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**Regional Convergence in Portugal: Policy Impacts (1990-2001)** 

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# Regional Convergence in Portugal: Policy Impacts (1990-2001)<sup>1</sup>

by

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#### **Abstract**

In this study we look at whether the seven Portuguese NUTS II regions have been able to share equally in the country's overall growth or whether there have been asymmetries and divergences in their growth patterns. We assess the regional impact of a wide range of Portuguese domestic policies on cohesion. We focus mainly on regional economic cohesion, although social cohesion effects are also considered. As in the case of Portugal structural operations within the community framework programmes and national efforts were highly intertwined, we also contrast the impact of Community policies in two regions.

**JEL classification**: O18, O22, O23, O38, O52. **Keywords**: Portugal, European Union, Regional Convergence, Cohesion, National Policies, Structural Funds, Institutions.

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A summary <u>in Portuguese</u> of the major objectives and findings of the paper is available in appendix B at the end of the paper. See also Box 5.1 (section 5 – Conclusion) for a summary of main conclusions.

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#### 1 - Introduction

Cohesion is a wide concept. In a broad sense, it embraces inequalities, whether in terms of income, living standards, employment or of environmental conditions, and has to be seen in terms of opportunities as well as outcomes (Ardy et al., 2002a). Convergence, a related notion, focuses on "real variables" such as per capita income or productivity. Convergence and divergence, however, are long-term processes that reflect both history and the effects of recent trends that shape the ability of a region to compete.

Following the terminology of the first Cohesion Report (European Commission, 1996), economic cohesion refers to the aim of promoting competitiveness and convergence through faster GDP growth in the poorest regions. Such an aim implicitly requires EU policies to raise the production capability of the poorer regions, thus creating conditions for faster growth, rather than simply promoting consumption through income transfers from the richer areas. As pointed out by Ardy et al. (2002b), the EU views cohesion as a development issue: one of the ways for the EU to achieve cohesion is through structural and cohesion funding that seeks to foster the long-term growth potential of regions, avoiding situations of dependence on those transfers and of high unemployment. The concept shall, then, be distinguished from the notion of social cohesion, which is related to the aim of ensuring that the least well-off have access to social protection and services of general interest. Social cohesion may be assessed by means of a number of indicators; some of the most important are unemployment, inequality of incomes, poverty, and social exclusion which in turn is multidimensional.

Three basic mechanisms through which policies impact on economic and social cohesion can be identified:

A first mechanism is economic efficiency. Policies aimed at promoting the efficient allocation of resources include regulation and institutional development, adequate incentives, the internalisation of externalities, a sound tax system, increased competition, public infrastructure, training and other labour market measures and science and technology-related initiatives. Their purpose is to correct shortcomings on the supply side of the economy that result in an inefficient economic performance.

A second mechanism is income redistribution. Policies aimed at reducing income disparities at the individual level may have a significant regional impact if the incidence of social needs

is asymmetrically distributed among regions, even when they do not have any regional dimension. Regions with below-average economic activity will have a propensity to draw in proportionally higher inflows of public expenditure, while dynamic regions contribute more to tax revenue.

A third mechanism is demand stabilisation, which may act in a preventive way with respect to disparities. The inter-play of public expenditure and taxation performs an important role in stabilising demand, attenuating short-term fluctuations in regional demand that might otherwise give rise to problems of cohesion.

It should be noted that each one of these three mechanisms may have an impact on both economic and social cohesion.

Some of the policies that act through the three mechanisms are implemented at the Member State level while others may involve both Community and national efforts.

- Community policies, insofar as they aim at raising the productivity of the less competitive regions, are specifically aimed at promoting economic cohesion (through Structural Funds, the Cohesion Fund, the CAP and others).
- Demand stabilisation in the Eurozone may to some extent be undertaken by the ECB, although this is only possible when not conflicting with the primary objective of price stability. At the Community level, however, the budget is too small to provide a demand stabilisation function. Therefore, the burden of demand stabilisation falls mainly on national policies. The scale of domestic public expenditure, typically in the range of 40-50 per cent of GDP, is much greater than that emanating from the EU, roughly amounting to 1 per cent of GDP.
- As far as income redistribution is concerned, Community policies do not have any direct role. Member States' policies, in contrast, deliberately do.

The fact that some cohesion policies can only be implemented through action at the Member State level while others may involve both Community and national efforts requires good coordination between both levels of government as to avoid that different policies contradict each other and in order to maximise effectiveness.

#### Purpose of the study

This study sets out to assess the impact of Portuguese domestic policies on cohesion in its seven regions. The discussion, along the lines of the broader study of Begg et al. (2004), focuses mainly on regional economic cohesion, although social cohesion effects are also considered. While it is well known that Portugal as a whole has been able to converge to the Community average since joining the EC in 1986, it remains to be seen whether the Portuguese regions have been able to share equally in that growth or whether there have been asymmetries and divergences in the growth patterns.

