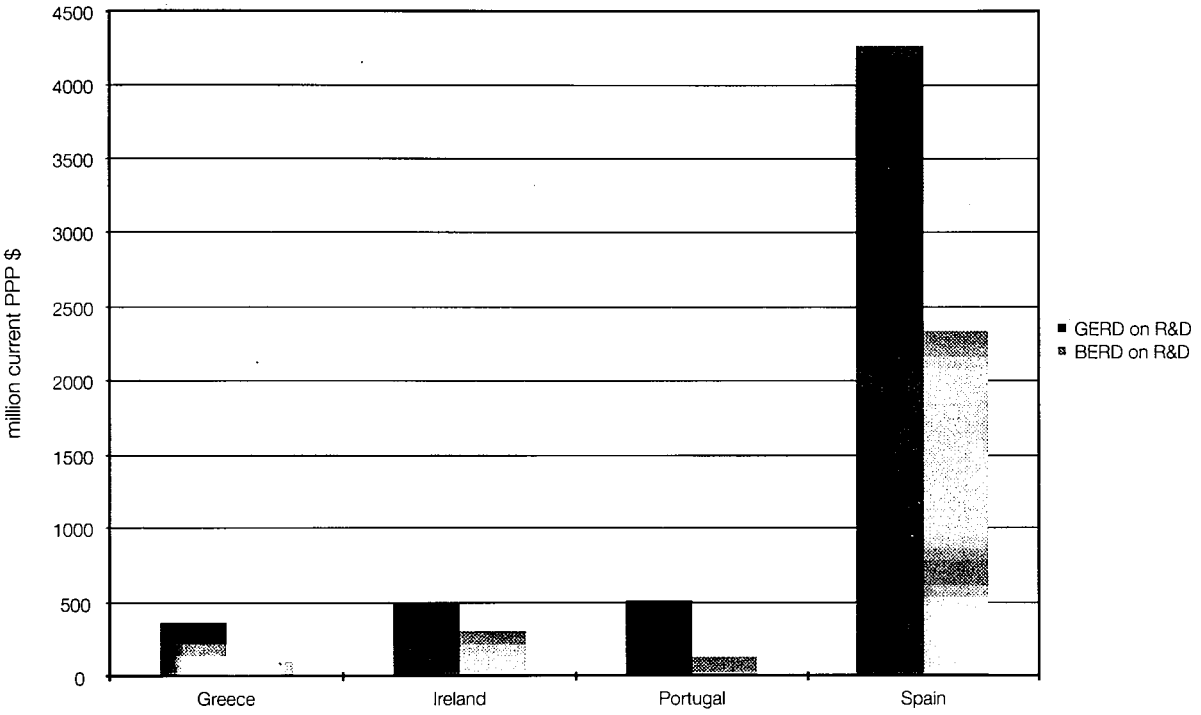
4.1.2 The Objectives of R&D and Innovation Policies

4.1.2.1 The Cohesion Countries

From Chart 4.1 it is clear that - in relation to both GDP and national population - R&D spending in the four Cohesion countries is significantly less than that found elsewhere in the EU Member States. Having said this, it is important to note that there is a substantial difference in the overall *scale* of R&D spending between Spain, on the one hand, and the remaining three countries, on the other. Clearly, this reflects differences in population size and in the size of the economy as a whole. The different levels of general and business-related R&D expenditure in the four Cohesion countries are illustrated in Chart 4.2.

Chart 4.2

Gross Domestic and Business R&D Expenditure



Source: OECD (1995)

The overall size of the Spanish economy also has an impact on RTD *priorities*. Unlike the other Cohesion countries, there is greater emphasis on the promotion of basic research in Spain; in the late 1980s this accounted for around 19 percent of the R&D budget (OECD, 1994). Indeed, the basic legislation governing science, technology and research policies in Spain (the 1986 "Law of Science") stresses the need to maintain and support basic research in order to develop new knowledge. Moreover, like most of the larger EU Member States, R&D policy is focused on a number of designated key themes and programmes. In contrast, in Greece, Portugal and Ireland, the emphasis is on two main areas: the expansion of the scientific and technical capacity of the country - the science base; and support for innovation and technology transfer.

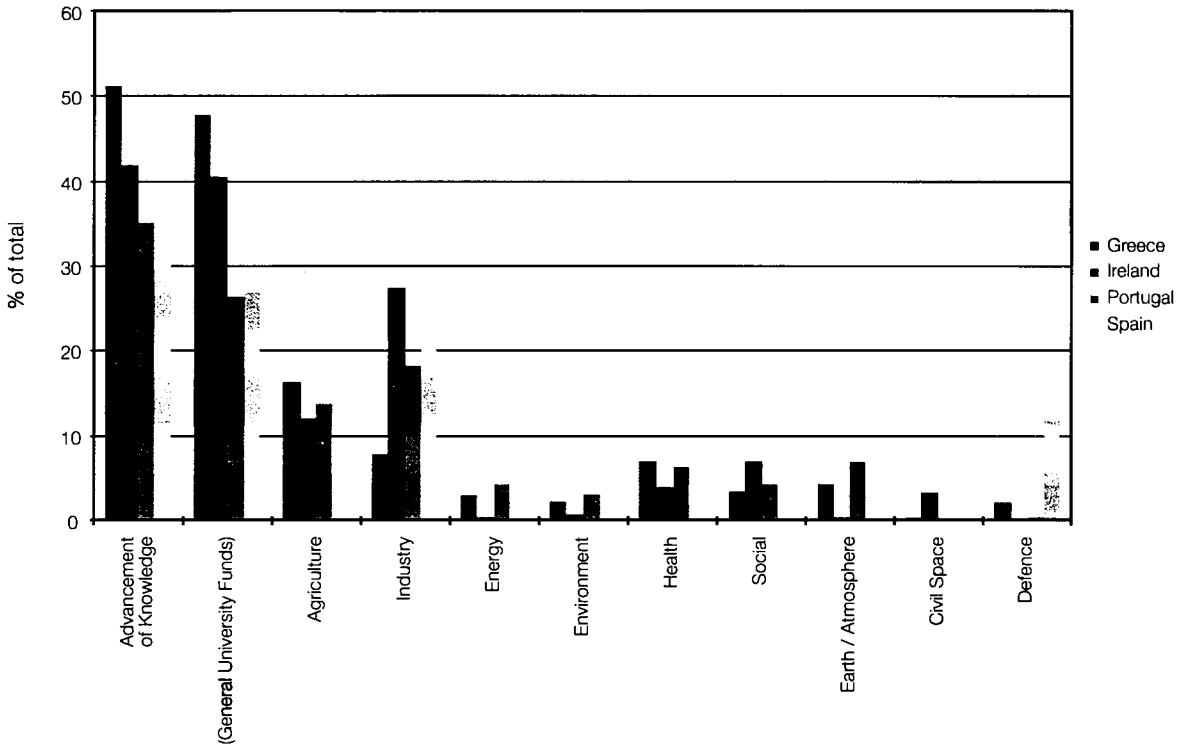
A further common feature of these three wholly Objective 1 countries is the role played by EU policies in stimulating R&D. CIENCIA and PEDIP in Portugal; EPET in Greece and STRIDE in all three countries have involved significant levels of funding for RTD and innovation. Perhaps related to this, Ireland and Portugal were the only OECD countries in which both public and private expenditure on R&D increased between the periods 1985-9 and 1990-2. In the context of co-

hesion at the European level, this is clearly of interest insofar as it seems unlikely that such levels of spend would have been sustainable through national resources alone.

With respect to *sectors* of activity, two points are worth making. First, and this is illustrated in Chart 4.2, in both Portugal and Greece, a very small proportion of R&D is undertaken by the private sector; just 27 and 22 percent respectively. This contrasts with a share of almost two-thirds in Ireland (among the highest in the OECD) and nearly one half in Spain. The second point concerns the areas on which R&D expenditure is focused. This is illustrated in Chart 4.3.

Chart 4.3

Government R&D Expenditure by Socio-Economic Objective



Source: OECD (1994)

Note: General University Funds are part of the funds assigned to "Advancement of Knowledge".

There are a number of interesting features of these expenditure priorities. Of particular note, Ireland and Spain are the highest spenders on industrial R&D (as a *proportion* of domestic expenditure) in the EU 12 while Greece and Portugal are the highest spenders on agricultural R&D.

As far as the *regional* dimension of policy is concerned, within the Cohesion countries, the emphasis is clearly on issues of national competitiveness. Indeed, as discussed earlier in this report, arguments for regional policy can be difficult enough to sustain in economies that are as whole underdeveloped in a European context. It is, therefore, scarcely surprising that regional development issues do not have a high profile in RTD policies in the Cohesion countries. Having said this, there are examples of attempts to dilute the concentration of RTD activities in the more prosperous regions. In Greece, part of the EU STRIDE funding is assigned to special measures for the most disadvantaged regions. However, this accounts for only a small proportion of the budget (3 percent) and seems unlikely to have any significant impact; as far as national policy is concerned there is no regional RTD policy in Greece. In Portugal, the focus is also on national RTD; however, the EU-funded CIENCIA Programme has been systematically oriented to try to redress regional imbalances in science and technology by ensuring that 50 percent of investment under the programme is outside the Lisbon region and by supporting specific projects in the least-favoured regions. At the same time, since the 1970s Portugal has been establishing higher

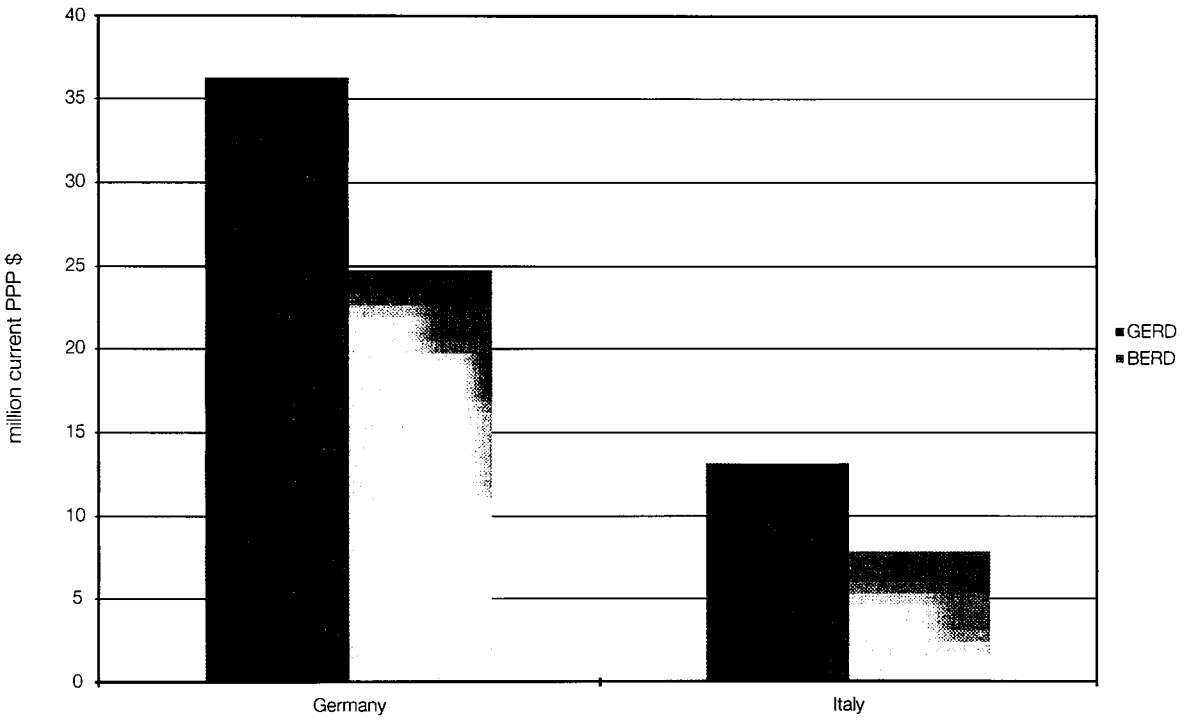
education establishments in regions where previously none existed. In Spain, too, RTD is a national policy and there is no regional policy orientation to policy. However, virtually all of the Autonomous Communities have established organisations to promote R&D and technological innovation at the regional level. Probably the most high profile technology initiative to take place in the problem regions is the Málaga technology park in Andalucía. Finally, in Ireland, there has been an attempt to bring R&D policy and industrial development policy closer together by restructuring the activities of the Industrial Development Authority (IDA) and the Science and Technology Agency (EOLAS). Two new agencies have been created - IDA-Ireland, concentrating on multinational firms, and *Forbairt*, concerned with the development of indigenous industry. While the regional orientation of policy remains limited (see Section 2.1.1 above), a feature of *Forbairt* is its strong regional organisation.

4.1.2.2 Germany and Italy

In the discussion of regional policy in Chapter 2, Germany and Italy were characterised as dual economies. The issues arising from the reunification of Germany and the Italian experience with implementing special policies for the *Mezzogiorno* make these two countries a pertinent grouping for the purposes of considering the regional impact of R&D policies. Indeed, it must be stressed that it is really only in this context that the grouping is relevant. As far as RTD policy *per se* is concerned, there is no convincing rationale for considering Germany and Italy as a distinct group, not least given that the relative importance of RTD spending differs widely between the two countries as do their overall budgets. These differences can be seen clearly from Chart 4.4.

Chart 4.4

R&D Total and Business R&D Expenditure



Source: OECD (1995).

Both this chart and the earlier Chart 4.1 make clear that support for R&D and innovation is a major focus of government policy in Germany. At the federal level, the BMBF (ministry for education, science, research and technology) is the main body responsible for policy, although specialist organisations are frequently used in its implementation and most of the SME research promotion programmes are operated by the AiF, an umbrella organisation for industrial research. The main *objectives* of the BMBF are:

- to support the transfer of scientific research results into competitive production

- to develop an efficient research infrastructure in the new *Länder*
- to support fundamental research and technology promotion concentrated on selected high technologies and the expansion of "precautionary" research, especially in the area of the environment
- to improve the basis for product-oriented R&D in firms through the promotion of pre-competitive research in key technologies such as IT, biotechnology, materials. Such research is mainly carried out in universities, national research centres and the Fraunhofer and Max Planck institutes
- to encourage the increased participation of SMEs in the innovation process by making the instruments of science and technology promotion simpler and more flexible
- to extend international co-operation in the areas of education, science and research.

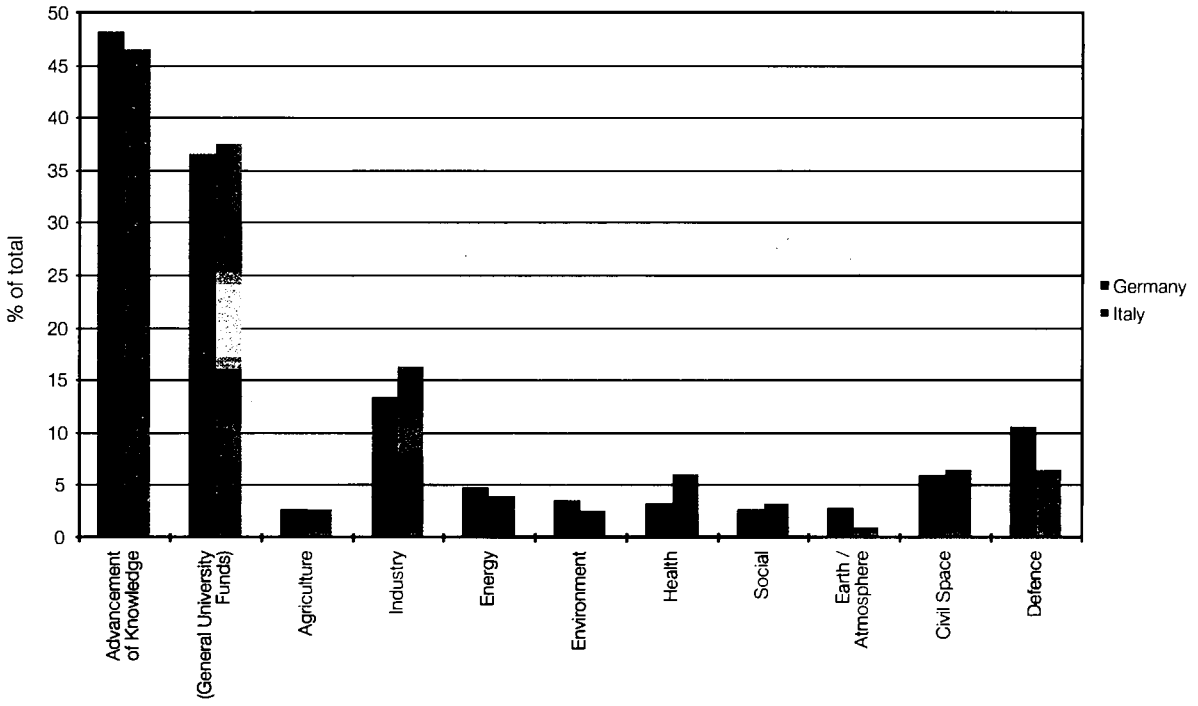
In Italy, the main responsibility for science and technology policy rests with MURST, the ministry for universities, scientific and technological research. A number of public research bodies also operate in specific fields, such as space research. In addition, the national research council (CNR) utilises a network of several hundred research institutes and funds private and public sector research as well as "mission-oriented" research projects. The main emphasis of policies to promote RTD in the business sector is on applied industrial research and innovation, reflecting the status of Italy as a net importer of technology. The main policy instrument is the Applied Research Fund which supports international and European collaboration, basic research projects carried out by industry, national research programmes for strategic technologies, training in R&D and participation in RTD activities by public institutions and consortia.

In terms of overall shares of spending between the public and the private sectors, a much higher proportion of the R&D spend is accounted for by the private sector in Germany than in Italy; 60.8 percent and 51.1 percent respectively. This places Germany towards the top of the range within the OECD and Italy around the median.

Regarding *sectors* of R&D spend, Germany, like Spain (although on a much larger scale), focuses much of public and private sector research activity around a number of advertised priorities including renewable energy, information technology and aerospace. In addition, there are State long-term research programmes in marine, polar and space research and technology. In Italy, research into specified fields is primarily carried out in the public sector; the main programmes to encourage RTD in the private sector do not operate around prescribed areas of research. The overall distribution of government R&D expenditure is set out in Chart 4.5.

Chart 4.5

Government R&D Expenditure by Socio-Economic Objective



Source: OECD (1994)

As in the Cohesion countries, most expenditure is accounted for by "advancement of knowledge" which includes general university funding. However, unlike the Cohesion countries, spending on agricultural research is relatively small. In common with the other larger European economies, both Germany and Italy spend significant sums on defence and civil space research.

As far as the *regional* dimension is concerned, the similarities in the regional economic structures of Germany and Italy are not reflected in current approaches to RTD in the problem regions. The OECD's regular review of science and technology policies noted that:

> "The primary goal of German research and development policy over the last few years has been to establish an efficient research environment in the new German *Länder*..."[9]

In contrast, the same report noted the demise of special RTD policies for the *Mezzogiorno* in the context of the ending of the separate policies for the south of Italy (see Section 2.1.2 above).

Following German reunification, the Science Council drew up recommendations which led to the formation of 24 new "blue list" institutes; 21 Fraunhofer Society institutions and working groups; two institutes and 28 working groups of the Max Planck Society. Industrial R&D in the new *Länder* is supported by a set of coordinated measures including R&D advisory agencies, and demonstration centres, support for new technology-based firms, assistance for increasing R&D staff resources and support of the award of R&D contracts by firms to research institutes. In 1992, planned measures to promote R&D in the new *Länder* amounted to some 313 MECU. In addition to the measures specific to the new *Länder*, firms in the east also have preferential access to all the specialised programmes operated by the BMBF.

In Italy, there are no separate measures for supporting RTD in the problem regions (other than those contained in the Objective 1, 2 and 5b plans and co-financed by the EU). In the past, separate support for research centres had been available in the context of *intervento straordinario* for the *Mezzogiorno*. There were also initiatives to develop science parks in the south; however, none of the measures introduced seemed capable of preventing research resources from migrating towards the Centre-North. For the most part, RTD and industrial development policies in Italy have always been operated with *national* economic development priorities in mind. In practice, this led to a striking imbalance in spending on research: in 1987 the public sector spent just 9 percent of total research funds in the *Mezzogiorno* (which contains 36 percent of the national population); private sector investment in industrial research in the *Mezzogiorno* accounted for a mere 3 percent of the national total (OECD, 1992).

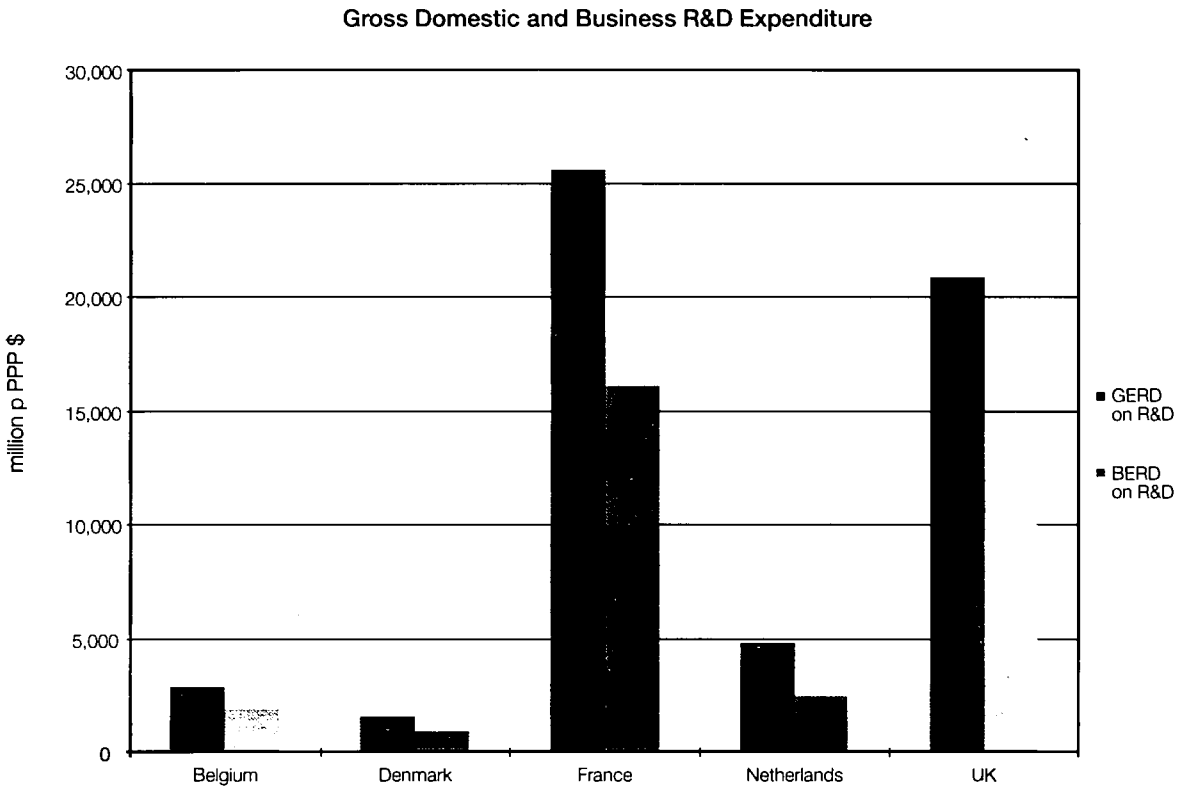
Although there is no regional RTD policy in Italy, the link between national regional policy and EU policy has been strengthened in the context of RTD policy by favouring projects located in Objective 1, 2 and 5b areas. Projects in these areas qualify for higher rates of award under the main programmes to support industrial R&D - the FRA (fund for applied research) and the FIT (fund for technological innovation). In fact, these programmes have always been available on a nationwide basis in Italy; however, the uptake of assistance by *Mezzogiorno* firms has always been significantly lower than would have been expected - accounting for just 5 percent of total spend under the FIT in 1990-94.

4.1.2.3 The "Northern European" Member States

There are five "northern European" Member States for which R&D expenditure data is available: Belgium, Denmark, France, the Netherlands and the United Kingdom. It will be recalled from Chart 4.1 that relative spending on R&D in France and the UK - at over 2 percent of GDP - is in excess of that found in the Netherlands, Denmark and Belgium (all around 1.7 percent). The differences are even more stark in absolute terms, as Chart 4.6 shows.

[9] OECD, 1994.

Chart 4.6



Source: OECD (1995)

As can be seen, France and the UK spend considerably more than the remaining northern European Member States in respect of both overall and business-related R&D expenditure. These two countries are the focus of discussion in the remainder of this section.

In France, responsibility for RTD policies rests with the Ministries for Industry and Research, the latter incorporating higher education. The objectives of R&D policy were most recently defined in June 1994. These involve the promotion of research with a view to assuring the competitiveness of the country, reinforcing the national R&D effort to keep pace with main competitors, making up the shortfall in research undertaken by firms, and reinforcing and "federating" public research. This contrasts with the philosophy expressed by the UK government. In the United Kingdom, the Department of Trade and Industry is the main government department responsible for policies promoting innovation and technology. The areas where it is believed DTI resources will be used to the best advantage are set out in two White Papers, one on science, engineering and technology (issued by the DTI in April 1993) and the second on "competitiveness" referred to above. In the former, it was announced that the partnership between government, industry and academia would be strengthened to ensure that the nation's science and technology is better geared to stimulating wealth creation. In the latter, action was announced to create the climate for industry to invest more of its own resources profitably on innovation and research and development.

DTI resources are to an increasing extent being targeted on:

- promoting innovation
- encouraging best practice
- simplifying access to sources of help
- facilitating the exploitation of technology, from the science base in the UK, in Europe or elsewhere.

In adopting these priorities, there has been a shift of resources away from *technology development*, where industry already invests considerable resources, towards *technology transfer*. This is best illustrated by the closure of the Advanced Technology Programmes.

In France, support for RTD covers the spectrum of activity from basic industrial research through to technol-

ogy transfer. General support is provided in the form of a tax credit for research expenditure of up to FF40 million (6 MECU) per firm per year. In addition, a number of major targeted programmes are operated in the fields of healthcare, transport, electronics and information technology through co-ordinated programmes involving a range of relevant ministries. The "technological leaps" initiative aims to encourage basic industrial research in areas put forward by industry, mainly large firms. The programme is run by the ministry for research. There is a continuum between this programme and the major innovative projects scheme which is primarily the responsibility of the ministry of industry. Both of these initiatives are mainly of relevance to large firms and are administered centrally. In addition, however, there has been growing emphasis in recent years on technology transfer, innovation and technology dissemination. This has involved a wide range of initiatives which are targeted towards SMEs to a greater extent and which are delivered at the regional level by local delegations of the ministries of research and industry and by the national agency for innovation, ANVAR.

In the field of research and development, the emphasis of UK policy is on promoting collaborative research. The main programme in this vein is LINK which supports pre-competitive R&D in specified spheres of activity and aims to encourage the rapid uptake of research ideas. Government funding covers up to 50 percent of the cost of each programme. LINK initiatives are restricted to closely-defined areas of research such as optoelectronics systems, structural composites and ventilation, air-conditioning and refrigeration. In contrast with countries such as France and Germany, support in the UK for applied research and development is virtually non-existent. This is particularly so with respect to non-activity-specific research and large firms. There is limited support for R&D to be undertaken by SMEs, the main measures being the SMART and SPUR programmes. Under SMART, individuals or firms with fewer than 50 employees are invited to compete for R&D funding. Successful proposals can receive grants of up to ECU 200,000 to enable an innovative idea to be followed through from concept to production. SPUR provides grants of up to 30 percent of eligible costs (subject to an award ceiling of £150,000 (0.2 MECU)) for the development of new products and processes involving a significant technological advance; it is limited to firms with fewer than 250 employees.

As noted earlier, the focus of UK policies to promote competitiveness has been increasingly on technology transfer. Measures include:

- Innovation and Technology Counsellors in 22 so-called Business Links to ensure that businesses have full local access to the range of information, advice and services they require.

- Teaching Company Scheme (TCS) - this scheme assists the transfer of technology and expertise from universities into industry by placing graduates into firms for two-year secondments to carry out projects under the joint supervision of academics and company staff. It operates UK-wide.

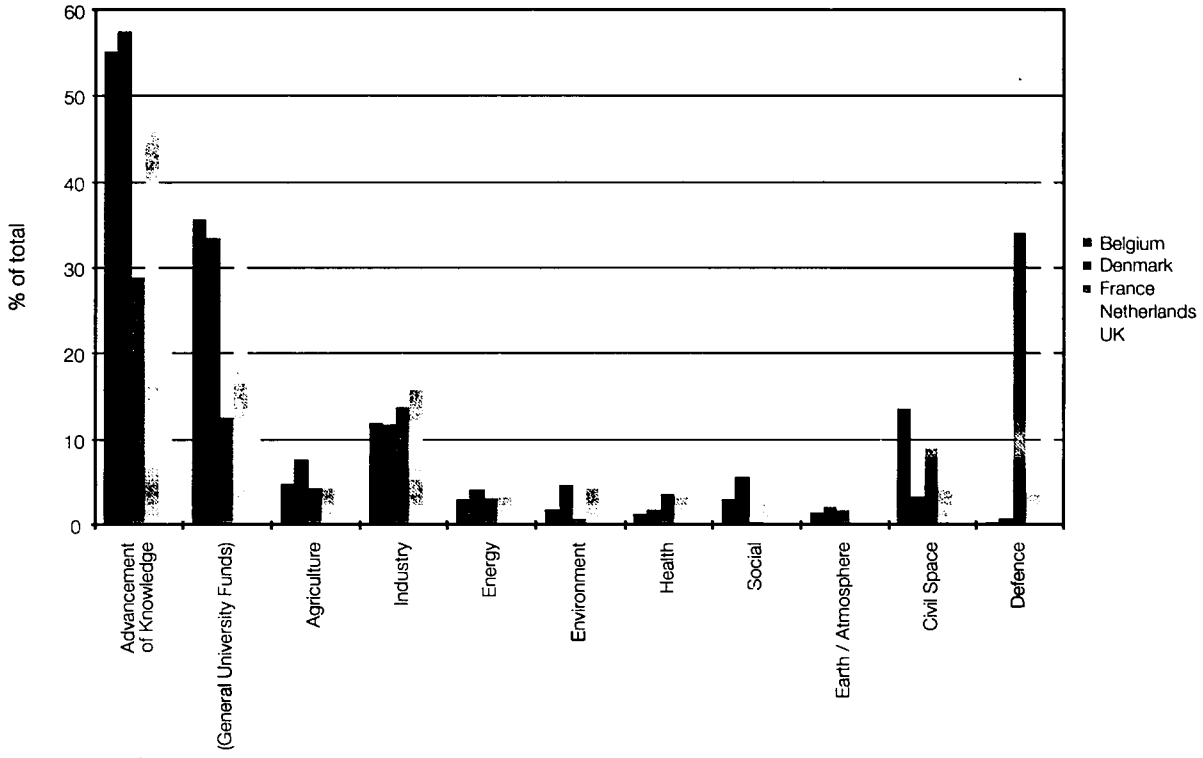
In terms of *sectoral* emphasis, it has already been noted that France operates a number of targeted technological development programmes and that the UK LINK programme addresses very specific research objectives. However, the most striking feature of R&D spending in the two countries is the extent to which it is defence-related (see Chart 4.7). Only the US assigns a greater proportion of the R&D spend to defence within the OECD group. On the other hand, these figures can be expected to decline; the latest data relates to expenditure in 1992 and 1993, since when defence spending in both the UK and France has been significantly reduced.

As far as the *regional* dimension is concerned, RTD and innovation policies in both countries are primarily concerned with *national* competitiveness. All the measures described above are operated on a nationwide basis in the two countries. That having been said, it is clear that the allocations made are likely to be greater where there are concentrations of appropriate business and research institutions and an innovation-friendly operating climate. Moreover, by their nature, defence and space-related research are particularly unlikely to be evenly distributed.

There are, however, initiatives to encourage greater participation of *all* regions in innovation in both countries. In France, the R&D policy statement referred to earlier emphasised the role of R&D in regional development through the diffusion of technologies and through a new instrument, the regional plans for the development of higher education and research. In addition, for a number of years there has been an explicit policy aimed at relocating public research institutes away from Paris. In the UK, 12 regional technology centres have been established with joint industry and government funding. These cover most of the country and seek to encourage the flow of knowledge between institutes of higher education and business, and to provide training for the introduction and management of technology, especially in SMEs. In addition, in 1992 a new strategy for research and technological development entitled "Innovation 2000"was launched in *Northern Ireland*. This outlines the way in which government intends to stimulate technical change to ad-

Chart 4.7

Government R&D Expenditure by Socio-Economic Objective



Source: OECD (1994)

dress the region's low average level of productivity and growth rate. At the same time as this strategy was launched in Northern Ireland, more prominence was being given to Northern Irish RTD in both a UK and an EU context. The RTD strategy is one of several strategy documents published as part of the reorientation of industrial policy in Northern Ireland which has taken place since 1990. The documents fit within the common framework outlined in "Competing in the 1990s"[10]. Policy changes were accompanied by institutional changes as responsibility for RTD measures was given to a single body, the Industrial Research and Technology Unit (IRTU) in March 1992. The unit gives "strategic focus and increased impetus to the use of R&D for wealth creation and industrial innovation".

4.1.3 The Regional Impact of Competitiveness Policies

The focus of the previous section was on RTD and innovation policies operated by the Member States, and in particular on the extent to which, if at all, there is a regional dimension to policy. Overall, it is clear that policies to promote RTD and innovation are operated with national policy objectives in mind. There are some attempts explicitly to stimulate innovation in the problem regions, but, where this does take place, it is primarily in the form of encouraging technology transfer and the uptake of innovation rather than innovation *per se*.

The picture which emerges is scarcely surprising: research and development policymakers are understandably unlikely to be willing to jeopardise R&D policy objectives for the sake of promoting less viable projects in the problem regions. Moreover, in Italy, where in the past there was a practice of reserving a quota of R&D spend for the *Mezzogiorno*, this led to an overall underspend on policy. This illustrates very clearly the reason for the lower levels of spending in the problem regions; R&D policy is essentially demand led, and demand is more likely to emanate from regions that are already prosperous. Moreover, for the prosperous regions, this promotes the trends towards a "virtuous" cycle of innovation and competitiveness. The reverse is true in the less prosperous regions; indeed, the uptake of R&D programmes should perhaps be interpreted as a measure of the regional problem, rather than a form of covert discrimination against problem regions by national policymakers. In the con-

[10] Department of Economic Development, 1990.

text of the problem regions, the tendency is more likely to be towards a vicious circle of lack of innovation and increasing inability to compete.

In spite of the emphasis of competitiveness policy on national objectives, there is, in many countries, explicit recognition of the need to sustain national competitiveness by improving the competitiveness of the problem regions. The United Kingdom and Germany both operate special and distinct policy measures for parts of their territories (Northern Ireland and the new *Länder*) on more generous terms than in the remainder of the country.

Also widespread is the increasing emphasis on the "regionalised" delivery of competitiveness policies. In France, following the decentralisation and deconcentration processes of the early 1980s SME, technology transfer and diffusion have increasingly been operated at the regional level. In the United Kingdom, the TECs and LECs, and, more recently, the Business Link network have sought to make policy delivery more sensitive to local needs. In Germany and, to a lesser extent, in Spain, this approach is partly inherent in the institutional structure.

In this section, the impact of competitiveness policies on cohesion is considered. For these purposes, impact refers to:

i. the *distribution* of national expenditures between the regions; and

ii. the *effect* of these policies.

4.1.3.1 The Regional Distribution of Expenditure

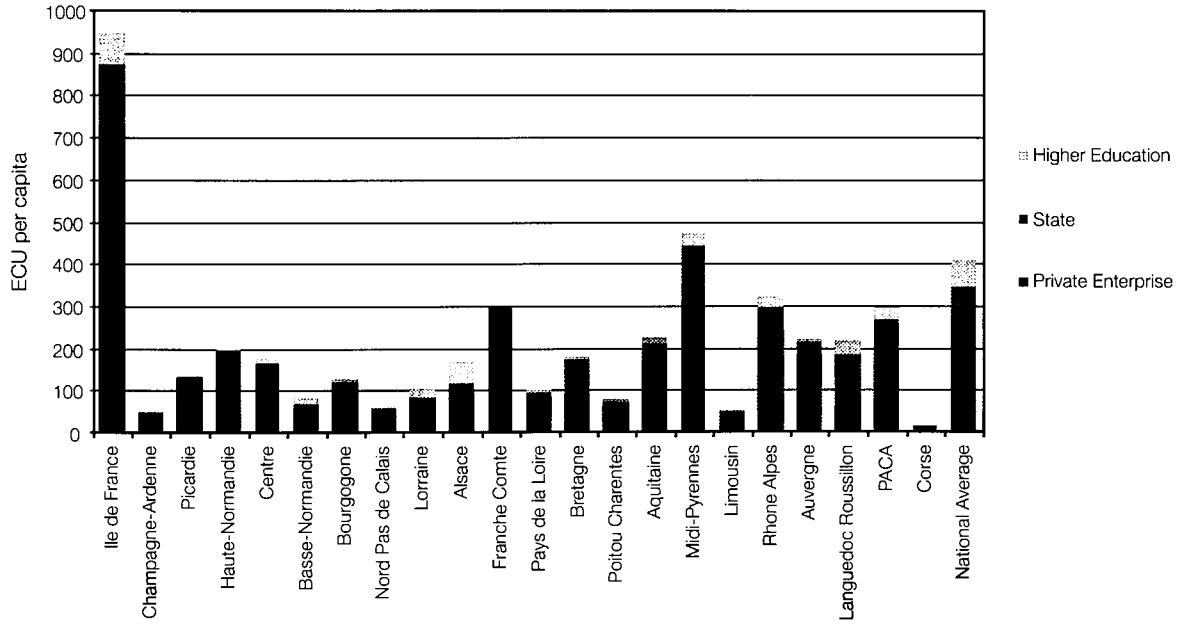
Relatively little information is available on the regional distribution of expenditure on RTD and innovation in the EU. This is understandable since the policies considered for the most part explicitly do not address spatial objectives. Nevertheless, the EU's REGIO database provides some data on the regional distribution of research personnel and expenditure in the private, government and higher education sectors. This section begins by considering the overall levels of spend on R&D for the regions for which data are available and the different sectors of the economy from which that expenditure is derived. The second part of this section considers the so-called business enterprise sector expenditure on R&D (BERD) and focuses on the extent to which this is financed by government.

4.1.3.1.1 Regional Expenditure on R&D

On the REGIO database, regional-level information on overall R&D expenditure - broken down into higher education, State and private enterprise spending - is available for three of the case study countries covered in this report: France, Italy and Spain. In addition, equivalent information has been generated for the United Kingdom utilising CSO sources.

Chart 4.8

France: Regional Expenditure on Research and Development



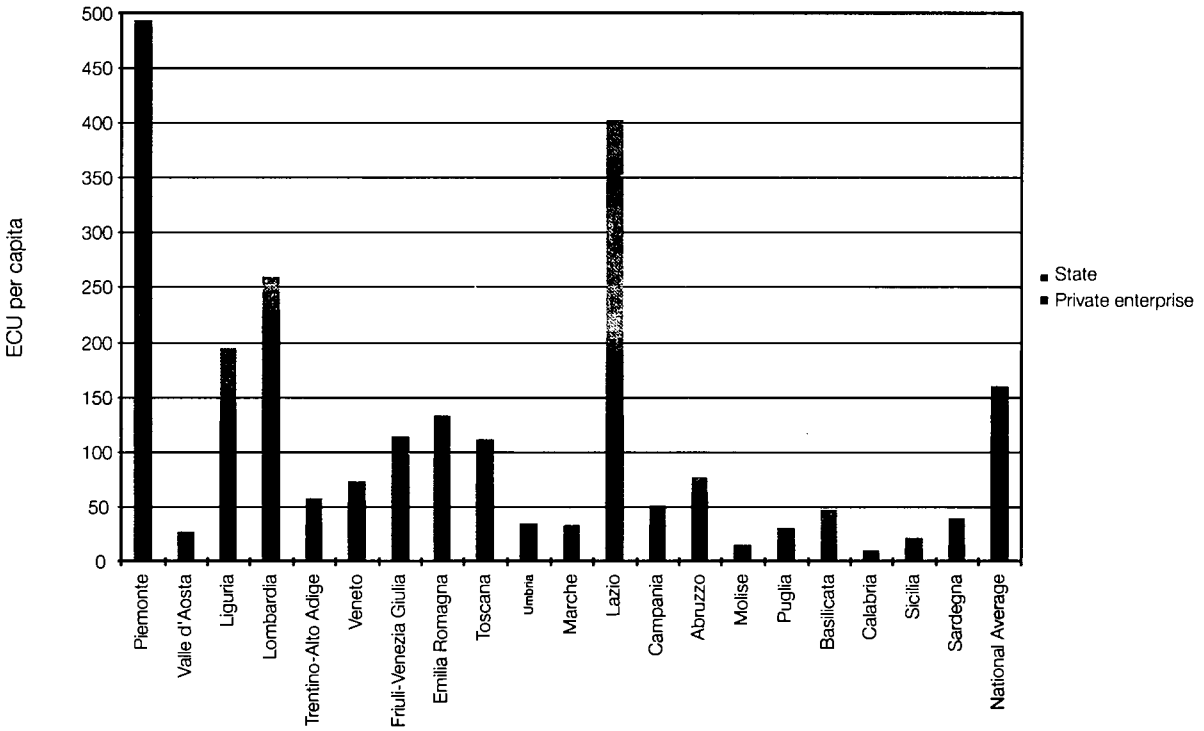
Source: REGIO, EUROSTAT

The data for France are particularly striking. R&D expenditure is very heavily concentrated in the Paris region, Île de France. This is illustrated in Chart 4.8. The Paris region accounts for some 43 percent of all R&D expenditure in France and an even higher proportion of R&D financed by the private sector. The R&D spend in the next highest spending region (in per head terms), Midi-Pyrénées, is just 11 percent of the spend in Paris. Expenditure in the Midi-Pyrénées region is clearly affected by the concentration of aerospace activities in the Toulouse area. The next highest spending region in France is Rhône-Alpes. This accounts for just 7.5 percent of the national R&D spend while the per capita expenditure is a third of that in Paris. At the other end of the spectrum, the less prosperous regions fare less well in the distribution of R&D expenditure. In Nord-Pas de Calais, expenditure *per head* on R&D is only 6.4 percent of that in Paris. In Limousin the figure is even lower with the region accounting for less than 0.2 percent of the national R&D spend; per capita spending on R&D is 20 times higher in Paris than in Limousin.

Expenditure by sector (ie. higher education, State, private enterprises) varies widely between regions. In all regions except Languedoc-Roussillon, most R&D expenditure takes place in the private sector; indeed, Languedoc-Roussillon is the only region in which private sector spending accounts for less than 30 percent of the total. In Bretagne, too, the private sector contribution is small at only around half of the total. On the other hand, in a number of the more prosperous regions (Île de France, Basse-Normandie, Alsace, and Rhône-Alpes) less than 80 percent of the spend is contributed by the private sector. This contrasts with the position in a number of the less prosperous regions (Nord-Pas de Calais, Limousin and Auvergne) where, although the overall spend tends to be lower, a greater proportion of the total comes from private rather than public sources.

Chart 4.9

Italy: Regional Expenditure on Research and Development



Source: REGIO, EUROSTAT

Note: Government expenditure for Valle d'Aosta is not available

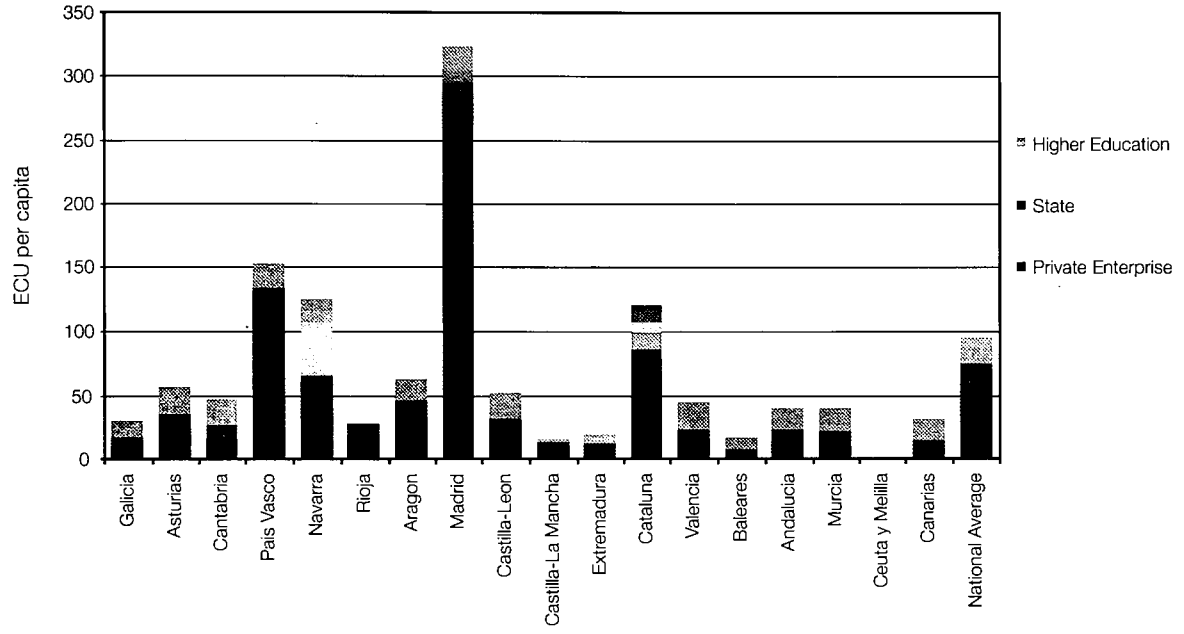
In Italy, the data available on the regional distribution of R&D expenditures do not include the higher education sector; this accounts for around 21 percent of the national R&D spend. Information is, however, available on the distribution of private sector and government spending. This is presented in Chart 4.9 on a per capita basis. As in France, the notable feature is the concentration of spending in the more prosperous regions.

Almost half of State and private sector R&D expenditure is accounted for by two regions, Piemonte and Lombardia. In contrast, in the eight regions of the *Mezzogiorno,* expenditure per head on R&D is very significantly below the national average. Indeed, in absolute terms, these regions account for only eight percent of private and State R&D funding (compared with 36 percent of the national population).

As in France, the distribution of funding between the public and private sectors also varies between regions. Lazio alone receives over half of the State funding of R&D in absolute terms. Moreover, the relative share in the region is skewed very markedly towards the public sector which, as Chart 4.9 shows, accounts for around a third of the R&D spend in the region; similar proportions are found in Basilicata and Sardegna. However, in Abruzzi and Molise, a higher proportion of R&D is funded by private industry than the national average (elsewhere in the *Mezzogiorno*, a greater proportion of R&D funding is by the State than the national average). In terms of overall shares, the *Mezzogiorno* accounts for 7 percent of private sector R&D spending and 11 percent of State funding.

Chart 4.10

Spain: Regional Expenditure on Research and Development



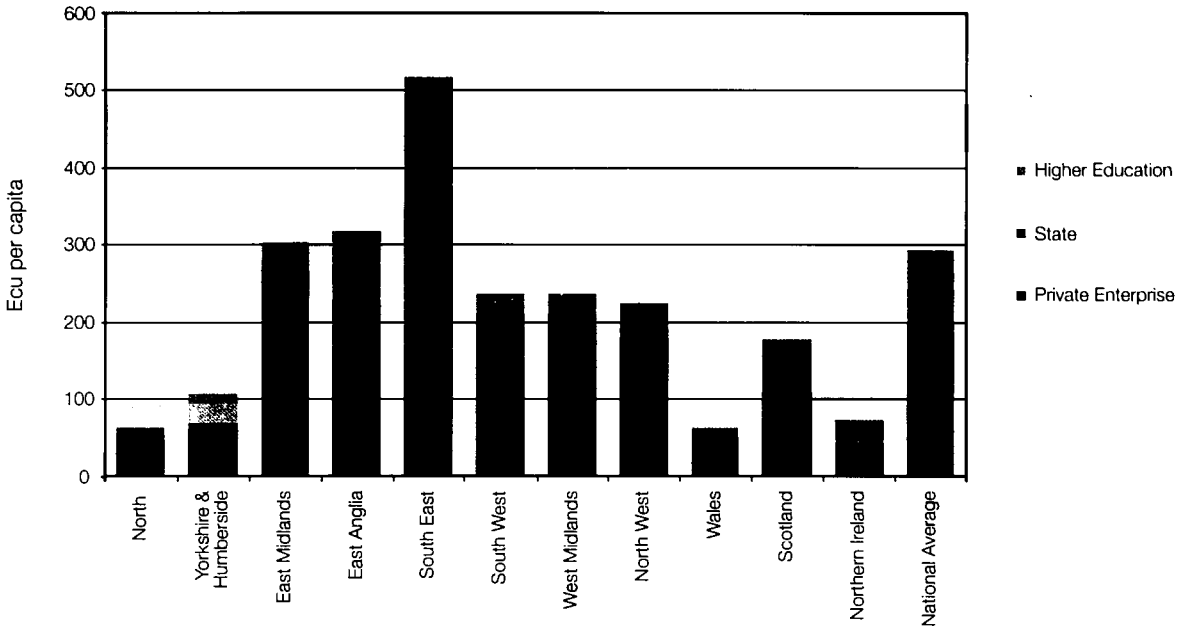
Source: REGIO, EUROSTAT

In common with Italy and France, R&D expenditure in Spain is concentrated in the more prosperous regions of the country. In per capita terms, spending in Madrid is significantly higher than in any other Spanish region, followed by other prosperous regions, Cataluña, País Vasco and Navarra - see Chart 4.10. Indeed, Madrid alone accounts for 42 percent of total R&D expenditure (against a share of 13 percent of the national population) whilst the Objective 1 regions collectively account for 24 percent of the total R&D spend and almost 60 percent of the national population.

With respect to the distribution of expenditure between the private and public sectors, on average, around 55 percent of the national spend is accounted for by the private sector. However, there are considerable regional variations in the composition of the spend. In a number of the Objective 1 regions (Galicia, Cantabria, Valencia, Andalucia and Murcia), the private sector contribution is well under 40 percent of the regional total. On the other hand, the proportion of private sector funding in Madrid is close to the national average and on a par with the proportion contributed by the private sector in Castilla-La Mancha, an Objective 1 region. Moreover, it is notable that 61 percent of State funding is channelled into Madrid while the private sector spend for the region amounts to only 43 percent of the national total. Conversely, in Castilla-León, also Objective 1, business in the region accounts for 3.4 percent of the Spanish private sector R&D spend whereas State spending in the region amounts to only 1.8 percent of the total.

Chart 4.11

UK: Regional Expenditure on Research and Development



Source: EUROSTAT, CSO (1995)

In common with the other countries for which regionalised R&D expenditure data are available, spending in the UK is concentrated on the most prosperous regions, and especially the South East of England. Per capita spending across the regions is illustrated in Chart 4.11. In absolute terms, the South East accounts for some 54 percent of total R&D expenditure; the region contains just over 30 percent of the national population. At the opposite end of the spectrum, Northern Ireland, the least prosperous region in the UK, accounts for just 0.7 percent of the total national spend on R&D, but 2.8 percent of the national population.

The composition of expenditures across sectors also varies between regions. On average, around 70 percent of R&D expenditure is accounted for by the private sector. However, less than 50 percent comes from the private sector in three regions: East Anglia (the second most prosperous region in the UK, with GDP higher than the EU average), Scotland and Northern Ireland. In the East and West Midlands, the South East and the North West (the second poorest English region), the private sector contribution exceeds 70 percent of the total spend. State expenditure also varies widely. In considering the relative contributions of the public and private sectors, there are some parallels with Spain. For example, East Anglia receives almost 6 percent of State R&D funding, but businesses in the region contribute just 3 percent of private R&D spending; in contrast, in the North West, businesses accounted for 10.5 percent of the national private sector spend, but just 3 percent of State R&D expenditure is channelled into the region.

4.1.3.1.2 Government Funding of Private Sector R&D

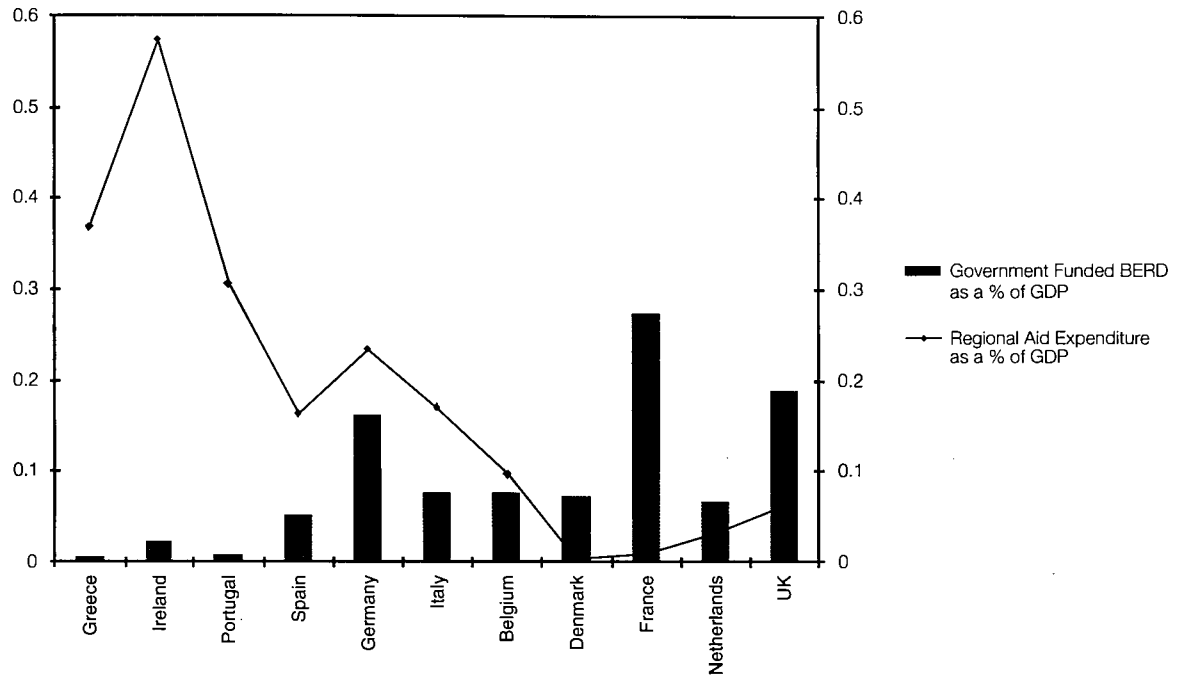
The section above has focused on overall levels of R&D spend in the regions, considering the distribution of expenditure between regions and sectors. This section looks at the extent to which business enterprise sector R&D (BERD) is financed by government and the regional distribution of such finance. The aim here is to provide some basis for comparing, in a regional context, levels of regional aid with levels of government funding of R&D.

There are two principal sources of information on government funding of R&D in the business sector. First, the European Commission undertakes regular surveys of the State aid spending of the EU countries, including R&D aid. Second, the OECD also undertakes statistical work in the field. The main disadvantage with the Commission surveys for the purposes of this study is that substantial amounts of government funding of R&D in the private sector are excluded from the analysis because the funding does not constitute State aid for the purposes of Article 92 of the EC Treaty. This section, therefore, takes the OECD figures as its start-

ing point. Before proceeding to consider the regional distribution of expenditures, it is worth providing some indication of overall orders of magnitude of R&D and regional aid spending.

Chart 4.12

R&D and Regional Aid funding as a % of National GDP



Source: OECD (1995), EUROSTAT, EPRC Calculations

In terms of overall government funding of BERD, the OECD figures suggest that expenditure in the EU11[11] amounted to some 8,311 MECU, around 0.15 percent of total EU GDP[12]. Expenditure on regional incentives by the same Member States is of a similar order of magnitude; the mean spend over the period 1989-93 was 7,229 MECU or equivalent to about 0.13 percent of EU GDP.

However, the distribution of spending on the two policy areas is by no means even. Chart 4.12 shows very wide variations in the relative importance of R&D and regional aid expenditures between countries. As a proportion of national GDP, the four Cohesion countries spend significantly more on regional aid than do the northern European countries. Moreover, all four countries spend in excess of 0.15 percent of national GDP on regional aid while spending less than 0.05 percent of national GDP on R&D support. In the five northern European countries, the position is reversed; four of the five (Belgium is the exception) spend very significantly more on R&D support to firms than they do on regional incentives. In the two so-called dual economies, the position is different again. Both spend significant sums on regional aid as a proportion of national GDP (more than Spain, but not as much as the other three Cohesion countries), but both also spend significant sums on R&D. In short, the poorer countries of the EU channel a large proportion of national resources towards regional policy, while the more prosperous countries focus principally on R&D; in between, in the two dual economies, there are significant levels of intervention in both policy areas.

Chart 4.12 focuses on the relative importance of R&D support and regional aid in relation to the size of the *national* economies; however, it is important to remember that the national economies vary considerably in size and that a consideration of the *absolute* levels of spend gives a very different picture. One illustration of this is that French government expenditure on BERD amounted to 2,916 MECU, whilst the equivalent

[11] Data are not available for Luxembourg.
[12] For most countries the data relate to 1992. For Belgium, Denmark and Greece the data are for 1991; for Portugal the data relates to 1990.

figure for Greece is 3.6 MECU. *Even in per capita terms*, this means that France spends 146 times as much on R&D support as does Greece.

An illustration of the relative expenditures in absolute terms is given in Chart 4.15 and Chart 4.16. For the purposes of comparison, similar illustrations of shares of population and GDP in the Community are given in Chart 4.13 and Chart 4.14 respectively.

Chart 4.15 shows that, in spite of the high levels of apparent spend on regional aid by the Cohesion Four, in absolute terms, this expenditure is about on a par with the share of population of those countries in the EU total. Similarly, while expenditure on regional aid in Italy and Germany appears low compared with the Cohesion country spend illustrated in Chart 4.12, the real volume of spending involved only becomes apparent when considered in absolute terms; these two countries together account for 72 percent of regional incentive spending in the EU, compared with shares of 40 percent and 45 percent of EU population and GDP respectively.

Chart 4.13 **Shares of EU12 Population (1993)**

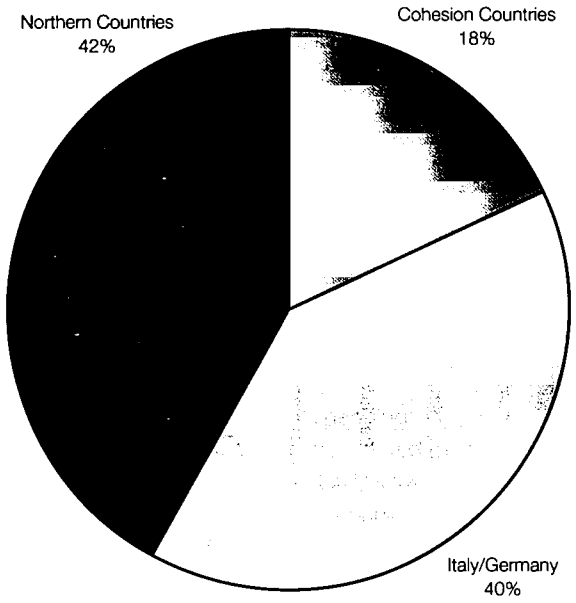
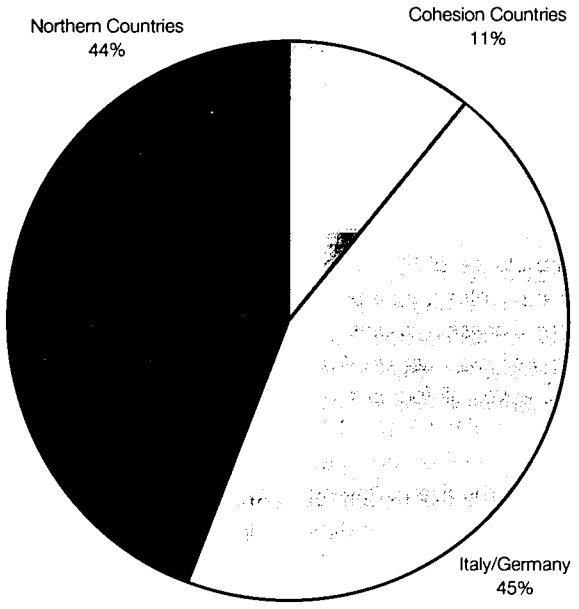
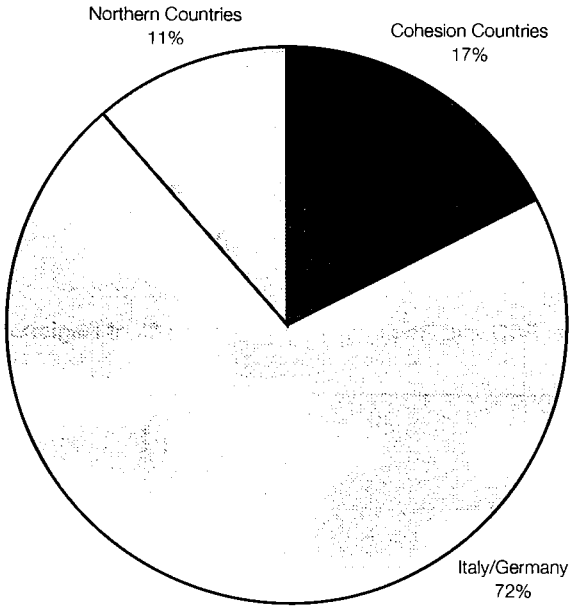


Chart 4.14 **Shares of EU12 GDP (ECU 1993)**



Source: EUROSTAT

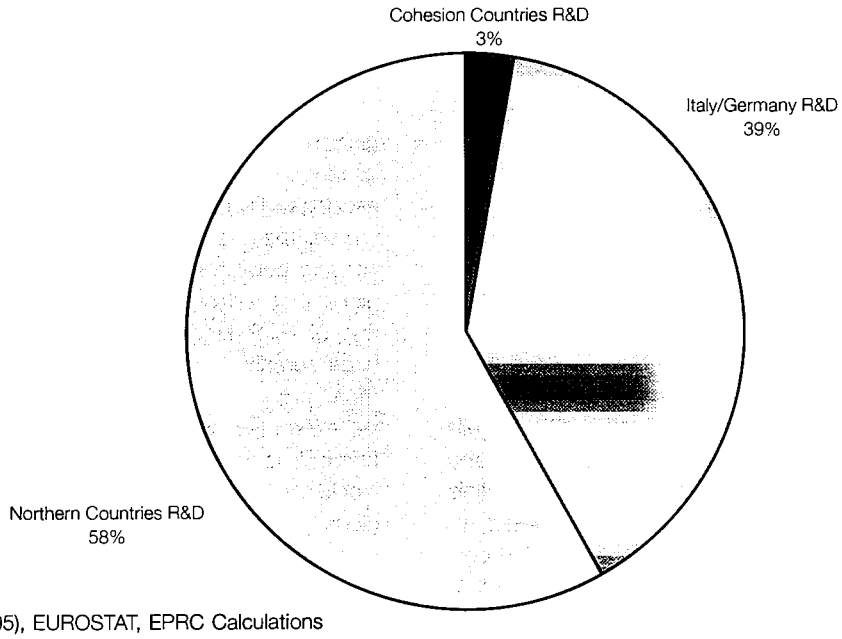
Chart 4.15 Shares of Regional Incentive Expenditure



Source: OECD (1995), EUROSTAT, EPRC Calculations

Chart 4.16 shows that spending on R&D in Italy and Germany combined is slightly less than what would be expected on the basis of their shares of population and GDP in the EU total. However, the situation in the Northern Countries and the Cohesion Four is dramatically different. Indeed, Chart 4.16 illustrates the extent to which Chart 4.12 underplays the scale of R&D funding in the north and exaggerates the R&D spend in the Cohesion Countries; this is a direct consequence of the small size of the Cohesion Four economies compared with the Northern Countries. Chart 4.16 shows Cohesion country spend on R&D support accounting for just 3 percent of the EU total, *about a quarter* of what would be expected on the basis even of their share of EU GDP, let alone population. Conversely, the higher spend on R&D support in the Northern countries and the larger size of those economies is reflected in a significantly larger share of overall R&D spend than would be expected on the basis of GDP or population.

Chart 4.16 **Shares of Government Funded Business Enterprise R&D**

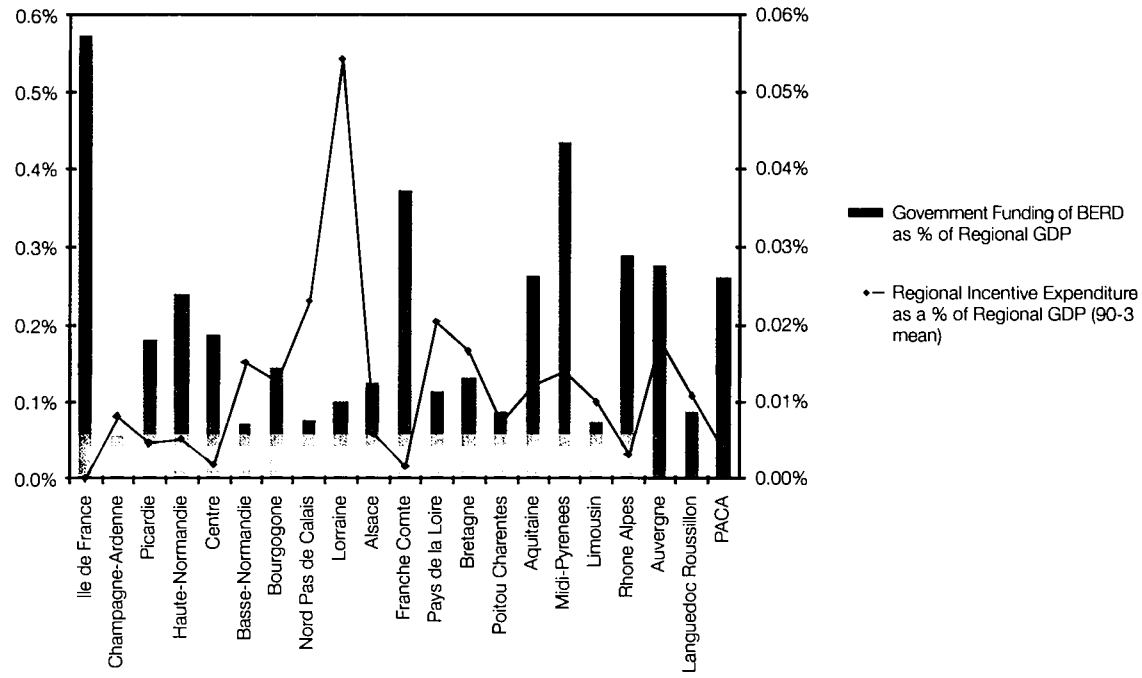


Source: OECD (1995), EUROSTAT, EPRC Calculations

As far as the *regional distributions* of government funding of BERD are concerned, calculations are based on the spread of private sector spending on R&D set out in the charts discussed earlier. Clearly, this assumes that the availability and uptake of government funding of BERD remains the same across regions; in fact, this may not be so given the different sectoral emphases of government R&D policies and the different sectoral concentrations of the various regions. Nevertheless, the approach remains the best approximation of government spending on BERD in the regions, in the absence of more concrete data.

Chart 4.17

France: R&D and Regional Aid Funding as % of Regional GDP

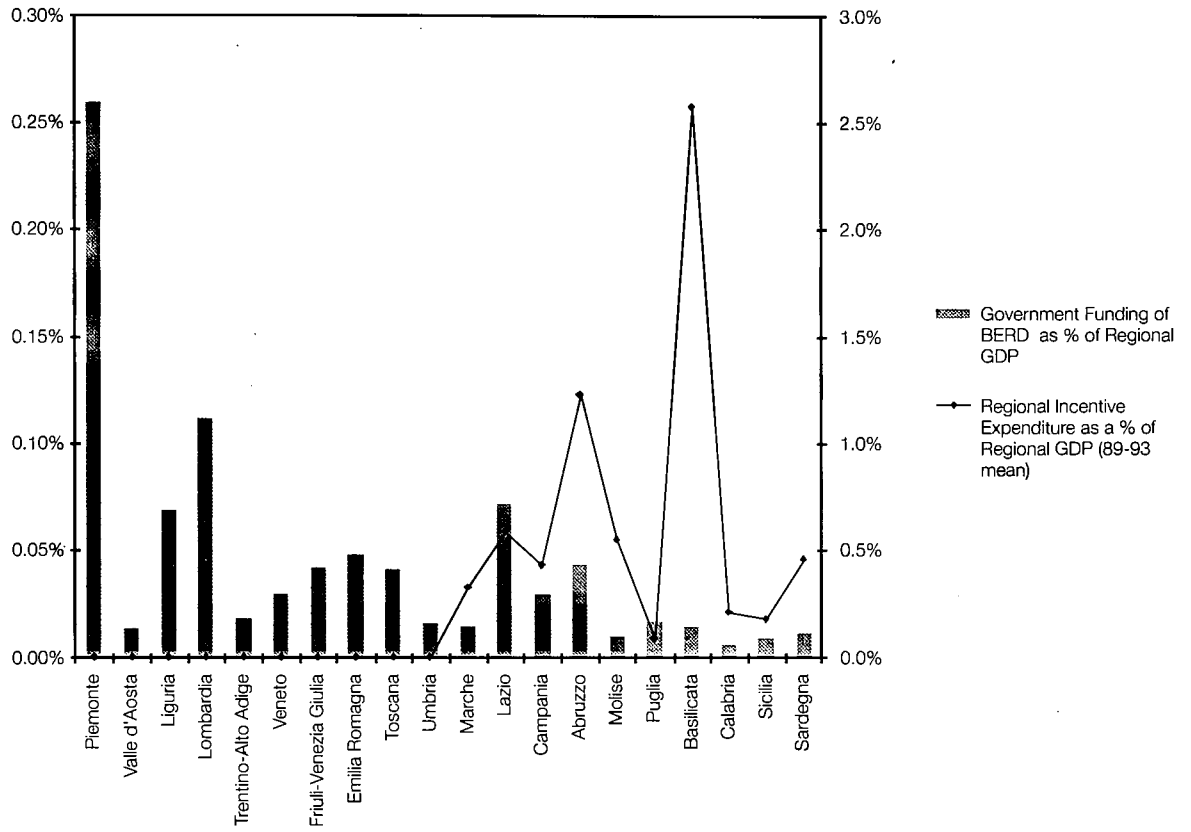


Source: OECD (1995), REGIO, EPRC Calculations

In considering Chart 4.17, it is essential to note that the scales for R&D and regional aid are different; indeed, the R&D scale is ten times the scale for regional aid funding. The scale chosen is obviously determined by the volume of spend and reflects the far higher levels of R&D expenditure compared to regional aid funding in France (see Chart 4.12). It is notable that, in virtually all regions (data are not available for Corsica), government funding of BERD represents a larger proportion of regional GDP than is contributed by regional aid; this is so even in the least prosperous regions such as Nord Pas de Calais and Limousin. The chart shows that the highest contribution of regional aid to regional GDP is in the Lorraine region; however, it is striking that the contribution of government funding of BERD in the Paris region is more than 10 times the value of regional aid in Lorraine. In spite of the difference in scales necessitated by the very different volumes of funding involved, there is a visible complementarity in the relationship between the two sources of funds; those regions that receive most in regional aid as a proportion of GDP tend to receive least in R&D aid. Perhaps surprising, however, is the extent to which the more prosperous regions benefit from R&D funding as expressed in regional GDP terms. In absolute terms, it is to be expected that expenditure on R&D would be concentrated in the more prosperous regions; however, Chart 4.17 shows that, for the most part, the more prosperous regions benefit much more from R&D funding *as a percentage of regional GDP* than do the poorer ones from regional aid.

