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Policy responses to regional unemployment: Lessons from Germany, Spain and Italy

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POLICY RESPONSES TO REGIONAL UNEMPLOYMENT: LESSONS FROM GERMANY, SPAIN AND ITALY

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ABSTRACT

In this paper we identify the main policy responses to the problem of regional unemployment in Germany, Spain and Italy. The paper takes a broad perspective in looking at the determinants of regional unemployment, the regional incidence of national policies and the effects and efficiency of regional policies. In spite of the very different situations and conditions in each country, there are a number of conclusions and policy options to reduce regional unemployment which governments and social partners should evaluate thoroughly. First, a stability-oriented macroeconomic policy-mix with a sufficiently flexible labour market is a necessary, although not sufficient condition for growth and employment at both national and regional levels. Second, the collective wage bargaining systems should either be decentralised *de facto* or should be complemented with easy-to-apply opt-outs at regional or firm level, thus allowing account to be taken of local or firm-specific conditions. Third, in order to avoid a long-term dependency of regions on fiscal transfers, incentives need to be set in such a way as to achieve an adequate balance between efficiency and equity. Fourth, the tax-benefit system should provide more incentives to create and take up jobs since disincentives are a particularly relevant problem for low-income regions. Fifth, pro-active regional policy expenditure on physical and human capital is indispensable for the catching-up of poorer regions, and the efficiency of these policies needs to be evaluated on a systematic and permanent basis. Finally, the low level of geographic mobility in the three countries needs to be addressed by a wide range of measures including greater regional differentiation of both wages and the tax-benefit system, more flexibility of the housing market, a more balanced use of fixed-term and permanent employment contracts as well as improvements in the public employment services.

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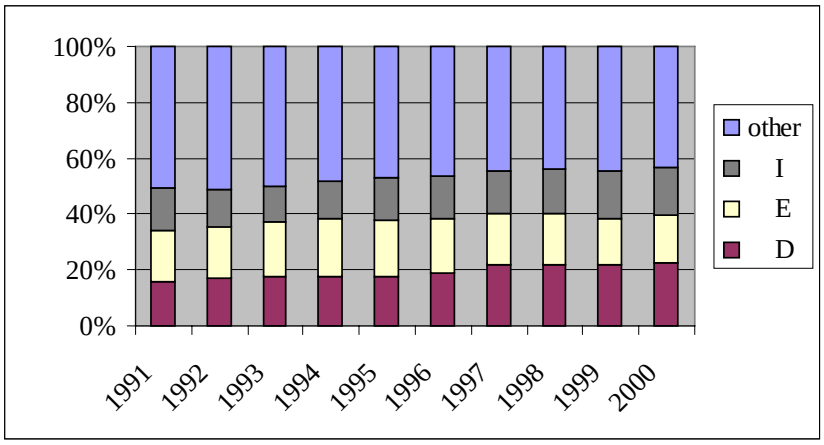
I. SUMMARY OF RESULTS

1. Introduction

A major share of unemployment in the EU has a persistent geographical dimension. In the 1990s the majority of unemployed in the EU15 lived in only three Member States: Germany, Spain and Italy. As shown in Graph I.1, the share of these three countries in total unemployment in the EU has increased from about 50% in 1991, when it roughly matched their population share, to some 56% in 2000. In this decade, unemployment increased in Germany and Italy, while it decreased considerably in Spain in the second half of the 1990s. Within these countries, there is a considerable variation of unemployment rates reaching from below 5% to over 20% (Graph I.2). Unemployment is concentrated in the poorer Objective 1 regions, i.e. eastern Germany, the South, centre and West of Spain as well as southern Italy which are the focus of this study.[1] These regional imbalances indicate that one or several mechanisms of adjusting this situation are not functioning in these three countries. It is therefore of interest to study these cases in more detail to find out whether the same problems are present and whether similar solutions could be applied.

GRAPH I.1**: Number of unemployed in % of total EU15 unemployment, 1991-2000**



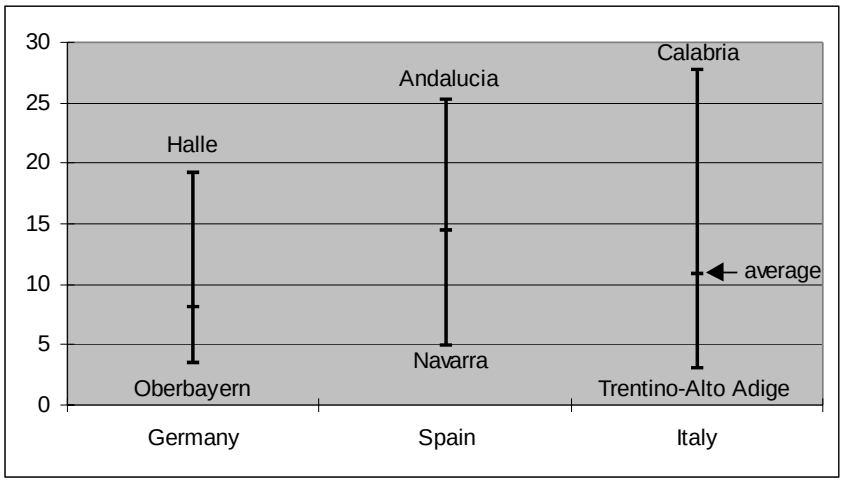
Source: DG ECFIN – AMECO database.

All chapters have a similar structure to allow for a stronger element of comparison. They proceed by first looking at some stylised facts that help in understanding regional unemployment in the country, then giving an overview of national and regional policies and, finally, drawing some policy conclusions. The different components of the analysis have a varying degree of importance in the three cases, but all are relevant to each case study. Given the specific interest of many readers in only the summary or one country case, each chapter was written with the objective to make them readable without having to read all chapters. However, those readers who

[1] To visualise these regions see map of regional unemployment in Europe at http://inforegio.cec.eu.int/wbdoc/docoffic/official/report2/documents/map4.pdf. In this study, phasing-out Objective 1 regions are included except for economic accounts data for Germany given the lack of separate data for east Berlin. Ceuta y Melilla are also sometimes excluded for Spain due to unreliable data.

read all chapters might notice some redundancies that are unavoidable given the similarities of issues.

GRAPH I.2: **Highest, lowest and average unemployment rates of NUTS 2 level regions in Germany, Spain and Italy, April 2000**



Source: Eurostat – Labour Force Survey.

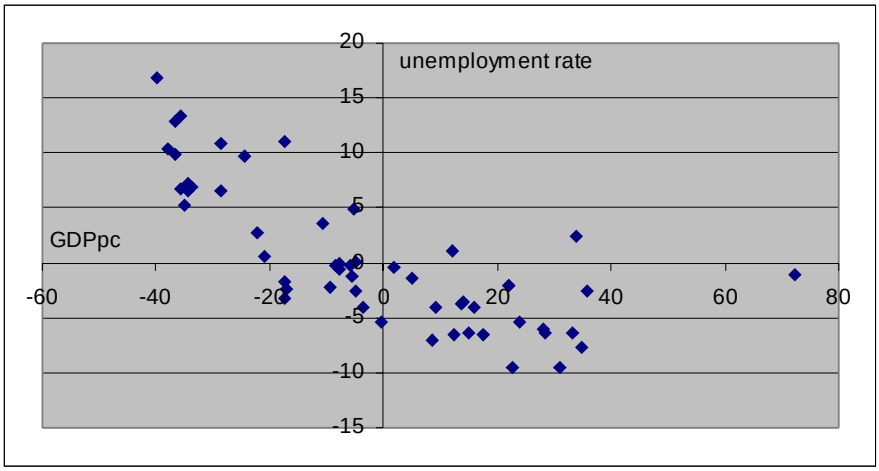
2. Determinants of regional unemployment: some stylised facts

There are obvious differences in the emergence of regional unemployment between Italy and Spain, on the one hand, and eastern Germany, on the other hand. In the former cases geographic peripherality and distance from the main European markets have always kept them in a weak position, while the latter has a rather central location in Europe but the liberalisation shock due to German unification required the full transformation of a regional economy. However, in each case, the mechanisms which would usually be expected to allow adjustments to occur have not operated efficiently enough, and this has led to large and persistent imbalances in regional unemployment rates.

2.1 The economic development of the regions

In each of the three cases, high unemployment is accompanied by a low level of per capita income. Therefore, the regions taken into account in the subsequent chapters are generally the same as the Objective 1 regions of these Member States. Graph I.3 shows a strong negative correlation (of –0.76) between the regional difference to the national average in GDP per capita and in unemployment. For example, the most extreme case is Calabria in South Italy whose GDP per capita is 40 percentage points below Italian average and whose unemployment rate is 17 percentage points above Italian average. While one should be cautious in establishing a simple causal relationship between these two variables, it can at least be said that both are an expression of a lack of economic dynamism of low-income regions.

GRAPH I.3: **Differences of regions in Germany, Spain and Italy to national average of GDP per capita in PPS (1998) and unemployment rate (2000) in percentage points**



Source: Eurostat.

2.2 Labour force qualifications

The regions under consideration tend to lag behind the national and EU average attainment levels in terms of education and training, as well as in R&D. In spite of considerable spending on education and training, these gaps have closed only very slowly because it takes a long time before investment in human capital is reflected in the attainment levels of the whole population. However, younger age groups often already have comparable levels of qualifications, whereas older groups remain in a position of being less skilled.

Nevertheless, it is not simply the case that unemployment rates are higher in these regions due to lower skills levels, mostly due to the fact that young people with low employment prospects stay longer in the education system. Indeed, there is some evidence, particularly in Germany and Italy, that unemployed people have much higher levels of qualifications in the Objective 1 regions than elsewhere. Statistically, qualifications of the labour force are relatively higher in eastern Germany than in western Germany. However, as for many other previously socialist countries, these skills and knowledge may be outdated in market economies so that there is scarce empirical evidence on the actual qualification of the labour force. In Southern Italy, one third of people aged under 35 years with a university degree are unemployed, although older age groups show the expected correlation between higher skills and lower unemployment rates. This suggests that there is a lack of labour mobility between regions and also that younger people may be ‘queuing’ for specific kinds of jobs, often in the public sector. Thus, while investments in human capital may be important in enhancing opportunities for more dynamic economic development, other forms of intervention are also needed in order to stimulate employment creation. In Spain, however, there is a higher correlation between unemployment rates over time in provinces where skills are lower.

2.3 Wages out of line with productivity

Regional differences in income and unemployment also persist because the wage bargaining system fails to respond adequately to labour market conditions prevailing at the regional, local and firm level. Because of regional differences in market access and factor endowments, labour productivity varies across regions even when the same technologies are applied. As a consequence, additional jobs are not created in low-productivity regions because unit labour costs within a given sector with a nation-wide wage floor would be overly high. These reservation wage floors, which may not only arise from wage bargaining but also from minimum wages and the tax-benefit-system, have an asymmetric effect in that they constrain job creation in low-productivity regions while this is less relevant in high-productivity regions.[2]

In the Objective 1 regions of Germany and Italy, nominal unit labour costs in all sectors taken together are 5 to 10% above the national average (Table I.1). However, in manufacturing (and some traded services), unit labour costs in low-productivity regions are generally in line with the national average due to strong competition which forces firms to adjust productivity to wages.[3] In high-unemployment regions of Spain and Italy, relative unit labour costs hardly respond to changes in relative unemployment.[4]

TABLE I.1: **Nominal unit labour costs in Objective 1 regions in total economy and in the manufacturing sector, national average=100**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
total										
Germany	139	126	115	112	114	111	111	112	112	111
Spain*	:	:	:	:	99	100	100	:	:	:
Italy	:	:	:	:	104	105	104	105	:	:
manufacturing										
Germany	198	169	134	132	130	122	114	110	107	104
Spain	:	:	:	:	99	99	100	99	:	:
Italy	:	:	:	:	96	99	99	99	:	:

* Excluding agriculture and fishing
Source: Eurostat for Spain and Italy, *Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder"* for Germany; own calculations of unit labour costs as compensation per employee over GVA/employment ratio; all original data based on ESA95 definitions.

The process underlying these adjustments is a major source of regional unemployment. Nation-wide sectoral wage agreements force firms in sectors subject to external competition to adjust labour productivity to the agreed nation-wide wage level. In less dynamic regions, where productivity growth is slower than wage

[2] Cf. Pench/ Sestito/ Frontini 1999.

[3] In Italy and Spain, compensation per employee and GVA over employment in Objective 1 regions in manufacturing are between 80% and 90% of the national average, while they are between 70% and 80% respectively in the case of eastern Germany.

[4] Cf. Decressin et al. 2001, p.54.

increases, adjustment generally occurs by means of labour-shedding, either by firing the least productive workers, by closing down production plants or by increasing capital-intensity. This adjustment process occurred in eastern Germany in the 1990s, when one million jobs were lost in manufacturing, but the national average level of unit labour costs was finally reached. Apart from this process of labour-shedding, other adjustment strategies are also open to firms wishing to keep wages low, such as leaving the wage bargaining system or moving to the informal economy.

In other sectors, in particular agriculture and non-traded services, unit labour costs may diverge permanently from the national average for various reasons. There are sector-specific methodological problems in calculating unit labour costs. For example, high subsidies in agriculture may lead to relatively high levels of employment and wages despite low productivity levels. Similarly, gross value added in the non-traded service sector is generally calculated on the basis of wages, so that the measurement of unit labour costs is not very meaningful. Moreover, distortions may be introduced if employment is defined in terms of persons employed rather than in terms of hours worked or full-time equivalents, particularly in sectors where part-time work is important. To the extent that the divergence of regional unit labour costs from the national average is not due to methodological problems, competitive pressures are lower in some sectors so that wage increases can better be passed on in prices. This may be of relevance for some non-traded services and may create problems of competitiveness in other sectors where these services are needed as inputs.

2.4 Insufficient geographic labour mobility

The large regional differences in unemployment and job vacancies in these three countries are not balanced by an equilibrating process of geographic mobility. A mix of various factors contributes to the low degree of labour mobility, ranging from rigidities in the labour and housing markets to cultural differences between regions.

The main explanation is that migration depends mainly on the expected difference in real disposable income less the transaction (and social) costs of migration. Hence, people migrate only if they expect an increase in purchasing power taking into account the costs of moving, local prices, taxation, social transfers etc. The design of the tax-benefit system and the functioning of the housing market therefore strongly affect the propensity to move. Looking at Table I.2, the most striking observation is the extremely low share of internal migration in Spain and Italy, the latter being the lowest of all OECD countries for which data are available.

A first important factor is the lack of regional differentiation in terms of wages, taxes and benefits, which means that there are only small differences in interregional levels of real disposable income. In particular, wage setting systems and benefits rarely take account of regional differences in the cost of living. As living costs tend to be lower in poorer regions, taking a job in a richer region may not necessarily improve a household's income situation in real terms. Moreover, weaknesses in the tax-benefit system such as in Italy may reinforce people's dependence on family networks and reduce their willingness to migrate to another region.

TABLE I.2: **Regional wage dispersion, migration and commuting in OECD countries**

	Coefficient of variation of regional average hourly earnings 1995	Gross internal migration flows as share of population 1995	Commuters as share of employed 1998
Belgium	8.0	1.27	22
Germany	13.7 (1994)	1.24 (1993)	8
Greece	4.7	:	:
Spain	11.7	0.60	1
France	18.4	1.49	5
Italy	9.4	0.50	2
Netherlands	4.9	1.61	8
Austria	4.3	:	15
Portugal	19.5	0.54 (1990)	2
Finland	:	0.92	3
Sweden	19.3	1.61	:
United Kingdom	19.3	2.30 (1998)	17
Australia	5.6	1.93	:
Canada	6.7	2.15	9
Czech Republic	12.2	0.55	5
Hungary	:	1.47	2
Japan	13.0	2.45	:
New Zealand	6.6	1.99 (1996)	:
USA	16.7	2.22	3

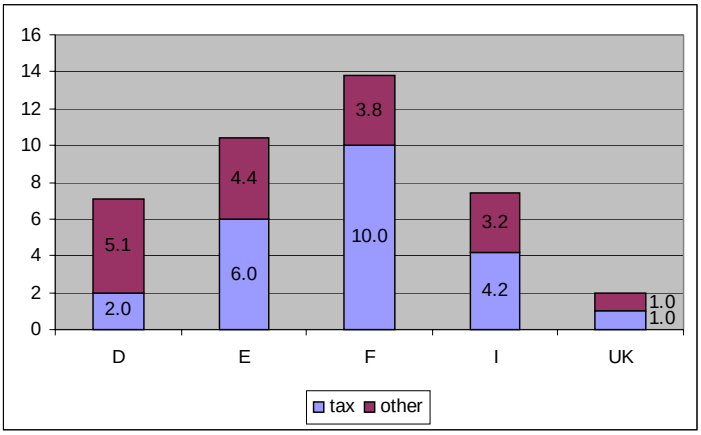
Note: Data are mainly from labour force surveys and for OECD-defined level 2 regions (which are the NUTS level 2 regions for EU Member States).
Source: OECD 2000.

Second, housing markets in the three countries are rather rigid due to strong levels of regulation and high transaction costs (including taxes), and this creates problems for people wishing to move from one place to another. Spain (78%) and Italy (68%) have rather high shares of owner-occupied housing, not least because of the strong regulation of private rented accommodation[5]. Transaction costs associated with house purchases are around 7-10% of the house price (Graph I.4), and probably prevent many unemployed people from buying a house in order to move to a city where there are insufficient houses for rent. In Germany, where privately rented housing accounts for about one third of all accommodation, rents are extremely high in some major cities because strong regulation means that there are limited incentives to increase the supply of rented houses.

Third, widespread use of fixed-term contracts may inhibit labour mobility between regions due to their lower level of job security. Fixed-term contracts are widely used in Spain (while the use of fixed-term contracts is still only limited in Italy) due to the rigidities associated with permanent employment contracts in terms of severance payments. Workers on fixed-term contracts may also experience difficulties in obtaining mortgages for house purchases, so that the prevalence of such contracts may interact with rigidities in the rented housing market to deter labour mobility.

[5] Cf. Maclennan et al. 2000, p.17. Figures are from around 1990; for Germany it is only 38%.

GRAPH I.4: **Transaction costs for house purchases in % of the price, 1993**



Source: Maclennan/ Muellbauer/ Stephens 2000, available at www.housingoutlook.co.uk ; data from Woolwich Building Society.

Fourth, job-matching mechanisms seem less than effective in both Spain and Italy. Tailored advisory services for unemployed people are still not provided systematically by Italy's public employment service. Moreover, in both countries, the decentralisation of the public employment service – while it is certainly useful in improving access to information at the local level - involves the risk that unemployed people will be provided with insufficient information about employment opportunities in other regions due to a lack of inter-regional co-ordination and information.

Finally, cultural aspects may also play a role in reducing labour mobility. In Italy and Spain, family networks remain strong, thus reducing young people's willingness to move far from other family members. Moreover, just as low international mobility in Europe is partly explained by differences in language and culture, interregional mobility may also be limited by such factors, although to a lesser degree. It may be the case that in larger countries with strong regional differences, there may be some kind of discrimination against people who do not use the local accent, dialect or even language. However, due to the availability of only anecdotal evidence, this aspect is not mentioned in the country chapters.

3. Regional incidence of national policies

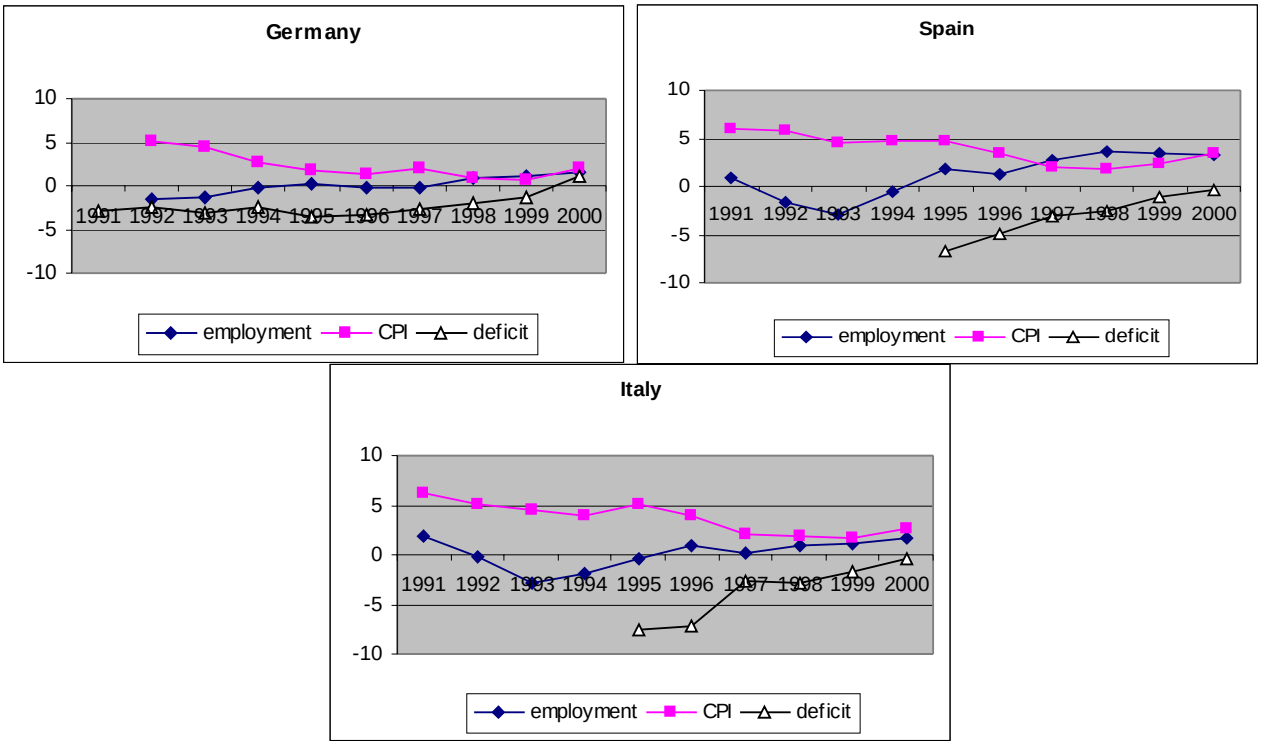
The importance of national policies in setting the basic economic and institutional context for regional development is clear in each of the three countries. Sound macroeconomic policies are of fundamental importance in providing the basis for economic growth and employment creation. However, particularly in countries with strong regional disparities in fiscal capacity, tensions may emerge between the core policy objective of maintaining balanced public finances and a number of other policy aims. Thus it may be difficult for countries to continue to achieve relatively equal levels of per capita household consumption and equal access to public services across regions, particularly given the desirability in these countries of reducing levels of taxation, particularly on labour, and maintaining levels of public investment in areas such as human, knowledge and physical capital. The national policy context is also important in terms of the regulation of markets, as a greater degree of flexibility in

labour and housing markets can assist in employment creation by facilitating adjustments through wage differentiation and labour mobility across regions.

3.1 Macroeconomic policies

The three countries underline the importance of sound macroeconomic policies for both national and regional growth of income and employment. An unbalanced policy-mix in the first half of the 1990s has contributed to a period of weak growth (Graph I.5). The second half of the 1990s saw a good performance in GDP growth and employment in Spain and Italy also due to the success in stabilising the economy in preparation for EMU. While causalities are certainly more complex, it is clear that the policy-mix of an adequate monetary policy, a reduction of budgetary deficits and wage moderation have at least provided the basis for several years of employment growth in all three countries. However, employment growth was much stronger in Spain than in Germany and Italy due to higher growth and more progress in labour market reform in Spain. In Germany, the major demand stimulus from German monetary union and the deficit-financed increase in public spending in the years following unification soon proved to be not sustainable and contributed to weak GDP growth in the rest of the 1990s, not least due to the necessary adjustment of the construction sector and a slow adjustment of the rather rigid labour market.

GRAPH I.5: **Employment (annual change in %), consumer price index (CPI, annual change in %) and budget deficit (in % of GDP), 1991-2000**



Note: Deficit figures in 2000 including one-off proceeds relative to the allocation of UMTS licences

Source: Commission – DG ECFIN.

3.2 Interpersonal redistribution and fiscal transfers

High levels of unemployment in specific regions tends to mean that levels of interpersonal redistribution are high between regions, with lower per capita tax revenues and higher per capita welfare payments in regions with high unemployment rates. While such transfers may be deemed necessary on the grounds of equity, they can have implications for public sector finances due to their impact on public sector indebtedness and tax rates. There is also a risk that high levels of interpersonal redistribution to high-unemployment regions may lead to economic dependence.

Interpersonal redistribution remains the most important source of interregional redistribution, mainly through the revenue side due to the progressiveness of taxation, whereas public expenditure does not clearly favour poorer regions. These transfers mean that there is a significant difference between regional demand (measured in terms of the aggregate absorption of households, firms and the government) and regional production (measured in terms of GDP). This disparity between demand and production gives rise to an import surplus (equal to public transfers and capital flows), which in eastern Germany amounted to 46% of regional GDP, and in southern Italy amounted to 12% of regional GDP in 1999[6]. In these two countries, the difference between demand and production in the poorer regions has contributed to a high tax burden where the total revenues of general government were around 47% relative to GDP in the second half of the 1990s, whereas they remained below 40% in Spain.

On the one hand, there is a risk that high levels of consumption spending may create difficulties for policy-makers in maintaining balanced budgets, particularly if they are also attempting to reduce taxes and to ensure relatively strong levels of public investment with the aim of stimulating long-run growth. In Italy in the 1970s and 1980s, the increases in public sector and household consumption, to a degree not justified by fiscal capacity, were a key reason for the strong rise in the overall tax burden and public sector indebtedness.

On the other hand, given that most regional public expenditure is related to consumption and does not therefore directly raise the productive capacity of the poorer regions, there is a risk that these regions may become economically dependent on state transfers rather then developing their own strategies for regional development.

3.3 Functioning of markets

All three countries have introduced some labour market reforms in recent years and these appear to have had some positive effects on employment creation although employment growth has tended to be stronger in the richer regions. However, as outlined above, a major problem for more employment in low-productivity regions are the relatively uniform wage levels across regions. Therefore, further action is

[6] Cf. Sinn/ Westermann 2001.

needed in specific areas, particularly in order to allow a greater degree of wage differentiation across regions.

There are various ways in which wage bargaining systems and agreements could take better account of regional differences in productivity. One option would be to allow the effective decentralisation of the bargaining system to the regional or firm level, while a second option would be to introduce more flexibility into sector-wide agreements. Greater regional wage differentiation can also be achieved by means of mechanisms which take into account the fact that equal wages in nominal terms mean that real wages differ across regions. This is because regional income and price levels tend to be positively correlated, in particular with regard to housing.