Our purpose is to analyse the impact of national rather than Community policies on cohesion. However, two regional studies enrich the analysis to the extent that they allow examining and contrasting the impact of Community policies in two out of the seven Portuguese regions (one continental and one ultra-peripheral). This is important for the case of Portugal (especially during the period of analysis, 1990-2001) where EU and national efforts seem to be highly intertwined. Portuguese national policies are closely tied to EU funding, and given the lack of a regional policy tradition, most were set up under the EU policies framework.

There is a wide range of national policies with a positive or negative bearing on cohesion, some of which explicitly have a regional dimension while others have only indirect effects on regional cohesion. The following policies are examined in this study:

- a) Macroeconomic policy. This policy plays a major role in stabilising demand and the level of unemployment. Its impact on cohesion comes through various channels: the interest rate, the exchange rate, taxation, the scale of public expenditures and output and price stability. Although determined at the aggregate level, macroeconomic policy may have a differential effect across regions.
- b) Public expenditures. As far as regional cohesion is concerned, the impact of public expenditures will emerge through a variety of channels, namely investments in education, health, social security, transport infrastructure. Even though being defined at the country-level, public structural expenditures may also have an indirect effect on regional cohesion (a territorial dimension) by increasing accessibility and living conditions in many laggard areas and also as a source of employment in less populated areas.
- c) Transfers from central government. Transfers to municipalities and to the autonomous regions may play an important role in cohesion to the extent that the level of proximity with respect to the utilisation of national funds may work in favour of its

effectiveness. Public transfers, impacting on the regional distribution of income, have also a role on social cohesion and may act as a regional demand stabilisation tool.

- d) State aid. State aid has a potential role in social cohesion, but can distort trade and competition between firms, regions or countries and delay restructuring. Whether or not state aids contribute to cohesion depends on their sectoral and spatial distribution, on the degree of distortion provoked in the market and on whether such distortions work in favour or against less-favoured regions.
- e) Employment and social policies. In general, these policies are potentially effective in boosting social cohesion. Employment policies that improve the attributes of the labour force may also contribute to economic cohesion, by facilitating adaptability and entrepreneurship and helping to make individuals more employable. Yet whether they are being used so as to improve the relative position of less-favoured regions is an open question.
- f) Science and technology. Science and Technology policy can be thought of as a specific set of policies that aim to improve the ability of firms to compete. However, regions have different capacities to exploit the potential stemming from innovation and innovation diffusion. At the national level there can be a tension between attempts to reinforce national competitive advantage and the desire to spread the benefits of high technology across regions.
- g) Foreign direct investment policy. Inward investment is typically an important part of a regional development strategy. FDI not only has a direct incidence on economic activity, income and jobs; it is also a mechanism for transferring technology, new managerial techniques and know-how. As in the case of Science and Technology policy, there might be a policy dilemma between wanting investment to go towards the less-developed regions and the fact that investment is more easily attracted to the better-endowed regions.

Whereas other policies could have been addressed, the primary goal of this study is not to examine in detail all initiatives but rather to analyse those national policies that are most relevant at a regional level.

We also draw on secondary data as well as on primary qualitative data collected through interviews with policy makers, regional leaders and academics. Open-ended exploratory questions allow for the collection of comprehensive data on regional specificities. All seven Portuguese regions are characterised in terms of their evolution over the decade 1991-2001, their specialisation patterns and the evolution of regional indicators. Interview evidence on

the assessment by regional representatives of the domestic policies' impact on regional cohesion is also presented and contrasted with the researchers' perspective.

The study is organised as follows: In Chapter 2 we analyse the impact of the above-mentioned national policies on cohesion. Chapter 3 addresses the question whether there has been convergence among the Portuguese NUTS II regions, characterising each of the seven regions both in quantitative and qualitative terms. This chapter also provides a qualitative evaluation of each policy dimension, based on the researchers' perspective and also on the opinions of key policy actors. The impact of Community policies is analysed in Chapter 4 where two regional case studies, Açores and Algarve, are presented. Chapter 5 concludes. In Box 5.1 we summarise the conclusions on the impact of national policies on regional (economic and social) cohesion and on the national economy.

#### 2 – The impact of national policies on cohesion

#### 2.1 – Macroeconomic policy

Long-term effects are positive: the incidence of nominal instability is asymmetric, hurting more those without access to financial instruments. EMU and SGP have a competitiveness-enhancing effect in laggard regions.

During the transition to EMU (European and Monetary Union), domestic credit expanded at very fast rates in Portugal (see figure 2.1.1). The rapid expansion in the demand for credit goes hand in hand with the changing composition of domestic credit in Portugal between 1979 and 2000, with households and non-monetary financial institutions (mainly devoted to consumer credit) emerging as important actors (see figure 2.1.1) while public sector borrowing requirements decreased significantly. This change was motivated by the drop in interest rates (see table 2.1.1) and the elimination of liquidity constraints that allowed households to smooth their lifetime expenditures, after decades of financial repression. The phenomenon accelerated in 1998 when Portugal qualified for the euro. Domestic banks were able to import money from abroad at favourable conditions.