Chart 4.18

Italy: R&D and Regional Aid Funding as a % of Regional GDP



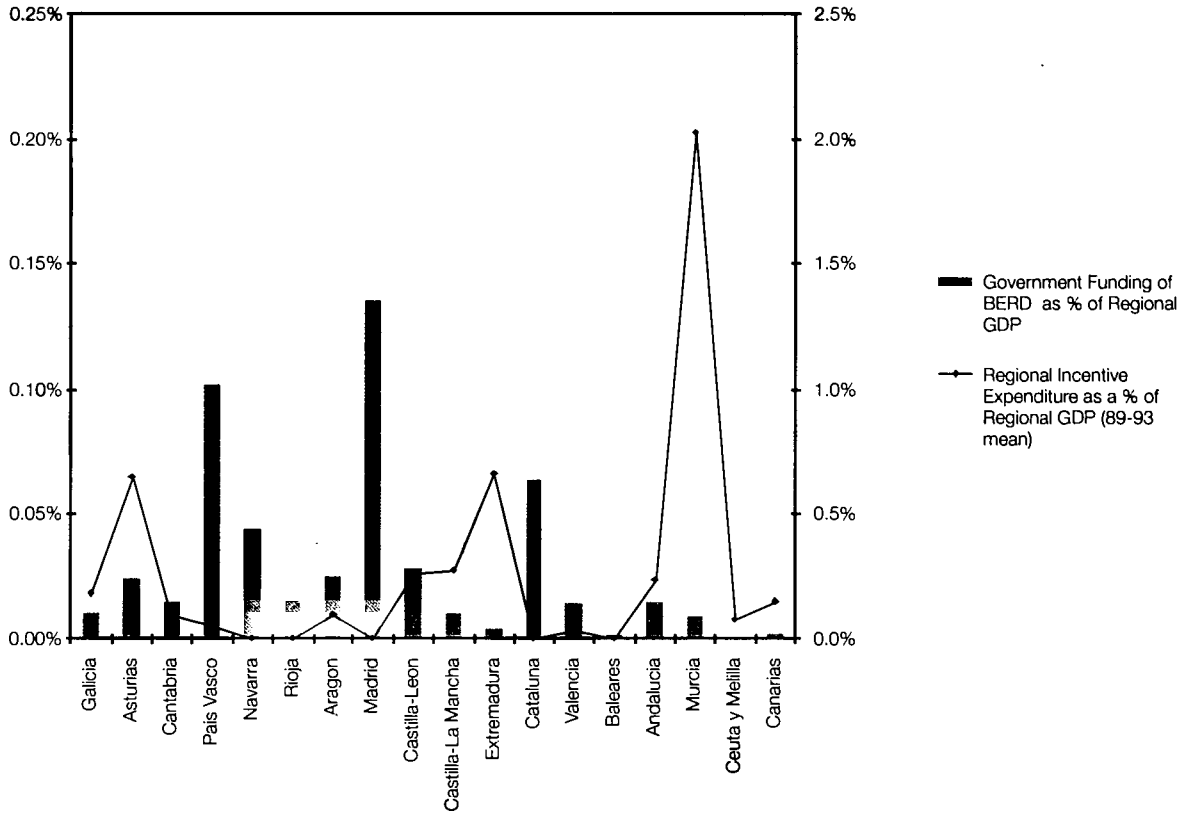
Source: OECD (1995), REGIO, EPRC Calculations

For the Italian data presented in Chart 4.18, the scales for measuring assistance also differ between the two policy types. However, reflecting the very different *volumes* of spending on the two policy areas (see Chart 4.12), compared with France, the positions are reversed. As discussed in the chapter on Member States' regional policies (Chapter 2), Italian regional policy accounts for a significant proportion of regional GDP in some parts of the *Mezzogiorno*, although there is not always a direct correlation between prosperity and the contribution of regional aid to regional GDP. In Abruzzi, for example, regional GDP is 90 percent of the EU average and regional aid represents 1.2 percent of GDP; in contrast, regional GDP in Calabria is just 60 percent of the EU average and regional aid amounts to only 0.2 percent of (a substantially smaller) regional GDP.

Taking the *Mezzogiorno* as a whole, the contribution of government funding of BERD to regional GDP is very small; only in Abruzzi - soon to lose its Objective 1 status - does the contribution even approach 0.05 percent of regional GDP. In contrast, and as in France, in the more prosperous regions R&D funding makes a larger contribution to regional GDP than in the poorer regions; indeed, the pattern in France is replicated in Italy. In Piemonte and Lombardia, the wealthiest regions, the share of regional GDP accounted for by government funding of BERD is substantially greater than elsewhere and this even although regional GDP is itself, by definition, substantially bigger.

Chart 4.19

Spain: R&D and Regional Aid Funding as a % of Regional GDP



Source: OECD (1995), REGIO, EPRC Calculations

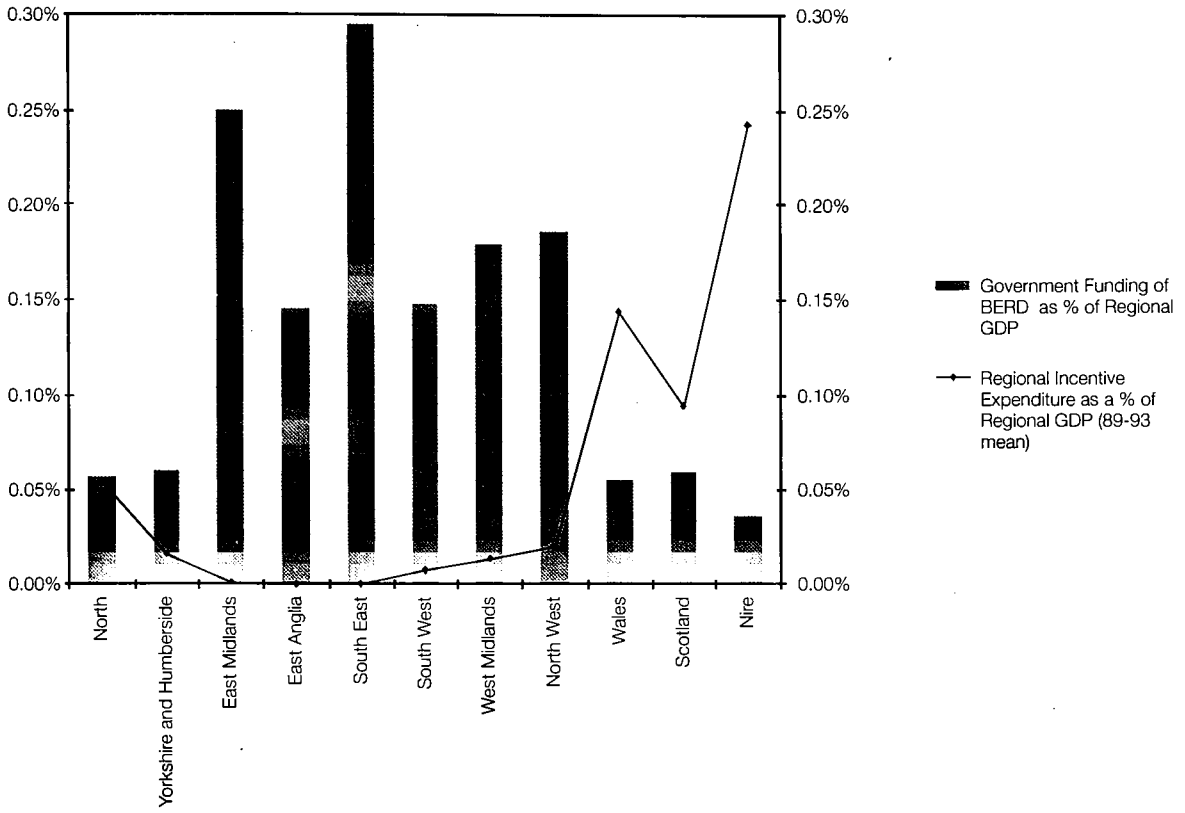
Chart 4.19, which presents the data for Spain, uses the same scale as the chart for Italy. Thus. the regional aid scale is ten times the scale used for government funding of BERD, a reflection of the relatively low spend on support for business R&D in Spain (see Chart 4.12). Comparing the Spanish and Italian charts reveal considerable similarities in the overall patterns of expenditure. In general there are very low levels government funding of BERD as a proportion of regional GDP across the Objective 1 regions (Galicia, Asturias, Cantabria, Extremadura, Andalucia, etc.), but a very high contribution in the richest regions (Madrid, País Vasco, Cataluña). Again, it is worth stressing that these figures represent not only larger shares of regional wealth, but also that the level of prosperity in which those shares are larger is also higher.

Unlike France, however, and in common with Italy, even in the regions which gain most from R&D spending, the level of spending is less significant than spending on regional aid in the poorer regions.

The data for the UK presented in Chart 4.20 are particularly interesting since levels of spending on the two policy areas are such as to enable them to be presented on the same scales. As elsewhere, the more prosperous regions (notably the South East of England) gain more government support for BERD relative to regional GDP than the poorer regions. Indeed, the South East receives more as a proportion of (a very high level of) regional GDP in terms of government funding of R&D than does Northern Ireland in regional aid. Further, the share of BERD funded by government in the South East exceeds regional and R&D aid combined in Northern Ireland. Again, it should be stressed that, as far as the poorer regions are concerned, the R&D spend represent very small shares of relatively low levels of regional GDP; in contrast, in the richer regions, GDP is, by definition higher, but the share of spend related to regional GDP is also substantially higher.

Chart 4.20

UK: R&D and Regional Aid Funding as a % of Regional GDP



Source: OECD (1995), CSO (1995), REGIO, EPRC Calculations

4.1.3.2 The Regional Effects of Competitiveness Policies

The second aspect of the impact of horizontal policies involves considering the effects of those policies based on a review of published studies. Research examining the spatial impact of spending on R&D is, almost inevitably, hampered by a lack of comparative regional data. As a result, evaluations have tended to be fairly limited in scope. Nevertheless, many researchers feel that non-spatial policy expenditure is potentially a powerful determinant of regional economic development throughout the EU (Amin and Tomaney, 1995).

Although measurement problems undoubtedly curtail (aggregate) research in this area, some evaluative work undertaken examines the effectiveness of national technology policy from a regional perspective. Studies assessing the impact of national R&D expenditure on regional economic development show that national policy towards problem regions is often poorly resourced and badly co-ordinated. One area frequently considered is the effectiveness of science parks. One study examining technology parks in Spain discovered that such parks tend to be located in more advanced areas with a history of technological innovation (Ybarra, 1991) and those which had located in such regions showed limited development effects. Many science parks in less favoured regions are characterised by poor linkages with the local region (academic institutions and suppliers) and perform little strategic R&D (Massey and Weild, 1992).

One in-depth case study of Spain's technology park in Andalucia (Peck, *et al*, 1996) found that policymakers had largely failed to create a genuine technology-led complex. The park is primarily seen as a location for incoming inward investment. Given the truncated nature of decision making within multinational subsidiaries most firms in the park do little in the way of R&D. Although some firms undertake some design work at their plant, this is mostly adaptive design for

specific customers rather than fundamental product development (Peck *et al*, 1996). Low levels of supplier linkages further reduce the scope for technology transfer between FDI and local suppliers. Peck *et al* conclude that Andalucia's technology park is ultimately based on 'knowledge produced elsewhere'.

Hassink's (1993) comparative study of technology policy in three European regions (North East of England, the Ruhr and Baden-Wurrtemberg) shows how regional technology policy is often an amalgamation of national and local initiatives. Hassink (1993) claims that the region with the most effective regional technology programme, Baden-Wurrtemburg, is also the territory with the most substantive regional autonomy in this area. According to Hassink (1993), the centralised nature of the UK, coupled with the low priority Britain accords to regional technological development, undermines local capacity building in the north east of England.

Other studies assessing the effectiveness of Member State regional technology policy have tended to focus on case study assessments of individual programmes or policies. An example of this was Sternberg's (1995) study of innovation centres in Germany. Using a variety of research techniques - such as before and after analysis, control groups and case studies - Sternberg examined the effectiveness of this policy and the impact these institutions had on regional economic development. Sternberg believes that innovation centres play an important role in promoting industrial efficiency and claims that, after leaving the innovation centre, successful firms employed more people, needed more office space, and experienced higher turnover.

Interestingly, Sternberg claims that nationally funded programmes are much more important for the new *Länder* than the more prosperous western and southern *Länder.* He concedes, however, that evaluations of this kind are invariably dogged by numerous methodological problems that make data reliability problematic. Another evaluative study of Emilia-Romagna, concludes that national innovation policy plays a vital role in developing the local technological base (Bianchi and Girodani, 1993). This owes to the fact that local initiatives are inevitably constrained by lack of available funding. However, Bianchi and Girodani believe that local business service centres such as CITER (Textile Information Centre, Emilia-Romagna) can play a powerful role in boosting the innovative capacity of local textile manufacturers through the provision of common services. Although not an evaluation *per se*, this study highlights how regional innovation policy must be seen as a complex network of initiatives operated by policy bodies on various spatial scales. In a regional development context, however, it is important to note that Emilia-Romagna is among the more prosperous regions of the EU, a fact which inevitably impacts on its innovative capacity.

Although most research in this area tends to focus on the role SMEs play in developing regional technological capabilities, the role played by multinationals is also of interest to policymakers in regions dominated by FDI. In these regions multinationals are the main source of local technological development. This is particularly interesting because some claim multinationals are pushing more of their R&D towards their local subsidiaries. This development is associated with moves towards more decentralised forms of industrial organisation which multinationals are supposedly adopting. This organisational transformation is not, however, accepted by all researchers and case studies of plants throughout Europe show a continuing regional hierarchy between core and peripheral regions in terms of MNC R&D (Amin *et al*, 1994).

While some observers note that this regional hierarchy may be becoming less clear cut, research conducted on multinationals in the *Mezzogiorno* discovered that this was not part of a comprehensive upgrading of the R&D capacity of firms in the region (Giunta and Martinelli, 1995). Others, meanwhile, conclude that technology transfer between multinationals and indigenous industry remains weak, especially in Objective 1 regions such as Portugal and Ireland (see respectively, Amin *et al*, 1994; Kenny, 1995). Furthermore, weak linkages between FDI and local suppliers undermine technology transfer in many Objective 2 regions (see Amin *et al*, 1994). These findings are particularly important for European regions where FDI is often the main source of R&D within the regional economy.

Moving beyond R&D policies to horizontal policies more generally, other evaluative work has shown how national policies on defence have uneven regional impacts (Lovering, 1991), especially important for EU Member States with sizeable defence industries (eg. Britain and France). In Britain, for example, the main beneficiaries of government defence-related spending are concentrated in the southern regions (South East and South West) where most high technology research is conducted. Although many people are employed in defence establishments in northern parts of the UK, these jobs comprise the lower value aspects of the production process. Meanwhile, the bulk of high-end R&D takes place in the more prosperous parts of the country, particularly the South East (Lovering, 1991).

This spatial division of labour has important consequences for regional development. Given that almost

half UK government spending on R&D goes on defence-related projects, some regions will disproportionately benefit from this element of government expenditure. One recent study reveals how large amounts of aerospace defence expenditure is absorbed by firms and research institutes in the South West near Bristol, while the same is true for electronics R&D in the Thames Valley area near London (Simmie, 1995). The high skills profile of this research means that defence-dependent regions disproportionately benefit from this element of national expenditure. This uneven spatial distribution of government R&D spending has an important downside, however. These localities are now highly sensitive to the current reductions in defence expenditure: reductions which could have serious knock-on effects for employment, skills and regional technological capacity in these areas (Simmie, 1995).

Another element of national public expenditure thought to impact regions differently is training. Although little evaluative work has been undertaken in this area, one study found the spatial impact of national training schemes to vary according to the level of unemployment within the region (Peck, 1990). Peck's study of the British government's Youth Trainee Scheme (YTS) discovered that the employer-led nature of this scheme meant that employers use trainees differently across the country. On one hand employers in areas of low unemployment and tight labour markets, such as the South East of England, often used the programme as a means of screening trainees for full time employment and offer genuine job-related training. Employers in depressed northern regions, on the other hand, predominantly used the scheme as a form of job substitution or 'cheap labour'. According to Peck, higher unemployment rates in the latter area reduced the need for recruitment and proper training. This study is interesting because it shows that national policies do not operate uniformly across countries and that policy effectiveness is often geographically uneven.

In the main, the studies reported within this review did not attempt to evaluate the regional effects of horizontal policies. Instead they mostly attempted to assess the effectiveness of horizontal policies in different geographical contexts. The studies examined point towards the fact that horizontal policies do not always work well in less favoured regions. The unique characteristics and circumstances of less favoured regions mean that national policy often neglects or works poorly when implemented in these areas. Various factors circumscribe current levels of understanding of these issues: the lack of regional sensitive data; the wide ranging nature of these policies; and the difficulty in disentangling their effects from other government policies. For these reasons little or no comprehensive evaluations have been attempted. Given the importance of such policies from a regional development perspective, this seems a worrying omission.

4.2 Employment Policies

The achievement of an acceptable level of employment and its counterpart, a low level of unemployment, is perhaps the most important objective of economic policy across the European Union. While the pursuit of this objective remains the responsibility of individual Member States, with the increasing recognition of the common nature of economic problems facing governments across Europe and of the high degree of interdependence of national economies, there is a growing awareness of the value of developing a common strategy.

At the same time, it is accepted that such a strategy has to take account of the major differences which remain in the stage of economic development attained by Member States and in their social, cultural and institutional characteristics, which mean that the appropriate form of the measures to be taken will vary from country to country. Although the general nature of problems faced may be similar, their manifestation, in terms, for example, of the social groups most affected, tends to differ as does the policy response likely to prove effective. Measures which work well in one country will not necessarily have a similarly beneficial effect somewhere else if the underlying conditions, including social behaviour and attitudes as well as institutional arrangements, are different.

A common approach to employment policy was given impetus by the publication at the end of 1993 of the Commission White Paper, *Growth, competitiveness, employment*, which outlined a European strategy for achieving a higher rate of growth and job creation and, thereby, for combating unemployment, ensuring a more equitable distribution of employment opportunities and for increasing economic and social cohesion. The general thrust of this strategy was endorsed by the Member States at the Edinburgh Council meeting in December of that year and has been reiterated and elaborated at subsequent meetings.

In particular, the Essen Council at the end of 1994 listed a number of key areas of policy as being of major importance for tackling the Union's employment problems:

- improving employment opportunities for the labour force, by promoting investment in vocational train-

ing. To that end a key role falls to the acquisition of vocational qualifications, particularly by young people. As many people as possible must receive initial and further training which enables them through life-long learning to adapt to changes brought about by technological progress, in order to reduce the risk of losing their employment;

- increasing the employment intensity of growth, in particular by:

  — a more flexible organisation of work, in a way which fulfils both the wishes of employees and the requirements of competition;

  — a wage policy which encourages job-creating investments and in the present situation requires moderate wage agreements below increases in productivity;

- the promotion of initiatives, particularly at regional and local level, that create jobs which take account of new requirements, e.g. in the environmental and social-service spheres

- reducing non-wage labour costs extensively enough to ensure that there is a noticeable effect on decisions concerning the taking on of employees and in particular of unqualified employees;

- increasing the effectiveness of employment policy by avoiding practices which are detrimental to the readiness to work, and by moving from a passive to an active labour market policy. The individual incentive to continue seeking employment on the general labour market must remain. Particular account must be taken of this when working out income-support measures. The need for, and efficiency of, the instruments of labour market policy must be assessed at regular intervals;

- implementing particular measures necessary to help young people, especially school leavers who have virtually no qualifications, by offering them either employment or training. The fight against long-term unemployment must be a major aspect of labour market policy. Varying labour market policy measures are necessary according to the very varied groups and requirements of the long-term unemployed. Special attention should be paid to the difficult situation of unemployed women and older employees.

As part of a policy of giving priority to action in these areas, Member States undertook to develop multi-annual employment programmes spelling out the measures introduced or planned. Further, they agreed at the Cannes Council meeting to present these in the Autumn of 1995. This section is largely based on the contents of these presentations.

The employment policy agreed at Essen was elaborated further at the Madrid Summit in December 1995, where it was reaffirmed that the fight against unemployment and for equal opportunities is the priority task for the Community and its Member States. At the same time, there was a convergence of views on the approach to be followed in carrying out this task. In particular, common emphasis was placed on the need for a co-ordinated strategy combining, on the one hand, macro-economic policies which would create the conditions for sustained growth of output and employment and, on the other hand, structural measures which would ensure that the opportunity for accelerated job creation afforded by the creation of these conditions was realised in practice.

Nevertheless, despite agreement on these two broad aspects of policy, there is somewhat less unanimity on their precise interpretation in terms of the concrete measures which they imply. This is less the case as regards the contents of macro-economic policy, where the constraints imposed by the general commitment to low inflation, financial stability and the achievement of the conditions for monetary unification as set out in the Maastricht Treaty limit the scope for independent discretionary action. In all Member States, therefore, monetary policy is aimed at maintaining low rates of inflation and stable exchange rates and, accordingly, at expanding credit and setting interest rates at rates and levels which are consistent with this, while fiscal policy is aimed at reducing, or containing, budget deficits, with the emphasis on restricting public expenditure growth and limiting increases in taxes (though more in some countries than others).

As regards structural policies, however, differences in emphasis are more apparent. While there is broad agreement on the aim of eliminating rigidities and achieving better operation of labour markets, the approach adopted and the measures implemented in pursuit of this aim vary significantly across the Union. This reflects, in part, differences in underlying philosophy as well as differences in economic conditions, social attitudes, cultural traditions and institutional characteristics, which, with practical experience, both help to shape that philosophy and are influenced by it.

In particular, a major difference concerns the role of government and the extent of State involvement in policy, with some countries attempting to reduce this, others to reform the way in which it operates to make

it more effective. At one extreme, the UK approach is to minimise State intervention and both the fiscal burden and regulatory constraints imposed on business and to rely largely on market forces to achieve employment aims. In most other parts of the Union, there is greater acceptance of the need for intervention to ensure that both economic and social objectives are pursued effectively - and, indeed, to ensure that the labour market functions efficiently - though there are differences in the extent of intervention thought necessary.

Such differences are reflected not only in the form of policies adopted, but also in the scale of public expenditure incurred in carrying them out. For example, in Denmark or Sweden, where there is a high degree of social consensus in favour of the State intervening to help people into work through training and other measures, government expenditure on active labour market measures is considerably higher than elsewhere in the Union. By contrast, in countries like the UK, where active labour market measures take the form of deregulation and a low level of fiscal and other charges on business, comparatively little is spent (in terms of monetary outlays if not of foregone tax revenue) on employment policy.

Somewhat paradoxically, the same tends to be true of countries with relatively highly regulated labour markets, those in the South of the Union especially, where objectives are pursued partly through imposing obligations on businesses. This is often compensated, however, by concessions or State support in other areas, which is sometimes reflected in a relatively high expenditure on subsidies and other State aids, whether explicit or implicit, to encourage firms to maintain employment levels and avoid redundancies.

Analogous differences also apply to the scale of so-called passive expenditure on labour market policy. In countries where spending on active measures is relatively high, there is some tendency for expenditure on unemployment benefits and other forms of income support for those out of work also to be high in relation to the number of people unemployed. This partly reflects a concern to assist people in their efforts to find work and to enable them to spend sufficient time looking for a suitable job, so helping to improve the functioning of the labour market. By contrast, in countries where reliance is placed more on the unrestricted interplay of market forces to balance labour demand and supply, there tends to be more emphasis on the avoidance of any disincentive for the unemployed to look for a job. Income support, therefore, tends to be maintained at a minimum acceptable level to encourage people to find employment as quickly as possible.

Nevertheless, in all countries, there has been an increasing shift of policy emphasis from passive labour market measures of income support for the unemployed to active measures designed to help them into work. In large measure, however, this has been frustrated by the sharp rise in unemployment in the early 1990s which added considerably to the funds required for income support and correspondingly limited those available for active measures.

In all countries, whatever the approach followed, specific measures for boosting employment are constrained not only by the intermediate macro-economic objectives of reducing budget deficits but also by the imperative to maintain cost competitiveness, which has tended increasingly to limit the extent to which taxes and other charges can be raised, especially on businesses. The funds available for labour market programmes are, therefore, restricted, as also is the scope for reducing existing charges falling on employment, any reductions necessitating compensatory increases elsewhere to prevent budget deficits from rising.

Similar constraints exist on other measures to maintain employment levels, such as regulations restricting layoffs and redundancies, which effectively shift the cost burden onto the private sector and tend to add to the costs of production.

4.2.1 Job Creation or Job Diversion?

Although the employment strategy first outlined in the White Paper and elaborated at subsequent European Council meetings, culminating in the two-pronged approach agreed in Madrid, has the general aim of increasing the net rate of job creation in the Union and, thereby, reducing unemployment, there is a question-mark over how far the structural aspects of the policy serve to redistribute jobs rather than expand their overall number. At the same time, even if the effect is to redistribute jobs rather than to increase them, this would not necessarily negate the value of implementing such measures, given the explicit objective of achieving a more equitable distribution of employment opportunities in the interests of improving economic and social cohesion in the Union.

In practice, there is a serious lack of empirical evidence on the effects of most of the measures included in the employment programmes being followed by Member States. Thus in the case of greater investment in vocational training, while increasing the number of young people receiving initial and further training is likely to give them more chance of finding an acceptable job, it does not necessarily follow that in itself it will create significantly more jobs. This is especially so in the short-term before the availability of a better trained

work force has time to filter through into an increase in the competitiveness of producers and, therefore, improved trade performance. The results of most research studies seem to show that while increased training tends to have a positive effect on employment, the scale of the effect is extremely variable and depends on the quality and content of what is being taught.

According to a recent Swedish study (Calmfors and Skedinger, *Oxford Review of Economic Policy*, Vol. 11, No.1), for example, more training can sometimes increase unemployment by raising employees' expectations of earnings above what employers are prepared to pay. Moreover, predicting what skills will be required by business in future years is by no means straight-forward when the pace of technological change is tending to alter the nature of jobs radically in a short period of time and to create employment opportunities which simply did not exist before. (The enormous expansion in the use of PCs, for example, and their far-reaching effect on working methods and the demand for skills throughout the economy, which has occurred over the past ten years was almost impossible to predict in the early 1980s when the technology was in its infancy.)

A labour market survey carried out in 1994 across the European Union (see Commission of the European Communities, 1995a) indicated that only 7 percent of businesses questioned regarded a shortage of adequately skilled applicants as being a very important obstacle to employing more people in industry and less than 30 percent considered it to be of any importance at all. Although this survey was conducted at a time when the European economies were only slowly beginning to recover from recession and skill shortages were found to be a more important factor in 1989 close to the peak of the economic cycle, it indicates that in itself more training cannot add significantly to job availability, except perhaps in the longer term. At the same time, a survey of nine countries (carried out by the McKinsey Global Institute) concluded that the crucial determinant of productivity, and, therefore, of competitiveness, was not so much the skills of the labour force as the ability of management to devise successful business strategies.

Job subsidies or job creation schemes of various kinds also have a questionable impact on overall job availability. According to most studies, most schemes seem to involve substantial 'dead-weight' losses (in the sense that many of the people assisted would have found jobs anyway) and significant substitution effects (in the sense that to a large extent the people assisted or the jobs created displace other people in work or other jobs). On the other hand, evidence seems to show that dead-weight losses can be reduced markedly by targeting subsidies on the most disadvantaged groups, though displacement effects are liable to remain important as employers take on workers who cost them less at the expense of existing staff or others who might have been recruited in their place.

Similar considerations apply to measures to reduce indirect labour costs, and employers' social contributions in particular, which have become a widespread means of encouraging firms to take on more people, especially new entrants to the labour market and those who have been unemployed for a long time. Though these might add to the numbers employed in the short-term by reducing the overall cost of employment, their net effect depends on how the associated reduction in State revenue is made good (ie. on what other taxes or charges are increased to prevent budget deficits from expanding) and, in the longer-term, on the extent to which they result in higher wage levels. (Cross-country comparisons seem to indicate that countries with relatively low indirect labour costs, such as Denmark, for example, where employer's social contributions are much smaller than elsewhere, do not tend to have correspondingly lower total labour costs but rather higher levels of direct labour costs - or gross wages - which are required to pay the higher income taxes or taxes on expenditure needed to compensate for low social contributions.)

Equally, measures aimed at expanding employment through stimulating the growth of environmental activities or social and local services, the development of which cannot readily be left to market forces because of the externalities involved and the collective nature of the goods and services produced, justifiable as they may be, will only tend to add to the number of available jobs, in the context of an overall budget constraint, if they result in a higher employment content of output or if they serve to shift the pattern of expenditure towards domestic production and away from imports. A key question in this regard, as in the case of reductions in employer's contributions, concerns the public expenditure which they effectively displace (or the higher taxes which they necessitate) and its comparative effect on employment.

Other measures have, perhaps, a less questionable effect on the overall level of employment, particularly if this is defined in terms of the number of people in work rather than the volume of work performed. This is most clearly the case as regards reductions in working time, whether achieved through a growth of part-time working or shortening the length of the normal working

week. In most Member States, average hours worked per person have declined over the past decade - by just over 4 percent between 1983 and 1994 for the Union as a whole - so adding to the number of people with jobs (unless it is argued that the reduction in hours stimulated a gain in labour productivity of equal or greater proportions which would not otherwise have occurred). Nevertheless, the reduction has varied significantly between Member States, from 6 percent or more in Germany, Belgium and the Netherlands to 1 percent or less in the UK and Italy.

At the same time, deliberate measures to reduce working time against the wishes of employers and/or employees run the risk of reducing efficiency and adding to costs (especially if there is no compensating reduction in average earnings), so damaging competitiveness and the potential for employment creation. Government policy in this area, therefore, can perhaps be most effectively concentrated on encouragement, education and example rather than on regulation (except where health and safety is at stake) and on helping to separate the issue of plant or business operating times from that of the hours worked by employees.

Policies of wage moderation, of keeping pay rises in line with or below the growth of labour productivity, also seem to have less uncertain effects, insofar as they serve to increase the profitability of operations and the prospective returns to investment and, therefore, should encourage companies to expand employment. In effect, if workers accept pay rises below the rate of productivity growth, then a given wage bill can fund more people in employment. Equally, however, wage moderation might simply lead to higher profits and a lower growth of aggregate demand, so depressing the rate of economic growth.

4.2.2 Employment Policy and Cohesion

If the effect of present policies on employment growth is uncertain, particularly in terms of its scale, their impact on cohesion is less questionable, as noted above. A common characteristic of most of the measures in operation or being planned is to reduce disparities in employment opportunities whether between individuals, social groups or regions.

Increased access to training, both initially for young people and for people already in work, stands to widen the job options available, especially to those with relatively few qualifications and low skill levels. Similarly, targeting support, in the form of subsidies, training programmes or reductions in indirect labour costs on the unemployed, particularly the young, the elderly, those out of work for long periods as well as women entering the labour market after a spell of inactivity, stands to improve the position of both those without jobs relative to those in employment and those most disadvantaged among the unemployed relative to those they are competing with for work. Moreover policies of wage moderation and of encouraging greater flexibility in working time arrangements, especially if accompanied by reductions in average hours worked, stand to spread the available work more equally between those wanting a job.

At the same time, while most measures do not have a specific regional dimension, the very fact that many of them are aimed at the unemployed, and within this group at the most disadvantaged of those without work, is likely to mean that they benefit regions with the most serious problems of unemployment and inadequate rates of job creation more than others, so tending to narrow regional disparities.

The main elements of the employment programmes in operation in Member States are described below, taking each broad kind of measure in turn and indicating the countries in which it has been implemented and the form which it has taken. It should be emphasised, however, that this is based on the presentations of programmes made by Member States and, therefore, on their choice of the measures to include. In consequence, the fact that a particular country is not mentioned in the context of any particular measure does not necessarily signify that it has not in practice introduced it in some form or other, merely that it does not figure in their choice of what to mention.

4.2.3 Summary of Employment Policies in Member States[13]

4.2.3.1 Education and Training

The Essen Council identified two objectives in this area for priority policy action:

- better education and training for young people entering the labour market
- the provision of lifelong training

One of the main concerns of Member States is the proportion of *young people* who leave the education system with few or no qualifications, whose chances of finding employment are made much more difficult by the shift in favour of skilled work in the labour market.

Participation rates in full-time education have risen in

[13] The description of employment programmes below relates to all the Member States apart from Austria and Sweden.

recent years in most Member States, which has served to stem the flow of early school leavers. This, however, is partly due to economic recession in the early 1990s and the lack of jobs for them to go into; it remains to be seen whether the increase in participation will continue as recovery strengthens and more jobs become available for young people. Moreover, in addition to encouraging young people to stay longer in education, there is a continuous need to improve its quality and gear it more towards the skills required by the labour market. To this end, initial education systems in a number of Member States have been adapted to incorporate more opportunity for vocational training.

The use of apprenticeships, or dual systems of work experience and on-the-job training, is widely regarded as a successful way of integrating young people into working life, as evidenced most especially by the German system. Employers in the Benelux countries as well as in Spain are, therefore, being encouraged by reductions or exemptions in social security contributions either to hire apprentices or retain them after their training period.

The UK has set up Modern Apprenticeships for 16-17 year olds and Accelerated Modern Apprenticeships for 18-19 year olds. France has recently lowered the age to 14 at which preparation for apprenticeships can take place. Ireland is aiming to expand its apprenticeship system with greater emphasis on quality rather than time served. There is also to be a new vocational training qualification under TEASTAS - the Irish National Certification Authority.

Both Greece and the UK are pursuing the idea of training credits or vouchers which have a financial value and can be presented to an employer or training provider in exchange for an approved course of training. In Greece vouchers may also be used for work experience as well. This system is being used already in the UK for 16 and 17 years olds and consideration is being given to extending it to 18 and 19 year olds. In Greece the target group is the young unemployed.

The opportunities for second-chance education or further and re-training for *the unemployed* are also being widely increased. Often their unemployment is the result of skills that are no longer required by the labour market and their only chance of finding a job is through learning new skills. In this context, in some Member States entitlement to unemployment benefits has been made more flexible to allow receipt of support while the person concerned is undergoing education and training.

In all Member States, there is recognition of the need for continued training during working life to allow employees to adapt to technological change in the workplace and a variety of methods are being used to achieve this.

In both the UK and the Netherlands, it has largely been left to businesses or, in the latter, to the social partners to decide vocational training arrangements. On the other hand, in Germany, Denmark and Belgium, career breaks for further training are being encouraged by government through the payment of allowances. In Italy, consideration is being given to making the costs of training to both employers and employees tax deductible.

The provision of additional vocational training by the State, of course, entails increased public expenditure and somehow this has be financed.. In most Member States, the resources earmarked for vocational training have been increased - notably in Spain, Denmark and Finland. However other ways - beyond State assistance - are being sought for its funding. In Greece, employers' contributions were more than doubled in 1994 to 0.45 percent of the wage bill to finance training. In the UK, in contrast to the general tendency in the rest of the Union to fund training by levies on firms, consideration is being given to the establishment of voluntary individual training accounts to help employees pay for their own training.

4.2.3.2 The Employment Intensity of Production

Over the past 20 years or so, labour productivity in the Union has shown an upward trend of around 2 percent a year, signifying that GDP has to grow by more than 2 percent a year on average to expand the number of people in employment. (Though the underlying rate of productivity growth varies from country to country, no Member State has succeeded in achieving employment growth over the past decade without having GDP growth of at least 2 percent a year). In the US, the rate of overall growth of GDP per person employed has been much less over the same period at less than 1 percent a year, leading to calls in some quarters for the Union to follow similar kinds of policies of employing many people on low pay in marginal activities. The challenge facing European countries is to achieve a similar rate of job creation as in the US without experiencing the same phenomenon of large numbers of working poor.

At Essen, Member States were encouraged to focus policy action on three broad ways of increasing employment-intensity:

- encouraging wage moderation

- increasing the flexibility of work organisation

- promoting employment initiatives at the regional and local level

Creating jobs while maintaining profit levels requires real *wage restraint*, but this can be difficult when wage setting is decentralised. On the other hand, centralised pay bargaining does not necessarily allow for variations in sectoral or regional economic conditions. Given that average real labour costs per person employed need to increase at a slower rate than productivity if employment expansion is to take place, pay rises need to vary from firm to firm and industry to industry.

A principal element of employment programmes is, therefore, the pursuit of decentralisation in pay determination. In some Member States, this is left purely to the social partners to bring about. In others, however, especially in the South of the Community, there is a gradual conversion taking place from pay determination at the national level to the active promotion of collective bargaining at the local level.

In contrast to this approach, Ireland operates a national pay agreement, whereby wage rises are limited to a cumulative amount linked to the expected rate of inflation over a three-year period. This has been in force since 1987 and is designed to maintain overall cost competitiveness. In Belgium also, a general pay policy is in force restricting wage increases across the economy to a small percentage a year.

With regard to *more flexible forms of pay determination,* the extent to which excessive labour costs hinder job creation, especially for the low-skilled and low-paid, has been the focus of policy attention in a number of Member States. In the Netherlands, there is concern that remuneration for low-paid work is often well above the level that employers are prepared to pay given the productivity of the employees in question. Hence apart from trying to close this gap by a downward convergence of wages at the lower end, the possibility of employers departing temporarily from paying the minimum wage has also been considered. In Germany, the use of start-up wages, amounting to 90 percent of regular wages for the first year, was introduced in the West German paper and chemicals industries in 1994.

Another method of increasing the flexibility of pay determination, encouraged in the UK, is through profit-related pay, where a basic wage can be topped up with a tax-free share of a company's profits, so allowing wage bills to be at least partly related to company performance.

Efforts are being made in some countries to make *working arrangements more flexible* and more in tune with the demands of the market, while, where possible, reducing the average amount of time each person works, so encouraging an expansion in the number of jobs. These take two main forms:

- an increase in part-time working

- greater flexibility in working hours including shorter working weeks and less overtime

The *expansion of part-time working* not only allows greater flexibility for both employers and employees but it also creates opportunities for integration into the labour market, especially for the young and the unemployed for whom part-time working may provide valuable workplace experience.

In the Netherlands, the UK and Denmark, part-time working accounts for over 20 percent of employment (in the Netherlands, around 36 percent). In these countries, labour market regulations and prevailing attitudes are already highly conducive to this form of employment. In the rest of the Union, however, it is less common. In Belgium, France and Ireland, it is generally below the Union average of 15 percent, but still above 10 percent, while in Germany, it is only slightly above the average. Elsewhere - including in all of the Southern Member States - part-time working represents no more than 8 percent of total employment.

For the majority of Member States, therefore, the expansion of part-time working is regarded as a key element in the changing pattern of employment. In these cases part-time working is generally being promoted, though employment protection legislation is also being extended to accompany this.

A number of different ways are being used to promote part-time working: In Germany, Belgium and Luxembourg, as in the Netherlands, the public sector is setting an example by creating new part-time jobs, in large measure by converting existing full-time ones into part-time.

One particular problem being addressed in Ireland, Italy and again in Germany is the combination of part-time working and receipt of social security benefits. At present, entitlement to benefit may be endangered by working part-time and these Member States are therefore implementing changes to their social protection systems to reduce or eliminate this possible disincentive for workers to take part-time employment.

In France, part-time working is being encouraged through exempting employers from social security contributions for employees working between 16 and 32 hours a week. Furthermore, efforts are being made here, as well as in Spain, to increase flexibility through the annualisation of working time (ie. by allowing employees some choice over how they organise the total number of hours they are contracted to work over the year).

In Greece and Portugal - where part-time working is under-developed - a cautious approach is being adopted. In Greece, moves towards part-time working are subject to the agreement of the social partners, while Portugal is promoting part-time working only as a means of creating flexibility for parental leave.

Most Member States have the aim of improving the *flexibility of working hours* so that they are more compatible with the demands of business. In both the Netherlands and Finland, working time legislation is in preparation designed to increase flexibility in working hours at the company level and to allow their determination by collective agreement. In Germany, agreement on a change in working hours was reached in 1994 at the industry level in response to the recession, enabling hours, and wages, to be reduced in order to preserve jobs. This approach is also being recommended in Italy, where it appears that, given the choice, many employees would accept a reduction in working hours and pay in crisis industries if this was necessary to preserve their jobs.

At the same time, there are moves to make the opening or operating hours of businesses more flexible in a number of Member States. This is particularly the case in Germany, Finland, Greece and the Netherlands, where more weekend and public holiday working is being encouraged.

Only in France, do there seem to be serious proposals to shorten the working week as a whole with the provision of state aid for firms willing to experiment with reducing weekly working hours by 15 percent while at the same time increasing the numbers employed by 10 percent for a three year period. In Greece, Italy and Finland, however, there are proposals to attempt to reduce overtime working - in the former, by a half.

In Belgium, Portugal and Luxembourg, there are moves to shorten working hours for those nearing retirement, or opting for early retirement, so that job sharing may take place and at the same time the skills and knowledge of the people concerned can be passed on to their successors.

In this context, it is worth noting that according to a labour market survey carried out across the Union in 1994 (*European Economy, op cit*), only 29 percent of respondents wished to work less (only 21 percent in France where a general reduction in working time is being considered) and almost twice as many expressed a preference for more pay rather than a reduction in working time.

A number of Member States have the aim of increasing *occupational and geographical mobility* by reducing the obstacles preventing people from moving more readily between jobs and regions. In many, both the unemployed and existing employees are being offered the opportunity to retrain in another profession. In Belgium, Denmark and the Netherlands, career breaks and job rotation are encouraged to give people the opportunity for vocational training,. In Denmark, this is coupled with a policy of encouraging their jobs to be filled temporarily by the unemployed, who can thereby gain valuable work experience.

Geographical mobility is also being encouraged in Greece, Spain and Portugal with financial assistance for removal and travel costs. While this may encourage a flow of labour supply from high to low unemployment areas, any such tendency is offset through the payment in Greece and Portugal of allowances to maintain seasonal employment in sectors such as tourism during the off-season.

A further area of action concerns the *reduction of regulatory barriers*. To the extent that legislation can have adverse effects on the flexibility of working arrangements and on the ability of companies to determine their employment policy, in the Netherlands, Finland and the UK, the government is aiming to reduce these barriers either through specific restructuring of legislation on dismissals (in the former two cases), or by close examination of employment legislation to assess its effectiveness and cost and abolishing that which is considered insufficiently effective or too costly to administer (in the UK).

4.2.3.3 Developing Initiatives at the Local Level

A point highlighted in the Commission White Paper on *Growth, competitiveness, employment* was the potential boost to job creation of initiatives taken at the local level. This was reiterated in 1995 in a Commission Communication (COM 273, June 1995). A range of measures to create jobs, particularly in local services,, have been introduced in most Member States. They involve:

- expanding and legitimising domestic service employment

- increasing socially-useful work

- promoting the creation of small and medium-sized enterprises (SMEs)

Jobs in domestic services are being promoted in a number of Member States. Though such work is often already being carried out, it is not always formal or even legal employment and the unofficial nature of this type of working combined with the administrative burden of formalising or legitimising it may hinder its growth. In most cases, the work involves a relatively low level of skills and therefore creates opportunities for the unskilled among the unemployed who represent a sizeable proportion of those looking for work.

The expansion of domestic working appears, however, to be a mainly a feature of employment programmes in Northern Europe. In Denmark, the domestic services scheme, under which households are given subsidies to reduce the cost of hiring casual labour for activities such as gardening and cleaning, was introduced in 1994 and is expected to become permanent in the near future. In Finland, the domestic service scheme, which encourages domestic working through employment subsidies and tax exemptions, is also to become permanent in 1996. In the Netherlands, a study is being carried out to examine the legitimisation of domestic working for the long-term unemployed, while in Luxembourg, an inter-ministerial group has recently submitted a report on new areas of job creation, which examines the possibilities for domestic working and its possible negative social effects.

Both France and Belgium have introduced measures to simplify the administrative procedure for domestic working and, therefore, promote its use. In France, since 1994, household employers have been granted tax deductions, while administrative procedures have been simplified through the use of an employment-service voucher which obviates the need for employment contracts or pay slips. In Belgium, the *Agences locales de l'emploi* (ALE) - where unemployed people are placed into personal service jobs - has been in operation in the majority of communities since 1994 and is to be the subject of evaluation during 1996. Depending on the results of this evaluation, domestic service working may be encouraged through the use of *the chèque multi-service* for the long-term and older unemployed.

Schemes to support *socially-useful work* usually cover social services, environmental protection, tourism and leisure, and, more specifically, activities in these areas which would not develop without public funding. In Denmark, pool jobs are being created for the unemployed to care for the elderly, sick and small children as well as working on environmental protection projects. In Luxembourg, a socially-useful jobs scheme was introduced in 1984 but its use declined in the late 1980s with the rapid increase in employment across the Union. Socially useful jobs, not already carried out by the public or private sectors, are now to be expanded again to provide work for the unemployed and those threatened with unemployment.

In Germany, local employment initiatives have been promoted in environmental protection, social services and child and youth welfare. Launched initially in 1993 in the new *Länder*, this scheme which provides lump-sum wage subsidies to provide work for the unemployed was extended in 1995 to the western part of Germany. It was expected that 140,000 unemployed people would benefit from this scheme during 1995. In Portugal, Local Initiative Development Programmes are intended to boost local services to help in the development of rural areas and the stimulation of local communities.

In Italy, there is to be a gradual shift from passive measures of income support for those out of work to measures to support the development of socially-useful jobs for which benefits are paid to those taking them up. This is particularly the case in areas deemed to be crisis regions, such as in the *Mezzogiorno*.

One of the main areas for employment creation identified in the White Paper was in *small and medium-sized enterprises*. Indeed in many of the Member States, SMEs already account for a large proportion of total employment. SMEs, however, tend to suffer from low survival rates. According to the Finnish experience, for example, one in three new firms folds within three years and one in two folds within five years. Not only is this costly in terms of jobs lost and the associated time out of work for those becoming unemployed, but it also creates an atmosphere of low business confidence for those remaining and for potential new entrants. Confidence is reduced further during times of recession. Business uncertainty can then lead on further to a reluctance to hire employees even where increased demand justifies it.

In Portugal, a number of tax incentive measures were introduced in 1995 to stimulate the creation of small and very small businesses (between 3 and 20 employees). These include a 95 percent reduction in profits subject to profits tax for the financial years 1995, 1996 and 1997, the exemption from fees for setting up new businesses and increases in the tax allowance limits for new investment. In addition, an incentive scheme was introduced in 1995 to support investment

projects in small enterprises that employ workers made redundant as a result of restructuring in the steel industry. A scheme to boost small businesses run by young entrepreneurs was also introduced in 1995 to provide grants, loans and risk capital guarantees for the creation, modernisation and internationalisation of these firms.

In France, measures have recently been introduced to ease the financial position of SMEs through lightening the tax burden - and so reducing the number of bankruptcies - and providing easier and cheaper access to loans and better loan guarantees. In Finland, similar measures are planned to be introduced in 1997.

In the UK, local enterprise is encouraged through Training and Enterprise Councils (TECs), which are privately-run training establishments maintaining close links with local business. Regional regeneration is supported by the Single Regeneration Budget available to promote urban and rural renewal. Five 'enterprise zones' offering temporary tax incentives for business creation have already been established and three more are planned in areas affected by the closure of coal mines.

In Ireland, plans are drawn up by the County Enterprise Boards and Partnership Companies at the regional level to promote urban and village renewal, with the aim of regenerating these communities so as to attract employers and develop tourism.

In Germany, Greece, Ireland, Luxembourg and Portugal, financial incentives are available to encourage the unemployed, especially the long-term unemployed, to start up their own business. In both Germany and Luxembourg, this bridging assistance was extended to 26 weeks in 1994. In Belgium, there are plans to evaluate the introduction of bridging loans to the unemployed for the same purpose.

4.2.3.4 Reducing Non-Wage Labour Costs

In most parts of the Union, there is increasing concern about the level of charges imposed on employers which add to non-wage labour costs and widespread attempts to reduce them. The only exceptions are Denmark, where social contributions are already at a very low level in comparison to the rest of the Union, Finland, where the efficacy of such reductions relative to lower income taxes is questioned, and Greece, where they do not seem to figure in the policy debate at all.

The relatively high level of *social charges* imposed on business in Europe reflects the extensive systems of social protection which are distinguishing feature of Union Member States as compared with other countries. The cost of such systems is an increasing focus of policy debate as the provision of resources for pensions, health and unemployment insurance mounts. Most Member States, however, have a deliberate policy aim of maintaining the prevailing level and extent of social protection, though there is a widespread tendency to target expenditure more effectively. At the same time, efforts are being made to achieve a more efficient functioning of the system.

The Netherlands and the UK are doing most to open up provision to the free market, eg. by privatisation of health insurance and retirement pensions. In Germany, reform of the health sector is intended to make the system more efficient, although here there is a basic understanding that to maintain given standards of social protection requires more people in employment contributing to its funding and fewer people being supported. In Italy, the aim is to revise the incentive system to encourage part-time and more flexible working.

With respect to *employment creation measures* most Member States have introduced reductions in employers' contributions to induce firms to take on more employees. In some cases - as in Spain, Portugal, Luxembourg, Ireland and the UK - this has been an across-the-board reduction for all employees. In Luxembourg, the funding of family allowances has been shifted from employers' contributions to the State. In Finland, employers' social contribution rates are progressive and increase more than in proportion to the total wage bill for the company, which serves to favour small companies.

In other countries - the majority - reductions in employers' contributions have been targeted on specific groups, especially on the low-paid and unskilled. In Belgium, Spain, Portugal, France, Luxembourg, the Netherlands and the UK, employers can benefit from reductions in contributions - or even exemptions for a limited period - if they hire someone who is long-term unemployed. In most cases, schemes apply to those who been out of work for a year or more, although in the UK the requirement is two years without work. Such incentives are also often conditional upon a minimum period of employment - usually between 1 and 3 years, though in the Netherlands, where long-term unemployment, is above-average for the Union, this has recently been reduced from a year to 6 months.

In the context of tight budgetary constraints and the maintenance of levels of social protection, *cuts in employers' contributions have to be financed* by increasing taxes or reducing public expenditure. In both the UK and the Netherlands, there are plans to introduce energy and/or environmental taxes to offset the cost (in

the UK a landfill tax is due to come into effect in October 1996). In Luxembourg and in France - for the low-paid only - employers' social security contributions will be transferred from employers to the State. In the case of Luxembourg, a solidarity tax levied on all sections of the community will also be introduced.

The size of the overall tax wedge - the difference between what employers have to pay for labour and the net wage an employee receives - rather than merely the scale of charges falling directly on employers is also of relevance for the process of job creation. A high tax wedge is particularly important in the case of relatively low skilled, and therefore low paid workers, whose productivity, and contribution to the value-added of a business, might not merit the costs of employing them.

A widespread aim of policy has been to encourage the employment of the lower skilled by reducing the cost of employing them without reducing their take-home pay - in other words, to reduce the size of the tax wedge. In Ireland, this has been pursued as part of an ongoing policy of tax reform, whereby the lowest paid are taken out of the tax net, standard tax rate bands are widened and personal allowances are increased. In Denmark, basic tax rates have been reduced markedly, by 12-14 percentage points. This approach is also being followed in Finland where the main target is the reduction in direct taxation rather than in employers' contributions since it is believed that the latter would be offset up by pay rises.

4.2.3.5 Improving Effectiveness of Labour Market Policy

Improving the effectiveness of labour market policy can be achieved in two ways:

- by a shift from passive to active labour market policy
- through increased efficiency in the functioning of social welfare systems of income support

Throughout the Union, there have been efforts to *shift expenditure from passive income support of the unemployed to active labour market measures* to help them find work. Such measures include counselling and guidance, education and vocational training, temporary work placements or subsidised employment.

In Denmark, an early, needs-oriented approach has been adopted in an attempt to prevent long-term unemployment. This will result in 1998 in full-time training or jobs being provided to all those unemployed for two years or more. In France, the UK and Finland, relaxation of unemployment benefit rules is being considered to allow entitlement to allowances to those on training courses.

In the UK, the introduction of the Jobseeker's allowance aims to provide more help to the unemployed to find work while imposing more pressure on them to seek employment and to take jobs which are offered and, at the same time, making work more financially attractive than unemployment. In Ireland and Finland, studies are being carried out to assess the disincentive effects of social benefits. Ways are, therefore, being examined to provide greater distinction between income from benefits or social allowances and earnings from employment. A revision to the Income Support Act came into force in 1996 in the Netherlands requiring everyone receiving income support to accept suitable job offers.

In Ireland, concern about the level of replacement rates for the unemployed with dependants has resulted in greater incentives being introduced for the low-paid through family income supplement (FIS) - on the lines of a similar scheme in the UK - and an increase in child benefit rates for those in work, while child dependent payments to the unemployed have been frozen.

In Ireland also, earnings-related benefits are to be discontinued and unemployment benefits to be taxed, while in France, unemployment compensation has since 1992 declined with the duration of unemployment. Only in Greece has the daily rate of unemployment benefit been raised in real terms in recent years - by 30 percent in 1994 and a further 10 percent in 1995.

In a number of Member States, social welfare systems are being modified to take account of the growth in atypical working, which, by extending entitlement to benefits, should provide a greater incentive for people to accept part-time work.

A further priority is that of *achieving greater efficiency in the functioning of the welfare system.* With the rising cost of providing welfare systems in the face of higher levels of unemployment, national governments generally are seeking to tighten up and make the functioning of the system more efficient. This is being achieved either through closing loopholes and reducing abuse of the system or increasing the efficiency with which the system works.

A number of Member States - Germany, Belgium and Luxembourg, for example - are aiming to reduce abuse of the system in terms of fraud and illegal employment. At the same time, in both Denmark and the Nether-

lands, rules for benefit entitlement are being tightened through stricter definition of availability for work and through requiring the unemployed to accept suitable offers of employment if they are in receipt of benefits.

There has also been widespread realisation that employment agencies are likely to operate more effectively if they are decentralised. In Germany, Spain and Italy, employment placements were subject to national monopoly and these structures have been dismantled in recent years to allow the development of more locally-based agencies. Furthermore, in Spain, temporary employment agencies have been legalised, in part to help fill vacancies in the skilled professions.

In the Netherlands, more responsibility has been given to local authorities to manage income support systems, partly in order to introduce a greater incentive to reduce the amount paid out in benefits. Since 1994, they have had an incentive budget to fund measures to encourage people to move off of income support.

4.2.3.6 Helping Those Hard-Hit by Unemployment

Employment measures have been increasingly targeted on those hit hardest by unemployment, who in most cases are:

- young people under 25
- the long-term unemployed
- older people who have not yet reached retirement age
- women seeking to enter or rejoin the labour market after a period of inactivity
- disabled people
- ethnic minorities

The measures introduced by Member States for each category are summarised below. In Member State presentations of their programmes, however, some general measures were listed where specific groups were not identified. These include the creation of public sector jobs in Denmark for those people who are difficult to place, grants to employers for hiring those with special needs in Greece, part-time community work and training in the voluntary or public sector in Ireland and socially-useful work programmes in the South of Italy.

In Ireland, a Local Employment Service (LES) is being introduced to identify the needs of target groups. The LES will provide guidance, training and employment support at the local level and is being piloted in 14 areas of high unemployment. The LES project is part of a wider-ranging programme of Integrated Development, which seeks to tackle long-term unemployment and social exclusion at the local level by addressing the underlying causes of economic and social marginalisation especially in disadvantaged areas.

The large numbers of *long-term unemployed* (those who have been out of work for a year or more) has been a serious problem in nearly all Member States for some time. These people find it increasingly difficult to find a job the longer they are out of work and greater attention is being focused on how their prospects can be improved.

As noted above, many Member States have introduced temporary reductions in employers' social security contributions if they hire someone who is long-term unemployed. In Denmark, in addition to the planned scheme for guaranteeing all those out of work for two years a job or training place, public sector jobs have been created for the most difficult-to-place of the long-term unemployed, which is also the case in the Netherlands, while in Portugal, Ireland and Greece, financial help is available for them to become self-employed. In the UK, companies are able to take on a long-term unemployed person for a three-week free trial, and the very long-term unemployed are permitted to work part-time while still receiving income support.

In Germany, wage subsidies have been introduced to encourage employers to take on the long-term unemployed. These amount to DM 3 billion (1,546 MECU) over the period 1995 to 1999 and are expected to provide employment to some 180,000 people.

The problems faced by *young people* in finding employment, as noted above, are often due to insufficient education and training, but the lack of work experience can also pose a significant obstacle.

The integration of young people into work is promoted in most Member States through financial incentives to employers. In Spain, Ireland, Luxembourg and Portugal, employers can benefit from temporary reductions in social security contributions when they hire a younger person. Alternatively, in Germany, Belgium, France, Greece, and again in Spain, employers receive subsidies for taking on younger people. For unemployed young people in the UK, there is the guarantee of full-time education, vocational training or a job.

Member States have different approaches to the problem of unemployment among *older people*. A number - such as Greece and Portugal - still encourage older

people - especially if unemployed - to take early retirement, despite the mounting cost of such a policy with the growing numbers of people close to or above retirement age. In Denmark and Germany, on the other hand, measures have been introduced to enable them to remain in the labour force for longer, often with more flexible pension options.

In other Member States, employers are given financial incentives to hire older workers. Mostly this amounts to reducing employers' contributions. In Luxembourg, however, a more graduated system of benefit incentives has been introduced, with firms hiring long-term unemployed people over the age of 50 having their social security contributions reimbursed for seven years, while for those over 40 the time period is three years.

Disabled people face considerable barriers to finding employment, but only a few Member States have specific policies for tackling the problem. Lower employers' contributions are used as an incentive to hire disabled people in Portugal and Luxembourg, though in the latter case rules also exist for providing a minimum number of jobs for disabled people in public and private organisations employing more than 25 people.

In the Netherlands, legislation is being prepared to promote the integration of the disabled into working life through increased wage subsidies and probationary periods of employment.

In the UK, unemployed disabled people have priority on government-funded employment and training programmes, and legislation is being prepared to combat discrimination against their employment. In Finland, the number of vocational training places for the disabled is planned to be expanded.

There are two main problems facing *women* in the labour market. First, there remains a demarcation between male and female jobs and limited opportunities exist for women in those that are traditionally male-dominated. Secondly, career breaks to have children pose a double problem, in the form of a loss of skills during absence from work and difficulties of finding a suitable job which is compatible with childcare responsibilities.

In Luxembourg, Portugal, the Netherlands and the UK, measures have been introduced to provide women rejoining the labour market with greater opportunities for training, especially in new professions. In the Netherlands, efforts are being made to promote the role of women in business. Equal opportunities in Germany are being promoted on the basis of women receiving labour market support equal to their share of total unemployment. In the UK, women returning to the labour market may still receive benefits (to the extent that they are entitled to them) while undergoing vocational training.

Only in the Netherlands presentation is there explicit mention of measures to promote job creation for *ethnic minorities*. In 1995, legislation came into effect to promote the 'fair participation' of ethnic minorities in employment. This will be supplemented in 1996 by the provision of grants for the settling-in and education of immigrants.

4.3 Concluding Points

The purpose of this chapter has been to consider policies which have no *intended* spatial effects but which, nevertheless, have significant regional impacts. Unlike the next chapter which deals with the regional dimension of general government transfers, the focus of this chapter has been on the *proactive* policies of government. Two particular policies have been reviewed: policies to promote competitiveness (in effect, R&D-oriented policies) and employment policies.

As far as RTD and innovation policies are concerned, the chapter begins by providing appropriate *background context*. The point is made that R&D spending in the four Cohesion countries is significantly less than that found elsewhere in the EU Member States - whether measured in relation to GDP or to national population. That having been said, Ireland and Portugal were the only OECD countries in which both public and private expenditure on R&D increased between the periods 1985-9 and 1990-2, an indication perhaps of the stimulating effect of EU policies. With regard to the *regional* dimension of R&D policy, the emphasis within the Cohesion countries is clearly on issues of *national* competitiveness, scarcely surprising given the tensions noted in Chapter 2 between national prosperity and regional disparity.

The grouping of Germany and Italy together reflects the common regional features of their economies rather than any similarities in the R&D arena. Indeed, the two countries currently take quite different approaches to RTD in their problem regions. While in Germany a major effort is in train to try to establish an efficient research environment in the new *Länder*, in Italy there are now no separate measures for supporting RTD in the problem regions, following the demise of special intervention in the *Mezzogiorno*.

With respect to the "northern European" Member States, the focus is on the two case study countries: France and the United Kingdom. In terms of the em-

phasis placed on R&D expenditure (as a percentage of GDP or on a *per capita* basis), both countries are very much towards the top end of the EU Member State range, just behind Germany and Sweden (see Chart 4.1). As far as the *regional* dimension is concerned the focus, once more, is on *national* competitiveness. That having been said, examples are to hand in both countries of initiatives which aim to encourage greater participation in innovation in *all* regions. Moreover, in Northern Ireland, a distinct strategy and enhanced funding are available to stimulate RTD in the province.

Summing up the contextual position, it is clear that policies to promote RTD and innovation are generally operated with national policy objectives in mind. While there are some attempts to stimulate innovation in the problem regions, this is primarily in the form of encouraging technology transfer and the uptake of innovation rather than innovation *per se*. This broad picture is hardly surprising: research and development policymakers are understandably unlikely to be willing to jeopardise R&D policy objectives for the sake of promoting less viable projects in the problem regions.

Turning to consider the *regional distribution* of expenditures on R&D, the analysis in Section 4.1.3.1 is restricted to four countries for which relevant data is available: France, Italy, Spain and the United Kingdom. The focus is, first, on the regional-level distribution of *overall* R&D expenditure, distinguishing between the private sector, government and the higher education sector; and, secondly, on the regional-level distribution of so-called business enterprise sector expenditure on R&D (BERD) and the extent to which this is financed by *government*.

With regard to the former aspect, the regional distribution of overall R&D expenditure, a number of common themes apply across the four case study countries. Of perhaps most significance, R&D expenditure tends to be heavily concentrated in more prosperous regions. Thus, Paris (the Île de France region) accounts for 43 percent of all R&D expenditure in France, Piemonte and Lombardia for almost half private and State R&D expenditure in Italy, Madrid for 42 percent of total R&D expenditure in Spain and the South East for some 54 percent of all R&D expenditure in the United Kingdom.

The reverse side of this coin is that R&D expenditure in the poorest regions is generally very low. By way of example, in France the Limousin region accounts for less than 0.2 percent of the national R&D spend and, on a *per capita* basis has expenditure levels 20 times lower than in Paris. In similar vein, the eight regions of the *Mezzogiorno* in Italy account for only 8 percent of private and State R&D funding compared with 36 percent of the national population. The Spanish Objective 1 regions collectively account for 24 percent of the total R&D spend while containing almost 60 percent of the national population. Lastly, in the UK, Northern Ireland represents just 0.7 percent of overall national R&D expenditure but holds 2.8 percent of the national population.

A final interesting point regarding the regional distribution of overall R&D expenditure concerns the distribution of private and public sector spending by region. While there is considerable variation between regions, there are a significant number of instances where relatively prosperous regions benefit particularly from public sector funding. An obvious example is Lazio which, on its own, receives over half of the State funding for Italian R&D. In Spain, too, over three-fifths of State R&D funding is channelled into Madrid.

Moving on to consider the regional distribution of government-funded BERD (business enterprise sector R&D) three general points can be made. The first is that there is a high degree of complementarity between government R&D funding and regional aid at the regional level. Prosperous regions are generally ineligible for regional support but benefit disproportionately from R&D funding; in contrast, poorer regions perform badly in terms of government R&D aid for business but generally do well with respect to regional assistance. Second, notwithstanding the general complementarity shown in Chart 4.5 to Chart 4.8, it is important to note the very different *scales* of R&D and regional spend by country. In general terms, R&D spending is far more significant than regional support in the prosperous Member States while regional aid is more important than government-funded BERD in many poorer Member States. Third, combining these two general points, it is the richest regions in the richest countries and the poorest regions in the poorest countries which benefit most from Member State R&D and regional aid in combination.

Evaluation studies on the regional effects of horizontal policies in general, and competitiveness policies in particular, are fairly limited, hampered by the lack of appropriate regional data and by the difficulties of disentangling the impact of what are often wide-ranging policies from other government policies. As a result, the focus of most studies is less on the regional effects of competitiveness policies and more on assessing the effectiveness of such policies in different geographical contexts. While it is difficult to generalise, a broad conclusion seems to be that competitiveness policies work less well in less-favoured regions.

Turning, finally, to consider *employment policies*, there is, in practice a serious lack of empirical evidence on the effects of most of the measures included in the employment programmes being followed by Member States. However, while the effect of present policies on employment growth is uncertain, particularly in terms of its scale, their impact on cohesion is less questionable. A common characteristic of most of the measures in operation or being planned is to reduce disparities in employment opportunities whether between individuals, social groups or regions. While most measures do not have a specific regional dimension, the very fact that many of them are aimed at the unemployed - and within this group at the most disadvantaged of those without work - is likely to mean that they benefit regions with the most serious problems of unemployment and inadequate rates of job creation more than others, so tending to narrow regional disparities.

5. Interregional Transfers from Central Government Budgets

5.1 Introduction

Public expenditure in the different Member States of the EU represents a significant proportion of the income of the countries concerned; on average, around a quarter of GNP in industrialised countries - more if social security is included. Government funds are generated from obligatory contributions across the regions of the countries concerned and are redistributed in expenditures across the regions. This process involves involuntary but significant interregional transfers. The question is whether this redistribution is in or out of line with the objectives of regional policy. In spite of its importance as a mechanism to promote cohesion, this issue has been understudied. This chapter presents the results of a research effort to assess these interregional transfer mechanisms in seven EU countries: France, Germany, Italy, Portugal, Spain, Sweden and the United Kingdom (302 million inhabitants).

Relatively little is known about budget-induced interregional transfers because so few studies have been undertaken on the subject. The reason for the lack of research in this area lies primarily in the conceptual and statistical difficulties involved in measuring who, and which region, pays into and/or gains from public funds. There are, however, some important, if relatively old, research results available. In the United States, Mushkin (1956, 1957) conducted seminal research on the State by State allocation of the federal budget. Mushkin appears to be the first to have made a clear distinction between two conceptual approaches to the regional allocation of government expenditure: one is the "dollar flow" approach which indicates where public money is physically going; the second is the "benefit" approach which indicates the location of those who benefit from public expenditure. This distinction is important and means that an accounting approach is necessarily partial and limited and has to give way to economic analysis integrating various conceptual approaches of the regional incidence of expenditures. For this reason, Mushkin concluded that it was necessary to undertake two sets of calculations (although ultimately she was only able to undertake the "flow" calculation because of insufficient regional data to calculate the "benefit"). The result of the study was clearly that the richer US regions were subsidising the poorer ones. The same kind of study, with the same conclusions, was published in 1967 by the US Congress.

Thanos Catsambas (1978) produced broadly similar results, but went further into the methodological and conceptual issues. In considering the US federal budget, he identified four conceptual approaches:

i. an accounting approach;

ii. a "flow" approach;

iii. a "benefit" approach; and

iv. an "impact on the general equilibrium" approach

In practice he used only the second and third of these approaches. The first has little economic meaning; and the fourth is impossible to calculate. A further important point made by Catsambas concerns the conceptual difficulties and statistical uncertainties of the budget allocation. As a result, he argued that it was necessary to produce several different results; his calculations on the US budget involved 10 different allocations and a rank-Spearman correlation analysis.

In 1969, a similar study was undertaken in respect of a particular region: the British Treasury made an analy-

sis of the situation of Scotland regarding the UK budget. The methodology involved combining, in the same analysis, a "flow" approach (for clearly regionalised expenditures such as capital expenditures or grants) and a "benefit" approach for "indirect" expenditures (such as defence, foreign policy or debt). It appeared that if Scotland was not a part of UK, it should have increased its public revenues or reduced its public expenditures by 30 percent (HM Treasury, 1969).

But the main studies on European countries were conducted for the so-called MacDougall report (1977), by the European Commission working party on the role of public finances in European integration. This report gives estimates of interregional transfers for four European countries: France, Germany, Italy and the United Kingdom. The methodologies for these studies are quite different, mixing, and not always clearly, the benefit and flow concepts. For this reason, it is questionable to compare the budgetary transfers across countries. However, the general results were clear once more: public funds contribute to reducing disparities in regional incomes. This is illustrated in Table 5.1.

Table 5.1: The Role of Public Funds in Reducing Interregional Disparities in Income.

	Average reduction in regional per capita income Var. Coef. (non-weighted by population)	Variation of the Gini coefficient of regional per capita income (weighted)
France	54	52
Germany	29	39
Italy	47	44
UK	36	31
Australia	53	53
Canada	32	28
USA	28	23

Source: Rapport du Groupe de Réflexion sur le rôle des finances publiques dans l'integration européenne(1977).

Other country studies can also be quoted. Van Rompuy & Verheirstraeten (1979), on Belgium, calculated the budget-induced transfers from Flemish to Walloon regions in 1974. They measured the net transfer benefiting Wallonia as 90 billion Belgium francs (11 percent of the budget). Coopers & Lybrand (1985), on the United Kingdom, produced similar results for the 1984 budgetary year: the net estimated contribution of the South East region to the UK budget was £3.7 billion, ie. nearly 4 percent of government expenditures.

In France, INSEE made a first effort to build CRAPUC (Regionalised Accounts of Central Public Administration) and to produce a regional allocation of both revenues and expenditures for the 1982-1984 central government budgets. The results (Donnelier and Garagnon, 1989[14]), relate the same kind of story: the richest region, Ile de France, transferred in 1984, through the central government budget, around 90 billion francs (8,000 francs/capita) to the rest of the country (ie. 7.5 percent of the Ile de France GDP or 7 percent of government expenditures). Poor regions such as Languedoc Roussillon or Bretagne gained through these transfers around 5,500 francs/capita. This effort is currently continuing at INSEE. Recently, new provisional and partial results were published (INSEE, 1995): the Ile de France region, in 1988, according to INSEE calculations, would have transferred, through the central government budget and social security funds, 197 billion francs to the rest of the country.

A number of studies, referred to in the "*Sound Money-Stable Finances*" (1994) report, have drawn attention to the balancing role of a central budget in a given country when a particular region suffers from an asymmetrical shock. In this case, it is argued, the central budget will play a buffer role, cushion the impact of the shock and more generally assist the region in need. There is but one step from this type of short term analysis to a more structured approach of the impact of the national budget on weaker regions. It is this that this study aims to do, by using a common conceptual and methodological approach to estimate the regional budgetary balances of regions in seven large European countries.

Section 5.2 presents a theoretical approach to budget induced interregional transfers (BIIT). The general methodology proposed and the way it has been adjusted and implemented in each country is presented in Section 5.3. Section 5.4 presents the main findings of the research. Finally, Section 5.5 begins to discuss some of the implications of these results.

[14] The results of this study, available on the quoted 1989 working paper at INSEE, produced by the authors, have been published in Godineau (1992).

5.2 A Simple Model of Budget-Induced Interregional Transfers

A starting point for the discussion of this issue is a simple model of budget-induced transfers (Prud'homme, 1993). Consider a country (or a federation) with a population P, of per capita GDP y and of GDP Y, composed of regions (or of states) i, of population P_i, of per capita GDP y_i, and of income Y_i. The budget E of this country is balanced. Let:

t_i be the per capita taxes paid by region i to the central budget;

e_i be the per capita expenditures or benefits of the central budget in region i;

g_i be the per capita budget-induced transfers for region i;

G_i be the budget-induced transfers for region i;

a, b, c, d, be parameters describing the tax and expenditure systems.

Then:

$$t_i = a\, y_i^b \qquad (1)$$

$$e_i = c + d\, y_i \qquad (2)$$

$$g_i = e_i - t_i \qquad (3)$$

a is an indicator of the budget size.

b reflects the progressivity of the tax system.

b=1 means a proportional tax system;

b>1 a progressive one.

d denotes what could be called the "equalising nature" of the expenditure system;

d=0 means that expenditures per capita benefit equally all regions and are independent of regional per capita income;

d<0 that they decrease with income; and

d>0 that they increase with income.