A coefficient to correct for regional differences in costs of living, with the public sector possibly functioning as a role model, might provide better incentives for the spatial allocation of activities. The European Communities, for example, have such a system in place which applies a correction coefficient to the salaries of staff working in Member States other than Belgium and Luxembourg (see Annex I for further details). The methodological problems of estimating and applying regional purchasing power parities should not be too difficult to overcome given that in several Member States a major share of public administration is undertaken by regional governments. Taking Germany as an example, it should be technically feasible to install such a system given that most of the public sector is run by the *Länder*. Moreover one component of public sector wages is a location allowance ("*Ortszulage*") which has however lost its original purpose of regional differentiation so that it now only depends on family status and no longer on the duty station. In Spain, some *Comunidades Autonómas* pay higher wages in public services under their sole responsibility, such as education.

4. Effects and efficiency of regional policies

Two main types of regional policy are applied in the three countries: first, fiscal transfers to poorer regions and, second, targeted forms of intervention, notably investment in physical and human capital. While in the former case it is important that equalisation or transfer mechanisms are well-designed in order to maintain a balance between equity and efficiency, the impact of the latter depends on the effectiveness of both strategy-building and implementation.

4.1 Explicit fiscal transfers to regions

In all three cases there are more or less explicit schemes of interregional fiscal equalisation. Germany has the most developed scheme, while in Spain a process of fiscal decentralisation is on-going and a scheme is slowly being phased in in Italy that will be fully working in 2014. Discussions and reforms of these schemes are characterised by the difficulty in achieving a balance between efficiency and equity, i.e. in consolidating richer regions' objective of more fiscal autonomy by keeping a higher share of what they produced and the poorer regions' objective of offering their population the same quality of public services which other regions enjoy. On the one

hand, if the balance were too much towards equity, fiscal decentralisation would lead to strong disincentive effects in that both richer and poorer regions would lose in fiscal terms if they improved their economic performance. On the other hand, if the balance were too much towards efficiency the poorer regions would have problems in financing public investment required for their process of catching-up and providing their citizens with an adequate level of public service.

Furthermore, there is often an imbalance between fiscal decentralisation of expenditure and revenue. While decentralisation is usually more advanced on the expenditure side, it is less so on the revenue side. For the latter, there is often a sharing of revenue of one tax between different tiers of government which tends to lead to low fiscal responsibility due to a lack of clear competencies and of tax competition between regions.

4.2 Regional policy expenditure

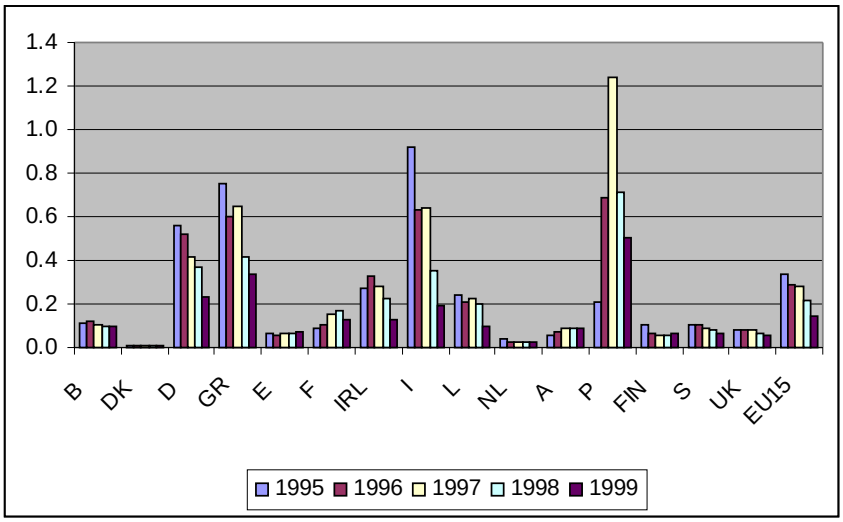
Each country has extensive regional policy instruments which provide investment in human, knowledge and physical capital, as well as incentives to private investment. These instruments are broadly modelled on, and co-financed by, the EU's Structural Funds, while Spain also receives finance from the Cohesion Fund. In Germany and Italy, there are also other region-specific instruments, for example employment subsidies and work provision schemes.

Evaluations of the macroeconomic effects of Structural Funds programmes in Germany and Spain indicate that public investment in human and physical capital can have a significant impact on the growth of income and employment. This is despite the fact that these types of public expenditure are very low in comparison with spending aimed at raising levels of household consumption and providing general public services.

Other types of regional policy expenditure are often less effective, notably spending on state aids, which account for a large share of regional funding in Germany and Italy. Although regional state aids in these countries have decreased in recent years and are now comparable to other Member States if expressed relative to GDP (Graph I.6), the amounts a private investor can receive are considerable and have a distorting effect in biasing towards highly capital-intensive productions. The size of dead-weight effects is difficult to determine, but some estimates suggest that considerable shares of private investment would have been undertaken in the absence of subsidies.

Moreover, the effectiveness of proactive regional policy instruments depends on the extent to which they are guided by a consistent long-term, strategic approach, are designed appropriately, and are implemented efficiently. The effectiveness of regional policy in southern Italy has been reduced by the numerous changes in strategy and in policy-making institutions.

GRAPH I.6: **Regional state aid in Member States in % of GDP, 1995-1999**



Source: European Commission 2001, Tables A6/1 to A6/16.

Further problems derive from weaknesses in the design of policies as it is necessary to ensure that investment is concentrated on the projects likely to have the greatest impact on growth and employment. Therefore, assistance should prioritise removing bottlenecks in the growth poles within the lagging regions rather than spreading the money evenly across the territory which usually has little effect. In eastern Germany, active labour market policies have often been used to reduce unemployment temporarily (e.g. by means of employment subsidies and public works), rather than to provide unemployed people with the skills and information required for finding work. A more targeted approach is necessary, so that such policies are designed to meet specific labour market needs and are focused on specific groups with particular requirements.

Finally, the effectiveness of regional policy can be undermined by inefficiencies in the implementation process. This may be due to complex bureaucratic procedures within the public administration, or to the lack of appropriate capacities and skills, for example for project selection, monitoring and evaluation. Sometimes, however, the effectiveness of regional policy may be undermined by the mismanagement of funds and corruption.

5. Conclusions and policy options

In spite of the very different situations and conditions in each country, there are a number of conclusions and policy options which governments and social partners should evaluate thoroughly with the aim of reducing the persistence of regional unemployment:

1. A stability-oriented macroeconomic policy-mix with a sufficiently flexible labour market is a necessary, although not sufficient condition for growth and employment at both national and regional levels.

2. The collective wage bargaining systems should either be decentralised *de facto* or should be complemented with easy-to-apply opt-outs at regional or firm level, thus allowing account to be taken of local or firm-specific conditions. An interesting option could be to introduce regional correction coefficients in public sector wages and in the benefits system in order to take account of regional differences in costs of living.

3. Regions with low levels of income per capita require considerable fiscal transfers to allow for similar levels of private and public consumption within a nation. In order to avoid long-term dependency, incentives need to be set in such a way as to achieve an adequate balance between efficiency and equity, i.e. to provide the poorer regions with the conditions required for their economic development and to offer their population a similar quality of public services which other regions enjoy.

4. The tax-benefit system should provide more incentives to create and take up jobs. Since disincentives are a particular problem at the lower end of productivity and wages, it is an especially relevant problem for low-income regions.

5. Pro-active regional policy expenditure on physical and human capital is indispensable for the catching-up of poorer regions. This requires the ongoing evaluation of efficiency and of long-term impacts, although the focus of evaluation should not be short-term employment effects. Within the assisted regions, funding should be spatially concentrated on areas where the largest impact can be expected in order to trigger a self-sustained process of development. Of particular importance is the design of institutions for channelling funds to the final beneficiary. Subsidies to private investment in the poorer regions tend not to be very efficient as they suffer from dead-weight effects, create a prisoners' dilemma in that every region is worse off in the competition for mobile capital through subsidies and tend to favour extremely capital-intensive forms of production. This may create a dualistic structure of small labour-intensive local firms and large capital-intensive firms.

6. The low level of geographic mobility in the three countries needs to be addressed by a wide range of measures. Greater regional differentiation in real terms should be encouraged in terms of both wages and the tax-benefit system. It would also be desirable to consider the ways in which the tax-benefit system interacts with family networks, and to make any necessary adjustments. Moreover, efforts should be made to increase the flexibility of the housing market by reducing transaction costs on house purchases and by enhancing incentives for housing supply. Mobility in Spain might also be encouraged by greater use of permanent employment contracts (which at present are unattractive to employers due to stringent firing conditions), as fixed-term contracts are less likely to enable people to move from one region to another. Finally, improvements may be needed in job-matching mechanisms, particularly in the public employment service's provision of information about employment opportunities in other regions.

REFERENCES IN CHAPTER I

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ANNEX I

The correction coefficient applied by the European Communities[7]

Article 64 of the Staff Regulations for officials of the European Communities stipulates:
"*An official's remuneration expressed in euros shall, after the compulsory deductions set out in these Staff Regulations or in any implementing regulations have been made, be weighted at a rate above, below or equal to 100%, depending on living conditions in the various places of employment. These weightings shall be adopted by the Council, acting by a qualified majority on a proposal from the Commission …"*

A correction coefficient operates as a percentage adjustment to the salary to compensate for the difference (positive or negative) in the cost of living in the duty station as compared with Brussels. The coefficient is calculated by Eurostat by using prices surveyed in the context of measuring purchasing power parities. Prices are weighted according to a basket of goods and services of average official's expenditure which is estimated from a "Family Budget Survey" among EC staff taking place roughly every five years.

For euro area countries the correction coefficient is the average price ratio (or economic parity) expressed as a percentage. For the countries outside the euro area (Denmark, Sweden and UK) an exchange rate must be used to express the average price ratio (or economic parity) as a percentage (or correction coefficient). Of course for the system to work, the same rate must be used to convert the salary from euro into local currency. To avoid recalculating the correction coefficient every month, the salary conversion rate is fixed annually. The two examples and the graph below explain the mechanism more in detail.

Example 1 (euro countries)

Suppose that the average basket of goods and services costs 240 euro in the duty station and 200 euro in Brussels. The price ratio (or economic parity) is therefore 240/200 = 1.2. That means that a salary of 1200 euro is needed to have the same purchasing power as with a 1000 euro salary in Brussels. In other words, to maintain the purchasing power in the duty station one would need a 20% higher salary than in Brussels. A correction coefficient of 120 is applied to the salary expressed in euro, to guarantee the same purchasing power.

Example 2 (non-euro countries)

Suppose that the average basket of goods and services costs 600 local currency units (LCU) in your duty station and 200 euro in Brussels. The price ratio (or economic parity) is therefore 600/200 = 3.0. That means that a 3000 LCU salary is needed to

[7] Information in this annex has been taken from a Eurostat brochure which is available to Commission staff.

have the same purchasing power as with a 1000 euro salary in Brussels. If the fixed exchange rate applied to the remuneration were 2.5 LCU/euro, a correction coefficient of 120 (=100 x 3.0/2.5) would be applied to the salary expressed in euro to bring the salary up to 3.000 (=1000 x 120/100 x 2.5). If the exchange rate were 2.4 LCU per Euro, the correction coefficient would have to be 125 (=100 x 3.0/2.4) to bring the salary up to 3.000 (=1000 x 125/100 x 2.5) Thus, the value of the exchange rate modifies the correction coefficient without affecting the purchasing power in the duty station or net salary in LCU. Hence, a fixed exchange rate is used to avoid having to change the correction coefficient every month.

Salary in Brussels (in euro)	x	Correction coefficient (Economic parity exchange rate)	x	Exchange rate (=1 for euro countries)	=	Salary in duty station (in euro for euro countries)

TABLE: **Correction coefficients in place since 1.7.2001 in the European Communities**

Country or location of employment	**Correction coefficient in %**	**Exchange rate 1 EUR =**	
Belgium/Luxembourg	100.0	1	EUR
Denmark	133.0	7.4470	DKK
Germany	105.1	1	EUR
except: Bonn	98.3	1	EUR
Karlsruhe	95.8	1	EUR
München	108.4	1	EUR
Greece	87.2	1	EUR
Spain	95.3	1	EUR
France	117.8	1	EUR
Irland	122.1	1	EUR
Italy	103.1	1	EUR
except: Varese	95.6	1	EUR
Netherlands	115.2	1	EUR
Austria	108.5	1	EUR
Portugal	88.6	1	EUR
Finland	122.1	1	EUR
Sweden	116.6	9.1925	SEK
United Kingdom	164.0	0.6035	GBP
except: Culham	132.0	0.6035	GBP

II. EASTERN GERMANY

1. Introduction

Within Germany, the unemployment situation differs considerably between its eastern and its western part.[8] In 2000, there were on average 1.36 million unemployed people in eastern Germany and 2.53 million unemployed in western Germany, and there were 22 and 6 unemployed per vacancy respectively (Table II.1). Furthermore, there were about 800,000 people in "hidden" unemployment in eastern Germany in 2000, so that the total number of registered and hidden unemployed in eastern Germany amounted to 2.16 million.[9] In November 2001, the unemployment rate stood at 7.4% in western Germany whereas it was 16.9% in eastern Germany. These averages conceal variations in unemployment rates in labour office districts of between 2.7% in Freising/Bayern and 22.6% in Neubrandenburg/Mecklenburg-Vorpommern. Thus, within the same country there are regions with extreme labour shortages and others with almost a quarter of the labour force without job.

TABLE II.1: **Labour market situation in eastern and western Germany in 2000 (in 1000)**

	East	West	total
civilian labour force (1)	7,806.1	32,504.9	40,311.0
unemployed (2)	1,359.3	2,529.4	3,888.7
vacancies (3)	62.1	451.9	514.0
unemployment rate in % (2/1)	17.4	7.8	9.6
unemployed/vacancy (3/2)	21.9	5.6	7.6

Source: Bundesanstalt für Arbeit.

The radical transformation of the east German economy after the collapse of the GDR has obviously affected the labour market. Between 1991 and 2000, eastern Germany lost more than 700,000 in population and more than 910,000 in employment (Table II.2). The ratio of employment to total population fell from above 46% to 42%, almost 6 percentage points less than in western Germany.

While a "J-curve" of economic activity and employment in the first years after an economy has suffered an external shock does not come as a surprise, the persistence of differences in regional unemployment between western and eastern Germany was more unexpected. This is all the more given that the employment situation improved considerably in western Germany from 1998 to 2000 whereas the situation in the east

[8] Note that there are different statistical concepts of eastern Germany due to the specific situation of Berlin. In labour market statistics west Berlin is attributed to western Germany and east Berlin to east Germany. In economic accounts, however, following the revision of the methodology (to "ESA95" by the *Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder"*), there is no longer a division of Berlin so that a choice is to be made as to which part of Germany Berlin is statistically attributed. Here, given the dominance of the west Berlin economy, Berlin as a whole is attributed to western Germany.

[9] Sachverständigenrat 2000 p.126. "Hidden" unemployed are those in labour market policy schemes on reduced working time, job creation, training, reduced working ability and early retirement.

German *Länder* at best stabilised. The paper proceeds by first looking at some stylised facts that help in understanding unemployment in eastern Germany, then giving an overview of national and regional policies and, finally, drawing some policy conclusions.

TABLE II.2: **Population and employment (annual average in 1000), 1991 and 2000**

	population			employment			employment/population (in %)		
	1991	2000*	difference	1991	2000	difference	1991	2000	difference
Brandenburg	2,562.0	2600	38.0	1,186.9	1045.2	-141.7	46.3	40.2	-6.1
M.-Vorpommern	1,907.7	1786	-121.7	845.6	750.6	-95.0	44.3	42.0	-2.3
Sachsen	4,721.6	4452	-269.6	2,240.5	1963.8	-276.7	47.5	44.1	-3.3
Sachsen-Anhalt	2,849.1	2641	-208.1	1,274.1	1052.3	-221.8	44.7	39.8	-4.9
Thüringen	2,591.4	2445	-146.4	1,237.9	1061.8	-176.1	47.8	43.4	-4.3
East Germany	14,631.8	13,924.0	-707.8	6,785.0	5,873.7	-911.3	46.4	42.2	-4.2
West Germany	65,352.4	68219	2,866.6	31,669.0	32656.6	987.6	48.5	47.9	-0.6
Germany	79,984.2	82,143.0	2,158.8	38,454.0	38,530.3	76.3	48.1	46.9	-1.2

* provisional

Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder".

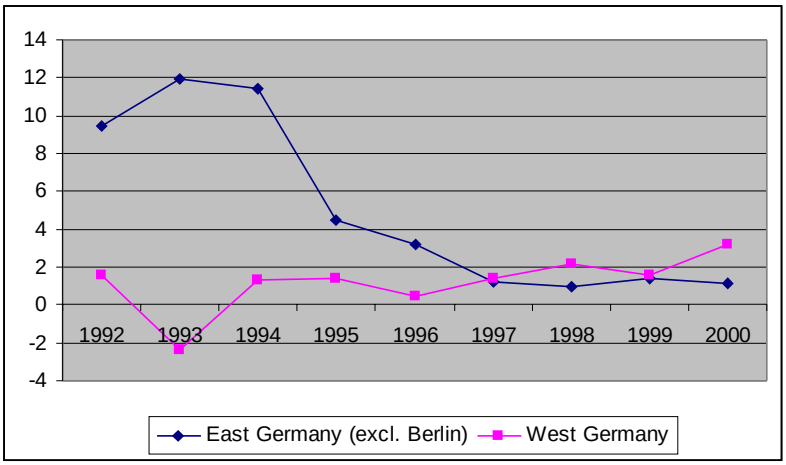
2. Determinants of regional unemployment in eastern Germany: some stylised facts

Unification has brought about a major shock to the east German economy which required its full transformation in order to regain competitiveness. While the implied structural change inevitably went along with the destruction of many jobs, several mechanisms have prevented the creation of an equal number of jobs and this contributed to the persistence of unemployment. Economic growth was impressive in the first half of the 1990s but remained below west German rates in the second half. Convergence thus came to a halt and so did employment growth. The qualification of the labour force is comparable to - or even better than in - western Germany although it is not clear to what extent some skills are system-specific and have become obsolete in a market economy. A major barrier to more investment and jobs was the rapid process of convergence of wages to west German levels which brought wages out of line with productivity and induced cuts in employment. Furthermore, those who have become unemployed have insufficient incentives to geographic labour mobility towards areas where jobs vacancies are available.

2.1 The economic development of eastern Germany

Employment is usually strongly linked to the overall economic performance of a country or a region. GDP growth in eastern Germany was higher than in western Germany until 1996 and has been slightly lower or equal since then (Graph II.1). As a consequence, GDP per capita relative to western Germany increased from 40% in 1991 to 62% in 1996 and more or less stagnated at that level from then on.

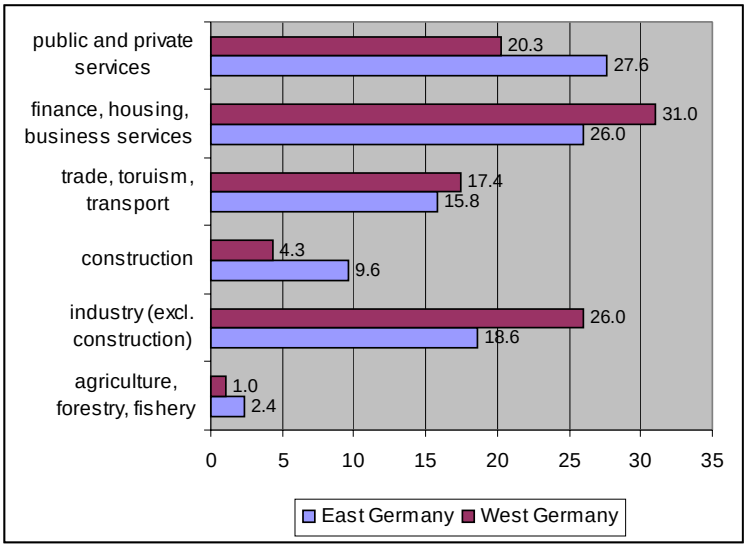
GRAPH II.1: **Annual change in real GDP in eastern and western Germany (1995 prices), 1992-2000**



Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder"; own calculations.

Economic growth in eastern Germany had a specific sectoral pattern in that it was strongly driven by an expansion of the construction sector which contracted in the second half of the 1990s, following a reduction in fiscal incentives for housing investment, and thus contributed to a subdued growth in these years (Graph II.2 and Table II.3). In 2000, the construction sector's share of gross value added (GVA) in the eastern *Länder* was still more than double its share in the old *Länder*. In contrast, the manufacturing sector had rather high growth rates throughout the 1990s, although this must be seen in the light of the very low starting level resulting from the almost complete collapse of industry after its exposure to external competition. The share of industry in total GVA in eastern Germany is still more than 7 percentage points below its share in western Germany. Lower growth rates than in the west are present in most service sectors with the exception of the public service.

GRAPH II.2: **Share of sectoral GVA in total GVA in eastern and western Germany in %, 2000**



Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder".

TABLE II.3: Change in GVA in % (constant 1995 prices) in the new Länder (excl. Berlin), 1992-2000

	1992	1993	1994	1995	1996	1997	1998	1999	2000
agriculture, forestry, fishery	-19.8	35.6	-12.3	13.1	3.5	6.5	10.4	3.7	-0.6
industry (excl. construction)	-5.8	14.6	12.3	6.4	9.2	3.9	3.9	2.7	7.5
- of which: manufacturing	1.3	19.6	20.8	8.5	7.5	9.3	5.5	3.3	8.3
construction	31.6	17.2	22.4	2.6	-1.5	-3.8	-10.5	-4.3	-9.7
trade, tourism, transport	16.7	13.1	10.8	2.5	1.9	0.7	3.6	2.7	1.5
finance, housing, business services	10.0	17.0	13.7	10.8	8.0	7.2	7.2	5.0	5.0
public and other private services	8.3	3.8	6.0	2.3	1.4	-0.4	-0.2	0.1	0.8
total	9.5	12.0	11.3	4.9	3.6	1.7	1.4	1.6	1.7

Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder".

A further dimension of growth in eastern Germany is its regional pattern which is becoming increasingly differentiated (Box II.1). A cluster analysis carried out by the German Council of Economic Experts in 1999 identified Leipzig, Dresden, Halle/Saale, Jena, Erfurt, Chemnitz and Berlin (including Potsdam) as the main growth poles in eastern Germany.[10] These regions are well equipped in terms of the growth determinants taken into account in the analysis, i.e. high productivity based on a favourable sectoral structure with many high value added, technology-intensive activities and a low share of agriculture, a high share of qualified employees, a low degree of industrial specialisation, a high population density as well as a low distance to other agglomerations. The explanation provided is that the proximity of firms, universities and research institutes allowed the exploitation of knowledge spill-overs and access to a pool of qualified employees.

BOX II.1: EMERGING INDUSTRIAL CLUSTERS IN EASTERN GERMANY

Three industries had a rather strong, spatially concentrated development in eastern Germany: microelectronics, chemicals, automobiles. In all three cases there is a certain tradition from the pre-war and GDR periods which is important with regard to the availability of skilled labour. At the same time, many of them strongly depend on input and output linkages so that clustering is a useful strategy for being close to suppliers, costumers and skilled labour. These industries are all very capital-intensive which reduces the importance of labour costs and is a consequence of the generous subsidisation of productive investment in eastern Germany.

Microelectronics

The electronics industry is among the industries with the strongest growth of production in eastern Germany and has doubled from 1995 to 1999. In 1998, about 34,000 were employed in this industry, or 6% of all employees in the manufacturing sector. A particular specialisation is in microelectronics which had already been developed in the GDR with about 120,000 employees, including a research centre for microelectronics in Dresden and semiconductor production plants in four locations (Erfurt, Dresden, Frankfurt/Oder and Neuhaus/Thüringen). Following the closing down or privatisation of these plants during the 1990s, Dresden (capital of Sachsen) developed a cluster of microelectronics with currently around 500 companies with more than 20,000 employees working directly in microelectronics or indirectly in related branches. Production plants of major companies include Infineon (a Siemens affiliate), AMD (Advanced Micro Devices) and ZMD (Dresden Centre for Microelectronics). Furthermore, there are 15 independent research institutes and more than 150 software offices active in this sector in Dresden. Intel is considering locating a production plant for semiconductors in Frankfurt/Oder (Brandenburg).

[10] Sachverständigenrat 1999, pp. 116 ff. See also Blien et al. 2001.

Chemicals

The east German chemical industry underwent the most intense restructuring after unification. Only in 1997 did employment increase again for the first time and has remained since then at a level of 32,000. The so-called "chemicals triangle" has a number of locations, most of which are in Sachsen-Anhalt and in basic materials including hydrogenation (Rodeleben), nitrogen products (Piesteritz), chlorine, phosphorus and silicon chemistry (Bitterfeld/Wolfen), olefins (Buna), refinery and petrochemicals (Leuna). The most important location is the "ChemiePark Bitterfeld/Wolfen" where there are 3,600 direct jobs in the chemical industry and another 7000 indirect jobs. The production there is rather capital-intensive with an investment per job of about • 500,000. It is a traditional chemical industry location which was founded at the end of the 19th century on the basis of exploitation of brown coal which however no longer exists today. The advantages of this cluster in Bitterfeld/Wolfen are best illustrated by the common utilities for energy and waste as well as a closed product flow cycle for synthetic quartz glass production on the basis of co-operation between different plants.