The fast expansion of domestic credit allowed domestic demand to grow at a very high pace in the late 1990s (see figure 2.1.2). This phenomenon was exacerbated by a pro-cyclical fiscal policy. In a small open economy, this leads to a rise in the relative price of non-

tradable goods, a production shift from tradables to non-tradables and a current account deficit<sup>2</sup>. In the non-tradables sector, there was an enormous impact on the demand for real estate. As real estate prices were rising, speculative demand emerged, driving the prices even higher. The resulting pressure on the labour market caused wages to grow significantly faster than productivity, leading to an increase in unit labour costs and the loss of external competitiveness (see table 2.1.2).

Since the shift in aggregate demand due to monetary and fiscal factors was of a temporary nature, the large current account deficit that emerged was not a problem in itself, but rather a symptom of the macroeconomic adjustment that was taking place.

The relative price effect (real appreciation) may be, however, a source of concern. In the last three decades, changes in relative prices had been made easier by nominal exchange rate adjustments. Now, this instrument is no longer available. The question is, then, whether nominal prices in the non-tradable sector will be able to fall. Thus far, producers have been reluctant to adjust prices downward, thus giving rise to excess supply and rising unemployment in some services and a sharp contraction in the real estate sector. In some urban areas, namely in the greater Lisbon area, a large excess supply of residential buildings has emerged.

The question is whether these developments have impacted differently on Portuguese regions. On an *a priori* basis, one would say that those regions in which the boom in the real estate sector was more pronounced would be more affected by the current crisis, especially the metropolitan areas that expanded without caring about urban quality. This includes the region of Lisboa e Vale do Tejo in particular, but also important urban areas in Norte and some cities in the coastal Algarve. In the vicinity of Lisbon, the traditional deficit in residential buildings was clearly overcome and a large excess supply has emerged. The same is true for areas around major industrial cities all over the country. In the Algarve, the demand was mostly driven by tourism, so that the excess supply might be easier to invert with the business cycle.

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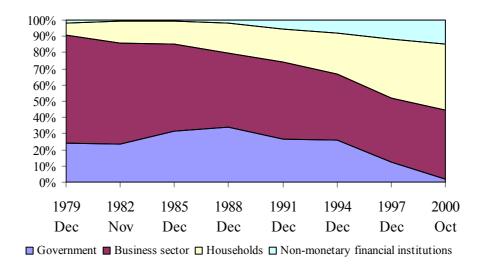
<sup>&</sup>lt;sup>2</sup> The overall balance of payments deficit was even larger because economic agents in general, and pension funds in particular, were re-adjusting the composition of their portfolios from domestic securities into euro-area securities other than those issued by Portuguese entities. Also, direct investment overseas by the business sector contributed significantly to raise the economy's financing needs.

These developments created some concerns about the stability of the banking sector. If large building companies go bankrupt, some banks will be forced to sell the assets received as a collateral, probably pushing prices down. However, in the worst-case scenario, the most affected banks would lose value, becoming vulnerable to external take-overs. In the Common Market, the transfer of property has as a stabilising effect. From a social cohesion point of view, however, the pricing-out of lower-income segments of the population in the housing market is negative.

Box 2.1.1 - Global assessment of policy impact

| National policy maker   | Positive: economic growth of the country promoted in general |
|-------------------------|--|
| perspective             | (or was promoted by) overall regional growth                 |
| Regional representative | Positive   |
| perspective             |  |
| Researcher perspective  | LONG TERM:   |
|                         | SHORT TERM: Credit insolvency risks and inevitable social    |
|                         | costs;   |
|                         | Polarisation of activities in most developed areas;          |
|                         | Imbalances in income distribution.                           |