Figure 5.1 gives a graphic presentation of the model. In Figure 5.1 b is taken to be equal to one (the tax system is assumed to be proportional) and d is taken to be equal to zero (the expenditure system is assumed to be of an equalising nature).

$$g_i = c + d\, y_i - a\, y_i^b$$

$$G_i = c\, P_i + d\, y_i\, P_i - a\, y_i^b\, Pi$$

$$E = a\, Sy_i^b\, P_i$$

c can be eliminated by introducing the balanced budget constraint $SG_i=0$:

$$c\, P + d\, Y - a\, Sy_i^b\, P = 0$$

$$c = E/P - d\, y$$

(3) becomes:

$$g_i = E/P - a\, y_i^b - d\,(y - y_i) \qquad (4)$$

Equation (4) shows that the budget-induced transfers for region i are a function of four factors:

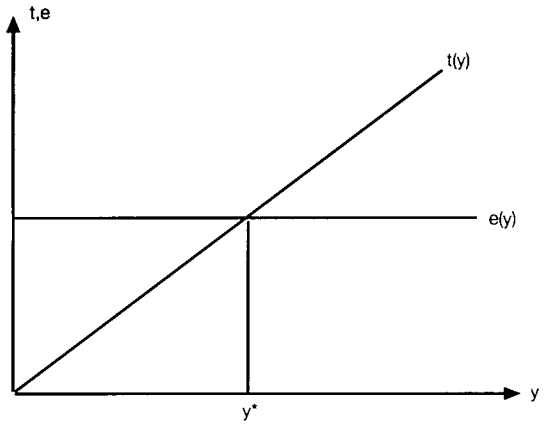
i. they are a function of the size of the budget E of the country (or federation), or, to put it otherwise, a function of the total taxes raised, which in turn depend upon a and b, the parameters of the tax system and upon the regional income distribution; the higher the budget, or the budget per capita, the greater the transfers;

ii. the magnitude of the transfers also depends upon the progressivity of the tax system, as indicated by b. For b>1 and for higher values of y_i, a y_i^b will be large, and the transfer negative;

iii. transfers are also a function of the equalising nature of the expenditure system, represented by d, the slope of the expenditure curve; if the expenditure system is equalising, that is if expenditures are greater in low income regions, then the lower the income of region i, the greater the positive transfer it will receive;

iv. for a given region i, the transfer is of course also related to its relative per capita income, or more precisely to the difference between its income and the average country income.

Figure 5.1: Graphic Presentation of the Simple Model



This simple model can be further simplified. If the tax system is proportional, b=1, and (4) becomes:

$$g_i = E/P - a\ y_i - d\ (y - y_i) \qquad (4a)$$

The assumption can also be made that the expenditure system is equalisation-neutral, that is independent of regional income. In this case, d=0, and (4) becomes:

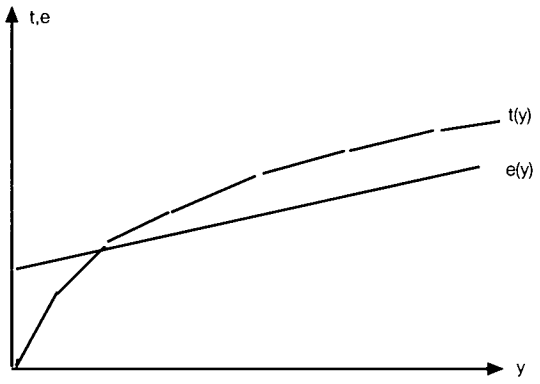
$$g_i = E/P - a\ y_i^b \qquad (4b)$$

The two modifications can also be considered jointly. In this case, (4) becomes:

$$g_i = a\ (y - y_i) \qquad (4c)$$

This is the simple case represented by Figure 5.1. In this case, there will be a positive transfer for all the regions with a regional income lower than the average income y*, and a negative transfer for all the regions with an income higher than y*. It is interesting to note that there can be transfers from richer to poorer regions even with a regressive tax system and a non-equalising expenditure system, as in the case represented by Figure 5.2.

Figure 5.2: The Simple Model, with Regressive Taxation and Non-Equalising Expenditures



The most important lesson to be drawn from this simple exercise is that national budgets are likely to transfer large amounts of money from richer to poorer regions. These transfers should be expected to be larger in the countries where the size of the budget (relative to GDP) is larger, where the tax system is progressive, where the expenditure system is equalising, and, of course, where inter-regional income disparities are greater. The calculations that follow should verify these assertions.

5.3 Methodology

Measuring interregional transfers induced by a national budget for a given country and a given year is a difficult exercise. The difficulties to be overcome are both conceptual and statistical.

5.3.1 Conceptual and Statistical Difficulties

At the conceptual level, it is often unclear how a given budget tax, or a given budget expenditure should be regionally allocated. Consider, for instance, the corporate income tax paid by a multi-regional enterprise, which is usually paid at the location of the company's headquarters; what is clear is that it should *not* be allocated to the region where it is paid and collected. The tax paid is obviously not contributed or borne by that region alone, but by all the regions that have contributed to the taxed profit of the company. Or consider expenditures on agricultural research undertaken in region A; should they be allocated to region A, or to region B, which is predominantly agricultural and will presumably benefit from agricultural research, or perhaps to region C, which happens to be a heavy consumer of agricultural products?

Then, even if and when it is known how, in principle, to allocate a particular type of revenue or expenditure, there may well be statistical difficulties in practice. The figures required to implement a correct conceptual procedure may well not exist at the appropriate regional level.

These difficulties have two implications. One is that there are not many studies of the regional allocation of national budgets. The second is that these studies cannot readily be compared. This is why it was felt important to develop a unified methodology, and to apply it to seven European countries: the UK, France, Italy, Spain, Sweden, Germany and Portugal. This methodology is based on work previously undertaken at L'OEIL, mostly but not only on France (Prud'homme, Rochefort and Nicol 1973, Davezies

1993; Davezies 1991; Davezies, Nicot, Pouliquen & Prud'homme, 1987; Davezies Nicot & Prud'homme, 1985). It is important to try and understand this methodology, because the findings are only as good and creditworthy as the methodology. The methodology involves three steps.

5.3.2 Budget Breakdown

The first step involves the establishment of detailed national budgets. These budgets have to be: (i) consolidated, (ii) balanced, (iii) recent, (iv) executed, and (v) broken down into as many items of revenue and expenditure as possible.

The need for *consolidation* of a budget refers to the extra-budgetary accounts, often subsidised by the budget, that may exist; there is a danger of double-counting that must be avoided. This raises the issue of the "perimeter" of the national budget, which varies from country to country, particularly with respect to the so-called "social security" accounts (the meaning of the concept itself varies from country to country). In principle, we have not included social security in this study; in practice, however, the UK, Italian, Portuguese, Spanish and Swedish budgets which have been used do include social security; this is one of the reasons why they represent a higher share of GDP than in France and Germany. In France, the social security system is distinct from the government budget. The last regional allocation of the social security funds in France is for 1990; no figures were available for 1993. It is important to notice that the German budget studied is the official one, ie. it does not include the *Länder* share of the tax sharing mechanism. This mechanism could be better considered as a part of national public finance, in which the central government decides the tax rates, collects all the taxes subject to the tax sharing system, and distribute grants to *Länder*. The accounts used in Germany, and it is these that were utilised in this study, consider that the share of taxes benefiting the *Länder* are in the local public finance system.

The budgets used are *balanced*. Some studies of interregional "transfers" are restricted to expenditures, or to certain types of expenditures. It should be clear, however, that such studies cannot, by definition, produce interregional transfers. To show that some regions "transfer" income to others, it is necessary to start with a balanced budget. The expenditures that are not financed by taxes are necessarily financed by borrowing, even though the regional allocation of this borrowing may raise some difficult theoretical issues. The budgets examined are ex-post, effective, *executed* budgets, not budgeted budgets. It seems obvious that it should be so, but it is interesting to note that, in many countries, it is much easier to have access to budgeted budgets than to executed budgets.

The budgets studied are the most *recent* that could be found: they are for the year 1993.

Finally, these budgets have been *decomposed* into as many items as convenient from the viewpoint of regional allocations. The basic principle used in these decompositions (which are of course constrained by the availability of data) is to produce items that can convincingly be regionally allocated. The resulting number of items appear in Table 5.2.

Table 5.2: Decomposition of National Budgets

	Expenditure items	Revenue items	Total number of items
France	312	62	370
Germany	106	37	150
Italy	140	24	186
Portugal	82	198	137
Spain	478	66	540
Sweden	80	49	130
United Kingdom	850	56	887

In many cases, a relatively small number of items - about a dozen - account for a large share - about half - of expenditures or of revenues. Table 5.3, for the UK, is illustrative of this feature. Comparable information for the other case study countries can be found in Annex IID.

Table 5.3: Main Items of the UK Budget, 1993

	£ billion	Percent
Revenues		
Income tax	58.4	23.4
Value-added tax	39.0	15.6
Social security contributions	38.7	15.5
Corporation tax	14.9	6.0
Business rates	12.6	5.0
Fuel duties	8.9	3.6
Tobacco duties	6.5	2.6
Sub-total	178.4	71.9
Total	**249.5**	**100.0**
Expenditure		
Retirement pensions (basic)	26.5	10.6
Payments to health authorities	21.4	8.6
Revenue support grant to LA	17.1	6.8
Income support (non pensioners)	12.2	4.9
Non domestic rates payments to LA	11.6	4.6
Equipment	8.0	3.2
Armed forces: personnel	6.9	2.8
Child benefits	6.0	2.4
Invalidity benefits	5.9	2.3
Payments on domestic rates to LA	4.8	1.9
Sub-total	120.3	48.2
Total	**249.5**	**100.0**

5.3.3 Regional Allocation Procedure

The second step consists in the regional allocation of these budgetary items. For *each* of them, allocation criteria or keys are sought. Let T be the total amount of a tax item collected at the national level, K an allocation criteria, Ki the value of this criteria for region i, Ti the amount of taxes allocated to or, put another way, contributed by region i:

$$Ti = T^*Ki/K$$

Much depends on the selection of appropriate criteria. The criteria selected must be (i) economically meaningful and (ii) multiple.

It is essential to understand that the criteria retained for the regional allocation of a particular item are chosen because they make economic sense. The work done is not an exercise in accounting. The research methodology is guided by economic reasoning, and by the theory of incidence in the selection of criteria.

In selecting appropriate criteria, a distinguishing feature of this study is that it does not limit itself to a single allocation key when a number of alternative allocations may seem theoretically appropriate. The reason for adopting this approach is that all of these criteria may be equally meaningful, either because there is a conceptual uncertainty as to the appropriate criteria, or because it has been necessary to use statistical proxies that are equally imperfect although acceptable. In other words, for a number of items, rather that providing just one "best" regional allocation, several "good" allocations are used. This is an important characteristic of the methodology.

Some examples might be useful in clarifying this point. For certain items of revenue or of expenditure, such as personal income tax or transfers to local governments (one of the most important types of expenditure everywhere), the actual recorded figures are utilised. The personal income tax paid and collected in region A can meaningfully be said to be contributed by region A. Similarly, the transfers to the local governments of region A can clearly be said to benefit region A. In such cases, the criteria used is hardly a criteria; it is the actual regional value, and it is of course singular.

For other items, such as corporate income tax, the actual regional values, as indicated above, are meaningless, and are simply ignored. The theory of incidence

suggests that a tax paid by an enterprise is borne by the workers of the enterprise (in the form of reduced wages), by the owners of the capital of the enterprise (in the form of reduced profits) and by the consumers of the products of the enterprise (in the form of higher prices). The theory suggests that the relative share of these tax bearers varies with the structure of the markets for labour, capital and goods, but it is not very helpful in providing percentages. In this study three criteria for the regional allocation of corporate income tax are adopted. The first assumes that the tax is borne 50 percent by workers and 50 percent by capital owners, and allocates half the national proceeds of the tax pro rata in line with the regional allocation of wages, and the remaining half pro rata according to the regional allocation of the stock of private capital. The second assumes that the tax is borne 50 percent by workers, 25 percent by capital owners, and 25 percent by consumers. The third assumes that the tax is borne 50 percent by capital owners, 25 percent by workers, and 25 percent by consumers.

For yet other items, there are no actual regional values available. This is, for instance, often the case for education expenditures in those countries where this is a national budget expenditure. In such a case, criteria such as the number of pupils by region (more precisely: the share of the region in the national total) or the number of teachers by region, can be utilised.

Table 5.4 indicates the number of criteria, or proxies, which have been produced and utilised for each country. For each criteria, the value for each region has been identified. In other words, for France, with 22 regions, a 22x135 matrix of criteria has been utilised. These matrices constitute, by themselves, an interesting regional statistical yearbook.

Table 5.4: Number of Criteria Used by Country

France	135
Germany	111
Italy	200
Portugal	45
Spain	180
Sweden	110
United Kingdom	316

5.3.4 Summing Procedure

The last step consists in adding up, for revenues, and then for expenditures, for each region, the amounts estimated for each item of revenue and of expenditure, in order to know how much each region has contributed (in revenues) to the budget, and how much it has gained (in expenditures) from the budget. If only one criteria had been used for each item, this task would be easy. Unfortunately, as mentioned above, several criteria have been used for a number of items. The addition of items can therefore be done in millions of different ways. Consider a country in which there are only two taxes: a business tax and a value-added tax. Assume that three criteria have been identified to allocate to region A the national proceeds of the business tax, and that these criteria yield 20, 22 and 23 as estimates of the contribution of A to the business tax. Assume that there are also three criteria for the regional allocation of VAT, that yield 30, 35 and 38 as estimates of the contribution of region A to VAT. It is easy to see that there are nine combinations of these two sets of figures. They will yield 50, 55, 58, 52, 57, 60, 53, 58 and 61 as estimates of the contribution of region A to the national budget. Instead of having just one figure, there are nine figures that are equally meaningful or at least plausible.

The essence of the procedure adopted in this study is to produce, for each region, all these estimates, and to study the numbers thus obtained. If the distribution of numbers is sufficiently concentrated - that is, if the coefficient of dispersion is reasonably low - the conclusion is that the estimates converge, and the median or the average value of the distribution is retained. This value is considered sufficiently robust to be meaningful and significant. The hypothesis behind this procedure is that the practical importance of some of the hard conceptual choices is often not great. It is not clear whether business taxes should be allocated pro rata with wages, capital or consumption; but in practice, it does not matter as much as might be feared because, for most regions, the share of wages is not very different from the share of capital nor from the share of consumption. If, on the contrary, the distributions are extremely dispersed, it will be impossible to say much about the contributions to the budget and the gains from the budget for a given region.

There are so many possible combinations that in practice it would be impossible to produce and study all the associated distributions. Accordingly the research has been limited to 101 randomly selected combinations, that produce, for each region, 101 estimates of its contribution to the budget and 101 estimates of its gain from the budget. For each region, the distribution of these 101 values is examined. As a check, for several cases the same operation has been carried out with 1001 randomly selected combinations. The results did not differ significantly from the results obtained by means of 101 randomly selected combinations.

Once estimates have been obtained for each region of what it contributes to the budget, and of what it gains

from the budget, it is easy to define a budgetary transfer, which is the difference between the two. Such transfers are positive when the region gains more than it contributes and negative when it contributes more than it gains.

5.3.5 Flow Approach and Benefit Approach

The procedure just described is, in fact, refined and enriched in the case of expenditures (or, to take the viewpoint of regions, in the case of gains from the budget) by a distinction between a "flow approach" and a "benefit approach". When the regional allocation of a given item of expenditure is considered, there are two basically different ways of looking at the regional gains. First, the question can be posed: where does the money go? Where is the expenditure actually made? This the flow approach. Second, where are the actual beneficiaries of this item of expenditure? Whose welfare is actually increased by it? This is the benefit approach.

The flow and benefit concepts can perhaps be made clearer by a few examples. Take the case of expenditures on agricultural research mentioned above: in a flow approach the amount will be allocated to the region(s) where research centres are located; in a benefit approach the amount will be allocated to the regions where agricultural goods are produced and/or in the regions where agricultural goods are consumed. Take the case of military expenditures: in a flow approach; this item will be allocated to the regions where arms are being made, or soldiers stationed; in a benefit approach, it will be assumed that all citizens are equally protected all over the country, and the expenditure will be allocated pro rata in line with population. Take expenditures in central government ministries: in a flow approach, they will be allocated to the city where wages are paid; in a benefit approach, they will be allocated all over the country, with the help of criteria reflecting the benefit that each region draws from the services performed by the particular ministry.

The flow approach and the benefit approach will therefore usually imply the use of different criteria for the allocation of most items of expenditure. Rather than utilising all the possible criteria for a given item, it was found useful to perform two distinct allocations, one for each approach. The work described above is thus done twice for expenditures. Distinct criteria are used, different summations are made, different sets of 101 distributions are randomly selected, different distributions of estimates are produced and analysed, different median values of the gains of each region from the national budget are retained.

For a given region, two estimates of the budgetary "gain" are produced: the "gain (flow)" and the "gain (benefit)". The comparison with the contribution to the budget will yield two estimates of budget-induced transfers: "transfers (flow)" and "transfers (benefits)", that is transfers in the flow approach and in the benefit approach.

Which is best? The question is futile. They are equally interesting but they tell different stories. They look at the complex phenomenon of budget-induced interregional transfers from different angles. The two approaches incorporate two conceptual approaches that are so different that it would not be reasonable to try and mix them. A corollary of this is that the dispersion of the 101 figures obtained for "gains" in both approaches will be narrower than would be the case if this distinction were not made.

Why is there not a similar distinction introduced for revenue items? For revenues items, use is made basically of a benefit approach. A flow approach would allocate revenues at the place where they are collected. For institutional reasons, this would not have much meaning, because the location of tax collection (or tax payment), at least for certain taxes, has little economic significance. In Portugal, due to the lack of existing regional data, the regional allocation of the budget and Social Security was implemented for the "flow" approach and not for the "benefit" one (which requires more data).

5.3.6 Treatment of Debt-Related Items

Borrowing (on the revenue side), debt reimbursements and interest on the debt (on the expenditure side) - which might be called debt-related items - present a special problem, all the more important because of the magnitude of such amounts in many countries. Lending money to the government is not the same thing as paying taxes to it. Receiving interest on such loans is not the same thing as benefiting from government expenditures.

Debt repayment on the expenditure side is allocated differently between the flow and the benefit calculations. For the benefit approach, regional proxies reflecting the incidence of debt financing are used. Debt financing increases the level of expenditure from which the population can benefit. Accordingly, debt payments have been allocated in proportion to the regional distribution of expenditures. These figures are based on a "first round" of calculations of the regionalisation of taxes and spending. This process assumes implicitly that (i) the regional distribution of marginal taxes or expenditures is the same as the mean of regional taxes and expenditures; and (ii) that the region-

al allocations of the expenditure benefits of previous years are not different from those of 1993. For the flow approach, debt financing is allocated according to the regional distribution of savers or shareholders. The deficit, on the revenue side, is allocated according to the tax contributions of the regions.

5.4 Main Findings

Many millions of calculations have been computed to produce regional budgetary balances in the seven countries. The general results, for each country, are presented in Annex IIB, in absolute terms (national currency, ECU and PPS) and in relative terms (relative to regional GDP and to total budget expenditures). Annex IIC displays a cartography of the results (see also Figures 5.5 to 5.12 at the end of this chapter). It is important, before presenting and discussing these results, to remember that they are not regional "accounts", but the outcome of economic analysis. The figures presented are mean results of various conceptual or statistical choices of allocation.

A number of observations and cautionary remarks should be made concerning the use of these results.

i. the type of government spending analysed differs between countries. In Italy, Portugal, Spain, Sweden and the United Kingdom, social security revenues and expenditures are included; in France and Germany they are essentially distinct. Attempts to compare the distributions between countries must take account of the different types of expenditure assessed in different countries and of the relative weight of the budget in the national GDP.

ii. similarly, the intensities of the interregional transfers are a function of the territorial breakdowns used in the different countries. This is always a concern in undertaking regional analyses of any kind; however, it is important to underline the significance of this issue. For statistical reasons, the breakdowns used vary considerably: 18 regions in Spain; 22 in France; 17 in Germany, 5 in Portugal, 20 in Italy; 11 in the United Kingdom; and 8 in Sweden. The intensity of the transfers measured is directly related to the territorial units employed; as such, comparing the intensity of the transfers is broadly equivalent to comparing regional breakdowns. For example, if the two neighbouring regions of Stockholm (which is a net contributor) and east-mid Sweden (which is a net beneficiary) were considered as a single region, the total value of the transfer from this "new" region to the rest of Sweden would be affected significantly. This means that it is not conceptually very meaningful to compare the general amount of transfers between countries.

iii. although the basic methodology adopted for the regional distribution of the budgets of the seven countries is the same, certain differences in the implementation of the methodology should be noted (as mentioned in the previous section). They result from differences in the quality and availability of the statistical information, especially at the regional level. For example, in the Spanish case, the regional criteria used for civil servants' wages is the number of employees in non-market employment. Annex IID displays the allocation choices made for the main expenditures and contributions of each country. It is easy to verify, on the basis of data for those countries where the regional statistical coverage is better, that there is, at the regional level, a very large convergence of the regional values for various analogue indicators. For example in France, the difference between the percentage of civil servants in Ile de France and the percentage of civil servants' wages is only one percentage point.

In spite of this somewhat lengthy list of caveats, the results presented provide, for the most part, a robust measure of the interregional transfers of the countries under study.

5.4.1 The Concentration of the Results

In the course of this study 101 regional allocations of expenditures on the "flow" and "benefit" approaches and 101 allocations of regional contributions have been calculated. It is appropriate to use the mean results as long as there is a concentration of these results. Such concentration was found in practice. Annex IIE gives, for each region, the variation coefficient (standard error/average: σ/M) and the Min/Max of the three sets of calculations. Table 5.5 gives an example of these tables for the UK case. Table 5.6 presents the national average and standard error of these regional coefficients.

All the values of the concentration coefficients indicate a good convergence of the results. The most concentrated results are for contributions, then for "flow" expenditures and "benefit" expenditures. Spain is the country where the results are the least concentrated, but even in this country, the regional contributions vary,

Table 5.5: Concentration of Results of 101 Regional Allocations of Budget Expenditures ("Benefit" and "Flow" Approaches) and Contributions: the Case of the UK

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contributions s/M	Contributions Min/Max
North	0.02	0.91	0.01	0.97	-0.01	0.97
Y&H	0.01	0.95	0.00	0.98	0.00	0.98
E. Mids	0.01	0.94	0.00	0.98	0.00	0.98
E. Anglia	0.02	0.90	0.01	0.97	0.00	0.98
South East	0.01	0.96	0.00	0.98	0.00	0.98
South West	0.03	0.90	0.01	0.98	0.00	0.98
W. Mids	0.01	0.95	0.00	0.99	-0.01	0.96
North West	0.02	0.93	0.00	0.98	0.00	0.98
Wales	0.01	0.95	0.01	0.95	0.00	0.99
Scotland	0.01	0.96	0.01	0.97	0.00	0.99
N. Ireland	0.02	0.94	0.01	0.98	-0.01	0.97
Mean	0.02	0.94	0.01	0.98	-0.01	0.98
Standard error	0.01	0.02	0.00	0.01	0.00	0.01

Table 5.6: Concentration of Results of 101 Regional Allocations of Budget Expenditures ("Benefit" and "Flow" Approaches) and Contributions: National Coefficients of Concentration

		Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contributions s/M	Contributions Min/Max
France	Average	0.02	0.91	0.01	0.97	-0.01	0.98
	Std. Err.	0.01	0.04	0.01	0.01	0.00	0.01
Germany	Average	0.02	0.93	0.03	0.91	-0.02	0.92
	Std. Err.	0.01	0.04	0.03	0.06	0.01	0.05
Italy	Average	0.10	0.80	0.04	0.86	-0.01	0.98
	Std. Err.	0.01	0.08	0.02	0.05	0.00	0.01
Portugal	Average	-	-	0.03	0.88	-0.01	0.97
	Std. Err.	-	-	0.01	0.03	0.00	0.01
Spain	Average	0.04	0.82	0.05	0.82	-0.06	0.86
	Std. Err.	0.02	0.06	0.03	0.09	0.05	0.10
Sweden	Average	0.03	0.88	0.03	0.92	0.00	1.00
	Std. Err.	0.03	0.07	0.03	0.06	0.00	0.00
U.K.	Average	0.02	0.94	0.01	0.98	-0.01	0.98
	Std. Err.	0.01	0.02	0.00	0.01	0.00	0.01

on average, from -7 percent to +7 percent around the mean contribution and from -9 percent to +9 percent around the average for regional expenditures ("flow" and "benefit"). The results of regional allocations of expenditures in Italy show the same levels of deviation.

For the other countries, the level of difference of the results is very small. The statistical convergence of the social and economic characteristics of regions makes the results generally insensitive to conceptual differences of allocation. For example, in all countries, the three synthetic proxies used to allocate corporate taxes (three different combinations of regional proxies on capital, wages and consumption) give almost the same result.

5.4.2 Budget-Induced Interregional Transfers are Large

Irrespective of whether the "flow" or the "benefit" concept is used, it appears that the richer regions of the countries studied transfer significant sums to the poorer or problem regions, through public funds. The implicit transfers involved are in line with regional policies implemented at national and European levels. This confirms the conclusion of the MacDougall report which highlighted the regional redistributive effects of the budget in the 1970s. There is a lack of technical vocabulary to define this mechanism, because the concepts of "progressivity" or "regressivity" apply only to tax matters. It is possible to enlarge this vocabulary to expenditures and even to interregional transfer systems. On this basis, a transfer system can be said to be interregionally progressive if and when richer regions subsidise poorer regions. This is the case for the Member States studied.

Detailed results of the regional allocations of national budgets are provided in Annex IIB (expenditures, revenues and balances, in terms of local currencies, ECU, PPS and relative to regional GDP and budget expenditures). Table 5.7 summarises the results of selected richer and poorer regions. Table 5.9 presents the balances of all the regions in terms of percentage of regional GDP and in ECU.

Table 5.7: Budget-Induced Interregional Transfers in MECU, as a Percent of Regional GDP and in k. ECU per capita: Selected Regions

	transf (benef) MECU	transf (flow) MECU	transf (benef) %GDPreg.	transf (flow) %GDPreg.	transf (benef) k ECU/cap	transf (flow) k ECU/cap
Andalucia	9,178	7,435	17%	14%	1.30	1.10
Galicia	3,185	2,078	14%	9%	1.20	0.80
Madrid	-8,455	-6,041	-13%	-9%	-1.70	-1.20
Cataluña	-4,302	-4,113	-6%	-5%	-0.70	-0.70
Midi Pyrenees	2,158	2,137	6%	6%	0.90	0.90
Languedoc R	2,649	2,760	8%	9%	1.20	1.30
Ile de France	-17,806	-8,848	-6%	-3%	-1.60	-0.80
Rhône-Alpes	-673	-1,655	-1%	-2%	-0.10	-0.30
Thüringen	6,883	5,111	28%	21%	2.71	2.01
Mecklen-Vor.	5,225	3,970	29%	22%	2.82	2.14
Baden-Württ.	-11,071	-10,128	-5%	-4%	-1.09	-0.99
Hessen	-6,778	-6,112	-4%	-4%	-1.14	-1.03
Sicilia	12,151	8,955	24%	17%	2.40	1.80
Campania	11,891	10,117	21%	18%	2.10	1.80
Lombardia	-23,436	-20,051	-14%	-12%	-2.60	-2.20
Piemonte	-6,778	-6,945	-9%	-10%	-1.50	-1.60
Alentejo	-	629	-	26%	-	1.18
Algarve	-	209	-	10%	-	0.61
Norte	-	-547	-	-2%	-	-0.16
Lisboa e V.T.	-	-657	-	-2%	-	-0.20
North Norrland	1,210	1,257	13%	14%	2.30	2.40
N.Mid Sweden	1,585	1,625	11%	11%	1.80	1.90
Stockholm	-3,493	-2,058	-10%	-6%	-2.10	-1.20
West Sweden	-76	-670	0%	-2%	0.00	-0.40
North West	4,368	3,530	6%	4%	0.70	0.60
Wales	3,603	2,704	11%	8%	1.20	0.90
South East	-21,524	-15,176	-8%	-5%	-1.20	-0.90
East Anglia	-426	-748	-1%	-3%	-0.20	-0.40

Before analysing and comparing the results, particularly between different countries, it must be recalled, as explained in Section 5.2, that the level of interregional transfers depends on the weight of the government budget in national income. In this research, due to lack of statistics on the regional allocation of social security in France and Germany, there is a great disparity of these weights (see Table 5.8). Before comparing, for example, the relative subsidy of Stockholm or Lombardia to the Ile de France it is necessary to bear in mind the relative amounts of public finance included. In fact, previous studies (Davezies, 1993) showed that the transfer induced by French social security from Ile de France to other regions is even bigger than budget-induced transfers. It is possible to take this different weighting of the budget effect into account, and to calculate "virtual" transfers by point of GDP financing the budget studied (see Table 5.8).

Table 5.8: The Weight in National GDP of Public Funds Analysed by Country and the Value of the Transfers per point of GDP of the National Budget 1993

	Budget analysed in % of GDP		ECU/cap. of "flow" transfers/point of GDP in budget
France	25%	Ile de France	-33
Germany	14%	Hessen	-73
Italy	48%	Lombardia	-46
Portugal	46%	Lisboa e V.T.	-4
Spain	32%	Madrid	-37
Sweden	53%	Stockholm	-23
United Kingdom	40%	South East	-23

Considering the results in Table 5.9 in detail, there are 16 out of the 100 studied regions where the "flow" and "benefit" results display different signs (for the five Portuguese regions, out these 100, the "benefit" has not been calculated). This situation occurs in intermediate income or very small regions. The number of regions in this position is low, given the big conceptual differences between the "flow" and "benefit" approaches. In the countries studied, there are 10 instances where regions were net beneficiaries in benefit terms and net contributors in flow terms. This means that in these regions, there are less flows of public money - relative to their contributions to the budget - than the amount of benefits obtained from government policies. Six of the regions in this case are in France where the social security funds are not regionally allocated; if this had been done, there would probably be a better convergence of the "flow" and "benefit" approaches. The reverse situation, in which "flow" transfers exceed "benefit" ones, arises in only six instances. There is, then, a considerable coherence in the results, in spite of the fact that the two types of regional allocation are based on quite distinct hypotheses.

Not surprisingly, the transfers accruing to net beneficiary regions are consistently higher in "benefit" terms than in "flow" terms. However, the net contributor regions generally receive a greater proportion of the flows of public money than of the benefits. For example, in the United Kingdom, almost half of civil service salaries are accounted for by the South-East.

The "central" regions appear to be the main contributors: Madrid and Cataluña in Spain; Lombardia, Emilia-Romagna and Piemonte in Italy; Stockholm in Sweden; Île de France in France; the South-East in the United Kingdom. On the basis of the "flow" concept, the net contribution varies between 2 percent (Lisbon & VT) and 12 percent (Lombardia) of the value of the regional GDP (the transfer financed by Île de France is three percent of its GDP, but probably more than double this figure if social security were included). In Germany, where social security funds are not included, the net contributors regions are less concentrated: four *Länder* share the same level of effort: Baden-Wurttenberg (4 percent of the regional GDP), Hessen (4 percent), Bayern (3 percent), Rheinland Pfalz (3 percent). In Portugal, because of the geographical breakdown of the regions, where the two main economic regions contain more than 70 percent of the population and comprise a mixture of rich and poor areas, the calculated interregional transfers are of course very small.

A secondary point is that a small number of other regions also appear as net "flow" contributors in the countries studied. This is true of four French regions (with two others near zero), four Italian, seven Spanish, one Swedish and three British regions.

Although caution is required in aggregating these result, it is interesting to have an order of magnitude of the redistributive mechanism by calculating the following overall results: for the "flow" approach, which minimises the transfers, the seven richest regions (Île de France, Hamburg, Lisbon & VT, Lombardia, Madrid, Stockholm and the South East), which represent 16 percent of the overall population of the seven countries and 19 percent of their GDP, financed (in 1993) 54 billion ECU of budget induced interregional transfers. This is equal to six percent of their regional GDP and 1.1 percent of the total GDP of the five countries. The 29 net contributing regions, with 55 percent of the population of the seven countries and 64 percent of their total GDP, financed 128 billion ECU. This represents four percent of their regional GDP and three percent of the total GDP of the five countries.

These figures confirm that national public funds play a very significant role in cohesion processes, transferring huge amounts of money from richer to poorer regions, more than twice the amount of the national contributions of these countries to the budget of the EC. If the other Member States produce the same level of budget-induced transfers, one could estimate that these transfers are something like more 20 times the European budget of the Structural Funds!

Of course, the flows are symmetrical in the sense that the poorer regions tend to be the largest net beneficiaries: Languedoc-Roussillon, Midi Pyrénées and Limousin in France; the eastern *Länder* in Germany, the Italian *Mezzogiorno* regions, Alentejo, Algarve and Centro regions in Portugal, Andalucía and Extremadura in Spain; the north of Sweden; northern regions and Wales in the United Kingdom.

Table 5.9: Budget-Induced Interregional Transfers: France, Germany, Italy, Portugal, Spain, Sweden and United Kingdom 1993

France	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
Alsace	-1%	0%	-0.2	0.0
Aquitaine	3%	2%	0.4	0.3
Auvergne	2%	1%	0.3	0.2
Bourgogne	3%	0%	0.4	-0.1
Bretagne	3%	3%	0.5	0.4
Centre	0%	1%	0.0	0.1
Champagne-A	1%	0%	0.2	0.0
Corse	15%	10%	1.9	1.4
F.-Comte	2%	-2%	0.3	-0.4
Ile de France	-6%	-3%	-1.6	-0.8
Languedoc-R.	8%	9%	1.2	1.3
Limousin	6%	6%	0.9	0.9
Lorraine	3%	2%	0.5	0.4
Midi-P.	6%	5%	0.9	0.9
Nord-P.C.	5%	1%	0.8	0.2
B.-Normandie	4%	3%	0.7	0.5
H.-Normandie	2%	-1%	0.3	-0.2
P.-de-la-Loire	2%	0%	0.3	-0.1
Picardie	2%	-3%	0.3	-0.4
Poitou-C.	3%	1%	0.4	0.1
Prov.-A.C.A.	1%	2%	0.2	0.3
Rhône-A.	-1%	-2%	-0.1	-0.3

Germany	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
Baden-Württ.	-5%	-4%	-1.09	-0.99
Bayern	-4%	-3%	-0.93	-0.72
Berlin	9%	12%	1.73	2.16
Brandenburg	22%	17%	2.39	1.79
Bremen	-1%	1%	-0.37	0.16
Hamburg	-5%	-1%	-1.77	-0.43
Hessen	-4%	-4%	-1.14	-1.03
Mecklen.-Vor.	29%	22%	2.82	2.14
Niedersachsen	-1%	-1%	-0.28	-0.15
Nordrh.-West.	-2%	-2%	-0.32	-0.33
Rhein.-Pfalz	-3%	-3%	-0.55	-0.54
Saarland	6%	4%	1.10	0.85
Sachsen	24%	17%	2.34	1.67
Sach.-Anhalt	26%	19%	2.57	1.95
Schles.Holst.	-3%	-1%	-0.50	-0.25
Thüringen	28%	21%	2.71	2.01

Italy	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
Abruzzo	18%	10%	2.3	1.2
Basilicata	49%	27%	4.6	2.5
Calabria	37%	20%	3.2	1.7
Campania	21%	18%	2.1	1.8
Emilia R.	-10%	-10%	-1.8	-1.7
Friuli V.G.	-2%	0%	-0.3	0.1
Lazio	-2%	10%	-0.3	1.7
Liguria	-4%	-4%	-0.7	-0.6
Lombardia	-14%	-12%	-2.6	-2.2
Marche	1%	-2%	0.1	-0.2
Molise	41%	17%	4.5	1.9
Piemonte	-9%	-10%	-1.5	-1.6
Puglia	18%	9%	1.8	1.0
Sardegna	23%	19%	2.5	2.1
Sicilia	23%	17%	2.4	1.8
Toscana	-7%	-7%	-1.1	-1.0
Trentino A.A.	-2%	10%	-0.3	1.8
Umbria	2%	0%	0.2	0.1
Valle d'Aosta	-3%	12%	-0.5	2.2
Veneto	-8%	-9%	-1.3	-1.4

Portugal	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
Alentejo	-	26%	-	1.18
Algarve	-	10%	-	0.61
Centro	-	4%	-	0.22
Lisboa e V.T.	-	-2%	-	-0.20
Norte	-	-2%	-	-0.16

Spain	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
Andalucia	17%	14%	1.3	1.1
Aragon	-7%	-3%	-0.8	-0.4
Asturias	1%	1%	0.1	0.1
Baleares	-8%	-7%	-1.0	-1.0
Canarias	13%	11%	1.3	1.2
Cantabria	0%	-1%	0.0	-0.1
Castilla L.Ma.	5%	3%	0.4	0.3
Castilla Leon	1%	2%	0.1	0.2
Cataluña	-6%	-5%	-0.7	-0.7
Ceuta Y Melil.	3%	14%	0.2	1.3
Extremadura	18%	15%	1.3	1.1
Galicia	14%	9%	1.2	0.8
La Rioja	-6%	-3%	-0.7	-0.3
Madrid	-13%	-9%	-1.7	-1.2
Murcia	3%	2%	0.2	0.2
Navarra	-6%	-6%	-0.8	-0.8
Pais Vasco	-9%	-9%	-1.1	-1.1
Valencia	0%	0%	0.0	0.0

Sweden	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
Stockholm	-9%	-6%	-2.1	-1.2
E.Mid Sweden	4%	3%	0.6	0.5
Smal/Islands	2%	0%	0.4	-0.1
South Sweden	1%	0%	0.2	0.0
West Sweden	0%	-2%	0.0	-0.4
N.Mid Sweden	11%	11%	1.8	1.9
Midden	9%	8%	1.6	1.4
Norrland	13%	14%	2.3	2.4

United Kingdom	transf(benef) % reg. GDP	transf(flow) % reg. GDP	transf(benef) k ECU/cap	transf(flow) k ECU/cap
North	9%	9%	1.1	1.2
Y. & H.	1%	-1%	0.2	-0.1
E. Midlands	1%	-2%	0.1	-0.2
East Anglia	-1%	-3%	-0.2	-0.4
South East	-7%	-5%	-1.2	-0.9
South West	0%	1%	-0.1	0.1
W. Midlands	3%	1%	0.3	0.1
North West	5%	4%	0.7	0.6
Wales	11%	8%	1.2	0.9
Scotland	6%	5%	0.9	0.6
N. Ireland	18%	17%	2.0	1.9

Source: OEIL Calculations

These transfers produce a large reduction of interregional disparities within countries. The best way to analyse this reduction would be to use regional data on the disposable income of households, because these transfers are generally oriented more towards regional income or standard of living than towards regional production. However, due to unavailable regional income data on the five countries, it has proven necessary to use a comparison of regional GDP per capita "before" and "after" budget transfers. This way of proceeding is conceptually questionable because GDP already includes public funds (taxes on production, public value added,...), and because the income oriented transfers weigh less in GDP than in income (national income is around two-thirds of national GDP), but it is nevertheless convenient to use this "mix" of data to produce a general indicator of regional disparity reduction. The term "budgetary adjusted GDP" (BAGDP) consists of the regional GDP plus transfers. Table 5.10 shows the result of an analysis in term of Gini coefficients:

Table 5.10: The Impact of Budget-Induced Interregional Transfers on Regional Economic Disparities in France, Germany, Italy, Portugal, Spain, Sweden and United Kingdom. 1993. (GDP and Budget Adjusted GDP per capita)

	Gini GDP	Gini BAGDP benefit	Gini BAGDP flow	% of reduction benefit	% of reduction flow
France (a)	0.121	0.098	0.109	-18.4%	-9.9%
Germany (a)	0.147	0.116	0.123	-21.0%	-16.2%
Italy (a)	0.132	0.068	0.095	-48.5%	-28.0%
Portugal (a)	0.149	-	0.133	-	-10.8%
Spain (a)	0.110	0.060	0.069	-45.4%	-37.4%
Sweden (a)	0.051	0.034	0.043	-33.8%	-14.4%
United Kingdom (a)	0.065	0.035	0.044	-46.9%	-32.7%
Weighted by pop mean reduction on seven countries (b)				-34.3%	-22.8%
7 countries (ECU)	0.187		0.169		-9.5%
6 countries (ECU) (b)	0.178	0.152		-14.8%	
7 countries (PPS)	0.143		0.120		-16.5%
6 countries (PPS) (b)	0.140	0.105		-25.2%	

(a) Gini in ECU or in PPS are the same
(b) Benefit calculated on 6 countries (without Portugal)

Note: French and German social security are not taken into account.

Source: OEIL Calculations

The reduction of interregional disparities appears very important, and of the same order of magnitude as the figures of the MacDougall report (Table 5.1), taking into account the fact that the MacDougall report measured the reduction of interregional disparities of income, which are less important before the budget than GDP disparities, and because the transfers have a larger impact on regional income than on regional GDP. Before comparing the intensity of the national budget redistributions, it must be recalled again that a part of the differences are due to differences in the degree of regional breakdown (in the UK for example, the breakdown is into eight regions whereas it is in 22 in France).

Table 5.10 shows the mean national reduction of disparities weighted by population. This is a good indicator of the mean national ability to reduce interregional disparities via the national budget. It is possible to compare this reduction with the reduction of Gini coefficients calculated on the GDP and BAGDP of the 101 regions. It appears clearly that the cohesion machine is more a *national* machine than an European one. A large part of the cohesion effect remains at the national level and does not play a role with respect to European cohesion. When a richer region of a poorer country subsidises an even poorer region, this mechanism has most impact on national rather than European cohesion.

5.4.3 Budget-Induced Interregional Transfers are Related to GDP

The transfers induced by government budgets are clearly related to the GDP per capita of regions. The richer is a region, relative to the national situation, the more its net contribution to the budget is negative. In similar vein, the poorer is a region, the more it receives in transfers from the budget.

There is a quite homogeneous transfer mechanism among the seven countries. It is possible to show, referring to the simple model set out in Figure 5.1 that this mechanism reflects a steady combination of the regional incidence of the tax system and expenditure allocations: richer regions contribute more to the budget than poorer regions, and in a larger proportion than they gain from the budget. Table 5.11 gives the slopes and coefficients of determination (R2) of the linear regressions linking respectively budget contributions and gains of the regions at their GDP per capita.

Table 5.11: Statistics of Linear Regressions Between Budget Contribution per capita and Gains(flow) per capita v GDP per capita in the Regions of France, Germany, Italy, Portugal, Spain, Sweden and United Kingdom (1993)

	x=GDP/cap	y=contribution/cap	y=gain(flow)/cap
France	Slope	0.18	0.06
	[R2]	[0.92]	[0.10]
Germany	Slope	0.12	0.00
	[R2]	[0.98]	[0.0001]
Italy	Slope	0.53	0.25
	[R2]	[0.96]	[0.40]
Portugal	Slope	0.32	0.01
	[R2]	[0.97]	[0.30]
Spain	Slope	0.36	-0.02
	[R2]	[0.88]	[0.02]
Sweden	Slope	0.60	0.24
	[R2]	[0.96]	[0.15]
United Kingdom	Slope	0.46	-0.01
	[R2]	[0.96]	[0.001]

Source: OEIL Calculations

The linear regression is very good for contributions (R2 near 1) and the slopes are steeper than the slopes for gains, even in Italy and Sweden where gains are increasing with GDP per capita. The role of contributions in the redistributive mechanism seems more important also in Sweden and Italy. These statistics show that while contributions are a function of income, expenditures do not follow the same rule (the R2 is near 0) and are distributed quite differently, without any regular pattern. There are at least four combined trends regarding regional gains from the budget in the flow approach: (i) some richer regions in Italy and Sweden receive relatively more per capita than the average, (ii) the same can be said of regions with political problems such as Corsica and Northern Ireland, and to a certain extent Trentino; (iii) and of regions with natural handicaps such as Canarias, Ceuta and Melilla, Val d'Aosta, or the three northern region of Sweden; (iv) for the other regions, it seems that the gains are related more to population than to any other indicator.

5.4.4 Equal Regions are not Treated Equally

One of the most important findings of this evaluation of budget-induced interregional transfers is the fact that national cohesion machines are unequal at the European level. As observed above in the context of the analysis of the difference of the mean Gini coefficient reduction in the seven countries compared with the Gini calculated on the 101 regions, the transfers produce more national cohesion than European cohesion. This means that transfers from regions are limited by na-

tional borders. It is a well-known finding of tax analysts: the more a tax system is decentralised, the less the system redistributes between populations and areas. The European Union, at the public finance level, functions as a very decentralised space. There is, on this point, a great difference with the United States of America where the Federal budget induces huge transfers between States: it can be seen from Table 5.1 (MacDougall report, 1977) that the US budget induced a reduction of the interregional income disparities index of 28 percent (variation coefficient) to 23 percent (Gini coefficient).

The fact that the main cohesion systems within Europe are implemented at the national level produces paradoxical mechanisms at the European level: some equal regions, in terms of GDP per capita, are not treated equally by their respective national budgets. Table 5.12 gives some examples with respect to selected regions.

Table 5.12: Equal Regions Regarding GDP per capita Are Treated Unequally by National Budgets: Selected Regions

	transf(flow) % reg. GDP	transf(flow) ECU/cap	GDP ECU/cap	BAGDP (flow) ECU/cap
Lisbon &VT	-2%	-187	10,270	10,019
Brandenburg	17%	1,807	10,637	12,444
Wales	8%	932	11,734	12,666
Aragon	-3%	-379	11,776	11,398
Pais Vasco	-9%	-1,079	12,347	11,268
North	9%	1,176	12,433	13,609
NW	4%	552	12,507	13,058
Cataluña	-5%	-675	12,658	11,983
WMids	1%	75	12,722	12,797
EAng	-3%	-358	14,140	13,782
Languedoc-R.	9%	1,272	14,500	15,771
Toscana	-7%	-1,025	15,450	14,425
Bretagne	3%	395	15,621	16,016
Midi-P.	5%	869	15,842	16,711

Relatively rich regions at the national level can be relatively poor regions at the European level. Similarly, poor regions at the national level can be rich regions at the European level. For example, the richer regions in Spain (as in Portugal, and probably Ireland or Greece), such as Cataluña, are financing (-5 percent of its GDP) poorer Spanish regions despite the fact that they have the same level of GDP per capita as Midi Pyrénées (on ECU basis) or Lorraine (on PPS basis), which are both financed by the French budget (respectively +5 percent and +2 percent of their GDP).

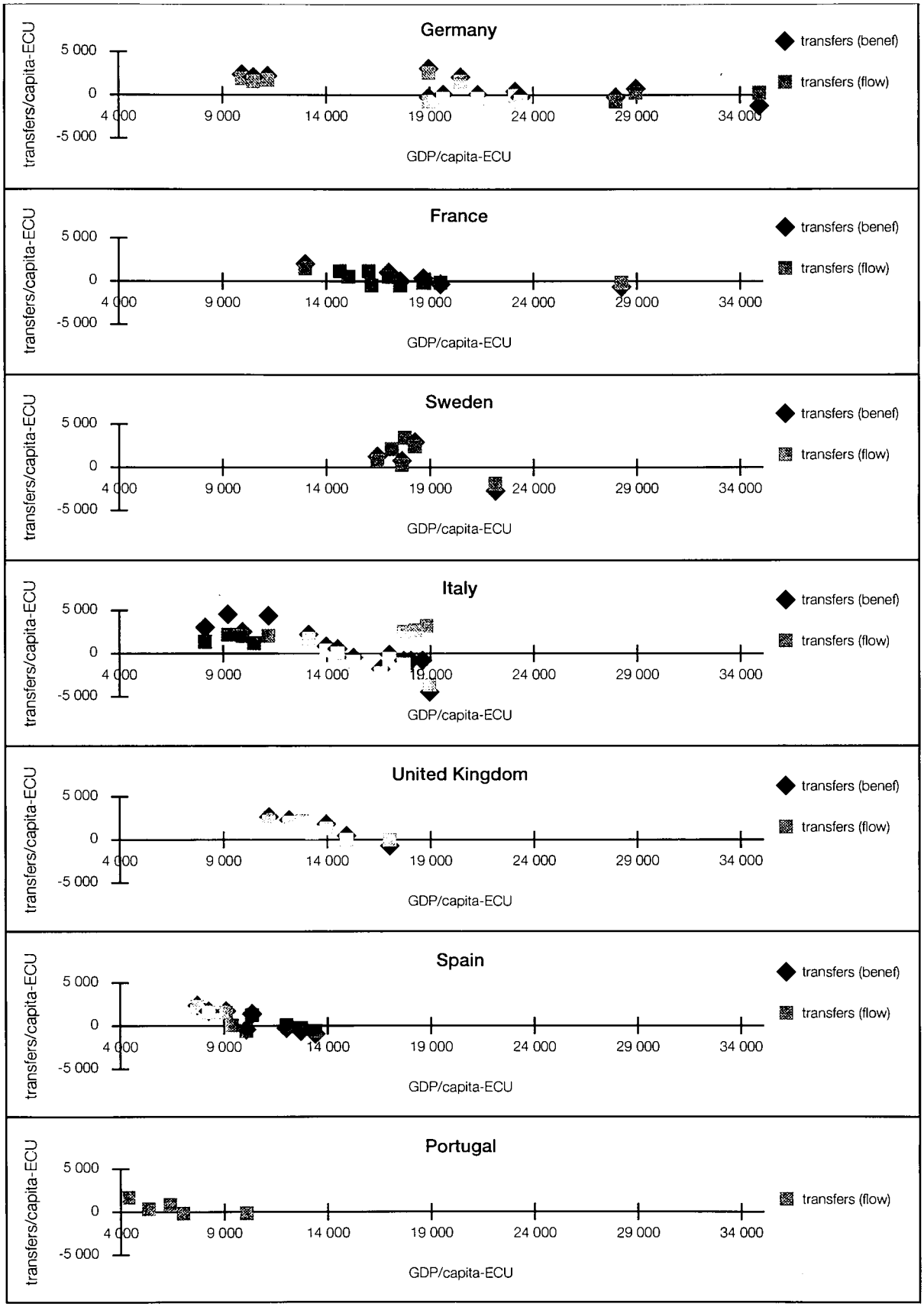
This is the major reason for the weak result in terms of European cohesion induced by the interregional redistribution of national budgets.

Figure 5.3 gives a general view of this unequal - at the European level - ability of national budgets to contribute to European cohesion. Annex IIF provides an exhaustive list of GDP per capita and net transfers (flow) per capita for all the regions within the case study countries.

A feature of Figure 5.3 is that it shows clearly that regions which have the same levels of GDP per capita can be treated very differently in terms of budget-induced interregional transfers. In considering this point, it is useful to distinguish between two sets of country: Spain, Portugal and the United Kingdom on the one hand and Italy, Sweden, France and Germany on the other.

The first three countries have regions which are relatively poor from a European perspective (on the basis of GDP per capita figures) but which are net contributors in terms of interregional transfers. In Spain, Cantabria, La Rioja, Aragón, Pais Vasco and Cataluña finance other Spanish regions despite the fact that they have on average, a GDP/capita of 78 percent of the European (12 countries) GDP per capita, 92 percent in terms of PPS. In the United Kingdom, Yorkshire & Humberside, East Midlands and East Anglia, are in the same situation, albeit at a lesser degree, as net contributors to the budget with a mean GDP per capita of 83 percent of the European average (94 percent

Figure 5.3: Budget-Induced Interregional Transfers Related to GDP per capita in France (18 840 ECU), Germany (20 070), Italy(14 586), Portugal (7 466), Spain (10 434), Sweden (18 134) and United Kingdom (13 858)



in PPS). In Portugal, Lisbon and Norte are net contributors with a very low GDP/capita (64 and 47 percent in ECU, 70 and 96 percent in PPS). It is certain that the same kind of figures would be found in other countries such as Ireland or Greece.

In contrast, the other four countries have regions with a relatively high level of GDP per capita and a net gain from their national budgets. This is true of regions with a GDP/capita higher than the European average of 15,830 ECU: in Sweden, Mid Norrland, North Norrland and North Mid Sweden gain between 8 and 10 percent of their GDP; in Italy, the regions in this situation are mainly "special" regions like Val d'Aosta, for natural reasons, Trentino, for political reasons and Lazio for institutional reasons; in Germany, there are two net beneficiary *Länder*, Bremen and Saarland, which both have GDP per capita above the European average (352 and 244 percent in ECU, 155 and 107 percent in PPS). Berlin and the new Lander are all net beneficiaries, with a GDP per capita higher than the European average in term of ECU (226 percent in Berlin, around 120 percent in the new *Länder*), but lower in terms of PPS (99 percent in Berlin, around 50 percent in the new Lander); in France, there are five regions which are both above the European average of GDP per capita and net beneficiaries from the budget, without any particular "special" reason: Basse-Normandie, Centre, Aquitaine, Provence-Alpes - Côte d'Azur and Midi-Pyrénées. It is probable that the same kind of situation occurs in the regions of other richer European countries like the Netherlands or Austria. The case of Belgium is probably very different because the country is no longer unitary since the 1988 reform, which means that the Flanders to Wallonia transfers have probably been significantly reduced.

5.4.5 Additional Confirmation in the Cases of France and the UK

This research is a first attempt to measure, using a common methodology, the transfers induced by public funds in European countries. The main conclusion is that GDP/capita disparities are lessened by the mechanisms of budget. This implies that regional disparities in household incomes are less significant than GDP interregional disparities. It is possible to verify this point with respect to the cases of France and UK where these data are available (see Table 5.13).

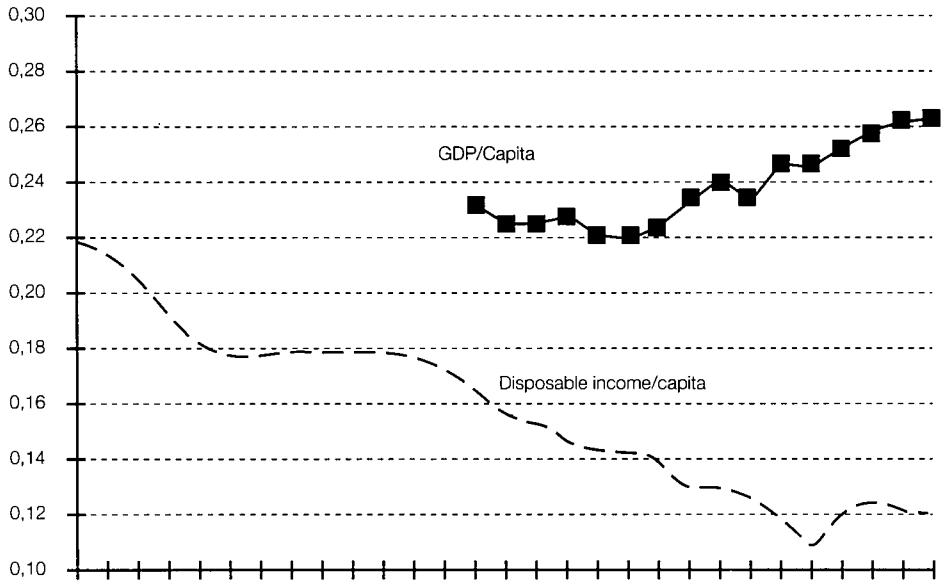
Table 5.13: Interregional Disparities of Gross Domestic Product (GDP) and Personal Disposable Income (PDI) in France and UK (1993 for UK, 1992 GDP and 1991 PDI for France): Regions Ranked by Growing GDP per capita.

	% share of UK GDP	% share of UK PDI		% share of Fr GDP	% share of Fr PDI
North Ireland	2.24	2.62	**Corse**	0.30	0.39
Wales	4.23	4.52	**Picardie**	2.67	2.81
North	4.78	4.86	**Nord Pas de Calais**	5.53	6.17
North West	9.94	10.34	**Pays de la Loire**	4.60	4.88
West Midlands	8.35	8.72	**Franche Comte**	1.74	1.75
York & Humb.	7.92	8.07	**Languedoc Rouss.**	2.90	3.40
East Midlands	6.58	6.60	**Poitou Charentes**	2.21	2.58
South West	7.80	8.22	**Bretagne**	3.94	4.58
Scotland	8.65	8.93	**Basse Normandie**	2.08	2.28
East Anglia	3.67	3.65	**Auvergne**	1.83	2.20
South East	35.85	33.46	**Haute Normandie**	3.07	2.93
			Limousin	0.97	1.23
			Bourgogne	2.47	2.74
			Midi Pyrennees	3.63	4.15
			Lorraine	3.40	3.94
			Rhône Alpes	9.39	9.16
			Centre	3.82	4.09
			Provence Aca	6.91	7.39
			Aquitaine	4.33	4.88
			Champagne Ard.	2.29	2.36
			Alsace	2.87	2.98
			Ile de France	29.03	23.12

Source: On France INSEE/Statistiques et Indicateurs des Régions Française; on the UK: Regional Trends (1995)

There is no direct linkage from GDP to Personal Disposable Income (PDI). This is because not only do budget transfers play a role, but also private interregional and international transfers. Even so, the figures are very clear: income disparities are much smaller than GDP disparities. In both countries and without exception, the poorer a region in terms of GDP/capita, the more it augments its share of income. In similar vein the richer is a region, the more its income is reduced. In the UK, the GDP/capita of Northern Ireland, the poorest region, is 68 percent of the South East figure while disposable income is 85 percent. In France, Languedoc-Roussillon, the poorest region (after atypical Corsica) moves from 55 percent of the GDP/capita of Île de France to 71 percent of the income/capita. The literature too often ignores the difference between GDP and income, perhaps because of old macroeconomic habits (at the national level, GDP and GNP are close, because there are no interregional transfers). The other reason is that too few Member States produce regional income/capita data. This is a pity, because this kind of figure offers direct evidence of the reality of progressive transfers between regions. Further, it is possible to show, in the case of France, that the evolution of interregional disparities is moving in opposite directions for GDP and DPI per capita (Figure 5.4). During the 1980s, interregional disparities in GDP/capita were growing whereas, at the same time, income disparities were decreasing. It is difficult to measure the factors of this double mechanism without knowing anything about the evaluation of annual public and private transfers, but this finding confirms that these transfers play a major role, in a static or dynamic approach, in the cohesion process between regions.

Figure 5.4: Coefficient of Variation, Weighted by Population, of Gross Domestic Product per capita (1975-1990) and Disposable Personal Income per capita (1962-1990) Within French Regions.



Source: Davezies L (1995). Calculated from INSEE data.

5.5 Concluding Points - Implications of the Findings

There are a lot of discussions which have still to be developed regarding the mechanism of interregional progressivity of budget-induced transfers. The first one, of course, is about the importance of an improvement in, and a periodic production of, such calculations. This study is a first attempt to measure these transfers, done thanks to the cooperation of seven academic teams, in a very short time period. The role played by such transfers in the cohesion process between European regions requires that they be taken into account by European policymakers on a regular basis.

Out of these first results, it is already possible to suggest three broad implications, regarding European regional policies.

5.5.1 A New Ranking of the Regional Economic Situations in Europe

As has been shown, taking into account budget-induced transfers produces a new representation of the relative economic situations of the European regions. It is important for European regional policy to keep in mind this new ranking (see Annex IIG). In the current methodology of designating problem region maps, the use of GDP (either in ECU or in PPS) gives the same status to regions which are equal in terms of GDP but which are unequal once transfers are taken into account. It could be argued that this introduces unfairness into the system; moreover, this could be corrected by a better measure of the real economic situation of the regions, one which included measures of both production and income. Budget-induced transfers, implicitly but politically conducted, play only a partial role in the formation of income. International and interregional private transfers, which are impossible to measure at the regional level, also play an important role in the state of development of a region. European regional policymakers may need to consider reviewing their method of defining the economic situation of European regions; and in particular, they may need to introduce into the definition of problem regions (i) the amount of public funds that implicitly benefit the regions and (ii) in the longer term, once it becomes available, the personal income of households (which take into account both private and public interregional transfers).

5.5.2 An Alternative Regional Development Strategy in the Poorest Regions

Another important discussion suggested by the findings presented in this chapter concerns the most efficient way of speeding up the development of the peripheral regions of Europe - in particular, the poorest regions of the less developed Member States. The measurement of budget-induced transfers shows that some of the richest regions of these countries, though relatively poor at the European level, transfer large amounts of money to the rest of their countries (see Figure 5.3). This implicit phenomenon suggests at least two conclusions:

(i) If the main obstacle to regional cohesion in Europe is international economic disparities, and if the main economic growth in the poorest countries is due to their most developed and productive regions - which both improve European economic cohesion and their own national interregional cohesion through national budgets - it is possible to conceive at the theoretical level, a policy alternative: (a) either to go on transferring direct European regional support to the poorest regions which have a low rate of return, in value-added terms, due to their low productivity and which have a small impact on European cohesion at both national and interregional levels, or (b) to reorientate European regional support towards the most productive regions of these countries. This second policy option can both maximise national growth - which is good for European cohesion - and maximise the income surplus a large part of which is redistributed (through production as well as social expenditures) to less developed regions - which is good for both national and European cohesion. To go further in this analysis, and to have a solid basis for making a choice between these two strategies, it would be necessary to build a dynamic model explaining what is the best strategy, and in what countries, according to interregional differences in marginal productivity and the marginal propensity of the budget to redistribute money between regions.

(ii) A second argument of relevance to the current focus of European regional policy, in relation to budget-induced transfers, lies in the fact that the richest regions of various countries are in very unequal situations. Both fiscal theory and common sense converge to explain that, if redistribution is operated at a decentralised level, some agents in net contributor regions located in poorer parts of the EU will migrate to richer areas where they can be net beneficiaries. The European public finance system is, by construction, decentralised. Assuming all the mobility obstacles were abolished at the European level (language, size of markets...), a firm located in Madrid or Barcelona (but also in a city like Lisbon or Thessalonika), could easily understand that it is better to operate and pay taxes in a place where it receives more money back through public expenditures, like Toulouse, Glasgow or Lille. The unfair competition between equally productive regions induced by budget transfers is a bias which may fuel a particular process of economic concentration, slowing down the growth of the most productive regions in poorer countries, and benefiting regions in the wealthiest countries. Such a development would run counter to cohesion. It may be that, rather than focus on the poorest regions, a long-term European cohesion policy could aim to compensate richer, more productive regions in poor Member States for the burden of the transfers they make to underdeveloped regions.

5.5.3 The Impact of Non-Regional Policy Changes on Interregional Cohesion

Regional policy must take into account the fact that changes in institutional or fiscal policies could have direct implications for the level of the flows of budget-induced transfers. For example, fiscal decentralisation, which is in process in many countries, has a direct implication for the volume of public funds managed at the national level and, related, for the intensity of the interregional redistribution of income. In another field, the EU convergence criteria which aim to reduce the public deficit (ie. public expenditures) have a direct impact on the scale of interregional transfers. Any harmonisation of national tax systems in European countries could also produce changes in the structure of government revenues, and thus change the spatial progressivity of the fiscal system. For example, in France, Ile de France contributes 25 percent of VAT, 36 percent of personal income tax and 65 percent of the tax on wealth. Any change in the structure of tax revenue has an immediate regional impact. As a result, those in charge of regional policies must develop a better understanding of budgetary cohesion mechanisms and become more involved in many, indeed most, non-regional policy changes.