Automobiles

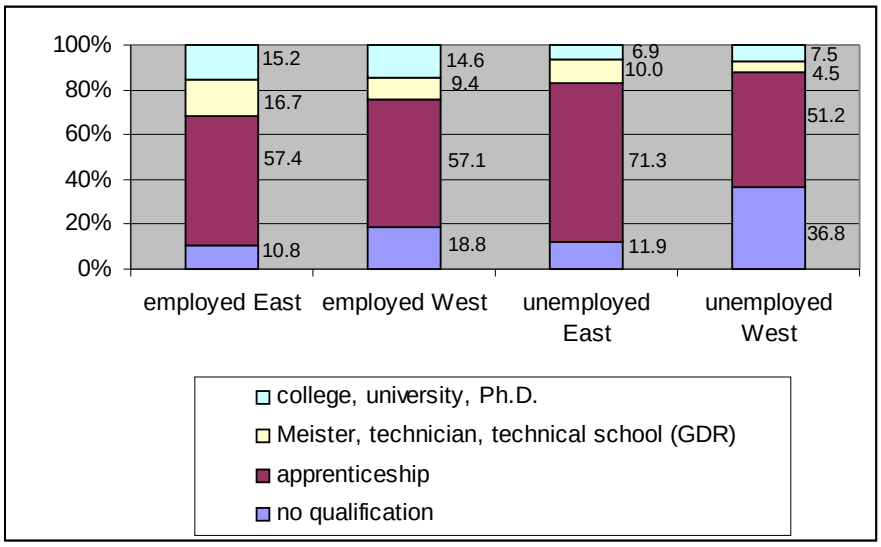
The production of automobiles was one of the most dynamic industries in eastern Germany after unification, with investment by car producers and input suppliers adding up to more than • 5 billion. This dynamism was supported by rather early decisions to stop the production of the GDR brands "Trabant" and "Wartburg", which were not competitive in terms of quality, and the investment decisions for highly productive production plants by Volkswagen (in Mosel and Chemnitz in Sachsen) and Opel (in Eisenach in Thüringen). This allowed them to make use of the available resources at these locations whose tradition goes back to the predecessors of Audi and BMW at the beginning of the 20th century. At present there are about 30,000 employees producing more than 400,000 cars per year in eastern Germany, which is about 8% of the domestic production of German car producers. Further investments which have recently started or will soon start production are DaimlerChrysler in Ludwigsfelde (Brandenburg), Porsche in Leipzig (Sachsen) and a transparent factory for assembling a Volkswagen luxury model in the centre of Dresden. In July 2001, BMW decided to build a new production site in Leipzig at investment costs of about • 1 billion, creating 5,000 direct jobs in the medium term and an estimated 5,000 indirect jobs. Leipzig had been chosen after a long selection process among applications from more than 250 cities and regions. The main arguments in favour of Leipzig had been the proximity to the BMW plants in Bavaria, the good infrastructure, the subsidies to be expected (28% of the investment), the availability of skilled labour, and a flexible working time scheme. The latter was agreed with BMW's workers council so that machines will be running between 60 and 140 hours per week while individual workers' time will be accounted on a medium-term basis without any payments for overtime or wage bill reductions in low-activity periods with less than the regular 38 hours per week.

2.2 The qualification of the labour force

Statistically, the qualifications of the labour force are relatively higher in eastern Germany than in western Germany. In the West in 1999, 18.8% of all employed had no formal qualifications while only 11.9% fell into this category in the East (Graph II.3). Similarly, of all unemployed, 36.8% in the West and 11.9% in the East had no qualification. However, as for many other previously socialist countries, there is a scarcity of empirical evidence on the actual qualifications of the labour force. This is mostly due to the fact that, in spite of a high level of formal education, a major part of skills and knowledge were system-specific and are now obsolete – in particular those in social sciences including management skills, but also in some technical professions - and are therefore of little use in today's market economies. This adds to mostly anecdotal evidence, which is difficult to distinguish from unjustified prejudices, that

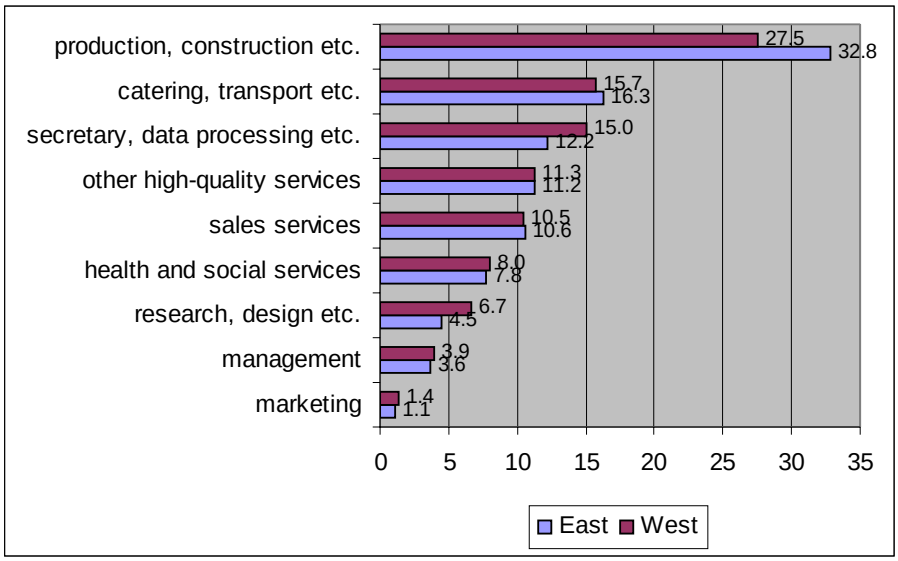
people in previously socialist countries tend to have passive attitudes in relying on the government to provide solutions to their economic and social problems.[11]

GRAPH II.3: Qualifications of employed and unemployed in eastern and western Germany in % of total, 1999



Source: Statistisches Bundesamt 2000 (microcensus April 1999).

GRAPH II.4: **Structure of employment by activities, 1996**



Source: DIW 2000 (microcensus 1996).

The functional structure of employment in eastern Germany tends to confirm a lower level of skills since it differs from the one in western Germany in mainly two aspects (Graph II.4). First, there is a much higher share of employment in production and construction activities (about 5 percentage points). Second, a lower share works in data processing (about 3 percentage points) and in research and design (by about 2

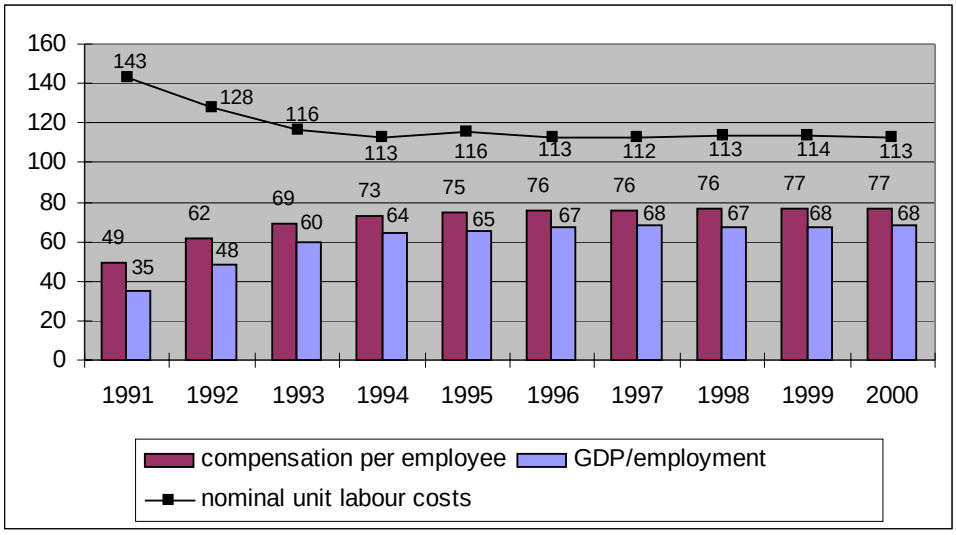
[11] See e.g. Pohl 2000, p.233

percentage points). While this structure is mostly the outcome of a sectoral structure dominated by many SMEs, on the one hand, and fewer large firms whose headquarters are located elsewhere, on the other hand, there might also be a certain degree of reverse causality in that it might be difficult to find qualified staff for more high value added jobs. This is also confirmed by low private R&D expenditure, although it has increased considerably in the 1990s. Indeed, many authors attribute the lack of competitiveness of firms in eastern Germany to problems of marketing, technology and innovation.[12]

2.3 Wages out of line with productivity

One of the main handicaps for growth and employment in eastern Germany has been the fast rise of wages beyond productivity increases. Wage convergence in collective agreements had the consequence of high unit labour costs relative to western Germany due to wages of about 13% above productivity on average since 1996 (Graph II.5). In 2000, compensation per employee had a level of 77% and GDP over employment a level of 68% relative to the west German level respectively. This holds in spite of an average weekly working time of 38.9 hours in 1999, compared to 36.8 hours in western Germany. Among the reasons for the low labour productivity in eastern Germany are a lower capital intensity due to different relative factor prices, a lower use of production capacities and the need for many east German firms to compete through lower prices.[13]

GRAPH II.5: **Compensation, productivity and nominal unit labour costs in eastern Germany (current prices, western Germany = 100), 1991-2000**



Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder"*;* own calculations.

[12] See e.g. Landeszentralbank Berlin-Brandenburg 2001, p.24ff.

[13] Cf. Sachverständigenrat 2000, p.186f.

The wage developments in eastern Germany are the outcome of many forces preventing wages from developing in line with productivity. The initial situation of the German monetary union and unification is crucial in understanding the process in the 1990s. While the 1:1 conversion rate of the GDR Mark to the deutschmark is often said to have been the main problem, this does not seem to be the case given that wages in the east were only about one third of those in the west and therefore basically corresponding to differences in productivity. More important was the situation of wage bargaining agreed in many sectors in 1991, namely that wages would convergence to western levels within five years. Those negotiations were mainly carried out by employers' associations and trade unions from the West due to the fact that most east German firms were yet to be privatised by the *Treuhandanstalt* and lacked sufficient representation to raise the issue of competitiveness. Whether this was done with the intention "to bind future east German firms and to effectively prevent them from threatening their markets"[14] is difficult to prove, but three factors have certainly contributed to this situation. First, the federal government's initial optimism on the time needed to complete the catching-up of eastern Germany ("flourishing landscapes"); second, the objective of avoiding major out-migration from eastern Germany that was presumed to take place if considerably lower wages prevailed for a longer time; and third, equity considerations of the "same pay for the same work". These factors created an environment in which rapid wage convergence was the easiest strategy to take. However, the five-year-agreements on full wage convergence proved to be unfeasible and were basically abandoned in 1993, but high rates of wage increases continued throughout the 1990s.

Unit labour costs by industries, calculated as the ratio of remuneration per employee over gross value added per employed person relative to western Germany, show that the biggest adjustments have taken place in traded goods sectors such as manufacturing and financial and business services which have come down from double in 1991 to almost western levels in 2000 (Table II.4). The agricultural sector has had lower unit labour costs than the West since 1993 due to its relatively high productivity. The construction sector has had a specific development in that its unit labour costs were below western Germany's level from 1994, but have been higher since 1998 probably due to low labour productivity following over-capacities. Trade, tourism and transport have basically always been 10 to 20% higher than the West.

TABLE II.4: **Nominal unit labour costs* in different sectors in eastern Germany (western Germany = 100), 1991-2000**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
agriculture, forestry, fishery	147	108	73	84	84	93	89	81	81	79
industry (excl. construction)	161	151	120	122	121	109	105	103	101	98
- of which: manufacturing	205	174	136	135	133	124	115	111	107	104
construction	120	112	106	97	96	92	96	105	107	111
trade, tourism, transport	119	109	108	106	115	114	115	115	116	117
finance, housing, business services	209	163	127	117	119	116	113	112	111	106
public and other private services	104	105	106	104	107	107	107	110	112	110
total	143	128	116	113	116	113	112	113	114	113

* Remuneration per employee over GVA/employment ratio
Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder", own calculations.

[14] Sinn/Westermann 2001, p.17.

The situation in the services sector is more difficult to analyse since, on the one hand, they include public services as well as services with administered prices which, during the 1990s, tended to be lower than those in the West and resulted in lower overall prices and productivity. On the other hand, many of these services are tradable inputs to other products, thus casting doubts on the competitiveness of this most dynamic sector of today's economies. The wage level of the public sector – 90% of the western level as of 2002 – is difficult to assess given that the concept of productivity makes less sense in the absence of market prices so that factor costs have to be taken as a substitute. However, the fact that the wage level in the public sector is about 10% higher than the average is problematic for several reasons:

- It may take over the role of a benchmark or a leader in the wage bargaining process in the private sector where wages in several sectors are higher than productivity compared to the West;

- It makes employment in the public sector more attractive than in the private sector, thus depriving the private sector of the more qualified people;

- Compared to the West, *Länder* and *Gemeinden* tend to be overstaffed as a left-over from the large public sector of the GDR which leads to rather high personnel expenditure. Apart from reducing staff, this leaves only a choice between lower investment expenditure or higher indebtedness. In view of the urgent need for better local infrastructure, many public entities have embarked on higher indebtedness during the 1990s which has however reached its limits now.[15]

While one may conclude that the situation had already improved considerably towards the end of the 1990s, it should be recognised that a major share of adjustment has taken place through the reduction of employment. In industry, which is the sector that is most exposed to external competition, firms are forced to adjust immediately by either closing down, or increasing their capital-intensity by higher investment and/or reduction of employment, or leaving employers' associations so as to allow for wages below levels of branch-wide agreements between employers' associations and trade unions.[16] In this sector alone, half of employment - or 1 million jobs - have been lost in net terms between 1991 and 2000. This employment effect cannot exclusively be attributed to the closing down of old companies, but is also due to the failure to attract new investment. Although 4% higher unit labour costs may be within the range of statistical inaccuracy, a region attempting to catch up in terms of income, productivity and employment should rather have lower unit labour costs than other regions in order to compete for more investment and jobs.

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[15] See e.g. Von Hagen/Strauch 2000, pp.14ff.

[16] In 1998, 46% of industry firms in eastern Germany had no tariff contracts, 19% firm-specific contracts and 35% branch-wide tariff contracts (cf. IWH 1999 quoted in OECD Economic Surveys: Germany; Paris 1999, p.81). According to IAB, 44% of west German firms were bound by branch-wide tariff agreements in 1999, the figure for east German firms being 21%; in terms of employees, the respective figures are 73% and 57% (cf. Sachverständigenrat 2000, p.193).

2.4 Insufficient geographic labour mobility

In spite of higher unemployment and lower wages, people from eastern Germany seem to migrate insufficiently – regarding a potentially equalising effect on unemployment rates - to west German regions offering jobs and higher wages. The main flows of out-migration from East to West took place in the years 1989 and 1990. Since then, net migration from eastern Germany has been only slightly negative although the improved development of the west German labour market in 1999 and 2000 suggests that out-migration has slightly increased again. In 1998 only 7,400 people left eastern Germany in net terms which are -0.05% relative to total population (Table II.5). Sachsen-Anhalt and Sachsen were the *Länder* with the highest out-migration, while Brandenburg is undergoing a specific development in that it benefits from the long withheld urban expansion of Berlin – a common tendency of major German cities over the last decades for people and firms to move to the outskirts. There is some evidence that young and qualified people are leaving eastern Germany more than other population groups,[17] although this is still hardly visible in the demographic structure of eastern Germany relative to western Germany.[18]

TABLE II.5: **Migration across Länder borders in 1000 persons, 1998**

		Brandenburg	M.-Vorpommern	Sachsen	Sachsen-Anhalt	Thüringen	East Germany
to	**west Germany**	23.3	21.8	39.3	27.6	24.1	136.1
	east Germany	11.1	5.2	12.8	11.2	8.0	48.3
	Berlin	19.4	3.4	3.6	2.7	1.3	30.4
from	**west Germany**	14.3	16.5	26.1	16.6	16.3	89.8
	east Germany	9.9	6.3	14.3	9.8	7.9	48.2
	Berlin	47.9	2.5	2.6	1.7	1.1	55.8
net migration	**west Germany**	-9.0	-5.3	-13.2	-11.0	-7.8	-46.3
to (-)/from(+)	**east Germany**	-1.2	1.1	1.5	-1.4	-0.1	-0.1
	Berlin	28.5	-0.9	-1.0	-1.0	-0.2	25.4
net migration from/to abroad		8.0	1.3	1.4	-0.3	3.2	13.6
net migration		26.3	-3.8	-11.3	-13.7	-4.9	-7.4
net migration in % of population		0.93	-0.21	-0.25	-0.51	-0.20	-0.05

Source: Statistisches Bundesamt; calculations by Hardt et al. 2001.

TABLE II.6: **Change of residence across borders of different areas in % of population**

	East Germany		West Germany	
	inwards	outwards	inwards	outwards
Gemeinden (1998)	5.3	5.3	6.0	5.9
Kreise (1998)	3.6	3.6	4.5	4.4
Länder (1999)	0.5	0.4	1.2	0.9

Source: Statistisches Bundesamt; own calculations

Comparing geographic mobility in terms of a change of residence at different levels of *Länder*, *Kreise* and *Gemeinden* between East and West in 1998/1999, mobility is somewhat higher in western Germany, although not significantly: at the level of the

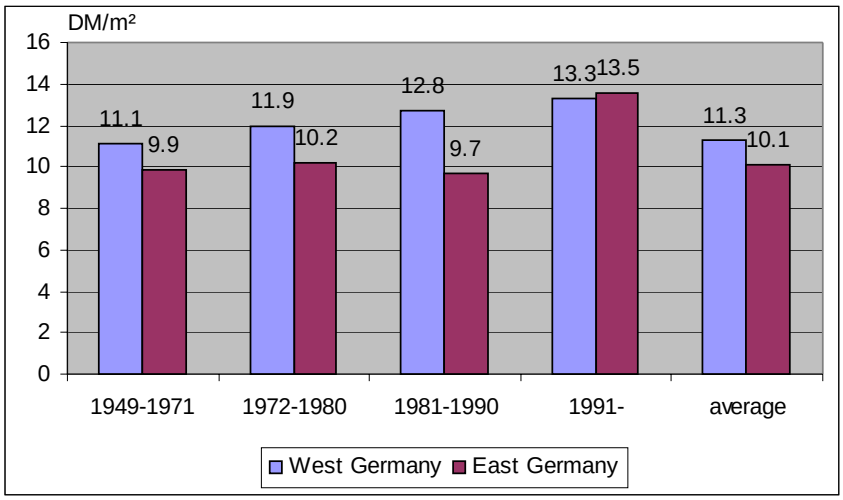
[17] See Hardt/Kempe/Schneider 2001.

[18] The only visible difference is for children under 6 whose share of total population in east Germany was 3.6% and in western Germany 6.3% at the end of 1998.

Gemeinden, it is about 6.0% in the West and 5.3% in the East relative to population (Table II.6). The absence of significant East/West differences in mobility is remarkable given the differences in labour market situations.

In general, the decision to migrate depends mainly on the expected difference in real disposable income less the transaction (and social) costs of migration. Hence, people migrate only if they expect an increase in purchasing power taking into account the costs of moving, local prices, taxation, social transfers etc. The social security system, while indispensable for those who cannot provide for their own income, takes away much of the pressure on unemployed people to move to areas where they could find employment. While certain elements have been reinforced in recent years to condition unemployment benefits on the preparedness to move, these have been applied rather reluctantly. Furthermore, the tax-benefit system in Germany often tends only marginally – or sometimes not at all - to improve the income situation for those at the lower end of the wage scale when changing from unemployment to employment.

GRAPH II.6: **Rents for private housing by year of construction in DM/m² in 1999**



Source: Frick/ Lahmann 2000 (DIW socio-economic panel).

In addition to income equalisation mechanisms through a nation-wide system of fiscal and social transfers, local prices for non-traded goods and services - housing prices in particular - tend be much lower in poorer regions. One of the main constraints of migration are the prices and transaction costs of housing which are a considerable share of household expenditure. Therefore, the relative difference in real income is usually much smaller than the difference in nominal income would suggest. Rents in eastern Germany are on average about 10% lower than in western Germany (Graph II.6). However, the difference depends largely on the year of construction. While houses built in the 1990s have about the same rent, there is a difference of about 24% for houses built in the 1980s, 15% for houses of the 1970s and 11% for houses built between 1949 and 1971. The level of housing prices in eastern Germany is also due to the tax breaks for investment in housing in the first half of the 1990s which have contributed to over-capacities that put pressure on prices.

3. Regional incidence of national policies

Following unification, fiscal policy in Germany had a pro-cyclical stance which contributed to the weak economic growth in the 1990s and the building up of high unemployment in Germany as a whole. This was also an outcome of major fiscal transfers from West to East that were necessary to finance public investment and the rather generous system of social security. Regulations in product, financial and labour markets which eastern Germany adopted with unification were often too rigid to cope with the need for fast adjustment.

3.1 Macroeconomic policies, interpersonal redistribution and fiscal transfers

Given the strong demand links, the economic situation of eastern Germany depends largely on the situation in western Germany. Following German monetary, economic and social union in July 1990 with the 1:1 conversion rate and the adoption of the west German economic and social system, there was a major boost in demand. The reaction was a rather unbalanced policy-mix with a pro-cyclical fiscal policy, which increased the budget deficit by financing transfers to the East while trying to avoid increases in taxation, plus a very tight monetary policy aimed at containing inflationary pressures. The consequence was a major economic slowdown in 1992/93 with a negative growth rate of real GDP of –1.1% in 1993. The subsequent increase in unemployment put fiscal policy under additional pressure to finance social expenditure and the federal government embarked on higher taxes and expenditure cuts. Growth rates remained rather modest until the end of the 1990s when the policy-mix became more balanced with a lower budget deficit - based on both reductions in taxes and expenditure supported by a more favourable business cycle in 2000 – and a fairly neutral monetary policy conducted by the European Central Bank.

There is a major gap between production income and disposable income in eastern Germany which is financed by transfers from the West. As can be seen in Table II.7, west German (and EU) net transfers of about 4% of the west German GDP accounted for roughly half of eastern Germany's GDP in the early 1990s and about a third towards the end of the 1990s. Of total gross transfers of about DM 180 billion per year in the second half of the 1990s, DM 80 billion were social security benefits while only about DM 30 billion were investment and about DM 15 million were subsidies.[19] While this imbalance has often been criticised, it was hardly to be avoided since it was the consequence of fully adopting the west German institutional and legal framework, including the welfare system.

[19] Deutsche Bundesbank 1998

TABLE II.7: **Public financial transfers to the new Länder in DM billion, 1991-1999**

	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999** (Plan)
Gross transfers to the new Länder									
Federal government budget [1)]	75	88	114	114	135	138	131	134	145
German Unity Fund [2)]	31	24	15	5					
Statutory pension insurance funds [3)]		5	9	12	17	19	18	19	18
Federal Labour Office [4)]	25	38	38	28	23	26	26	27	27
Western Länder/ municipalities [5)]	5	5	10	14	10	11	11	11	12
Total gross transfers [6)]	**135**	**146**	**162**	**164**	**178**	**180**	**176**	**183**	**191**
Return flows									
Additional tax revenue [7)]	31	35	37	41	43	45	45	45	48
Additional administrative revenue	2	2	2	2	2	2	2	2	2
Total	**33**	**37**	**39**	**43**	**45**	**47**	**47**	**47**	**50**
Total intra-German net transfers	**102**	**109**	**123**	**120**	**133**	**133**	**129**	**136**	**141**
in % of west German GDP [9)]	3.7	3.8	4.2	4.0	4.2	4.2	4.0	4.0	4.1
European Union budget [8)]	4	5	5	6	7	7	7	7	7
Total net transfers	**106**	**114**	**128**	**126**	**140**	**140**	**136**	**143**	**148**
in % of east German GDP [9)]	52.3	43.8	40.2	34.2	35.6	34.2	32.6	33.6	34.1

1) As of 1995 also tax renouncements of the federal government on the basis of the reorganisation of the fiscal equalisation scheme
2) Debt redemption, excluding the subsidies of federal government and the Länder
3) Net balance East excluding federal government transfers
4) Net balance East including federal government transfers to the Federal Labour Office
5) As of 1995 essentially revenues within the framework of the new fiscal equalisation scheme
6) Excluding double counting of federal government transfers to the Federal Labour Office (see footnote 4)
7) Estimate; as of 1996 including the impact of the annual tax law
8) Estimate
9) Berlin included in west German GDP

Source: Bundesministerium der Finanzen.

3.2 Functioning of labour, financial and product markets

Labour market regulation and the welfare system have been taken over from western Germany in spite of the huge differences in economic situation. The west German labour market system was mainly developed in the 1960s and 1970s when – at least compared to present levels of unemployment – the German economy was operating close to full employment. It was thus designed to protect employees rather than to facilitate the hiring of the unemployed. Since then only minor modifications have taken place to improve the situation so that the system was less than adequate for the situation of the east German labour market of the 1990s. Particular problems at the lower end of the wage scale arise from the tax-benefit system which reduces incentives to create or take up jobs in that it introduces wage floors and sometimes makes employment financially less attractive than remaining unemployed.

In financial markets, a major problem for eastern Germany was the principle of "restitution before compensation" of property which was laid down in the unification treaty. According to this principle, state-owned property was to be returned to previous owners rather than compensating them. This created major legal uncertainties due to a lack of documentation and cases of several people claiming the same property. As a consequence, the lack of clear property rights created uncertainties for investment and financing through loans due to lack of collateral. Many legal disputes, which usually take several years, had to be settled and continue even more than a decade after unification. For these reasons, "greenfield" investment was widespread in eastern Germany in the early 1990s while city centres and traditional industrial sites were basically avoided by investors.

On product markets, one problem was the complete re-orientation of trade from eastern to western Europe. After dissolving the COMECON and following the general transformation problems, the traditional markets of eastern Germany had collapsed so that new distribution networks in western Europe – including western Germany – had to be built from scratch. In view of the lack of expertise in marketing, this was a major problem for east German SMEs with potentially competitive products. Several policy and private sector initiatives have been taken to promote the market access of those east German firms that could not benefit from FDI-related networks.

4. Effects and efficiency of regional policies

The two main categories of regional policies in Germany are an explicit scheme of fiscal equalisation (*Finanzausgleich*) and several pro-active programmes aimed at promoting economic development. The *Finanzausgleich* between the German *Länder* has been criticised for its exaggerated redistribution which creates disincentives for the *Länder* to improve their economic and fiscal performance. In spite of a recent reform of the system, it remains rather non-transparent and tends to dilute fiscal responsibility. A wide range of regional policy programmes have been implemented in eastern Germany and will continue over the coming years. For some measures, there is a potential to improve their efficiency by a better targeting of expenditure.

4.1 Explicit fiscal transfers to regions

Since 1995, the new German *Länder* fully participate in the rather developed – and therefore fairly complicated – explicit scheme of fiscal equalisation (*Finanzausgleich*) between the different administrative levels of *Bund* (federal government), *Länder* (states) and *Gemeinden* (municipalities) whose main principles are defined in Articles 106 and 107 of the *Grundgesetz* (federal constitution). Given that the sharing of expenditure is only indirectly determined by the attribution of tasks to the different levels, the system of fiscal equalisation works mainly through the sharing of tax revenues. A "vertical" element allocates different taxes exclusively to *Bund*, *Länder* and *Gemeinden*, while income taxes, corporate taxes, capital gains withdrawal taxes and value added taxes are shared on the basis of certain objectives, in order "to achieve a justified equalisation, to avoid an over-burdening of taxpayers and to maintain the similarity of living conditions". A "horizontal" element is introduced by

a correction mechanism on the *Länder* share of the value added tax revenue which aims to balance the differences in fiscal capacities and fiscal needs of the *Länder*. On the basis of a comparison between a "fiscal capacity index" and an "equalisation index" for the average per capita fiscal capacity of all *Länder* (including half of the tax revenues of *Gemeinden*), a redistribution of the value added tax revenue from richer to poorer *Länder* is implemented in order to ensure that all *Länder* reach a minimum fiscal capacity of 95% of the equalisation index. In addition, the poorer *Länder* can receive supplementary allocations from the *Bund* (*Bundesergänzungs-zuweisungen*) in order to improve further their fiscal position.