Figure 2.1.1 - Relative composition of domestic credit, 1979-2000



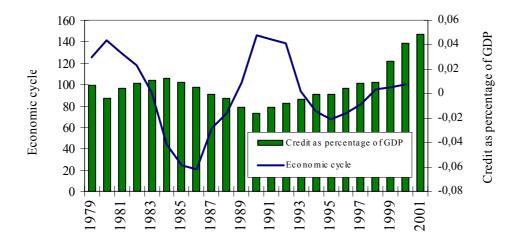
Source: Banco de Portugal

Table 2.1.1 - Main macroeconomic indicators, 1995-2001

|  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000  | 2001 |
|--|------|------|------|------|------|-------|------|
| GDP Per Capita (PPP and current prices, EU-15 = 100) | 70,5 | 70,9 | 74,4 | 73,3 | 73,4 | 73,4  | 73,8 |
| GDP Growth Rate                                      | 2,9  | 3,8  | 3,9  | 4,5  | 3,5  | 3,5   | 1,7  |
| Private Consumption                                  | 2,3  | 2,8  | 3,1  | 7,2  | 5,3  | 2,8   | 0,8  |
| Government Consumption                               | 2,0  | 1,5  | 2,7  | 3,2  | 5,7  | 4,0   | 3,2  |
| Gross Fixed Investment                               | 4,7  | 2,7  | 12,2 | 12,4 | 7,9  | 3,6   | 0,0  |
| Exports  | 11,8 | 9,0  | 9,5  | 8,9  | 3,4  | 8,5   | 3,3  |
| Imports  | 9,6  | 7,7  | 12,0 | 14,4 | 7,5  | 5,7   | 0,5  |
| Current Account Balance (percentage of GDP)          | -0,2 | -4,2 | -5,7 | -6,9 | -8,5 | -10,2 | -9,0 |
| Unemployment (percentage Civil Lab Force)            | 7,2  | 7,3  | 6,7  | 5,0* | 4,4  | 4,0   | 4,1  |
| Inflation (IPCH)                                     | 5,0  | 2,9  | 1,9  | 2,4  | 2,2  | 2,8   | 4,4  |
| Nominal Short Term Interest Rate (< 1 year)          | 8,1  | 5,4  | 4,1  | 2,8  | 2,4  | 3,5   | 2,9  |
| Real Effective Exchange Rate (average rate)          | 1,2  | -0,3 | 0,9  | 1,4  | 0,3  | -0,4  | 3,1  |
| Unit Labour Costs (percentage)                       | 3,7  | 3,5  | 4,0  | 3,9  | 3,3  | 4,0   | 5,5  |
| Government Budget Balance (percentage of GDP)        | -5,7 | -3,3 | -2,5 | -2,3 | -2,4 | -2,9  | -4,1 |
| Primary Bud. Bal. (percentage of GDP)                | 0,0  | 1,5  | 1,7  | 1,1  | 0,8  | 0,2   | -1,1 |
| Government Debt (percentage of GDP)                  | 65,9 | 64,9 | 59,4 | 54,6 | 54,3 | 53,2  | 55,1 |
| Structural and Cohesion Funds (percentage of GDP)    | 2,8  | 3,1  | 3,3  | 3,2  | 3,1  | 2,1   | 1,7  |

Source: Banco de Portugal; Note: \* This rate (1998) is not comparable with the 1999 unemployment rate

Figure 2.1.2 - Domestic credit, 1979-2001



Source: Own calculations based on data from Banco de Portugal

Table 2.1.2 - Index of nominal unit labour costs in manufacturing, 1999-2002

|          | 1999-Q4 | 2000-Q2 | 2000-Q4 | 2001-Q2 | 2001-Q4 | 2002-Q2 | 2002-Q4 |
|----------|---------|---------|---------|---------|---------|---------|---------|
| Portugal | 103.4   | 104.7   | 106.8   | 109.7   | 111.9   | 113.9   | 115.2   |
| EU-15    | 103.2   | 104.2   | 104.7   | 107.3   | 108.9   | 110.3   | =       |

Sources: OCDE, Eurostat; Note: 1995 = 100

#### 2.2 - Public expenditures

Tables 2.2.1 and 2.2.2 compare the Portuguese and EU15 government spending by category and by function, respectively (the totals do not match because of a statistical discrepancy). As shown in Table 2.2.1, government spending as a percentage of GDP (Gross Domestic Product) has declined significantly in the EU between 1995 and 2002, while in Portugal it increased by one percentage point. By 2002, Portuguese government spending reached 46.1 per cent of GDP, a figure very close to the EU15 average. In spite of this small increase, given of the obligations under the SGP (Stability and Growth Pact), there is a clear tightening constraint, arguably implying an increasing incentive for Portugal to improve the quality of expenditure programmes. To what extent this has resulted in more effective policies for regional cohesion remains an open question, though.

The weight of the public sector wage bill is well above the EU15 average, and continued to increase in the period 1995 to 2002 (Table 2.2.1). The ageing of the population put significant pressure on social spending. As shown in table 2.2.3, between 1995 and 2000 expenditures on old age pensions increased from 41.7 per cent to 45.6 per cent of the expenditures on social benefits. Still, spending on social benefits in Portugal is still relatively low when compared to the EU15 average. Transfers and subsidies other than social benefits (which includes spending on industrial and regional support) have also increased relative to GDP, as opposed to the EU15 average. The amount of public investment on infrastructure of various kinds is also higher tan in the EU average, but it has declined slighty from 1995 to 2002<sup>3</sup>.

As shown in Table 2.2.2, government expenditures in education are higher in Portugal than in the EU average, both in percentage of GDP and in percentage of total expenditure. Expenditures with the health care system are still below the EU15 average, when measured in percentage of GDP, but increased slightly between 1995 and 2001. The increase in public expenditures does not necessarily translate, however to higher provision of education and health care. Comparing the relative efficiency of education and health care expenditures in a

<sup>&</sup>lt;sup>1</sup> Pereira and Andraz's (2002) estimated the long run impact on growth of public investment in transportation infrastructures. The results point to an impact on output of 9.5 times the amount invested, suggesting that public infrastructures have been a powerful instrument to promote long-term growth in Portugal.

number of countries, St. Aubyn (2002), pointed out to the existence of important inefficiencies in the Portuguese systems. This means that provision could increase significantly without extra costs if incentives and the administration were set to be more efficient.