Figure 5.5: Interregional Transfers in France

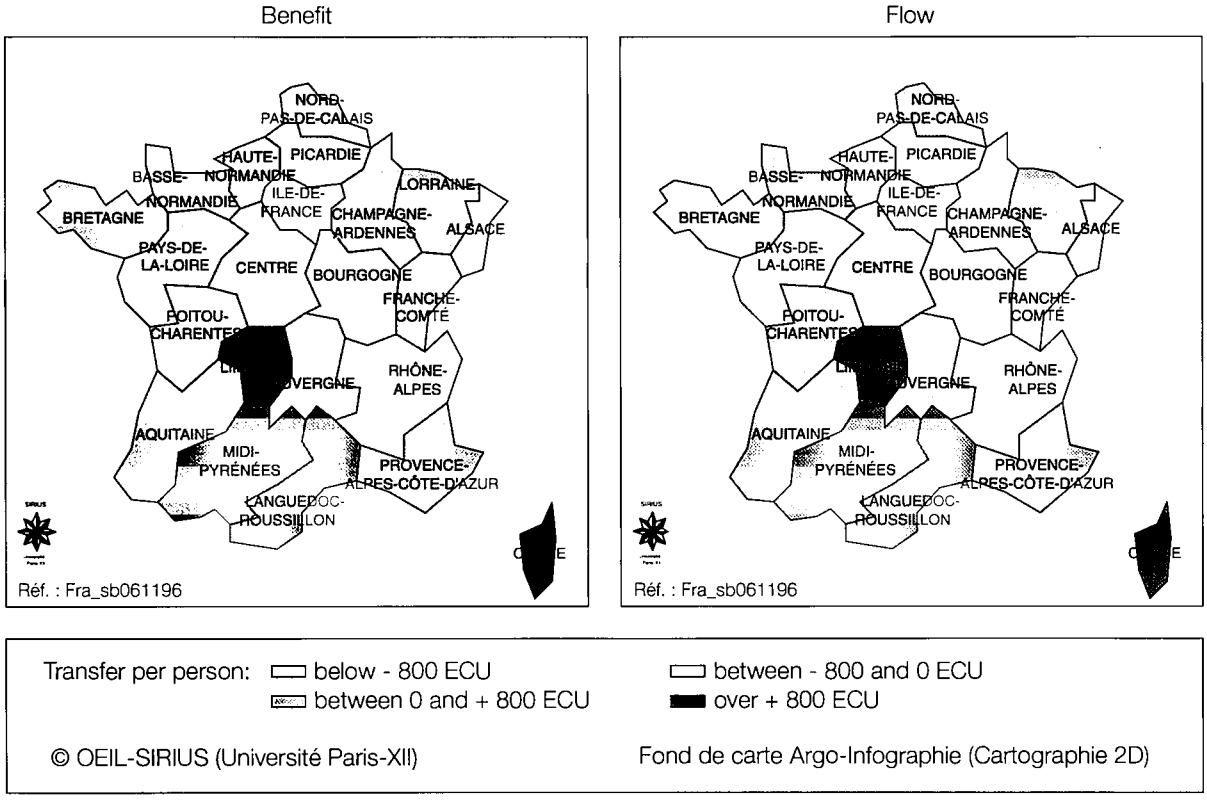


Figure 5.6: Interregional Transfers in Germany

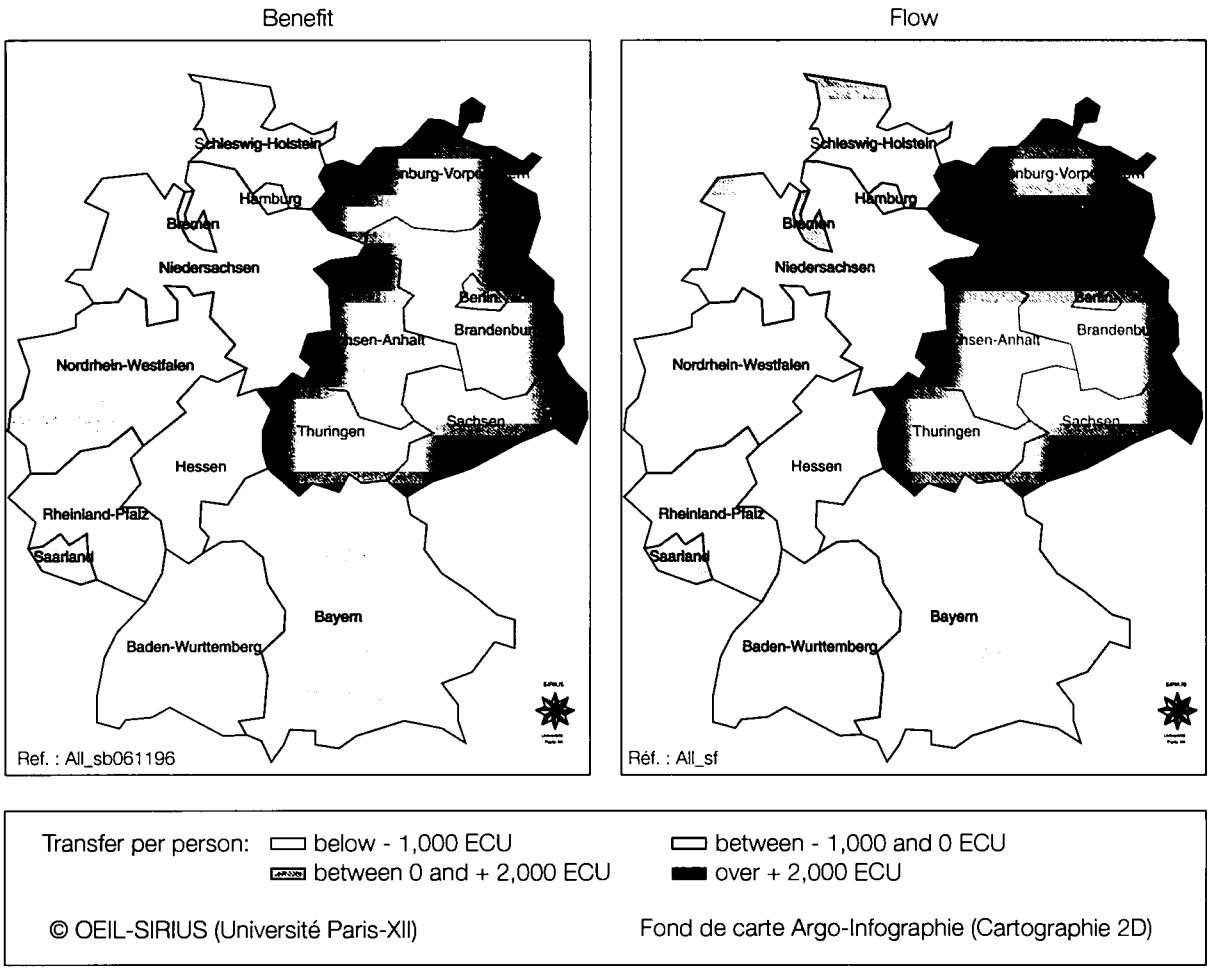


Figure 5.7: Interregional Transfers in Italy

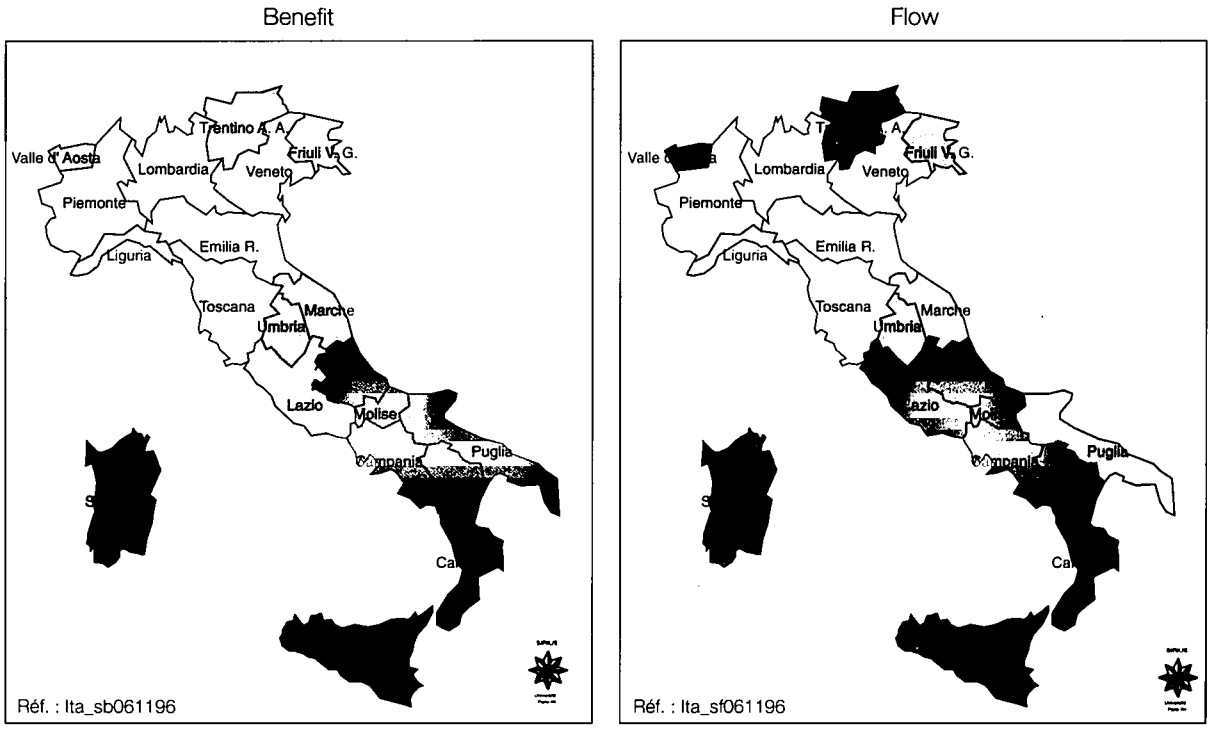


Figure 5.8: Interregional Transfers in Portugal

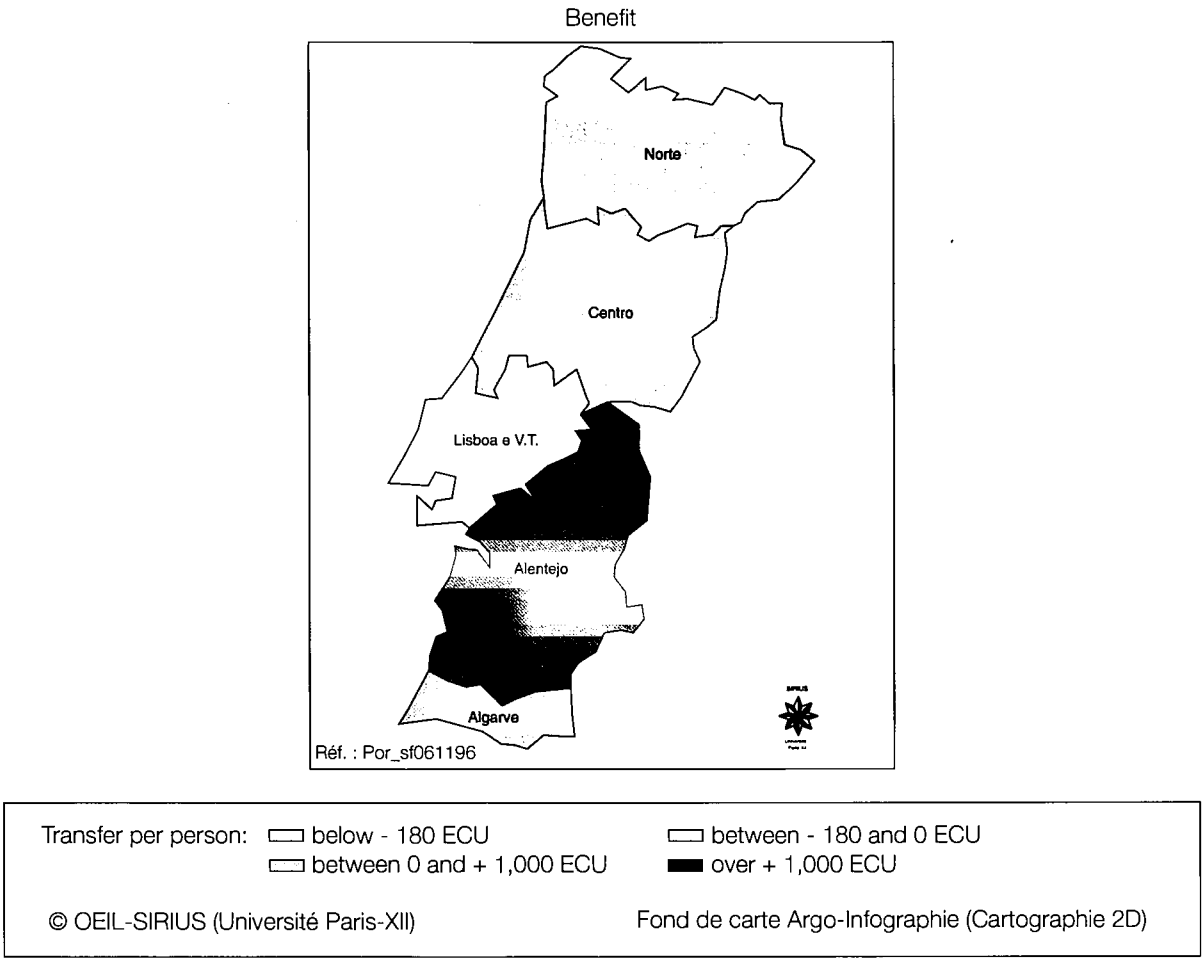


Figure 5.9: Interregional Transfers in Spain

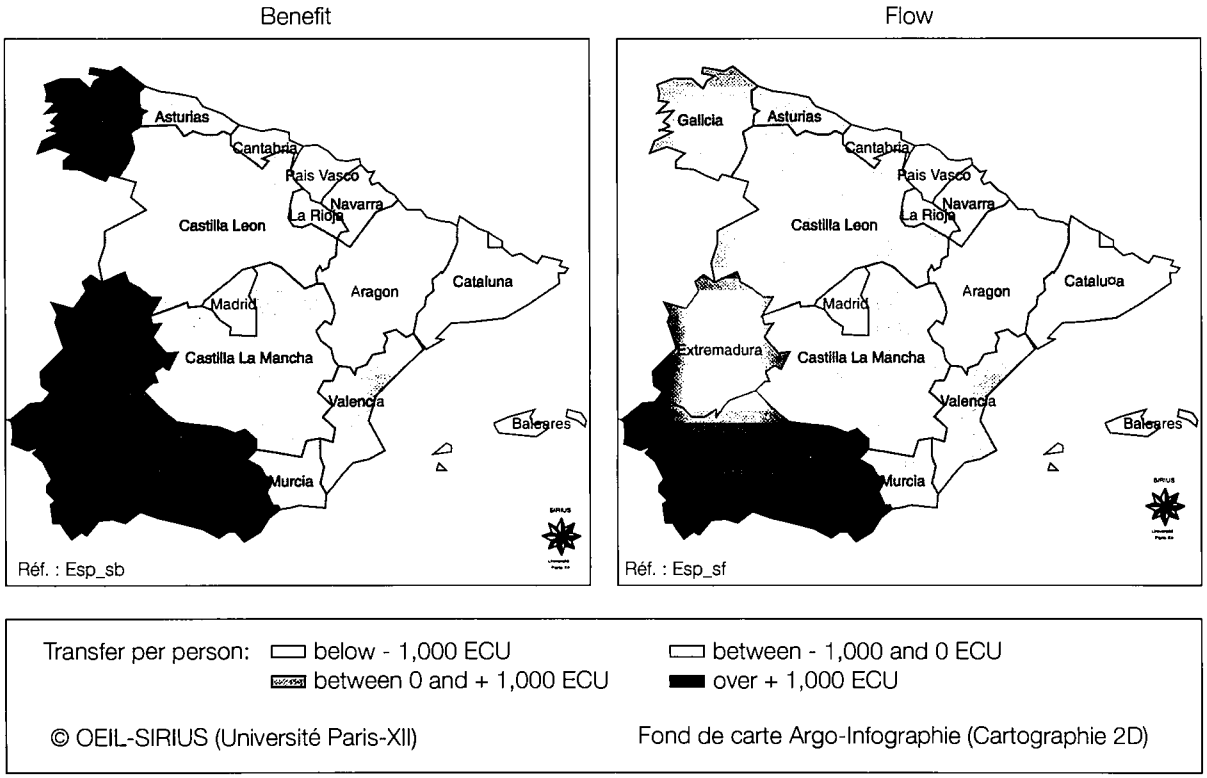


Figure 5.10: Interregional Transfers in Sweden

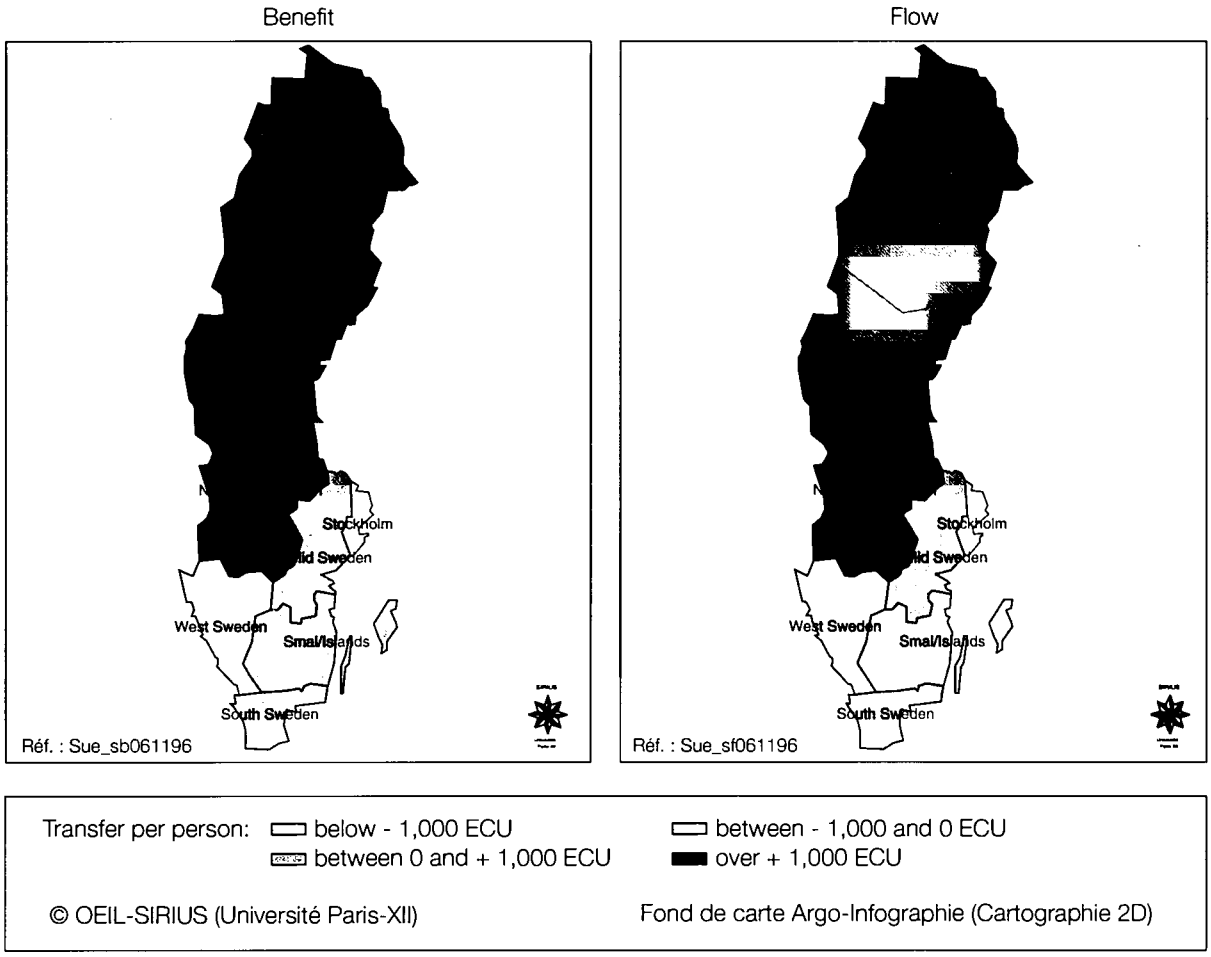


Figure 5.11: Interregional Transfers in the United Kingdom

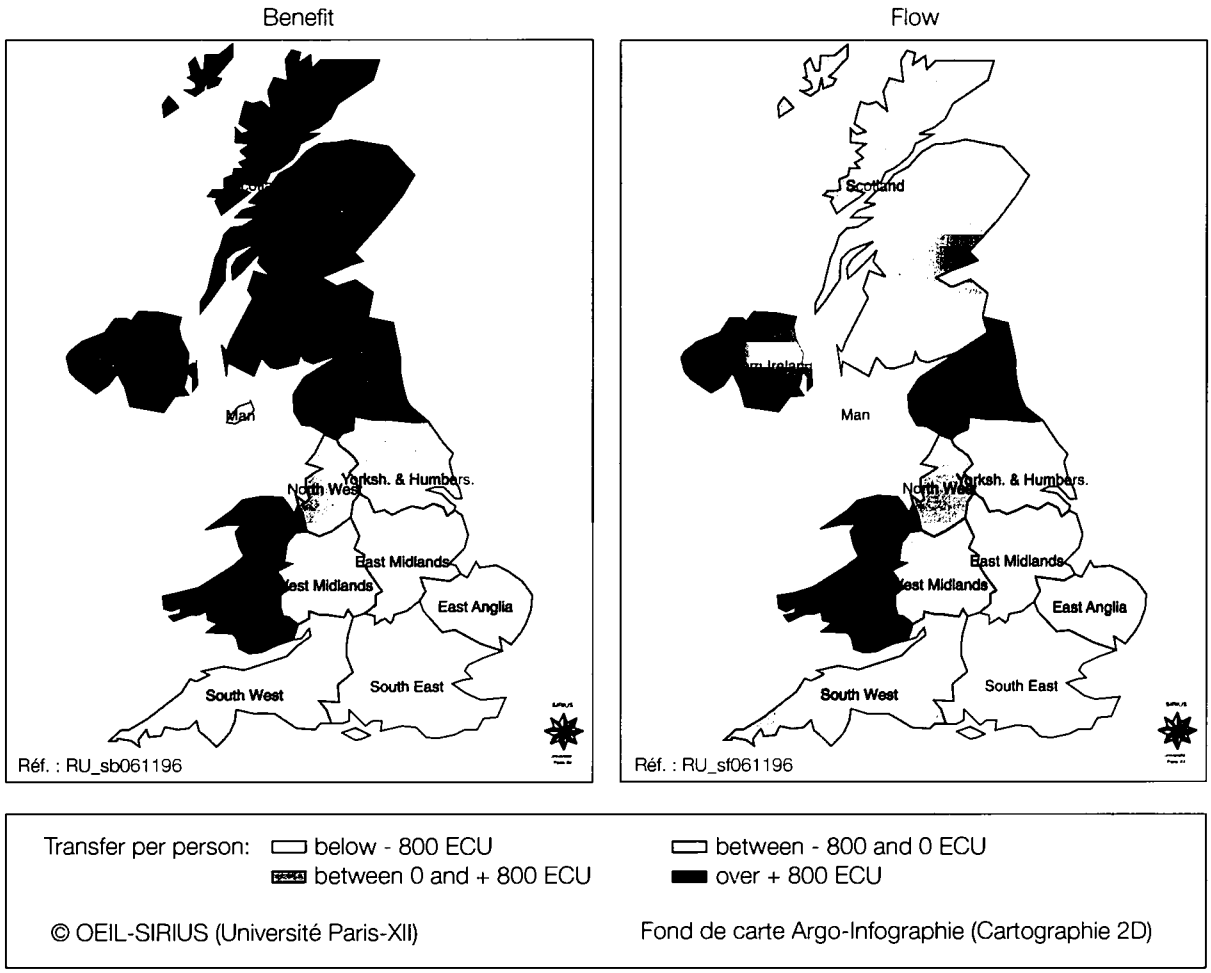
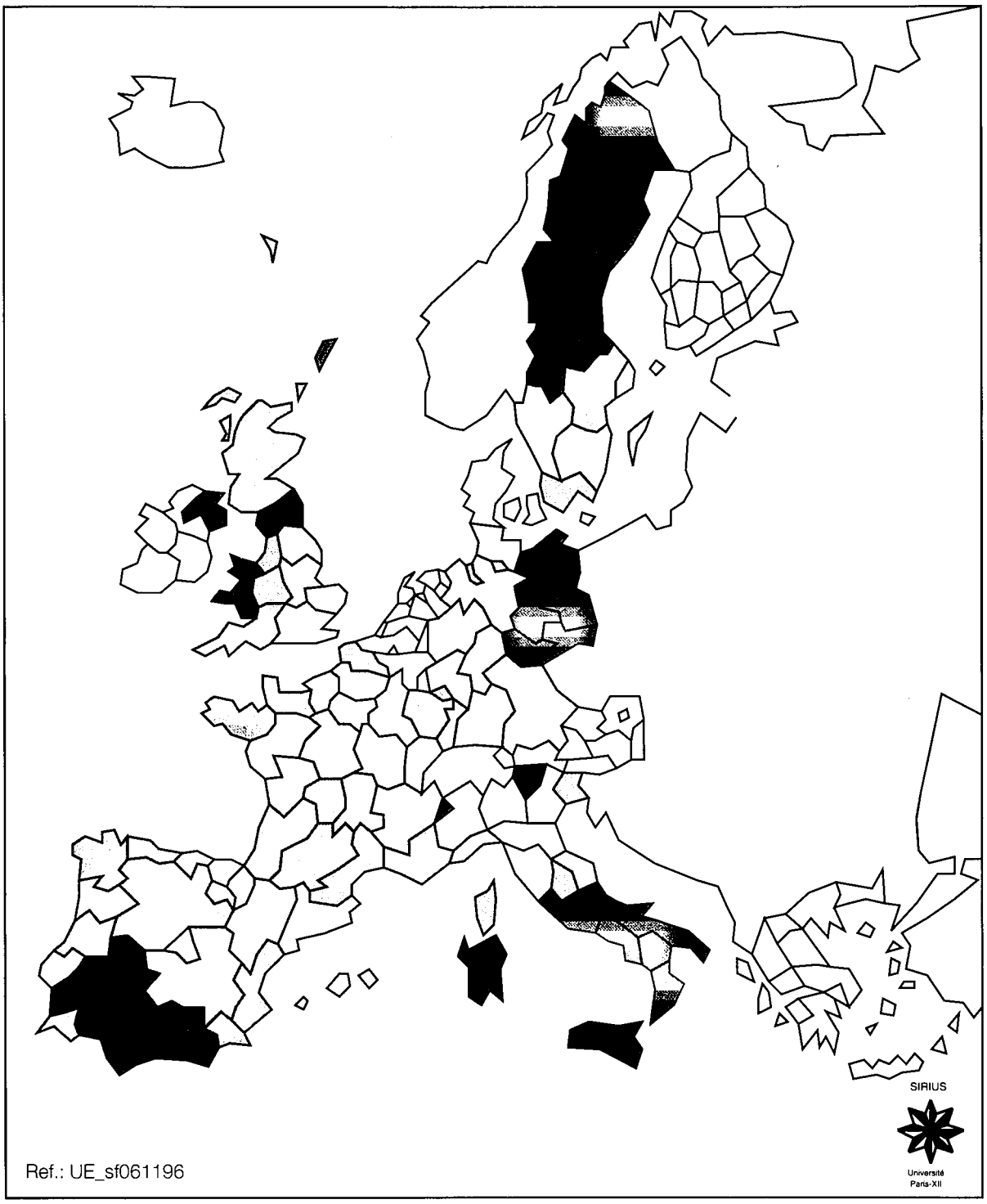


Figure 5.12: Interregional Transfers in Selected EU Countries (Flow Analysis)



Transfer per person:
- below - 1,000 ECU
- between - 1,000 and 0 ECU
- between 0 and + 1,000 ECU
- over + 1,000 ECU

Fond de carte Argo-Infographie (Cartographie 2D)

Note: Social Security is not included for France and Germany.

6. Conclusions

6.1 Main Findings

This report has focused on two principal categories of government spending that impact on economic and social cohesion in the EU Member States: the automatic transfers induced by government taxation and expenditures; and the spending policies pursued proactively by governments, whether or not with cohesion in mind. The substantive conclusions for each of the areas considered are set out at the end of each of the preceding chapters. The purpose of this concluding section is to draw together some of the more general issues that arise from the study.

A key point to bear in mind in considering the overall results of the work concerns the scale of the transfers and spending concerned; budget induced interregional transfers are massive compared with spending on proactive government policies. This is best illustrated by example: the value of the transfer flows to Lorraine is about 40 times the spend on regional incentive policy in the region. Moreover, this is a modest example; Lorraine is not even one of the principal beneficiaries of transfers in France (transfer flows to Midi-Pyrénées and Limousin amounted to 5 and 6 percent of regional GDP, respectively compared to just 2 percent for Lorraine), but Lorraine does receive more regional aid as a proportion of regional GDP than any other French region. The same calculation for Limousin shows that transfers are worth 600 times more than regional incentive spending in the region.

The same holds true for expenditure on horizontal policies. In Chapter 4, it was noted that the contribution of EU governments to private sector spending on R&D was of the same broad order of magnitude as their spending on regional incentive policy. In all the countries discussed, this spending is very heavily skewed in favour of the more prosperous regions, even in relation to regional GDP. Taking France as an example again, government funding of private sector R&D in Île de France amounts to around one-fifth of the value of the transfer flows out of the region. Again, this is a very conservative example. Of the countries considered in Chapter 4, government funding of private sector R&D accounts for a higher proportion of regional GDP (0.57 percent) in the Paris region than anywhere else; the comparable proportions for Madrid and Piemonte are 0.26 percent and 0.13 percent of their regional GDP figures respectively. Moreover, the value of the transfer flows away from these regions are significantly higher than those away from Paris; 10 percent of regional GDP in the case of Piemonte and 9 percent in the case of Madrid. This means that the value of the transfer flows away from Madrid is some 70 times the value of government R&D policy in the region.

In the wider context of cohesion at the European level, these figures are clearly of considerable significance. Not only does Île de France receive substantially more in government funded R&D as a proportion of regional GDP than does Madrid, but the transfer flows away from Madrid are substantially larger than those away from Paris. All this must be set in the context of the fact that the GDP of Madrid is 97 percent of the EU average while that of Île de France is 166 percent of the EU average.

Not only do the expenditures considered in this report differ substantially in scale, they also differ in nature. Automatic transfers are the inevitable outcome of differences between the amount of taxation collected in a given region, which is closely related to the prosperity of that region, and the value of government expenditures in a region, which is more closely related to the population of that region. The pattern of much of this expenditure reflects the needs arising from the demands made on welfare and public services provision,

including health, education and unemployment benefits. In consequence, in regional terms, transfers flow, in a neutral way, to those regions where the need arises. In so doing, they remove much of the impact on regional incomes of external economic shocks. Also key, transfer mechanisms are long-term, providing a kind of mutual insurance policy between the regions of a nation. In France, for example, the status of regions as contributors or beneficiaries from the central government has changed over time as the competitive advantage of regions has changed; in the 1960s, the Nord Pas de Calais region was a contributor to the budget - it is now a beneficiary. It is unclear how common this change of status is; however, it is clear that if regions that are beneficiaries are to have any chance of becoming contributors, then government funding must continue to provide for the basic needs of the region, irrespective of how much it currently contributes to the central budget.

Proactive policies contrast sharply with automatic transfers. By their nature, they are explicit and directed at specific developmental objectives; they tend to be implemented on short to medium-term timescales. Far from being neutral and automatic, they frequently involve considerable policymaker discretion and require expert input into policy design, delivery and implementation. Nevertheless, the impact of proactive policies is unclear. The difficulties involved in policy evaluation mean that an understanding of the real effects of the range of government policies (on cohesion or more generally) "remains elusive".

Notwithstanding the differences in the nature and the volume of the expenditures studied, and the difficulties involved in policy evaluation, it can be said that, overall, national expenditures tend to flow from the more prosperous towards the less prosperous regions within a country. Not surprisingly, regional policy spending tends to flow in the direction of the worst-off regions within countries although, as has been shown, the patterns of spend are somewhat uneven. Regional policy spending is buttressed by automatic transfers; the results from this part of the study are unambiguous - the direction of the flows supports economic and social cohesion within the national context. Member States' other spatial policies also support cohesion, although it is notable that, as far as these policies are concerned, the overriding objectives are political and social, rather than economic. The pattern for horizontal policies is less clear cut. Member States' employment policies tend, by their nature, to support social, and perhaps economic, cohesion. However, the pattern of expenditures on policies aimed at improving the competitiveness of national economies by promoting RTD is virtually a mirror image of patterns of regional disparity; the wealthier a region is, the more government tends to spend on promoting R&D within that region. Conversely, the poorer a region is, the smaller the spend on R&D as a proportion of regional GDP.

This study has examined the situation of regions primarily within their national contexts. However, it is important to stress that, taking an EU perspective, there is no direct relationship between the prosperity of a region and its status as a contributor to the national budget or a beneficiary from it; similarly, it does not follow that regions of equivalent prosperity in a European context will be equal beneficiaries of Member States' regional or horizontal policies. The Midi-Pyrénées and Cataluña regions, which have the same level of prosperity in relation to the EU average illustrate this point. Midi-Pyrénées is designated for French regional policy purposes and receives a net flow transfer from the government budget equal to 5 percent of regional GDP; in contrast, Cataluña is not designated for national regional policy purposes and makes a net flow contribution to the government budget of 5 percent of its GDP. More than this, not only does Cataluña receive nothing from the national regional policy budget, but it also receives less than Midi-Pyrénées in R&D policy spend; the R&D spend in Midi-Pyrénées is worth 0.44 percent of regional GDP; in Cataluña it is worth just 0.06 percent.

6.2 Outstanding Issues

The analysis presented in this report is very far from having exhausted the topic of the relationships between regional policies and cohesion mechanisms. Three sets of issues deserving further work appear particularly important.

The first set is related to time. The analyses undertaken are basically static. They relate to a given year and do not take into account the time dimension, which is of course essential to the cohesion process. In particular, they take no account of the benefits that can accrue from past accumulated infrastructure investments. It can be hypothesised that the poorer regions, even if they now receive as much as, or more than, the richer regions in terms of specific or general expenditures, remain at a disadvantage because they received less in the past, and do not benefit from similar infrastructure endowments. If appropriate cohesion policies are to be developed more research is required in order to understand the impact of history on cohesion mechanisms.

Second, "non-spending" policies have not been considered. Non-spending policies are regulatory policies

that have a differential impact upon different regions. Examples of such policies would be environmental policies (they are more costly in congested or ecologically fragile regions), social policies (a national minimum wage policy is more constraining in low wage regions), or deregulation policies (the relaxation of universal service provision requirements which they often imply brings benefits for richer regions). In the same category, are fiscal expenditures, that is tax breaks or exemptions for specific purposes, such as housing construction or environmental improvements: their regional impacts are very unlikely to be identical for the various regions of a country. The regional implications of all these "non spending" policies are one of the "blind spots" of regional development analysis - and policies. They are difficult to evaluate, but they are certainly important.

Thirdly, the analysis (especially that of budget-induced transfers) has ignored the true long term impacts of public expenditures. They have, in essence, implicitly assumed that one ecu spent in a given region is equal to one ecu spent in another region, and that one ecu spent in a given fashion is equal to one ecu spent in another fashion. This simplifying assumption is of course not very realistic. From a cohesion viewpoint, the impacts of all these ecus are likely to be very different. What is required but is not available is a typology of the long-term impacts of various types of expenditures in various types of regions. It could be, for instance, that the "cohesion benefit" of an ecu is larger for welfare assistance than for infrastructure investments in a very poor region but that the reverse is true for a medium income region. In the absence of such information, adding ecus is a rather crude way of estimating the magnitude of what is being done for regions.

6.3 Policy Implications

This report was not recommendations-oriented. Nevertheless, the analyses - imperfect as they are - have some policy implications. A number of them have already been evoked or discussed in the various chapters of the report. Four, rather general, but important, implications will be mentioned briefly here.

The first is that policy decisions which impact on economic and social cohesion emanate from all parts of the Commission, not just the Regional Policy Directorate (DG XVI). Decisions taken in all Directorates have regional and cohesion consequences. Some of these consequences can be as important, or more important, for cohesion objectives, than the decisions and the expenditures controlled by DG XVI. What is done in the fields of environment, transportation, research, taxation, agriculture, education, consumer and competition policies, etc. matters. This has been recognised for quite some time at the national level, where regional policies increasingly strive to achieve harmonisation with sectoral policies. The same thing is of course a goal at the European level, but, as documented by this report, must probably be pursued and undertaken even more systematically.

The second implication is that the sum of Member States commitments to national cohesion does not add up to EU cohesion. It is in many cases the other way around. As a result of national cohesion policies, the richer regions of the poorer countries (Cataluña) have to pay for the poorer regions of their countries, whereas the poorer regions of the richer countries (the Midi-Pyrénées) are subsidised by the richer regions of their own country. Equals (Cataluña and Midi-Pyrénées) are not treated equally. National cohesion policies frequently run counter to European cohesion policies. This basic contradiction must be analysed, appreciated and addressed. It is a major challenge for regional policy at the EU level.

Thirdly, the analysis suggests that the role presently played by regional GDP per capita in the design of EU regional policies should perhaps be reconsidered. GDP per capita is an indicator of the wealth of a region *before* national redistributive policies. What matters, or what matters also, is probably the wealth of each region *after* national redistributive policies. Regional income per capita - which is not even available for all countries - is likely to be an indicator as important for EU policies as GDP per capita.

Finally, our analysis suggests that more attention should be given to the longer term impacts of assistance policies. Because of the magnitude of national redistributive policies, the poorer regions of the poor countries (the Alentejos) benefit from the wealth of the richer regions of these countries (the Lisbons). Giving money to Lisbon is thus a way to give money to Alentejo. This is true in the short term. But it is probably truer in the long term. If, as is likely, the money spent in Lisbon induces more growth than the money spent in Alentejo, then an ecu spent now in Lisbon will mean an increased flow of benefits for Alentejo over the years. There might be a time when it is better for Alentejo itself that the assistance money be spent in Lisbon, not to mention the fact that it would be better for Portugal. This is at this stage hardly more than an hypothesis, that should be further researched, but it is an hypothesis that has serious policy implications for the European Union.

Bibliography

Amin, A., Bradley, D., Howells, J. Tomaney, J. and Gentle, C. (1994) 'Regional Incentives and the Quality of Mobile Investment in the Less Favoured Regions of the EC' *Progress in Planning*, 41, Part 1.

Amin, A. and Tomaney, J. (1995) 'The Challenge of Cohesion' in Amin A. and Tomaney, J. (Eds) *Behind the Myth of European Union*, Routledge London.

Atkinson, R. and Moon, G. (1994) *Urban Policy in Britain*, Macmillan, London.

Bianchi, P. and Giordani, G. (1993) 'Innovation Policy at the Local and National Levels: The Case of Emilia-Romagna', *European Planning Studies*, 1, pp. 25-42.

Calmfors and Skedinger 'Does Active Labour Market policy Increase Employment? Theoretical Considerations and some Empirical Evidence from Sweden' *Oxford Review of Economic Policy,* Vol 11, 1, OUP, 1995.

Catsambas, T. (1978) *Regional Impacts of Federal Fiscal Policy,* Lexington Books, Mass.

Commission of the European Communities (1977) *Rapport du groupe de réflexion sur le rôle des finances publiques sur l'intégration européenne,* Série Economiques et Finances, Volumes I and II, Brussels.

Commission of the European Communities (1993) *Growth, Competitiveness and Employment: The Challenges and Ways Forward into the 21st Century,* OOPEC, Luxembourg.

Commission of the European Communities (1994) 'Competitiveness and Cohesion: Trends in the Regions', *Fifth Periodic Report on the Social and Economic Situation and the Development of the Regions of the European Community,* OOPEC, Luxembourg.

Commission of the European Communities (1995) *Fourth Survey from the Commission on State Aid in the European Union in the Manufacturing and Certain Other Sectors*, COM(95), 365 final, Brussels, 26.07.1995.

Commission of the European Communities (1995a) 'Performance of the European Union Labour Market: Results of an ad hoc labour market survey covering employers and employees', *European Economy No.3,* 1995.

Coopers & Lybrand (1985) *The London Equation,* Greater London Council.

Davezies, L. (1991) 'La place de Paris dans le budget de l'Etat. Eléments de solidarité fiscal,' *Annales de la Recherche Urbaine,* Novembre.

Davezies, L. (1993) *Budgets publics et redistribution spatiale: les effets du budget de l'Etat et de la sécurité social sur la répartition régionale des revenus en 1989*, OEIL/IUP/Université de Paris Val de Marne, publié par l'AURIF, Paris.

Davezies, L., Nicot, B. H., Pouliquen, P. and Prud'homme, R. (1987) *La contribution des grandes villes au développement: Abidjan subventionne-t-elle le reste de la Côte d'Ivoire,* Centre de Nations Unies pour les Etablissements Humains (Habitat), Janvier, polygr., 40p, published in *Revue d'Economie Régionale et Urbaine,* 4.

Davezies, L., Nicot, B. H. and Prud'homme, R. (1985) *La place de Casablanca dans le budget de l'Etat marocain,* rapport de consultants, diffusion restreinte.

Department of Economic Development of Northern Ireland (1990) *Competing in the 1990s,* Department of Economic Development, Belfast.

Donnelier, J. C. And Garagnon, M. (1989) *Comptes régionaux des administrations publiques centrales (CRAPUC),* Commissariat Général du Plan et INSEE, Division des Etudes Régionales, note de présentation (non-publiée), mai 1989, miméo.

EUROSTAT (1994) General Government Accounts and Statistics 1981-92, OOPEC, Luxembourg.

Giunta, A. and Martinelli, F. (1995) 'The Impact of Post-Fordist Corporate Restructuring in a Peripheral Region', in Amin A. and Tomaney, J. (Eds) *Behind the Myth of European Union*, Routledge, London.

Godineau, X. 'Les comptes régionalisés des administrations centrales. Un instrument à promouvoir' in Archambault, E. (ed) *La Comptabilité Nationale, pourquoi faire?* Actes du 4ème colloque de Comptabilité Nationale, pp. 173-181, Economica, Paris.

Hassink, R. (1993) 'Regional Innovation Policies Compared', *Urban Studies*, 30, pp. 1009-1024.

HMSO (1995) *Final Evaluation of Enterprise Zones*, Department of the Environment: London.

HMSO (1994) *Competitiveness: Helping Business to Win,* Cm 2563, London.

HM Treasury (1969) *Estimates of Central Government Revenue and Expenditure Attributable for Scotland for the Year 1967-1968,* London.

IDA Ireland (1994) Annual Report, Dublin.

INSEE (1995) *l'Île de France au coeur du processus de redistribution de la richesse,* Regards sur l'Île de France, 30.

Lagendijk, A. and van der Knaap, G. A. (1995) 'The Impact of Foreign Investments in the Automobile Industry on Local Economic Development in Spain', *Area*, 27, pp. 335-346.

Lovering, J. (1991) 'The Changing Geography of the Military Industry in Britain' *Regional Studies*, 25, pp. 279-293.

Massey, D. and Weild, D. (1992) 'Evaluating Science Parks', *Local Economy*, 7, pp. 10-25.

Moore, B., Rhodes, J. and Tyler, P. (1986) *The Effects of Government Regional Economic Policy*, HMSO, London.

Mushkin, J. (1957) 'Distribution of Federal Expenditures Among the States' *The Review of Economics and Statistics*, 39.

Mushkin, S. (1956) 'Distribution of Federal Taxes among the States' *National Tax Journal,* 2.

OECD (1992) *Reviews of National Science and Technology Policy: Italy,* OECD, Paris.

OECD (1994) *Science and Technology Policy: Review and Outlook 1994,* OECD, Paris.

OECD (1995) *OECD in Figures - statistics on the member countries 1995 edition,* Supplement to the OECD Observer No. 194 June/July, OECD, Paris.

PACEC (1987) *An Evaluation of the Enterprise Zone Experiment*, Department of the Environment, HMSO, London.

PACEC (1990) *The Efficiency of Regional Policy in Member Countries of the European Community*, PA Cambridge Economic Consultants, Cambridge.

PACEC (1993) *Regional Selective Assistance 1985-88*, HMSO, London.

Peck, F., Stone, I. and Esteban, M. (1996) 'Technology Parks and Regional Development in the Southern European Periphery: The Andalucian Case', *European Urban & Regional Studies*, 3, pp. 53-65.

Peck, J. (1990) 'The Youth Training Scheme: Regional Policy in Reverse?', *Policy and Politics*, 2, pp. 135-143.

Phelps, N. (1993) 'Branch Plants and the Evolving Spatial Division of Labour: A Study of Material Linkage Change in the Northern Region of England', *Regional Studies*, 27, pp. 87-101.

Price Waterhouse (1993) *Evaluation of Urban Development Grant, Urban Regeneration Grant and City Grant*, Department of the Environment, London.

Prud'homme, R. (1993) 'The Potential Role of the EC Budget in the Reduction of Spatial Disparities in a European Economic and Monetary Union, *European Economy, 5.*

PSMRU (1988) *An Evaluation of the Urban Development Grant. Department of the Environment,* HMSO, London.

Robinson, F., Shaw, K., and Lawrence M. (1994) 'Urban Development Corporations and the Creation of Employment: An Evaluation of Tyne & Wear and Tee-

side Development Corporations', *Local Economy*, 4, pp. 326-337.

Roper, S. and O'Shea, G. (1991) 'The Effect of Labour Subsidies in Northern Ireland 1967-79', *Scottish Journal of Political Economy*.

Simmie, J. (1995) 'R&D and the 'Peace Dividend': A Review of the Implications for Some Local Defence-Dependent Economies in the UK', *International Journal of Urban and Regional Research*, 19, pp. 194-207.

Sternberg, R. (1995) 'Assessment of Innovation Centres - Methodological Aspects amd Empirical Evidence from Western and Eastern Germany', *European Planning Studies*, 3, pp. 85-97.

Teague, P. (1994) 'Governance Structure and Economic Performance: the Case of Northern Ireland', *International Journal of Urban and Regional Research*, 16, pp. 275-292.

Turok, I. (1992) 'Property-led Urban Regeneration: Panacea or Placebo?', *Environment and Planning A*, 24, pp. 361-379.

Turok, I. (1993) 'Inward Investment and Local Linkages: How Deeply Embedded is 'Silicon Glen", *Regional Studies*, 5, pp. 401-418.

United Nations (1980) *Classification of the Functions of Government,* Statistical Papers, Series M, 70, New York.

US Congress, House of Representatives (1968) *Federal Revenue and Expenditure Estimate for States and Regions, Fiscal Years 1965-67,* US Government Printing Office, Washington DC.

Van Rompuy, P. And Verheirstraeten, A. (1979) *Economisch federalisme* deel 1, Université de Louvain.

Wren, C. and Waterson, M. (1991) 'The Direct Employment Effects of Financial Assistance to Industry, *Oxford Economic Papers*.

Ybarra, J., Domenech, R. and Giner, M. (1991) 'Technological Parks: Their Theory and Reality in Spain', *International Journal of Urban and Regional Research*, 15, pp. 383-394.

Yuill, D., Allen, K., Bachtler, J., Clement, K. and Wishlade, F. (1995) *European Regional Incentives 1995-96,* 15th edition, Bowker-Saur, London.

Yuill, D., Bachtler, J. and Wishlade, F. (1996) *European Regional Incentives 1996-97,* 16th edition, Bowker-Saur, London.

ANNEXES

ANNEX I:
Regional Incentive Expenditure by Nation and Region in the EU Member States: Tables and Charts, 1989-93

Table of contents

1. Introduction

The tables and charts in this annex provide information at the national and then the regional level on the trends, scale and intensity of regional incentive expenditure in the EU Member States (EU 12) over the 1989-93 period. The annex divides into two main sections.

First, in Section 2, overview tables and charts are provided at the *national* level for EU 12. The tables contain the following information for the years 1989 to 1993 (in as far as data is available):

- expenditure trends (national currencies): Table 1a
- expenditure trends (ECU, 1993 prices); Table 1b
- expenditure as a percentage of national GDP: Table 2
- expenditure *per capita* (national population): Table 3
- expenditure *per capita* (recipient assisted areas): Table 4

The four charts which follow relate in turn to Tables 1b, 2, 3 and 4.

The adjustments made to the data in moving from Table 1a through to Table 4 are straightforward:

- the original data was drawn from country-specific sources and contacts; its coverage is discussed further in Section 2
- to allow *trends* to be identified (in Table 1a) the original data was translated to 1993 prices by utilising the Eurostat "price index" (GDP change in prices 1989-93)
- to bring the Table 1a data on to a common currency, ECU exchange rates for 1993 were applied (Table 1b)
- two measures of the *scale* of policy were derived:
  - — one involved relating the original expenditure data to national GDP (see Table 2)
  - — the other involved adjusting the Table 1b data to a *per capita* basis utilising Eurostat national population figures for 1989-93 (Table 3)
- in estimating the *intensity* of policy, national-level expenditure was related to the national population located in

designated assisted areas; information on the population coverage of such areas was drawn from country sources and DGIV.

Second, in Section 3, tables and charts are provided at the *regional* level for those countries where regional expenditure data is available: Belgium, France, Germany, Italy, the Netherlands, Portugal, Spain and the United Kingdom. Of the other four countries:

- there has been no regional incentive on offer in Denmark since January 1991
- there is no national-level data for Greece, and hence no regional breakdown
- in both Ireland and Luxembourg the NUTS breakdown means that, again, no regional breakdown is available.

In presenting regional-level data, the countries concerned are grouped as follows to reflect the discussion in Section 3.3 of the report:

- the Cohesion countries (Portugal and Spain)
- Italy and Germany
- the 'northern European' countries (Belgium, France, the Netherlands, the United Kingdom)

The tables provided at the regional level broadly mirror those in Section 2 of this annex. They show for each region covered:

- expenditure trends (ECU, 1993 prices): Table 1
- expenditure as a percentage of regional GDP: Table 2
- expenditure *per capita* (regional population): Table 3
- expenditure *per capita* (recipient regional assisted areas): Table 4

The three charts which follow relate, in turn, to Tables 2, 3 and 4. Finally, a further chart is provided which gives an indication of the overall "mosaic"of the regional intensity of policy, setting *per capita* expenditure in the assisted areas of each recipient region against regional GDP.

The adjustments involved in moving from Table 1 to Table 4 at the regional level are very similar to those adopted nationally:

- the original data was drawn from country-specific sources and contacts; its coverage is discussed further in Section 3
- *trends* have been identified by utilising the Eurostat "price index" (GDP change in prices 1989-93
- to bring the data on to a common currency ECU exchange rates for 1993 were applied (Table 1)
- two measures of *scale* were derived:
  - one involved relating the original expenditure data to regional GDP (see Table 2)
  - the other involved adjusting the Table 1 data on to a *per capita* basis utilising Eurostat regional population figures for 1989-93 (Table 3)
- in estimating the regional *intensity* of policy, regional-level expenditure was related to the regional population lo-

cated in designated assisted areas; information on the population coverage of such areas at the regional level has been obtained from DGIV.

One final point to note is that some of the expenditure on national regional incentives may be co-financed by the Structural Funds, particularly in Objective 1 regions. Unfortunately, information on this is not readily available. Statistics have, however, been produced on the degree of Structural Fund support for the productive environment (industry and services) over the 1989-93 period as part of the CSFs agreed for Objective 1 regions. These show the percentage contribution of the Structural Funds to have been as follows:

Country Grouping	Objective 1 CSF	Percent
Cohesion countries	Greece	62.2
	Ireland	61.7
	Portugal	65.8
	Spain	50.0
Italy/Germany	Italy	42.5
	Germany	50.0
Other Member States	Northern Ireland	54.8
	Corsica	45.0

Source: Directorate-General for Regional Policy.

While these percentages give some indication of the potential for Structural Fund support for the main regional incentives on offer in those regions which qualify for Objective 1 support, no information is available on the actual levels of co-financing which have taken place.

2. National-Level Data

This section provides a series of tables and related charts which highlight trends in regional incentive expenditure at the *national* level, together with indicators of the scale and intensity of the national regional policy spend. The data in the tables and charts generally relate to expenditure committed under the main regional capital grant(s) of the countries concerned (EU 12). The focus is on capital grants for two main reasons: first, such grants are far and away the most significant regional incentive measure in nearly all of the countries covered; and second, it is only in respect of regional capital grants that information is available at the regional level on the spatial distribution of expenditure (see Section 3).

Before reviewing, country by country, the coverage of the data in the tables and charts which follow, it is useful to be aware of the broad relationship between regional capital grant expenditure and regional incentive spending more generally. Such information is provided in the recent Commission Survey on State Aids[1]. This shows, over the 1990-92 period, between 97 percent and 100 percent of regional State aid spending took the form of grant support in five countries: Denmark, Luxembourg, the Netherlands, Spain and Portugal. In a further two countries (Belgium and Great Britain), around 90 percent of expenditure was grant-based, while in another four countries (Ireland, west Germany, Northern Ireland and Greece) around three-quarters of the regional State aid spend was attributable to grants. Only in parts of three countries - Germany (in the east and along the now-defunct Zonal Border Area), France and Italy - have grants played a lesser role in expenditure terms. In general, grants very much represent the mainstay of regional incentive spending across the EU Member States.

Turning to a more detailed, country-by-country review of data coverage, in Belgium the data relates to the capital grant/interest subsidy in Flanders and Wallonia. These are, by some way, the main regional incentives in Belgium, though support is also available in the form of a State guarantee, an accelerated depreciation allowance and exemptions from capital registration duties and real estate income tax. Over the 1990-92 period, the Fourth Commission Survey on State Aids estimates that some 92 percent of regional State aid spending took the form of grants, with most of the remainder being accounted for by the State guarantee. A substantial revision of the Wallonian regional incentives in 1993 has created a discontinuity in the Wallonian statistics. From 1993 the Wallonian investment grant was limited to firms with more than 250 employees or turnover exceeding ECU 20 million. Projects from smaller firms are processed under separate small firm legislation (available nationally).

In Denmark the regional incentive package (which, by that time, consisted solely of the investment grant scheme) was abolished as from 1 January 1991, though an assisted area location may still be used to justify awarding grants to industry on an *ad hoc* basis. However, this facility has not so far been used. Over the 1990-92 period the State Aids Survey identified all Danish regional incentive expenditure as being in the form of grant support.

In France the main regional incentive is the regional policy grant, PAT (*prime d'amenagement du territoire).* In ad-

[1] *Fourth Survey from the Commission on State Aid in the European Union in the Manufacturing and Certain Other Sectors* (COM (95), 365 final, Brussels, 26.07.1995).

dition, regional incentive support is available in the form of the local business tax concession (*exoneration de la taxe professionnelle),* aid to decentralisation (*aide a la decentralisation*) and the reduction in property transfer/land tax (*reduction du droit de mutation ou de la taxe de publicite foncier).* Further, a wide range of more general support to regional development is provided as part of the concept of *amenagement du territoire* (for more details, see Section 3.3.1.3 in the main report). According to the State Aids Survey, all regional incentive support in France over the 1990-92 period took the form either of grants (ie. mainly the PAT) or tax concessions. In metropolitan France just over 56 percent of regional State aid support was accounted for by the PAT; in contrast, in the overseas territories (which qualify for aid under Article 92 3(a)) all but 2 percent of support was in the form of tax concessions. One final point to note in the French context is that, although the local business tax concession is not insignificant in terms of tax revenue foregone, its impact on investment and location decisions is less clear. The fact is that richer localities can often offer more attractive prospects for business development - including lower general rates of local business tax - than can poorer localities via time-limited local business tax concessions.

In Germany, regional policy has been the joint responsibility of the Federal and *Land* levels since 1969. The key regional incentive under the Joint Task for the Improvement of Regional Economic Structures (*Gemeinschaftsaufgabe Verbesserung der regionalen Wirtschaftsstruktur)* is the investment grant (*Investitionszuschuss).* However, it should be noted that, until 1989, there was also an important investment allowance available *(Investitionszulage).* Moreover, until 1994 it was possible to receive a special depreciation allowance in the now-abolished Zonal Border Area. Further, small locally-oriented firms (those which do not exhibit the 'primary effect') are eligible for support under the ERP regional soft loan. Also of note is the fact that, prior to unification, separate support measures were available in Berlin. Such assistance is currently being phased out. Finally, the obvious point must be made that investment grant assistance is only part of the support package directed towards the new *Länder.* Broader policies for the new *Länder* are discussed more fully in Section 3.4.1.4 of the main report. According to the State Aids Survey, some three-quarters of regional State aid in west Germany over the 1990-92 period took the form of a grant, with most of the remainder being a tax concession. In the new *Länder*, in contrast, just 63 percent of regional State aid was accounted for by grant support, with the activities of the *Treuhandanstalt* representing a large proportion of the remaining expenditure. Finally, support for Berlin and for the now-defunct Zonal Border Area, mainly in the form of tax concessions, was a very important component of regional State aid spending in Germany over the 1990-92 period (representing over two-fifths of the total according to the State Aids Survey). However, as noted above, such support is currently being phased out.

In Greece, two incentive packages are available: a fiscal package comprising a tax allowance combined with an increased depreciation allowance; and an (alternative) financial package comprising an investment grant and interest rate subsidy, again combined with the increased depreciation allowance. No award statistics are available for the fiscal elements of the package. For the financial incentives, no data is available after 1988. The Greek figure in the tables is 1988 expenditure committed under the investment grant scheme for manufacturing projects only. The figure would be more than doubled were all sectors taken into account. Moreover, adding interest rate subsidy expenditure would further increase the outcome by more than 13 percent. The combined investment grant/interest rate subsidy figure for all sectors in 1988 was Drs 82,599 million; this compares with investment grant spending on manufacturing of Drs 32,387 million. While regional State aid figures for Greece over the 1990-92 period are included in the State Aids Survey (showing that three-quarters of such expenditure is accounted for by grant support), the Survey makes the point that "since the figures are still essentially estimates, the results for Greece should still be treated with caution"[(2)].

In Ireland, IDA-Ireland operates incentive programmes for new industry, major expansions and international services while *Forbairt* focuses on schemes for small industries, product and process development and enterprise development. The data in the table covers grants approved under the IDA new industry and internationally-traded services programmes. No data is available for 1993. According to the State Aids Survey, over the 1990-92 period grants represented almost 78 percent of the regional State aid spend in Ireland; a further 15 percent was in the form of tax concessions with some 7 percent as equity support.

In Italy, the data in the tables relates to Law 64/86. This has effectively been suspended since the summer of 1992, leaving a large number of applications and payments unprocessed. Subsequently, a new legal basis for policy was passed (Law 488/92) but it has not yet been fully implemented. The data provided covers the capital grant and in-

[(2)] *Ibid* p. 4.

terest subsidy available under Law 64/86. In addition, major social security concessions operated in favour of *Mezzogiorno* firms. Finally, tax concessions were also available in respect of the IRPEG and ILOR taxes. No expenditure information is available in respect of these tax concessions. In the State Aids Survey, grants accounted for 25 percent of regional State aid expenditure over the 1990-92 period. Almost all of the remaining spend took the form of social security concessions. These have subsequently been revised both in the context of the Italian regional policy package and with a view to phasing them out completely by the end of the decade.

In Luxembourg, regional assistance is mainly in the form of grants, but interest rate subsidies, loan guarantees and tax concessions are also provided for under the Framework Law. The statistics in the tables relate to the capital grant. Over the 1990-92 period, the State Aids Survey records all regional State aid spending in Luxembourg as being in the form of grant support.

In the Netherlands, there is just one key regional incentive, the investment premium, IPR (*Investeringspremieregelung*). The data in the tables relate to this scheme. The State Aids Survey shows 100 percent of regional State aid expenditure in the Netherlands to have taken the form of grant assistance over the 1990-92 period.

In Portugal, the SIR replaced the SIBR in 1994. The figures in the tables are in respect of the SIBR *(Sistema de Incentivos de Base Regional),* the regional incentives system. The SIBR is essentially a grant-based system; this is confirmed by the State Aids Survey which identifies 97 percent of regional State aid expenditure over the 1990-92 period as being grants based.

In Spain, there is a single regional incentive on offer, the regional investment grant *(subvencion a la inversion).* The figures in the tables relate to this scheme. Unsurprisingly, 100 percent of regional State aid expenditure over the 1990-92 period is recorded as being in the form of grants in the State Aids Survey.

Finally, in the United Kingdom, a distinction must be drawn between the British and Northern Irish regional incentive packages. In Britain, the main element of the package is Regional Selective Assistance (RSA). The figures in the tables are in respect of RSA. In addition, minor support (less than £20 million per annum in terms of expenditure committed) is available for small firms in the assisted areas under the Regional Enterprise Grant scheme. In Northern Ireland, regional incentive support is provided via the Selective Financial Assistance scheme. In considering recent trends in regional incentive expenditure in the UK, it should be noted that previously-important components of the regional incentive package were withdrawn in 1988 - the Regional Development Grant in Britain and the Capital Grant in Northern Ireland. In both Britain and Northern Ireland, the regional incentives currently on offer are very much grants-oriented. Although RSA in Britain has historically involved a relatively wide range of incentives, in recent years it has become increasingly (indeed, almost exclusively) grants-based. The State Aids Survey records almost 90 percent of British regional State aid spending between 1990 and 1992 as being in the form of grants. In Northern Ireland, the grants component is almost three-quarters of total expenditure over the 1990-92 period, most of the remainder taking the form of tax concessions.

Table 1a: Expenditure trends for main regional incentives (1993 prices, national currencies)

COUNTRY	INCENTIVE	EXPENDITURE COMMITTED (national currency, millions, 1993 prices)[1]					
		1989	1990	1991	1992	1993	Mean
Belgium	Capital Grant/Interest Subsidy	10133,9	7490,4	5936,9	5599,7	4583,0	6748,8
Denmark	Regional Development Grant	73,1	64,2	0,0	0,0	0,0	27,5
France	PAT (Regional Policy Grant)	752,5	901,2	703,8	575,2	251,6	636,9
Germany (West)	Investment Grant - west	819,9	1089,0	827,8	671,2	489,5	779,5
Germany (East)	Investment Grant - east	0,0	146,0	7650,3	5715,1	5775,5	6428,9
Greece	Investment Grant	60074,4	n.a.	n.a.	n.a.	n.a.	60074,4
Ireland	IDA (Industrial Development Authority)	236,5	172,8	112,7	125,4	n.a.	161,9
Italy	Capital Grant/Interest Subsidy	3290,9	7556,8	1880,3	350,8	0,0	2615,8
Luxembourg	Capital Grant/Interest Subsidy	1219,0	1342,1	1911,0	2211,0	1412,0	1619,0
Netherlands	IPR (Investment Premium)	160,0	262,4	218,0	181,9	52,0	174,9
Portugal	SIBR (Regional Incentive System)	46313,2	32671,9	28285,6	25947,2	44845,8	35612,8
Spain	RIG (Regional Investment Grant)	265818,8	110636,3	39205,7	32569,4	29192,7	95484,6
Great Britain	Regional Selective Assistance	324,0	393,4	226,9	231,1	341,7	303,4
N Ireland	Selective Financial Assistance	94,8	81,3	88,9	48,7	53,7	73,5

[1] *Italian commitments in billions of lira*

Table 1b: Expenditure trends for main regional incentives, 1989-93 (1993 prices, ECU, millions)

COUNTRY	INCENTIVE	EXPENDITURE COMMITTED - MECU (1993 prices)					
		1989	1990	1991	1992	1993	Mean
Belgium	Capital Grant/Interest Subsidy	250,4	185,1	146,7	138,4	113,2	166,8
Denmark	Regional Development Grant	9,6	8,5	0,0	0,0	0,0	3,6
France	PAT (Regional Policy Grant)	113,4	135,9	106,1	86,7	37,9	96,0
Germany (West)	Investment Grant - west	423,4	562,4	427,5	346,6	252,8	402,5
Germany (East)	Investment Grant - east	0,0	75,4	3950,8	2951,4	2982,6	3320,1
Greece	Investment Grant	223,7	n.a.	n.a.	n.a.	n.a.	223,7
Ireland	IDA (Industrial Development Authority)	295,6	216,1	140,9	156,8	n.a.	202,3
Italy	Capital Grant/Interest Subsidy	1787,4	4104,2	1021,2	190,5	0,0	1420,7
Luxembourg	Capital Grant/Interest Subsidy	30,1	33,2	47,2	54,6	34,9	40,0
Netherlands	IPR (Investment Premium)	73,6	120,6	100,2	83,6	23,9	80,4
Portugal	SIBR (Regional Incentive System)	245,9	173,4	150,2	137,7	238,1	189,1
Spain	RIG (Regional Investment Grant)	1782,5	741,9	262,9	218,4	195,8	640,3
Great Britain	Regional Selective Assistance	415,3	504,4	290,9	296,3	438,1	389,0
N Ireland	Selective Financial Assistance	121,6	104,2	114,0	62,4	68,8	94,2

Table 2: Expenditure on main regional incentives, 1989-93, as a percentage of national GDP

COUNTRY	INCENTIVE	EXPENDITURE COMMITTED as a % of national GDP					
		1989	1990	1991	1992	1993	Mean
Belgium	Capital Grant/Interest Subsidy	0,147%	0,105%	0,082%	0,076%	0,064%	0,095%
Denmark	Regional Development Grant	0,009%	0,008%	0,000%	0,000%	0,000%	0,003%
France	PAT (Regional Policy Grant)	0,011%	0,013%	0,010%	0,008%	0,004%	0,009%
Germany (West)	Investment Grant - west	0,032%	0,040%	0,029%	0,023%	0,017%	0,028%
Germany (East)	Investment Grant - east	0,000%	0,004%	0,224%	0,186%	0,204%	0,206%
Greece	Investment Grant	0,367%	n.a.	n.a.	n.a.	n.a.	0,367%
Ireland	IDA (Industrial Development Authority)	0,902%	0,604%	0,385%	0,409%	n.a.	0,575%
Italy	Capital Grant/Interest Subsidy	0,218%	0,491%	0,121%	0,022%	0,000%	0,170%
Luxembourg	Capital Grant/Interest Subsidy	0,388%	0,414%	0,572%	0,649%	0,405%	0,486%
Netherlands	IPR (Investment Premium)	0,030%	0,047%	0,039%	0,032%	0,009%	0,031%
Portugal	SIBR (Regional Incentive System)	0,420%	0,280%	0,238%	0,216%	0,370%	0,305%
Spain	RIG (Regional Investment Grant)	0,461%	0,185%	0,064%	0,053%	0,048%	0,162%
Great Britain	Regional Selective Assistance	0,052%	0,062%	0,037%	0,038%	0,055%	0,049%
N Ireland	Selective Financial Assistance	0,015%	0,013%	0,014%	0,008%	0,009%	0,012%

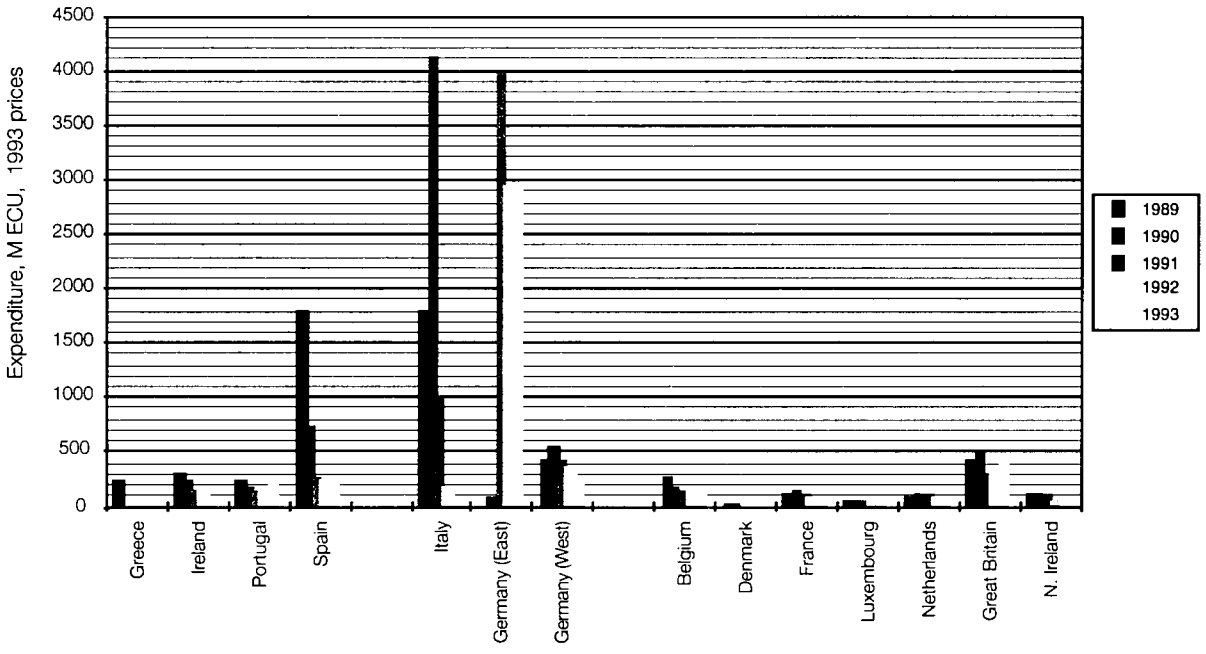
Table 3: Expenditure per capita on main regional incentives, 1989-93 (1993 prices, ECU, national population)

COUNTRY	INCENTIVE	EXPENDITURE PER CAPITA (NATIONAL POPULATION (ECU)					
		1989	1990	1991	1992	1993	Mean
Belgium	Capital Grant/Interest Subsidy	25,22	18,60	14,69	13,81	11,25	16,71
Denmark	Regional Development Grant	1,88	1,65	0,00	0,00	0,00	0,70
France	PAT (Regional Policy Grant)	2,02	2,40	1,86	1,52	0,66	1,69
Germany (All)	Investment Grant - all	6,86	10,18	54,90	41,08	39,95	30,59
Germany (West)	Investment Grant - west	6,86	8,97	5,36	4,32	3,12	5,73
Germany (East)	Investment Grant - east	0,00	1,20	49,54	36,77	36,83	41,45
Greece	Investment Grant	22,24	n.a.	n.a.	n.a.	n.a.	22,24
Ireland	IDA (Industrial Development Authority)	84,09	61,61	40,02	44,25	n.a.	57,49
Italy	Capital Grant/Interest Subsidy	31,55	72,39	18,00	3,36	0,00	25,06
Luxembourg	Capital Grant/Interest Subsidy	80,34	87,43	122,84	140,15	88,28	103,81
Netherlands	IPR (Investment Premium)	4,97	8,10	6,68	5,53	1,57	5,37
Portugal	SIBR (Regional Incentive System)	24,70	17,48	15,21	13,97	24,13	19,10
Spain	RIG (Regional Investment Grant)	45,88	19,06	6,74	5,59	5,00	16,46
United Kingdom	RSA and SFA	9,39	10,62	7,02	6,20	8,73	8,39
Great Britain	Regional Selective Assistance	7,27	8,80	5,04	5,12	7,54	6,75
N Ireland	Selective Financial Assistance	2,13	1,82	1,98	1,08	1,19	1,64

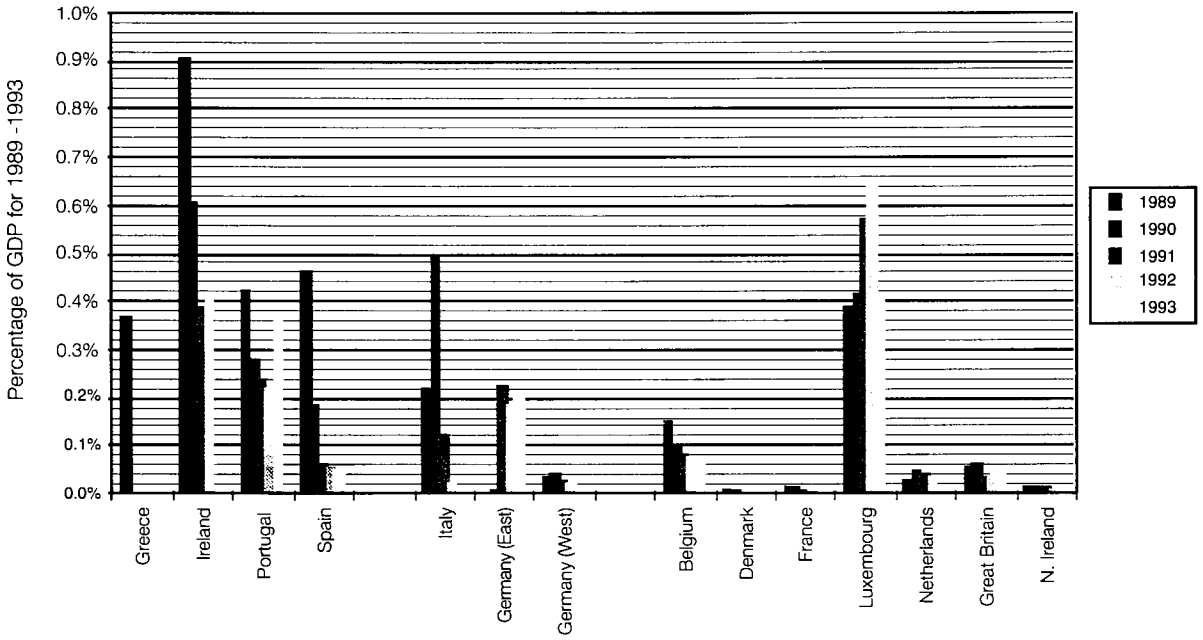
Table 4: Expenditure on main regional incentives - per capita of recipient assisted areas (1993 prices, ECU)

COUNTRY	INCENTIVE	EXPENDITURE PER CAPITA IN ELIGIBLE AREAS (ECU per capita of eligible population, 1993 prices)					
		1989	1990	1991	1992	1993	Mean
Belgium	Capital Grant/Interest Subsidy	76,20	56,21	44,38	41,71	33,98	50,49
Denmark	Regional Development Grant	8,37	7,95	0,00	0,00	0,00	3,27
France	PAT (Regional Policy Grant)	5,17	5,73	4,45	3,62	1,57	4,11
Germany (West)	Investment Grant - west	23,67	30,97	25,72	20,60	14,83	23,16
Germany (East)	Investment Grant - east	0,00	4,41	217,25	164,38	167,03	184,35
Greece	Investment Grant	38,34	n.a.	n.a.	n.a.	n.a.	38,34
Ireland	IDA (Industrial Development Authority)	84,09	61,61	40,02	44,25	n.a.	57,49
Italy	Capital Grant/Interest Subsidy	88,62	203,34	50,55	9,43	0,00	70,39
Luxembourg	Capital Grant/Interest Subsidy	80,34	87,43	122,84	140,15	110,63	108,28
Netherlands	IPR (Investment Premium)	24,97	40,70	33,55	27,78	9,45	27,29
Portugal	SIBR (Regional Incentive System)	24,70	17,48	15,21	13,97	49,25	24,12
Spain	RIG (Regional Investment Grant)	78,29	32,53	11,51	9,54	8,54	28,08
Great Britain	Regional Selective Assistance	21,35	25,86	14,82	15,04	22,82	19,98
N Ireland	Selective Financial Assistance	76,90	65,70	71,63	38,95	42,36	59,11

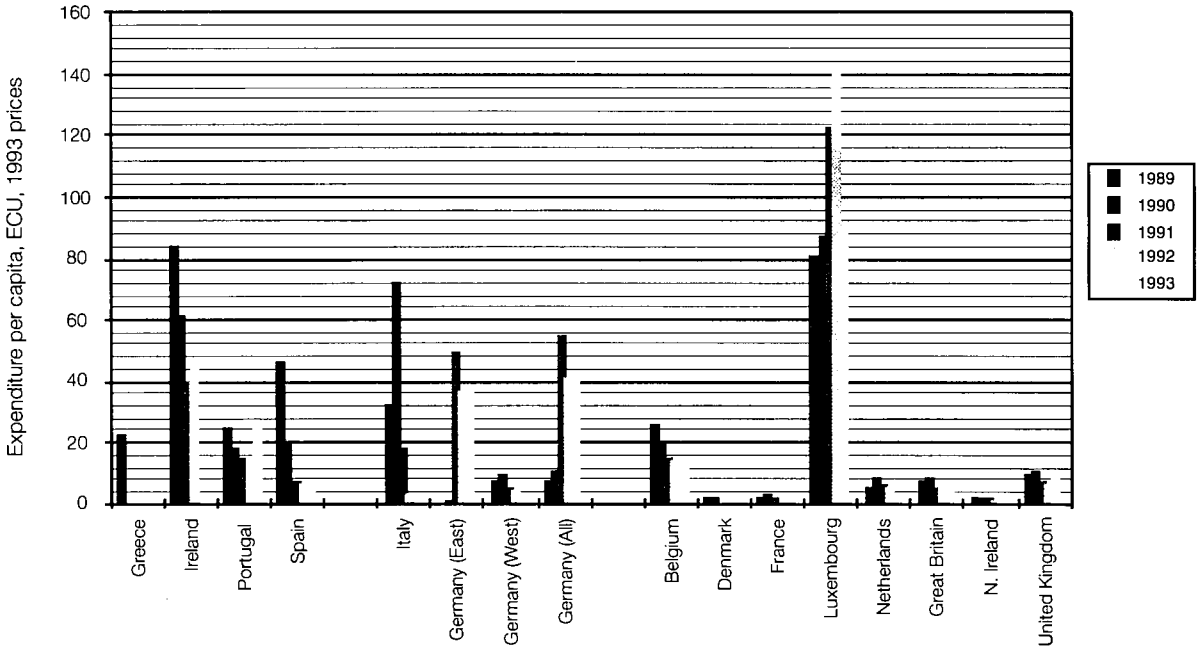
Main regional incentive expenditure trends in the Member States, 1989-1993 (1993 prices, ECU, millions)
See Member State Table 1b



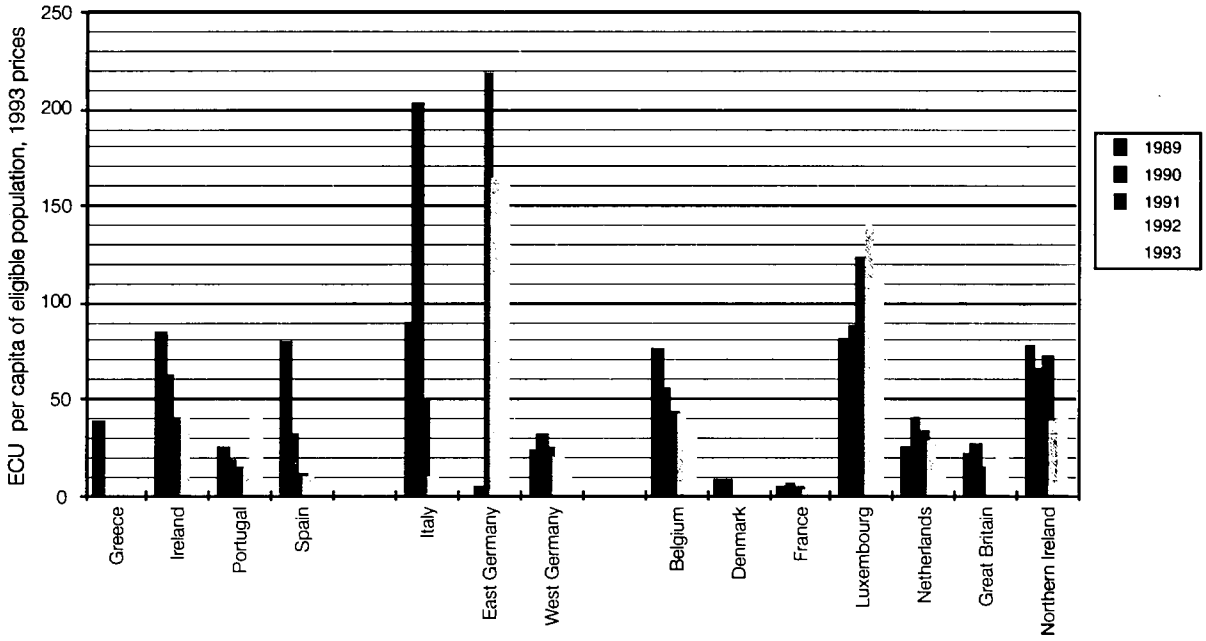
Expenditure on main regional incentives 1989-93, as a percentage of national GDP
See Member States Table 2



Main regional incentive expenditure in the Member States, per capita of the national population, 1989-1993 (ECU, 1993 prices)
See Member States Table 3



Main regional incentives: Expenditure per capita in the recipient assisted areas only, 1989-93 (ECU, 1993 prices)
See Member States Table 4



3. Regional-Level Data

This section consists of a series of tables and related charts which highlight trends in regional incentive expenditure at the *regional* level. In addition, indicators of the scale and intensity of regional incentive spending at the regional level are provided. As in Section 2, the focus is on grant expenditure; this is the only information which was available on the spatial distribution of regional incentive expenditure amongst the regions. The relationship of grant-based expenditure to more general regional incentive spending has already been discussed in Section 2.