Through fiscal equalisation and supplementary federal allocations the western *Länder* contribute about 0.1% of their GDP to improving the fiscal capacity of the eastern *Länder* by about 5.1% (Table II.8). Contributing *Länder* are Hessen, Baden-Württemberg, Bayern, Nordrhein-Westfalen and Hamburg whereas the main beneficiaries in relative terms are Berlin, Bremen, Saarland and the eastern *Länder*. For the east German *Länder*, the most important funds are the special supplementary federal allocations of annual DM 14 billion in the context of the "Solidarity Pact". The relatively small contribution of Hamburg – given that it is the richest of all *Länder* in terms of GDP per capita – and the large benefits of Berlin and Bremen are due to certain bonus elements in the calculations given to the three "city *Länder*" and to *Länder* with sea ports.

TABLE II.8: **Länderfinanzausgleich (LFA) in million DM in 2000**

	"fiscal capacity" before LFA (a)	**allocations/ contributions (b)**	**supplementary federal allocations (c)**	**"fiscal capacity" after LFA (d)= (a)+(b)+(c)**	**total allocations in % of GDP (e)=(b)+(c)/ GDP**
Nordrhein-Westfalen	88,071	-2,201	0	85,870	-0.25
Bayern	62,219	-3,749	0	58,470	-0.54
Baden-Württemberg	54,453	-3,873	0	50,580	-0.67
Niedersachsen	33,793	1,113	1,890	36,796	0.87
Hessen	35,254	-5,354	0	29,900	-1.51
Rheinland-Pfalz	17,002	780	1,287	19,069	1.18
Schleswig-Holstein	11,932	358	791	13,081	0.93
Saarland	4,402	329	1,467	6,198	3.74
Hamburg	12,178	-1,099	0	11,079	-0.77
Bremen	2,990	872	1,930	5,792	6.49
Berlin	14,381	5,521	3,824	23,726	6.22
Total western Germany	336,675	-7,303	11,189	340,561	0.11
Sachsen	17,344	2,328	4,590	24,262	4.86
Sachsen-Anhalt	10,247	1,407	2,924	14,578	5.38
Thüringen	9,444	1,320	2,682	13,446	5.21
Brandenburg	10,163	1,263	2,690	14,116	4.89
Mecklenburg-Vorpommern	6,879	983	2,015	9,877	5.40
Total eastern Germany	54,077	7,301	14,901	76,279	5.09
Total Germany	390,752	7,301	26,090	424,143	0.84

Source: Bundesministerium der Finanzen and own calculations.

The Federal Constitutional Court has judged several elements of the *Finanzausgleich* to be unconstitutional and has requested a revision on the basis of general guidelines to be decided by 2003 and implemented by 2005. This judgement was the outcome of a complaint to the Constitutional Court by the governments of Hessen, Baden-Württemberg and Bayern about the alleged excessive equalisation effects of the *Finanzausgleich* which they claimed provided disincentives to both contributors and beneficiaries to promote economic development through their often negative marginal effects on net revenues. In June 2001, an agreement modifying certain elements of the *Finanzausgleich* was reached between the federal government and the *Länder* governments.[20] It was facilitated by the federal government's commitment to take over some public debt from the *Länder* and to finance a second "Solidarity Pact" for eastern Germany from 2005 to 2019 totalling about € 156 billion. The latter will have a decreasing path (from € 10.4 billion in 2005 to € 2.1 billion in 2019) of which € 51 billion is ring-fenced for business and infrastructure development while the remaining € 105 billion will be unconditional.

While this agreement slightly increases the incentives for the *Länder* to improve their revenue situation and the east German *Länder* now have a long-term commitment on which they can base their budgetary planning, this was also a missed occasion for a more radical reform. The fiscal system is characterised by a fairly complicated sharing of tax revenues and taxing powers between the different tiers of government which has diluted the fiscal responsibilities of each of them. In this way, tax increases can be more easily implemented if it is not clear to the citizen who is responsible and if there is no tax competition between regions. Furthermore, any changes or reforms become extremely difficult since they usually require double approval by both *Bund* and *Länder*. This also explains the difficulty in establishing an internal stability pact with sanctioning powers for compliance with the EU Stability Pact, something which is still co-ordinated by an informal "budgetary planning council" in which the different levels of government are represented.

4.2 Regional policy expenditures

There is a wide range of regional policy programmes specifically targeting eastern Germany (Box II.2). A joint evaluation of these different policies is not available, while there are many indicators, studies and evaluations of single programmes. Regarding innovation and technology, most R&D indicators show that existing firms and universities devote resources to R&D of between 75% and 100% of the level in western Germany (Table II.9). However, given the weak economic structure in eastern Germany, there is a major gap when indicators are related to total population.

[20] Essentially a higher weight of 64% will be given to the fiscal capacity of the municipalities and the progressivity of the "tax rate" of revenues over needs for net-contributing *Länder* will be flattened.

TABLE II.9: **Indicators on R&D in eastern and western Germany**

	East	West	West=100
R&D employees in % of all employed (1997)	3.49	4.24	82
R&D expenditure in % of total revenue (1997)	1.86	2.44	76
Patent registrations per 100,000 inhabitants (1995-98)	70	249	28
Private R&D expenditure in DM per inhabitant (1997)	215	792	27
Expenditure of universities in DM per inhabitant (1995-97)	1631	1724	95
Academic and artistic employed per 100,000 inhabitants (average 1995-98)	214	248	86

Source: DIW/IWH/IfW 2000, p.15; Pohl 2000, p.228.

BOX II.2: REGIONAL POLICY PROGRAMMES IN EASTERN GERMANY

The wide range of programmes specifically targeting eastern Germany can be summarised as follows:[21]

- Several innovation and technology schemes, although most of them are also applied to west German regions, are a particular focus of government programmes targeting the innovative capacity of small and medium-sized firms in eastern Germany. These schemes concentrate on directly strengthening corporate innovation, promoting co-operation between firms and with universities and research centres, supporting regional innovative advisory centres and promoting universities and technical colleges as well as expanding the scientific and research centres

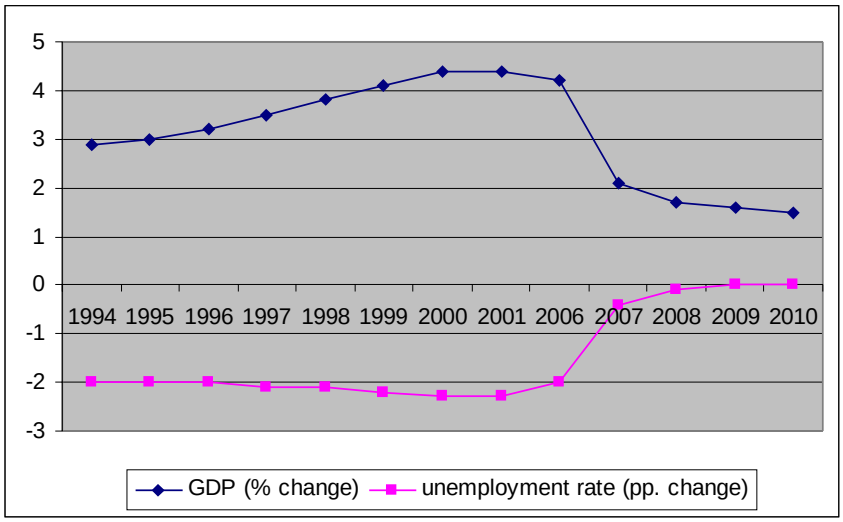
- Economic development policy is composed of different elements. First, eastern Germany has been eligible for EU Structural Funds assistance under Objective 1 since 1991. The Community Support Framework for the period 2000-2006 was adopted in June 2000 and has a financial volume of EU funds of € 20.7 billion which are co-financed by national public and private money. Second, the *Bund-Länder* "Joint Task for Improving the Regional Economic Structure", to which all new *Länder* are eligible, gives assistance to private investment and local infrastructure related to private investment. Maximum rates of assistance which vary according to sector, firm size and structural problems of a region can reach 50% for investment grants and 80% for local infrastructure. Third, a tax investment grant is given for initial investment at a rate of up to 12.5% for large firms and up to 25% for SMEs, increased by 2.5 percentage points in border regions (INTERREG III regions). Fourth, several specific SME schemes are channelled through state-owned banks (*Deutsche Ausgleichsbank* and *Kreditanstalt für Wiederaufbau* which have been merged recently) with various financial instruments such as support to start-ups by equity capital, loans or guarantees.

- Infrastructure investment has been a main focus of public investment in eastern Germany. In the transport sector, about 50% of the federal investment programme 1999-2002, which totals € 34.5 billion, is earmarked for railways, roads and waterways in eastern Germany. This is complemented by an Operational Programme of the European Regional Development Fund (ERDF) on transport infrastructure as a part of the Community Support Framework 2000-2006. In the context of the Solidarity Pact, € 3.4 billion per year is foreseen for investment projects of the eastern *Länder* and *Gemeinden*. Additional measures receiving public finance are on urban development and the housing sector.

- Active labour market policy (ALMP) measures are being undertaken by both national and EU programmes on training, public work provision, wage subsidies, financing of reduced working time and early retirement. ALMP in eastern Germany had a financial volume of about € 11 billion in the years 1999 and 2000 respectively. Most measures target problem groups such as long-term, older and younger unemployed people. On annual average in 2000, there were about 233,000 participants in training schemes, 192,000 in job creation schemes, 120,000 in jobs with subsidised labour costs, 90,000 in early retirement schemes, 35,000 in youth unemployment and 48,000 in other schemes, totalling 717,000 participants.

The impact of the EU Structural Funds programmes in eastern Germany since 1994 has been simulated by a sectoral macroeconometric model ("HERMIN").[22] In spite of the limited size of Structural Funds (and national public co-financing) which was initially about 2 percent of GDP and will decline gradually to around 1.2 percent in the year 2006, the combined demand-side and supply-side effects have increased from 3% in 1994 to above 4% in the period 2000-2006 (Graph II.7). After 2006, when the simulation assume that Structural Funds payments stop, the effects level off to supply-side effects of about 1.5% in 2010. Similarly, the unemployment rate is more than 2 percentage points lower than it would be without the Structural Funds programmes throughout most of the period 1994 to 2006. However, after 2006 the effect on unemployment diminishes due to the assumption that the continuing supply-side effects mainly have an effect on productivity rather than on employment.

GRAPH II.7: **Aggregate CSF impacts on GDP and unemployment rate relative to baseline scenario, 1994-2010**



Source: Bradley/Morgenroth/Untiedt 2000, p.11.

In the context of the Joint Task for Improving the Regional Economic Structure to which all new Länder are eligible, DM 17 billion was spent between 1996 and 1998 on promoting private investment of a volume of DM 58 billion which aimed to create 108,000 new jobs and to secure 300,000 existing jobs; DM 6 billion was spent on local infrastructure projects.[23] The Joint Task foresees a regional differentiation of maximum rates of assistance to private investment with a bias against better-performing regions, i.e. rates of assistance to private investment are lower in those areas with higher growth.[24] The official rationale is that other instruments such as R&D or urban policy measures will strengthen these growth poles anyway.

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[21] Cf. Bundesministerium der Finanzen 2001, pp.53ff.

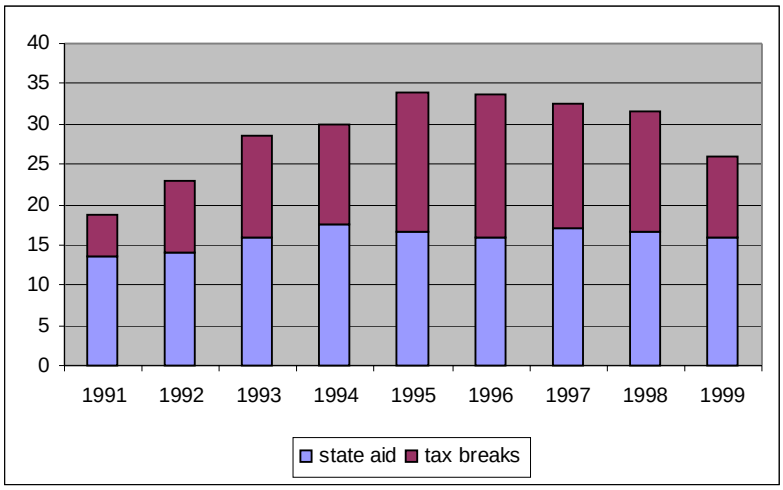
[22] Bradley/Morgenroth/Untiedt 2000

[23] Cf. Bundesregierung 1999; job estimates based on approved applications.

[24] The so-called "A-areas of assistance" have maximum rates of 50% for SMEs and 35% for other firms whereas the so-called "B-areas of assistance" have rates of 43% and 28% respectively, the latter

The volume of subsidies peaked in 1996 and has decreased since then (Graph II.8). While the volume of state aid has remained fairly stable, the decline is mostly due to a special depreciation scheme for investment in the new *Länder*, which came to an end in 1998, as well as to the abolition of the wealth tax and the business capital tax in the West that had never been introduced in the East so that they are no longer considered to be tax breaks. Per DM 1000 of GDP, there were DM 182 of subsidies in 1991 and DM 97 in 1999 in eastern Germany, while the value was rather stable at about DM 30 in western Germany.[25]

GRAPH II.8: **State aid and tax breaks in the new Länder in billion DM, 1991-1999**



Source: Deutsche Bundesbank 2000 (based on data from Federal Ministry of Finance).

The number of start-ups and liquidations in eastern Germany can be seen as a further indicator of the success of these various measures (Graph II.9). The number of start-ups halved from 1991 to 1994 and increased again until 1998.[26] However, at the same time the number of liquidations increased steadily, leading to a decline in the positive net balance to only 9,000 in 1998. Nevertheless, adding up the total balance from 1991-1998, a net 328,000 enterprises have been created and have survived.

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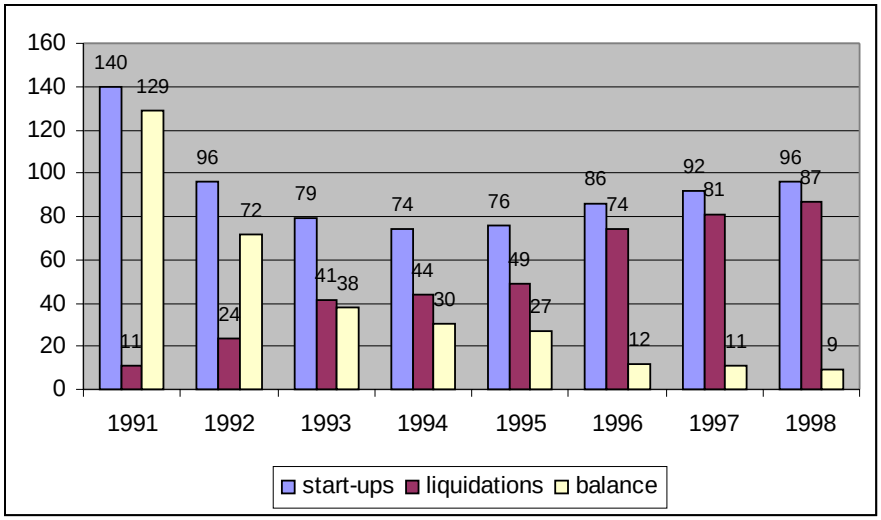
being, as of 1 January 2000, the labour-market regions of Berlin, Dresden, Leipzig, Jena, Schwerin, Halle/Saale, Chemnitz, Magdeburg, Eisenach, Sonneberg, Grimma and Belzig as well as parts of the labour-market regions of Erfurt, Weimar, Pirna, Zwickau, Bautzen and Gotha.

[25] Cf. Pohl 2000, p.233 based on data from Federal Ministry of Finance.

[26] Actual market entries, estimated on the basis of commercial business registrations, applications for the Federal financial support programme ERP and on empirical inquiries. It must be taken into account though, that the high number of start-ups in east Germany in the early 1990s was partially the outcome of the restructuring and privatisation of GDR socialist firms ("*Kombinate*") with a very high vertical integration and social policy functions.

GRAPH II.9: **Start-ups and liquidations in eastern Germany in 1000, 1991-1998**



Source: Hauser 2000.

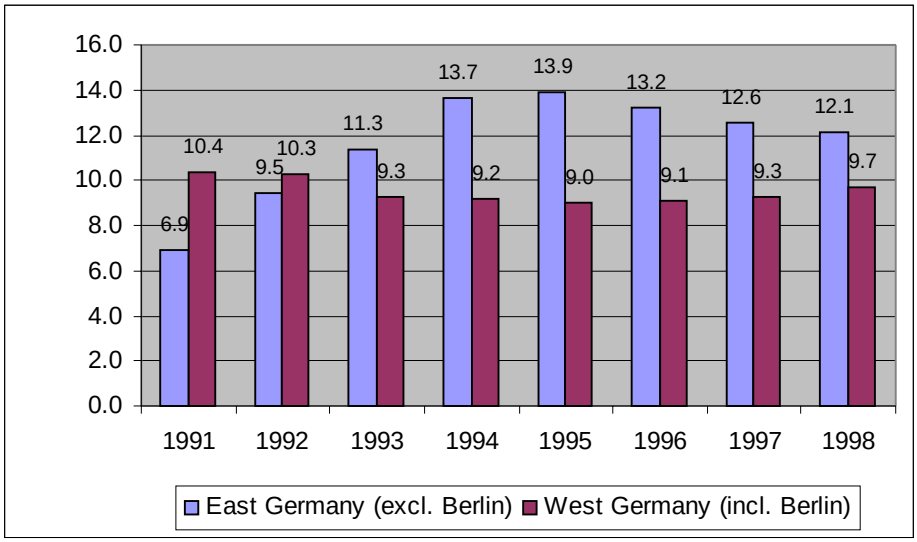
A further indicator of the success of policies in eastern Germany is the volume of private investment which, in order to converge towards the west German economy, needs to be higher for a considerable period of time. In per capita terms, gross fixed capital formation in constant prices has indeed been higher than in western Germany since 1993, by more than 50% in 1995 but declining to 24% in 1998 (Graph II.10). The capital stock per capita is estimated to have reached a level of 72.5% of the west German level. However, it must be taken into account that the figures also include public investment which accounts for a considerable share of total investment in eastern Germany. In most years, about two thirds of fixed investment has been in buildings while only one third went into equipment. This is a problem with regard to private housing where over-capacities have built up so that an estimated 1 million apartments are now deserted - most of them standard GDR houses – leading to calls for more public funding to tear down deserted buildings.

Regarding the public capital stock, a study by two economic research institutes (DIW and RWI) estimated that in 2005 – in spite of major achievements in adding, modernising and upgrading infrastructure over the last decade - eastern Germany will still have a deficit in infrastructure relative to western Germany of a value of between DM 265 and 275 billion.[27] A new calculation by DIW arrives at a lower value of DM 157 billion.[28] Graph II.11 illustrates that the public capital stock per inhabitant is already higher than in the West in several public functions, in particular in social institutions, while there are major deficits in waste water treatment, roads, universities and schools.

[27] DIW/IWH/IfW 2000, p.24, based on DIW/ifo/RWI/ILS: Solidarpakt II – Infrastrukturelle Nachholbedarfe Ostdeutschlands, March 2000, unpublished.

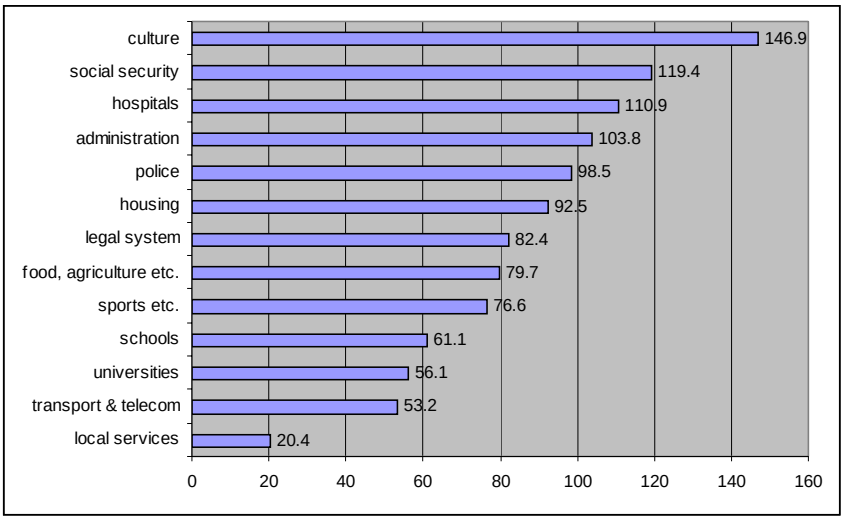
[28] Cf. Vesper 2001

GRAPH II.10: **Gross fixed capital formation per capita at constant 1995 prices in DM 1000, 1991-1998**



Source: Arbeitskreis "Volkswirtschaftliche Gesamtrechnung der Länder".

GRAPH II.11: **Public gross fixed capital stock of east German Länder and Gemeinden by functions in % of west German Länder (excluding city Länder), 1999**



Source: DIW/IWH/IfW 2000.

A review of existing evaluation studies on the impact of active labour market policies (ALMP) in eastern Germany arrives at the following main conclusions regarding the two main types of programmes:[29]

- Regarding measures on further training, some studies show positive results which are however not consistent over different specifications regarding time and target groups. Most microeconomic studies find no significant impact of further training

[29] Fitzenberger/Speckesser 2000

although macroeconomic analyses on Germany as a whole find a reduction of regional long-term unemployment.

- For work provision schemes (*Arbeitsbeschaffungsmaßnahmen*, "ABM"), only one study arrives at positive effects while three other studies find significantly negative effects. Macroeconomic analyses of Germany as a whole find a positive impact of ABM.

Given the available data and the methodological heterogeneity of the studies, the authors conclude that the impact of training measures and ABM is at best low, although not necessarily negligible. Two studies recently carried out for the Federal Ministry of Finance criticise the consistently negative effects of ABM in reducing the incentives to look for a regular job for two reasons.[30] First, the wage is paid at 20% less than those in collective agreements and is therefore often higher than for many regular jobs paid outside collective agreements. Second, participation in ABM renews the right to unemployment benefits that are higher than unemployment assistance to which long-term unemployed are entitled; this has already been abolished for training measures in 1998. The overall conclusion is that ALMP need to be better targeted to specific problem groups and the requirements of the labour market, but should not serve merely as a means of reducing unemployment temporarily by creating a second labour market.

5. Conclusions and policy options

A global analysis of the main determinants of unemployment in eastern Germany identified in section 2 and of the national and regional policies described in sections 3 and 4, allows a number of policy conclusions to be developed.

The employment situation in eastern Germany depends strongly on the overall economic situation in eastern Germany and in Germany as a whole. As has been evidenced by the negative experience in Germany in the first half of the 1990s, a balanced macroeconomic policy-mix, based on the objective of a budget in balance or in surplus in the medium term is an important condition for long-term growth and employment. Structural reforms on labour markets are necessary to facilitate the adjustment and creation of employment in Germany, and should also continue on product and financial markets. Transfers to eastern Germany through the social security system and the *Finanzausgleich* will remain necessary for a longer time until there is a sufficient degree of convergence in the tax base. However, the fact that most of these transfers are for consumption rather than for public investment is a continuing problem which makes catching-up a longer process than necessary. Regarding the *Finanzausgleich*, the main objective to reduce disincentives is somewhat under-ambitious in that it would also be an occasion to introduce more fiscal responsibility by a clearer sharing of taxing powers between *Bund*, *Länder* and *Gemeinden* so that citizens would know who is responsible for changes in taxation. This would also allow the introduction of some degree of tax competition at different

[30] Zentrum für Europäische Wirtschaftsforschung 2000 and Schneider et al. 2000

regional levels. The remaining deficits in infrastructure and technology will require continuing efforts in public investment. However, support to infrastructure and private investment has the potential to be improved in terms of efficiency by a stronger focus on growth poles rather than pursuing the present implicit objective of an equal economic development across eastern Germany by giving higher rates of assistance to the least developed areas. At the very least, there should be no differentiation in rates of assistance to private investors within eastern Germany who would prefer the advantages of locating in the emerging clusters that have to compete with other attractive locations in Europe.

To upgrade the qualification of the labour force, a review of active labour market policies (ALMP) should provide for a better targeting instead of creating a second labour market which reduces unemployment only temporarily. Incentives for participation in ALMP should be reviewed in order to promote the search for regular jobs rather than the return into the benefit system. Institutions of education, training and public R&D need to have sufficient resources to be able to achieve the same standards as in western Germany.

In order to address the problem of overly high unit labour costs in eastern Germany, more wage differentiation taking account of the specific conditions of sectors, regions and firms is most important. Actual increases in productivity in firms in eastern Germany rather than west German wage levels should be the benchmark, given that west German wages are themselves an average of high-productivity and low-productivity regions. Wage negotiations should also take account of the fact that – in the presence of regional price differences – equal nominal wages imply higher real wages for people in areas with lower price levels such as many areas in eastern Germany. Wage convergence in the public sector should only follow the private sector and should not lead in negotiations. However, in view of the increases in east German public sector wages agreed until 2002 (leading to a level of 90% of nominal wages in the West and thereby basically equal real wages for many regions with low costs of living) a high degree of wage moderation should prevail in this sector in the years after 2002 in order to get closer again to the overall wage level in eastern Germany.

Various factors should be addressed to remove barriers to geographic labour mobility and to increase the propensity to move. First, the system of unemployment benefits and assistance should provide more incentives to look for and take up jobs elsewhere rather than only forcing unemployed people to accept jobs in commuting distance to their place of residence. Second, the flexibility of the housing market should be enhanced by reducing transaction costs for purchasing and renting houses. Third, the possibility of introducing regional correction coefficients for social transfers and public sector wages in Germany should be evaluated as an option to bring about more equality in real income rather than in nominal income (see the example of the European Communities in Annex I). A revival of the earlier regional differentiation of public sector wages by the *Ortszuschlag* (local allowance) could be a starting point for this option.