Despite a tendency to increase over tha last decades, spending on social protection in portugal is still significantly below the EU15 average. This reflects the different stages in the building up of the European welfare state, which means a lower social commitment with the reduction of income disparities and the provision of equal opportunities. Because of the existing inefficiences, however, it not obvious that social costs will be lower in Portugal than in other European countris, in case globalisation and increasing competition force a resclale of the current model of social protection.

Most public expenditures in Portugal do not possess an explicit regional dimension. Policy-making in Portugal is very much centralised and regional and local authorities' discretion over the way they spend the budget is very limited. Expenditures that take place at the regional or local level are a direct consequence of policies determined nationally. Notwithstanding, to the extent that the amount spent in different regions depends on the age structure of the resident population and on the perceived needs for social support, this may translate into higher levels of government expenditure per capita in less prosperous regions<sup>4</sup>. In that case, social cohesion is accounted indirectly at the regional level. Social expenditures have, however, only a limited effect on strengthening underlying competitiveness. Although in Portugal there is concern, as it is in other countries, to ensure that the provision levels of essential public goods do not differ much across the territory, infrastructures building tends to be concenytrated in regions with larger population. Unfortunally, the relative scale of the different public expenditure in different regions in Portugal cannot be assessed, because of data unavailability.

The regional distribution of CSF (Community Support Framework) funds may provide an indication of the regional incidence of those public expenditures that are set to co-finance EU

<sup>4</sup> The Third Report on Economic and Social Cohesion (2004) confirms this expectation for the case of

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the United Kingdom.

funding<sup>5</sup>. As shown in Tables 2.2.4 under CSF II, funds per capita for the poorest regions of Açores and Alentejo were substantially lower than those for the richest regions of Lisboa e Vale do Tejo, Centro and Madeira. CSF funds per capita in Lisboa e Vale do Tejo are nearly six times the amount received by Açores. Table 2.2.5 shows that, relative to regional GDP, transfers to the poorest regions Açores and Alentejo amount to barely 0.8 and 1.39 per cent, respectively, while the richest region Lisboa e Vale do Tejo received 1.67 per cent. This suggests that, if CSF II induced' public expenditure did have any impact on regional cohesion, it might have been one of divergence rather than convergence<sup>6</sup>. Under CSF III, in constrast, transfers tend to be inversely related to income, with Lisboa e Vale do Tejo receiving less than a fourth of the amount per head of population of the poorer region, Alentejo (see Table 2.2.6).

Although spending under CSF may provide an insight on how the concerns about regional cohesion have evolved, it is important to note that the size of these expenditures is very small when compared to total government expenditures (as shown in Table 2.2.5, between 1994 and 2006, CSF II funds amounted to 1.8 only per cent of GDP on average). Hence, the regional distribution of CSF expenditures tell us nothing about the regional distribution of government expenditures.

The 'regional cohesion problem' is clearly recognized in the TIP (Territorial Improvement Programme). The TIP, created within the Portuguese Operational Programme for 2000-2006, is now the main national instrument for promoting economic and social cohesion at the subnational level. The programme targets regional development in order to reduce regional asymmetries and pays attention to investments in specific areas as to avoid the continuous concentration of funds in the coastal areas. The programme features three different dimensions: small cities (strengthening their functional importance), agricultural areas (supporting their specific potential) and metropolitan peripheries. The intervention almost encloses the totality of the Portuguese NUTS II regions, with distinct weights and emphasis

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<sup>&</sup>lt;sup>5</sup> Note that taking opportunity of structural funds is quite demanding from a domestic budget point of view. Table 2.2.1 shows that the share of public (national) expenditure has increased markedly from 20 to 37 per cent of the total CSF. Given this pressure, the scope for other national initiatives in similar areas of intervention is very small.

<sup>&</sup>lt;sup>6</sup> Note, however, that the modernization of the most advanced regions may be highly important in the early stages of development, if the Williamson hypothesis (1965), that regional imbalances first rise and then decrease when the economy meets a growth pattern, holds (see Artis and Nixson, 2001).

in accordance to each region's specific characteristics and problems. Promoting the development of small peripheral cities is expected to generate significant *spill-over* effects within less developed regions. This policy shall not be seen, however, as of domestic nature, because most of the funds are attributed through the CSF III.

Overall, in a scale of 1-5, we would rank public expenditures with 4 (positive impact on cohesion). Public expenditures had chiefly an indirect impact on regional development through strong investments in motorways, international networks, ports, social infrastructures, local and regional health care services, senior citizen care, basic schooling, etc. These improvements in basic infrastructures increased the accessibility and living conditions in many laggard areas, partly contributing to reverse the tendency for desertification. On the other hand, the principle of covering the entire territory with education, health, judicial services, public order, etc., has a competitiveness-enhancing effect on the less prosperous regions. As a matter of fact, the Census 2001 reflects positive demographic and investment dynamics in several interior cities of Norte, Alentejo, Algarve, Madeira and Açores.