As noted earlier (in Section 1), regional breakdowns are available for only eight of the EU 12 countries: Belgium, France, Germany, Italy, the Netherlands, Portugal, Spain and the United Kingdom. The regional breakdowns are as follows:

Belgium	2 regions
France	22 regions
Germany	16 *Länder*
Italy	20 regions
Netherlands	12 provinces
Portugal	5 CCR plus 2 autonomous regions
Spain	17 autonomous communities plus Ceuta and Melilla
United Kingdom:	10 standard regions (plus Northern Ireland)[3]

For each country four tables are provided for the main regional capital grant on offer:

- expenditure trends (ECU, 1993 prices): Table 1
- expenditure as a percentage of regional GDP: Table 2
- expenditure *per capita* (regional population): Table 3
- expenditure *per capita* (recipient regional assisted areas): Table 4

In addition, charts have been produced for Tables 2-4 for each country. Finally, a chart is provided for each country which relates the intensity of policy at the regional level to regional GDP.

[3] A problem in the UK is that the available regional data sets relate to two different categories of region: the regional expenditure data is for DTI regions while other data is for so-called UK standard regions. The main differences of relevance to the current study are in the North and North West of the country, and, more specifically, in the treatment of Cumbria. Steps are currently being taken to minimise the impact of these regional discontinuities which exaggerate expenditure slightly in the North West and understate it for the North.

The country groupings which follow reflect the discussion in Section 3.3 of the main report. Accordingly, the charts and tables are in the country order set out below:

Cohesion countries	Portugal
	Spain
Italy/Germany	Italy
	Germany
Other Member States	Belgium
	France
	the Netherlands
	Great Britain

Finally, there is an overview set of three charts which relate regional-level policy intensity to regional GDP for the:

- Cohesion countries
- Italy/Germany
- Other Member States

In these overview charts all of EU 12 are included, with national data being utilised where regional-level data is not available.

Regional Level Data: Portugal

Table 1. Portugal: Regional Incentive System (SIBR)
Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
pt11	Norte	36,92	45,45	23,35	30,62	44,04	36,07
pt12	Centro (P)	47,45	48,98	21,01	35,37	27,96	36,15
pt13	Lisboa e Vale do Tejo	144,87	53,00	41,09	27,62	60,58	65,43
pt14	Alentejo	4,42	13,19	21,06	8,63	17,53	12,96
pt15	Algarve	2,43	1,42	0,43	0,32	0,21	0,96
pt2	Acores	5,79	8,29	32,32	20,21	13,85	16,09
pt3	Madeira	3,95	3,21	10,95	15,05	73,91	21,41
pt	Portugal	245,83	173,55	150,19	137,8	238,07	189,09

Table 2. Portugal: Regional Incentive System (SIBR)
Expenditure as a percentage of regional GDP, 1989-93

	Region	1989	1990	1991	1992	1993	Mean, 89-93
pt11	Norte	0,168%	0,197%	0,103%	0,133%	0,193%	0,16%
pt12	Centro (P)	0,542%	0,539%	0,234%	0,390%	0,311%	0,40%
pt13	Lisboa e Vale do Tejo	0,458%	0,156%	0,123%	0,082%	0,180%	0,20%
pt14	Alentejo	0,180%	0,544%	0,880%	0,357%	0,729%	0,54%
pt15	Algarve	0,121%	0,065%	0,020%	0,014%	0,010%	0,05%
pt2	Acores	0,495%	0,714%	3,041%	1,881%	1,298%	1,49%
pt3	Madeira	0,297%	0,243%	0,906%	1,231%	6,090%	1,75%
pt	Portugal	0,368%	0,245%	0,209%	0,189%	0,329%	0,27%

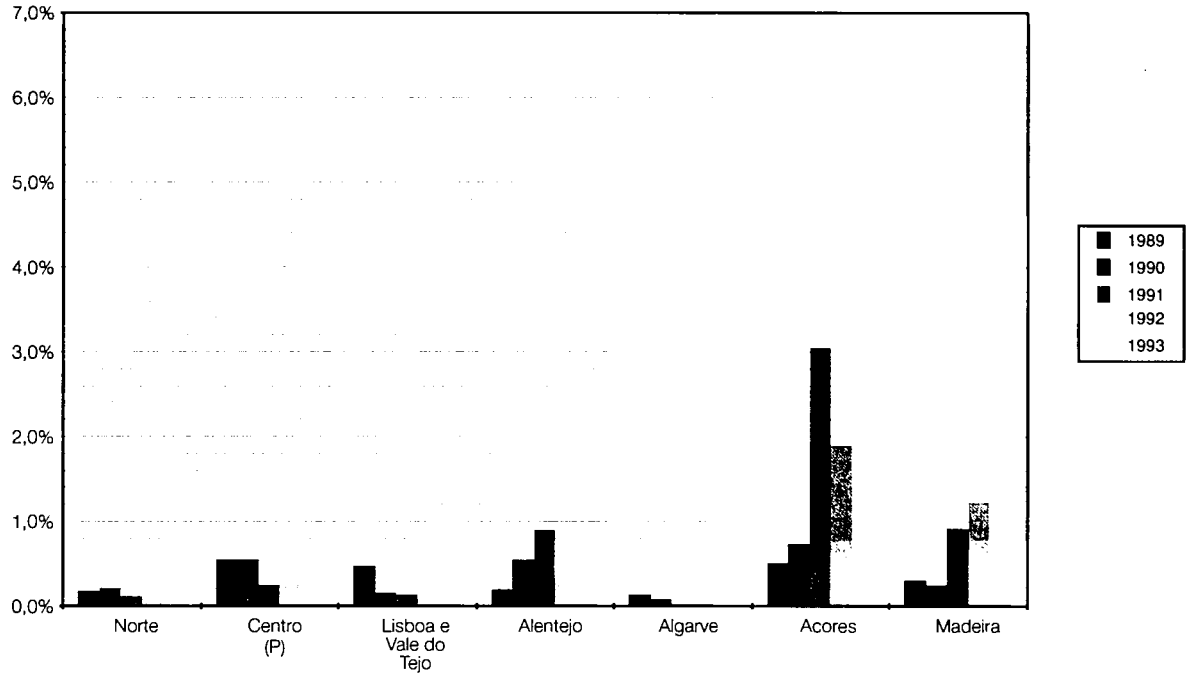
Table 3. Portugal: Regional Incentive System (SIBR)
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
pt11	Norte	10,18	13,08	6,72	8,81	12,63	10,28
pt12	Centro (P)	26,61	28,27	12,19	20,59	16,32	20,80
pt13	Lisboa e Vale do Tejo	41,91	16,08	12,48	8,39	18,39	19,45
pt14	Alentejo	7,80	23,98	38,64	15,96	32,61	23,80
pt15	Algarve	7,10	4,19	1,25	0,92	0,60	2,81
pt2	Acores	22,83	34,66	135,72	85,08	58,22	67,30
pt3	Madeira	14,44	12,65	43,17	59,38	291,22	84,17
pt	Portugal	23,86	17,55	15,22	13,98	24,13	18,95

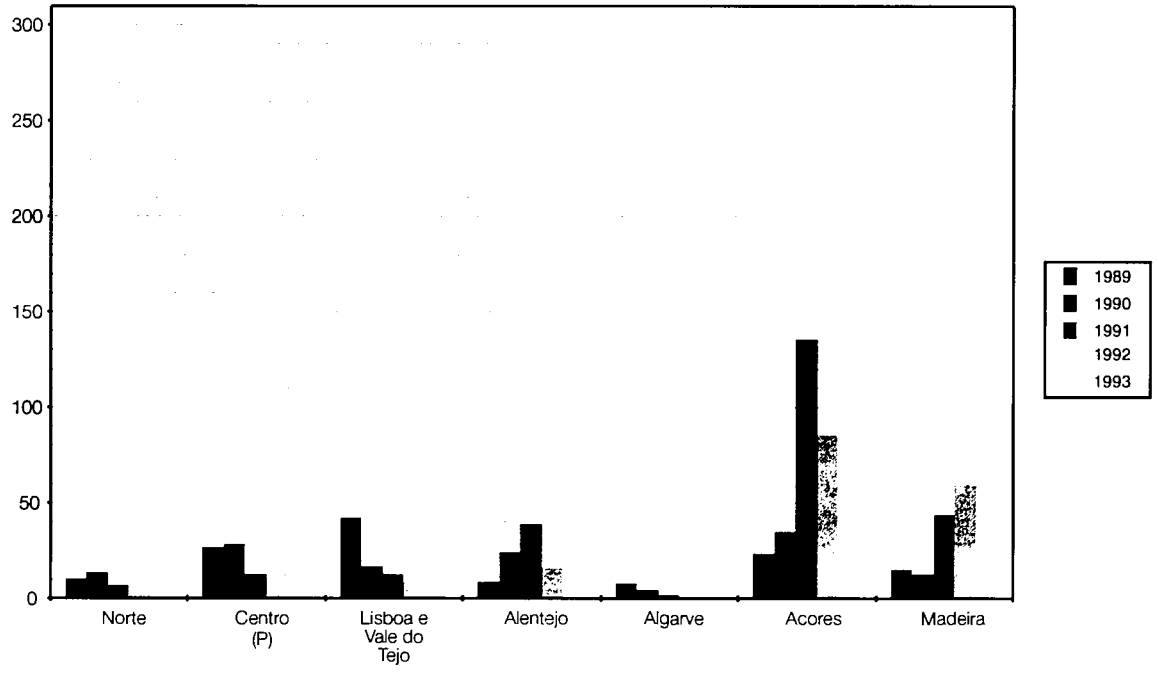
Table 4. Portugal: Regional Incentive System (SIBR)
Expenditure per capita of eligible population

See Table 3: 100% of the population is eligible.

Portugal: Regional Incentive System (SIBR)
Expenditure as a percentage of regional GDP, 1989-93
See Portugal Table 2



Portugal: Regional Incentive System (SIBR)
Expenditure per capita of regional population (1993 prices, ECU)
See Portugal Table 3



Portugal: Mean annual Regional Incentive System (SIBR) Expenditure per capita of eligible regional population 1989-93 v. regional GDP per capita 1992 (both in ECU)

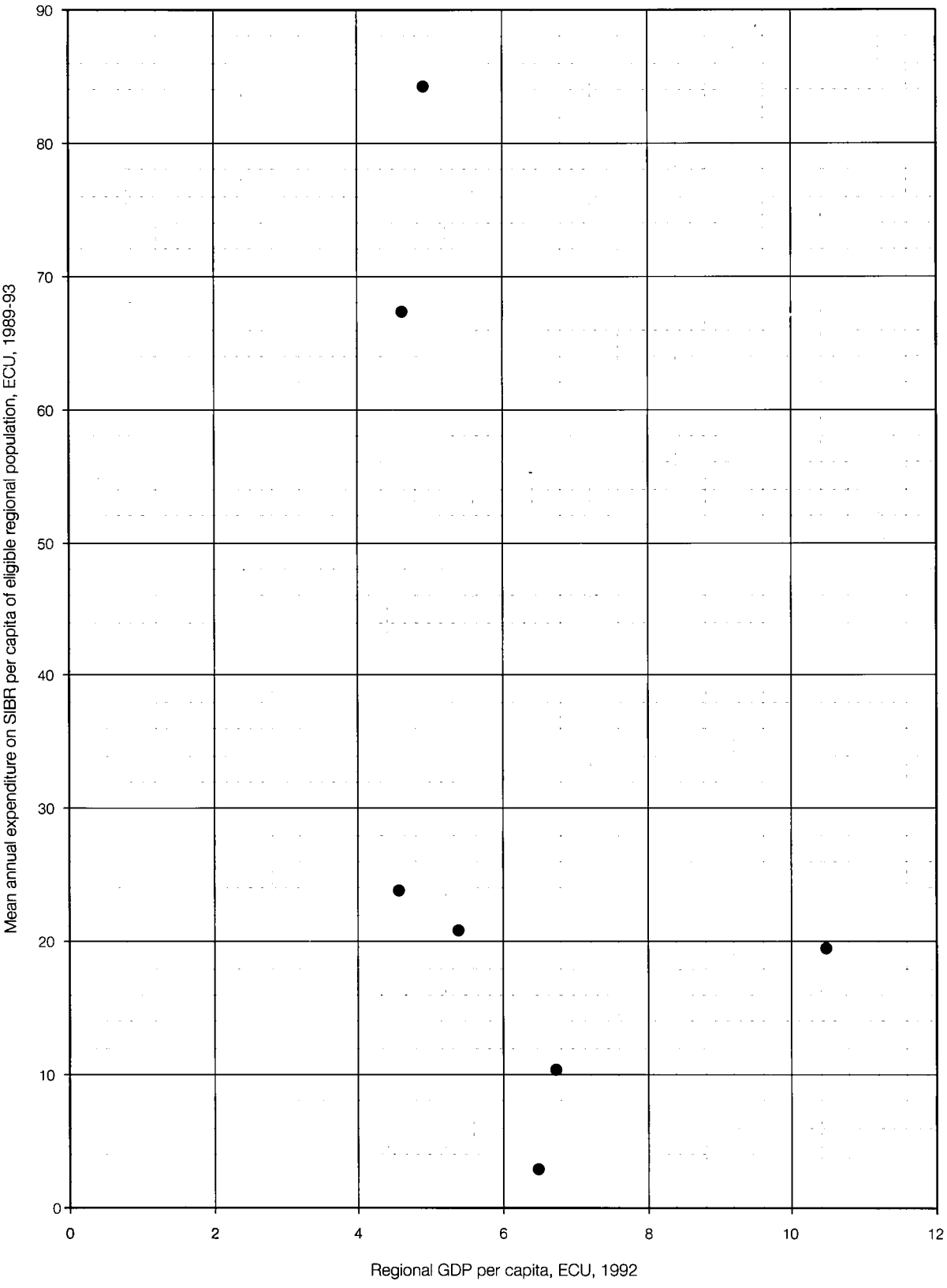


Table 1. Spain: Regional Investment Grant (RIG) Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
es11	Galicia	95,92	43,86	24,46	20,16	15,42	39,96
es12	Asturias	24,44	264,81	39,90	9,27	5,57	68,80
es13	Cantabria	12,54	3,77	2,32	5,31	1,12	5,01
es21	Pais Vasco	32,77	13,31	0,92	17,58	0,20	12,96
es22	Navarra	-	-	-	-	-	-
es23	Rioja	-	-	-	-	-	-
es24	Aragon	23,82	17,52	6,97	9,41	7,05	12,96
es3	Madrid	-	-	-	-	-	-
es41	Castilla-Leon	133,62	56,10	31,66	47,70	35,70	60,96
es42	Castilla-La Mancha	101,15	38,65	24,38	17,60	17,54	39,87
es43	Extremadura	90,84	90,92	39,21	17,28	10,91	49,83
es51	Cataluna	-	-	-	-	-	-
es52	Valencia	22,19	28,97	5,83	7,78	3,99	13,75
es53	Baleares	-	-	-	-	-	-
es61	Andalucia	277,68	141,38	62,47	49,70	88,60	123,97
es62	Murcia	907,67	15,51	11,54	10,17	4,06	189,79
es63	Ceuta y Melilla	0,78	2,95	-	0,14	0,18	0,81
es7	Canarias	59,12	24,15	13,23	6,29	5,42	21,64
es	Spain	1.782,54	741,91	262,91	218,41	195,76	640,30

Table 2. Spain: Regional Investment Grant (RIG) Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
es11	Galicia	0,441%	0,199%	0,110%	0,090%	0,070%	0,182%
es12	Asturias	0,228%	2,493%	0,368%	0,085%	0,051%	0,645%
es13	Cantabria	0,236%	0,072%	0,044%	0,099%	0,021%	0,094%
es21	Pais Vasco	0,128%	0,051%	0,004%	0,067%	0,001%	0,050%
es22	Navarra	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
es23	Rioja	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
es24	Aragon	0,175%	0,127%	0,049%	0,068%	0,050%	0,094%
es3	Madrid	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
es41	Castilla-Leon	0,568%	0,236%	0,132%	0,201%	0,144%	0,256%
es42	Castilla-La Mancha	0,709%	0,261%	0,162%	0,115%	0,117%	0,273%
es43	Extremadura	1,242%	1,202%	0,502%	0,219%	0,139%	0,661%
es51	Cataluna	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
es52	Valencia	0,059%	0,074%	0,014%	0,019%	0,010%	0,035%
es53	Baleares	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
es61	Andalucia	0,546%	0,259%	0,111%	0,088%	0,161%	0,233%
es62	Murcia	9,718%	0,154%	0,114%	0,103%	0,041%	2,026%
es63	Ceuta y Melilla	0,073%	0,268%	0,000%	0,013%	0,016%	0,074%
es7	Canarias	0,410%	0,164%	0,088%	0,041%	0,035%	0,148%
es	Spain	0,461%	0,185%	0,064%	0,053%	0,048%	0,162%

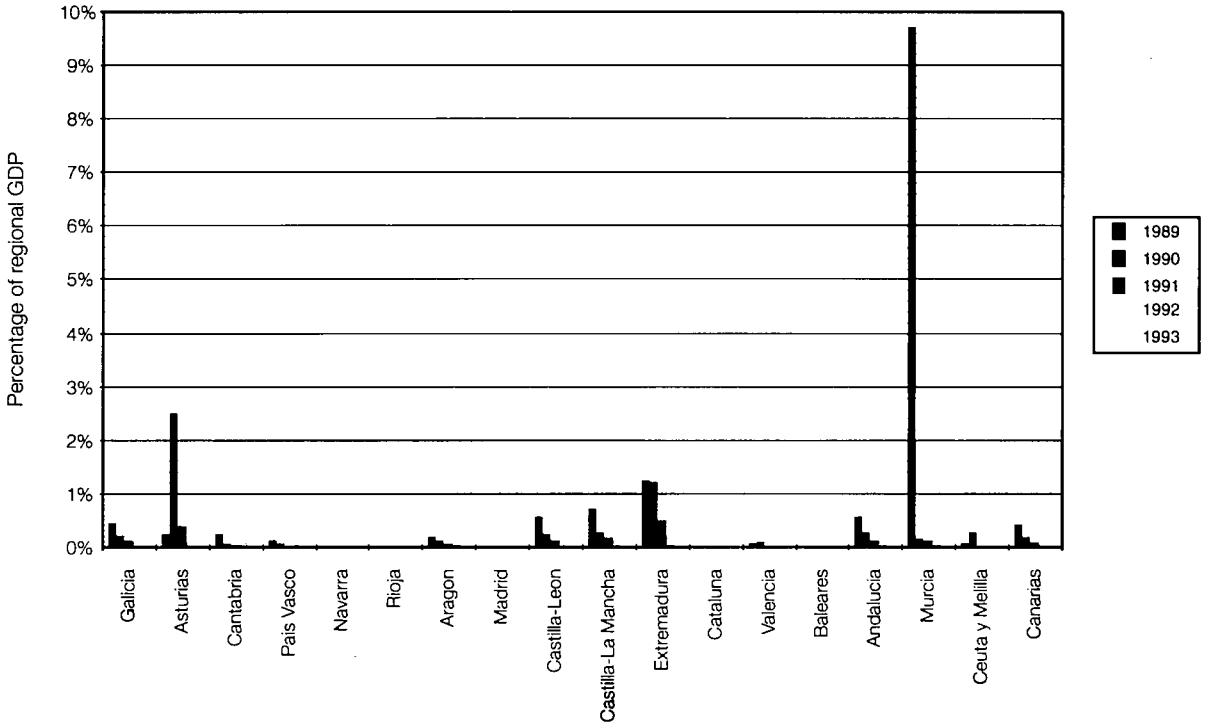
Table 3. Spain: Regional Investment Grant (RIG)
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
es11	Galicia	34,13	15,63	8,73	7,21	5,53	14,24
es12	Asturias	21,61	234,86	35,48	8,27	4,99	61,05
es13	Cantabria	23,80	7,16	4,41	10,08	2,12	9,51
es21	Pais Vasco	15,41	6,25	0,43	8,25	0,10	6,09
es22	Navarra	-	-	-	-	-	-
es23	Rioja	-	-	-	-	-	-
es24	Aragon	19,58	14,43	5,76	7,79	5,85	10,68
es3	Madrid	-	-	-	-	-	-
es41	Castilla-Leon	50,78	21,35	12,07	18,21	13,64	23,21
es42	Castilla-La Mancha	59,09	22,56	14,23	10,26	10,21	23,27
es43	Extremadura	80,71	80,66	34,74	15,29	9,64	44,21
es51	Cataluna	-	-	-	-	-	-
es52	Valencia	5,88	7,66	1,54	2,05	1,05	3,63
es53	Baleares	-	-	-	-	-	-
es61	Andalucia	40,42	20,48	9,01	7,13	12,66	17,94
es62	Murcia	891,36	15,15	11,21	9,82	3,90	186,29
es63	Ceuta y Melilla	6,26	23,64	-	1,13	1,38	6,48
es7	Canarias	40,17	16,32	8,88	4,20	3,60	14,63
es	Spain	45,88	19,06	6,74	5,59	5,00	16,46

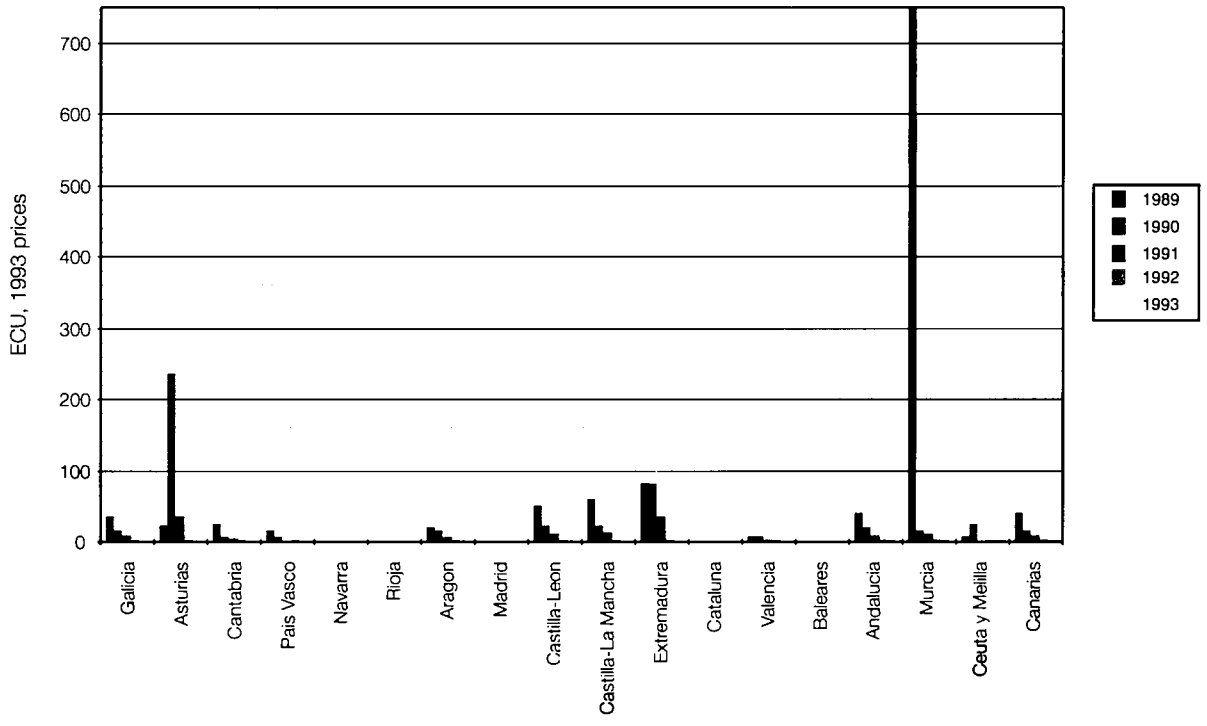
Table 4. Spain: Regional Investment Grant (RIG)
Expenditure per capita of recipient region assisted population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
es11	Galicia	34,13	15,63	8,73	7,21	5,53	14,24
es12	Asturias	21,61	234,86	35,48	8,27	4,99	61,05
es13	Cantabria	23,80	7,16	4,41	10,08	2,12	9,51
es21	Pais Vasco	54,63	22,17	1,53	29,26	0,34	21,59
es22	Navarra	-	-	-	-	-	-
es23	Rioja	-	-	-	-	-	-
es24	Aragon	59,15	43,60	17,40	23,53	17,67	32,27
es3	Madrid	-	-	-	-	-	-
es41	Castilla-Leon	50,78	21,35	12,07	18,21	13,64	23,21
es42	Castilla-La Mancha	59,09	22,56	14,23	10,26	10,21	23,27
es43	Extremadura	80,71	80,66	34,74	15,29	9,64	44,21
es51	Cataluna	-	-	-	-	-	-
es52	Valencia	19,59	25,53	5,12	6,83	3,50	12,11
es53	Baleares	-	-	-	-	-	-
es61	Andalucia	40,42	20,48	9,01	7,13	12,66	17,94
es62	Murcia	891,36	15,15	11,21	9,82	3,90	186,29
es63	Ceuta y Melilla	6,26	23,64	-	1,13	1,38	6,48
es7	Canarias	40,17	16,32	8,88	4,20	3,60	14,63
es	Spain	78,29	32,53	11,51	9,54	8,54	28,08

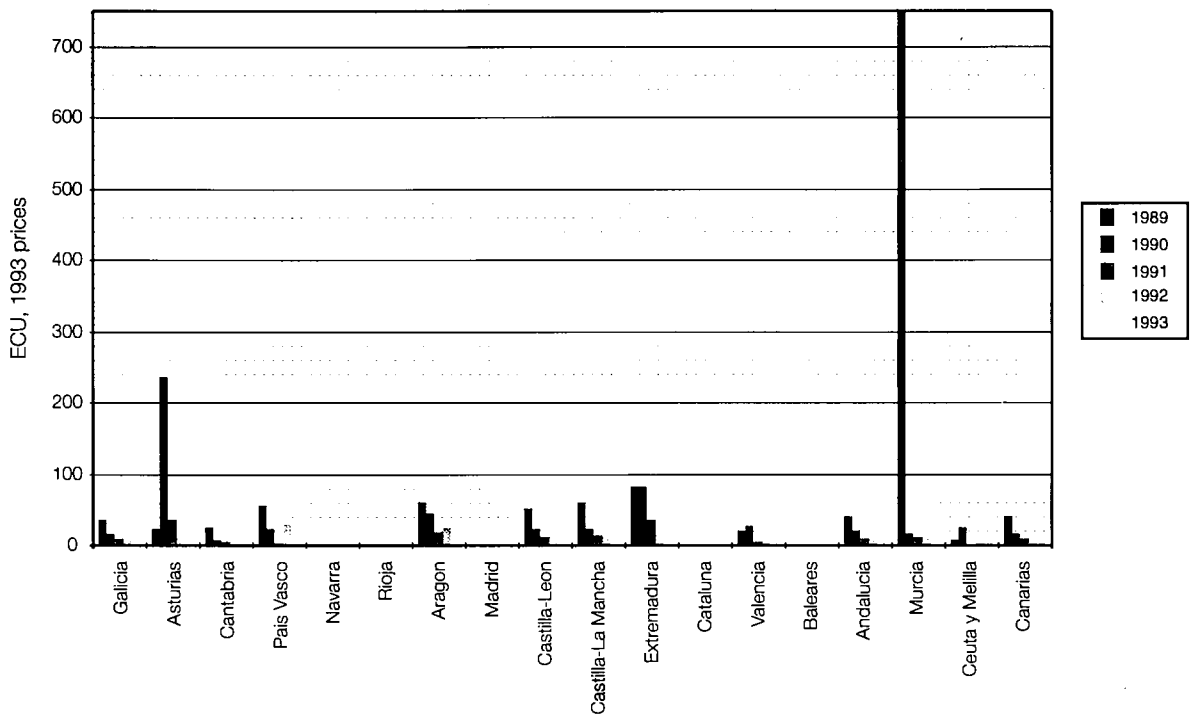
Spain: Regional Investment Grant (RIG)
Expenditure as a percentage of regional GDP
See Spain Table 2



Spain: Regional Investment Grant)
Expenditure per capita of regional population, 1989-93 (1993 prices, ECU)
See Spain Table 3



Spain: **Regional Investment Grant)**
Expenditure per capita of recipient regional assisted area population, 1989-93 (1993 prices, ECU)
See Spain Table 4



Spain: **Mean annual Regional Investment Grant (RIG) expenditure per capita of eligible regional population, 1989-93, v. regional GDP per capita 1992 (both in ECU)**

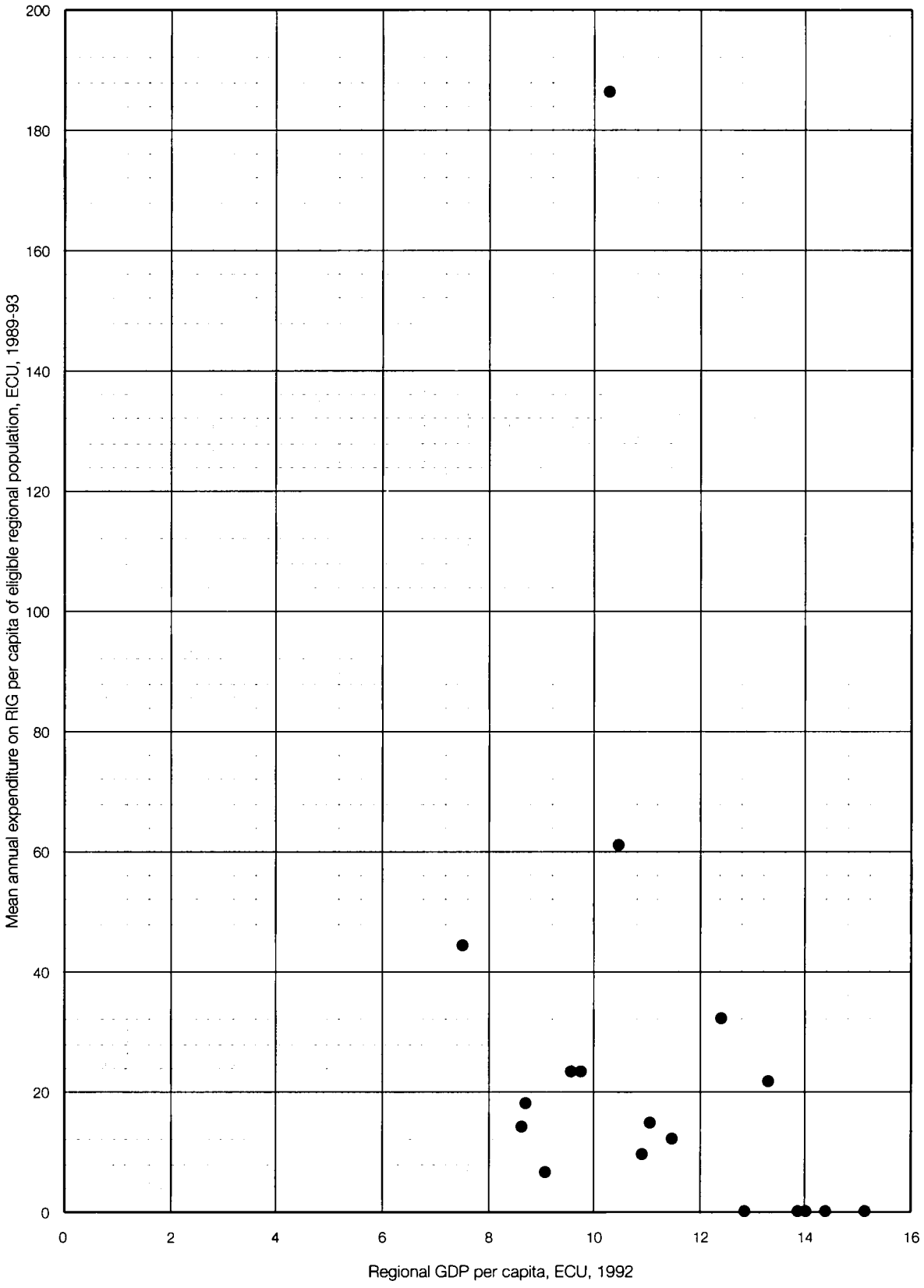


Table 1. Italy: Capital Grant/Interest Subsidy Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
it11	Piemonte	-	-	-	-	-	-
it12	Valle d'Aosta	-	-	-	-	-	-
it13	Liguria	-	-	-	-	-	-
it2	Lombardia	-	-	-	-	-	-
it31	Trentino-Alto Adige	-	-	-	-	-	-
it32	Veneto	-	-	-	-	-	-
it33	Friuli-Venezia Giulia	-	-	-	-	-	-
it4	Emilia Romagna	-	-	-	-	-	-
it51	Toscana	-	1,27	-		-	0,25
it52	Umbria	-	-	-	-	-	-
it53	Marche	59,69	287,47	-	-	-	69,43
it6	Lazio	383,55	2.051,79	52,72	1,70	-	497,95
it8	Campania	321,11	544,98	283,74	79,95	-	245,96
it71	Abruzzo	377,37	396,46	172,38	43,09	-	197,86
it72	Molise	43,23	17,85	42,06	-	-	20,63
it91	Puglia	59,69	86,69	37,91	-	-	36,86
it92	Basilicata	198,29	251,77	220,36	61,24	-	146,33
it93	Calabria	62,44	79,68	40,87	4,54	-	37,50
ita	Sicilia	146,15	158,08	139,20	-	-	88,68
itb	Sardegna	135,85	228,19	31,99	-	-	79,21
it	Italy	1.787,36	4.104,22	1.021,22	190,52	-	1.420,67

Table 2. Italy: Capital Grant/Interest Subsidy

Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
it11	Piemonte	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it12	Valle d'Aosta	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it13	Liguria	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it2	Lombardia	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it31	Trentino-Alto Adige	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it32	Veneto	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it33	Friuli-Venezia Giulia	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it4	Emilia Romagna	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it51	Toscana	0,000%	0,002%	0,000%	0,000%	0,000%	0,000%
it52	Umbria	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
it53	Marche	0,288%	1,357%	0,000%	0,000%	0,000%	0,329%
it6	Lazio	0,466%	2,385%	0,060%	0,002%	0,000%	0,583%
it8	Campania	0,574%	0,940%	0,488%	0,136%	0,000%	0,427%
it71	Abruzzo	2,405%	2,443%	1,038%	0,257%	0,000%	1,229%
it72	Molise	1,178%	0,478%	1,098%	0,000%	0,000%	0,551%
it91	Puglia	0,142%	0,204%	0,086%	0,000%	0,000%	0,086%
it92	Basilicata	3,572%	4,421%	3,823%	1,051%	0,000%	2,573%
it93	Calabria	0,345%	0,462%	0,222%	0,024%	0,000%	0,211%
ita	Sicilia	0,307%	0,318%	0,272%	0,000%	0,000%	0,179%
itb	Sardegna	0,803%	1,308%	0,173%	0,000%	0,000%	0,457%
it	Italy	0,218%	0,491%	0,121%	0,022%	0,000%	0,170%

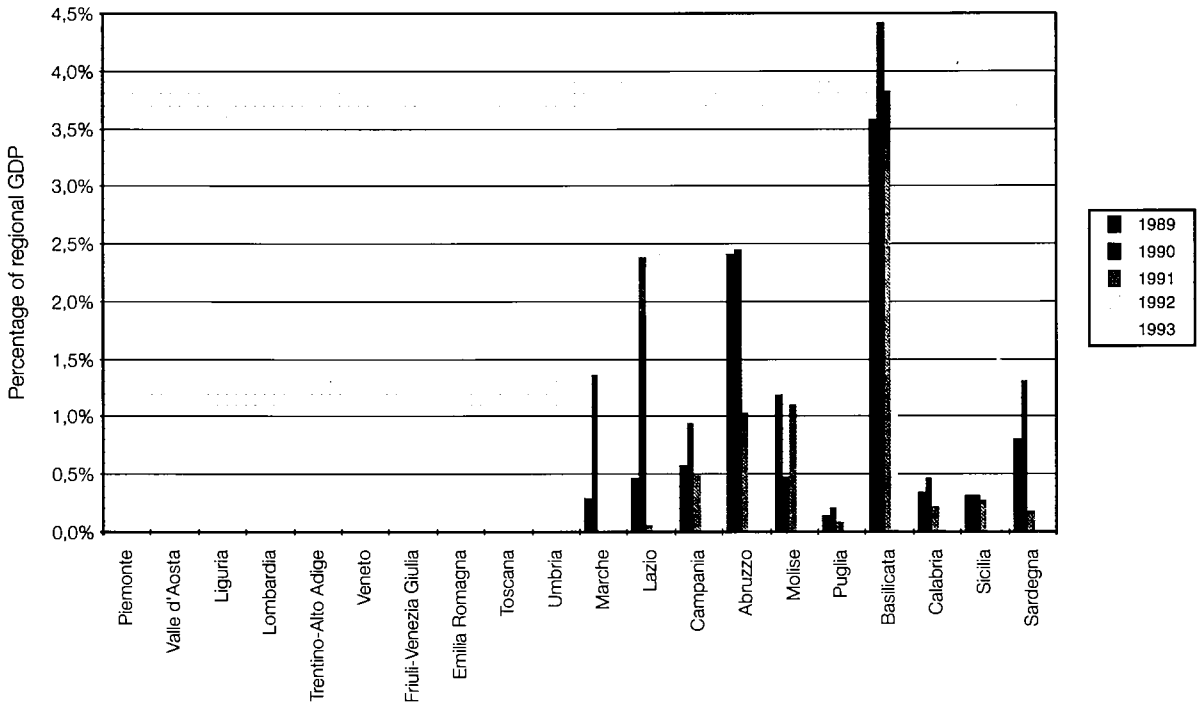
Table 3. Italy: Capital Grant/Interest Subsidy
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
it11	Piemonte	-	-	-	-	-	-
it12	Valle d'Aosta	-	-	-	-	-	-
it13	Liguria	-	-	-	-	-	-
it2	Lombardia	-	-	-	-	-	-
it31	Trentino-Alto Adige	-	-	-	-	-	-
it32	Veneto	-	-	-	-	-	-
it33	Friuli-Venezia Giulia	-	-	-	-	-	-
it4	Emilia Romagna	-	-	-	-	-	-
it51	Toscana	-	0,36	-	-	-	0,07
it52	Umbria	-	-	-	-	-	-
it53	Marche	42,02	202,03	-	-	-	48,81
it6	Lazio	75,23	401,10	10,28	0,33	-	97,39
it8	Campania	57,42	97,22	50,49	14,20	-	43,87
it71	Abruzzo	304,38	318,88	138,33	34,50	-	159,22
it72	Molise	130,83	54,00	127,22	-	-	62,41
it91	Puglia	14,91	21,59	9,42	-	-	9,18
it92	Basilicata	324,54	412,00	360,65	100,39	-	239,52
it93	Calabria	29,98	38,33	19,70	2,19	-	18,04
ita	Sicilia	29,44	31,82	28,01	-	-	17,85
itb	Sardegna	83,09	139,29	19,45	-	-	48,37
it	Italy	31,55	72,39	18,00	3,36	-	25,06

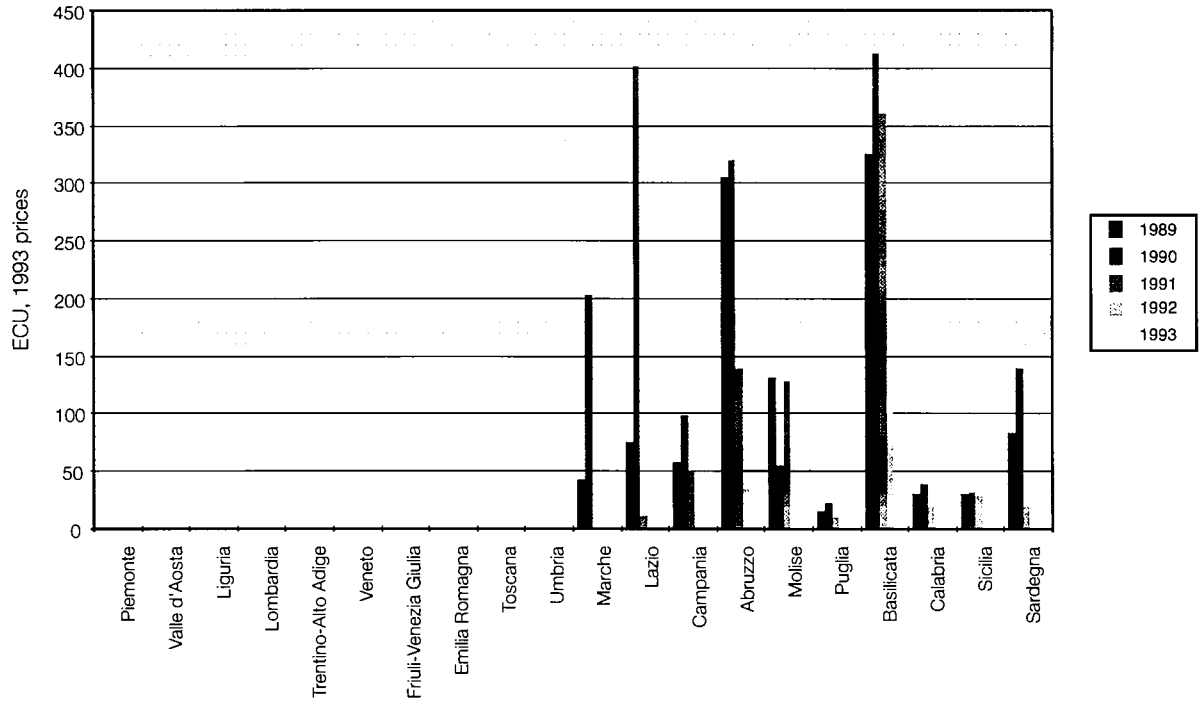
Table 4 Italy: Capital Grant/Interest Subsidy
Expenditure per capita of recipient region assisted population (ECU, 1993 prices)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
it11	Piemonte	-	-	-	-	-	-
it12	Valle d'Aosta	-	-	-	-	-	-
it13	Liguria	-	-	-	-	-	-
it2	Lombardia	-	-	-	-	-	-
it31	Trentino-Alto Adige	-	-	-	-	-	-
it32	Veneto	-	-	-	-	-	-
it33	Friuli-Venezia Giulia	-	-	-	-	-	-
it4	Emilia Romagna	-	-	-	-	-	-
it51	Toscana	-	18,04	-	-	-	3,61
it52	Umbria	-	-	-	-	-	-
it53	Marche	165,55	797,25	-	-	-	-
it6	Lazio	800,35	4.267,03	109,31	3,52	-	1.036,04
it8	Campania	57,42	97,22	50,49	14,20	-	43,87
it71	Abruzzo	304,38	318,88	138,33	34,50	-	159,22
it72	Molise	130,83	54,00	127,22	-	-	62,41
it91	Puglia	14,91	21,59	9,42	-	-	9,18
it92	Basilicata	324,54	412,00	360,65	100,39	-	239,52
it93	Calabria	29,98	38,33	19,70	2,19	-	18,04
ita	Sicilia	29,44	31,82	28,01	-	-	17,85
itb	Sardegna	83,09	139,29	19,45	-	-	48,37
it	Italy	83,65	191,76	48,46	9,04	-	66,58

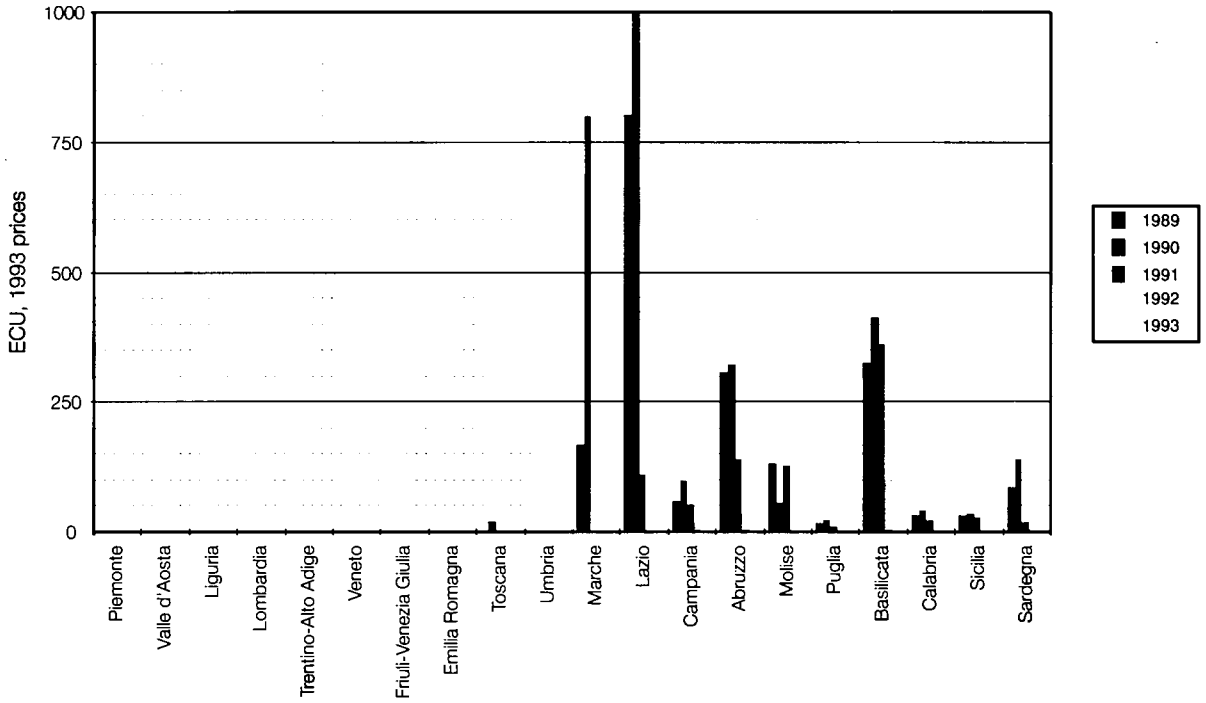
Italy: Capital Grant/Interest Subsidy
Expenditure by region, 1989-92, as a percentage of regional GDP
See Italy Table 2



Italy: Capital Grant/Interest Subsidy
Expenditure per capita of regional population, 1989-92, (1993, prices, ECU)
See Italy Table 3



Italy: Capital Grant/Interest Subsidy
Expenditure per capita of recipient region assisted area population, 1989-92, (1993, prices, ECU)
See Italy Table 4



Italy: Mean annual Capital Grant/Interest Subsidy (CG/IS) expenditure per capita of eligible regional population, 1989-93, v. regional GDP per capita 1992 (both in ECU)

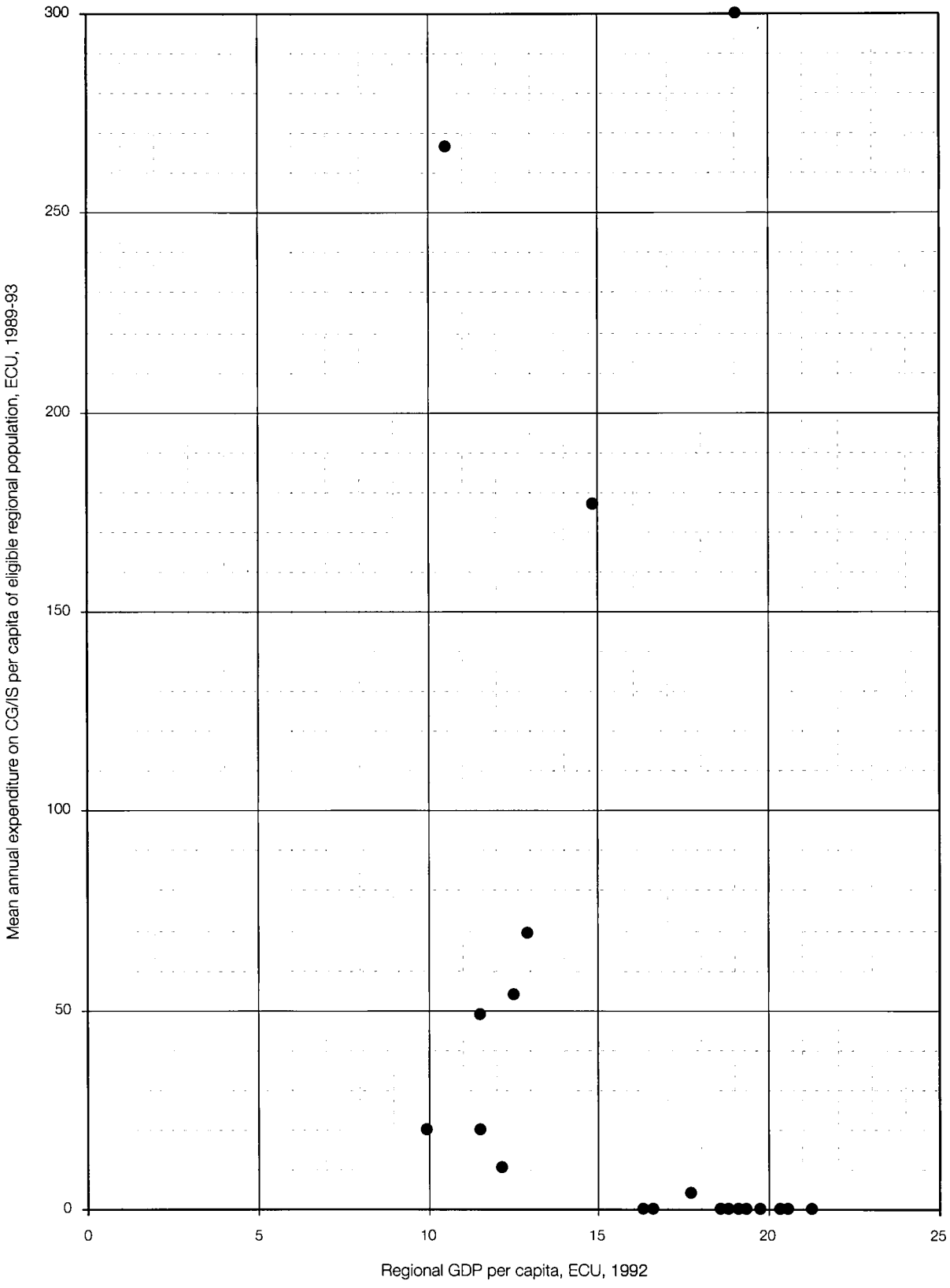


Table 1. Germany: Investment Grant (IG)
Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
	West Germany						
de1	Baden Wurttenburg	0,00	0,02	0,32	0,00	0,00	0,07
de2	Bayern	33,07	65,70	49,57	32,71	17,69	39,75
de5	Bremen	1,29	1,52	1,97	6,82	5,16	3,35
de6	Hamburg	0,00	0,00	0,00	0,00	0,00	0,00
de7	Hessen	16,38	39,15	9,72	5,38	4,68	15,06
de9	Niedersachsen	76,93	213,27	100,39	87,84	61,92	108,07
dea	Nordrhein-Westfalen	178,54	116,05	158,99	88,70	87,73	126,00
deb	Rheinland-Pfalz	27,01	45,88	52,23	36,75	24,85	37,34
dec	Saarland	57,61	28,20	37,63	83,53	43,52	50,10
def	Schleswig Holstein	32,64	52,47	16,52	4,96	7,22	22,7
	West Germany (exc. Berlin)	*423,47*	*562,26*	*427,34*	*346,68*	*252,77*	*402,5*
	East Germany						
de3	Berlin	0,00	0,04	252,41	100,05	181,83	178,11
de4	Brandenburg	0,00	11,39	1015,87	322,64	660,63	670,17
de8	Macklenburg-Vorpommern	0,00	30,85	312,57	328,64	290,37	320,81
ded	Sachsen	0,00	7,50	619,43	827,69	552,50	669,04
dee	Sachsen-Anhalt	0,00	0,11	1016,36	859,89	610,19	828,85
deg	Thuringen	0,00	25,54	733,84	511,89	687,08	652,78
	East Germany (inc. all Berlin)	0,00	75,43	3950,47	2950,78	2982,61	3319,76
de	Germany (all)	423,47	637,70	4377,81	3297,46	3235,37	3722,27

Table 2. Germany: Investment Grant (IG)
Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
	West Germany						
de1	Baden Wurttenburg	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
de2	Bayern	0,014%	0,026%	0,018%	0,012%	0,006%	0,015%
de5	Bremen	0,007%	0,008%	0,010%	0,034%	0,026%	0,017%
de6	Hamburg	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
de7	Hessen	0,012%	0,026%	0,006%	0,003%	0,003%	0,010%
de9	Niedersachsen	0,059%	0,155%	0,069%	0,059%	0,042%	0,077%
dea	Nordrhein-Westfalen	0,052%	0,032%	0,043%	0,024%	0,024%	0,035%
deb	Rheinland-Pfalz	0,040%	0,064%	0,071%	0,050%	0,034%	0,052%
dec	Saarland	0,284%	0,132%	0,172%	0,380%	0,201%	0,234%
def	Schleswig Holstein	0,071%	0,107%	0,032%	0,010%	0,014%	0,047%
	East Germany						
de3	Berlin	0,000%	0,000%	0,354%	0,153%	0,284%	0,264%
de4	Brandenburg	0,000%	0,050%	4,757%	1,457%	2,443%	2,903%
de8	Macklenburg-Vorpommern	0,000%	0,212%	2,271%	2,151%	1,626%	2,087%
ded	Sachsen	0,000%	0,020%	1,736%	2,130%	1,204%	1,697%
dee	Sachsen-Anhalt	0,000%	0,000%	4,628%	3,552%	2,183%	3,454%
deg	Thuringen	0,000%	0,142%	4,329%	2,667%	2,786%	3,309%

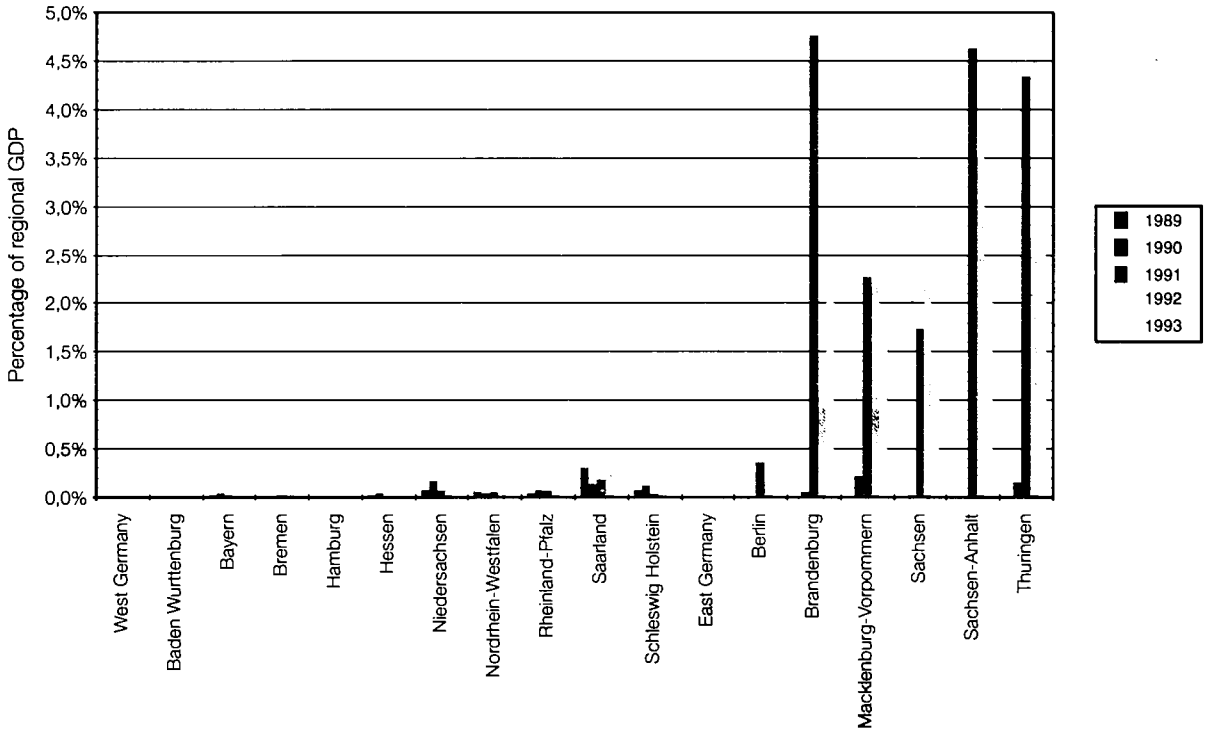
Table 3. Germany: Investment Grant (IG)
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
	West Germany						
de1	Baden Wurttenburg	0,00	0,00	0,03	0,00	0,00	0,01
de2	Bayern	2,99	5,86	4,33	2,82	1,50	3,50
de5	Bremen	1,95	2,26	2,89	9,97	7,53	4,92
de6	Hamburg	0,00	0,00	0,00	0,00	0,00	0,00
de7	Hessen	2,94	6,92	1,69	0,92	0,79	2,65
de9	Niedersachsen	10,71	29,28	13,59	11,75	8,17	14,70
dea	Nordrhein-Westfalen	10,58	6,79	9,16	5,07	4,96	7,31
deb	Rheinland-Pfalz	7,39	12,39	13,88	9,62	6,40	9,94
dec	Saarland	54,65	26,48	35,07	77,57	40,15	46,78
def	Schleswig Holstein	12,73	20,22	6,29	1,87	2,69	8,76
	East Germany						
de3	Berlin	0,00	0,02	73,51	29,03	52,47	51,68
de4	Brandenburg	0,00	4,42	394,01	126,89	259,81	261,71
de8	Macklenburg-Vorpommern	0,00	16,04	162,46	173,73	155,70	169,31
ded	Sachsen	0,00	1,53	130,02	176,90	119,05	142,50
dee	Sachsen-Anhalt	0,00	0,04	353,64	304,57	218,16	292,13
deg	Thuringen	0,00	9,78	281,03	199,02	269,89	253,24

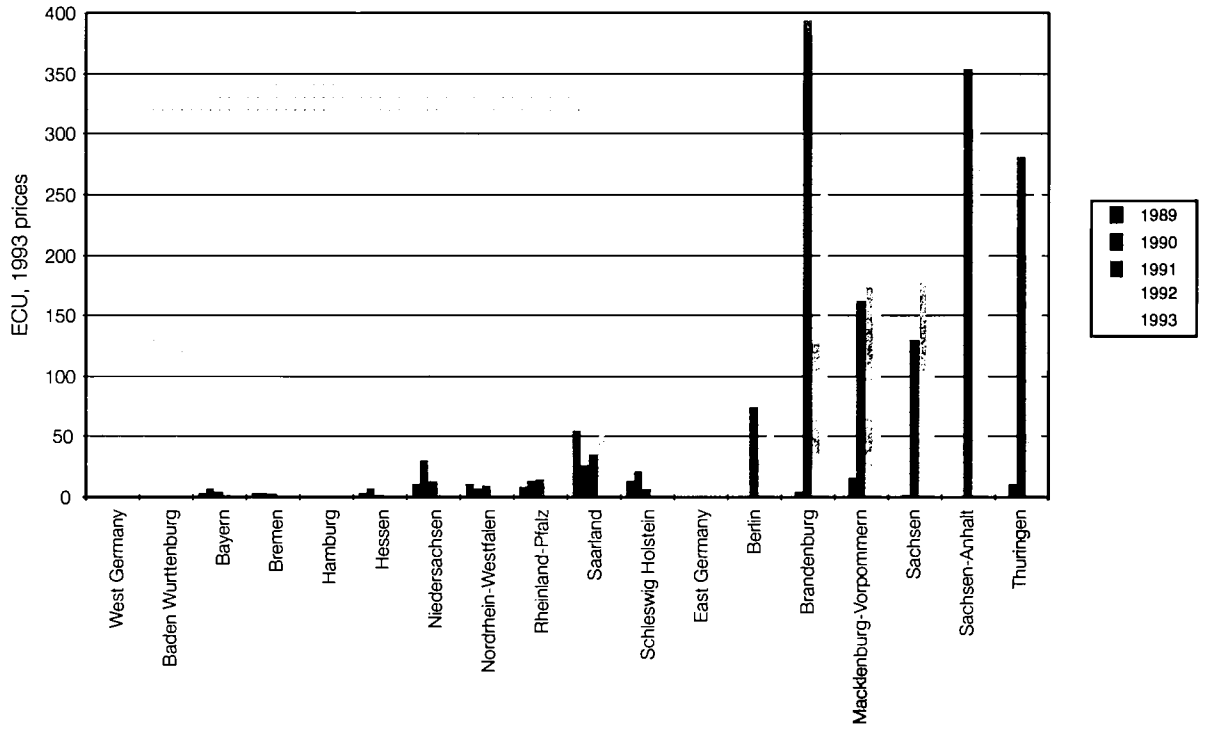
Table 4. Germany: Investment Grant (IG)
Expenditure committed per head of recipient region assisted population (ECU, 1993 prices)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
	West Germany						
de1	Baden Wurttenburg	0,00	3,60	65,65	0,00	0,00	13,85
de2	Bayern	17,71	34,65	25,62	16,69	8,89	20,71
de5	Bremen	1,95	2,26	2,89	9,97	7,53	4,92
de6	Hamburg	0,00	0,00	0,00	0,00	0,00	0,00
de7	Hessen	45,96	108,08	26,36	14,41	12,34	41,43
de9	Niedersachsen	18,37	50,22	23,31	20,15	14,02	25,21
dea	Nordrhein-Westfalen	28,07	18,00	24,31	13,44	13,16	19,39
deb	Rheinland-Pfalz	25,41	42,59	47,69	33,05	22,00	34,15
dec	Saarland	61,61	29,86	39,54	87,45	45,27	52,74
def	Schleswig Holstein	17,51	27,82	8,65	2,57	3,71	12,05
	East Germany						
de3	Berlin	0,00	0,02	73,51	29,03	52,47	51,68
de4	Brandenburg	0,00	4,42	394,01	126,89	259,81	261,71
de8	Macklenburg-Vorpommern	0,00	16,04	162,46	173,73	155,70	169,31
ded	Sachsen	0,00	1,53	130,02	176,90	119,05	142,50
dee	Sachsen-Anhalt	0,00	0,04	353,64	304,57	218,16	292,13
deg	Thuringen	0,00	9,78	281,03	199,02	269,89	253,24

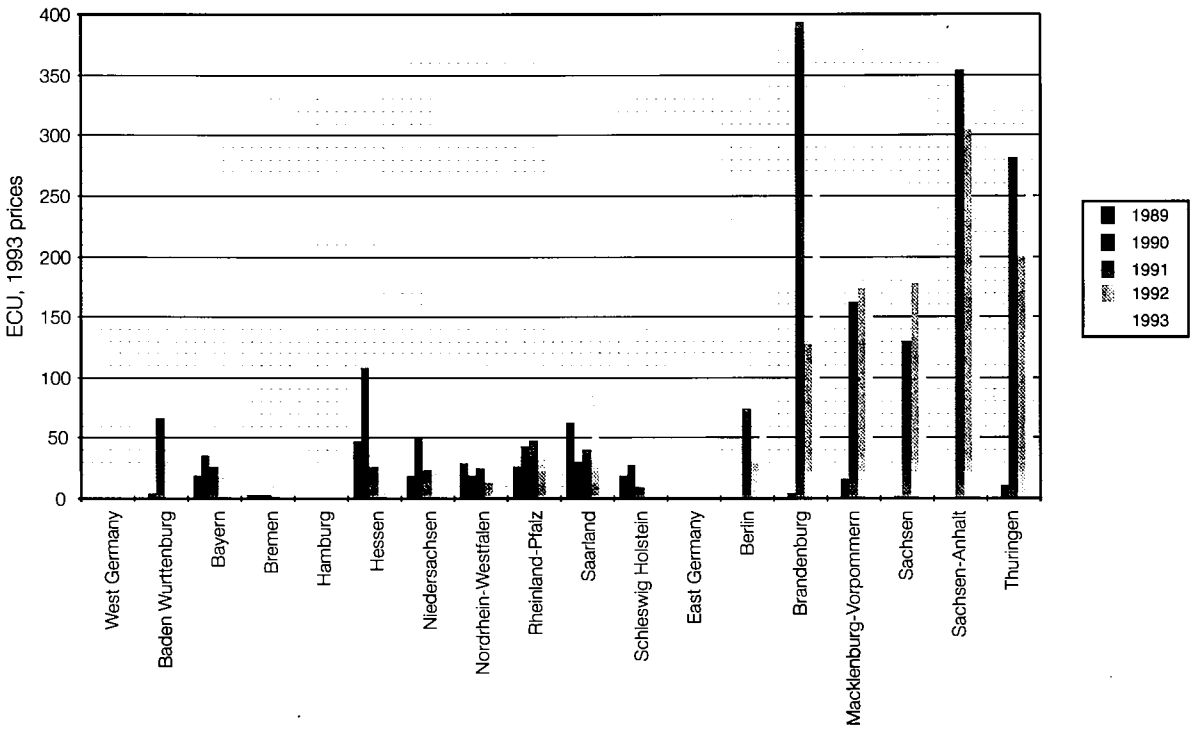
Germany: Investment Grant
Expenditure by region, as a percentage of regional GDP, 1989-93
See Germany Table 2



Germany: Investment Grant
Expenditure per capita of regional population, 1989-93 (1993 prices, ECU)
See Germany Table 3



Germany: Investment Grant
Expenditure per capita of recipient region assisted area population, 1989-93 (1993 prices, ECU)
See Germany Table 4



Germany: Mean annual Investment Grant (IG) expenditure per capita of eligible population, 1989-93, v. regional GDP per capita 1992 (both in ECU)

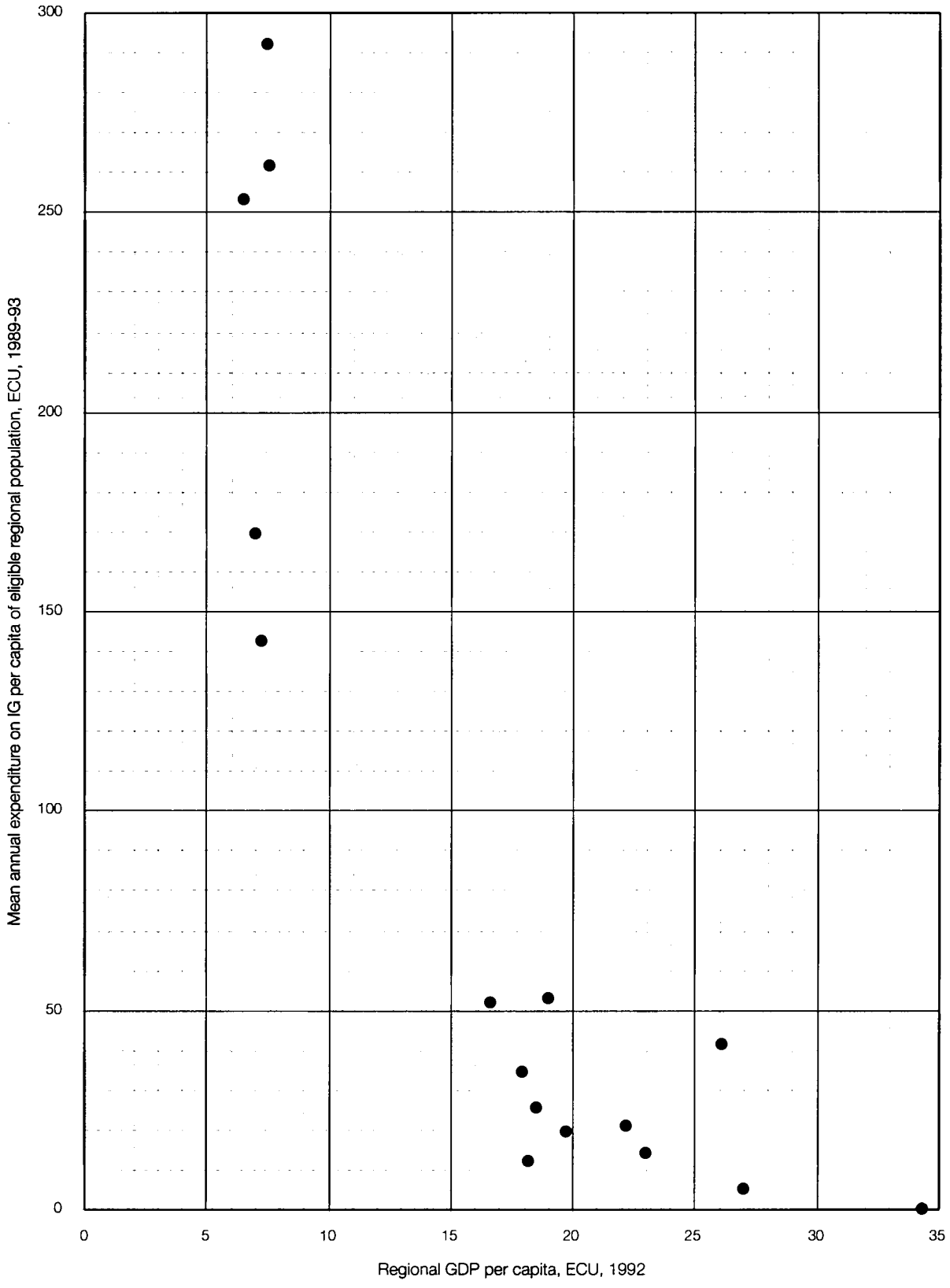


Table 1. Belgium: Capital Grant/Interest Subsidy
Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
be1	Brussels	0	0	0	0	0	0
be2	Vlaams Gewest	92,09	100,92	71,83	56,69	81,86	80,68
be3	Region Wallonne	158,18	84,09	74,79	81,71	31,38	86,03
be	Belgium	250,28	185,00	146,63	138,40	113,24	166,71

Table 2. Belgium: Capital Grant/Interest Subsidy
Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
be1	Brussels	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
be2	Vlaams Gewest	0,093%	0,098%	0,069%	0,053%	0,078%	0,078%
be3	Region Wallonne	0,354%	0,182%	0,159%	0,171%	0,066%	0,187%
be	Belgium	0,147%	0,105%	0,082%	0,076%	0,063%	0,095%

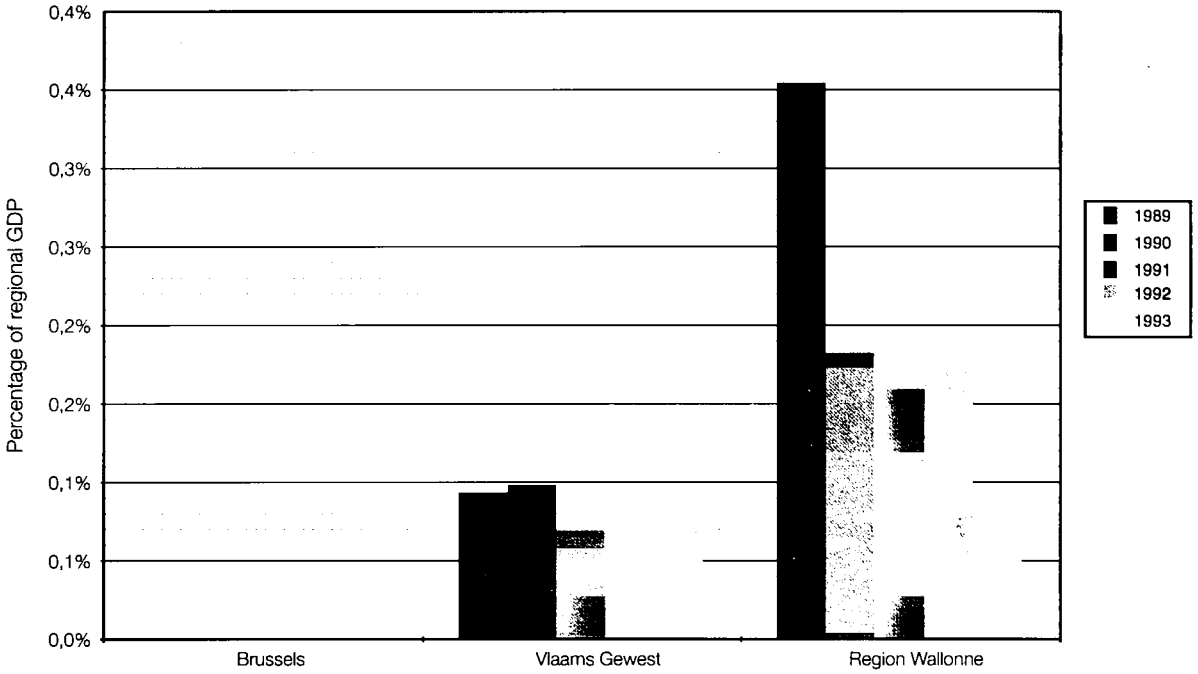
Table 3. Belgium: Capital Grant/Interest Subsidy
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
be1	Brussels	0,00	0,00	0,00	0,00	0,00	0,00
be2	Vlaams Gewest	16,09	17,58	12,45	9,78	14,05	13,99
be3	Region Wallonne	48,90	25,92	22,95	24,94	9,53	26,45
be	Belgium	25,21	18,60	14,68	13,81	11,25	16,71