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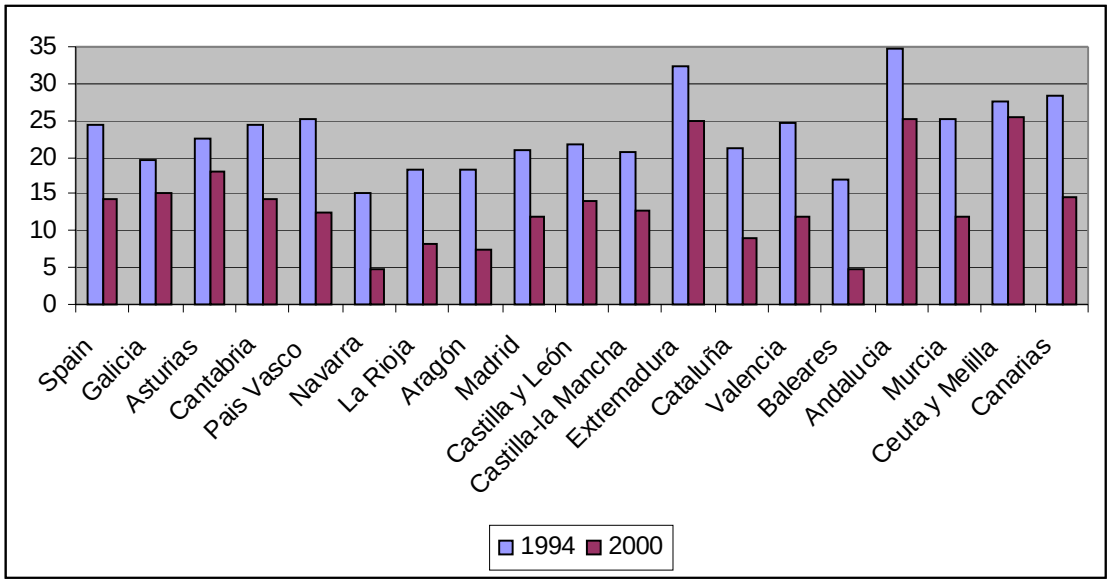
III. THE SPANISH OBJECTIVE 1 REGIONS

1. Introduction

Since the mid-1990s the unemployment situation in Spain has improved considerably as a consequence of high rates of employment growth. From its peak in 1994 at 24.4%, the unemployment rate has decreased by 10 percentage points to 14.4% in 2000. Nevertheless, regional disparities in unemployment have hardly diminished and the unemployment situation of the Spanish regions, the *Comunidades Autónomas*,[31] still varies considerably (Graph III.1). Comparing the situation in the years 1994 and 2000, the unemployment rate was reduced by more than 10 percentage points in the northern and eastern regions, whereas the reduction was mostly by less than 10 percentage points in the 11 poorer (Objective 1) regions of Spain.[32] At provincial level, the unemployment rates varied from 4.7% in Lérida/Cataluña to 30.2% in Cadiz/Andalucía. As an expression of labour shortages in specific sectors, in particular agriculture and construction, some regions recently asked for an increase in the number of work permits allocated to foreigners (e.g. Galicia and Murcia).

GRAPH III.1: **Unemployment rates in Spanish regions in 1994 and 2000**



Source: Eurostat – Community Labour Force Survey.

[31] In Eurostat's statistical classification of regions, these are NUTS level 2 while provinces are NUTS level 3.

[32] Objective 1 regions are Galicia, (Principado de) Asturias, Castilla y Léon, Castilla-La Mancha, Extremadura, (Comunidad) Valencia(na), Andalucía, (Region de) Murcia, Ceuta y Melilla and Canarias. Cantabria is a specific case in that it receives transitional support under Objective 1 until the end of 2006.

The source of the above figures is a labour force survey whose harmonised Community methodology is co-ordinated by Eurostat and is based on the ILO definition of unemployment (i.e. not having worked a certain number of hours per week, actively looking for a job and prepared to take up a job). An alternative methodology, the rates of registered unemployment, gives results which are lower in level, but regional differences are still high.[33] The rates of registered unemployment rates for Andalucía and Extremadura show the biggest deviation from the labour force survey which is due to the fact that unemployed agricultural workers who are in a region-specific social security scheme are not taken into account in statistics of registered unemployment.

This paper proceeds by first looking at some stylised facts that help in understanding regional unemployment in Spain, then gives an overview of national and regional policies and, finally, draws some policy conclusions.

2. Determinants of regional unemployment: some stylised facts

Faced with different economic shocks in the 1980s and 1990s, Spanish regions and their labour markets reacted differently in adjusting to the new situation. Among the various possible mechanisms of adjustment – growth and structural change, sectoral mobility, wages and geographic mobility – some regions had a response which led more strongly towards unemployment increases than in other regions. The failure of adjustment mechanisms in avoiding the emergence and persistence of regional disparities in unemployment will be further explained in this section.

2.1 The economic development of the Spanish Objective 1 regions

Regional unemployment in Spain is strongly linked to the economic development of the regions. Graph III.2 demonstrates that there is a high negative correlation (of -0.78) between GDP per head and unemployment rates. This paper thus has a particular focus on those Spanish regions that are eligible for EU Structural Funds assistance under Objective 1 in the programming period 2000-2006. Particular attention is given to Andalucía and Extremadura which are the regions with the highest unemployment rates of about 25% and also the poorest Spanish regions.[34] These two regions also stand out for having a significantly high share of employment in agriculture (10%) and a low share in industry (25%) compared to the national average (4% and 32% respectively). In these and other poorer regions the share of agricultural employment in total employment used to be a third or even more two decades ago which implies a major process of adjustment.

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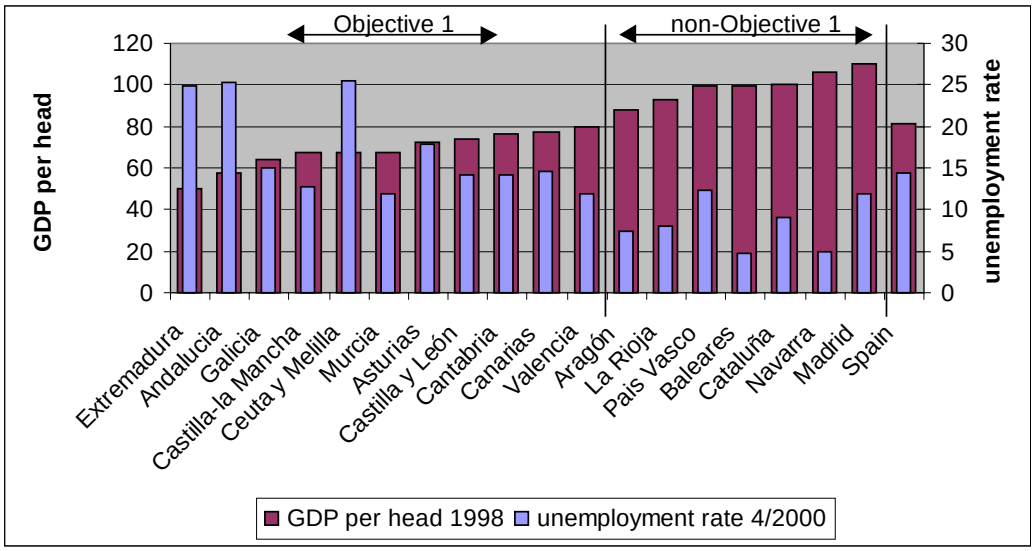
[33] In April 2000, Asturias (14.7%), Ceuta y Melilla (13.5%), Canarias (12.8%), Extremadura (12.7%), Andalucía (12.4%) and Galicia (12.2%) had more than double the rate of registered unemployment of Cataluña (6.1%) as the lowest.

[34] Almost the same holds for Ceuta and Melilla which are however not a *Comunidad Autonoma*, are more difficult to analyse because of problems of data availability and have a specific location in Africa.

GRAPH III.2: **GDP per head in 1998 (PPS, EU15=100) and unemployment rate in April 2000 (Community labour force survey)**



Source: Eurostat.

In a long-run perspective across all Spanish regions, there was a strong process of convergence of GDP per capita from the 1950s until 1984. Capital/labour ratios have converged across the 17 Spanish regions since the 1970s due to both labour-shedding and higher private investment in regions with a relatively low stock of private capital. However, returns to private physical capital have not been significantly higher in high-unemployment regions and have thus not helped reduce differences in unemployment rates among regions.[35] Between 1985 and 2000, the catching-up at national level of 10 percentage points to 81% of the EU average in purchasing power standards (PPS) was accompanied by a moderate process of divergence at both regional and provincial level which is rather robust for different data sources and measures of convergence.[36] However, in the same period there is little change in the interregional distribution of disposable household income per capita. The main explanation for this development is that, although labour productivity continued to converge, net employment creation was lower in poorer regions i.a. due to labour-shedding in agriculture which was not compensated by other new jobs.[37]

2.2 The qualification of the labour force

Although Spain's expenditure on education has already been comparable to the EU average for many years, it takes a long time in catching-up countries to build an educational level of its population which is comparable to other Member States. In Spain, some 65% of the population aged 25 to 59 has no educational levels beyond

[35] Cf. Mauro/Spilimbergo 2001.

[36] Cf. Salas 1999.

[37] Cf. De la Fuente 2001c.

compulsory schooling. People in this age group with higher education are more concentrated in the northern regions and Madrid. Given this spatial pattern of educational skills and the general fact that education levels and unemployment tend to be negatively correlated contribute to a corresponding spatial pattern of unemployment. Therefore, the persistence of unemployment over time is higher in regions where the qualification of the workforce is low. Comparing unemployment rates in the 50 provinces in 1977 and 1992, Mauro/Spilimbergo (1998) find a higher correlation between unemployment rates in the two years in provinces where skills are lower. In a comparison between the Portuguese and Spanish labour markets, Bover/García-Perea/Portugal (2000) find that – in spite of the overall higher educational endowments - returns to education are much lower in Spain. They explain this partly in terms of a higher supply of educated labour, but also in terms of more compressed wages across skill groups. Incentives to higher education in the form of justified expectations for higher wages are thus lower in Spain than in Portugal.

2.3 Wages out of line with productivity

Although the Spanish wage bargaining system is formally decentralised, the actual outcome is rather similar across regions. The wage bargaining system has several spatial dimensions: national, regional, provincial, and firms. It takes place according to a cascading system in which the outcome of agreements for a sector at national level is de facto accepted as a minimum at regional level. This system was amended by the 1994 labour market reform and an agreement with the social partners in April 1997 stipulates that negotiations on wages can take place at the firm level. However, the option for a firm to opt out of provincial wage agreements, as foreseen by the 1994 reform in certain cases, has only rarely been applied since the conditions are very restrictive and it tends to be seen as a signal for financial troubles of the companies concerned. In 2000, 46% of all firms had firm-specific agreements, but this affected only 11% of all employees covered by wage agreements (Table III.1). Overall, the multiple levels of the system introduce an inflationary tendency by successively adding on to agreements reached at the higher level. Furthermore, many wage agreements include catch-up clauses in case inflation turns out to be higher than assumed at the time of the agreement, and this may endanger Spain's external competitiveness given that inflation tends to be higher than the euro area average.

TABLE III.1: **Wage agreements at firm level and other level in % of total, 1998-2000**

	agreements			employees			firms		
	1998	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**
firm level	72.5	72.5	72.4	11.7	11.8	11.0	47.1	46.0	46.4
other level	27.5	27.5	27.6	88.3	88.2	89.0	52.9	54.0	53.6
total (n°)	5,091	5,110	4,583	8,750,600	9,008,100	8,643,000	2,028,700	2,073,800	2,059,800

Source: Spanish Ministry of Labour (http://www.mtas.es/).

Calculations of real unit labour costs in the Spanish regions for the first half of the 1990s suggest that differences in real wages between high-unemployment and low-unemployment regions in Spain were not sufficiently large to offset differences in

productivity, resulting in unit labour costs being 5% higher in regions of high unemployment than in those with low unemployment.[38]

Calculations based on more recent data from the new ESA95 methodology of economic accounts give a rather mixed picture across sectors. Real unit labour costs in manufacturing – calculated for the year 1998 as the ratio of compensation per employee and of GVA per employed person, adjusted for regional inflation differentials since 1992 – varied by about 10 percentage points around the national average with no clear correlation with regional unemployment (Graph III.3). For example, in Extremadura productivity and wages were both at about two thirds of the national average while in Pais Vasco wages and productivity were both more than 20% above national average. The average unit labour costs of the manufacturing sector in Objective 1 regions taken together was almost the same as the national average. The overall picture of rather similar unit labour costs within a certain range of methodological uncertainty is not very surprising in the manufacturing sector which is most exposed to interregional and international competition so that different adjustment mechanisms will always exert a tendency to bring wages in line with productivity relative to other competitors, mainly through variations in employment. Wages below productivity make a region attractive for investment and increase employment while wages above productivity forces employers to reduce employment and in this way to increase productivity. High-unemployment regions should thus have below average unit labour costs and lower wage increases than average in order to increase employment.

In other sectors for which data to calculate real unit labour costs are available, the results can be summarised as follows (see detailed results in the table in Annex III):

- In agriculture and fishing as well as mining and quarrying, the results make little sense and are probably biased by the large amounts of subsidies paid in these sectors which have a strong influence on the relationship between wages and gross value added;

- In the industry sector, construction is rather similar to manufacturing whereas electricity, gas and water sectors vary considerably across regions, probably because liberalisation in this sector was not yet very advanced in 1998;

- In market services, there is a tendency for unit labour costs to be low in the Objective 1 regions and high in the more prosperous regions;

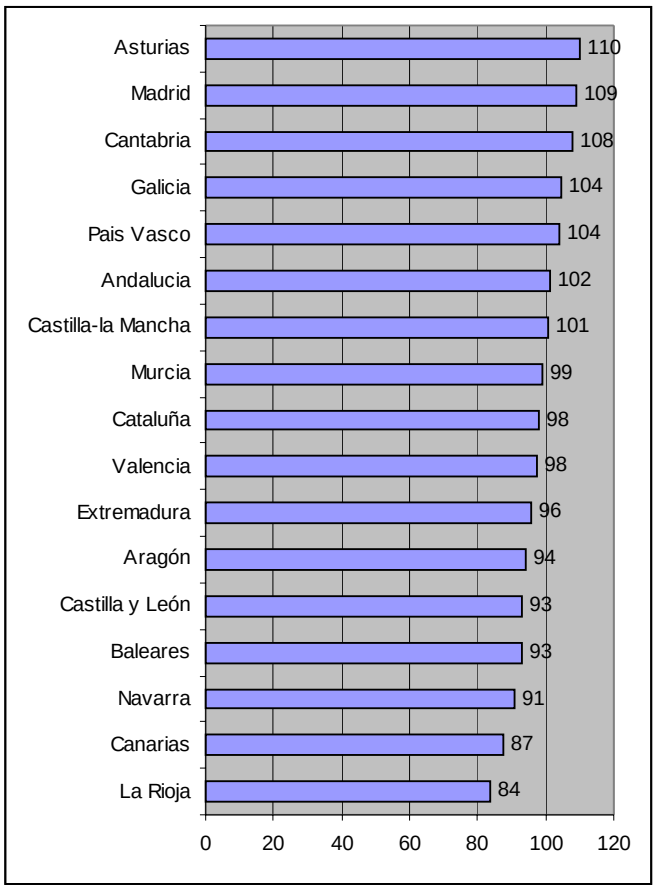
- In non-traded services, there is little deviation from the national average which is probably due to the statistical need to take factor costs (most of which are wages) as a proxy for value added.

Regional wage dispersion, here measured by the coefficient of variation of compensation per employee, may point to regional problems in some sectors (Graph III.4). The coefficient tends to be rather low for construction, transport and communications, financial services, business activities, education, social work and household services. As a consequence, jobs in these sectors, for example in health and

[38] Cf. Mauro/Prasad/Spilimbergo 1999.

education, are relatively attractive in the poorer regions since compensation is high compared to the average wage within a region, but relatively unattractive in the wealthier regions. It is interesting to note, however, that there is a rather high variation of compensation in the public administration, reaching ECU 31,000 in Pais Vasco and only ECU 15,800 in Extremadura; the more autonomous regions obviously make use of their powers to pay higher salaries to their staff. [39]

GRAPH III.3: **Real unit labour costs in the manufacturing sector in Spanish regions, 1998 (Spain=100)**

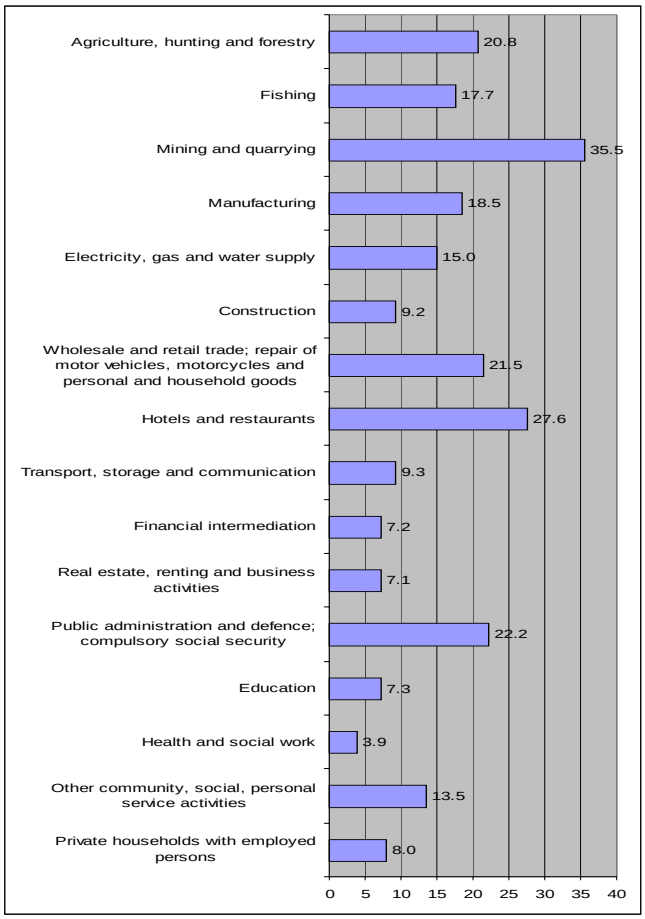


Note: Unit labour costs as compensation per employee over GVA/employment ratio deflated by the regional consumer price index relative to national consumer price index (basis 1992). Results for Ceuta y Melilla were excluded because they were implausibly low, possibly due to small sample size effects.

Source: Eurostat, own calculations.

[39] However, given that the number of employees are not on the basis of full time equivalents they are sensitive to differences in working time. For example, the introduction of the 35-hour week for civil servants in Andalucía, Extremadura, La Rioja and Navarra in 2000 will further increase these differences if this measure actually contributes to increases in staff numbers in these regions' public administrations.

GRAPH III.4: **Coefficient of variation of compensation per employee across Spanish regions, 1997**



Source: Eurostat, own calculations.

2.4 Insufficient geographic labour mobility

In spite of high unemployment, geographic labour mobility in Spain is among the lowest in the EU. In 1999, only 0.1% of all employed between 15 and 64 years had changed residence compared to one year earlier which compares to an EU average of 1.4%.[40] Similarly low rates are recorded for commuting. Over time, interregional mobility (i.e. between *Comunidades*) relative to total population has declined from 0.9% in 1964 to a low of 0.3% in 1982 and stabilised between 0.5% and 0.6% in the 1990s.[41] However, intraregional and intraprovincial mobility has increased steadily from about 0.5% to about 1.5%. Interregional mobility in Spain is very low compared to 1% to 2.5% in other major EU countries and 3% in the US.[42]

Several reasons are usually given for this particularly low degree of mobility in Spain:

[40] Cf. European Commission 2001b, p.51.

[41] Cf. Bentolila 2001, p.3.

[42] Cf. Bentolila 2001, p.5.

- High aggregate unemployment which prevailed in the 1990s reduces incentives to move since it is difficult to find a new job elsewhere;

- 90 per cent of new job contracts are of a temporary nature so that now about one third of all jobs are based on temporary contracts. This type of contract provides little security for the costs incurred by moving;

- the strong centralisation of wage bargaining, which does not take sufficient account of regional differences in productivity and costs of living, thus limiting incentives in terms of real wage differences to move from less prosperous to more prosperous regions (see also section III.2.3 on regional wage dispersion);

- unemployment benefits and high severance payments that are largely tax-exempt offer a sufficient financial basis to prefer a position of unemployment for a longer time to the alternative of moving to where a job is available;

- family networks, which offer support for each family member and the respective obligations for each of them, are still of high importance;[43]

- persistent rigidities in the housing market for various reasons make moving an expensive exercise (see section III.3.2 for further details).

3. Regional incidence of national policies

Given the high degree of decentralisation in Spain, macroeconomic policies, redistributive policies and structural policies decided by the central government have varying effects on the Spanish regions. Fiscal decentralisation has devolved many tasks to the regional governments which requires, on the other hand, strong efforts of co-ordination at the central level in order to maintain a coherent policy.

3.1 Macroeconomic policies

The Spanish general government budget has seen a rapid process of consolidation over the last decade. While revenues relative to GDP have remained stable at somewhat below 40% in the 1990s, expenditure has been reduced from a peak of 47.6% in 1993 to 40% in 2000, thus bringing down the public deficit by more than 6 percentage points. The 2001 budget is planned to be balanced and the updated Stability Programme of early 2001 foresees a surplus of 0.2-0.3% in the coming years. During this process of consolidation, public investment has been maintained above 3% and is programmed to increase to 3.8% in 2004 which is far above the EU average of 2.2% to 2.4% registered in the last years.

In 2000, according to provisional figures, general government had a deficit of –0.3% of GDP. The central government had a deficit of –0.5% of GDP which was equalised

[43] Cf. Bentolila 2001, p.10.

by a corresponding surplus of social security. In the same year, the regions taken together had a deficit of about –0.3% of GDP with little variation between them. The regions' total debt relative to GDP was highest in Valencia (10.1%), Galicia (9.1%), Andalucía (8.5%), Cataluña (8.3%), Navarra (6.3%) and Extremadura (5.8%); all other regions had a total debt of below 5% of GDP. Although their total debt amounted to only 6.3% of GDP - which compares to a general government's debt of 61.1% in 2000 – this is rather high in view of their relatively small budgets and the debt servicing this implies.

In conjunction with the 2001 budget, the Spanish government has presented a draft "General Law on Budgetary Stability" which commits the public sector, including all three levels of government and social security, to a budget in balance or in surplus from 2003. Deficits shall only be allowed in duly justified exceptional situations and require a medium term economic-financial plan for reducing the deficit in the three subsequent years. In order to achieve these targets, the central government defines stability objectives for each level of government. These would have to be translated into stability objectives of each of the regions by the Council for fiscal and financial policies (CPFF). The government's main instrument for controling compliance with these rules is the requirement that the regions' debt emissions must have prior authorisation by the central government. However, depending on the definition of exceptional situations, there may be an overly high inflexibility of fiscal policy in dealing with asymmetric shocks, in particular for regional and local governments which have a relatively non-diversified, and therefore unstable, tax base.

3.2 Interpersonal redistribution and fiscal transfers

The various categories of a budget's revenue and expenditure sides have different effects on income distribution. A decomposition of the redistributive effects on household income across Spanish regions shows that in 1995 the strongest effect came from social benefits (77%) followed by direct income taxes (33%) whereas social security contributions had a slightly regressive effect (-7%), probably arising from the maximum and minimum thresholds built into the system.[44]

De la Fuente (2001a) classified all public expenditure in Spain between 1990 and 1997 into four major categories: administration, regional expenditure, social security and economic development policy. On the basis of fiscal flows (including both revenues and expenditure) between regions in per capita values as annual averages, he finds the following results:

- only 27% of fiscal flows are actually regional, while 65% are based on personal redistribution;

- the redistributive effect of the budget (of about 33% on the per capita income of regions) relative to the national average relies almost exclusively on the revenue side while the expenditure side has a slight regressive effect. Within the broad

[44] Cf. Salas 1999.

categories, some 90% of the redistributive effect arises from personal redistribution;

- the situation of per capita resources between different regions varies considerably and seems to be based on rather arbitrary criteria which put into danger the rights of equal access to public services.

De la Fuente (2001b) identifies three main weaknesses of the Spanish system in the period 1997-2001: the inequality and arbitrariness of the financing of regional budgets, the lack of autonomy and the absence of fiscal responsibility of the regional administration. Most of these problems have their origin in the asymmetric decentralisation which is rather advanced on the expenditure side and almost non-existent on the revenue side. In light of the constitutional principles of equality and solidarity, he concludes that the discussion should be more focused on individuals than on regions, i.e. on personal rather than on regional income distribution. His proposal for a new system is, first, to establish a basic level of finance per capita which is the same for all regions so that additional resources would have to arise from higher regional taxation; second, to determine the level of revenues of the sub-central level from both central budget transfers and shares of personal income tax, VAT and special taxes; and, finally, to give the regions the legislative power to modify the rates of the shared taxes.

The tax-benefit-system as a whole is not particularly generous compared to the rest of the EU. Although labour income taxes account for some 60% of general government revenue, the tax wedge is approximately at the OECD average and below the EU average. While the statutory minimum wage is rather low, the unemployment benefits system is considered rather generous by international comparisons. The net replacement rate for low-wage earners is the same as the EU average (70%), but somewhat higher for low-income families. Unemployment benefits amount to 70% of the previous wage for the first 6 months and 60% thereafter, with floors and ceilings related to the minimum wage. The duration of unemployment benefits depends on the last job's tenure up to a maximum of two years after which unemployment assistance of 75% of the statutory minimum for maximum 30 months is paid. The Spanish labour market is characterised by high employment protection, in particular in the form of high severance payments for workers on permanent contracts which contribute to high labour costs. Severance payments can be considered as a part of the benefit system since they come on top of unemployment benefits and are not taxable. As a consequence, a large share of jobs created in Spain in the 1990s have been on fixed-term contracts and in this way has introduced more flexibility at least in one part of the labour market. Despite the successive reduction of the severance payments in different reforms in 1997, 1999 and 2001, a major share of new jobs is still based on fixed-term contracts.

3.3 Functioning of markets

The Broad Economic Policy Guidelines (BEPGs) for the year 2001 recognise that Spain has taken several measures to improve the functioning of its product markets, the knowledge-based economy and capital markets. The transposition of internal market legislation and the liberalisation of the telecommunications and energy

markets has been speeded up; the Community rules on public procurement have been implemented more effectively and the level of State aid has been reduced. To tackle the problem of the low level of R&D expenditure, a three-year National R&D and Innovation Plan has been launched.

A specific problem with strong adverse effects on the functioning of labour markets, is an inflexible housing market. First, there is an underdeveloped market for rental housing which is reflected in one of the highest shares of owner-occupied housing in the OECD at about 80%. This is a consequence of the minimum length of renting contracts of five years and generous tax preferences for owner-occupied housing. Tax preferences are granted to owner-occupied housing in the personal income tax projected to equal to 9.1% of personal income tax revenues in the 2000 State Budget. Second, house prices are relatively high by international standards and prices vary significantly from one region to another because of restricted urban land supply. Local governments, which control most of the supply of urban land, have an interest in keeping prices high as land sales and real estate taxes constitute an important share of municipal tax revenues. As a rationing strategy, municipalities often take a long time to provide licenses to use land for construction and can ask that 10 percent of the land be used for urban development purposes. In 1997, 42% of their current revenues (excluding transfers from other levels of government; 22% of total revenues) originated from taxes on land and real estate. Taxes and other fees contribute to rather high transaction costs of about 10% of house prices. The government decided in June 2000 that municipalities have to provide objective reasons when denying land development plans and that development can start if no explicit objection is received within six months.