Box 2.2.1 - Global assessment of policy impact

| National policy maker  | Positive: infrastructures, education and health;                   |
|------------------------|--|
| perspective            | Too high.  |
| Regional               | Positive: infrastructures and education;                           |
| representative         | More concern with regional asymmetries;                            |
| perspective            | Too low.   |
| Researcher perspective | Selectivity and coordination required;                             |
|                        | Expenditures in structural areas suggested;                        |
|                        | Mainly an indirect push for regional development through strong    |
|                        | investments in infrastructures: motorways, international           |
|                        | networks, ports, social infrastructures, local and regional health |
|                        | care services, senior citizen care, basic schooling, etc;          |

Table 2.2.1 - General government expenditures by economic category, 1995 and 2002

|      | Goods and services |           | of which er | npl. comp. | Social benefits |           | Debt i    | nterest   | Other transf | ers + subsidies | GDI       | FC*       | Total expenditure |      |
|------|--------------------|-----------|-------------|------------|-----------------|-----------|-----------|-----------|--------------|-----------------|-----------|-----------|-------------------|------|
|      | 1995               | 2002      | 1995        | 2002       | 1995            | 2002      | 1995      | 2002      | 1995         | 2002            | 1995      | 2002      | 1995              | 2002 |
|      | % of % of          | % of % of | % of % of   | % of % of  | % of % of       | % of % of | % of % of | % of % of | % of % of    | % of % of       | % of % of | % of % of | % of              | % of |
|      | GDP Total          | GDP Total | GDP Total   | GDP Total  | GDP Total       | GDP Total | GDP Total | GDP Total | GDP Total    | GDP Total       | GDP Total | GDP Total | GDP               | GDP  |
| EU15 | 20,7 40,4          | 20,6 43,5 | 11,1 21,6   | 10,4 21,9  | 17,2 33,5       | 16,4 34,6 | 5,4 10,5  | 3,4 7,2   | 6,7 13,1     | 4,2 8,9         | 2,6 5,1   | 2,2 4,6   | 51,3              | 47,4 |
| PT   | 18,6 41,3          | 21,1 45,8 | 13,6 30,2   | 15,4 33,4  | 11,8 26,2       | 13,0 28,2 | 6,3 14,0  | 3,0 6,5   | 4,4 9,8      | 5,4 11,7        | 3,7 8,2   | 3,4 7,4   | 45,0              | 46,1 |

Sources: Eurostat, Government sector accounts Note: \* Gross Domestic Fixed Capital formation

Table 2.2.2 - General government expenditures by function, 1995 and 2001

|      | General services |       |      | Environment |      |       | Health |       |      | Education |      |       | Social protection |       |      | Other |      |       |      | То    | tal  |       |      |       |      |      |
|------|------------------|-------|------|-------------|------|-------|--------|-------|------|-----------|------|-------|-------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|
|      | 199              | 95    | 20   | 01          | 19   | 95    | 20     | 001   | 19   | 95        | 20   | 001   | 19                | 95    | 20   | 001   | 19   | 95    | 200  | )1    | 19   | 95    | 200  | )1    | 1995 | 2001 |
|      | % of             | % of  | % of | % of        | % of | % of  | % of   | % of  | % of | % of      | % of | % of  | % of              | % of  | % of | % of  | % of | % of  | % of | % of  | % of | % of  | % of | % of  | % of | % of |
|      | GDP              | Total | GDP  | Total       | GDP  | Total | GDP    | Total | GDP  | Total     | GDP  | Total | GDP               | Total | GDP  | Total | GDP  | Total | GDP  | Total | GDP  | Total | GDP  | Total | GDP  | GDP  |
| EU15 | 8,2              | 15,5  | 6,8  | 14,5        | 0,8  | 1,5   | 0,7    | 1,5   | 6,2  | 11,7      | 6,3  | 13,4  | 5,2               | 9,8   | 5,0  | 10,7  | 20,0 | 37,8  | 18,8 | 40,1  | 12,5 | 23,6  | 9,3  | 19,8  | 52,9 | 46,9 |
| PT   | 8,7              | 19,3  | 6,7  | 14,5        | 0,4  | 0,9   | 0,7    | 1,5   | 5,3  | 11,8      | 6,8  | 14,7  | 6,5               | 14,4  | 7,0  | 15,2  | 12,5 | 27,8  | 13,6 | 29,4  | 11,6 | 25,8  | 11,4 | 24,7  | 45,0 | 46,2 |

Sources: Eurostat, Government sector accounts

Note: EU15 includes an estimate for Spain in 1995

Table 2.2.3 - Expenditure on pensions and unemployment benefits in percentage of total social benefits, 1995 and 2000

| _    | Old age | pensions* | Unemployment benefits |        |  |  |  |
|------|---------|-----------|-----------------------|--------|--|--|--|
|      | 1995    | 2000**    | 1995                  | 2000** |  |  |  |
| EU15 | 44,8    | 46,4      | 8,4                   | 6,3    |  |  |  |
| PT   | 41,7    | 45,6      | 5,4                   | 3,8    |  |  |  |

Sources: Eurostat, ESSPROS

Note: \* Old-age pensions include survivors benefits; \*\* provisional or estimated data