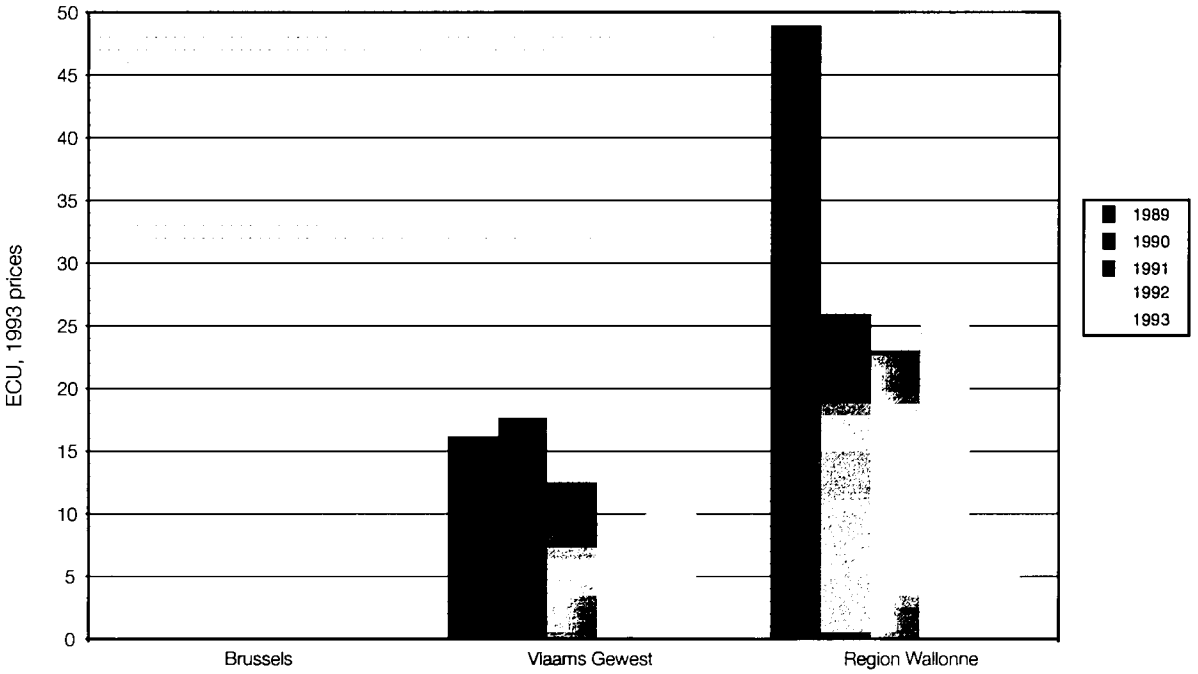
Table 4. Belgium: Capital Grant/Interest Subsidy
Expenditure per capita of recipient region assisted population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
be1	Brussels	0,00	0,00	0,00	0,00	0,00	0,00
be2	Vlaams Gewest	71,36	78,03	55,33	43,51	62,54	62,16
be3	Region Wallonne	79,23	42,03	37,24	40,54	15,50	42,91
be	Belgium	76,14	56,17	44,34	41,71	33,97	50,47

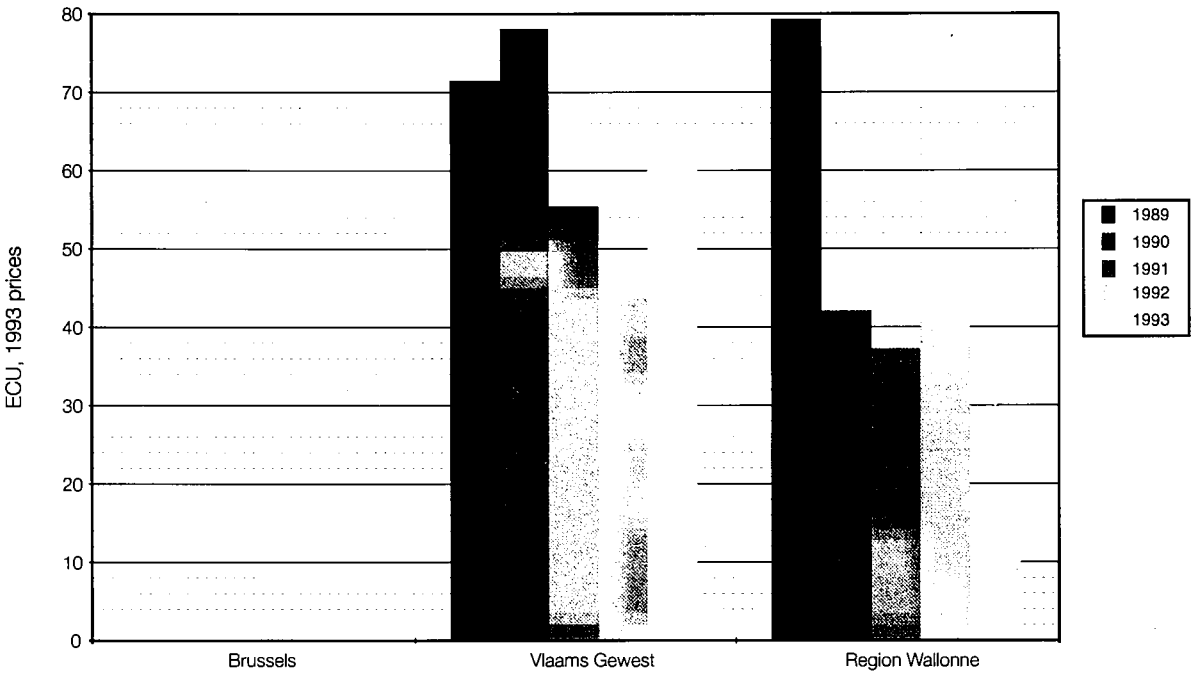
Belgium: Capital Grant/Interest Subsidy
Expenditure by region, 1989-93, as a percentage of regional GDP
See Belgium Table 2



Belgium: Capital Grant/Interest Subsidy
Expenditure per capita of regional population, 1989-93, (1993 prices, ECU)
See Belgium Table 3



Belgium: Capital Grant/Interest Subsidy
Expenditure per capita of recipient region assisted area population, 1989-93, (1993 prices, ECU)
See Belgium Table 4



Belgium: Mean annual expenditure on Capital Grant/Interest Subsidy per capita of eligible regional population 1989-93 v. regional GDP per capita 1992 (both in ECU)

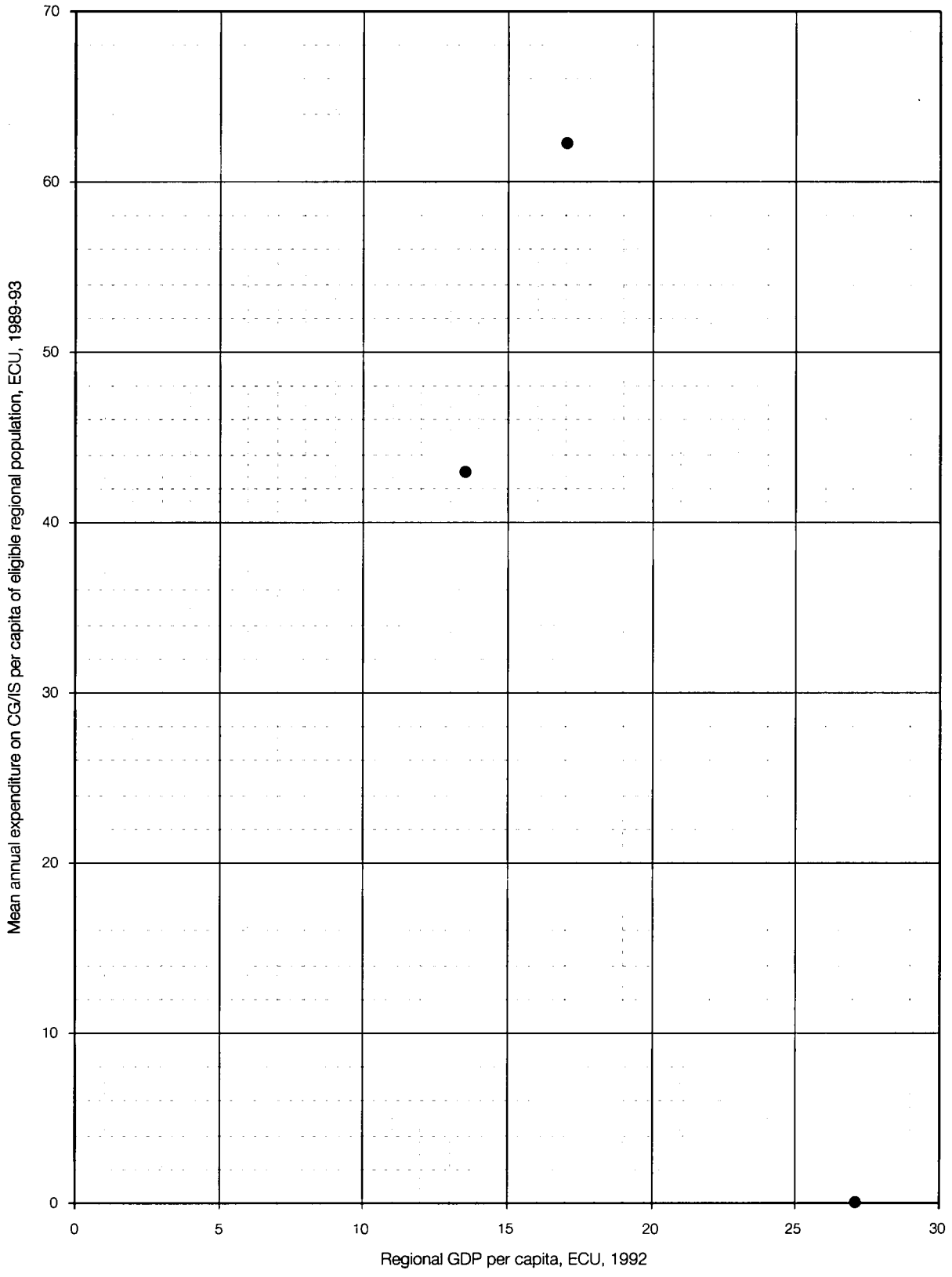


Table 1. France: Regional Development Grant (PAT)
Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
fr1	Ile de France	n.a.	0,00	0,00	0,00	0,00	0,00
fr21	Champagne-Ardenne	n.a.	0,43	6,47	0,39	0,87	2,04
fr22	Picardie	n.a.	2,29	1,89	0,76	0,53	1,37
fr23	Haute-Normandie	n.a.	2,47	2,68	1,03	0,18	1,59
fr24	Centre	n.a.	0,59	0,00	0,00	2,25	0,71
fr25	Basse-Normandie	n.a.	3,99	2,05	5,55	2,25	3,46
fr26	Bourgogone	n.a.	1,76	2,84	7,09	1,63	3,33
fr3	Nord Pas de Calais	n.a.	15,89	21,92	10,21	5,89	13,48
fr41	Lorraine	n.a.	19,59	24,13	33,00	3,47	20,05
fr42	Alsace	n.a.	3,56	2,52	0,74	0,21	1,76
fr43	Franche Comte	n.a.	0,93	0,14	0,00	0,15	0,31
fr51	Pays de la Loire	n.a.	28,82	2,84	2,62	5,32	9,90
fr52	Bretagne	n.a.	8,24	9,46	6,32	4,51	7,13
fr53	Poitou Charentes	n.a.	2,82	1,89	2,33	0,00	1,76
fr61	Aquitaine	n.a.	13,95	5,68	1,00	2,07	5,67
fr62	Midi-Pyrenees	n.a.	11,02	4,10	3,59	3,17	5,47
fr63	Limousin	n.a.	2,42	0,33	0,22	1,22	1,05
fr71	Rhone Alpes	n.a.	2,96	4,73	2,70	1,91	3,08
fr72	Auvergne	n.a.	7,35	3,00	2,93	0,98	3,56
fr81	Languedoc Roussillon	n.a.	0,95	7,41	4,13	1,03	3,38
fr82	PACA	n.a.	5,84	1,47	2,02	0,30	2,41
fr83	Corse	n.a.	0,00	0,37	0,05	0,00	0,15
fr	France	n.a.	135,86	106,09	86,71	37,93	91,65

Table 2. France: Regional Development Grant (PAT)
Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
fr1	Ile de France	n.a.	0,000%	0,000%	0,000%	0,000%	0,000%
fr21	Champagne-Ardenne	n.a.	0,002%	0,025%	0,001%	0,004%	0,008%
fr22	Picardie	n.a.	0,008%	0,007%	0,003%	0,002%	0,005%
fr23	Haute-Normandie	n.a.	0,008%	0,009%	0,003%	0,001%	0,005%
fr24	Centre	n.a.	0,001%	0,000%	0,000%	0,006%	0,002%
fr25	Basse-Normandie	n.a.	0,018%	0,009%	0,024%	0,009%	0,015%
fr26	Bourgogone	n.a.	0,007%	0,011%	0,026%	0,006%	0,012%
fr3	Nord Pas de Calais	n.a.	0,027%	0,037%	0,017%	0,010%	0,023%
fr41	Lorraine	n.a.	0,053%	0,065%	0,089%	0,009%	0,054%
fr42	Alsace	n.a.	0,012%	0,008%	0,002%	0,001%	0,006%
fr43	Franche Comte	n.a.	0,005%	0,001%	0,000%	0,001%	0,002%
fr51	Pays de la Loire	n.a.	0,059%	0,006%	0,005%	0,011%	0,020%
fr52	Bretagne	n.a.	0,019%	0,022%	0,014%	0,010%	0,017%
fr53	Poitou Charentes	n.a.	0,012%	0,008%	0,010%	0,000%	0,007%
fr61	Aquitaine	n.a.	0,030%	0,012%	0,002%	0,004%	0,012%
fr62	Midi-Pyrenees	n.a.	0,028%	0,010%	0,009%	0,008%	0,014%
fr63	Limousin	n.a.	0,023%	0,003%	0,002%	0,011%	0,010%
fr71	Rhone Alpes	n.a.	0,003%	0,005%	0,003%	0,002%	0,003%
fr72	Auvergne	n.a.	0,037%	0,015%	0,015%	0,005%	0,018%
fr81	Languedoc Roussillon	n.a.	0,003%	0,024%	0,013%	0,003%	0,011%
fr82	PACA	n.a.	0,008%	0,002%	0,003%	0,000%	0,003%
fr83	Corse	n.a.	0,000%	0,016%	0,002%	0,000%	0,005%
fr	France	n.a.	0,013%	0,010%	0,008%	0,004%	0,009%

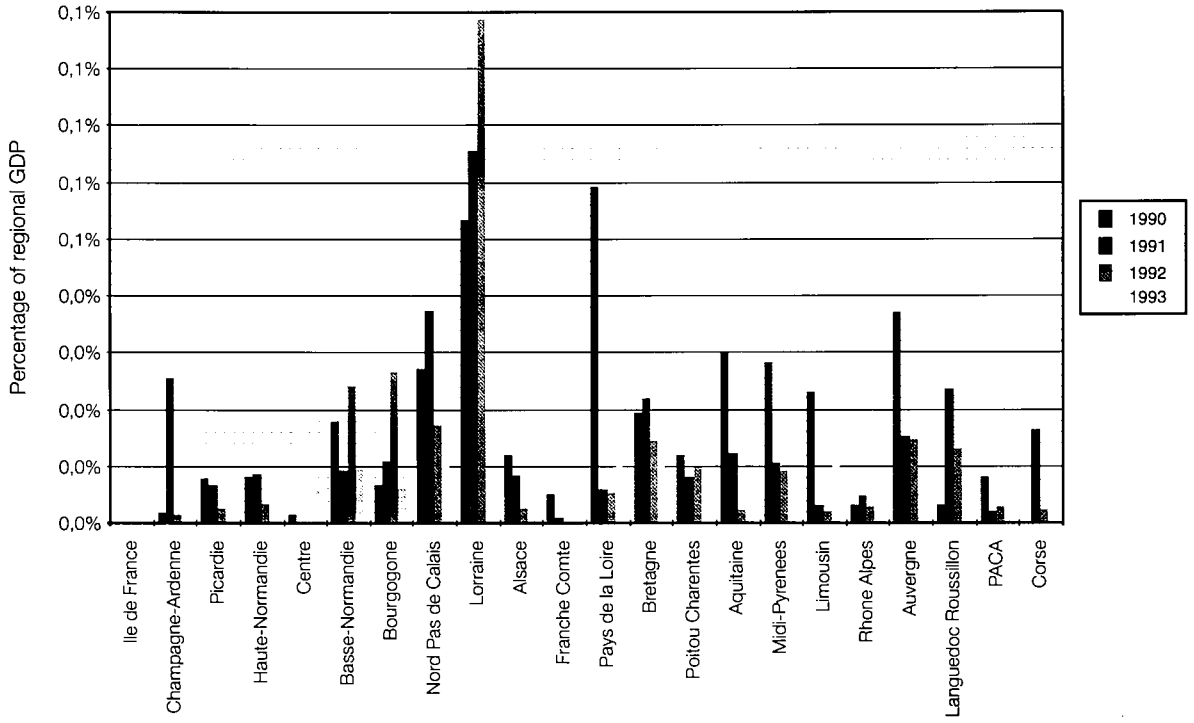
Table 3. France: Regional Development Grant (PAT)
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
fr1	Ile de France	n.a.	0,00	0,00	0,00	0,00	0,00
fr21	Champagne-Ardenne	n.a.	0,32	4,80	0,29	0,65	1,51
fr22	Picardie	n.a.	1,26	1,04	0,41	0,29	0,75
fr23	Haute-Normandie	n.a.	1,42	1,54	0,59	0,10	0,91
fr24	Centre	n.a.	0,25	0,00	0,00	0,93	0,30
fr25	Basse-Normandie	n.a.	2,87	1,47	3,97	1,60	2,48
fr26	Bourgogone	n.a.	1,09	1,76	4,40	1,00	2,06
fr3	Nord Pas de Calais	n.a.	4,01	5,53	2,57	1,48	3,39
fr41	Lorraine	n.a.	8,49	10,49	14,36	1,51	8,71
fr42	Alsace	n.a.	2,19	1,55	0,45	0,13	1,08
fr43	Franche Comte	n.a.	0,85	0,13	0,00	0,14	0,28
fr51	Pays de la Loire	n.a.	9,42	0,92	0,85	1,71	3,23
fr52	Bretagne	n.a.	2,95	3,37	2,25	1,59	2,54
fr53	Poitou Charentes	n.a.	1,77	1,18	1,45	0,00	1,10
fr61	Aquitaine	n.a.	4,99	2,02	0,35	0,73	2,02
fr62	Midi-Pyrenees	n.a.	4,54	1,68	1,46	1,28	2,24
fr63	Limousin	n.a.	3,34	0,46	0,30	1,70	1,45
fr71	Rhone Alpes	n.a.	0,55	0,88	0,50	0,35	0,57
fr72	Auvergne	n.a.	5,55	2,27	2,22	0,74	2,70
fr81	Languedoc Roussillon	n.a.	0,45	3,47	1,91	0,47	1,57
fr82	PACA	n.a.	1,37	0,34	0,47	0,07	0,56
fr83	Corse	n.a.	0,00	1,48	0,21	0,00	0,42
fr	France	n.a.	2,40	1,86	1,52	0,66	1,61

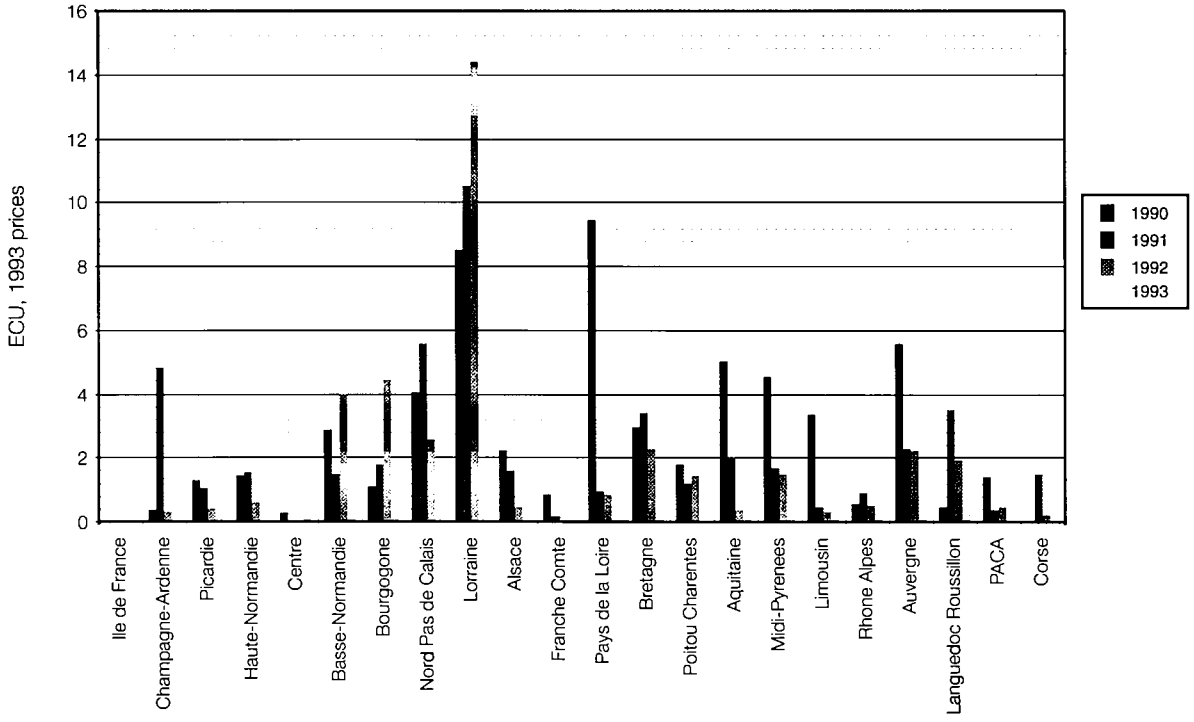
Table 4. France: Regional Development Grant (PAT)
Expenditure per capita of recipient region assisted population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
fr1	Ile de France	n.a.	0,00	0,00	0,00	0,00	0,00
fr21	Champagne-Ardenne	n.a.	1,22	18,26	1,09	2,46	5,75
fr22	Picardie	n.a.	4,01	3,31	1,31	0,91	2,38
fr23	Haute-Normandie	n.a.	3,95	4,27	1,63	0,29	2,54
fr24	Centre	n.a.	2,75	0,00	0,00	10,26	3,25
fr25	Basse-Normandie	n.a.	3,41	1,75	4,72	1,90	2,95
fr26	Bourgogone	n.a.	5,38	8,68	21,66	4,95	10,17
fr3	Nord Pas de Calais	n.a.	5,06	6,98	3,24	1,87	4,29
fr41	Lorraine	n.a.	12,49	15,42	21,11	2,22	12,81
fr42	Alsace	n.a.	2,52	1,78	0,52	0,15	1,24
fr43	Franche Comte	n.a.	3,98	0,60	0,00	0,63	1,30
fr51	Pays de la Loire	n.a.	14,08	1,38	1,27	2,55	4,82
fr52	Bretagne	n.a.	3,23	3,70	2,46	1,74	2,78
fr53	Poitou Charentes	n.a.	1,77	1,18	1,45	0,00	1,10
fr61	Aquitaine	n.a.	6,53	2,64	0,46	0,95	2,65
fr62	Midi-Pyrenees	n.a.	5,85	2,16	1,88	1,65	2,89
fr63	Limousin	n.a.	3,34	0,46	0,30	1,70	1,45
fr71	Rhone Alpes	n.a.	3,03	4,79	2,71	1,91	3,11
fr72	Auvergne	n.a.	6,47	2,65	2,59	0,87	3,14
fr81	Languedoc Roussillon	n.a.	0,53	4,11	2,27	0,56	1,87
fr82	PACA	n.a.	7,22	1,79	2,45	0,36	2,96
fr83	Corse	n.a.	0,00	1,48	0,21	0,00	0,42
fr	France	n.a.	5,324	4,144	3,371	1,468	3,58

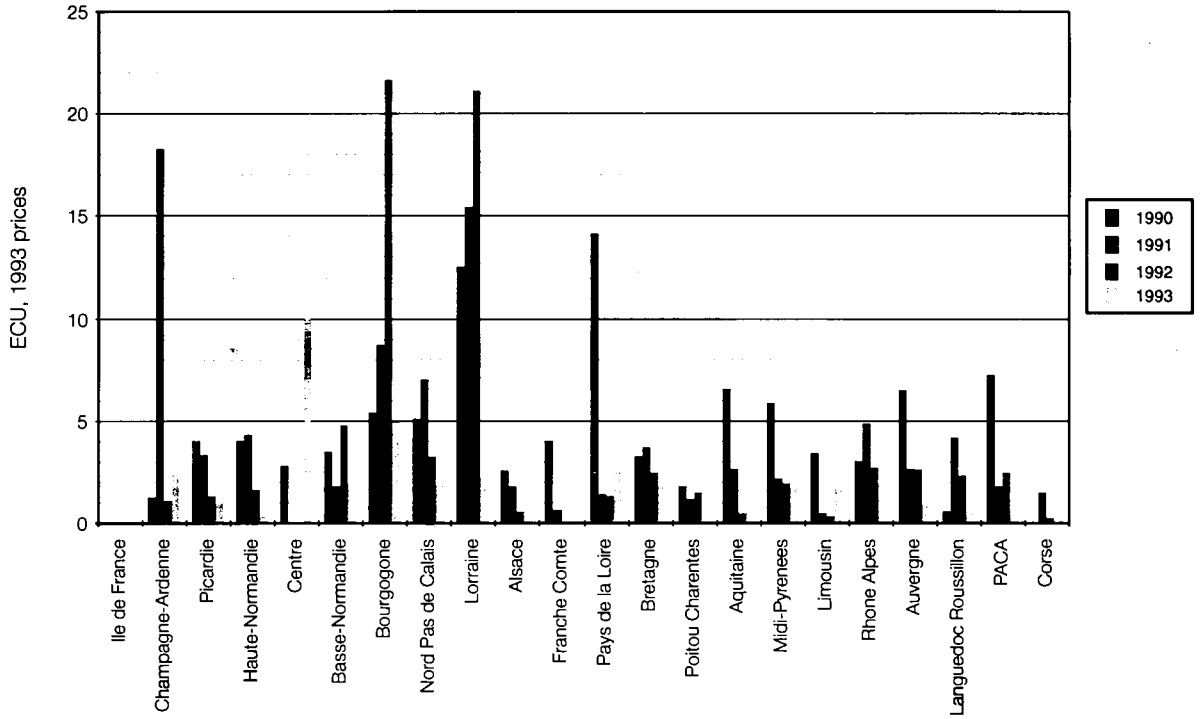
France: Regional Development Grant (PAT)
Expenditure by region, as a percentage of regional GDP, 1990-93
See France Table 2



France: Regional Development Grant (PAT)
Expenditure per capita of regional population, 1990-93 (1993 prices, ECU)
See France Table 3



France: Regional Development Grant (PAT)
Expenditure per capita of recipient region assisted area population, 1990-93 (1993 prices, ECU)
See France Table 4



France: Mean annual Regional Policy Grant (PAT) Expenditure per capita of eligible regional population, 1989-93, v. regional GDP per capita 1992 (both in ECU)

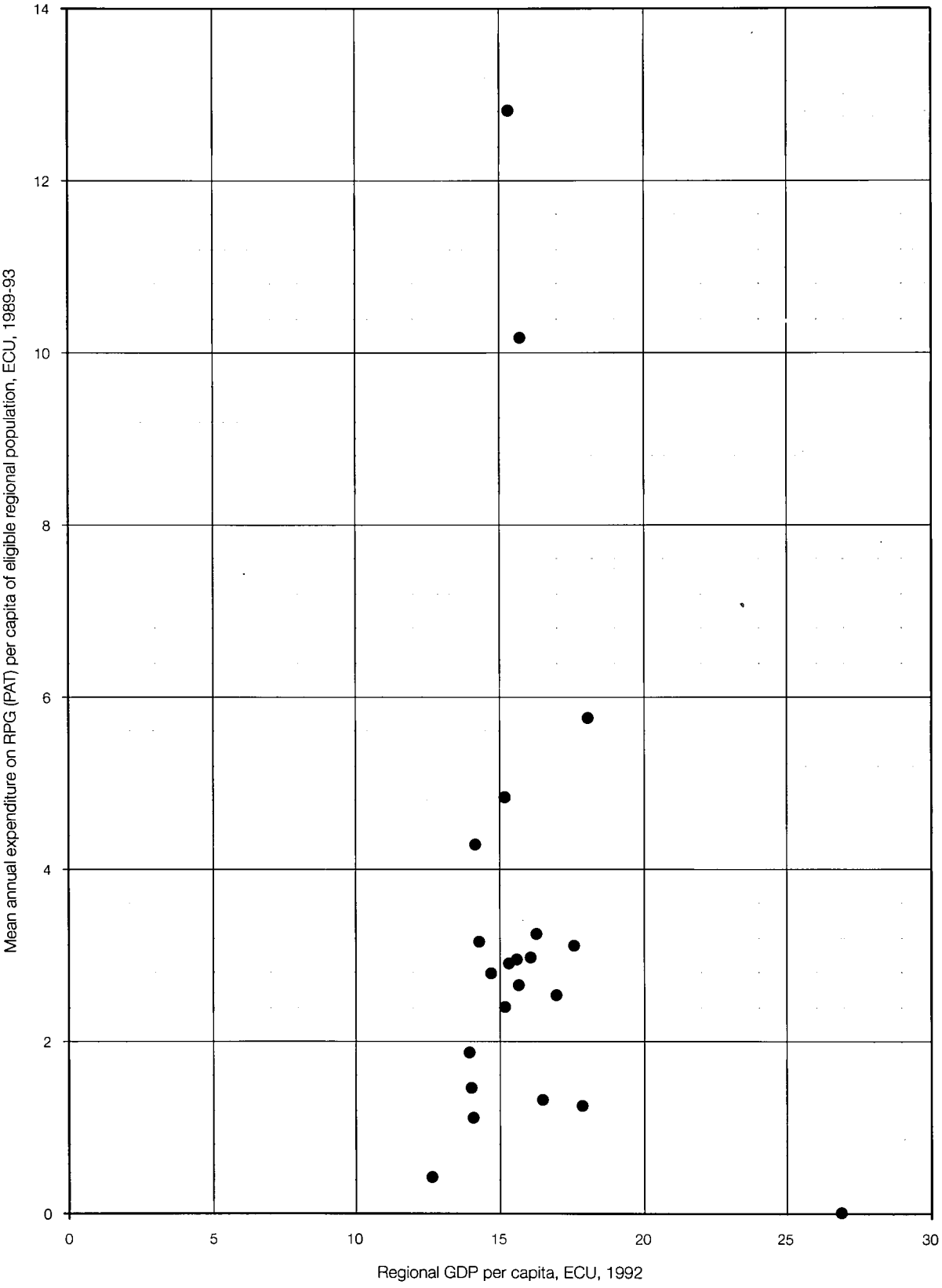


Table 1. Netherlands: Investment Premium (IPR)
Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
nl11	Groningen	4,08	7,53	10,93	27,05	10,67	12,05
nl12	Friesland	3,83	7,24	8,20	11,77	3,59	6,92
nl13	Drenthe	1,36	1,43	2,49	4,34	3,17	2,56
nl21	Overijssel	8,42	19,89	47,27	5,42	-	16,20
nl22	Gelderland	12,85	16,69	8,96	1,26	-	7,95
nl23	Flevoland	0,40	2,85	2,68	2,85	1,79	2,12
nl31	Utrecht	-	-	-	-	-	-
nl32	Noord-Holland	-	-	-	-	-	-
nl33	Zuid-Holland	-	-	-	-	-	-
nl34	Zeeland	-	-	-	-	-	-
nl41	Noord-Brabant	20,57	7,48	3,55	6,63	-	7,65
nl42	Limburg	32,77	57,44	16,87	24,34	4,55	27,19
nl	Netherlands	84,28	120,54	100,96	83,68	23,77	82,65

Table 2. Netherlands: Investment Premium (IPR)
Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
nl11	Groningen	0,037%	0,065%	0,085%	0,213%	0,086%	0,097%
nl12	Friesland	0,045%	0,083%	0,093%	0,130%	0,041%	0,079%
nl13	Drenthe	0,021%	0,021%	0,037%	0,063%	0,049%	0,038%
nl21	Overijssel	0,056%	0,129%	0,303%	0,034%	0,000%	0,104%
nl22	Gelderland	0,049%	0,061%	0,032%	0,004%	0,000%	0,029%
nl23	Flevoland	0,015%	0,101%	0,091%	0,096%	0,058%	0,072%
nl31	Utrecht	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
nl32	Noord-Holland	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
nl33	Zuid-Holland	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
nl34	Zeeland	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
nl41	Noord-Brabant	0,058%	0,020%	0,009%	0,017%	0,000%	0,021%
nl42	Limburg	0,192%	0,334%	0,098%	0,138%	0,027%	0,158%
nl	Netherlands	0,034%	0,047%	0,039%	0,031%	0,009%	0,032%

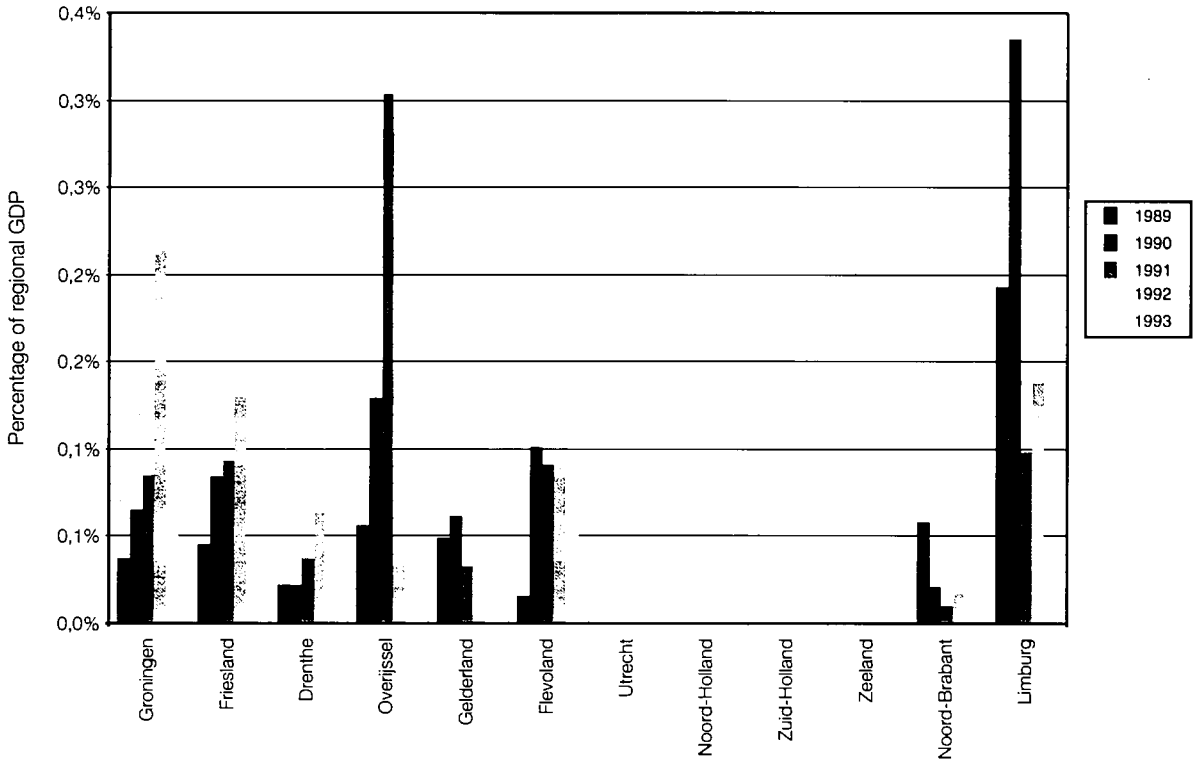
Table 3. Netherlands: Investment Premium (IPR)
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
nl11	Groningen	7,35	13,60	19,71	48,72	19,20	21,72
nl12	Friesland	6,39	12,08	13,66	19,56	5,94	11,53
nl13	Drenthe	3,10	3,24	5,62	9,75	7,08	5,76
nl21	Overijssel	8,29	19,49	46,06	5,25	-	15,82
nl22	Gelderland	7,16	9,25	4,93	0,69	-	4,41
nl23	Flevoland	1,99	13,50	12,12	12,24	7,37	9,44
nl31	Utrecht	-	-	-	-	-	-
nl32	Noord-Holland	-	-	-	-	-	-
nl33	Zuid-Holland	-	-	-	-	-	-
nl34	Zeeland	-	-	-	-	-	-
nl41	Noord-Brabant	9,47	3,42	1,61	2,98	-	3,49
nl42	Limburg	29,80	52,03	15,20	21,82	4,06	24,58
nl	Netherlands	5,69	8,10	6,73	5,53	1,56	5,52

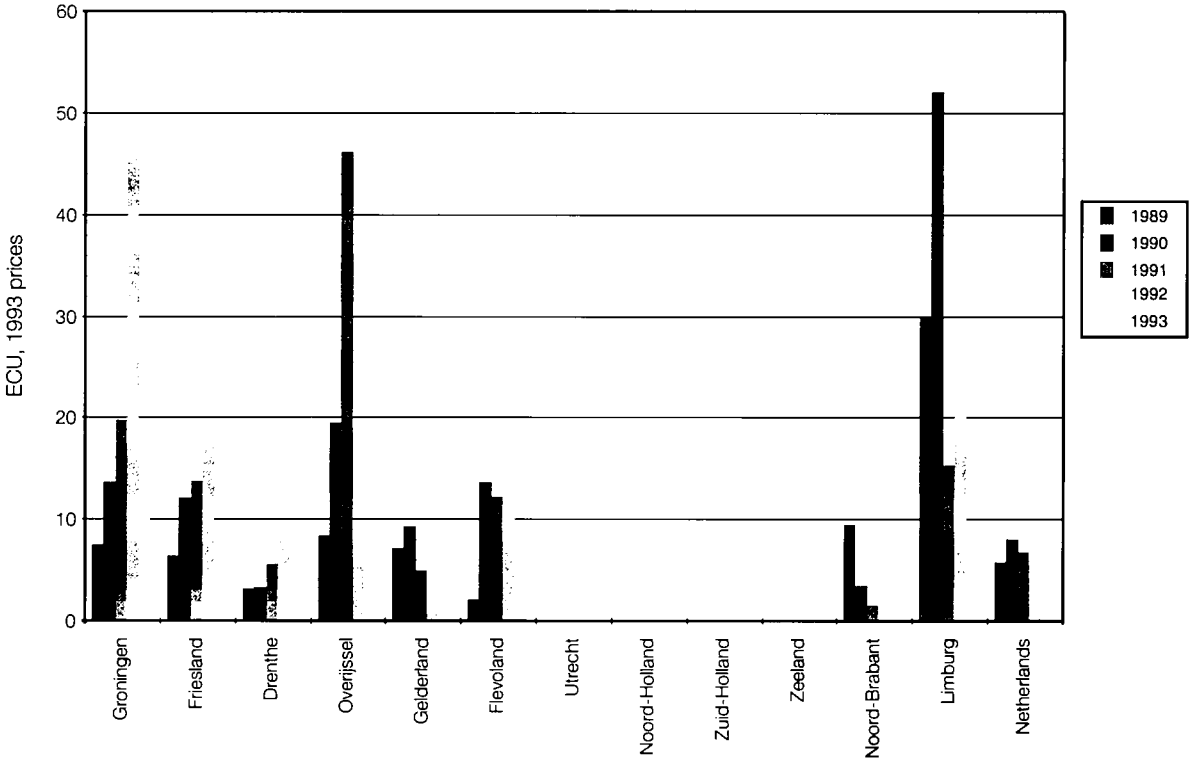
Table 4. Netherlands: Investment Premium (IPR)
Expenditure per capita of recipient region assisted population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
nl11	Groningen	8,55	15,81	22,92	56,65	22,33	25,25
nl12	Friesland	6,39	12,08	13,66	19,56	5,94	11,53
nl13	Drenthe	8,56	8,94	15,53	26,94	19,55	15,90
nl21	Overijssel	14,73	34,61	81,80	9,32	-	28,10
nl22	Gelderland	57,44	74,57	40,06	5,64	-	35,54
nl23	Flevoland	6,93	47,03	42,23	42,65	25,67	32,90
nl31	Utrecht	-	-	-	-	-	-
nl32	Noord-Holland	-	-	-	-	-	-
nl33	Zuid-Holland	-	-	-	-	-	-
nl34	Zeeland	-	-	-	-	-	-
nl41	Noord-Brabant	91,91	33,43	15,85	29,65	-	34,17
nl42	Limburg	51,73	90,33	26,40	37,88	7,05	42,68
nl	Netherlands	28,61	40,67	33,80	27,79	9,39	28,05

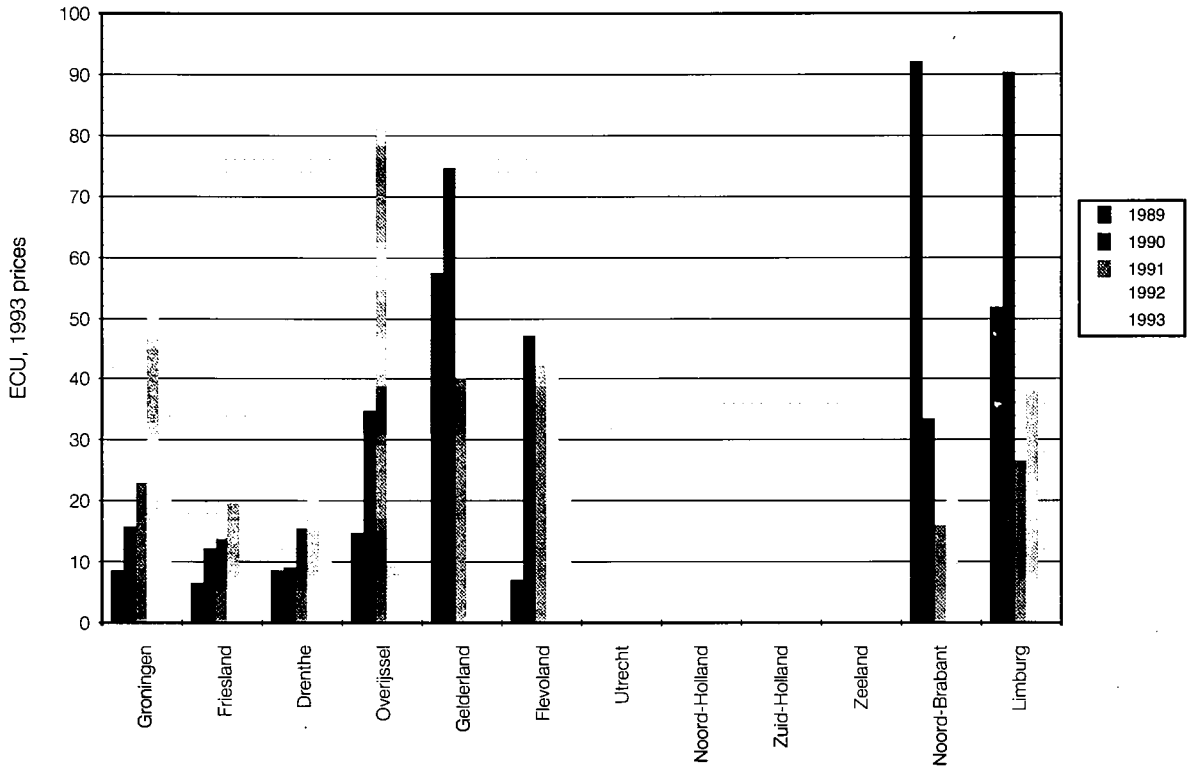
Netherlands: Investment Premium
Expenditure by region, as a percentage of regional GDP, 1989-93
See Netherlands Table 2



Netherlands: Investment Premium
Expenditure per capita of regional population, 1989-93 (1993 prices, ECU)
See Netherlands Table 3



Netherlands: Investment Premium
Expenditure per capita of recipient region assisted area population, 1989-93
(1993 prices, ECU)
See Netherlands Table 4



Netherlands: Mean annual Investment Premium (IPR) expenditure per capita of eligible regional population1989-93 v. regional GDP per capita 1992 (both in ECU)

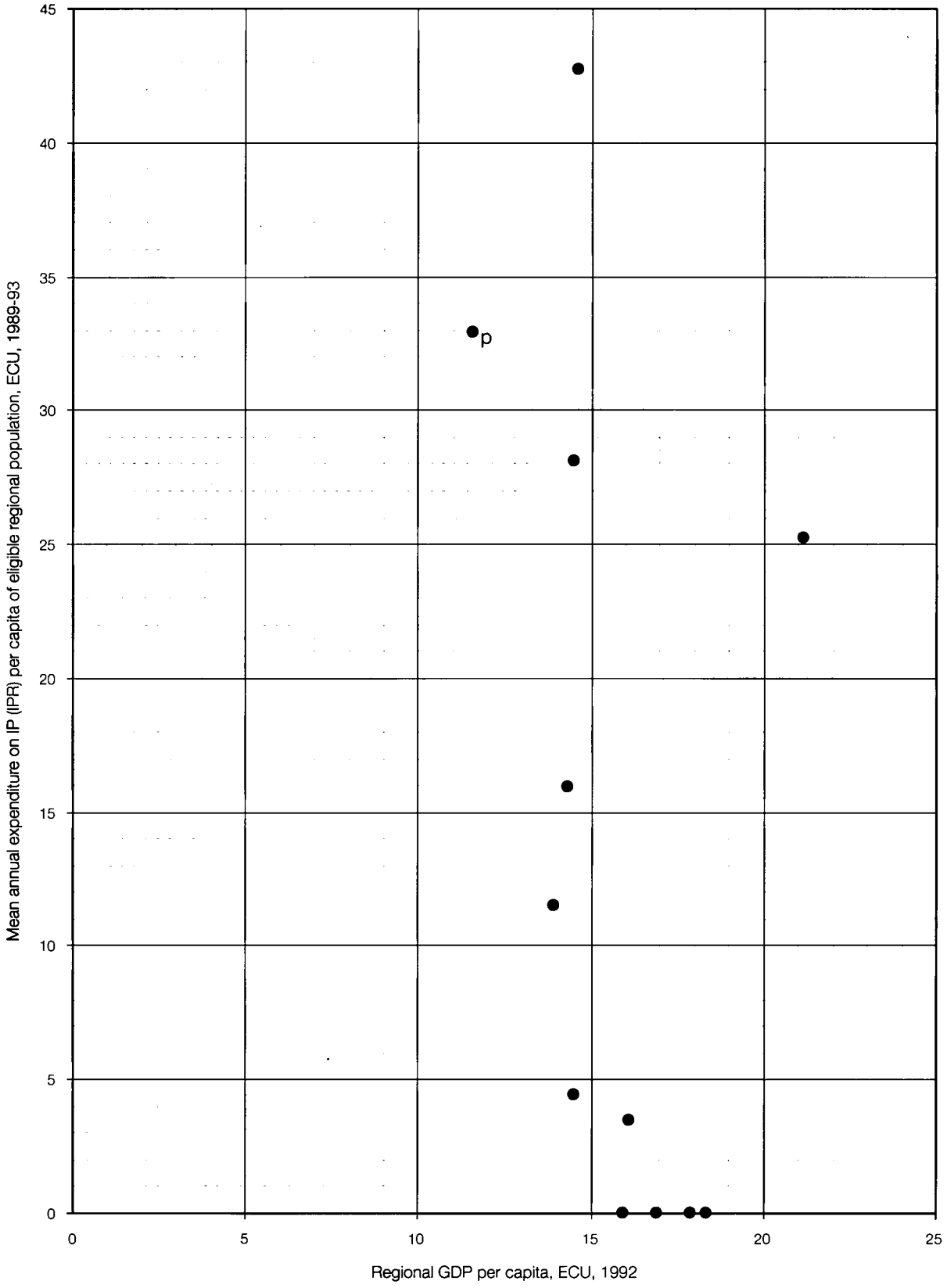


Table 1. Great Britain: Regional Selective Assistance (RSA)
Northern Ireland: Selective Financial Assistance (SFA)
Expenditure trends 1989-93 (1993 prices, MECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
UK1	North	103,76	27,74	23,41	33,62	44,86	46,67
UK2	Yorkshire & Humberside	21,10	31,73	24,90	14,46	22,05	22,85
UK3	East Midlands	1,32	0,49	2,15	1,06	3,13	1,63
UK4	East Anglia	-	-	-	-	0,31	0,06
UK5	South East	-	-	-	-	0,51	0,10
UK6	South West	17,86	7,98	6,78	8,45	10,88	10,39
UK7	West Midlands	27,27	21,17	16,86	9,51	27,90	20,54
UK8	North West	28,04	38,85	36,51	34,51	37,51	35,08
UK9	Wales	96,69	117,19	107,48	96,74	122,09	108,04
UKA	Scotland	119,30	259,24	72,86	97,97	168,86	143,64
	Great Britain	415,33	504,39	290,94	296,32	438,08	389,01
UKB	Northern Ireland	121,55	104,21	114,04	62,42	68,85	94,21

Table 2. Great Britain: Regional Selective Assistance (RSA)
Northern Ireland: Selective Financial Assistance (SFA)
Expenditure as a percentage of regional GDP

	Region	1989	1990	1991	1992	1993	Mean, 89-93
UK1	North	0,115%	0,032%	0,029%	0,040%	0,055%	0,054%
UK2	Yorkshire & Humberside	0,014%	0,022%	0,018%	0,010%	0,016%	0,016%
UK3	East Midlands	0,001%	0,000%	0,002%	0,001%	0,003%	0,001%
UK4	East Anglia	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
UK5	South East	0,000%	0,000%	0,000%	0,000%	0,000%	0,000%
UK6	South West	0,012%	0,006%	0,005%	0,006%	0,008%	0,007%
UK7	West Midlands	0,017%	0,014%	0,012%	0,006%	0,020%	0,014%
UK8	North West	0,014%	0,021%	0,021%	0,020%	0,022%	0,020%
UK9	Wales	0,121%	0,151%	0,149%	0,130%	0,170%	0,144%
UKA	Scotland	0,076%	0,167%	0,050%	0,064%	0,115%	0,094%
	Great Britain	0,022%	0,028%	0,017%	0,017%	0,026%	0,022%
UKB	Northern Ireland	0,306%	0,268%	0,300%	0,158%	0,181%	0,243%

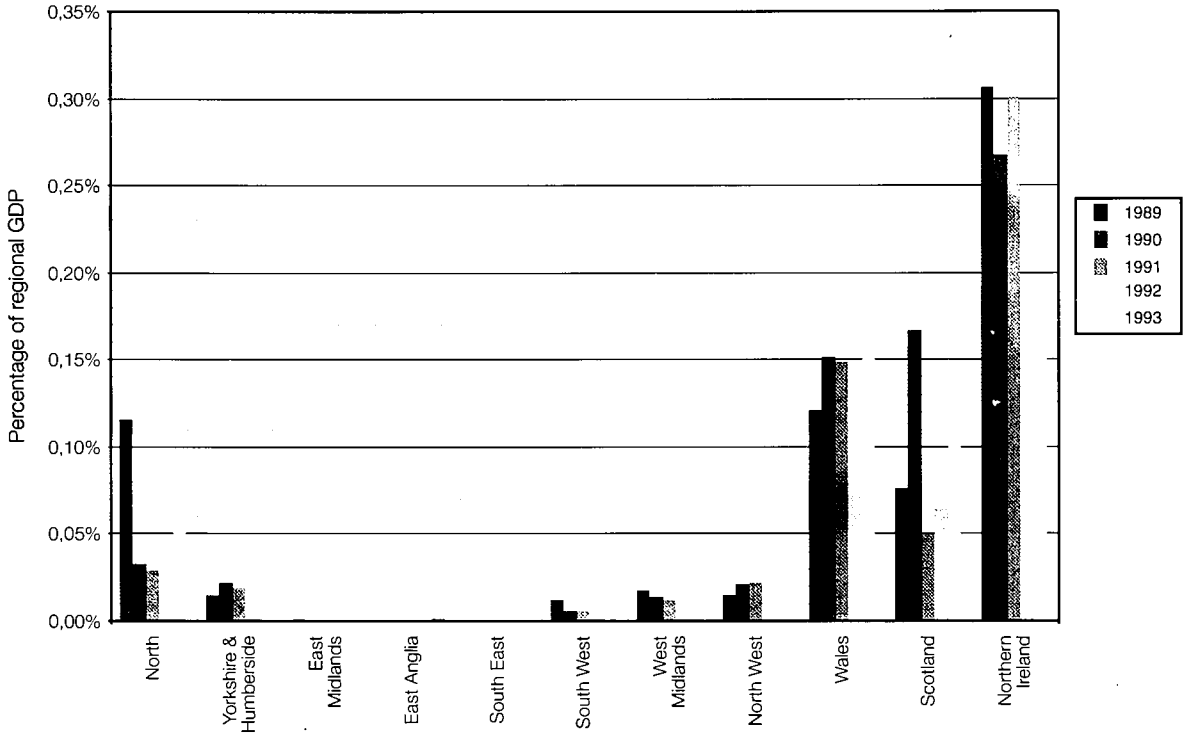
Table 3. Great Britain: Regional Selective Assistance (RSA)
Northern Ireland: Selective Financial Assistance (SFA)
Expenditure per capita of regional population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
UK1	North	33,77	9,02	7,58	10,86	14,47	15,14
UK2	Yorkshire & Humberside	4,28	6,42	5,01	2,90	4,40	4,60
UK3	East Midlands	0,33	0,12	0,53	0,26	0,77	0,40
UK4	East Anglia	-	-	-	-	0,15	0,03
UK5	South East	-	-	-	-	0,03	0,01
UK6	South West	3,85	1,71	1,44	1,79	2,29	2,21
UK7	West Midlands	5,23	4,06	3,21	1,80	5,28	3,92
UK8	North West	4,40	6,09	5,72	5,39	5,85	5,49
UK9	Wales	33,75	40,73	37,26	33,42	42,06	37,44
UKA	Scotland	23,43	50,87	14,27	19,17	33,01	28,15
	Great Britain	7,47	9,05	5,19	5,26	7,76	6,95
UKB	Northern Ireland	76,90	65,70	71,63	38,95	42,36	59,11

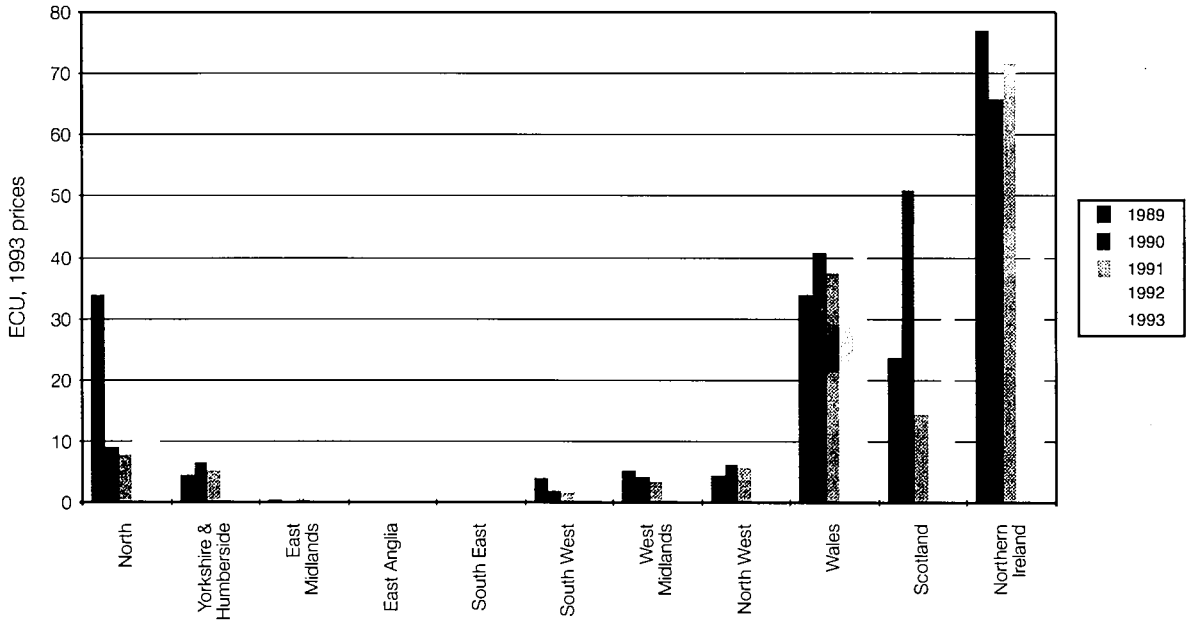
Table 4. Great Britain: Regional Selective Assistance (RSA)
Northern Ireland: Selective Financial Assistance (SFA)
Expenditure per capita of recipient region assisted population (1993 prices, ECU)

	Region	1989	1990	1991	1992	1993	Mean, 89-93
UK1	North	39,92	10,67	8,95	12,84	17,10	17,90
UK2	Yorkshire & Humberside	9,15	13,71	10,70	6,19	9,41	9,83
UK3	East Midlands	1,92	0,72	3,10	1,53	4,46	2,35
UK4	East Anglia	-	-	-	-	2,10	0,42
UK5	South East	-	-	-	-	0,47	0,09
UK6	South West	18,05	8,04	6,77	8,38	10,74	10,40
UK7	West Midlands	8,32	6,45	5,10	2,87	8,39	6,23
UK8	North West	9,23	12,76	11,99	11,31	12,27	11,51
UK9	Wales	47,80	57,69	52,78	47,33	59,58	53,04
UKA	Scotland	38,40	83,39	23,40	31,43	54,11	46,15
	Great Britain	21,58	26,15	15,02	15,25	22,49	20,10
UKB	Northern Ireland	76,90	65,70	71,63	38,95	42,36	59,11

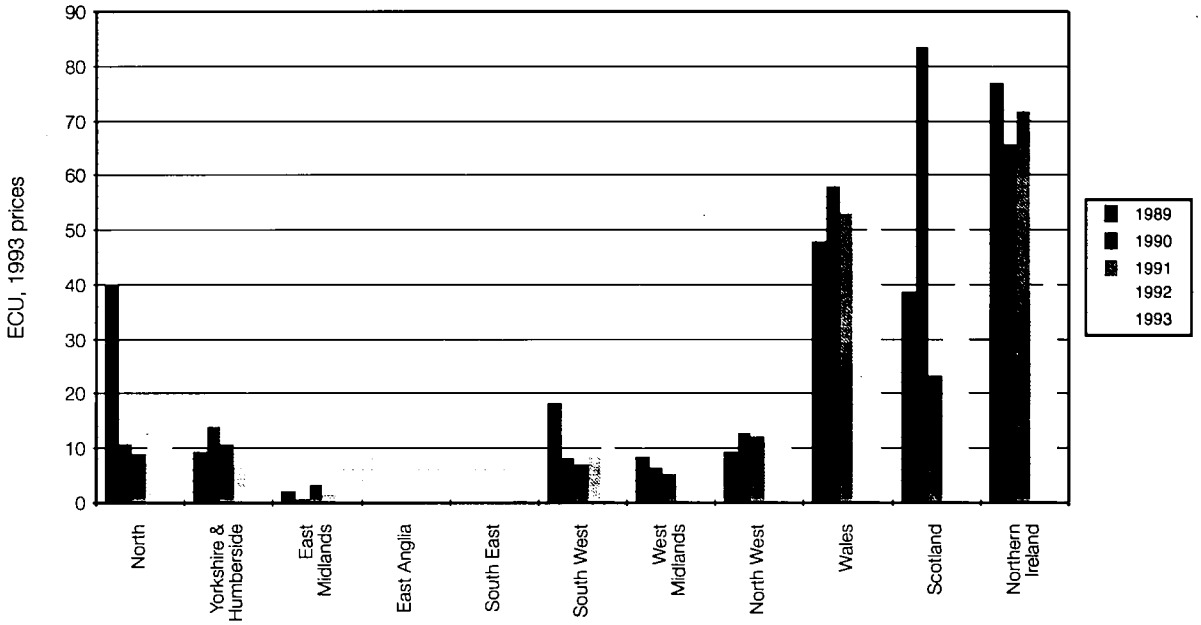
Great Britain: Regional Selective Assistance
Expenditure by region, as a percentage of regional GDP, 1989-93
See Great Britain Table 2
(Also includes Northern Irish Selective Financial Assistance)



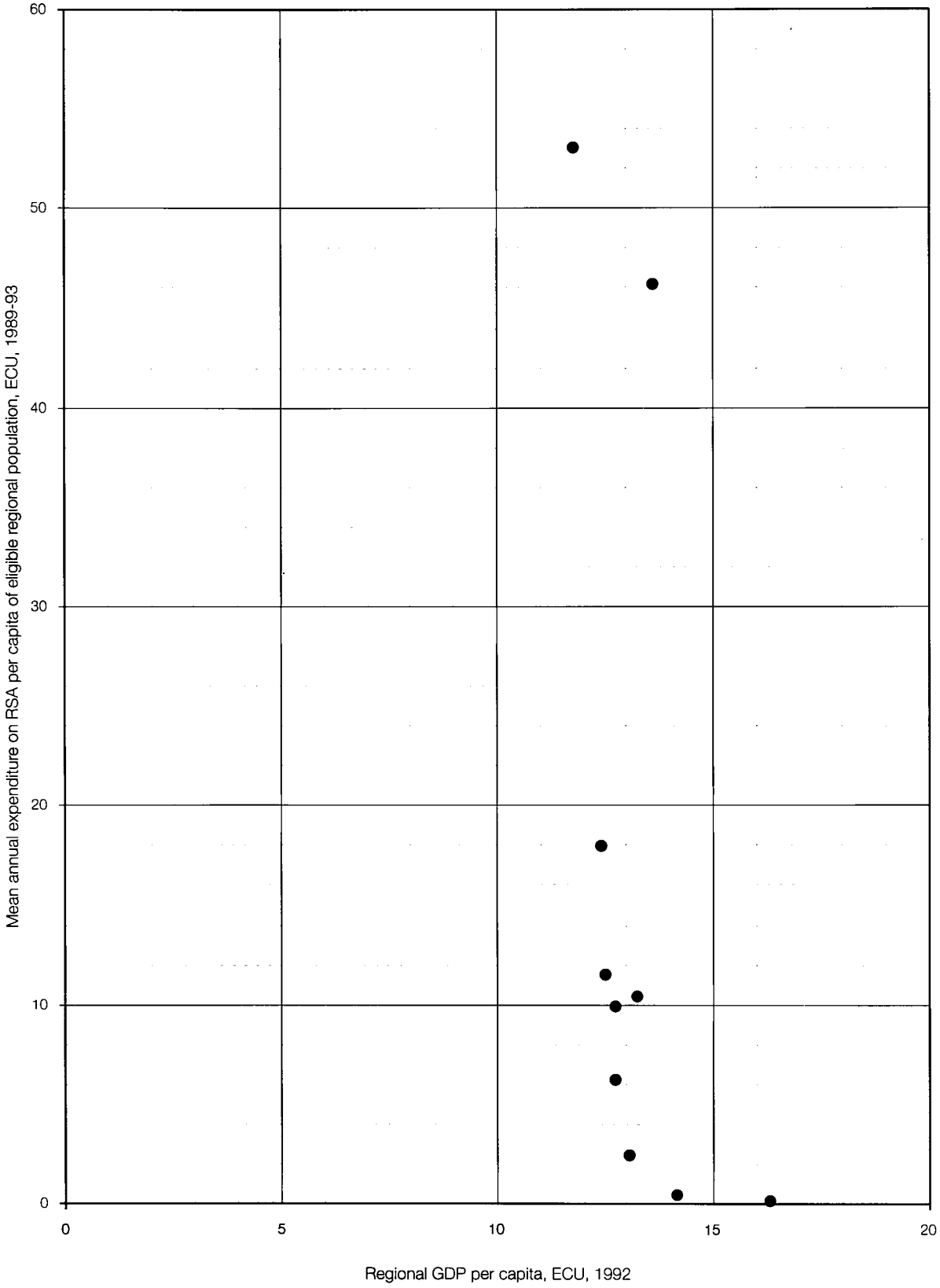
Great Britain: Regional Selective Assistance
Expenditure per capita of regional population, 1989-93 (1993 prices, ECU)
See Great Britain Table 3
(Also includes Northern Irish Selective Financial Assistance)



Great Britain: Regional Selective Assistance
Expenditure committed per capita of recipient region asssted area population, 1989-93 (1993 prices, ECU)
See Great Britain Table 4
(Also includes Northern Irish Selective Financial Assistance)

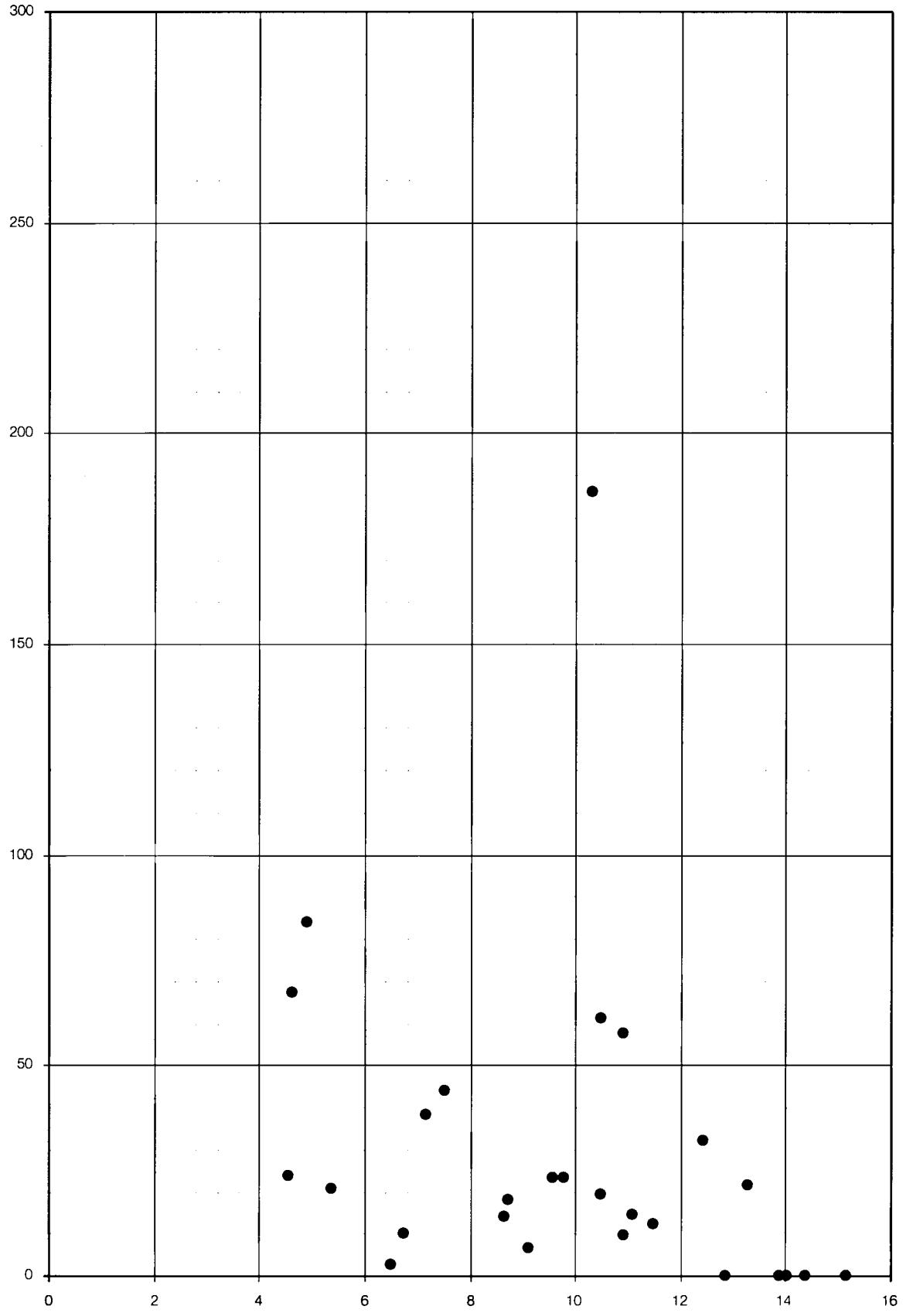


Great Britain: Mean annual Regional SelectiveAssistance (RSA) Expenditure per capita of eligible population,1989-93, v. regional GDP per capita 1992 (both in ECU)

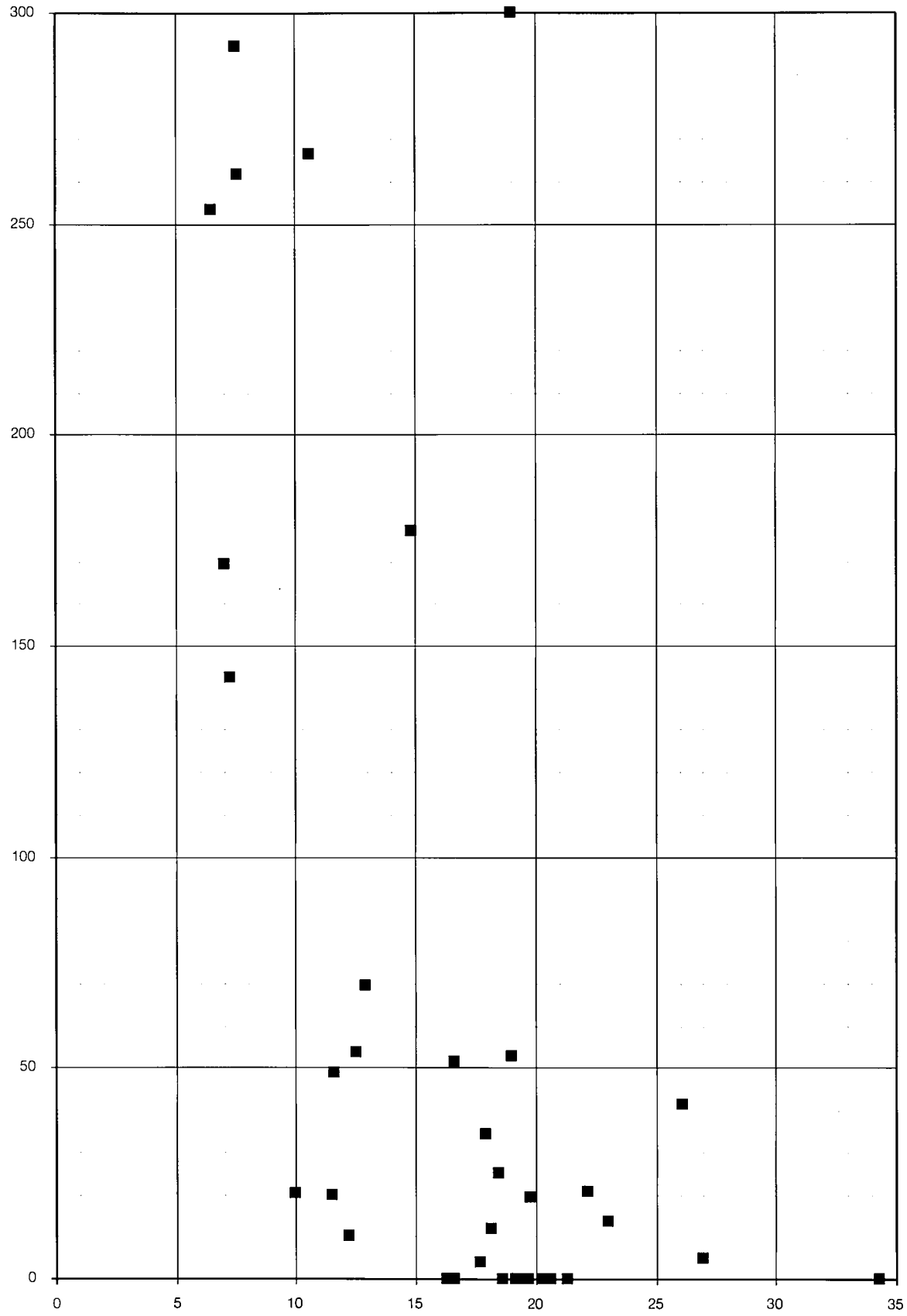


Overview Charts: Regional-Level Expenditure Data v. Regional GDP

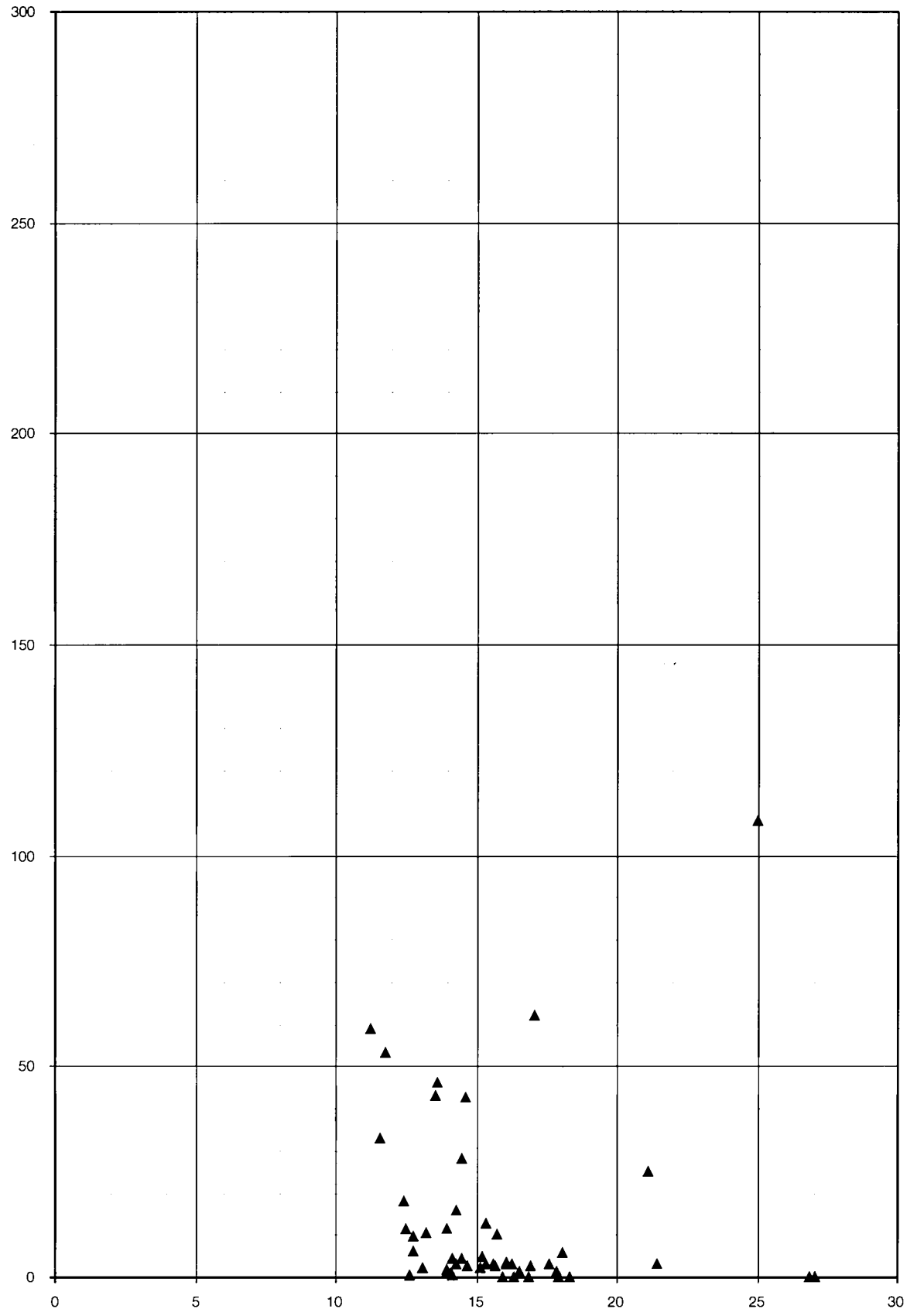
Cohesion Countries: Mean expenditure/capita of eligible population on main regional incentive by region, 1989-93, in ECU v. regional GDP/capita, 1992, in ECU



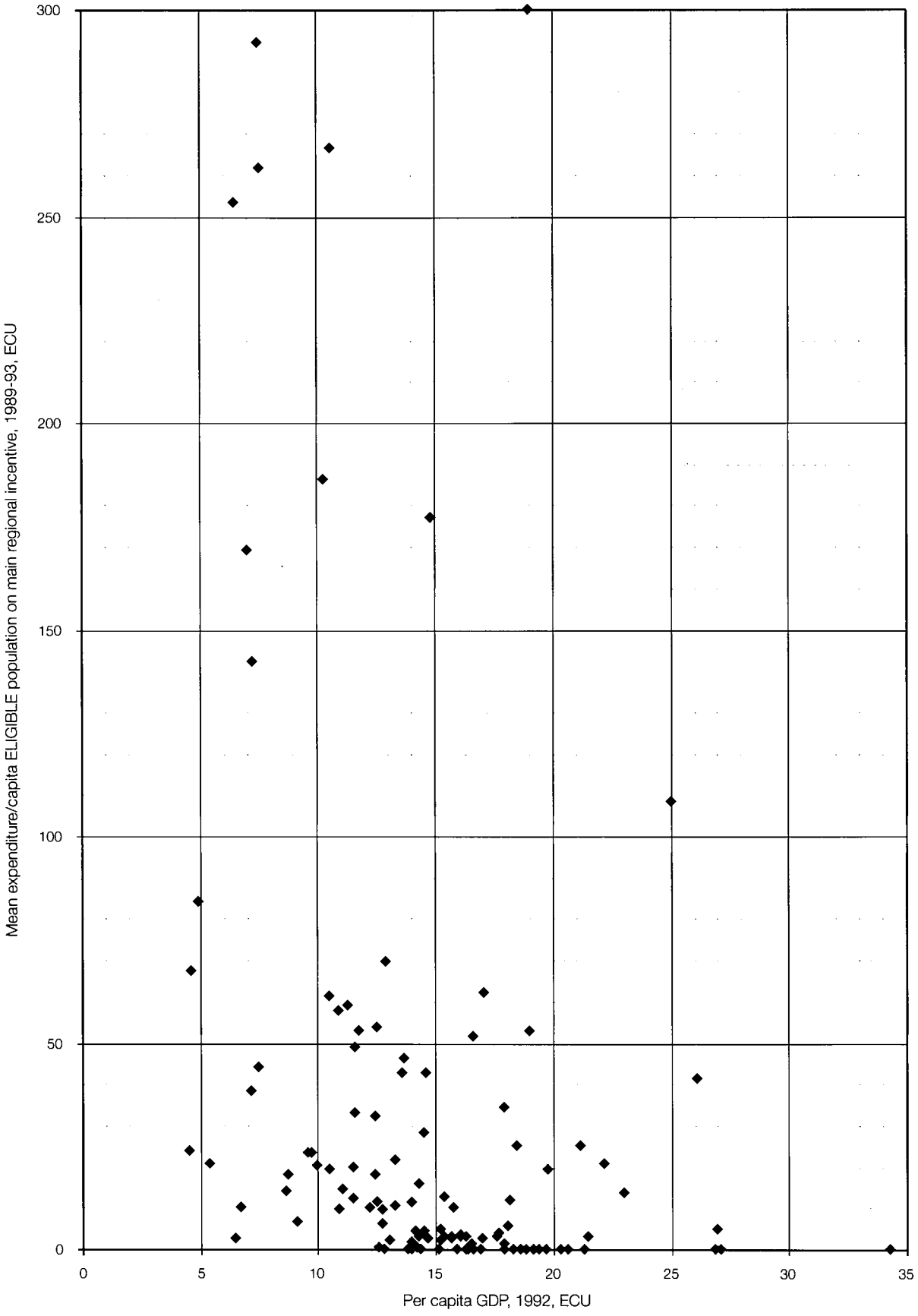
Italy Germany: Mean expenditure/capita of eligible population on main regional incentive by region, 1989-93, in ECU v. regional GDP/capita, 1992, in ECU



Other States: Mean expenditure/capita of eligible population on main regional incentive by region, 1989-93, in ECU v. regional GDP/capita, 1992, in ECU



Mean expenditure/capita of eligible population on main regional incentive by region, 1989-93, in ECU v. regional GDP/capita, 1992, in ECU



ANNEX II: Interregional Transfers from Central Government Budgets: Research Results

A. Budgetary Breakdowns and Regional Allocations

The methodology utilised in the study is described in detail in Section 5.3 of the report. Basically, the methodology involves three steps:

- first, detailed national budgets are established. These have to be (i) consolidated (ii) balanced (iii) recent (iv) executed and (v) broken down into as many items of revenue and expenditure as possible.