With a view to labour markets, the government adopted - at the end of 1999 and again in March 2001 - programmes to reduce employers' social security payments and severance payments for new permanent contracts, whether full- or part-time, for groups with greater difficulties in entering the labour market (women, long-term unemployed, older people, agricultural worker, socially excluded).[45] Moreover, severance payments for temporary contracts have recently been introduced in order to increase the relative attractiveness of permanent contracts since about a third of all employees are working on the basis of a temporary contract. The OECD suspects that this reform has contributed to a shift from underground employment into the formal labour market since employment growth was strongest in construction and the services sector where the underground economy is most prevalent.[46] The government intended to introduce further measures of labour market reform towards the end of 2001 along with the Budget law. Depending on the progress in the social dialogue, these measures could include reforms of social protection and collective bargaining as well as regulations aimed to reducing accidents at work.

[45] Cf. Kingdom of Spain 2001, and OECD 2001. Firing costs are 20 days of wages per year of work for permanent contracts for these special groups (33 for other groups) in the case of justified dismissals (33 and 45 if unjustified, which courts tend to see as the rule). In all cases, it is 8 days for temporary contracts.

[46] OECD 2000, p.30.

Comparing the very different performance of the Portuguese and the Spanish labour markets, Bover/García-Peres/Portugal (2000) conclude that the institutional differences in the wage-setting mechanisms are the main explanation for these differences. In spite of a low union density of only 11%, Spanish trade unions are more powerful in setting high wage floors because of high severance payments, state funding and the statutory extension clause. This results in a compressed wage distribution within and across skill categories which – in view of skill-biased technological change – prices many low-productivity jobs out of the market. They recommend broadening the effective base of workers represented in the unions, emphasising bargaining at firm level by more operational opt-out clauses, eliminating the statutory extension clause and reducing dismissal costs.

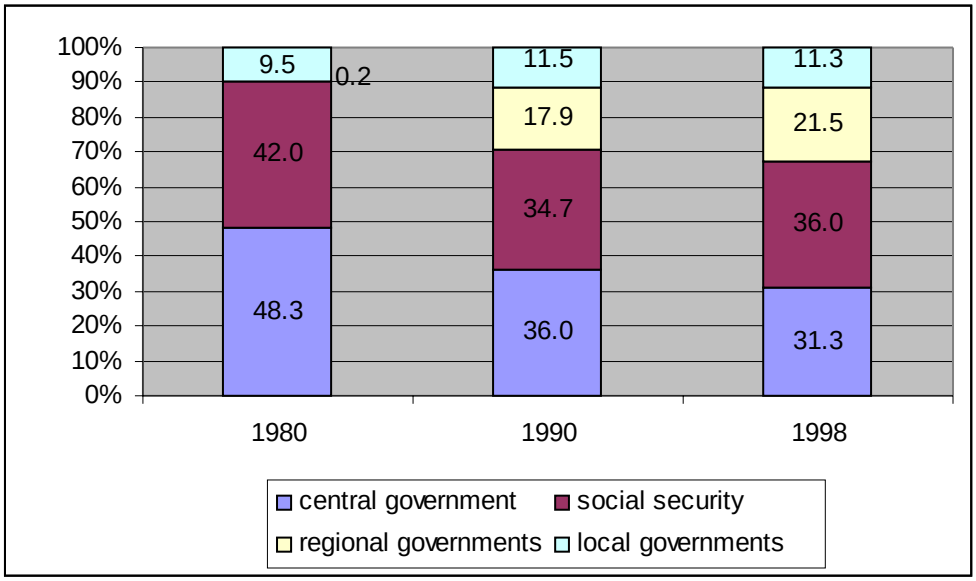
4. Effects and efficiency of regional policies

Since the recognition of the regions in the constitution in 1978, a continuing process of fiscal decentralisation has given Spanish regions considerable margins of manoeuvre to conduct their own regional policies. Further steps for the future system were agreed in July 2001. However, concerns are expressed that this process should not go too far since this might endanger unity and solidarity within Spain as stipulated in the constitution. Furthermore, the asymmetry of strong decentralisation of expenditure which is not matched by a parallel process on revenues is criticised for exerting inappropriate incentives on the regional governments' budgetary behaviour.

4.1 Explicit fiscal transfers to regions

Over the last 25 years, fiscal decentralisation has advanced substantially. The central government's share in total public expenditure declined from almost one half in 1980 to less than a third in 1998, a level which is comparable to federal countries like Germany and the US (Graph III.5). At the same time, the regional governments' share in public expenditure has increased from almost nil to more than 20%. The central government has remained the most important level in terms of expenditure in defence, public order and safety while the regional governments have become most important in education and health care (Table III.2).

GRAPH III.5: **Public expenditure by level of government in %, 1980-1998**



Source: Ministerio de Economia y Hacienda - Cuentas de las Administraciones Publicas, here taken from Vinuela 2000.

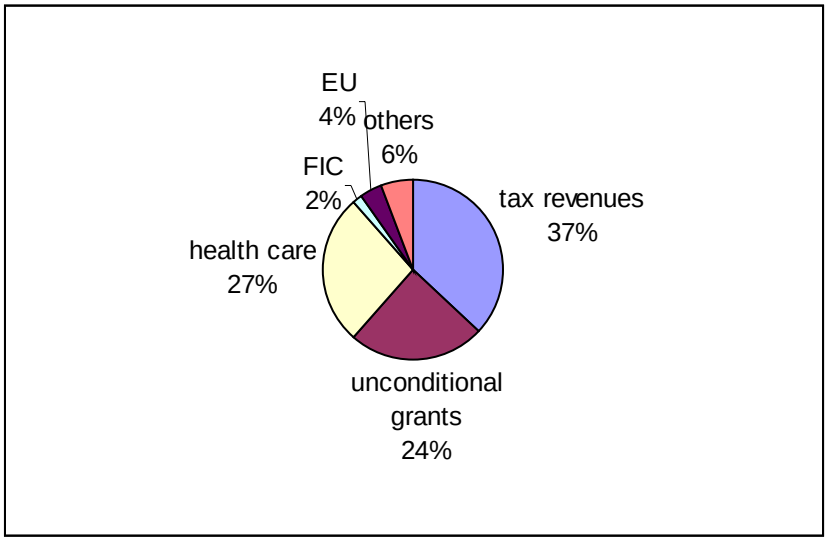
TABLE III.2: **Public expenditure by functions and levels of government in %, 1997**

	central government	social security	regional government	local government
general public services	40	0	15	45
defence	100	0	0	0
public order and safety	67	0	13	21
education	34	1	59	6
research	62	6	32	0
health	2	45	50	3
social security and welfare	8	88	2	2
housing and community affairs	8	0	21	72
culture and sports	14	2	29	56
economic development	29	15	36	20

Source: Ministerio de Economia y Hacienda - Cuentas de las Administraciones Publicas, here taken from Vinuela 2000.

This process of devolving spending to regional governments was however not accompanied by equivalent revenue-raising powers and had to rely on transfers from the central government. More than 60% of the regional governments' revenues arise from taxes and unconditional grants where they have little margin of manoeuvre, while the remaining part is conditional finance which is earmarked for specific purposes (Graph III.6). Until the mid-1990s, the decentralisation of tasks created a tendency to increase deficits at regional and local level. In recent years however, deficits at regional and local level have been controlled by the central government through certain provisions and by multi-annual agreements which were co-ordinated – although not sanctioned - by the Council for fiscal and financial policies (CPFF) which is composed of representatives from central ministries and the regional ministries of finance.

GRAPH III.6: **Revenues of regional governments in %, 1997**



Source: Ministerio de Economia y Hacienda – Informe sobre la Financiacion de las CCAA; here taken from Vinuela 2000.

Until 2001, the regional financing system was agreed upon by the CPFF in the form of five-year agreements. For the period 1997-2001, this system has three different types of regions:[47]

1. Pais Vasco and Navarra have their own personal and corporate income tax system and collect most taxes. With the main exception of the social security system (excluding health) and certain infrastructure networks (ports and airports), they exercise expenditure powers in most areas. For spending programmes carried out exclusively by the central government (mainly foreign affairs, defence and some network infrastructure) they pay a fixed share to the central government which is, for example, 6.24% of GDP for the Pais Vasco.

2. For the other regions, the "common regime" applies, and grants revenue-raising powers on a 30% share of the personal income tax revenues and some other taxes, mainly related to property and property transfers. These account for one-fifth of their total revenues and half of their unconditional revenues. Regions also have limited rights to vary rates and deductions on personal income tax, although little use is made of these rights. Up to now, no regional government has modified the marginal tax rates, although most have introduced additional deductions, mainly concerning family and housing allowances. The remaining tax receipts are attributed to the central government which transfers conditional resources earmarked for specific purposes and guarantees compensating transfers in case a region's personal income tax revenues grow by less than national GDP - although regions may keep revenues above that benchmark. The main areas of competence at regional level are education, social services, active labour market policies, some infrastructure investment and health care.

[47] OECD 2000, p.100 and 126ff.

3. Since the common regime implies that a part of a region's revenues depends on its economic performance, Andalucía, Castilla-La Mancha and Extremadura have not accepted this system. The pre-1997 system continues to apply in these regions which gives them no taxing powers, but provides for unconditional transfers from the central government, with amounts calculated on the basis of a range of different variables related to the cost of activities and their income per capita.

Several more specific problems appear on the revenue side of the regional and local budgets:

- The asymmetric guarantees of the central government - the growth of tax revenues of at least nominal GDP growth but never below - introduces disincentives on the raising of revenues and on the information and transparency for many taxes which are administered by the regions.

- In view of their smaller income base, poorer regions tend to have more volatile income tax revenues which are, in addition, pro-cyclical and reinforce cyclical changes in economic activity.[48] They have therefore a stronger need to take recourse to debt-financing which is however getting more difficult with the new draft Law on Budgetary Stability. A more diversified tax base could avoid this dilemma through increases in the rather low wastewater charges and energy taxes which would at the same time better internalise externalities and reduce taxation on labour income by a stricter application of the user/polluter pays principle.[49]

- In order to reduce the rigidities and the high price levels in the housing market there is a need to give municipalities access to tax revenues other than those related to land and real estate.

A new system for the financing of the 15 regions under the common regime starting in 2002 was agreed in the meeting of the CPFF on 27 July 2001. It replaces the previous five-year arrangement by a permanent system on the basis of two main changes: the central government increases its transfers and the regions receive a higher share and more legislative powers in taxation. For the year 2002, the central government hands out an additional € 1.8 billion, of which € 565 million is given to the three regions which have not participated in the previous 5-year scheme (Andalucía, Extremadura and Castilla-La Mancha); € 745 million is allocated on the basis of a range of variables the most important of which is population; and € 487 million is provided for health and social services to allow several regions to move towards taking over full responsibilities in these policies. Further tax revenues are ceded to the regions which are thus equal to 33% of personal income tax, 35% of VAT, 40% of special taxes on hydrocarbons, tobacco, alcohol and beer, and 100% of special taxes on electricity and the registration of vehicles. Moreover, the regions receive full legislative powers on 30% of the personal income tax and 100% for the ceded taxes related to culture and legal proceedings.

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[48] Joumard/Varoudakis 2000, p.40, provide some evidence on the correlation between the growth of personal income taxes and per capita income.

[49] Cf. OECD 2000, p.48f.

In principle, the process of fiscal decentralisation is to be welcomed since it implies more incentives and competition between the Spanish regions because their tax revenues partly depend on their economic performance. Nevertheless, fiscal responsibility at regional level remains weak for certain taxes, in particular VAT and special taxes, whose revenues will be pooled and distributed according to a regional consumption indicator. Furthermore, the legislative powers of regions to vary tax rates are rather limited. However, there is a general need to find the right balance between some (richer) regions' desire for more autonomy and other (poorer) regions' need for fiscal solidarity and political unity between the different parts of the country. The principles of financial solidarity across regions and of resource sufficiency for the provision of public services are explicitly mentioned in the Spanish constitution. Once more detailed information on the new fiscal system becomes available, its redistributive effects should be evaluated thoroughly. On the one hand, there is a greater diversification of the revenues of regional budgets which makes them less dependent on transfers from the central government and on regional income developments. On the other hand, given the decentralising elements on the revenue side of budgets, poorer regions might be confronted with tighter budgetary constraints for financing the public investment required for their development.

4.2 Regional policy expenditure

In simple terms it can be said that the process of decentralisation and the choice of policies transferred from the central to the regional level have been inspired by the priorities of the EU Structural Funds under Objective 1, which are infrastructure, human capital and support for private investment. At a more detailed level, non-university education, health policies, social policies (excluding pensions) and investment in regional infrastructure are managed by the regions in varying degrees. The so-called "Article 151 regions" (Andalucía, Canarias, Cataluña, Galicia and Valencia) are more advanced in terms of decentralisation than the so-called "Article 143" regions (Aragón, Asturias, Baleares, Cantabria, Castilla-La Mancha, Castilla y León, Extremadura, Madrid, Murcia, La Rioja) which have asked for more time to take over certain policies (education until 2001 and health care until 2004). Regional state aid to the private sector is not particularly high in comparison to the rest of the EU. On a per capita basis in the eligible regions, the average in the years 1997-99 was € 11.3 compared to € 87.4 in the EU15, and it was 0.06 as a % of GDP compared to 0.20% in the EU15. Public employment services and active labour market policies (ALMP) are managed by the regional governments although legislation and general decisions are taken by the central government. However, this recent decentralisation of public employment services has raised concerns about the lack of co-ordination across regions which may be a problem if information on job vacancies does not flow across regions.

In Andalucía and Extremadura there are specific programmes for agricultural workers who are indispensable in seasonal peak times but usually remain unemployed for the rest of the year. The most important is the "*Plan de Empleo Rural*" under which they can get temporary jobs in state-financed infrastructure projects. Having worked for a certain number of days in this scheme entitles them to unemployment assistance from

a relatively generous social security scheme for agricultural workers (Box III.1).[50] While these unemployed should be included in the unemployment figures of the labour force survey, this is not the case for registered unemployment figures.

BOX III.1: UNEMPLOYMENT ASSISTANCE FOR SEASONAL FARM WORKERS IN ANDALUCÍA AND EXTREMADURA UNDER THE SPECIAL AGRICULTURAL SCHEME OF SOCIAL SECURITY (REASS)

Unemployed people eligible to assistance under this scheme must be older than 16 and resident in Andalucía or Extremadura and must have contributed for at least 35 days during the last 12 months to the special agricultural scheme of social security, including the days worked in public rural employment programmes. They must not be related to the owner of the agricultural holding where they had worked and must have a household income of less than 2 to 4 times the minimum wage depending on the number of household members.

The maximum duration of benefits depends on age and family status. It is 3.43 days per day contributed to social security for a single person under 25, 180 days for those between 25 and 52, and 300-360 days for those older than 52 depending on their pension status. Benefits amount to 75% to 100% of the minimum wage (which is 433.45 €/month in 2001) plus the social security contributions. In 2000, the scheme covered 224,200 workers of which 126,300 were women and 149,200 aged between 25 and 54 years. 195,500 of these were in Andalucía and 28,700 in Extremadura which is about half of these regions' total registered unemployment (in which these data are however not included). The scheme accounts for approximately 5% of total expenditure on unemployment benefits in Spain.

The Interregional Compensation Fund (*Fondo de Compensación Interterritorial*; FCI) provides the regions with funds which are earmarked for investment in productive and social infrastructure which help to reduce regional income disparities. Based on a law, it is to amount to 40% of the net public investment of the central government budget. Only regions receiving EU assistance under Objective 1 are eligible to the FCI, thus allowing for a close co-ordination with EU Structural Funds and a co-financing of the projects. Its distribution is based on several (weighted) parameters among which are income per head, emigration rate over the last 10 years, unemployment rate, regional area, while insularity and other agreed-upon criteria may correct the outcome. Funds are transferred from the central government to the 10 Objective 1 regions (excluding Ceuta y Melilla). On a per capita basis, Extremadura, Galicia and Andalucía are the main beneficiaries. It accounts for about 2% of the total budgets of the beneficiary regions under the common regime, but it is slightly more important for some regions given its redistributive character, reaching up to 3.8% of the 1999 budget of Extremadura.[51]

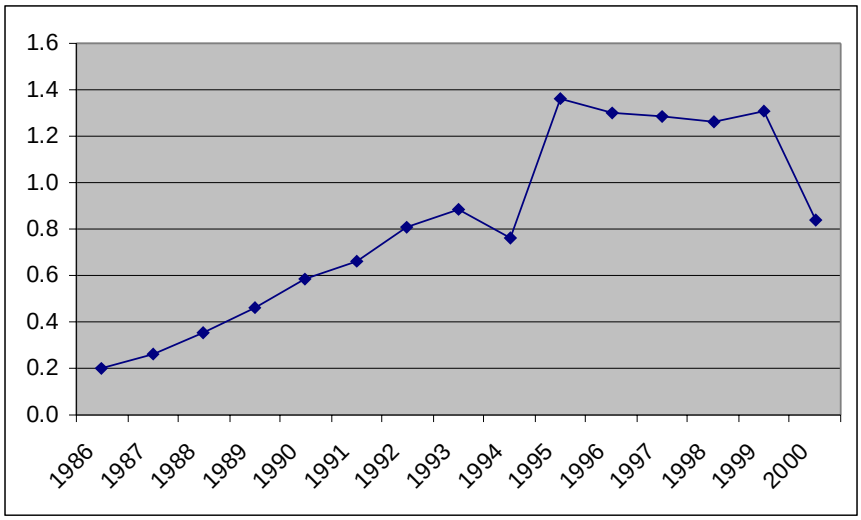
Since the major reform of EU Structural Funds in 1989, Spain has been the main beneficiary of these funds in absolute terms. In the programming period 1989-1993, Spain received annual average payments of ECU 2.89 billion, and in the period 1994-99 about ECU 6 billion (in current prices). Relative to GDP, these payments were up

[50] Mauro/Prasad/Spilimbergo 1999, p.37f.

[51] Own calculations on the basis of data on the FCI and regional budget plans taken from the Spanish Ministry for Public Administration (www.map.es)

to 1.4% and have thus gained a macroeconomic significance (Graph III.7). Almost the whole country is eligible for assistance for lagging regions (Objective 1), industrial regions (Objective 2) or rural regions (Objective 5b, now under Objective 2), while programmes on human resources (Objectives 3 and 4, now only Objective 3) are applied on a nation-wide basis. In the programming period 2000-2006, the Spanish Objective 1 regions (including Cantabria as a phasing-out Objective 1 region) will receive a total of € 39.5 billion allocated on the basis of programmes for each of the regions and of multi-regional programmes on competitiveness, innovation/R&D, local development and information society. Objective 2 programmes for the remaining regions total € 2.75 billion of EU grants, while Objective 3 programmes focussing on the integration of unemployed people with special difficulties amount to € 2.2 billion. On the basis of Community Support Frameworks (CSF) for each of the Objectives, there is a considerable amount of national public and private co-financing of the EU funding.

GRAPH III.7: **EU Structural Funds and Cohesion Fund payments in % of GDP, 1986-2000**



Source: Own calculations based on European Court of Auditors data for EU payments and European Commission data for GDP.

Given the concentration of funding on Objective 1 regions, the evaluation of the economic impact of EU Structural Funds has mainly focussed on these programmes (Box III.2). In spite of rather different methodological approaches, they arrive at common basic results of positive income and employment effects of the CSFs, although the employment effects are lower than the income effects because of positive impacts on labour productivity. A further result is that Structural Funds do not only provide a stimulus to aggregate demand, but also have continuing supply-side effects through improvements in productivity and competitiveness.

BOX III.2: EVALUATIONS OF THE ECONOMIC IMPACT OF EU STRUCTURAL FUNDS FOR OBJECTIVE 1 REGIONS IN SPAIN

An aggregate production function approach

De la Fuente (1999) has made a preliminary assessment of the Community Support Framework (CSF) 1994-99 in Spanish Objective 1 regions. Based on an aggregate production function approach and an employment demand equation he analyses the impact of the induced increases in infrastructure stock, non-infrastructure capital stock and labour on growth and employment. Assuming that additional private investment actually corresponds to private co-financing, the CSF's direct and indirect impact through infrastructure investment adds 0.63 percentage points to the GDP growth rate and 0.21 percentage points to employment growth; the corresponding figures for non-infrastructure capital are 0.56 and 0.19 percentage points. A more detailed calculation for Andalucía, including expenditure on training schemes, arrives at a total 1.22 percentage points of GDP growth and 0.40 percentage points of direct employment growth. A different scenario which estimates induced private investment by taking account of dead-weight, crowding-out and crowding-in effects arrives at comparable results (1.12 and 0.37). A calculation of the "social rates of return", defined as the discount rate which makes the present value of the flow of additional regional income generated by each type of investment equal to the investment undertaken in the initial year, reveals major differences between the expenditure categories: 40.2% for infrastructure investment, 31.2% for non-infrastructure investment, 13.7% for subsidies and 14.6% for training. Although the reasons for the lower returns on training remain unclear – and discounting possible methodological and data problems - they may be related to the weak performance of the labour market until recently which failed to integrate unemployed who have benefited from training measures.

The HERMIN models

A simulation to evaluate the aggregate macroeconomic impact of the Spanish Objective 1 programmes from 1989 to 2006 has been made on the basis of the so-called HERMIN model. In order to get comparable results for the macroeconomic impact of Structural Funds under Objective 1, HERMIN models have been developed for Greece, Spain, Ireland and Portugal. Each national model consists of three broad sub-components (a supply side, an absorption side and an income distribution side) which function as an integrated system of equations. While conventional Keynesian mechanisms are at the core of the model, the supply sub-component determines output in manufacturing also via price and cost competitiveness. Interest and exchange rates are exogenous to the model. HERMIN identifies three channels through which the CSFs affect an economy's long-run supply potential: through increased investment in physical infrastructure, through increases in human capital and through direct assistance to the private productive sector. These channels are introduced into the models in the standard way (through expenditure and income shocks) and in addition via two types of policy externalities: The first arises through increased total factor productivity likely to be associated with improved infrastructure or a higher level of human capital; the second type is associated with the role of improved infrastructure and training in attracting productive activities through FDI and enhancing the ability of endogenous industries to compete in the international market.

The table shows the impact of the CSFs (excluding private co-financing) in increasing the level of GDP and reducing the unemployment rate in all four countries relative to the scenario without CSF. Compared to the results for Greece, Ireland and Portugal, those for Spain may seem rather low. The explanation is purely methodological in that the whole territory of Spain is not eligible for Objective 1 assistance while the evaluation of the macroeconomic impact relates to the Spanish economy as a whole. However, comparing the increase in GDP to the CSF funding, this "multiplier" is largest for Spain basically because it is a larger economy and has therefore fewer leakage effects into imports. The figures for the year 2010 point to the supply-side effects of increased productivity and competitiveness which continue even when the demand-side stimulus of CSF payments is assumed to stop after 2006.

TABLE: **Aggregate CSF impacts on real GDP at market prices (GDP, change in %) and unemployment rate (UR, change in percentage points), 1989-2010**

	Greece		Ireland		Portugal		Spain	
	GDP	UR	GDP	UR	GDP	UR	GDP	UR
1989	4.1	-3.2	2.2	-1.4	5.8	-3.6	0.8	-0.5
1993	4.1	-2.9	3.2	-1.0	7.4	-4.1	1.5	-0.8
1999	9.9	-6.2	3.7	-0.4	8.5	-4.0	3.1	-1.6
2006	7.3	-3.2	2.8	0.4	7.8	-2.8	3.4	-1.7
2010	2.4	0.4	2.0	0.5	3.1	-0.1	1.3	-0.4

Source: ESRI; taken from European Commission 2001a, p. 131.

The macroeconomic ex ante evaluation of the CSF 2000-2006

Three different models have been applied to simulate the macroeconomic impact of the CSF 2000-2006 and are presented in the CSF document. The Spanish government's MOISEES models simulated the impact of the CSF mainly on the demand side, although the supply-side effects of an increased production capacity through a higher capital stock are also taken into account. The HERMIN simulation differed from the above description only in that it looked at the CSF 2000-2006 in isolation and not as a continuation of the previous CSFs. The Commission's QUEST II model confirmed that long-term effects, which improve the production structure of an economy and are the main objective of EU Structural Funds, continue to induce a higher level of GDP of somewhat below 1% even when CSF payments are assumed to stop. However, the QUEST II simulation also suggests that some of the initial positive effects of the CSF may be reduced by a deterioration of the trade balance and a certain crowding-out of private investment as a consequence of an appreciation of the real exchange rate and an increase in real interest rates. According to MOISEES, an annual average of 122,000 jobs is created due to the CSF while HERMIN arrives at a figure of 219,000.

5. Conclusions and policy options

Spain has made major progress in employment growth and the reduction of unemployment since the mid-1990s. A major share of this success is due to the efforts in maintaining macroeconomic stability and reforming labour markets. However, the reduction in the level of unemployment has not been accompanied by a reduction in regional disparities in unemployment. The various determinants of this problem and the range of policies available to address this problem have been discussed in the preceding analysis.

Unit labour costs in the traded goods sector are more or less the same in regions of high and of low unemployment. High-unemployment regions should however provide more moderate wage developments so as to attract more investment and/or to provide more incentives for geographic mobility of unemployed people. To achieve this, one option would be a stronger *de facto* decentralisation of the wage bargaining system by removing the regional and provincial bargaining levels and having firms opt into sectoral nation-wide agreements rather than having them justify an opt out. A second option would be to introduce correction coefficients to take account of regional differences in prices and purchasing power. The latter could also be applied to benefits where they are the same across all regions in nominal terms while, due to lower costs of living in low-productivity regions, they are higher in real terms.

A particular problem for the flexibility of the labour market are the barriers to geographic mobility. One of the reasons are the rigidities in the housing market. A phasing-out of tax incentives to owner-occupied housing and a removal of tax distortions in the housing market should be envisaged. Moreover, the municipalities should be accorded a broader tax base, because at present this relies too strongly on land sales and real estate taxes. Such a change would reduce incentives for urban land rationing which exerts pressures on the housing situation. An additional problem for geographic mobility may arise from the decentralisation of public employment services if the exchange of information on job vacancies is insufficient. A more general reduction of severance payments on permanent work contracts would also enhance their relative attractiveness compared to fixed-term contracts which provide only a weak basis for decisions to move.