Table 2.2.4 - Community support framework II expenditures by co-financing entity and region, 1994-2006

CSF II (1994 - 1999) CSF III (2000 - 2006) 10<sup>6</sup> euros 10<sup>3</sup> euros 10<sup>6</sup> euros 10<sup>3</sup> euros of which of which Number Per of Per % of Public % of Communitary % of Public % of Communitary Total Total Projects Funds Expenditure Capita<sup>2</sup> Funds Expenditure Capita 1 NUTS II 3.918 1,187 22,4 37,2 Norte 2.893,2 0,803 77,6 4.327,3 62,8 2.047,4 80,6 19,4 2.191 2.693,3 1,511 63,5 36,5 Centro 1,162 Lisboa e 0,730 4.171,9 82,1 17,9 3.025 2.523,1 57,4 42,6 Vale do 1,223 Tejo 81,2 18,8 348 3,321 62,2 37,8 Alentejo 328,7 0,623 1.751,4 Algarve 173,1 0,463 74,7 25,3 185 707,1 1,816 64,1 35,9 Açores 75,3 0,316 60,3 39,7 224 1.098,1 4,606 77,8 22,2 285 285,1 33.9 1.086,7 4,430 Madeira 66,1 64,8 35,2 9.974,7 0,929 20,3 10.291 79,7 14.187,0 1,380 Portugal 63,3 36,7

 $Sources: \ Community \ Support \ Framework \ (CSF) \ II \ and \ III, own \ calculations$ 

Notes: 1 we use the average of population for the period between 1995 and 1999; 2 we use the average of population for the years 2000 and 2001

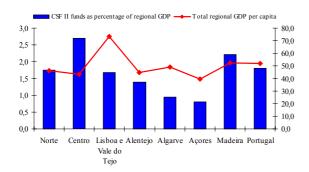
Table 2.2.5 - CSF expenditures as percentage of regional GDP, 1994-2006

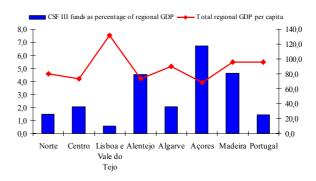
| NUTS II               | CSF II* | CSF III** |
|-----------------------|---------|-----------|
| Norte                 | 1,75    | 1,48      |
| Centro                | 2,69    | 2,07      |
| Lisboa e Vale do Tejo | 1,67    | 0,56      |
| Alentejo              | 1,39    | 4,51      |
| Algarve               | 0,94    | 2,02      |
| Açores                | 0,80    | 6,73      |
| Madeira               | 2,21    | 4,61      |
| Portugal              | 1,80    | 1,43      |

Sources: Eurostat; CSF II and III, own calculations

Notes: \* We assume that the values for the regional GDP of 1994 are the same as the values of 1995; \*\* here we use the average rate of growth to calculate the regional GDP for the period between 2002 and 2006

Figure 2.2.1 - CSF as percentage of regional GDP and total regional GDP per capita, 1994-2006





Sources: Eurostat; CSF II and III, own calculations

Notes: We use the average of population for the period between 1995 and 1999; the GDP pc values are in 10<sup>3</sup> euros; we assume that the values for the regional GDP of 1994 are the same as the 1995 values; here we use the average rate of growth to calculate the regional GDP for the period between 2002 and 2006

Table 2.2.6 - Community support framework II expenditures by co-financing entity and region, 2000-2006 - A. Continent

Community Support Framework III Total Communitary Funds Public Expenditure % **NUTS II** Priorities per capita\* 10<sup>6</sup> Euros per capita\* % per capita\* % 0,223 29,922 0,313 26,328 1.144.548,0 0,091 20,587 2 0.077 6,471 281.324,0 0.054 7,212 0.018 4,059 Norte 0,800 67,201 0,468 75,354 3 2.921.423,0 62,866 0,332 4.347.295,0 0,744 0,441 Total 1,190 100 100 100 0,446 29,595 0,313 32,716 0,133 24,164 797.094,0 0,049 2 0,158 10,443 281.257,0 0,109 11,378 8,815 Centro 3 0,904 59,962 1.614.970,0 0,536 55,907 0,369 67,020 100 100 100 Total 1,508 2.693.321,0 0,958 0,550 1 0,172 23,544 593.966,0 0,110 26,250 0,062 19,889 Lisboa e 2 0,069 9,466 238.800,0 0,039 9,336 0,030 9,638 Vale do 0,269 0,488 66,990 1.690.029,0 64,414 0,219 70,473 3 Tejo Total 0,729 100 2.522.795,0 0,418 100 0,310 100 0,781 23,564 412.696,0 0,547 26,551 0,234 18,658 2 0,161 4,871 85.315,0 0,113 5,486 0.048 3.862 Alentejo 53,382 934.923,0 1,023 49,657 0,746 59,502 3 1,769 18,182 18,306 0,225 17,978 4 0,603 318.438,0 0,377 100 Total 3,314 1.751.372,0 2,060 100 1,254 100