- second, to allow the regional allocation of these budgetary items, allocation criteria or "keys" are sought for each item. Regional allocation keys are chosen on the basis of their *economic* sense: the research methodology is guided by economic reasoning and by the theory of incidence in the selection of criteria

- third, for each region, the amounts estimated for each item of revenue and of expenditure are summed with a view to indicating how much each region has contributed (in revenues) to the budget and how much it has gained (in expenditures) from the budget.

Detailed budgetary breakdowns as specified in step one were produced for each of the case study countries. The extent of breakdown by country is shown in the Table A.1:

Table A.1: Decomposition of National Budgets

	Expenditure items	Revenue items	Total number of items
France	312	62	370
Germany	106	37	150
Italy	140	24	186
Portugal	82	198	137
Spain	478	66	540
Sweden	80	49	130
United Kingdom	850	56	887

As mentioned, regional allocation keys were sought for each item in step two of the methodology. The number of regional allocation criteria used by country is set out in Table A.2:

Table A.2: Number of Criteria Used by Country

France	135
Germany	111
Italy	200
Portugal	45
Spain	180
Sweden	110
United Kingdom	316

The final results of the exercise are presented in Annex IIB.

B. Final Results

1. FRANCE

	Moy prélèv MF	Moy depbenf MF	Moy depflux MF	Solde bén. MF	Solde flux. MF	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
Total	-1.734.807	1.734.807	1.734.790	-1	-17	-261.660	261.660	261.658	0	-3
ALSACE	-48.792	46.004	48.901	-2.670	197	-7.359	6.939	7.376	-403	30
AQUITAINE	-76.262	84.662	82.503	8.220	6.161	-11.503	12.770	12.444	1.240	929
AUVERGNE	-36.908	39.205	38.539	2.219	1.699	-5.567	5.913	5.813	335	256
BOURGOGNE	-43.407	47.819	42.890	4.358	-551	-6.547	7.213	6.469	657	-83
BRETAGNE	-74.203	83.524	81.598	9.243	7.385	-11.192	12.598	12.307	1.394	1.114
CENTRE	-67.933	68.444	70.315	598	2.386	-10.246	10.323	10.606	90	360
CHAMPAGNE ARDENNES	-38.715	40.739	38.406	2.015	-273	-5.839	6.145	5.793	304	-41
CORSE	-6.138	9.415	8.413	3.233	2.280	-926	1.420	1.269	488	344
FRANCHE COMTE	-28.775	31.179	25.876	2.346	-2.783	-4.340	4.703	3.903	354	-420
ILE DE FRANCE	-463.225	343.748	404.306	-118.056	-58.663	-69.868	51.847	60.981	-17.806	-8.848
LANGUEDOC ROUSSILLON	-55.968	74.195	74.461	17.566	18.296	-8.442	11.191	11.231	2.649	2.760
LIMOUSIN	-19.301	23.734	23.470	4.331	4.164	-2.911	3.580	3.540	653	628
LORRAINE	-61.790	70.133	67.558	8.263	5.847	-9.320	10.578	10.190	1.246	882
MIDI PYRENNEES	-65.910	80.401	80.097	14.310	14.171	-9.941	12.127	12.081	2.158	2.137
NORD PAS DE CALAIS	-99.942	119.924	105.716	19.854	5.621	-15.074	18.088	15.945	2.995	848
BASSE NORMANDIE	-36.805	43.305	41.197	6.327	4.409	-5.551	6.532	6.214	954	665
HAUTE NORMANDIE	-48.231	51.354	45.652	3.140	-2.563	-7.275	7.746	6.886	474	-387
PAYS DE LA LOIRE	-82.530	89.364	80.821	6.783	-1.627	-12.448	13.479	12.190	1.023	-245
PICARDIE	-47.761	51.005	42.536	3.257	-5.149	-7.204	7.693	6.416	491	-777
POITOU CHARENTES	-42.819	47.689	44.346	4.785	1.476	-6.458	7.193	6.689	722	223
PACA	-124.449	128.887	133.233	4.336	8.477	-18.771	19.440	20.095	654	1.279
RHONES ALPES	-164.944	160.078	153.956	-4.460	-10.976	-24.878	24.144	23.221	-673	-1.655

1. FRANCE (*Continued*)

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
Total	-36.990	37.007	37.006	17	16	-24%	24%	24%	0%	0%
ALSACE	-1.038	979	1.041	-57	4	-24%	22%	24%	-1%	0%
AQUITAINE	-1.623	1.801	1.755	175	131	-24%	27%	26%	3%	2%
AUVERGNE	-785	834	820	47	36	-28%	29%	29%	2%	1%
OURGOGNE	-924	1.017	913	93	-12	-25%	27%	25%	3%	0%
BRETAGNE	-1.579	1.777	1.736	197	157	-25%	29%	28%	3%	3%
CENTRE	-1.446	1.456	1.496	13	51	-25%	25%	26%	0%	1%
HAMPAGNE ARDENNES	-824	867	817	43	-6	-24%	25%	23%	1%	0%
CORSE	-131	200	179	69	49	-28%	43%	38%	15%	10%
FRANCHE COMTE	-612	663	551	50	-59	-23%	25%	21%	2%	-2%
ILE DE FRANCE	-9.856	7.314	8.603	-2.512	-1.248	-23%	17%	20%	-6%	-3%
LANGUEDOC ROUSSILLON	-1.191	1.579	1.584	374	389	-27%	36%	36%	8%	9%
LIMOUSIN	-411	505	499	92	89	-27%	34%	33%	6%	6%
LORRAINE	-1.315	1.492	1.438	176	124	-25%	29%	28%	3%	2%
MIDI PYRENNEES	-1.479	1.805	1.798	321	318	-26%	31%	31%	6%	5%
NORD PAS DE CALAIS	-2.127	2.552	2.249	422	120	-25%	30%	27%	5%	1%
BASSE NORMANDIE	-783	921	877	135	94	-23%	28%	26%	4%	3%
HAUTE NORMANDIE	-1.026	1.093	971	67	-55	-24%	25%	23%	2%	-1%
PAYS DE LA LOIRE	-1.756	1.901	1.720	144	-35	-25%	27%	25%	2%	0%
PICARDIE	-1.016	1.085	905	69	-110	-25%	26%	22%	2%	-3%
POITOU CHARENTES	-911	1.015	944	102	31	-26%	29%	27%	3%	1%
PACA	-2.648	2.742	2.835	92	180	-26%	27%	28%	1%	2%
RHONES ALPES	-3.510	3.406	3.276	-95	-234	-25%	24%	23%	-1%	-2%

1. FRANCE (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. kF/hab.	Dép. bénéf. par hab. kF/hab.	Dép. flux par hab. kF/hab.	Solde bénéf. par hab. kF/hab.	Solde flux par hab. kF/hab.
Total	-100%	100%	100%	0%	0%					
ALSACE	-3%	3%	3%	0%	0%	-29,7	28,0	29,8	-1,6	0,1
AQUITAINE	-4%	5%	5%	0%	0%	-26,9	29,9	29,1	2,9	2,2
AUVERGNE	-2%	2%	2%	0%	0%	-28,0	29,8	29,3	1,7	1,3
OURGOGNE	-3%	3%	2%	0%	0%	-26,8	29,6	26,5	2,7	-0,3
BRETAGNE	-4%	5%	5%	1%	0%	-26,3	29,6	28,9	3,3	2,6
CENTRE	-4%	4%	4%	0%	0%	-28,3	28,5	29,3	0,2	1,0
HAMPAGNE ARDENNES	-2%	2%	2%	0%	0%	-28,7	30,2	28,5	1,5	-0,2
CORSE	0%	1%	0%	0%	0%	-24,4	37,4	33,4	12,8	9,0
FRANCHE COMTE	-2%	2%	1%	0%	0%	-25,9	28,1	23,3	2,1	-2,5
ILE DE FRANCE	-27%	20%	23%	-7%	-3%	-42,7	31,7	37,3	-10,9	-5,4
LANGUEDOC ROUSSILLON	-3%	4%	4%	1%	1%	-25,8	34,2	34,3	8,1	8,4
LIMOUSIN	-1%	1%	1%	0%	0%	-26,9	33,1	32,7	6,0	5,8
LORRAINE	-4%	4%	4%	0%	0%	-26,9	30,6	29,4	3,6	2,5
MIDI PYRENNEES	-4%	5%	5%	1%	1%	-26,8	32,7	32,6	5,8	5,8
NORD PAS DE CALAIS	-6%	7%	6%	1%	0%	-25,1	30,2	26,6	5,0	1,4
BASSE NORMANDIE	-2%	2%	2%	0%	0%	-26,3	30,9	29,4	4,5	3,1
HAUTE NORMANDIE	-3%	3%	3%	0%	0%	-27,5	29,3	26,0	1,8	-1,5
PAYS DE LA LOIRE	-5%	5%	5%	0%	0%	-26,6	28,8	26,1	2,2	-0,5
PICARDIE	-3%	3%	2%	0%	0%	-26,0	27,7	23,1	1,8	-2,8
POITOU CHARENTES	-2%	3%	3%	0%	0%	-26,5	29,6	27,5	3,0	0,9
PACA	-7%	7%	8%	0%	0%	-28,6	29,6	30,6	1,0	1,9
RHONES ALPES	-10%	9%	9%	0%	-1%	-30,2	29,3	28,2	-0,8	-2,0

1. FRANCE (*Continued*)

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.	Solde . flux par hab k ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
Total										
ALSACE	-4,5	4,2	4,5	-0,2	0,0	-0,6	0,6	0,6	0,0	0,0
AQUITAINE	-4,1	4,5	4,4	0,4	0,3	-0,6	0,6	0,6	0,1	0,0
AUVERGNE	-4,2	4,5	4,4	0,3	0,2	-0,6	0,6	0,6	0,0	0,0
OURGOGNE	-4,0	4,5	4,0	0,4	-0,1	-0,6	0,6	0,6	0,1	0,0
BRETAGNE	-4,0	4,5	4,4	0,5	0,4	-0,6	0,6	0,6	0,1	0,1
CENTRE	-4,3	4,3	4,4	0,0	0,1	-0,6	0,6	0,6	0,0	0,0
HAMPAGNE ARDENNES	-4,3	4,6	4,3	0,2	0,0	-0,6	0,6	0,6	0,0	0,0
CORSE	-3,7	5,6	5,0	1,9	1,4	-0,5	0,8	0,7	0,3	0,2
FRANCHE COMTE	-3,9	4,2	3,5	0,3	-0,4	-0,6	0,6	0,5	0,0	-0,1
ILE DE FRANCE	-6,4	4,8	5,6	-1,6	-0,8	-0,9	0,7	0,8	-0,2	-0,1
LANGUEDOC ROUSSILLON	-3,9	5,2	5,2	1,2	1,3	-0,5	0,7	0,7	0,2	0,2
LIMOUSIN	-4,1	5,0	4,9	0,9	0,9	-0,6	0,7	0,7	0,1	0,1
LORRAINE	-4,1	4,6	4,4	0,5	0,4	-0,6	0,7	0,6	0,1	0,1
MIDI PYRENNEES	-4,0	4,9	4,9	0,9	0,9	-0,6	0,7	0,7	0,1	0,1
NORD PAS DE CALAIS	-3,8	4,5	4,0	0,8	0,2	-0,5	0,6	0,6	0,1	0,0
BASSE NORMANDIE	-4,0	4,7	4,4	0,7	0,5	-0,6	0,7	0,6	0,1	0,1
HAUTE NORMANDIE	-4,1	4,4	3,9	0,3	-0,2	-0,6	0,6	0,6	0,0	0,0
PAYS DE LA LOIRE	-4,0	4,3	3,9	0,3	-0,1	-0,6	0,6	0,6	0,0	0,0
PICARDIE	-3,9	4,2	3,5	0,3	-0,4	-0,6	0,6	0,5	0,0	-0,1
POITOU CHARENTES	-4,0	4,5	4,1	0,4	0,1	-0,6	0,6	0,6	0,1	0,0
PACA	-4,3	4,5	4,6	0,2	0,3	-0,6	0,6	0,7	0,0	0,0
RHONES ALPES	-4,6	4,4	4,3	-0,1	-0,3	-0,6	0,6	0,6	0,0	0,0

1. FRANCE (*Continued*)

	Population k	Population %	GDP 1993 MF	GDP 1993 M ECU	GDP 1993 M PPS
Total	57.328	100%	7.084.268	1.068.517	1.001.402
ALSACE	1.641	3%	206.166	31.096	29.085
AQUITAINE	2.832	5%	311.709	47.015	43.973
AUVERGNE	1.316	2%	133.482	20.133	18.831
OURGOGNE	1.618	3%	174.236	26.280	24.580
BRETAGNE	2.821	5%	292.171	44.068	41.217
CENTRE	2.399	4%	269.026	40.577	37.953
HAMPAGNE ARDENNES	1.349	2%	164.676	24.838	23.232
CORSE	252	0%	22.012	3.320	3.105
FRANCHE COMTE	1.109	2%	125.453	18.922	17.698
ILE DE FRANCE	10.853	19%	2.026.062	305.590	285.823
LANGUEDOC ROUSSILLON	2.170	4%	208.606	31.464	29.429
LIMOUSIN	718	1%	70.762	10.673	9.983
LORRAINE	2.294	4%	243.089	36.665	34.296
MIDI PYRENNEES	2.460	4%	258.384	38.972	38.451
NORD PAS DE CALAIS	3.976	7%	393.365	59.331	55.493
BASSE NORMANDIE	1.402	2%	157.224	23.714	22.180
HAUTE NORMANDIE	1.753	3%	202.261	30.507	28.533
PAYS DE LA LOIRE	3.102	5%	328.026	49.476	46.275
PICARDIE	1.840	3%	194.299	29.306	27.411
POITOU CHARENTES	1.613	3%	162.296	24.479	22.895
PACA	4.354	8%	478.878	72.229	67.557
RHONES ALPES	5.456	10%	662.085	99.862	93.402

2. ITALY

	Moy prélèv ML	Moy depbenf ML	Moy depflux ML	Solde bén. ML	Solde flux. ML	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
Total	-745.956.064	738.934.875	745.955.902	-144.738	0	-405.191	401.377	405.191	-79	0
Abruzzo	-13.150.038	18.464.398	16.287.449	5.314.322	2.924.443	-7.143	10.030	8.847	2.887	1.589
Basilicata	-4.698.996	10.096.758	7.665.689	5.288.179	2.854.098	-2.552	5.484	4.164	2.872	1.550
Calabria	-15.509.250	28.159.074	22.469.820	12.422.501	6.731.233	-8.424	15.296	12.205	6.748	3.656
Campania	-47.889.099	69.986.579	67.426.802	21.890.860	18.625.333	-26.013	38.016	36.625	11.891	10.117
Emilia R.	-66.074.403	52.088.261	53.144.235	-13.018.347	-12.620.726	-35.890	28.293	28.867	-7.071	-6.855
Friuli V. G.	-17.585.394	16.714.137	17.765.524	-684.098	153.145	-9.552	9.079	9.650	-372	83
Lazio	-75.653.133	72.041.545	91.274.423	-2.711.605	16.794.071	-41.093	39.132	49.579	-1.473	9.122
Liguria	-26.109.183	23.553.932	24.200.582	-2.185.176	-1.880.288	-14.182	12.794	13.145	-1.187	-1.021
Lombardia	-157.798.790	112.026.446	118.589.201	-43.144.860	-36.913.107	-85.714	60.851	64.416	-23.436	-20.051
Marche	-18.102.493	18.138.939	17.685.843	207.832	-597.577	-9.833	9.853	9.607	113	-325
Molise	-2.838.957	5.720.164	4.090.876	2.829.785	1.185.526	-1.542	3.107	2.222	1.537	644
Piemonte	-67.178.076	53.884.297	54.194.041	-12.341.392	-12.786.303	-36.490	29.269	29.437	-6.704	-6.945
Puglia	-34.390.104	48.546.275	42.393.017	13.992.837	7.475.952	-18.680	26.370	23.027	7.601	4.061
Sardegna	-15.630.062	23.555.722	22.489.825	7.850.894	6.592.108	-8.490	12.795	12.216	4.264	3.581
Sicilia	-42.319.766	65.022.007	59.608.346	22.370.506	16.486.771	-22.987	35.319	32.378	12.151	8.955
Toscana	-52.766.312	44.533.660	45.932.237	-7.495.798	-6.792.633	-28.662	24.190	24.950	-4.072	-3.690
Trentino A. A.	-12.754.148	12.018.873	15.966.165	-539.326	2.972.827	-6.928	6.528	8.673	-293	1.615
Umbria	-9.703.446	9.985.570	9.869.278	369.520	98.566	-5.271	5.424	5.361	201	54
Valle d' Aosta	-1.988.110	1.857.426	2.478.012	-102.381	481.548	-1.080	1.009	1.346	-56	262
Veneto	-63.816.305	52.540.792	52.424.538	-10.458.992	-11.784.987	-34.664	28.539	28.476	-5.681	-6.401

2. ITALY (*Continued*)

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
Total	-450.785	446.543	450.785	-87	0	-48%	47%	48%	0%	0%
Abruzzo	-7.947	11.158	9.843	3.212	1.767	-44%	61%	54%	18%	10%
Basilicata	-2.840	6.101	4.632	3.196	1.725	-44%	94%	71%	49%	27%
Calabria	-9.372	17.017	13.579	7.507	4.068	-47%	85%	67%	37%	20%
Campania	-28.940	42.294	40.747	13.229	11.256	-46%	67%	65%	21%	18%
Emilia R.	-39.929	31.477	32.115	-7.867	-7.627	-50%	39%	40%	-10%	-10%
Friuli V. G.	-10.627	10.100	10.736	-413	93	-47%	44%	47%	-2%	0%
Lazio	-45.718	43.535	55.158	-1.639	10.149	-46%	44%	55%	-2%	10%
Liguria	-15.778	14.234	14.625	-1.321	-1.136	-49%	44%	45%	-4%	-4%
Lombardia	-95.359	67.698	71.664	-26.073	-22.307	-51%	36%	38%	-14%	-12%
Marche	-10.939	10.961	10.687	126	-361	-46%	46%	45%	1%	-2%
Molise	-1.716	3.457	2.473	1.710	717	-41%	83%	59%	41%	17%
Piemonte	-40.596	32.563	32.750	-7.458	-7.727	-51%	41%	41%	-9%	-10%
Puglia	-20.782	29.337	25.618	8.456	4.518	-43%	61%	53%	18%	9%
Sardegna	-9.445	14.234	13.590	4.744	3.983	-46%	69%	66%	23%	19%
Sicilia	-25.574	39.293	36.022	13.519	9.963	-44%	68%	63%	23%	17%
Toscana	-31.887	26.912	27.757	-4.530	-4.105	-52%	44%	45%	-7%	-7%
Trentino A. A.	-7.707	7.263	9.648	-326	1.796	-43%	40%	54%	-2%	10%
Umbria	-5.864	6.034	5.964	223	60	-45%	46%	46%	2%	0%
Valle d' Aosta	-1.201	1.122	1.497	-62	291	-49%	46%	61%	-3%	12%
Veneto	-38.564	31.750	31.680	-6.320	-7.122	-47%	39%	38%	-8%	-9%

2. ITALY (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. kL/hab.	Dép. bénéf. par hab. kL/hab.	Dép. flux par hab. kL/hab.	Solde bénéf. par hab. kL/hab.	Solde flux par hab. kL/hab.
Total	-101%	100%	101%	0%	0%					
Abruzzo	-2%	2%	2%	1%	0%	-10.273	14.425	12.725	4.152	2.285
Basilicata	-1%	1%	1%	1%	0%	-7.543	16.207	12.304	8.488	4.581
Calabria	-2%	4%	3%	2%	1%	-7.330	13.308	10.619	5.871	3.181
Campania	-6%	9%	9%	3%	3%	-8.284	12.106	11.664	3.787	3.222
Emilia R.	-9%	7%	7%	-2%	-2%	-16.527	13.029	13.293	-3.256	-3.157
Friuli V. G.	-2%	2%	2%	0%	0%	-14.426	13.711	14.574	-561	126
Lazio	-10%	10%	12%	0%	2%	-14.372	13.686	17.339	-515	3.190
Liguria	-4%	3%	3%	0%	0%	-15.340	13.839	14.219	-1.284	-1.105
Lombardia	-21%	15%	16%	-6%	-5%	-17.400	12.353	13.076	-4.757	-4.070
Marche	-2%	2%	2%	0%	0%	-12.382	12.407	12.097	142	-409
Molise	0%	1%	1%	0%	0%	-8.399	16.924	12.103	8.372	3.507
Piemonte	-9%	7%	7%	-2%	-2%	-15.306	12.277	12.348	-2.812	-2.913
Puglia	-5%	7%	6%	2%	1%	-8.327	11.755	10.265	3.388	1.810
Sardegna	-2%	3%	3%	1%	1%	-9.276	13.980	13.347	4.659	3.912
Sicilia	-6%	9%	8%	3%	2%	-8.303	12.757	11.695	4.389	3.235
Toscana	-7%	6%	6%	-1%	-1%	-14.661	12.374	12.762	-2.083	-1.887
Trentino A. A.	-2%	2%	2%	0%	0%	-13.954	13.150	17.468	-590	3.253
Umbria	-1%	1%	1%	0%	0%	-11.677	12.016	11.876	445	119
Valle d' Aosta	0%	0%	0%	0%	0%	-16.568	15.479	20.650	-853	4.013
Veneto	-9%	7%	7%	-1%	-2%	-14.238	11.723	11.697	-2.334	-2.629

2. ITALY (*Continued*)

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.	Solde . flux par hab k ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
Total										
Abruzzo	-5,6	7,8	6,9	2,3	1,2	-6,2	8,7	7,7	2,5	1,4
Basilicata	-4,1	8,8	6,7	4,6	2,5	-4,6	9,8	7,4	5,1	2,8
Calabria	-4,0	7,2	5,8	3,2	1,7	-4,4	8,0	6,4	3,5	1,9
Campania	-4,5	6,6	6,3	2,1	1,8	-5,0	7,3	7,0	2,3	1,9
Emilia R.	-9,0	7,1	7,2	-1,8	-1,7	-10,0	7,9	8,0	-2,0	-1,9
Friuli V. G.	-7,8	7,4	7,9	-0,3	0,1	-8,7	8,3	8,8	-0,3	0,1
Lazio	-7,8	7,4	9,4	-0,3	1,7	-8,7	8,3	10,5	-0,3	1,9
Liguria	-8,3	7,5	7,7	-0,7	-0,6	-9,3	8,4	8,6	-0,8	-0,7
Lombardia	-9,5	6,7	7,1	-2,6	-2,2	-10,5	7,5	7,9	-2,9	-2,5
Marche	-6,7	6,7	6,6	0,1	-0,2	-7,5	7,5	7,3	0,1	-0,2
Molise	-4,6	9,2	6,6	4,5	1,9	-5,1	10,2	7,3	5,1	2,1
Piemonte	-8,3	6,7	6,7	-1,5	-1,6	-9,2	7,4	7,5	-1,7	-1,8
Puglia	-4,5	6,4	5,6	1,8	1,0	-5,0	7,1	6,2	2,0	1,1
Sardegna	-5,0	7,6	7,2	2,5	2,1	-5,6	8,4	8,1	2,8	2,4
Sicilia	-4,5	6,9	6,4	2,4	1,8	-5,0	7,7	7,1	2,7	2,0
Toscana	-8,0	6,7	6,9	-1,1	-1,0	-8,9	7,5	7,7	-1,3	-1,1
Trentino A. A.	-7,6	7,1	9,5	-0,3	1,8	-8,4	7,9	10,6	-0,4	2,0
Umbria	-6,3	6,5	6,5	0,2	0,1	-7,1	7,3	7,2	0,3	0,1
Valle d' Aosta	-9,0	8,4	11,2	-0,5	2,2	-10,0	9,4	12,5	-0,5	2,4
Veneto	-7,7	6,4	6,4	-1,3	-1,4	-8,6	7,1	7,1	-1,4	-1,6

2. ITALY (*Continued*)

	Population k	Population %	GDP 1993 ML	GDP 1993 M ECU	GDP 1993 M PPS
Total	58.099	100%	1.559.917.961	847.321	942.667
Abruzzo	1.280	2%	30.179.513	16.393	18.238
Basilicata	623	1%	10.734.871	5.831	6.487
Calabria	2.116	4%	33.296.326	18.086	20.121
Campania	5.781	10%	104.185.872	56.592	62.961
Emilia R.	3.998	7%	131.926.060	71.660	79.724
Friuli V. G.	1.219	2%	37.786.525	20.525	22.834
Lazio	5.264	9%	165.336.528	89.808	99.914
Liguria	1.702	3%	53.718.539	29.179	32.463
Lombardia	9.069	16%	310.342.893	168.573	187.542
Marche	1.462	3%	39.620.161	21.521	23.942
Molise	338	1%	6.909.273	3.753	4.176
Piemonte	4.389	8%	132.498.611	71.971	80.070
Puglia	4.130	7%	79.936.220	43.420	48.306
Sardegna	1.685	3%	34.157.914	18.554	20.641
Sicilia	5.097	9%	95.325.139	51.779	57.606
Toscana	3.599	6%	102.366.964	55.604	61.861
Trentino A. A.	914	2%	29.684.284	16.124	17.938
Umbria	831	1%	21.607.817	11.737	13.057
Valle d' Aosta	120	0%	4.074.133	2.213	2.462
Veneto	4.482	8%	136.230.318	73.998	82.324

3. SPAIN

	Moy prélèv MPtas	Moy depbenf MPtas	Moy depflux MPtas	Solde bén. MPtas	Solde flux. MPtas	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
Total	-19.563.741	19.563.633	19.563.636	-108	-116	-131.195	131.194	131.194	-1	-1
Andalucia	-2.511.969	3.884.583	3.612.265	1.368.574	1.108.639	-16.845	26.050	24.224	9.178	7.435
Aragon	-705.178	566.060	631.943	-135.931	-67.054	-4.729	3.796	4.238	-912	-450
Asturias	-551.418	571.451	565.099	21.282	16.685	-3.698	3.832	3.790	143	112
Baleares	-421.309	308.573	311.452	-113.965	-105.253	-2.825	2.069	2.089	-764	-706
Canarias	-580.208	882.821	830.622	299.536	265.355	-3.891	5.920	5.570	2.009	1.779
Cantabria	-257.841	253.965	245.794	-2.413	-11.543	-1.729	1.703	1.648	-16	-77
Castilla La Mancha	-688.471	788.229	763.976	104.414	75.936	-4.617	5.286	5.123	700	509
Castilla Leon	-1.255.174	1.303.285	1.339.623	52.184	80.915	-8.417	8.740	8.984	350	543
Cataluña	-3.756.716	3.133.405	3.130.515	-641.474	-613.313	-25.193	21.013	20.993	-4.302	-4.113
Ceuta Y Melilla	-48.515	52.352	71.844	4.373	24.113	-325	351	482	29	162
Extremadura	-346.169	551.384	525.332	208.501	179.467	-2.321	3.698	3.523	1.398	1.204
Galicia	-1.086.717	1.560.685	1.407.747	474.948	309.941	-7.288	10.466	9.440	3.185	2.078
La Rioja	-154.695	125.345	143.930	-29.083	-11.763	-1.037	841	965	-195	-79
Madrid	-3.351.675	2.095.373	2.474.505	-1.260.841	-900.818	-22.476	14.052	16.594	-8.455	-6.041
Murcia	-426.918	464.800	456.761	38.462	29.997	-2.863	3.117	3.063	258	201
Navarra	-322.449	258.175	267.728	-62.634	-59.992	-2.162	1.731	1.795	-420	-402
Pais Vasco	-1.269.686	914.752	952.333	-351.994	-335.901	-8.515	6.134	6.386	-2.360	-2.253
Valencia	-1.828.633	1.848.395	1.832.163	25.951	14.474	-12.263	12.395	12.287	174	97

3. SPAIN (*Continued*)

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
Total	-155.034	155.033	155.033	-1	-1	-32%	32%	32%	0%	0%
Andalucia	-19.906	30.783	28.625	10.845	8.785	-31%	47%	44%	17%	14%
Aragon	-5.588	4.486	5.008	-1.077	-531	-34%	27%	30%	-7%	-3%
Asturias	-4.370	4.528	4.478	169	132	-34%	35%	35%	1%	1%
Baleares	-3.339	2.445	2.468	-903	-834	-29%	21%	22%	-8%	-7%
Canarias	-4.598	6.996	6.582	2.374	2.103	-25%	38%	36%	13%	11%
Cantabria	-2.043	2.013	1.948	-19	-91	-33%	32%	31%	0%	-1%
Castilla La Mancha	-5.456	6.246	6.054	827	602	-31%	35%	34%	5%	3%
Castilla Leon	-9.947	10.328	10.616	414	641	-34%	35%	36%	1%	2%
Cataluña	-29.770	24.831	24.808	-5.083	-4.860	-33%	27%	27%	-6%	-5%
Ceuta Y Melilla	-384	415	569	35	191	-29%	31%	43%	3%	14%
Extremadura	-2.743	4.370	4.163	1.652	1.422	-30%	47%	45%	18%	15%
Galicia	-8.612	12.367	11.156	3.764	2.456	-33%	47%	43%	14%	9%
La Rioja	-1.226	993	1.141	-230	-93	-34%	28%	32%	-6%	-3%
Madrid	-26.560	16.605	19.609	-9.992	-7.139	-34%	21%	25%	-13%	-9%
Murcia	-3.383	3.683	3.620	305	238	-29%	31%	31%	3%	2%
Navarra	-2.555	2.046	2.122	-496	-475	-32%	26%	27%	-6%	-6%
Pais Vasco	-10.062	7.249	7.547	-2.789	-2.662	-33%	24%	25%	-9%	-9%
Valencia	-14.491	14.647	14.519	206	115	-31%	32%	31%	0%	0%

3. SPAIN (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. kPtas/hab.	Dép. bénéf. par hab. kPtas/hab.	Dép. flux par hab. kPtas/hab.	Solde bénéf. par hab. kPtas/hab.	Solde flux par hab. kPtas/hab.
Total	-100%	100%	100%	0%	0%					
Andalucia	-13%	20%	18%	7%	6%	-357	552	514	195	158
Aragon	-4%	3%	3%	-1%	0%	-594	476	532	-114	-56
Asturias	-3%	3%	3%	0%	0%	-506	525	519	20	15
Baleares	-2%	2%	2%	-1%	-1%	-577	423	427	-156	-144
Canarias	-3%	5%	4%	2%	1%	-380	579	544	196	174
Cantabria	-1%	1%	1%	0%	0%	-489	482	466	-5	-22
Castilla La Mancha	-4%	4%	4%	1%	0%	-415	475	460	63	46
Castilla Leon	-6%	7%	7%	0%	0%	-498	517	531	21	32
Cataluña	-19%	16%	16%	-3%	-3%	-617	514	514	-105	-101
Ceuta Y Melilla	0%	0%	0%	0%	0%	-385	415	570	35	191
Extremadura	-2%	3%	3%	1%	1%	-328	522	497	197	170
Galicia	-6%	8%	7%	2%	2%	-398	572	516	174	114
La Rioja	-1%	1%	1%	0%	0%	-586	475	545	-110	-45
Madrid	-17%	11%	13%	-6%	-5%	-668	417	493	-251	-179
Murcia	-2%	2%	2%	0%	0%	-401	436	429	36	28
Navarra	-2%	1%	1%	0%	0%	-617	494	512	-120	-115
Pais Vasco	-6%	5%	5%	-2%	-2%	-608	438	456	-169	-161
Valencia	-9%	9%	9%	0%	0%	-469	474	470	7	4

3. SPAIN (*Continued*)

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.	Solde . flux par hab k ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
Total										
Andalucia	-2,4	3,7	3,4	1,3	1,1	-2,8	4,4	4,1	1,5	1,2
Aragon	-4,0	3,2	3,6	-0,8	-0,4	-4,7	3,8	4,2	-0,9	-0,4
Asturias	-3,4	3,5	3,5	0,1	0,1	-4,0	4,2	4,1	0,2	0,1
Baleares	-3,9	2,8	2,9	-1,0	-1,0	-4,6	3,3	3,4	-1,2	-1,1
Canarias	-2,5	3,9	3,7	1,3	1,2	-3,0	4,6	4,3	1,6	1,4
Cantabria	-3,3	3,2	3,1	0,0	-0,1	-3,9	3,8	3,7	0,0	-0,2
Castilla La Mancha	-2,8	3,2	3,1	0,4	0,3	-3,3	3,8	3,6	0,5	0,4
Castilla Leon	-3,3	3,5	3,6	0,1	0,2	-3,9	4,1	4,2	0,2	0,3
Cataluña	-4,1	3,4	3,4	-0,7	-0,7	-4,9	4,1	4,1	-0,8	-0,8
Ceuta Y Melilla	-2,6	2,8	3,8	0,2	1,3	-3,1	3,3	4,5	0,3	1,5
Extremadura	-2,2	3,5	3,3	1,3	1,1	-2,6	4,1	3,9	1,6	1,3
Galicia	-2,7	3,8	3,5	1,2	0,8	-3,2	4,5	4,1	1,4	0,9
La Rioja	-3,9	3,2	3,7	-0,7	-0,3	-4,6	3,8	4,3	-0,9	-0,4
Madrid	-4,5	2,8	3,3	-1,7	-1,2	-5,3	3,3	3,9	-2,0	-1,4
Murcia	-2,7	2,9	2,9	0,2	0,2	-3,2	3,5	3,4	0,3	0,2
Navarra	-4,1	3,3	3,4	-0,8	-0,8	-4,9	3,9	4,1	-0,9	-0,9
Pais Vasco	-4,1	2,9	3,1	-1,1	-1,1	-4,8	3,5	3,6	-1,3	-1,3
Valencia	-3,1	3,2	3,1	0,0	0,0	-3,7	3,8	3,7	0,1	0,0

3. SPAIN (*Continued*)

	Population k	Population %	GDP 1993 MPtas	GDP 1993 M ECU	GDP 1993 M PPS
Andalucia	7.033	18%	8.190.267	54.924	64.904
Aragon	1.188	3%	2.086.189	13.990	16.532
Asturias	1.089	3%	1.624.961	10.897	12.877
Baleares	730	2%	1.446.762	9.702	11.465
Canarias	1.526	4%	2.308.527	15.481	18.294
Cantabria	527	1%	792.424	5.314	6.280
Castilla La Mancha	1.660	4%	2.228.598	14.945	17.661
Castilla Leon	2.521	6%	3.706.974	24.859	29.377
Cataluña	6.093	16%	11.501.327	77.128	91.142
Ceuta Y Melilla	126	0%	168.356	1.129	1.334
Extremadura	1.056	3%	1.166.715	7.824	9.246
Galicia	2.729	7%	3.288.842	22.055	26.062
La Rioja	264	1%	454.667	3.049	3.603
Madrid	5.019	13%	9.774.369	65.547	77.457
Murcia	1.065	3%	1.477.332	9.907	11.707
Navarra	523	1%	999.700	6.704	7.922
Pais Vasco	2.088	5%	3.844.314	25.780	30.465
Valencia	3.902	10%	5.842.074	39.177	46.295

4. SWEDEN

	Moy prélèv MSEK	Moy depbenf MSEK	Moy depflux MSEK	Solde bén. MSEK	Solde flux. MSEK	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
Stockholm	-182.458	150.547	164.279	-31.852	-18.769	-20.006	16.507	18.013	-3.493	-2.058
East Mid Sweden	-117.849	125.427	123.996	7.836	6.175	-12.922	13.753	13.596	859	677
Smal/Islands	-63.822	66.575	63.385	3.120	-503	-6.998	7.300	6.950	342	-55
South Sweden	-102.024	104.357	102.362	2.710	161	-11.187	11.443	11.224	297	18
West Sweden	-145.496	144.171	139.586	-690	-6.115	-15.954	15.808	15.306	-76	-670
North Mid Sweden	-69.741	86.150	83.498	14.459	14.818	-7.647	9.446	9.156	1.585	1.625
Mid Norrland	-32.695	38.462	37.885	5.893	5.186	-3.585	4.217	4.154	646	569
North Norrland	-43.177	54.080	54.668	11.031	11.459	-4.734	5.930	5.994	1.210	1.257

4. SWEDEN (*Continued*)

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
Stockholm	-17.200	14.192	15.486	-3.003	-1.769	-54%	45%	49%	-9%	-6%
East Mid Sweden	-11.110	11.824	11.689	739	582	-53%	56%	56%	4%	3%
Smal/Islands	-6.017	6.276	5.976	294	-47	-51%	53%	51%	2%	0%
South Sweden	-9.618	9.838	9.649	255	15	-52%	53%	52%	1%	0%
West Sweden	-13.716	13.591	13.159	-65	-576	-52%	52%	50%	0%	-2%
North Mid Sweden	-6.574	8.121	7.871	1.363	1.397	-53%	65%	63%	11%	11%
Mid Norrland	-3.082	3.626	3.571	555	489	-50%	59%	58%	9%	8%
North Norrland	-4.070	5.098	5.153	1.040	1.080	-51%	64%	65%	13%	14%

4. SWEDEN (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. kSEK/hab.	Dép. bénéf. par hab. kSEK/hab.	Dép. flux par hab. kSEK/hab.	Solde bénéf. par hab. kSEK/hab.	Solde flux par hab. kSEK/hab.
Stockholm	-24%	20%	21%	-4%	-2%	-109	90	98	-19	-11
East Mid Sweden	-15%	16%	16%	1%	1%	-79	84	83	5	4
Smal/Islands	-8%	9%	8%	0%	0%	-81	84	80	4	-1
South Sweden	-13%	14%	13%	0%	0%	-82	84	82	2	0
West Sweden	-19%	19%	18%	0%	-1%	-84	83	80	0	-4
North Mid Sweden	-9%	11%	11%	2%	2%	-81	100	97	17	17
Mid Norrland	-4%	5%	5%	1%	1%	-82	97	95	15	13
North Norrland	-6%	7%	7%	1%	1%	-82	103	104	21	22

4. SWEDEN (*Continued*)

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.k	Solde . flux par hab ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
Stockholm	-11,9	9,8	10,7	-2,1	-1,2	-10,3	8,5	9,2	-1,8	-1,1
East Mid Sweden	-8,7	9,3	9,2	0,6	0,5	-7,5	8,0	7,9	0,5	0,4
Smal/Islands	-8,9	9,2	8,8	0,4	-0,1	-7,6	7,9	7,6	0,4	-0,1
South Sweden	-9,0	9,2	9,0	0,2	0,0	-7,7	7,9	7,8	0,2	0,0
West Sweden	-9,2	9,1	8,8	0,0	-0,4	-7,9	7,8	7,6	0,0	-0,3
North Mid Sweden	-8,8	10,9	10,6	1,8	1,9	-7,6	9,4	9,1	1,6	1,6
Mid Norrland	-9,0	10,6	10,5	1,6	1,4	-7,8	9,1	9,0	1,4	1,2
North Norrland	-9,0	11,3	11,4	2,3	2,4	-7,8	9,7	9,8	2,0	2,1

4. SWEDEN (*Continued*)

	Population k	Population %	GDP 1993 MSEK	GDP 1993 M ECU	GDP 1993 M PPS
Stockholm	1.678	19%	336.336	36.879	31.706
East Mid Sweden	1.485	17%	222.017	24.344	20.930
Smal/Islands	790	9%	125.455	13.756	11.827
South Sweden	1.242	14%	196.800	21.579	18.552
West Sweden	1.740	20%	278.607	30.549	26.264
North Mid Sweden	865	10%	132.815	14.563	12.520
Mid Norrland	397	5%	65.390	7.170	6.164
North Norrland	524	6%	84.515	9.267	7.967

5. UNITED KINGDOM

	Moy prélèv M£	Moy depbenf M£	Moy depflux M£	Solde bén. M£	Solde flux. M£	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
Total	-249.651.252	249.651.252	249.651.252	0	0	-320.066	320.066	320.066	0	0
North	-11.392.621	14.121.749	14.222.284	2.730.344	2.839.720	-14.606	18.105	18.234	3.500	3.641
Y&H	-19.421.591	20.160.731	19.155.965	716.798	-278.493	-24.899	25.847	24.559	919	-357
EMids	-16.495.371	16.745.493	15.859.280	256.933	-638.343	-21.148	21.469	20.332	329	-818
EAng	-8.778.468	8.436.088	8.200.613	-332.121	-583.302	-11.254	10.815	10.514	-426	-748
SE	-92.447.846	75.561.256	80.585.943	-16.788.984	-11.837.455	-118.523	96.873	103.315	-21.524	-15.176
SW	-19.930.888	19.714.700	20.417.380	-186.024	468.827	-25.552	25.275	26.176	-238	601
WMids	-20.100.504	21.460.761	20.392.200	1.349.579	308.116	-25.770	27.514	26.144	1.730	395
NW	-24.509.929	27.927.176	27.250.942	3.406.984	2.753.223	-31.423	35.804	34.937	4.368	3.530
Wales	-10.277.697	13.099.393	12.401.043	2.810.526	2.108.817	-13.177	16.794	15.899	3.603	2.704
Scot	-20.971.108	24.517.589	23.470.465	3.467.166	2.492.354	-26.886	31.433	30.090	4.445	3.195
Nlre	-5.325.229	7.906.316	7.695.136	2.568.800	2.366.535	-6.827	10.136	9.866	3.293	3.034

5. UNITED KINGDOM (*Continued*)

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
Total	-362.984	362.984	362.984	0	0	-40%	40%	40%	0%	0%
North	-16.565	20.533	20.679	3.970	4.129	-38%	47%	47%	9%	9%
Y&H	-28.238	29.313	27.852	1.042	-405	-39%	41%	39%	1%	-1%
EMids	-23.984	24.348	23.059	374	-928	-40%	41%	38%	1%	-2%
EAng	-12.764	12.266	11.923	-483	-848	-38%	37%	36%	-1%	-3%
SE	-134.416	109.864	117.170	-24.411	-17.211	-41%	34%	36%	-7%	-5%
SW	-28.979	28.665	29.686	-270	682	-41%	40%	42%	0%	1%
WMids	-29.225	31.203	29.649	1.962	448	-38%	41%	39%	3%	1%
NW	-35.636	40.605	39.622	4.954	4.003	-39%	45%	44%	5%	4%
Wales	-14.943	19.046	18.031	4.086	3.066	-39%	49%	47%	11%	8%
Scot	-30.491	35.648	34.125	5.041	3.624	-39%	45%	43%	6%	5%
Nlre	-7.743	11.495	11.188	3.735	3.441	-38%	56%	55%	18%	17%

5. UNITED KINGDOM (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. k£/hab.	Dép. bénéf. par hab. k£/hab.	Dép. flux par hab. k£/hab.	Solde bénéf. par hab. k£/hab.	Solde flux par hab. k£/hab.
Total	-100%	100%	100%	0%	0%					
North	-5%	6%	6%	1%	1%	-3.680	4.561	4.594	882	917
Y&H	-8%	8%	8%	0%	0%	-3.881	4.029	3.828	143	-56
EMids	-7%	7%	6%	0%	0%	-4.049	4.110	3.893	63	-157
EAng	-4%	3%	3%	0%	0%	-4.200	4.036	3.924	-159	-279
SE	-37%	30%	32%	-7%	-5%	-5.213	4.261	4.544	-947	-668
SW	-8%	8%	8%	0%	0%	-4.189	4.143	4.291	-39	99
WMids	-8%	9%	8%	1%	0%	-3.808	4.065	3.863	256	58
NW	-10%	11%	11%	1%	1%	-3.830	4.364	4.259	532	430
Wales	-4%	5%	5%	1%	1%	-3.544	4.517	4.276	969	727
Scot	-8%	10%	9%	1%	1%	-4.104	4.798	4.593	679	488
Nlre	-2%	3%	3%	1%	1%	-3.271	4.856	4.727	1.578	1.454

5. UNITED KINGDOM *(Continued)*

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.	Solde . flux par hab k ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
Total										
North	-4,7	5,8	5,9	1,1	1,2	-5,4	6,6	6,7	1,3	1,3
Y&H	-5,0	5,2	4,9	0,2	-0,1	-5,6	5,9	5,6	0,2	-0,1
EMids	-5,2	5,3	5,0	0,1	-0,2	-5,9	6,0	5,7	0,1	-0,2
EAng	-5,4	5,2	5,0	-0,2	-0,4	-6,1	5,9	5,7	-0,2	-0,4
SE	-6,7	5,5	5,8	-1,2	-0,9	-7,6	6,2	6,6	-1,4	-1,0
SW	-5,4	5,3	5,5	-0,1	0,1	-6,1	6,0	6,2	-0,1	0,1
WMids	-4,9	5,2	5,0	0,3	0,1	-5,5	5,9	5,6	0,4	0,1
NW	-4,9	5,6	5,5	0,7	0,6	-5,6	6,3	6,2	0,8	0,6
Wales	-4,5	5,8	5,5	1,2	0,9	-5,2	6,6	6,2	1,4	1,1
Scot	-5,3	6,2	5,9	0,9	0,6	-6,0	7,0	6,7	1,0	0,7
Nlre	-4,2	6,2	6,1	2,0	1,9	-4,8	7,1	6,9	2,3	2,1

5. UNITED KINGDOM ***(Continued)*** *(Continued)*

	Population k	Population %	GDP 1993 M£	GDP 1993 M ECU	GDP 1993 M PPS
Total	58.071	100%	627.712.020	804.759	912.672
North	3.096	5%	30.025.320	38.494	43.656
Y&H	5.004	9%	49.687.560	63.702	72.244
EMids	4.074	7%	41.290.860	52.937	60.036
EAng	2.090	4%	23.051.340	29.553	33.516
SE	17.733	31%	225.013.620	288.479	327.163
SW	4.758	8%	48.936.420	62.739	71.152
WMids	5.279	9%	52.386.360	67.162	76.167
NW	6.399	11%	62.423.400	80.030	90.761
Wales	2.900	5%	26.542.620	34.029	38.592
Scot	5.110	9%	54.288.780	69.601	78.934
Nlre	1.628	3%	14.065.740	18.033	20.451

6. GERMANY

	Moy prélèv MDM	Moy depbenf MDM	Moy depflux MDM	Solde bén. MDM	Solde flux. MDM	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
total	-457.348	457.367	457.365	22	16	-235.746	235.756	235.755	11	8
Baden-Wurttemberg	-67.261	45.441	47.579	-21.479	-19.649	-34.671	23.423	24.525	-11.071	-10.128
Bayern	-75.153	53.879	58.851	-21.226	-16.458	-38.739	27.773	30.336	-10.941	-8.484
Berlin	-19.981	31.875	34.552	11.625	14.568	-10.299	16.430	17.810	5.992	7.509
Brandenburg	-8.197	20.031	17.104	11.761	8.846	-4.225	10.325	8.816	6.062	4.560
Bremen	-5.340	4.842	5.553	-488	209	-2.752	2.496	2.862	-251	108
Hamburg	-15.314	9.565	14.032	-5.836	-1.426	-7.894	4.930	7.233	-3.008	-735
Hessen	-42.085	28.845	30.224	-13.149	-11.858	-21.693	14.869	15.579	-6.778	-6.112
Mecklenburg-Vorpommern	-5.600	15.756	13.362	10.137	7.701	-2.887	8.122	6.888	5.225	3.970
Niedersachsen	-41.964	38.108	39.748	-4.194	-2.230	-21.631	19.643	20.489	-2.162	-1.149
Nordrhein-Westfalen	-104.960	93.573	92.923	-11.011	-11.518	-54.103	48.234	47.898	-5.676	-5.937
Rheinland-Pfalz	-21.545	17.367	17.447	-4.133	-4.104	-11.106	8.952	8.993	-2.131	-2.115
Saarland	-5.532	7.838	7.324	2.321	1.782	-2.851	4.040	3.775	1.196	918
Sachsen	-13.626	34.695	28.680	21.033	14.989	-7.024	17.884	14.783	10.842	7.726
Sachsen-Anhalt	-8.285	22.234	18.880	13.909	10.532	-4.270	11.461	9.732	7.170	5.429
Schleswig-Holstein	-15.073	12.447	13.688	-2.600	-1.283	-7.769	6.416	7.056	-1.340	-662
Thuringen	-7.434	20.872	17.418	13.354	9.915	-3.832	10.759	8.978	6.883	5.111

6. GERMANY *(Continued)*

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
total	-201.147	201.156	201.155	10	7	-14%	14%	14%	0%	0%
Baden-Wurttemberg	-29.583	19.986	20.926	-9.447	-8.642	-14%	10%	10%	-5%	-4%
Bayern	-33.051	23.695	25.882	-9.335	-7.238	-14%	10%	11%	-4%	-3%
Berlin	-8.788	14.019	15.197	5.113	6.407	-16%	26%	28%	9%	12%
Brandenburg	-3.605	8.811	7.523	5.173	3.891	-16%	38%	33%	22%	17%
Bremen	-2.348	2.129	2.442	-215	92	-14%	13%	15%	-1%	1%
Hamburg	-6.735	4.207	6.172	-2.567	-627	-13%	8%	12%	-5%	-1%
Hessen	-18.510	12.686	13.293	-5.783	-5.215	-13%	9%	9%	-4%	-4%
Mecklenburg-Vorpommern	-2.463	6.930	5.877	4.458	3.387	-16%	45%	39%	29%	22%
Niedersachsen	-18.456	16.760	17.482	-1.845	-981	-15%	13%	14%	-1%	-1%
Nordrhein-Westfalen	-46.163	41.155	40.869	-4.843	-5.066	-15%	13%	13%	-2%	-2%
Rheinland-Pfalz	-9.476	7.638	7.674	-1.818	-1.805	-15%	12%	12%	-3%	-3%
Saarland	-2.433	3.447	3.221	1.021	784	-13%	19%	17%	6%	4%
Sachsen	-5.993	15.260	12.614	9.251	6.593	-15%	39%	32%	24%	17%
Sachsen-Anhalt	-3.644	9.780	8.304	6.118	4.632	-15%	41%	35%	26%	19%
Schleswig-Holstein	-6.629	5.474	6.020	-1.144	-564	-15%	13%	14%	-3%	-1%
Thuringen	-3.270	9.180	7.661	5.873	4.361	-16%	44%	36%	28%	21%

6. GERMANY (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. kDM/hab.	Dép. bénéf. par hab. kDM/hab.	Dép. flux par hab. kDM/hab.	Solde bénéf. par hab. kDM/hab.	Solde flux par hab. kDM/hab.
total	-100%	100%	100%	0%	0%					
Baden-Wurttemberg	-15%	10%	10%	-5%	-4%	-7	4	5	-2	-2
Bayern	-16%	12%	13%	-5%	-4%	-6	5	5	-2	-1
Berlin	-4%	7%	8%	3%	3%	-6	9	10	3	4
Brandenburg	-2%	4%	4%	3%	2%	-3	8	7	5	3
Bremen	-1%	1%	1%	0%	0%	-8	7	8	-1	0
Hamburg	-3%	2%	3%	-1%	0%	-9	6	8	-3	-1
Hessen	-9%	6%	7%	-3%	-3%	-7	5	5	-2	-2
Mecklenburg-Vorpommern	-1%	3%	3%	2%	2%	-3	9	7	5	4
Niedersachsen	-9%	8%	9%	-1%	0%	-6	5	5	-1	0
Nordrhein-Westfalen	-23%	20%	20%	-2%	-3%	-6	5	5	-1	-1
Rheinland-Pfalz	-5%	4%	4%	-1%	-1%	-6	4	4	-1	-1
Saarland	-1%	2%	2%	1%	0%	-5	7	7	2	2
Sachsen	-3%	8%	6%	5%	3%	-3	8	6	5	3
Sachsen-Anhalt	-2%	5%	4%	3%	2%	-3	8	7	5	4
Schleswig-Holstein	-3%	3%	3%	-1%	0%	-6	5	5	-1	0
Thuringen	-2%	5%	4%	3%	2%	-3	8	7	5	4

6. GERMANY (*Continued*)

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.	Solde . flux par hab k ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
total										
Baden-Wurttemberg	-3,4	2,3	2,4	-1,1	-1,0	-2,9	2,0	2,1	-0,9	-0,8
Bayern	-3,3	2,3	2,6	-0,9	-0,7	-2,8	2,0	2,2	-0,8	-0,6
Berlin	-3,0	4,7	5,1	1,7	2,2	-2,5	4,0	4,4	1,5	1,8
Brandenburg	-1,7	4,1	3,5	2,4	1,8	-1,4	3,5	3,0	2,0	1,5
Bremen	-4,0	3,6	4,2	-0,4	0,2	-3,4	3,1	3,6	-0,3	0,1
Hamburg	-4,6	2,9	4,3	-1,8	-0,4	-4,0	2,5	3,6	-1,5	-0,4
Hessen	-3,6	2,5	2,6	-1,1	-1,0	-3,1	2,1	2,2	-1,0	-0,9
Mecklenburg-Vorpommern	-1,6	4,4	3,7	2,8	2,1	-1,3	3,7	3,2	2,4	1,8
Niedersachsen	-2,8	2,6	2,7	-0,3	-0,2	-2,4	2,2	2,3	-0,2	-0,1
Nordrhein-Westfalen	-3,1	2,7	2,7	-0,3	-0,3	-2,6	2,3	2,3	-0,3	-0,3
Rheinland-Pfalz	-2,8	2,3	2,3	-0,5	-0,5	-2,4	2,0	2,0	-0,5	-0,5
Saarland	-2,6	3,7	3,5	1,1	0,8	-2,2	3,2	3,0	0,9	0,7
Sachsen	-1,5	3,9	3,2	2,3	1,7	-1,3	3,3	2,7	2,0	1,4
Sachsen-Anhalt	-1,5	4,1	3,5	2,6	1,9	-1,3	3,5	3,0	2,2	1,7
Schleswig-Holstein	-2,9	2,4	2,6	-0,5	-0,2	-2,5	2,0	2,2	-0,4	-0,2
Thuringen	-1,5	4,2	3,5	2,7	2,0	-1,3	3,6	3,0	2,3	1,7

6. GERMANY (*Continued*)

	Population k	Population %	GDP 1993 MDM	GDP 1993 M ECU	GDP 1993 M PPS
total	81.181	100%	3.160.809	1.629.283	1.390.163
Baden-Wurttemberg	10.198	13%	469.794	242.162	206.623
Bayern	11.819	15%	534.239	275.381	234.949
Berlin	3.471	4%	123.972	63.903	54.525
Brandenburg	2.541	3%	52.434	27.028	23.063
Bremen	684	1%	38.080	19.629	16.748
Hamburg	1.700	2%	116.177	59.885	51.097
Hessen	5.946	7%	319.017	164.442	140.308
Mecklenburg-Vorpommern	1.852	2%	34.631	17.851	15.232
Niedersachsen	7.618	9%	283.483	146.125	124.680
Nordrhein-Westfalen	17.725	22%	715.718	368.927	314.784
Rheinland-Pfalz	3.904	5%	141.017	72.689	62.022
Saarland	1.085	1%	41.898	21.597	18.428
Sachsen	4.624	6%	88.963	45.857	39.129
Sachsen-Anhalt	2.789	3%	54.219	27.948	23.848
Schleswig-Holstein	2.687	3%	99.344	51.208	43.693
Thuringen	2.538	3%	47.823	24.651	21.034

7. PORTUGAL

	Moy prélèv M£	Moy depbenf M£	Moy depflux M£	Solde bén. M£	Solde flux. M£	Moy prélèv M ECU	Moy depbenf M ECU	Moy depflux M ECU	Solde bén. M ECU	Solde flux. M ECU
total	-6.020.727		6.022.758	2.031		-31.962		31.973	11	
Norte	-1.968.085		1.857.862	-103.046		-10.448		9.863	-547	
Centro	-916.103		986.001	71.018		-4.863		5.234	377	
Lisboa e V.T.	-2.686.013		2.569.839	-123.780		-14.259		13.643	-657	
Alentejo	-246.344		364.790	118.451		-1.308		1.937	629	
Algarve	-204.181		244.265	39.388		-1.084		1.297	209	

7. PORTUGAL (*Continued*)

	Moy prélèv M PPS	Moy depbenf M PPS	Moy depflux M PPS	Solde bén. M PPS	Solde flux. M PPS	Moy prélèv % du GDP reg.	Moy depbenf % du GDP reg.	Moy depflux % du GDP reg.	Solde bén. % du GDP reg.	Solde flux. % du GDP reg.
total	-47.720		47.736	16		-46%		46%	0%	
Norte	-15.599		14.725	-817		-46%		43%	-2%	
Centro	-7.261		7.815	563		-54%		58%	4%	
Lisboa e V.T.	-21.289		20.368	-981		-42%		41%	-2%	
Alentejo	-1.953		2.892	939		-54%		81%	26%	
Algarve	-1.618		1.936	312		-50%		60%	10%	

7. PORTUGAL (*Continued*)

	Moy prélèv % des dépenses	Moy depbenf % des dépenses	Moy depflux % des dépenses	Solde bén. % des dépenses	Solde flux. % des dépenses	Prélev. par hab. k£/hab.	Dép. bénéf. par hab. k£/hab.	Dép. flux par hab. k£/hab.	Solde bénéf. par hab. k£/hab.	Solde flux par hab. k£/hab.
total	-100%		100%		0%					
Norte	-33%		31%		-2%	-563		532		-29
Centro	-15%		16%		1%	-534		575		41
Lisboa e V.T.	-45%		43%		-2%	-815		780		-38
Alentejo	-4%		6%		2%	-460		682		221
Algarve	-3%		4%		1%	-595		712		115

7. PORTUGAL (*Continued*)

	Prélev. par hab. k ECU/hab.	Dép. bénéf. par hab k ECU/hab.	Dép. flux par hab. k ECU/hab.	Solde bénéf. par hab. k ECU/hab.	Solde . flux par hab k ECU/hab.	Prélev. par hab. k PPS/hab.	Dép. bénéf. par hab. k PPS/hab.	Dép. flux par hab. k PPS/hab.	Solde bénéf. par hab. k PPS/hab.	Solde flux par hab. k PPS/hab.
total										
Norte	-3,0		2,8		-0,2	-4,5		4,2		-0,2
Centro	-2,8		3,1		0,2	-4,2		4,6		0,3
Lisboa e V.T.	-4,3		4,1		-0,2	-6,5		6,2		-0,3
Alentejo	-2,4		3,6		1,2	-3,6		5,4		1,8
Algarve	-3,2		3,8		0,6	-4,7		5,6		0,9

7. PORTUGAL (*Continued*)

	Population k	Population %	GDP 1993 M£	GDP 1993 M ECU	GDP 1993 M PPS
total	9.383	100%	13.195.884	70.053	104.589
Norte	3.495	37%	4.303.689	22.847	34.110
Centro	1.714	18%	1.695.707	9.002	13.440
Lisboa e V.T.	3.296	35%	6.336.955	33.641	50.226
Alentejo	535	6%	452.653	2.403	3.588
Algarve	343	4%	406.879	2.160	3.225