The process of fiscal decentralisation has made further progress towards improving fiscal responsibility and incentives for regions on the revenue side. Increasing regional competencies on the expenditure side need to be matched by an increased reliance on regionally and locally raised taxes which are based on a wider basket of taxes. However, in a context of increased constraints on debt-financing at all levels of government, an overly strong reliance on taxes depending on income may bring poorer regions into a vicious circle where they have too little resources for public investment required for their catching-up. The new system starting in 2002 needs to be evaluated as to whether an appropriate balance between regional autonomy and a continuation of fiscal solidarity has been achieved.

Regarding pro-active regional policy, the regions have gained considerable discretion on the spending of national and EU funding for regional development and labour market policies. Efficient spending should be based on a clear strategy which defines the priorities for regional development and job creation. This includes a clear definition of spatial priorities in terms of both efficiency and equity so that funding is primarily given to the most efficient projects, many of which are likely to be in the growth poles of poorer regions, rather than being evenly spread across the territory with little effect in terms of regional development. A particular problem of regional policy is the avoidance of dead-weight effects which is a standard problem in direct aid to the private sector and in job creation schemes.

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ANNEX III

TABLE: **Real unit labour costs (Spain = 100), 1997**

	Galicia	Asturias	Cantabria	Pais Vasco	Navarra	La Rioja	Aragón	Madrid	Castilla y León	Castilla-la Mancha	Extremadura	Cataluña	Valencia	Baleares	Andalucía	Murcia	Ceuta y Melilla	Canarias
Agriculture, hunting and forestry	254	237	191	131	:	:	:	202	:	:	:	111	116	55	62	81	:	155
Fishing	116	66	114	98	:	:	:	91	:	:	:	105	101	118	64	179	:	93
Mining and quarrying	80	186	52	83	164	118	137	98	143	56	175	59	113	100	93	49	:	77
Manufacturing	106	101	111	105	87	83	89	108	91	103	95	98	99	98	102	101	64	93
Electricity, gas and water supply	73	76	119	88	68	90	76	111	78	89	61	105	100	148	138	102	:	130
Construction	94	98	108	104	93	97	101	96	103	93	96	104	106	108	102	96	90	89
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	83	69	127	140	110	85	101	156	96	64	68	125	86	46	91	65	81	47
Hotels and restaurants	123	97	97	100	70	98	83	95	97	65	70	135	80	102	71	78	63	107
Transport, storage and communication	98	106	98	99	90	87	103	98	106	97	104	101	96	99	103	91	111	103
Financial intermediation	116	87	104	77	83	126	122	97	100	111	120	96	105	113	108	100	71	106
Real estate, renting and business activities	84	89	88	125	101	85	96	112	84	82	82	107	91	85	92	76	101	102
Public administration and defence; compulsory social security	98	91	100	98	92	99	101	107	98	103	101	92	100	94	100	103	109	98
Education	100	100	101	98	93	96	103	97	100	100	102	102	101	99	102	99	98	100
Health and social work	99	100	101	98	98	97	101	102	99	100	99	97	102	101	101	100	101	99
Other community, social, personal service activities	98	99	100	98	95	96	99	102	98	99	98	100	102	99	101	99	102	99
Private households with employed persons	99	99	101	99	96	98	101	101	100	99	99	99	101	99	101	100	100	99
Total	114	104	107	105	:	:	:	98	:	:	:	99	98	89	98	93	:	95

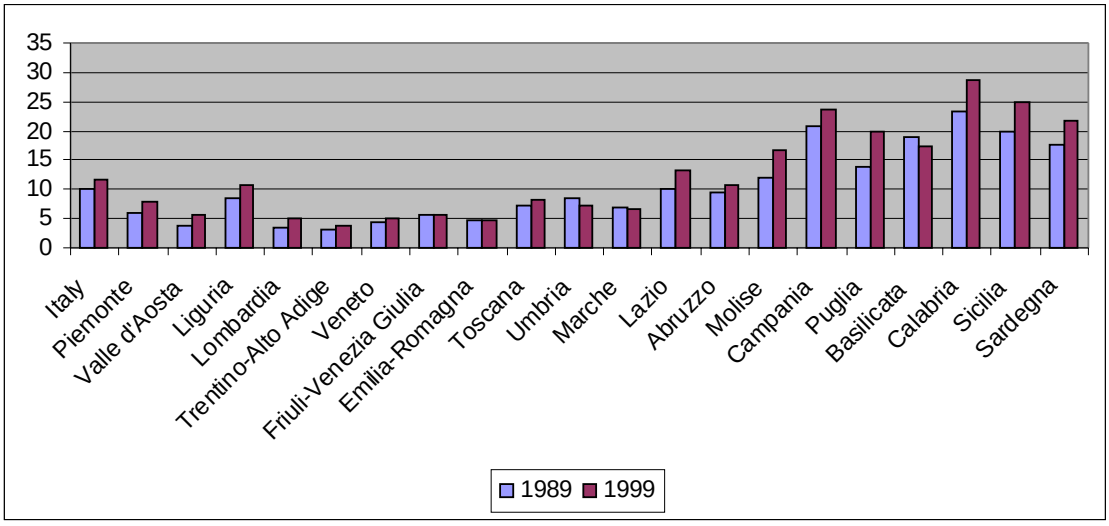
Note: real unit labour costs = real wages over productivity; with prices = regional consumer price index relative to national consumer price index (basis 1992), wages = compensation per employee and productivity = gross value added (GVA) over employment. *Source:* Eurostat, own calculations.

IV. SOUTHERN ITALY

1. Introduction

Although Italy's unemployment rate remains above the EU average, this is in large part due to high rates of unemployment in the southern regions[52], while unemployment in the Centre-North is relatively low (Graph IV.1). According to Labour Force Survey data, regional unemployment rates in 1999 ranged from 4% in Trentino-Alto Adige, to 29% in Calabria, while the average unemployment rate in the Centre-North regions was 7%, but the average in the Objective 1 regions was 3 times higher. Similarly, activity and employment rates are significantly lower in the South than in the Centre-North.

GRAPH IV.1: **Regional unemployment rates in %, 1989 and 1999**



Source: Eurostat, Labour Force Survey.

Recent decades have seen a widening of the gap between the 2 areas, mainly due to a deterioration in the South's labour market situation. While unemployment in the Centre-North fluctuated relatively little in 1983-99, in the South it increased from 12% in 1983 to 20% in 1999. Employment and activity rates also fell in the South, yet saw only relatively small changes in the Centre-North. Although employment growth was quite buoyant in Italy in 2000, due to stronger economic growth and greater labour market flexibility, this was mainly focused in the Centre-North, which saw the emergence of some labour shortages.

[52] The 8 Southern Italian regions are Basilicata, Calabria, Campania, Puglia, Sardegna, Sicilia, Molise and Abruzzo. The first 6 are Objective 1 regions, while aid to Molise is being 'phased-out' and assistance to Abruzzo was 'phased out' in 1994-99. Unless otherwise stated, data in this paper refer to all 8 Southern Italian regions.

The following section examines some of the key determinants of the wide dispersion of regional unemployment rates in Italy, while the third and fourth sections analyse the impact of national and regional policies on regional unemployment differentials, and the final section draws some conclusions and points to policy recommendations.

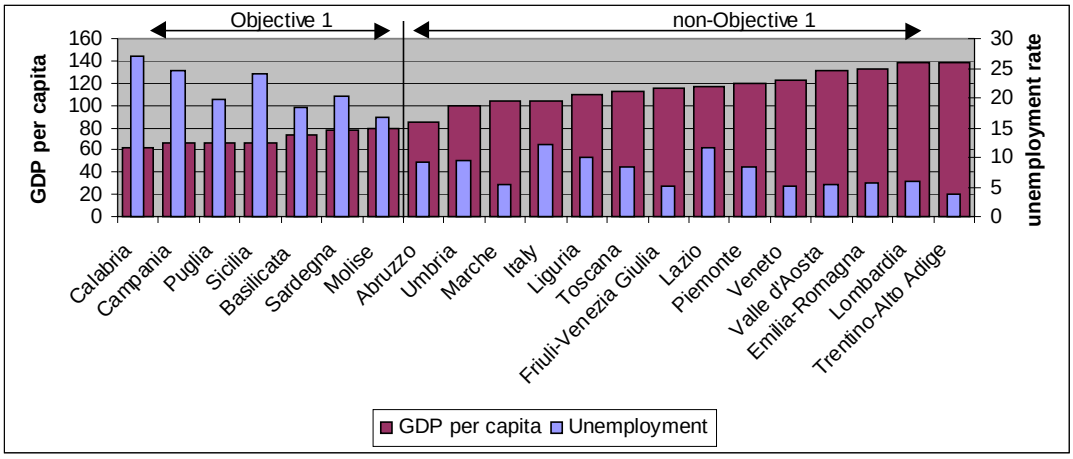
2. Determinants of regional unemployment: some stylised facts

One reason for the high levels of unemployment in the Southern regions is their low rates of economic growth in recent decades, which has meant that the South's level of GDP per capita, relative to the Centre-North, has hardly changed since the early 1970s. Low growth rates may in part be due to the lower level of human capital in the South. However, unemployment rates are significantly higher at all education levels in the South, particularly in younger age groups, which suggests that there are significant problems associated with initial entry to the labour market, and also that more highly qualified young people in the South may be 'queuing' for specific kinds of jobs. The rise in unemployment rates in the 1970s-90s is also linked to the lack of wage responsiveness to differences in regional economic conditions, as well as to the fall in levels of labour mobility since the early 1970s.

2.1 Economic development in Italy's regions

The level of GDP per capita in the South is around two-thirds of the Italian average and has seen only minor fluctuations since the early 1970s. The low level of growth in GDP and productivity over recent decades is a key reason for the South's persistently high levels of unemployment (Graph IV.2).

GRAPH IV.2: **GDP per capita (EU-15=100) and unemployment rates (in % of labour force), 1998**



Source: ISTAT, EUROSTAT.

The only period in the past half-century when the South succeeded in converging towards the Centre-North's level of GDP per capita was the 1960s and early 1970s, due partly to the spread of growth effects from the Centre-North, and partly to slower population growth in the South, not least as a result of relatively strong labour

migration. Real GDP growth remained slightly higher in the South than in the Centre-North in the rest of the 1970s, yet fell behind in the 1980s-90s. Population growth, however, has been more rapid in the South since the early 1970s, not least due to the fall in labour mobility.

There are a number of reasons for the South's slow growth, not least its geographical peripherality, which leads to poorer market access, and the region's factor endowments. The lack of adequate human and physical capital is in part due to the policy focus on raising levels of household and public sector consumption, rather than investing in the human and physical capital necessary for fuelling long run growth. The institutional context of Southern Italy also generates certain disincentives to private investment, ranging from the lack of secure property rights and the prevalence of criminality, to the region's less efficient public services (including transport, energy and water supply) and a national wage bargaining system which raises unit labour costs in the South to non-competitive levels.

2.2 Labour force qualifications and sectoral mix

The South's lower level of education, relative to the Centre-North, may have contributed to the region's slower economic development. However, unemployment in the South is not simply due to a lack of skills, as unemployment rates are high among people with strong qualifications, particularly in younger age groups. This may in part be due to a lack of employment opportunities for more educated workers in the South, due to the region's sectoral mix.

Although the gap in education levels has narrowed between the South and Centre-North, the South still lags behind, with 45% of people lacking any secondary qualification, compared to 42% in Italy as a whole. The lag in levels of human capital is likely to have contributed to the slower pace of economic development in the South over a number of decades. The gap is all the more serious given that levels of education spending throughout Italy are among the lowest in the EU, relative both to GNP and to total government spending. This suggests that stronger investment in human capital could enhance prospects for economic growth and consequent employment creation.

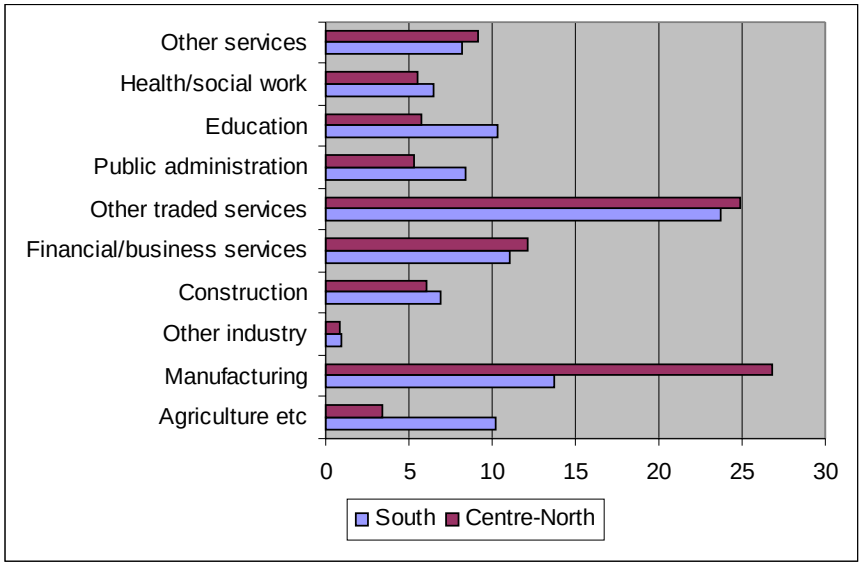
Nevertheless, the South's relatively lower education levels do not provide an adequate explanation of the strong regional dispersion of unemployment, not least because the expected correlation between low skills levels and higher unemployment rates is only to be found among people aged over 35 years (Table IV.1). There is no such correlation among younger people, with unemployment rates of around 30% at all education levels (while in the Centre-North, unemployment is highest among younger people with no qualifications and those with university degrees). The significant disparities between younger and older workers may in part be due to the lack of efficient job search and allocation mechanisms, as well as to stringent employment protection legislation which deters employers from hiring people with no formal labour market experience. It also appears, however, that there is a lack of employment opportunities for more skilled and educated workers in the South and that some young people, particularly university graduates, are 'queuing' for permanent jobs, mainly in the public sector.

TABLE IV.1: **Unemployment rates by education level and age group, 1997**

	Aged 25-34	Aged 35-64
SOUTH		
University degree	31.4	3.0
Diploma	29.8	5.9
Professional qualification	31.6	9.5
Secondary school certificate	27.4	11.2
No qualifications	35.5	15.2
Total	29.4	9.8
ITALY		
University degree	20.4	2.1
Diploma	15.0	3.6
Professional qualification	11.0	4.9
Secondary school certificate	14.6	6.4
No qualifications	26.1	8.5
Total	15.5	5.5

Source: Community Support Framework 2000-2006, Operational Programme "La Scuola per lo Sviluppo".

Graph IV.3: **Percentage of regional employment by sector, 1998**



Source: Eurostat.

This tendency to 'queue' for permanent jobs is particularly common in the South due to the sectoral structure of the region's employment, which is dominated by public services, agriculture and construction - all sectors strongly dependent on public transfers. Thus most of the more highly qualified jobs in the South are in the public sector and, possibly, in traded services (although the share of employment in financial and business services in lower in the South than in the Centre-North). The most striking differences between the 2 parts of Italy are in the agricultural and manufacturing sectors. In 1998, agriculture accounted for 10.2% of employment in the South and only 3.4% in the Centre-North, whereas manufacturing accounted for only 13.7% of employment in the South but 26.8% in the Centre-North.

An analysis of longer-run data[53] reveals both the degree of structural change which the South has undergone since the 1970s, and also the historic limits of industrialisation in the region. The share of employment in agriculture in the South had fallen strongly by the end of the 1990s, from around one third in 1970 (when it accounted for around 13% of employment in the Centre-North), and it is likely that workers in this sector will have experienced difficulties in finding alternative employment. The fall in industry's share of employment in the South has been less dramatic because industrialisation remained limited even in the 1970s (when industry accounted for around 26% of employment, and manufacturing for less than 15%) – in contrast with a peak of 43% of employment in industry in the Centre-North in 1970, including 33% in manufacturing. Thus not only has the South seen a significant structural change in the composition of employment in recent years, but it has been transformed from a small-scale agricultural economy to an economy dependent on service sector employment, and largely funded by public transfers.

2.3 Lack of wage responsiveness to regional economic conditions

The level of nominal wages has converged between the South and Centre-North since the late 1960s, despite significant regional differences in labour productivity. The subsequent rise in unit labour costs has contributed to the increase in unemployment in the South, even though the state has attempted to reduce the South's disadvantage by means of subsidies on social security contributions. The convergence of regional wages, combined with the lower cost of living in the South, has also been a key factor in reducing labour mobility from southern to northern regions.

The differential in nominal wages between the South and Centre-North changed significantly between 1960 and 1980, following the introduction of centralised wage bargaining mechanisms. While wages in the South were around half of the Centre-North level in 1960, they rose to around 90% by the early 1980s, and this ratio has remained relatively unchanged ever since[54]. This shift hindered the growth of manufacturing in the South and, indeed, contributed to the reduction in its share of employment, as companies have either closed down operations or have restructured, investing in capital in order to be able to reduce employment.

Although there is some degree of regional variation in nominal manufacturing wages (Table IV.2), this is largely due to sectoral differences between the South and Centre-North. Moreover, the regional differential in nominal manufacturing wages is not sufficient to compensate for the stronger differences in labour productivity between regions, which widened in the 1960s-90s because productivity increased less rapidly in the South than in the Centre-North. Unit labour costs in the South have converged towards the Italian average; in 1998, unit labour costs in the Objective One regions (i.e. excluding Abruzzo) stood at 100.5% of the Italian average in the manufacturing sector. However, this convergence in levels of unit labour costs has been achieved by

[53] Svimez 2000.

[54] Brunello/Lupi/Ordine 2001.

means of significant state subsidies for employment, not least in terms of reduced social security contributions[55]. Nevertheless, even with these subsidies, the effects of regional wage equalisation has had a detrimental effect on employment in the South. (Annex IV provides details of unit labour costs in all sectors.)

TABLE IV.2: **Gross nominal wages in the South divided by total workforce, Italy=100**

	1995	**1996**	**1997**	**1998**
Agriculture/Forestry/Fishing	133.1	132.6	130.8	127.9
Industry	89.0	89.6	88.9	88.2
of which manufacturing	85.0	86.3	85.9	85.2
Construction	99.2	99.0	101.1	101.4
Business and financial services	85.5	85.1	87.3	86.7
Other traded services	82.5	83.5	85.8	85.5
Non traded services	104.0	104.7	104.2	104.1
Total	91.9	92.5	93.0	92.5

Source: ISTAT, calculations by DG ECFIN.

As the cost of living is also lower in the South, the imbalance is even stronger in terms of real wages. A recent study calculates that the accumulated difference in prices between North and South in 1947-95 was over 14%[56]. Even if nominal producer wages are higher in some sectors in the Centre-North, the differential in terms of the real consumer wage is much smaller and may indeed favour the South in sectors such as the public administration, thus acting as a disincentive to labour mobility.

Finally, the relatively high level of the producer wage in the South may contribute to the growth of the informal economy, as businesses seek to remain competitive by undercutting the wage levels agreed via the national bargaining process. The OECD[57] estimates that the informal economy accounts for one third of total employment in the South and over 40% of industrial employment (compared to around 20% in Italy as a whole). It is therefore likely that a proportion of the people who are registered as unemployed are in fact employed in the informal sector. The scale of the informal economy may in part be due to national factors, such as stringent employment protection legislation and the relatively high tax wedge on labour. However, the far greater prevalence of the informal economy in the South suggests that region-specific factors are also important, not least the lack of wage responsiveness to local economic conditions.

[55] OECD 2000a p.153.

[56] Alesina/Danninger/Rostagno 1999.

[57] OECDa 2000 p.129.

2.4 Insufficient labour mobility

Labour migration from the South to the Centre-North was relatively high from the 1950s to the early 1970s but then started falling and has remained low ever since. By the mid 1990s, the ratio of gross migration flows to population was lower in Italy than in any other OECD country, and inter-regional commuting is also very limited[58]. The lack of labour mobility is due to a number of factors, particularly the move towards nominal wage convergence in the late 1960s, the increase in state transfers to the South, the rise in the fixed costs associated with migration, and the lack of effective job-matching mechanisms.

The convergence of nominal wages across regions in the late 1960s reduced incentives to migrate by raising the level of reservation wages and household disposable income in the South[59]. Further disincentives to migrate were generated by the increase in real per capita transfers to the South in the 1960s-90s, which led to a rise in levels of household consumption. Moreover, as these transfers primarily take the form of pensions, and there is no minimum income scheme for people with no formal employment record, this increase may have reinforced the dependence of young people on informal family networks, thus reducing their propensity to migrate.

Incentives to migrate may also have been affected by a rise in the fixed costs associated with migration, due to the more rapid rise in the cost of living in the Centre-North, and increased rigidities in the housing market[60]. Similarly, the costs and difficulties associated with finding accommodation may mean that migration is facilitated by interpersonal links in the host region, so that long periods of low migration may lead to hysteresis effects, raising the effective cost of migrating[61]. The importance of informal connections is also likely to be all the more important due to the historical lack of efficient formal job search mechanisms in the form of public and private employment agencies providing advisory services to unemployed people, as well as information on job opportunities throughout Italy.

3. Regional incidence of national policies

Specific aspects of the national institutional and policy context can have spatially differentiated effects and may thus contribute to the strong regional dispersion of unemployment in Italy. Of particular importance are policies relating to the macroeconomic context and to interpersonal redistribution, as well as taxation on capital and labour. Moreover, although various measures have been undertaken in recent years aimed at increasing the efficiency of Italy's product, capital and labour markets, there are still a number of features of the labour and housing markets which

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[58] OECDb 2000 p.53.

[59] Brunello/Lupi/Ordine 2001.

[60] Cannari/Nucci/Sestito 2000.

[61] Attanasio/Padoa-Schioppa 1991.

tend to exert a negative influence on regional unemployment rates by affecting regions' attractiveness to private capital and the extent of interregional labour mobility.

3.1 Macroeconomic policies and interpersonal redistribution

Italy's macroeconomic context worsened from the 1970s until the early 1990s, with rises in inflation and in public sector indebtedness. There have been significant improvements in the country's macroeconomic stability in the 1990s, yet the challenge now is to maintain this stability, while also raising levels of public investment in the South in order to stimulate growth. Such a strategy will require fiscal responsibility by regional and local authorities, as well as by the central state, and may also involve a re-balancing of the relative policy emphasis on consumption and investment spending in the South.

Public finances deteriorated throughout the 1970s-80s and into the early 1990s, with the general government deficit rising from 3.3% of GDP in 1970 to a peak of 12.5% of GDP in 1985, before falling gradually. The strongest reduction occurred in 1997, when the general government deficit fell to 2.7% of GDP, from 7.1% of GDP in 1996, following significant efforts to consolidate public finances by reducing spending and increasing fiscal receipts. The shift in the fiscal stance has also led since 1995 to a reduction in the gross public debt, which had risen consistently from 38.0% of GDP in 1970, to 123.8% of GDP in 1994. However, the level of the gross public debt remains high, at 114.5% of GDP in 1999.

TABLE IV.3: **Per capita investment and consumption in the South, Italy=100**

	1995	**1996**	**1997**	**1998**
Public and private investment	69.0	68.3	72.5	71.9
Public and private consumption	83.0	82.5	82.2	82.2
Consumption of households	78.1	77.2	76.8	76.5
Consumption of public administration	99.5	99.9	100.3	101.1
GVA at factor cost	65.9	65.8	66.5	66.3

Source: ISTAT, Eurostat, DG ECFIN calculations.

A key reason for the increases in public sector indebtedness from the 1970s was the rise in public spending in the Southern regions, despite their limited fiscal capacity[62]. A recent study estimates that per capita tax revenues in most southern regions were only around 60% of the Italian average in 1983-92[63]. This is in part due to the low level of economic activity, but is also related to the progressiveness of the tax system,

[62] European Commission 1993.

[63] Decressin 1999.

the South's exemptions from specific forms of taxation (e.g. relief on social security contributions), and tax evasion via the informal economy. The same study shows that, despite the gap in fiscal capacity, per capita levels of public consumption in the South were around the national average, while per capita levels of social benefits were around 85% of the national level. The additional financing of household consumption and public services was provided in the form of state transfers, which contributed significantly to the accumulation of national public sector indebtedness.

Notable efforts have been made to consolidate public finances since the mid 1990s, and this has included some reduction in public spending in the South. This strategy has laid the foundations for consistent, long-run growth throughout Italy, and provided the basis for stronger employment creation in 2000, although primarily in the Centre-North. However, the reduction in public investment and the loss of employment in public enterprises has led to increased unemployment in specific localities. Efforts are now needed to maintain macroeconomic stability, while also raising levels of public investment in the South, with the aim of increasing productivity and boosting the region's attractiveness to private investment.

On the one hand, ongoing fiscal consolidation will depend on the active commitment of local and regional authorities, which have gained greater fiscal autonomy since the late 1990s. Significant problems have arisen in the past, with overruns on spending, particularly in relation to health services for which the Regions are responsible. An Internal Stability Pact has therefore been agreed between the state and the regional and local authorities aimed at ensuring fiscal responsibility (Box IV.1).

BOX IV.1: INTERNAL STABILITY PACT

The Internal Stability Pact was agreed at the end of 1998 and set targets for improving the fiscal balance of the regional, provincial and municipal authorities in 1999-2001. Revised targets were later set for 2001-03, as it was estimated that half of the targeted savings were not achieved in 1999. Changes were also made in relation to definitions and mechanisms for assessing compliance. However, the IMF[64] notes a number of factors which may limit the Pact's effectiveness. The first is the lack of effective sanctions. The second is that targets are not set in relation to each authority's existing net borrowing, but rather in relation to its level of primary current expenditure. The third is the use of different targets from those monitored in Italy's Stability Programme and specifically the exclusion of investment spending from the terms of the Pact, even though this is the only type of expenditure for which the regions are allowed to borrow.

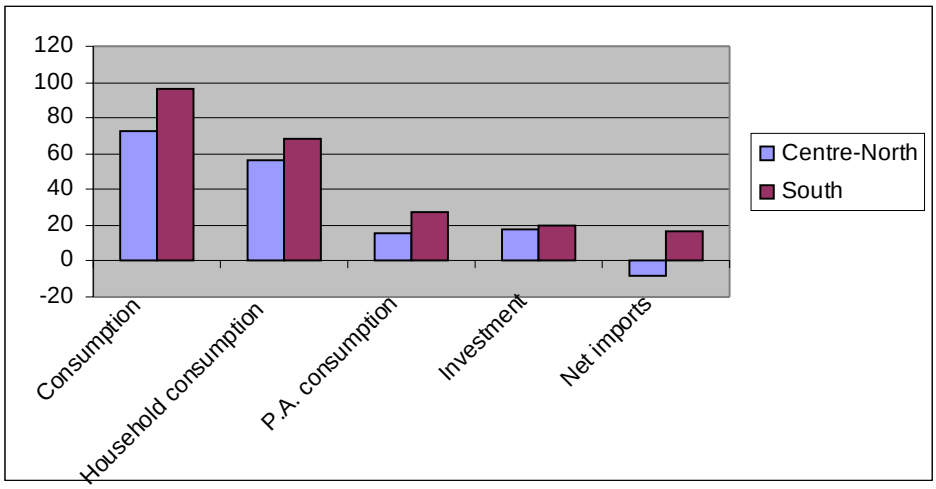
On the other hand, it may only be possible to raise public investment significantly in the South if consumption spending is reduced. Despite some reductions in public spending in the 1990s, net imports into the South were around 17% of southern GDP in 1995-98 (Graph IV.4). This is primarily due to relatively higher levels of public consumption and employment in the South, as well as to relatively high welfare payments to individuals. By contrast, the share of investment in regional GDP is not significantly higher in the South than in the Centre-North, because the main focus of

[64] IMF 2000.

policy has been to promote convergence of household and public sector consumption across regions, rather than to stimulate catching up in terms of productivity and real GDP per capita.

A recent study has emphasised the role of public employment as a hidden form of redistributive transfer to the South[65]. Levels of public employment are higher in the South than in the Centre-North, whether scaled relative to regional GDP, consumption, labour force, total employment or population. Moreover, public sector jobs tend to have higher wages than comparable jobs in the private sector in the South, for example in financial, business and personal services. Thus it is not simply the case that public consumption accounts for a higher share of GDP in the South due to its low level of GDP per capita, or due to the political commitment to maintaining equal public services in all regions. Rather, a key reason for the high level of public consumption in the South is the relatively higher levels of public employment.

GRAPH IV.4: **Consumption, investment and net imports (in % of regional GDP), 1998**



Source: ISTAT, DG ECFIN calculations.

The Southern regions also receive significant interpersonal transfers, which raise levels of household consumption. However, welfare payments mainly take the form of old-age and invalidity pensions, which together account for 70% of spending. Benefits with a relatively high replacement rate (80% of the previous wage) are available to workers laid off by firms covered by the *Cassa Integrazione Guadagni* – namely medium-sized or large industrial, construction and commercial firms. However, few benefits are available to individuals with little or no formal labour market experience. Moreover, many people laid off from restructuring companies have been allocated invalidity pensions, which have the effect of raising the reservation wage in the South, not only among recipients, but also among other household members because income from pensions is redistributed within the household. For example, younger people are less likely to migrate in search of work

[65] Alesina/Danninger/Rostagno 1999.

as they would no longer live in a household with a high level of consumption – particularly as there is no income support for first-time job-seekers.

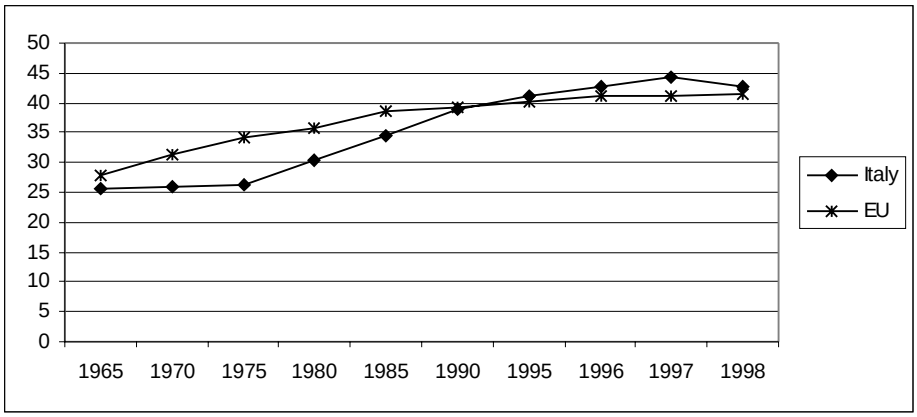
3.2 Taxes on capital and labour

The tax system has proved unfavourable to private sector investment and labour market participation in recent decades, not only due to frequent increases in taxes on capital and labour, but also due to the complexity of rules which increases uncertainty. Policy-makers now face the dual challenge of reducing the tax burden, particularly on labour, while also ensuring that revenues are sufficient to continue to reduce public sector indebtedness. The need to cut the tax burden is especially strong in the South, where fiscal incentives on labour are due to be lowered significantly in 2001.

Although Italy's total tax burden was below the EU average from the mid 1960s to the mid 1990s, its level rose more rapidly than in most other EU Member States so that, by 1995, it exceeded the EU average (Graph IV.5). Tax increases affected all main tax bases, but particularly taxes on income and profits, and social security contributions. The share of tax revenue in GDP peaked in 1997, at 44.2% of GDP, compared to the EU15 average of 41.1%.

The 1997-98 tax reform reduced the tax wedge on labour, with the aim of reducing incentives to employment creation, and also cut taxes on capital, with a view to stimulating investment. However, although the tax wedge on labour has been reduced, particularly for workers on lower wages, the overall tax burden remains heavy, not least due to high social security contributions.

GRAPH IV.5: **Tax revenue as a percentage of GDP, 1965-98**



Source: OECD 2000c.

Moreover, even in 1999 the marginal tax rate facing the principal earner in Italian households was relatively high (although lower for the second earner in the household), and this may act as a disincentive to labour market participation. The marginal tax rate does not vary according to the type of household (e.g. single or married, with or without children), although it falls from 40% to 34% for the principal

earner in households earning less than two thirds of the average production worker's wage[66]. The marginal tax rate facing the second earner is lower, ranging from 22% in households earning around the average of the production worker's wage, to 34% in high income households.

Various forms of tax relief and credits have been provided in the South since the late 1960s with the aim of reducing disincentives to investment and employment (Box IV.2). Intervention has traditionally taken the form of relief on social security contributions, although more recently tax credits have been introduced.

BOX IV.2: TAX RELIEF AND TAX CREDITS IN SOUTHERN ITALY

Specific schemes of relief on social security contributions for companies in the South date back to the late 1960s. Employers' contributions to the main welfare and social security schemes (*sgravi degli oneri sociali*) were reduced in 1968, while exemptions were also introduced for a number of additional contributions, for example for healthcare (*fiscalizzazione oneri sociali*). However, new instruments have been developed since the mid 1990s[67], as the European Commission has ruled that region-specific forms of tax relief constitute a form of state aid which distorts competition between Member States:

- Various contributions have been abolished and replaced by the new regional tax, IRAP, so that exemptions for the South no longer apply.
- Relief on employers' mainstream social security contributions in the South is due to end in 2001.
- New nationwide schemes of relief on social security contributions have been introduced e.g. for newly employed part-time workers.
- Relief on social security contributions is available for 5 years to companies leaving the informal sector, and is expected to see a higher rate of take-up in the South due to the larger size of its informal sector.
- Tax credits have been introduced for companies investing or employing new workers, particularly in the South and the 'depressed areas' of the Centre-North.

3.3 The functioning of markets

Various reforms have been introduced to the regulation of Italy's labour market in recent years, notably measures aimed at removing restrictions on part-time and fixed term contracts, and these have contributed to more rapid employment growth, primarily in the Centre-North. However, there are a number of features of the Italian labour market which create disincentives to employment. While some aspects appear to have similar impacts across all regions – such as stringent employment protection legislation – others have region-specific effects, notably the national wage bargaining system and the lack of effective job allocation mechanisms.

[66] OECD 2001a.

[67] Ministero del Tesoro 2001b.

Italy's wage bargaining system has specific negative effects in the Southern regions (Box IV.3). Since the late 1960s, the system has produced national agreements on nominal wage levels which do not reflect regional differences in productivity or living costs. This has acted as a disincentive to private investment in the South, as well as to labour migration from South to North, and has thus been an important contributory factor to the rise in unemployment in the South.

Some changes to the wage bargaining system were introduced in the early 1990s, so that a 2-tier system now operates, with firms able to raise wages above the level set in the national agreements, as long as specific targets for productivity or profitability have been met. Although these reforms have been important in ensuring wage moderation in the context of the state's disinflation strategy, no significant move has been made to allow greater regional wage differentiation. Temporary derogations from national wage agreements are, however, sanctioned in a limited number of local areas, mainly in the South, via the *contratti d'area* initiative.

A second source of region-specific inefficiency in the labour market is the lack of effective formal job allocation mechanisms. A very low share of new job placements are arranged via public employment centres in Italy, compared to countries such as Germany, the Netherlands and the UK[68]. Moreover, unemployment rates among young people are significantly higher throughout Italy, but particularly in the South, suggesting that job-matching mechanisms are weak for people with no labour market experience. Public employment centres have tended to focus on collecting employment statistics, rather than providing advice and information to unemployed people. However, private employment agencies have been introduced since 1998, and the public employment service is also in the process of reform.

BOX IV.3: THE WAGE-SETTING SYSTEM

- In 1946, the wage indexation system (*scala mobile*) was introduced. In addition to any negotiated wage increases, the *scala mobile* automatically indexed wages to any rise in the national cost of living – to the greater benefit of workers in regions with smaller rises in inflation. Moreover, rises in the price level automatically fed back into wage increases, thus leading to inflationary spirals.
- In 1961-69, the system of wage cages (*gabbie salariali*) reduced sectoral wage differences between regions by limiting disparities in regional wages to a maximum of 20%.
- In 1969, a system of national agreements was introduced which set national wage floors for each sector, applied equally across all regions.
- In the 1980s, reforms led to greater wage differentiation across sectors and professions, although not across regions.
- In 1992-93, the *scala mobile* was abolished, and the Incomes Policy Accord set up a 2 tier wage bargaining system. First, national sectoral agreements are negotiated for 2 years in the case of wages, and for 4 years in the case of working conditions. Wage increases are set within the upper limit of the government's projections for consumer-price inflation. Second, individual firms may agree higher wage increases on the basis of productivity or profitability targets.

[68] Prasad/Utili 1998.

Responsibility for the public employment service has been reallocated from the provinces to the regions, and new employment centres are being set up. Reforms include the provision of tailored advice to unemployed people, as well as a national information system with details on job vacancies throughout Italy. The basic features of the reform should be in place by the end of 2003, and finalised by 2006. However, the National Action Plan for Employment 2001 shows that the reform is generally proceeding less rapidly in the South, and that specialised advisory services are more likely to be available in the Centre-North.

There are also a number of constraints on the housing market, with strong regulation of the private rented sector, and high transactions costs on house purchases. In the 1970s-80s, house sales were further muted by the combination of high interest rates and the limited availability of mortgage finance. The sluggish housing market creates disincentives to migration and may thus contribute to the strong regional dispersion of unemployment.

Regulation of the private rented sector increased in 1978, with the Fair Rent Act (*Equo Canone*) which introduced rent controls, establishing a formula for rent-setting, and stipulating a rental contract length of 4 years, after which either the landlord or the tenant was free to decide not to renew the lease. This led both to a fall in housing rents relative to blue collar wages, and to a reduction in the supply of rented accommodation. The private rented sector remains constrained, even though opt-outs from the *Equo Canone* were introduced in 1992, both for newly constructed accommodation and for leases agreed with associations of house owners and tenants.

One consequence of the introduction of rent controls was a further shift towards owner-occupied accommodation, whose share of housing rose to 67% in 1990 (above the EU average of 56%)[69]. However, house purchasing is subject to significant transactions costs, with stamp duty of 8% on all purchases, as well as 4% VAT on new homes. The mortgage market was also negatively affected in the 1970s-80s by high inflation and high nominal interest rates, so that house purchases have often been undertaken with own funds, rather than via borrowing.

4. The effects and efficiency of regional policies

Although Italy has undertaken regional policy for a number of decades, in the form both of interregional fiscal transfers and proactive regional policies, the benefits in terms of higher growth and employment creation are far from clear. Indeed, the policy emphasis on raising levels of household and public sector consumption, rather than on investing in human and physical capital, may have hindered the South's economic development. Similarly, some of the strategic decisions made in the sphere of proactive regional policy, as well as the mismanagement of funds, have reduced the effectiveness of policy intervention.

[69] European Parliament 1996.

4.1 Explicit fiscal transfers to the regions

The Regions are responsible for a range of executive tasks, such as healthcare, training and regional transport, and were until recently financed almost entirely from state transfers, although the Special Statute Regions[70] also received shares of national taxes. Transfers were used to ensure that there was little regional variation in per capita levels of public sector consumption, despite significant regional disparities in per capita gross value added. Although the system of regional finance has been redesigned since 1997, with a significant increase in the Regions' own revenues, state transfers are still used to ensure that differences in regional levels of public sector consumption are limited.

Following the establishment of the Ordinary Statute Regions in the early 1970s, a range of executive responsibilities was transferred to the regional level. Regions were largely financed by transfers from the central state, although they also had minimal own revenues and could borrow for investment purposes. The aim was to ensure that public services were financed equally across all regions, regardless of their varying fiscal capacities, so that per capita levels of public consumption have differed little between the Centre-North and South.

The system of regional financing was reformed in the 1990s, and own revenues now account for around 70% of Regions' current spending[71]. The most important source of regional revenue is the *Imposta Regionale sulle Attività Produttive* (IRAP), a regional tax on productive activities, which was introduced in 1997-98, replacing a number of minor taxes. IRAP is levied on the value added of enterprises, partnerships and self-employed people, and in 1998 accounted for 74% of the regions' own tax revenue, or 2.2% of GDP. A second important innovation in 1997-98 was the addition of a flat rate regional tax to the national personal income tax, with the tax rate set by each region within specific limits (initially 0.5% and 0.9%). The Regions are also allocated (shares of) other tax bases, such as the motor vehicles tax, a share of the revenue from excise duty on petrol, and (since 1999) a share of revenue from value added tax. The state still provides transfers to the poorer regions, but with the aim of compensating them for their lower level of own revenues, rather than as the main source of financing.

An equalisation fund has also been set up, although it redistributes finance only between the 15 Ordinary Statute Regions, and draws only on 40% of the national VAT revenues in these Regions[72]. Equalisation is based on a formula which takes into account each region's population size, differences in the regions' fiscal capacity (the

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[70] The 5 Special Statute Regions (Friuli-Venezia Giulia, Sardegna, Sicilia, Trentino Alto Adige, and Valle d'Aosta) have greater autonomy and were set up in the late 1940s, whereas the 15 Ordinary Statute Regions were established in the early 1970s.

[71] IMF 2000.

[72] IMF 2000.

'solidarity coefficient') and the regional need for healthcare. The application of the formula is being introduced gradually in 2001-2014.

The main function of these changes in the structure of regional finance is to enhance regional autonomy – particularly for the richer Regions – and to increase the transparency of interregional transfers, whether via the central state or via the equalisation fund. In the longer run, these changes may also lead to a wider differential in levels of public consumption between the South and Centre-North, due to differences in per capita income and economic activities. However, this may not imply that public spending in the South will be rebalanced in favour of public investment, so that additional forms of policy intervention may be needed, specifically aimed at stimulating the South's economic development.

4.2 Regional policy expenditure

Although proactive regional policy in Southern Italy has a long history, dating back to at least 1950, its success has been limited. This is in part due to the relatively low level of proactive regional spending in comparison with expenditure aimed at equalising consumption across regions. However, regional policy has also been characterised by a number of weaknesses, not least the frequent changes in both strategy and institutions. Poor strategic decisions have also been made, notably the emphasis on industrialising via public enterprises and the ongoing focus on state aids. Finally, public funds have not always been well-managed, due to complex bureaucratic procedures and sometimes to corruption.

Regional policy has undergone numerous shifts since the 1950s, when it focused on agricultural restructuring and the construction of basic infrastructure. In the early 1960s, the emphasis moved to the use of financial incentives to promote industrial development in designated growth poles. By the end of the 1960s, however, the industrialisation strategy was mainly being pursued by public enterprises and, when these experienced difficulties from the mid 1970s, the policy focus shifted once more, this time towards promoting SMEs and the 'industrial districts' seen to underpin the growth of North-eastern Italy. By the early 1990s, efforts were being made to reduce public indebtedness, leading to the privatisation and restructuring of public enterprises, as well as cut-backs in state aids and public investment. A further new economic development strategy for the South was launched in 1999, aimed at stimulating a shift in supply-side conditions via economic reforms and investment in physical, human and knowledge capital[73].

The strategy of promoting industrialisation via the expansion of public enterprises and state aids, particularly in the 1960s-80s, did not prove successful. Since the 1970s, state aids have accounted for a large share of regional expenditure - for example, over 40% of EU structural aid to Italy in 1976-99 – despite questions over the efficiency and effectiveness of these instruments. State aids have strong dead-weight effects and also tend to promote capital-intensive forms of economic activity. Moreover, their

[73] Ministero del Tesoro 2001a.

efficiency in southern Italy has been undermined by the use of discretionary allocation mechanisms, and by the lack of project monitoring. Although the level of state aid fell in Italy in the 1990s, region-specific state aid (which is mainly allocated to the South) remains the highest in the EU-15 relative to GDP[74].

Particularly in the 1970s-80s, a large share of state aids was allocated to public enterprises, which had come to be seen as a means of promoting economic development in the South, rather than simply as suppliers of products and services. Public enterprises allocated around 40-50% of their total investment to the South in the 1960s and early 1970s, although this fell to around 30% by the mid 1980s[75]. By the late 1970s, the profitability of many public enterprises had deteriorated, partly due to their concentration in energy-intensive and structurally declining sectors, such as steel, but also due to the imbalance between labour costs and productivity. However, public enterprises continued to receive state aids, thus feeding public sector indebtedness, and, by the end of the 1980s, they accounted for 15% of non-agricultural employment in Italy[76]. Thus when privatisation and restructuring programmes were finally introduced in the 1990s, the costs in terms of job losses and enterprise closures were significant.

Much of the finance for proactive regional policy in Southern Italy since the 1970s has taken the form of EU structural aid (Graph IV.6). Italy benefited from 20-25% of EU structural aid in 1976-89 and, although its share of payments fell in the 1990s, it remains the second largest recipient after Spain, allocated 15.5% of funds for Objectives One, 2 and 3 in 2000-2006. As well as significant funds for the southern Objective One regions, Italy also receives additional EU structural aid for areas in the Centre-North under Objective 2, as well as finance for labour market programmes under Objective 3 (Table IV.4).

TABLE IV.4: **EU Structural aid to Italy in 2000-2006**

	Objective 1	**Objective 2**	**Objective 3**	**Total**
€ million at 1999 prices	22122	2522	3744	29656
Percentage of total	16.3	11.2	15.6	15.2

Notes: Data for Objectives One and 2 include 'phasing out' regions. Total includes the Community Initiatives, Innovative Actions, and aid for Fisheries interventions outside the Objective One regions.

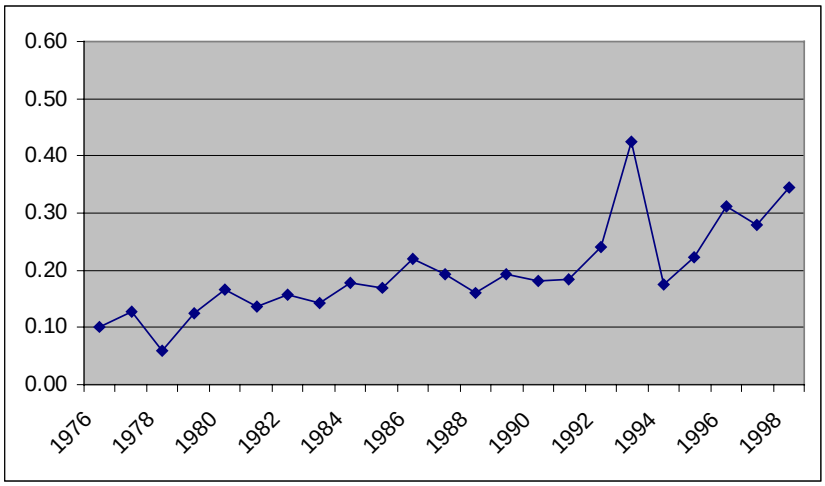
Source: European Commission.

[74] European Commission 2001.

[75] Attanasio/Padoa-Schioppa 1991.

[76] OECD 2001b.

GRAPH IV.6: EU Structural aid as a percentage of national GDP



Source: Own calculations based on Court of Auditors data.

The effectiveness of proactive regional policy in southern Italy has, however, been undermined by numerous institutional changes, particularly since the late 1970s, as well as by inefficient management, complex bureaucratic procedures and, sometimes, by corruption and the misallocation of funds. As a consequence, the quality (and sometimes quantity) of public services, in areas such as local transport, water and energy supply, is significantly poorer than in the Centre-North, despite many years of public investment in the South's physical capital.

5. Conclusions and policy recommendations

Italy has made progress in recent years in improving macroeconomic stability, in opening up product markets to competition and in increasing labour market flexibility. These reforms provide the basis for enhanced growth throughout Italy, and ongoing efforts are needed to maintain and pursue these strategies. However, policy intervention is also needed in other areas in order to promote growth and to raise employment creation, not least by increasing the South's attractiveness to private capital, and by removing obstacles to labour mobility.

The first challenge is to increase the attractiveness of the southern regions to private investment. While the government's commitment to raising productivity in the South by means of public investment in human and physical capital is to be welcomed, this must not be at the expense of recent gains in macroeconomic stability, and may thus imply the need to adjust the balance between public current and capital spending in the South. Action is also needed in a number of other areas in order to reduce the significant disincentives to private investment in the South:

- The wage bargaining system should be reformed to allow wage levels to respond to differences in regional labour productivity levels and living costs. This reform is of particular importance given that the high levels of social security subsidies granted to the South since the late 1960s are due to end in 2001.

- The ending of social security subsidies also emphasises the need to reduce further the tax burden on labour, in terms of both payroll taxes and social security contributions, within the limits set by the necessity of fiscal discipline. One means of reducing the budgetary impact of tax cuts would be to target tax reductions at the lower end of the wage scale. This should be of particular benefit to the South, where the sectoral mix is such that wages are somewhat lower than in the Centre-North.

- Major efforts are also required to improve the institutional context for investment. This not only includes measures aimed at enhancing the efficiency of the public administration and public services, but also intervention to tackle organised criminality and the lack of secure property rights. Action is also needed to reduce the scale of the informal economy in southern Italy, which is at present encouraged by the lack of regional wage differentiation and high labour taxes.

- The effectiveness of regional policy must also be enhanced by ensuring that funds are well-managed, and that monitoring and evaluation procedures are improved. A consistent long-term strategy of investment in human and physical capital is needed, but spending on state aids should be reduced further, due to its potential dead-weight effects.

The second challenge is to reduce disincentives to labour mobility, which is among the lowest in the EU-15, in terms of both migration and commuting. Not only would this reduce unemployment in the South, but it should also raise Italy's aggregate growth rate, by reducing labour market bottlenecks in the Centre-North. Moreover, southern Italy is unlikely to see convergence towards the Centre-North in terms of GDP per capita in the absence of increased migration. Action is needed in the following areas:

- The reform of the public employment service should be accelerated in order to improve the quality and efficiency of formal job allocation mechanisms, particularly for matching job seekers and vacancies across regions.

- Disincentives to mobility are created by the policy emphasis on raising nominal household consumption in the South, despite large differences in regional fiscal capacity and in the cost of living. Efforts should be made to reform the welfare system, with invalidity pensions being replaced by conventional unemployment benefits which are conditional on active job search. The possibility of reducing the South's high levels of public employment should also be investigated, as it acts as a hidden form of social transfer, providing incentives for 'wait' unemployment.

- Action is also needed to reduce rigidities in the housing market, both by lowering levels of transaction costs on house purchases, and by easing regulation of the private rented sector in order to stimulate the supply of private rented accommodation.

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ANNEX IV: UNIT LABOUR COSTS BY REGION AND SECTOR, 1998 (ITALY = 100)

	PIE	VDA	LIG	LOM	TAA	VEN	FVG	ER	TOS	UMB	MAR	LAZ	ABR	MOL	CAM	PUG	BAS	CAL	SIC	SAR	OB.ONE
Agriculture forestry fishing	94.1	199.7	59.2	56.0	151.3	83.1	96.9	112.5	84.8	103.5	96.0	88.4	74.3	187.2	132.5	128.1	136.2	165.2	114.5	113.2	128.6
Industry	102.4	101.3	107.3	97.6	96.8	101.4	104.7	103.3	98.2	105.0	110.1	98.0	103.5	93.7	102.5	101.1	85.9	84.2	87.3	92.7	95.8
Manufac-turing	100.5	119.3	113.5	98.1	95.0	98.8	102.8	100.1	97.0	105.2	107.0	100.9	103.3	93.6	104.8	102.0	86.3	92.9	93.0	97.8	99.4
Construc-tion	99.0	124.2	129.1	115.7	91.7	93.8	110.1	105.8	107.6	121.1	100.1	92.6	127.8	107.8	90.5	107.5	93.7	88.7	80.0	78.5	89.5
Services	95.7	108.8	104.8	97.3	117.3	109.7	108.5	106.7	108.7	99.4	99.4	86.6	113.0	94.2	100.9	101.2	96.7	100.7	93.5	100.5	98.7
Financial and business services	99.2	76.7	95.2	113.2	120.7	98.0	117.1	113.7	117.5	99.5	100.4	123.4	96.1	71.8	71.1	72.8	69.7	63.6	65.5	71.1	69.2
Other traded services	95.6	80.0	88.0	102.4	78.9	95.6	95.7	97.5	104.2	95.0	98.3	86.6	106.1	103.9	107.3	117.6	103.0	108.6	112.7	105.0	110.6
Non traded services	76.4	108.1	111.1	54.1	113.4	81.4	131.0	69.8	91.7	94.6	83.7	144.9	112.2	148.2	102.2	125.6	119.4	121.1	124.1	124.6	117.9
Public adminis-tration	119.7	71.2	67.1	144.3	87.4	117.1	75.8	122.5	97.3	94.2	119.3	52.9	100.0	89.1	132.6	107.2	123.9	120.3	98.7	91.7	111.3
Education	112.0	129.1	135.9	113.3	94.1	113.8	128.1	138.5	110.9	110.7	112.3	99.2	94.2	98.5	72.0	79.3	61.2	74.1	81.6	88.5	77.5
Health and social work	91.3	111.0	83.9	105.6	91.6	97.1	82.2	91.6	106.9	97.6	93.8	131.9	94.8	87.5	101.0	96.8	87.7	95.8	96.4	77.1	95.5
Total	**97.6**	**106.5**	**97.7**	**95.2**	**100.4**	**97.4**	**103.0**	**99.4**	**99.7**	**100.8**	**102.7**	**100.1**	**106.6**	**114.4**	**107.9**	**105.9**	**106.5**	**104.2**	**102.6**	**104.6**	**105.5**

Source: Own calculations based on data from Eurostat, ESA95.