C. Regional Maps of the Results

Figure 1: Interregional Transfers in France

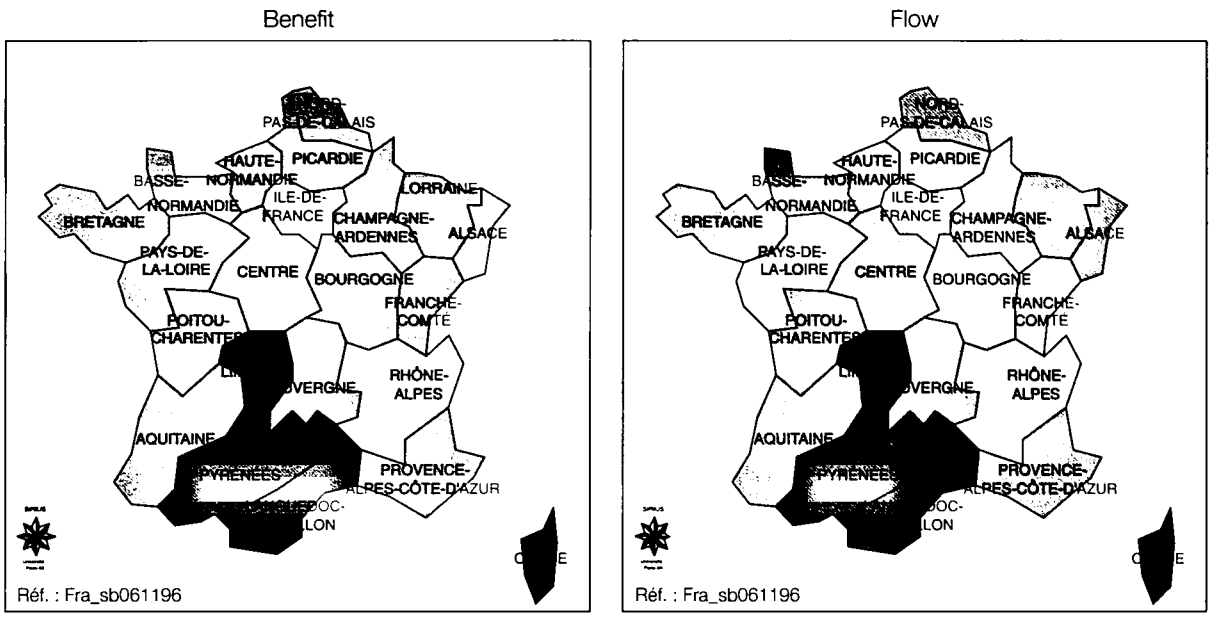


Figure 2: Interregional Transfers in Germany

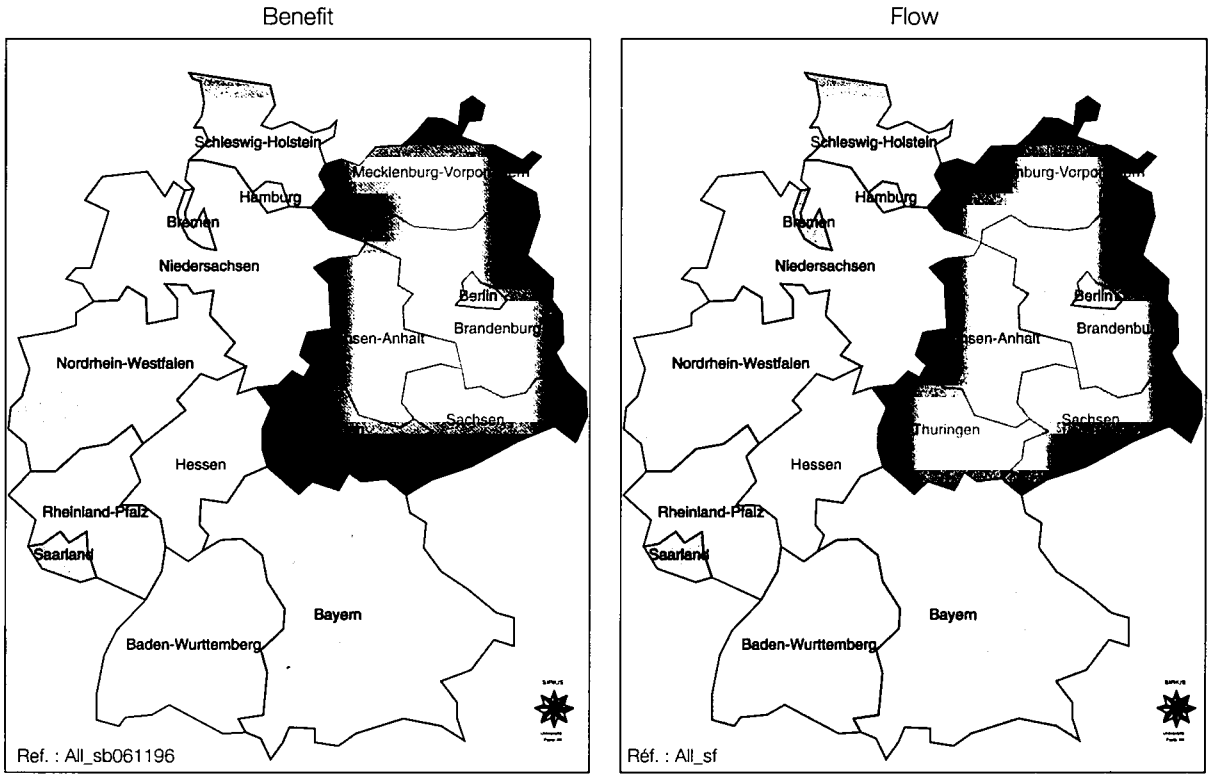


Figure 3: Interregional Transfers in Italy

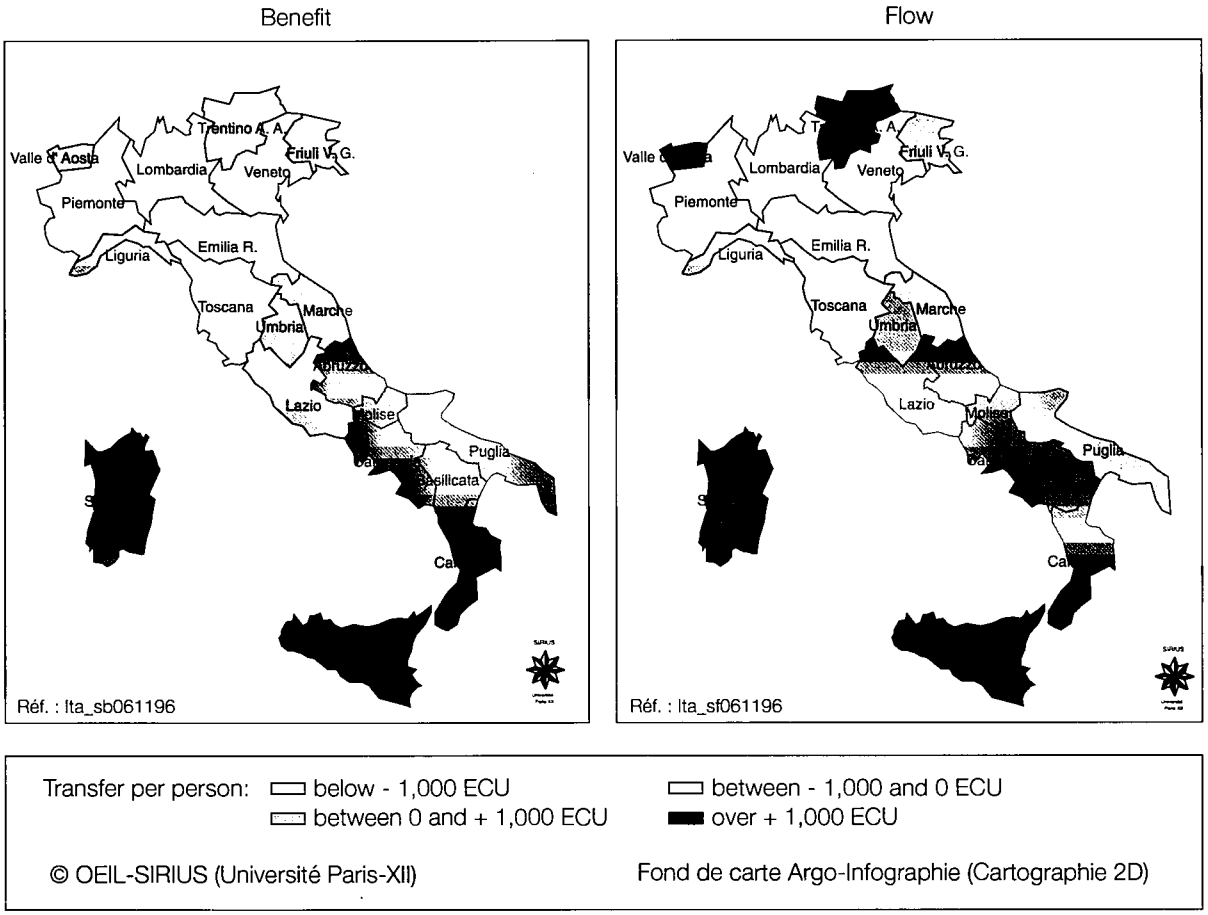


Figure 4: Interregional Transfers in Portugal

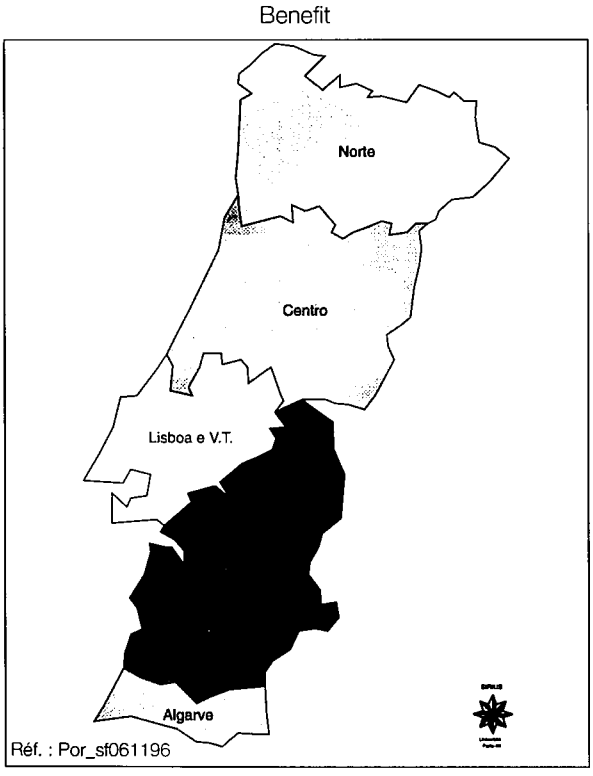


Figure 5: Interregional Transfers in Spain

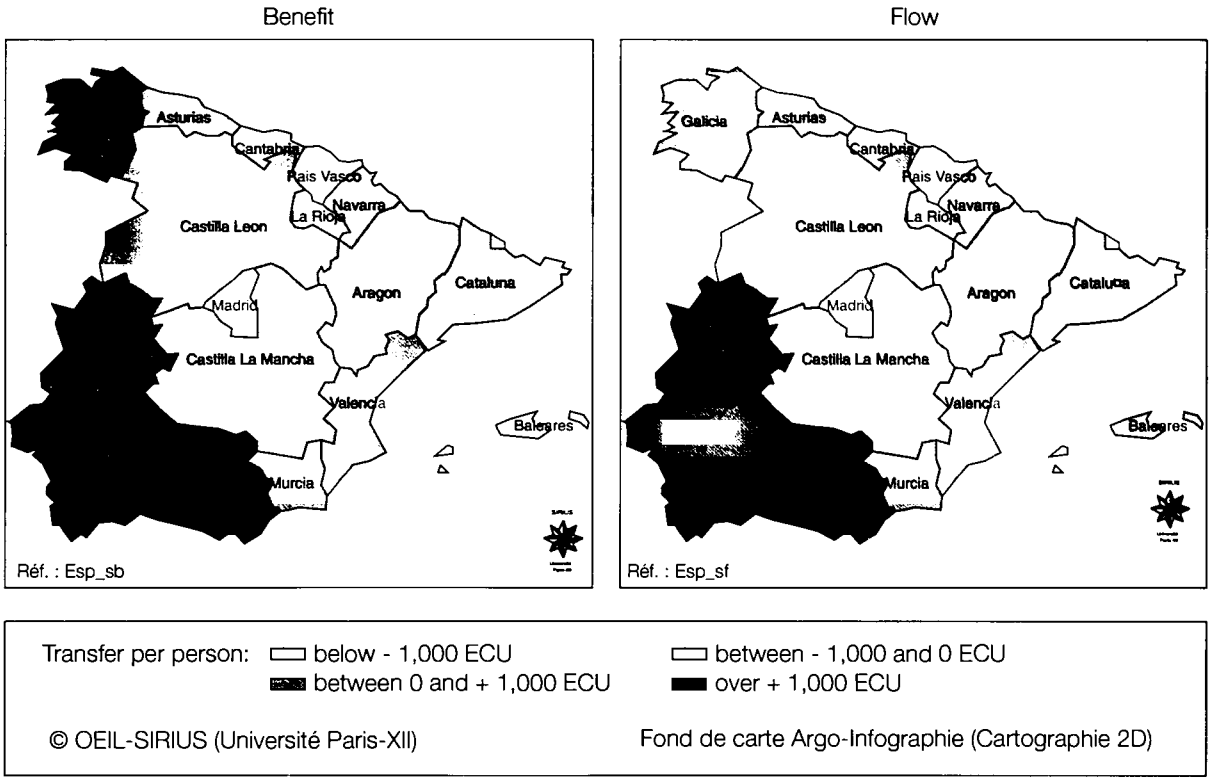


Figure 6: Interregional Transfers in Sweden

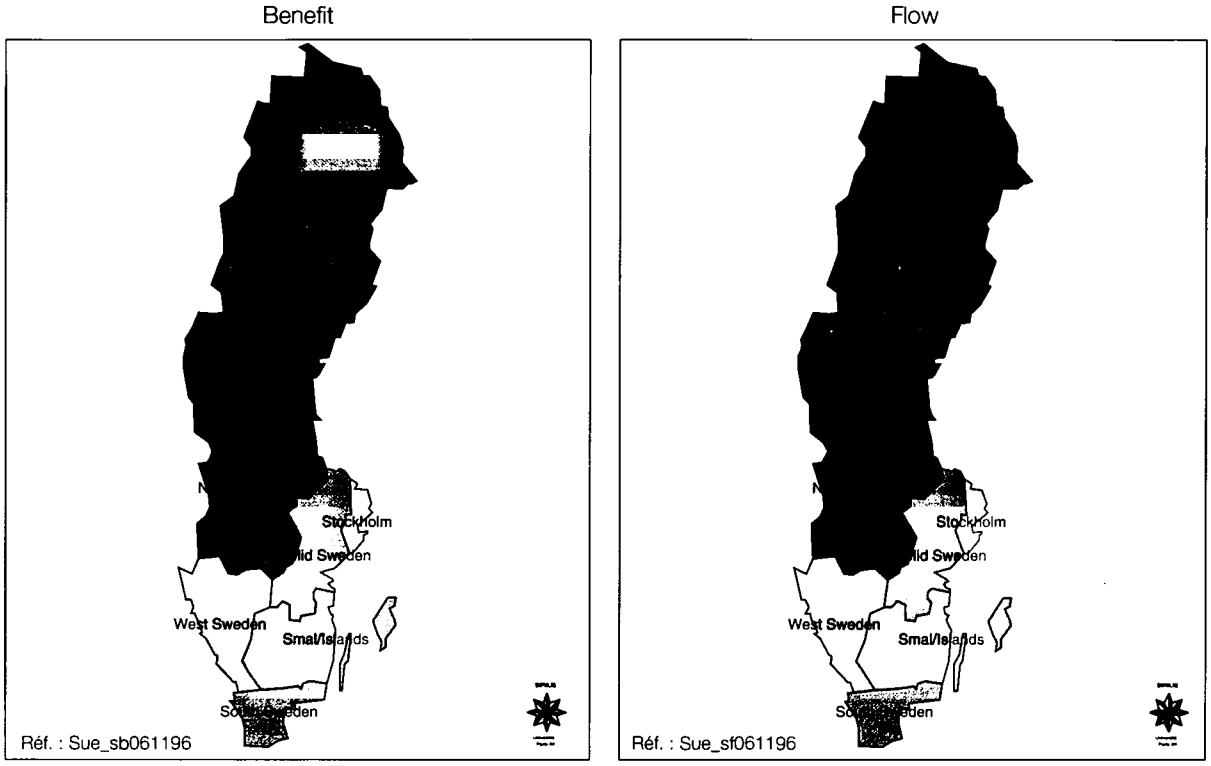


Figure 7: Interregional Transfers in the United Kingdom

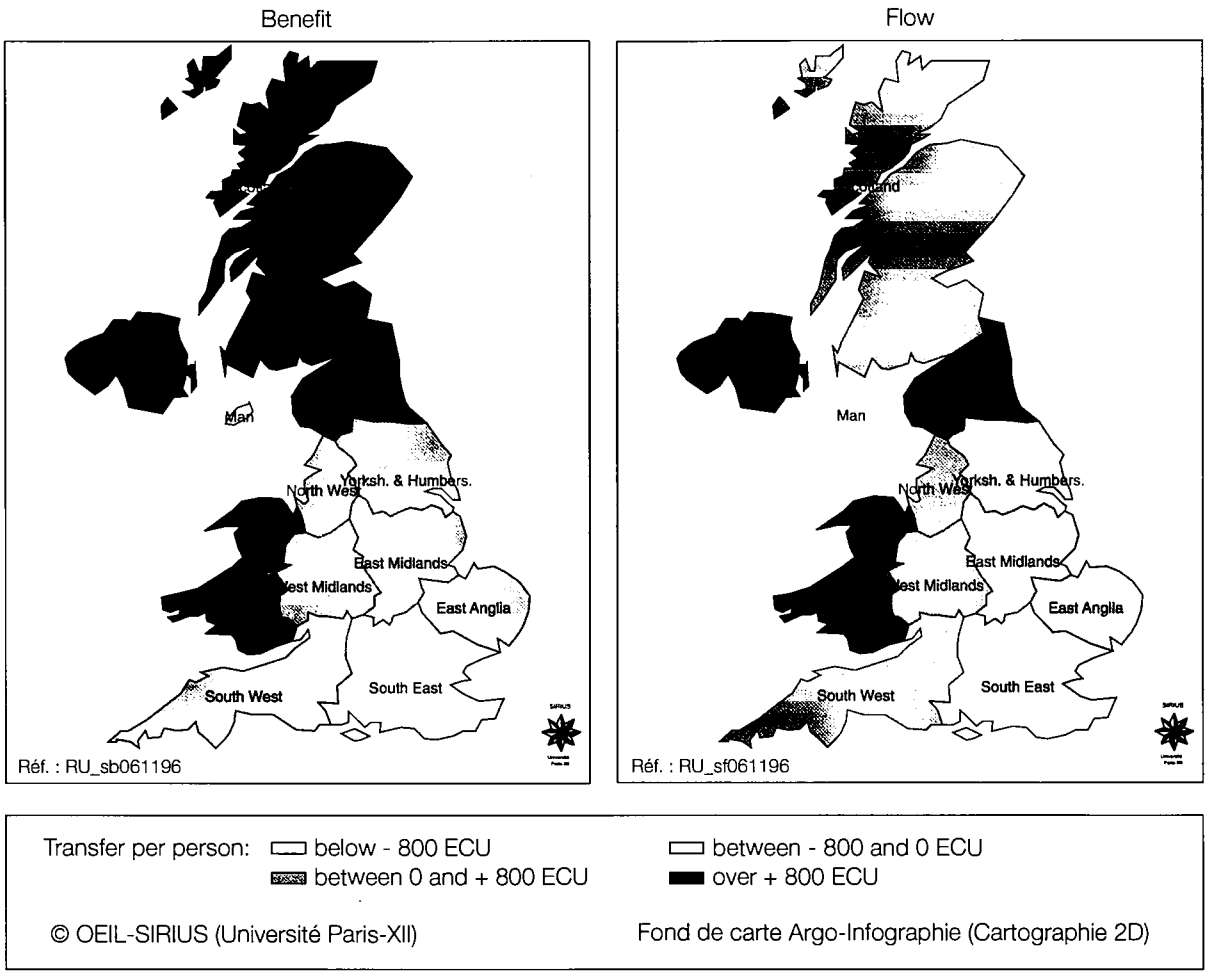
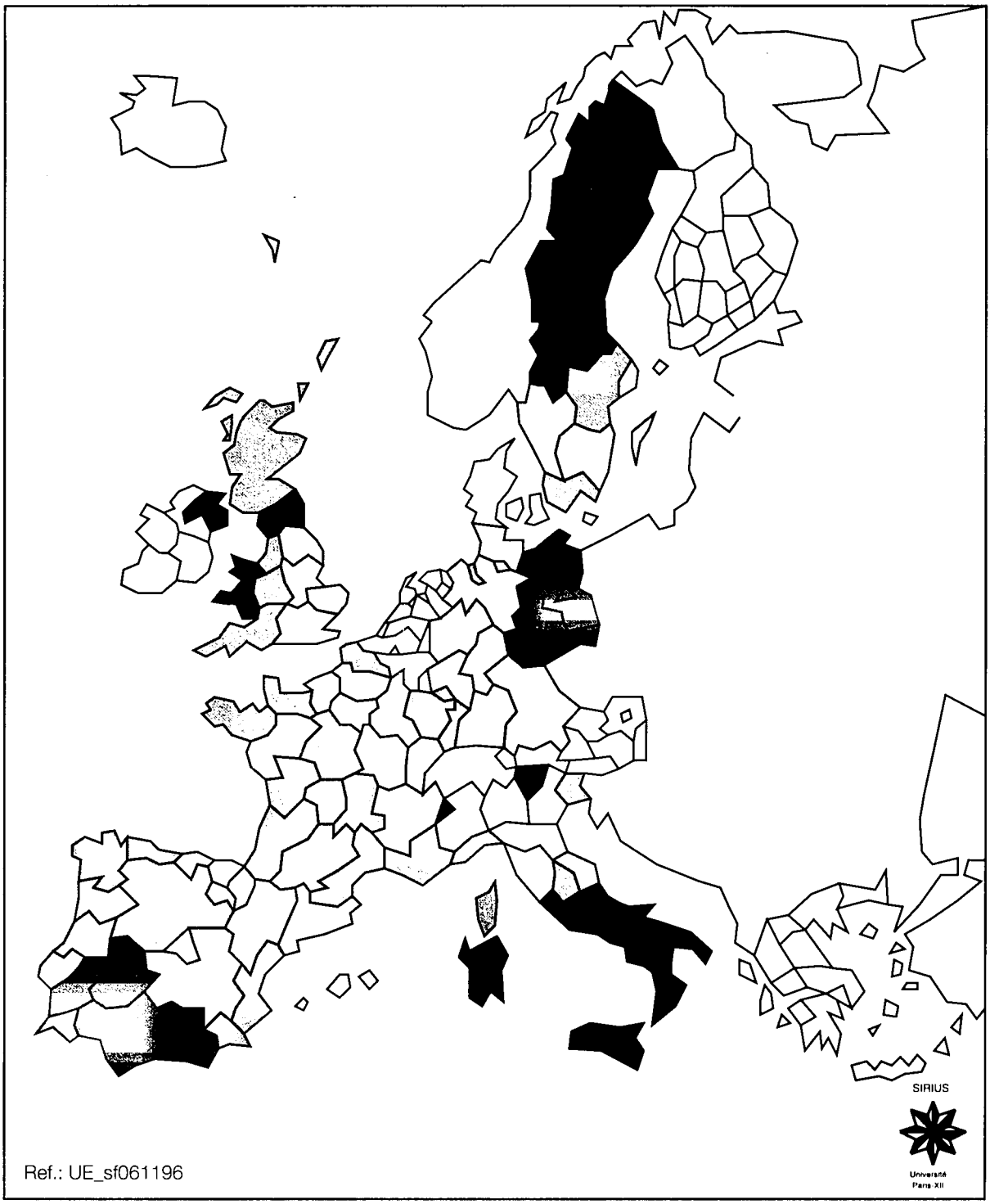


Figure 8: Interregional Transfers in Selected EU Countries (Flow Analysis)



Transfer per person: below - 1,000 ECU; between - 1,000 and 0 ECU; between 0 and + 1,000 ECU; over + 1,000 ECU

Fond de carte Argo-Infographie (Cartographie 2D)

D. Main Expenditures and Revenues by Country-Related Regional Proxies

SPAIN

MAIN REVENUES		%of expenditures	
Retención al trabajo, actividades profesionales y premios	-3.736.390	-19,1	RFDTF
IVA operaciones interiores	-2.563.275	-13,1	CFHCRE
Hidrocarburos	-1.215.597	-6,2	FUEL
Impuesto sobre sociedades	-1.153.153	-5,9	SOC1 SOC2 SOC3
Retención al Capital Mobiliario	-897.105	-4,6	IEFAMR IEFAME INTFAM
Sub total	*-11.417.224*	*-48,9*	

MAIN EXPENDITURES			FLOW APPROACH	BENEFIT APPROACH
Obras Públicas, Transporte y Medio Ambiente Infraestructura de carreterasInversiones reales	341.990	1,7	KMAUT MAROUT	FUEL KMCARR INVCA MAROU
Trabajo y Seguridad Social Dirección y Servicios Generales de Seguridad y Protección socialActivos financieros	345.025	1,8	VIEU MORTI HGPOB	VIEU MORTI HGPOB PDCRE
Trsfrt corporaciones locales/ Trsfrt corporaciones locales/Diputaciones/ T. courants	345.111	1,8	TR1 PDCRE	TR1 PDCRE
Trsfrt corporaciones locales/ Ayuntamientos/T. courants	608.327	3,1	TR1 PDCRE	TR1 PDCRE
Clases Pasivas Pensiones de Clases pasivasGastos de personal	673.191	3,4	RA86 EMP86	PCI PENAS
Aportación a la C.E.E Aporte a la CEE/T. courants	877.887	4,5	CHOMAGR	CHOMAGR
Trabajo y Seguridad Social Inst. Nac de EmpleoTransferencias Corrientes	953.236	4,9	CHOM	CHOM
Transferencias a las Comunidades Autonomas Transferencias a las Comunidades Autonomas/ T. courantsmontants répartis	1.790.608	9,2	TR1	TR1
Aportación del Estado a la Tesorería de la Seguridad Social Seguridad Social/T. courants	2.208.161	11,3	PSATS ESES ESCF MORTI	PSATS ESES ESCF MORTI
Sub total	*8.143.536*	*41,6*		

SPAIN *(continued)*

REGIONAL KEYS	
CFHCRE	Consumo final de los hogares-Mill pts
CHOM	Nombre de chômeurs
CHOMAGR	(50%CHÔMEURS)+(50% VA AGRICOLE)
EMP86	Empleo en servicios no venta-Miles de personas
ESCF	Establecimientos sanitarios. Camas en funcionamiento-Nº de camas
ESES	Establecimientos sanitarios. Establecimientos-Nº de establecimientos
FUEL	Consumo de elementos energéticos. Combustibles y carburantes liquidos-miles de TEC
HGPOB	Habitaciones en establecimientos hoteleros-Nº de habitaciones
IEFAMR	Cta de renta de los hogares. Intereses efectivos, dividendos o rentas (cuasi sociedades) Recursos-mill pts
INTFAM	Intereses y dividendos cobrados por familias-Mill pts
INVCA	Intereses y dividendos cobrados por familias-Mill pts
KMAUT	Autopistas y autovias -Km
KMCARR	Red de carreteras publicas -Km
MAROUT	Flux de marchandises par route (déchargées)
MORTI	Mortalité infantile (indicateur)
PCI	Pensiones contributivas pon invalidez -miles
PDCRE	Población de derecho-Miles de personas
PENAS	Pensiones asistenciales en vigor (media anual)-miles de pensiones
PSATS	Profesionales sanitarios colegiados: ATS (enfermeros)-Nº
RA86	Remuneración a asalariados en servicios no venta-Mill pts
RFDTF	Renta familiar disponible deducciones: imp direc sobre las familias-Mill pts
SOC1	(50% IEFAMR)+(50% RACRE)
SOC2	(50% IEFAMR)+(25% RACRE)+(25%CFHRE)
SOC3	(25% IEFAMR)+(50% RACRE)+(25%CFHRE)
TR1	Transferencias a las Comunidades Autonomas 1994/Transferencias Corrientes
VIEU	Pop more 65 years old

FRANCE

MAIN REVENUES	Millions Francs	%of expenditures	
TVA Taux normal	-489.787	-28,2	CONSNOR
Impôt sur le revenu:	-292.890	-16,9	IRPP
Taxes intérieures sur les prod. pétroliers	-126.425	-7,3	ESSENCE CONSESSENC
Impôt sur les sociétés	-102.530	-5,9	ISUN ISDEUX ISTROIS
Sub total	*-1.011.631*	*-58,3*	

MAIN EXPENDITURES			FLOW APPROACH	BENEFIT APPROACH
Contrib état à APL (aide au logement)	28.428	*1,6*	AIDESOC	AIDESOC LOGT BTP PATRIM
Subvention établiss privés d'éducation ss contrat	31.166	*1,8*	ENSPRIV	ENSPRCON ENSPRIV ENSPRCON
Rémunérations Ministère Budget	31.640	*1,8*	SALPUB	POP
Form ouvrière, reclass main d'o. FNE	32.361	*1,9*	CHOMEUR AIDESOC ACTSEC	CHOMEUR AIDESOC PIB ACTSEC
Salaires enseignants écoles	46.498	*2,7*	SALPUB	ELEVPRPUB
Investissement, catégorie "divers"	59.048	*3,4*	INVDIV	INVDIV POP
Salaires enseignants Collèges et Lycées	73.934	*4,2*	SALPUB	ELEVSEPUB PROFSECPUB
Dépenses en capital Défense	88.666	*5,1*	ARME	POP
Dotation Globale de Fonctionnement	96.219	*5,5*	DGF	DGF
Dépenses Ordinaires Défense	100.401	*5,8*	SALPUB	POP
Pensions allocations, charges fonction publique	185.349	*10,6*	SALPUB POP65	EFRETR POP POP65
Sub total	*773.709*	*44,4*		

FRANCE *(Continued)*

REGIONAL KEYS	
ACTSEC	Actifs ayant un emploi/secondaire
AIDESOC	Bénéficiaires de l'aide sociale (F courants)
ARME	Effectifs industriels travaillant pour l'armement
BTP	Population active secteur BTP
CHOMEUR	Demandes emploi non satisfaites
CONSESSENC	Consommation d'essence des ménages
CONSNOR	Consommation produits à TVA normale
DGF	Dotation globale de fonctionnement ttes coll loc
EFRETR	Retraités
ELEVSEPUB	Effectif total élèves secondaire public
ENSPRCON	Effectif total élèves secondaire public
ENSPRIV	Salaires de l'Etat à l'enseignement privé sous contrat (1992)
ESSENCE	Livraisons essence/super/gasoil mètres cubes
INVDIV	Investisements Etat divers, 86-90 total
IRPP	Rôles de l'IRPP émis, en millions de francs-1993
ISDEUX	50%SALAIRES-50%CAPITAL
ISTROIS	50% SALAIRES-25%CONSOMM-25%CAPITAL
ISUN	50%CAPITAL-25%SALAIRES-25%CONSOMM
LOGT	Logements aidés autorisés (accession et locatif)
PATRIM	Revenu du patrimoine des ménages (millions)
PIB	PIB en millions de francs courants
POP65	Population + de 65 ans
PROFSECPUB	Enseignants secondaire public
SALPUB	Salaires versés aux fonctionnaires

ITALY

MAIN REVENUES		% of expenditures	
Impôts sur le revenu des personnes physiques	-136	-18,2	IRPP
TVA	-75	-10,1	TVA 82A 111A
taxe/pétrole	-38	-5,1	TAXPET
Taxe sur revenu capitaux	-37	-4,9	TAXREVK
taxe locale/revenu	-18	-2,5	IRPP TLR
Taxe /profits	-18	-2,4	ISDEUX ISTROIS ISUN
Sub total	*-322*	*-43,1*	

MAIN EXPENDITURES			BENEFIT APPROACH
Défense Nationale	21	2,9	200A
Pensions ordinaires	28	3,7	303A
Interventions en faveur des régions	31	4,2	350A
Prévention-santé/Fonds sanitaire national	40	5,3	52A 200A 550A
Prévoyance sociale	43	5,7	53A 17B
Interventions en faveur des Provinces et communes	44	5,9	351A
Administration générale	51	6,9	200A
Sub total	*237*	31,8	

MAIN EXPENDITURES			FLOW APPROACH
Transferts aux ménages	16	2,2	305A 54A
Achats de biens et services	26	3,5	304A
Personnels en retraite/pensions	30	4,1	303A
Transferts aux Communes et Provinces	30	4,1	308A
Sommes non allouées (sommes réservées à la trésorerie)	31	4,1	200A
Transferts aux organismes de prévoyance	45	6.0	200A 63A 53A 54A
Transferts aux Régions/2 Provinces Autonomes	64	8.6	307A
personnels en activité	87	11,6	302A
Sub total	*330*	*44,2*	

ITALY *(continued)*

REGIONAL KEYS	
IRPP	IRPP
111A	constotale/ménage
17B	nombre de chômeurs
200A	Population
302A	personnels en activité
303A	Personnels en retraite/pensions
304A	Achats de biens et services
305A	Transferts aux ménages
307A	Transferts aux Régions/2 Provinces Autonomes
308A	Transferts aux Communes et Provinces
350A	Total transferts Régions & provinces autonomes
351A	Total transferts Provinces&Communes
52A	Dépenses de santé
53A	Dépenses de prévoyance
54A	dépenses d'assistance
550A	Nombre de médecins
63A	Pop active (milliers)
82A	Consomation finale interne
IRPP	IRPP
ISDEUX	Tax /profits 50%Capital/50%salariés(VA)
ISTROIS	Tax /profits: 25%Capital/50%salariés/25% consom
ISUN	Tax /profits: 50%Capital/25%salariés/25% consom
TAXPET	taxe/pétrole
TAXREVK	Taxe sur revenu capitaux
TLR	taxe locale/revenu
TVA	TVA

UNITED KINGDOM

MAIN REVENUES			
Income tax	-58.400.000	-23,4	INCTAX
Value added tax	-38.959.000	-15,6	VAT
Social security contributions	-38.700.000	-15,5	NICONTRIB1
Corporation tax	-14.900.000	-6,0	CORP1 CORP2 CORP3
Business rates	-12.600.000	-5,0	CORP1 CORP2 CORP3
Fuel duties, of which: Petrol	-8.890.300	-3,6	PETROLCAR
Other receipts	-6.900.000	-2,8	GDP
Tobacco duties	-6.518.000	-2,6	TOBACCO
Sub total	*-185.867.300*	*-74,5*	

MAIN EXPENDITURES			FLOW APPROACH	BENEFIT APPROACH
Revenue support grant and payment of non-domestic rates	4.811.559	1,9	S100	S100
Invalidity benefit, basic	5.856.000	2,3	16+EWS	16+EWS
Family benefits:child benefit	6.049.756	2,4	POP0-15EWS	POPEWS POP0-15EWS
Personnel : armed forces	6.875.000	2,8	DEFPERSON	DEFPERSON POP
Equipment	8.039.000	3,2	DEFEQUIP DEFEMPLOY	POP DEFEQUIP DEFEMPLOY MANUFGDP GDP
To LAs- Non-domestic rates payments	11.559.000	4,6	BUSINESSRATEE	BUSINESSRATEE
Income support: non pensioners	12.170.418	4,9	INCSUPPEWS	INCSUPPEWS
To LAs- Revenue Support Grant	17.051.517	6.8	REVSUPPE	REVSUPPE
Current advances to and payments on behalf of health authorities, & payments by the NHS Exec for contracted services HOSPITALE	21.384.711	8,6	NHSCURRENTE	NHSCURRENTE
Retirement Pension, basic	26.526.000	10,6	65+EWS	65+EWS
Sub total	*120.322.961*	*48,2*		

UNITED KINGDOM *(continued)*

REGIONAL KEYS	
16+EWS	Population over 16 in England
65+EWS	OVER 65
BUSINESSRATEE	Business rate expenditures 1993/4 £million - ACTUAL FOR ENGLAND
CORP1	50%SALAIRES-50%CAPITAL
CORP2	50% SALAIRES-25%CONSOMM-25%CAPITAL
CORP3	50%CAPITAL-25%SALAIRES-25%CONSOMM
DEFEMPLOY	Defence: Directly supported employment, (thous.)
DEFEQUIP	Defence: Expenditure on equipment
DEFPERSON	Defence: Services personnel only, (thous.)
GDP	GDP - Factor cost:current prices, (mill's)
HOSPITALE	Hospital activity 1993-4 (daycases, outpatients and accident/emergency) No figs for in-patients yet
INCSUPPEWS	Income Support to Non-Pensioners - number of benefit units
INCTAX	Total Income Tax Payable,(million)
MANUFGDP	GDP of Manufact. Indus., (Mill's)
NHSCURRENTE	NHS current expenditure,£'000s, 1992-3
NICONTRIB	Expenditure on NI contributions by household
NICONTRIB1	Attributable National Insurance contributions in class1, employers+employees
PETROLCAR	share of petrol, S&NI known, rest divided by no. of cars
PETROLMILE	share of petrol, S & NI known, rest divided by miles travelled by private road vehicles per year
POP	Population '000s
POP0-15EWS	Pop. 0 - 15, (thous.)
POP0-15EWS	Pop. 0 - 15, (thous.)
POPEWS	POPULATION OF ENG, WALES, SCOTLAND
RATEVALUE	Non Domestic Rates raised (English figs from Non-domestic rating of property, at 1 April 1994, £ million)
REVSUPPE	Revenue Support Grant in England 1993/4 £millions
REVSUPPE	Revenue Support Grant in England 1993/4 £millions
S100	Scotland 100%
TOBACCO	Expenditure on tobacco products by household
VAT	Household expenditure VAT is charged on

SWEDEN

MAIN REVENUES				
Social security contribution, gross	-222.333	-28,9	301B	
Value added tax	-117.832	-15,3	131B	
Tax on petrol	-19.449	-2,5	136B	
Tax on energy	-14.803	-1,9	136B	
Corporate income tax	-12.199	-1,6	2000A 2001A 2002A	
Miscellaneous revenues from government activities	-8.838	-1,1	1002A	
Tax redistribution levy on municipalities	-8.778	-1,1	202B	
Tax on real estate (50% on households)	-8.056	-1,0	111B	
Tax on real estate (50% on firms)	-8.056	-1,0	2000A 2001A 2002A	
Sub total	*-420.344*	*-54,6*		
MAIN EXPENDITURES				
Financial bank support ("swedish bank cris")	23.518	3,1	1302A	1302A 1307A
R & D (including higher education)	24.250	3,2	108A	108A 1307A
Labour market policy measures	28.080	3,6	201A	201A 1323A
Unemployment benefits	32.045	4,2	204A 206A	204A 206A 115B 203A
Interest Subsidies	33.665	4,4	610A	610A
State authorities	44.040	5,7	104A	1002A 104A
Sickness benefits	44.123	5,7	607A	607A
ATP-pension and other pensions	166.718	21,7	601A	601A
Sub total	*396.439*	*51,5*		

SWEDEN *(continued)*

REGIONAL KEYS	
1002A	population
104A	employees and location
108A	receiver, location and employees/R & D (including higher education)
111B	residence of payer
115B	total employment
1302A	weighted personal and corporated income and fortune tax
1307A	gdp (milions sek)
131B	Consumption /total
1323A	unemployed
136B	deliveryof petrol
2000A	(Capital*2)-Consumption- salary
2001A	Capital-salaries
2002A	(salaries*2)-capital-consumption
201A	receiver/Labour market policy measures
202B	place of registration/redistribution levy on municipalities
203A	employees
204A	residence receiver
206A	unemployment and location of receiver
301B	total salary payments of residence
601A	receiver/ATP-pension and other pensions
607A	receiver/Sickness benefits
610A	receiver/Interest Subsidies

GERMANY

MAIN REVENUES			
tax on consumption	-125.482	-27,4	GDP WAGES
On personnal income	-120.210	-26,3	STEEK
Petroleum Tax	-56.113	-12,3	HORSEP
Calculated borrowing requirment .	-50.154	-11,0	TAX
on corporate income	-28.198	-6,2	CORP1 CORP2 CORP3
Sub total	*-380.157*	*-83*	

MAIN EXPENDITURES (FLOW)			
Commercial Enterprises, Common Original and Capital	28.437	6,2	APERS GDP
the old Federal States	28.183	6,2	BEV65UMA
"Deutsche Einheit" Fund	27.694	6,1	BEVGESO
Wages and purchase of goods&services: 15%	25.887	5,7	APERS
Unemployment Insurance	20.756	4,5	ALOGES
Child Benefit	17.968	3,9	BEVU20
German Defense Forces wages: old L	16.181	3,5	APERS
Pension funds public sector	13.862	3,0	APERS
Unemployment Benefit	12.671	2,8	ALO1UM
German Defense Forces: investment	11.955	2,6	BESRAUM FUEVER
Sub total	*203.593*	*44,5*	

MAIN EXPENDITURES (FLOW)			
the old Federal States	33.156	7,2	BEV65UMA
Commercial Enterprises, Common Original and Capital	28.437	6,2	APERS GDP GDP
"Deutsche Einheit" Fund	27.694	6,1	BEVGESO
Unemployment Insurance	24.419	5,3	ALOGES
Child Benefit	21.139	4,6	BEVU20
Germari Defense Forces wages: old L	16.181	3,5	BEVGES
Unemployment Benefit	14.907	3,3	ALO1UM
Pension funds public sector	13.862	3,0	APERS
Miners' Social Insurance Scheme	12.857	2,8	BESBERG
German Defense Forces: investment	11.955	2,6	BEVGES
other scientific research	11.451	2,5	FUEBUN HSWISH GDP
War Victims Welfare Service	11.289	2,5	VERKR
Sub total	*227.347*	*49,7*	

GERMANY *(continued)*

REGIONAL KEYS	
ALO1UM	Share of over one-year unemployed persons 30.9.1993
ALOGES	Unemployed persons 10.9.1993
APERS	Personnel expenditure. Wages of civil servant
BENEF	Calculated
BESBERG	Workers in mining industry
BESRAUM	Workers in air and space industry
BEV65UMA	65 years old and over/OLd landers
BEVGES	Population
BEVGESO	Population in the new federal states
BEVU20	Population of under 20-year-old
CORP1	0,5wages (WAGES), 0,5 Capital (STEEK)
CORP2	0,5wages,0,25cons (GDP), 0,25Capital
CORP3	0,5capital, 0,25wages, 0,25cons
FUEBUN	Financing to non univ research centers
FUEVER	Expenditure for defense. Defense contracts
GDP	1993 GDP, millions of ecu
HORSEP	1993 Car horsepower/region
HSWISH	Scientific personnel (full-time)
STEEK	Income and Corporate Tax
TAX	Calculated
VERKR	War victims welfare service, beneficiaries
WAGES	Wages

PORTUGAL

MAIN REVENUES			
Contributions - General Plan	- 963.416.435	-16,0	WAGES CONTRIB
Personal Income Tax	- 826.270.017	-13,7	INCOME
V.A.T.	- 797.294.447	-13,2	INCOME
Tax on oil products	- 369.627.927	-6,1	CIRCTAX
Corporate Income Tax	- 279.106.071	-4,6	CORP1 CORP2 CORP3
"Imposto de Selo"	- 222.684.947	-3,7	CREDIT INCOME
Exterior	- 152.786.633	-2,5	POP
Tax on tobacco consumption	- 132.327.261	-2,2	INCOME POP
Subtotal	*- 3.743.513.737*	*-62,2*	
MAIN EXPENDITURES (FLOW)			
Community and familie	136.401.400	2,3	POP POP<15
Non located	145.491.610	2,4	INVPLAN EMPBTP
Supported by ESF	168.887.142	2,8	CSF
Current Expenses	174.221.492	2,9	FMAI
Old age	181.004.500	3,0	POP>64
'Supported by the State Budget	214.120.560	3,6	INVPLAN1 EMPBTP
Current Expenses	234.977.933	3,9	POP
Paid to other institutions	324.630.956	5,4	DEPOUP CAPINC
Handicap and Rehabilitation	547.650.500	9,1	POP
Current Expenses	548.185.005	9,1	FME
Current Expenses	569.467.600	9,5	FMS
Paid to households	571.335.702	9,5	DEPOUP CAPINC
Current Expenses without debt interest	604.677.698	10,0	FMF
Subtotal	*4.421.052.099*	*73,4*	

PORTUGAL *(continued)*

REGIONAL KEYS	
CAPINC	Households Capital Income
CIRCTAX	Tax on circulation of vehicles, 1990 (Local Tax)
CONTRIB	Social Contributions payed, 1990
CORP1	50% WAGES-50% CAPITAL
CORP2	50%WAGES-25%CONSUMPTION (income) -25%CAPITAL
CORP3	50%CAPITAL-25%WAGES-25%CONSUMPTION (income)
CREDIT	Banking credit to non financial enterprises and private individuals 1993
CSF	1st Community Support Framework Funds Allocation
DEPOUP	Saving Deposits in Banks 1993
EMPBTP	Employment i Building and construction,1989
FMAI	Functionarys of Ministry of Interior
FME	Functionarys of Ministry of Education
FMF	Functionarys of Ministry of Finance
FMS	Functionarys of Ministry of Health
INCOME	Hoseholds income before tax
INVPLAN	Investments of the Plan
INVPLAN1	Investments Supported by the State Budget
POP	Total Population Estimation for 1994 (31-XII)
POP<15	Estimation for population under 15 years old, 1994 (31-XII)
POP>64	Estimation for population above 64 years old, 1994 (31-XII)
WAGES	Total Wage Distribution

E. Concentration of Results

FRANCE

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
1 Alsace	0,02	0,92	0,01	0,97	-0,01	0,98
2 Aquitaine	0,01	0,94	0,01	0,96	-0,01	0,99
3 Auvergne	0,01	0,92	0,01	0,96	-0,01	0,97
4 Bourgogne	0,02	0,93	0,02	0,96	-0,01	0,96
5 Bretagne	0,02	0,92	0,00	0,98	-0,01	0,98
6 Centre	0,01	0,93	0,01	0,97	-0,01	0,98
7 Champagne Ardennes	0,03	0,90	0,01	0,98	0,00	0,99
8 Corse	0,03	0,86	0,01	0,97	-0,01	0,97
9 Franche-Comté	0,01	0,92	0,01	0,98	-0,01	0,97
10 Ile-de-France	0,03	0,88	0,02	0,95	-0,01	0,98
11 Languedoc-Roussillon	0,07	0,79	0,02	0,95	-0,01	0,97
12 Limousin	0,03	0,87	0,02	0,93	-0,01	0,97
13 Lorraine	0,02	0,93	0,01	0,96	-0,01	0,98
14 Midi-Pyrénées	0,02	0,90	0,01	0,97	-0,01	0,98
15 Nord-Pas-de Calais	0,02	0,93	0,00	0,99	0,00	0,99
16 Basse Normandie	0,03	0,89	0,01	0,98	-0,01	0,98
17 Haute Normandie	0,01	0,93	0,00	0,98	0,00	0,99
18 Pays de la Loire	0,01	0,95	0,02	0,95	0,00	0,99
19 Picardie	0,02	0,91	0,00	0,98	0,00	0,98
20 Poitou-Charentes	0,02	0,93	0,02	0,96	-0,01	0,97
21 Provence-A.C.A.	0,01	0,93	0,01	0,98	0,00	0,99
22 Rhône-Alpes	0,01	0,96	0,01	0,98	0,00	0,99
Average	**0,02**	**0,91**	**0,01**	**0,97**	**-0,01**	**0,98**
Standard Error	**0,01**	**0,04**	**0,01**	**0,01**	**0,00**	**0,01**

ITALY

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
Abruzzo	0,11	0,81	0,05	0,83	-0,01	0,97
Basilicata	0,13	0,66	0,05	0,81	-0,01	0,97
Calabria	0,12	0,69	0,05	0,81	-0,01	0,98
Campania	0,11	0,73	0,05	0,79	-0,01	0,97
Emilia-Romagna	0,10	0,80	0,02	0,90	0,00	0,99
Friuli-Venezia Giulia	0,09	0,85	0,01	0,95	0,00	0,99
Lazio	0,09	0,91	0,05	0,86	0,00	0,99
Liguria	0,09	0,86	0,01	0,95	-0,01	0,99
Lombardia	0,12	0,74	0,06	0,80	0,00	0,99
Marche	0,09	0,94	0,04	0,88	0,00	0,99
Molise	0,13	0,68	0,05	0,79	-0,01	0,98
Piemonte	0,10	0,83	0,02	0,93	-0,01	0,98
Puglia	0,11	0,78	0,05	0,80	0,00	0,98
Sardegna	0,11	0,73	0,04	0,86	-0,01	0,98
Sicilia	0,11	0,75	0,04	0,86	-0,01	0,98
Toscana	0,10	0,86	0,02	0,91	0,00	1,00
Trentino-Alto Adige	0,09	0,82	0,05	0,79	-0,01	0,97
Umbria	0,09	0,89	0,05	0,84	-0,01	0,98
Valle d'Aosta	0,09	0,79	0,03	0,88	-0,01	0,97
Veneto	0,10	0,83	0,03	0,88	0,00	0,99
Average	**0,10**	**0,80**	**0,04**	**0,86**	**-0,01**	**0,98**
Standard Error	**0,01**	**0,08**	**0,02**	**0,05**	**0,00**	**0,01**

SPAIN

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
Andalucia	0,05	0,81	0,05	0,82	-0,08	0,80
Aragón	0,04	0,83	0,05	0,83	-0,04	0,88
Asturias	0,02	0,89	0,03	0,87	-0,03	0,92
Baleares	0,06	0,76	0,09	0,72	-0,07	0,82
Canarias	0,06	0,75	0,08	0,74	-0,14	0,70
Cantabria	0,03	0,86	0,06	0,81	-0,06	0,84
Castilla La Mancha	0,03	0,87	0,02	0,91	-0,01	0,97
Castilla-y-León	0,02	0,92	0,04	0,88	-0,04	0,88
Cataluña	0,04	0,85	0,02	0,92	-0,01	0,97
Ceuta y Melilla	0,07	0,71	0,10	0,59	-0,20	0,62
Extremadura	0,06	0,81	0,02	0,89	-0,02	0,92
Galicia	0,04	0,82	0,02	0,89	-0,03	0,90
La Rioja	0,04	0,81	0,02	0,91	-0,01	0,95
Madrid	0,08	0,73	0,03	0,89	-0,03	0,93
Murcia	0,03	0,88	0,07	0,79	-0,07	0,82
Navarra	0,05	0,77	0,05	0,78	-0,05	0,87
País Vasco	0,06	0,78	0,10	0,71	-0,10	0,76
Valencia	0,03	0,90	0,03	0,89	-0,01	0,96
Average	**0,04**	**0,82**	**0,05**	**0,82**	**-0,06**	**0,86**
Standard Error	**0,02**	**0,06**	**0,03**	**0,09**	**0,05**	**0,10**

UNITED KINGDOM

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
North	0,02	0,91	0,01	0,97	-0,01	0,97
Y&H	0,01	0,95	0,00	0,98	0,00	0,98
EMids	0,01	0,94	0,00	0,98	0,00	0,98
EAng	0,02	0,90	0,01	0,97	0,00	0,98
SE	0,01	0,96	0,00	0,98	0,00	0,98
SW	0,03	0,90	0,01	0,98	0,00	0,98
WMids	0,01	0,95	0,00	0,99	-0,01	0,96
NW	0,02	0,93	0,00	0,98	0,00	0,98
Wales	0,01	0,95	0,01	0,95	0,00	0,99
Scot	0,01	0,96	0,01	0,97	0,00	0,99
NIre	0,02	0,94	0,01	0,98	-0,01	0,97
Average	**0,02**	**0,94**	**0,01**	**0,98**	**-0,01**	**0,98**
Standard Error	**0,01**	**0,02**	**0,00**	**0,01**	**0,00**	**0,01**

SWEDEN

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
Stockholm	0,04	0,83	0,02	0,94	0,00	0,99
East Mid Sweden	0,02	0,93	0,02	0,94	0,00	1,00
Smal/Islands	0,02	0,90	0,02	0,94	0,00	1,00
South Sweden	0,02	0,94	0,02	0,97	0,00	1,00
West Sweden	0,02	0,93	0,02	0,97	0,00	1,00
North Mid Sweden	0,10	0,74	0,10	0,77	0,00	1,00
Mid Norrland	0,03	0,88	0,02	0,93	0,00	1,00
North Norrland	0,03	0,88	0,02	0,93	0,00	1,00
Average	**0,03**	**0,88**	**0,03**	**0,92**	**0,00**	**1,00**
Standard Error	**0,03**	**0,07**	**0,03**	**0,06**	**0,00**	**0,00**

GERMANY

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
Baden-Württemberg	0,02	0,94	0,02	0,95	-0,01	0,95
Bayern	0,01	0,95	0,03	0,90	-0,01	0,97
Berlin	0,03	0,87	0,02	0,94	-0,02	0,93
Brandenburg	0,01	0,96	0,01	0,95	-0,04	0,87
Bremen	0,02	0,88	0,05	0,86	-0,02	0,93
Hamburg	0,04	0,84	0,10	0,74	-0,03	0,92
Hessen	0,02	0,93	0,03	0,91	-0,02	0,93
Mecklenburg-Vorpommern	0,01	0,94	0,01	0,95	-0,04	0,86
Niedersachsen	0,04	0,91	0,00	0,98	-0,01	0,98
Nordrhein-Westfalen	0,01	0,96	0,04	0,89	-0,01	0,98
Rheinland-Pfalz	0,01	0,95	0,01	0,97	0,00	0,98
Saarland	0,01	0,96	0,03	0,92	-0,02	0,93
Sachsen	0,01	0,95	0,02	0,93	-0,04	0,87
Sachsen-Anhalt	0,01	0,95	0,01	0,94	-0,04	0,87
Schleswig-Holstein	0,01	0,97	0,07	0,83	-0,01	0,97
Thuringen	0,01	0,95	0,01	0,95	-0,04	0,85
Average	**0,02**	**0,93**	**0,03**	**0,91**	**-0,02**	**0,92**
Standard Error	**0,01**	**0,04**	**0,02**	**0,06**	**0,01**	**0,05**

PORTUGAL

	Exp(benef) s/M	Exp(benef) Min/Max	Exp(flow) s/M	Exp(flow) Min/Max	Contrib s/M	Contrib Min/Max
Norte			0,03	0,88	-0,01	0,97
Centro			0,02	0,92	-0,01	0,97
Lisboa e Vale do Tejo			0,03	0,89	-0,01	0,97
Alentejo			0,03	0,88	-0,01	0,97
Algarve			0,04	0,84	-0,01	0,98
Average			**0,03**	**0,88**	**-0,01**	**0,97**
Standard Error			**0,01**	**0,03**	**0,00**	**0,01**

F. GDP and Transfers Ranked by Country and by GDP

1. Transfers and GDP of the Regions, Ranked by Country

2. Transfers and GDP of the Regions, Ranked by Growing GDP/capita

Transfers and GDP of the regions, ranked by country

FRANCE

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Alsace	-1%	0%	-0,2	0,0	18.949	17.724
Aquitaine	3%	2%	0,4	0,3	16.601	15.527
Auvergne	2%	1%	0,3	0,2	15.299	14.309
Bourgogne	3%	0%	0,4	-0,1	16.242	15.192
Bretagne	3%	3%	0,5	0,4	15.621	14.611
Centre	0%	1%	0,0	0,1	16.914	15.820
Champagne-Ardennes	1%	0%	0,2	0,0	18.412	17.222
Corse	15%	10%	1,9	1,4	13.175	12.321
France-Comté	2%	-2%	0,3	-0,4	17.062	15.959
Ile-de-France	-6%	-3%	-1,6	-0,8	28.157	26.336
Languedoc-Roussillon	8%	9%	1,2	1,3	14.500	13.562
Limousin	6%	6%	0,9	0,9	14.865	13.904
Lorraine	3%	2%	0,5	0,4	15.983	14.950
Midi-Pyrénées	6%	5%	0,9	0,9	15.842	15.630
Nord-Pas-de-Calais	5%	1%	0,8	0,2	14.922	13.957
Basse-Normandie	4%	3%	0,7	0,5	16.914	15.820
Haute-Normandie	2%	-1%	0,3	-0,2	17.403	16.277
Pays de la Loire	2%	0%	0,3	-0,1	15.950	14.918
Picardie	2%	-3%	0,3	-0,4	15.927	14.897
Poitou-Charentes	3%	1%	0,4	0,1	15.176	14.194
Provence-A.C.A.	1%	2%	0,2	0,3	16.589	15.516
Rhône-Alpes	-1%	-2%	-0,1	-0,3	18.303	17.119

ITALY

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Abruzzo	18%	10%	2,3	1,2	12.807	14.248
Basilicata	49%	27%	4,6	2,5	9.360	10.413
Calabria	37%	20%	3,2	1,7	8.547	9.509
Campania	21%	18%	2,1	1,8	9.789	10.891
Emilia Romagna	-10%	-10%	-1,8	-1,7	17.924	19.941
Friuli-Venezia Giulia	-2%	0%	-0,3	0,1	16.838	18.732
Lazio	-2%	10%	-0,3	1,7	17.061	18.981
Liguria	-4%	-4%	-0,7	-0,6	17.144	19.073
Lombardia	-14%	-12%	-2,6	-2,2	18.588	20.679
Marche	1%	-2%	0,1	-0,2	14.720	16.376
Molise	41%	17%	4,5	1,9	11.104	12.355
Piemonte	-9%	-10%	-1,5	-1,6	16.398	18.243
Puglia	18%	9%	1,8	1,0	10.513	11.696
Sardegna	23%	19%	2,5	2,1	11.011	12.250
Sicilia	23%	17%	2,4	1,8	10.159	11.302
Toscana	-7%	-7%	-1,1	-1,0	15.450	17.188
Trentino Alto-Adige	-2%	10%	-0,3	1,8	17.641	19.626
Umbria	2%	0%	0,2	0,1	14.124	15.712
Valle d'Aosta	-3%	12%	-0,5	2,2	18.442	20.517
Veneto	-8%	-9%	-1,3	-1,4	16.510	18.368

SPAIN

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Andalucia	17%	14%	1,3	1,1	7.809	9.228
Aragón	-7%	-3%	-0,8	-0,4	11.776	13.916
Asturias	1%	1%	0,1	0,1	10.006	11.825
Baleares	-8%	-7%	-1,0	-1,0	13.290	15.705
Canarias	13%	11%	1,3	1,2	10.145	11.988
Cantabria	0%	-1%	0,0	-0,1	10.083	11.917
Castilla La Mancha	5%	3%	0,4	0,3	9.003	10.639
Castilla-y-León	1%	2%	0,1	0,2	9.861	11.653
Cataluña	-6%	-5%	-0,7	-0,7	12.658	14.958
Ceuta y Melilla	3%	14%	0,2	1,3	8.960	10.587
Extremadura	18%	15%	1,3	1,1	7.409	8.756
Galicia	14%	9%	1,2	0,8	8.082	9.550
La Rioja	-6%	-3%	-0,7	-0,3	11.549	13.648
Madrid	-13%	-9%	-1,7	-1,2	13.060	15.433
Murcia	3%	2%	0,2	0,2	9.302	10.992
Navarra	-6%	-6%	-0,8	-0,8	12.818	15.147
País Vasco	-9%	-9%	-1,1	-1,1	12.347	14.591
Valencia	0%	0%	0,0	0,0	10.040	11.864

SWEDEN

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Stockholm	-9%	-6%	-2,1	-1,2	21.978	18.895
East Mid Sweden	4%	3%	0,6	0,5	16.393	14.094
Smal/Islands	2%	0%	0,4	-0,1	17.413	14.971
South Sweden	1%	0%	0,2	0,0	17.374	14.937
West Sweden	0%	-2%	0,0	-0,4	17.557	15.094
North Mid Sweden	11%	11%	1,8	1,9	16.836	14.474
Mid Norrland	9%	8%	1,6	1,4	18.060	15.526
North Norrland	13%	14%	2,3	2,4	17.685	15.204

UNITED KINGDOM

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
North	9%	9%	1,1	1,2	12.433	14.101
Y&H	1%	-1%	0,2	-0,1	12.730	14.437
EMids	1%	-2%	0,1	-0,2	12.994	14.736
EAng	-1%	-3%	-0,2	-0,4	14.140	16.036
SE	-7%	-5%	-1,2	-0,9	16.268	18.449
SW	0%	1%	-0,1	0,1	13.186	14.954
WMids	3%	1%	0,3	0,1	12.722	14.428
NW	5%	4%	0,7	0,6	12.507	14.184
Wales	11%	8%	1,2	0,9	11.734	13.308
Scot	6%	5%	0,9	0,6	13.621	15.447
Nlre	18%	17%	2,0	1,9	11.077	12.562

GERMANY

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Baden-Württemberg	-5%	-4%	-1,1	-1,0	23.746	20.261
Bayern	-4%	-3%	-0,9	-0,7	23.300	19.879
Berlin	9%	12%	1,7	2,2	18.411	15.709
Brandenburg	22%	17%	2,4	1,8	10.637	9.076
Bremen	-1%	1%	-0,4	0,2	28.697	24.485
Hamburg	-5%	-1%	-1,8	-0,4	35.226	30.057
Hessen	-4%	-4%	-1,1	-1,0	27.656	23.597
Mecklenburg-Vorpommern	29%	22%	2,8	2,1	9.639	8.225
Niedersachsen	-1%	-1%	-0,3	-0,2	19.182	16.367
Nordrhein-Westfalen	-2%	-2%	-0,3	-0,3	20.814	17.759
Rheinland-Pfalz	-3%	-3%	-0,5	-0,5	18.619	15.887
Saarland	6%	4%	1,1	0,8	19.905	16.984
Sachsen	24%	17%	2,3	1,7	9.917	8.462
Sachsen-Anhalt	26%	19%	2,6	1,9	10.021	8.551
Schleswig-Holstein	-3%	-1%	-0,5	-0,2	19.058	16.261
Thuringen	28%	21%	2,7	2,0	9.713	8.288

PORTUGAL

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Norte		-2%		-0,2	6.537	9.760
Centro		4%		0,2	5.252	7.841
Lisboa e Vale do Tejo		-2%		-0,2	10.207	15.238
Alentejo		26%		1,2	4.492	6.707
Algarve		10%		0,6	6.297	9.402

Transfers and GDP of the regions, ranked by growing GDP/capita

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Alentejo		26%		1,2	4.492	6.707
Centro		4%		0,2	5.252	7.841
Algarve		10%		0,6	6.297	9.402
Norte		-2%		-0,2	6.537	9.760
Extremadura	18%	15%	1,3	1,14	7.409	8.756
Andalucia	17%	14%	1,3	1,06	7.809	9.228
Galicia	14%	9%	1,2	0,76	8.082	9.550
Calabria	37%	20%	3,2	1,73	8.547	9.509
Ceuta y Melilla	3%	14%	0,2	1,28	8.960	10.587
Castilla La Mancha	5%	3%	0,4	0,31	9.003	10.639
Murcia	3%	2%	0,2	0,19	9.302	10.992
Basilicata	49%	27%	4,6	2,49	9.360	10.413
Mecklenburg-Vorpommern	29%	22%	2,8	2,1	9.639	8.225
Thuringen	28%	21%	2,7	2,0	9.713	8.288
Campania	21%	18%	2,1	1,75	9.789	10.891
Castilla-y-León	1%	2%	0,1	0,22	9.861	11.653
Sachsen	24%	17%	2,3	1,7	9.917	8.462
Asturias	1%	1%	0,1	0,10	10.006	11.825
Sachsen-Anhalt	26%	19%	2,6	1,9	10.021	8.551
Valencia	0%	0%	0,0	0,02	10.040	11.864
Cantabria	0%	-1%	0,0	-0,15	10.083	11.917
Canarias	13%	11%	1,3	1,17	10.145	11.988
Sicilia	23%	17%	2,4	1,76	10.159	11.302
Lisboa e Vale do Tejo		-2%		-0,2	10.207	15.238
Puglia	18%	9%	1,8	0,98	10.513	11.696
Brandenburg	22%	17%	2,4	1,8	10.637	9.076
Sardegna	23%	19%	2,5	2,13	11.011	12.250
Nlre	18%	17%	2,0	1,86	11.077	12.562
Molise	41%	17%	4,5	1,91	11.104	12.355
La Rioja	-6%	-3%	-0,7	-0,30	11.549	13.648
Wales	11%	8%	1,2	0,93	11.734	13.308
Aragón	-7%	-3%	-0,8	-0,38	11.776	13.916
País Vasco	-9%	-9%	-1,1	-1,08	12.347	14.591
North	9%	9%	1,1	1,18	12.433	14.101
NW	5%	4%	0,7	0,55	12.507	14.184
Cataluña	-6%	-5%	-0,7	-0,68	12.658	14.958
WMids	3%	1%	0,3	0,07	12.722	14.428
Y&H	1%	-1%	0,2	-0,07	12.730	14.437
Abruzzo	18%	10%	2,3	1,24	12.807	14.248
Navarra	-6%	-6%	-0,8	-0,77	12.818	15.147
EMids	1%	-2%	0,1	-0,20	12.994	14.736
Madrid	-13%	-9%	-1,7	-1,20	13.060	15.433
Corse	15%	10%	1,9	1,36	13.175	12.321
SW	0%	1%	-0,1	0,13	13.186	14.954
Baleares	-8%	-7%	-1,0	-0,97	13.290	15.705
Scot	6%	5%	0,9	0,63	13.621	15.447
Umbria	2%	0%	0,2	0,06	14.124	15.712
EAng	-1%	-3%	-0,2	-0,36	14.140	16.036
Languedoc-R.	8%	9%	1,2	1,27	14.500	13.562

	trsf (benef) % reg. GDP	trsf (flow) % reg. GDP	trsf (benef) k ECU/cap.	trsf (flow) k ECU/cap.	GDP 1993 ECU/cap	GDP 1993 PPS/cap
Marche	1%	-2%	0,1	-0,22	14.720	16.376
Limousin	6%	6%	0,9	0,87	14.865	13.904
Nord-P.C.	5%	1%	0,8	0,21	14.922	13.957
Poitou-C.	3%	1%	0,4	0,14	15.176	14.194
Auvergne	2%	1%	0,3	0,19	15.299	14.309
Toscana	-7%	-7%	-1,1	-1,03	15.450	17.188
Bretagne	3%	3%	0,5	0,39	15.621	14.611
Midi-P.	6%	5%	0,9	0,87	15.842	15.630
Picardie	2%	-3%	0,3	-0,42	15.927	14.897
Pays de la Loire	2%	0%	0,3	-0,08	15.950	14.918
Lorraine	3%	2%	0,5	0,38	15.983	14.950
Bourgogne	3%	0%	0,4	-0,05	16.242	15.192
SE	-7%	-5%	-1,2	-0,86	16.268	18.449
East Mid Sweden	4%	3%	0,6	0,46	16.393	14.094
Piemonte	-9%	-10%	-1,5	-1,58	16.398	18.243
Veneto	-8%	-9%	-1,3	-1,43	16.510	18.368
Provence-A.C.A.	1%	2%	0,2	0,29	16.589	15.516
Aquitaine	3%	2%	0,4	0,33	16.601	15.527
North Mid Sweden	11%	11%	1,8	1,88	16.836	14.474
Friuli-Venezia Giulia	-2%	0%	-0,3	0,07	16.838	18.732
Centre	0%	1%	0,0	0,15	16.914	15.820
B.-Normandie	4%	3%	0,7	0,47	16.914	15.820
Lazio	-2%	10%	-0,3	1,73	17.061	18.981
France-Comté	2%	-2%	0,3	-0,38	17.062	15.959
Liguria	-4%	-4%	-0,7	-0,60	17.144	19.073
South Sweden	1%	0%	0,2	0,01	17.374	14.937
H.-Normandie	2%	-1%	0,3	-0,22	17.403	16.277
Smal/Islands	2%	0%	0,4	-0,07	17.413	14.971
West Sweden	0%	-2%	0,0	-0,39	17.557	15.094
Trentino-Alto Adige	-2%	10%	-0,3	1,77	17.641	19.626
North Norrland	13%	14%	2,3	2,40	17.685	15.204
Emilia Romagna	-10%	-10%	-1,8	-1,71	17.924	19.941
Mid Norrland	9%	8%	1,6	1,43	18.060	15.526
Rhône-Alpes	-1%	-2%	-0,1	-0,30	18.303	17.119
Berlin	9%	12%	1,7	2,2	18.411	15.709
Champagne-A.	1%	0%	0,2	-0,03	18.412	17.222
Valle d'Aosta	-3%	12%	-0,5	2,18	18.442	20.517
Lombardia	-14%	-12%	-2,6	-2,21	18.588	20.679
Rheinland-Pfalz	-3%	-3%	-0,5	-0,5	18.619	15.887
Alsace	-1%	0%	-0,2	0,02	18.949	17.724
Schleswig-Holstein	-3%	-1%	-0,5	-0,2	19.058	16.261
Niedersachsen	-1%	-1%	-0,3	-0,2	19.182	16.367
Saarland	6%	4%	1,1	0,8	19.905	16.984
Nordrhein-Westfalen	-2%	-2%	-0,3	-0,3	20.814	17.759
Stockholm	-9%	-6%	-2,1	-1,23	21.978	18.895
Bayern	-4%	-3%	-0,9	-0,7	23.300	19.879
Baden-Württemberg	-5%	-4%	-1,1	-1,0	23.746	20.261
Hessen	-4%	-4%	-1,1	-1,0	27.656	23.597
Ile-de-France	-6%	-3%	-1,6	-0,82	28.157	26.336
Bremen	-1%	1%	-0,4	0,2	28.697	24.485
Hamburg	-5%	-1%	-1,8	-0,4	35.226	30.057

G. GDP Per Capita and BAGDP Per Capita

GDP per capita vs BAGDP per capita (Budgetary Adjusted GDP) -1993

	GDP rank	GDP ECU/cap	BAGDP rank	BAGDP ECU/cap
Alentejo	100	4.492	99	5.667
Centro	99	5.252	100	5.472
Algarve	98	6.297	97	6.907
Norte	97	6.537	98	6.381
Extremadura	96	7.409	96	8.549
Andalucia	95	7.809	94	8.867
Galicia	94	8.082	95	8.843
Calabria	93	8.547	85	10.275
Ceuta y Melilla	92	8.960	86	10.244
Castilla La Mancha	91	9.003	93	9.310
Murcia	90	9.302	92	9.491
Basilicata	89	9.360	75	11.848
Mecklenburg-Vorpommern	88	9.639	76	11.782
Thuringen	87	9.713	77	11.726
Campania	86	9.789	79	11.539
Castilla-y-León	85	9.861	88	10.076
Sachsen	84	9.917	78	11.588
Asturias	83	10.006	87	10.109
Sachsen-Anhalt	82	10.021	72	11.967
Valencia	81	10.040	89	10.065
Cantabria	80	10.083	91	9.937
Canarias	79	10.145	82	11.311
Sicilia	78	10.159	73	11.916
Lisboa e Vale do Tejo	77	10.207	90	10.007
Puglia	76	10.513	80	11.497
Brandenburg	75	10.637	68	12.431
Sardegna	74	11.011	60	13.136
Nlre	73	11.077	63	12.940
Molise	72	11.104	62	13.009
La Rioja	71	11.549	84	11.250
Wales	70	11.734	66	12.666
Aragón	69	11.776	81	11.398
País Vasco	68	12.347	83	11.268
North	67	12.433	58	13.609
NW	66	12.507	61	13.058
Cataluña	65	12.658	71	11.983
WMids	64	12.722	64	12.797
Y&H	63	12.730	67	12.659
Abruzzo	62	12.807	56	14.048
Navarra	61	12.818	70	12.049
EMids	60	12.994	65	12.793
Madrid	59	13.060	74	11.856
Corse	58	13.175	51	14.539
SW	57	13.186	59	13.312
Baleares	56	13.290	69	12.324
Scot	55	13.621	54	14.246
Umbria	54	14.124	55	14.188
EAng	53	14.140	57	13.782
Languedoc-R.	52	14.500	42	15.771

	GDP rank	GDP ECU/cap	BAGDP rank	BAGDP ECU/cap
Marche	51	14.720	52	14.498
Limousin	50	14.865	43	15.740
Nord-P.C.	49	14.922	48	15.136
Poitou-C.	48	15.176	47	15.314
Auvergne	47	15.299	45	15.493
Toscana	46	15.450	53	14.425
Bretagne	45	15.621	40	16.016
Midi-P.	44	15.842	33	16.711
Picardie	43	15.927	44	15.505
Pays de la Loire	42	15.950	41	15.871
Lorraine	41	15.983	37	16.367
Bourgogne	40	16.242	39	16.191
SE	39	16.268	46	15.412
East Mid Sweden	38	16.393	32	16.849
Piemonte	37	16.398	50	14.816
Veneto	36	16.510	49	15.082
Provence-A.C.A.	35	16.589	31	16.883
Aquitaine	34	16.601	29	16.929
North Mid Sweden	33	16.836	19	18.714
Friuli-Venezia Giulia	32	16.838	30	16.906
Centre	31	16.914	28	17.064
B.-Normandie	30	16.914	23	17.389
Lazio	29	17.061	18	18.794
France-Comté	28	17.062	34	16.684
Liguria	27	17.144	35	16.544
South Sweden	26	17.374	24	17.389
H.-Normandie	25	17.403	26	17.182
Smal/Islands	24	17.413	25	17.343
West Sweden	23	17.557	27	17.172
Trentino-Alto Adige	22	17.641	14	19.408
North Norrland	21	17.685	12	20.083
Emilia Romagna	20	17.924	38	16.209
Mid Norrland	19	18.060	13	19.493
Rhône-Alpes	18	18.303	22	18.000
Berlin	17	18.411	10	20.574
Champagne-A.	16	18.412	20	18.382
Valle d'Aosta	15	18.442	9	20.621
Lombardia	14	18.588	36	16.377
Rheinland-Pfalz	13	18.619	21	18.077
Alsace	12	18.949	16	18.968
Schleswig-Holstein	11	19.058	17	18.811
Niedersachsen	10	19.182	15	19.031
Saarland	9	19.905	7	20.752
Nordrhein-Westfalen	8	20.814	11	20.479
Stockholm	7	21.978	8	20.752
Bayern	6	23.300	6	22.582
Baden-Württemberg	5	23.746	5	22.753
Hessen	4	27.656	4	26.628
Ile de France	3	28.157	3	27.342
Bremen	2	28.697	2	28.855
Hamburg	1	35.226	1	34.794

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