Sources: CSF III, European Commission, Population (2001) - Eurostat, June 2003. Notes: 1 - Support for Investments of Municipal and inter-municipal interest; 2 - Integrated measures with territorial bases; 3 -Regionally decentralised central government measures; 4 - PEDIZA II; \* 103 euros

196.803,0

70.097,0

440.215,0

707.115,0

#### B. Autonomous Regions

Algarve

1 2

3

Total

Community Support Framework III

0,577

0,205

1,115

1,898

30,405

10,824

58,772

100

0,247

0,088

0,727

1,062

23,236

8,286

68,478

100

|         |            |             | Total  |                       | Communita   | ary Funds | Public Expenditure |       |  |
|---------|------------|-------------|--------|-----------------------|-------------|-----------|--------------------|-------|--|
| NUTS II | Priorities | per capita* | %      | 10 <sup>6</sup> Euros | per capita* | %         | per capita*        | %     |  |
| ·       | 1          | 1,032       | 27,53  | 246.658,0             | 0,878       | 28,29     | 0,155              | 23,88 |  |
|         | 2          | 0,890       | 23,72  | 212.547,0             | 0,677       | 21,82     | 0,213              | 32,81 |  |
|         | 3          | 0,98        | 26,09  | 233.785,0             | 0,83        | 26,60     | 0,15               | 23,64 |  |
| Açores  | 4          | 0,85        | 22,66  | 203.090,0             | 0,72        | 23,29     | 0,13               | 19,67 |  |
|         | 5          | 1,16        | 23,49  | 277.151,0             | 0,45        | 12,62     | 0,37               | 36,03 |  |
|         | 6          | 0,027       | 0,54   | 6.411,0               | 0,023       | 0,64      | 0,004              | 0,40  |  |
|         | T          | 4,938       | 100,00 | 1.179.642,0           | 3,577       | 100,00    | 1,020              | 100   |  |
|         | 1          | 2,096       | 48,16  | 515.263,0             | 1,481       | 51,08     | 0,676              | 42,79 |  |
| Madeira | 2          | 2,26        | 51,84  | 554.689,0             | 1,42        | 48,92     | 0,90               | 57,21 |  |
|         | T          | 4,353       | 100,00 | 1.069.952,0           | 2,898       | 100,00    | 1,580              | 100   |  |

Sources: CSF III, European Commission, Population (2001) - June 2003

0,824

0,293

1,843

2,960

27,832

9,913

62,255

100

Notes: Açores: 1 - Guarantee the basic conditions to improve regional competitiveness; 2 - Improve traditional productive base. 3 - Promote supported development; 4 - Support Local Development of endogenous potential; 5 - Promote investment on enterprises; 6 - Technical Assistance; Madeira: 1 - Development of Euro - Atlantic platform of excellence; 2 - Consolidation of social and economic base of the region; \* 10<sup>3</sup> euros

#### 2.3 - Transfers from Central Government

### 2.3.1 - Transfers to municipalities

In Portugal taxes are predominantly levied centrally. The burden of regional and local taxes represents less than five per cent of the general government revenues. Municipalities are hence largely dependent on transfers from the state.

Transfers to municipalities follow the Principle of "Equilibrio Financeiro", which envisages a "fair" distribution of resources between the State and municipalities (vertical balance) and between municipalities of the same type (horizontal balance). The Portuguese Constitution establishes in its article 254, n.º 1 that: "Municipalities shall share, in their own right, and in accordance with the law, the revenue from direct taxation". Transfers to municipalities correspond to a percentage of the arithmetic average of the receipts from those taxes.

A 1999 law extinguished the FEF (Financial Balance Fund) and created three new instruments: the FGM (Municipalities' General Fund) that allocates resources to the regions, largely based on regional needs for spending per capita (this value is assessed centrally, involving the estimation of a standardised level of service per head of population), but with additional criteria that benefit two island regions; a second fund, with explicit cohesion objectives (FCM - Municipal Cohesion Fund) is limited to less developed municipalities, while two additional funds aim ensure that the municipalities have adequate resources (FFF - Freguesias (smallest unit of local government) Financing Fund - and the FBM - Municipal Base Fund -, created in 2002).

The municipalities' participation in the state taxes is currently defined by the LFL (Local Finance Law) [Law n. ° 94/2001, of 20<sup>th</sup> August]. At present, the financial State transfers to municipalities are processed through the four distinct instruments referred above:

#### i) FGM (Municipalities' General Fund)

This fund is attributed to all municipalities. The total of the FGM is distributed through three territorial units (Continent, Autonomous Region of Açores and Autonomous Region of Madeira), as a direct function of criteria like resident population or area. The distribution to the municipalities inside territorial units obeys to a variety of different criteria, such as: resident population under 15 years, the number of municipalities within the region, area, or related to the receipts of direct taxes.

The fund aims to endow the municipalities with financial conditions adjusted to their performance in terms of effected investment relative to attributions. The fund envisages vertical balance in function of the type and amount of carried-out investments per item (???).

#### ii) FCM (Municipal Cohesion Fund)

This fund acts as a complement to the FGM and aims at strengthening municipal cohesion and fostering the correction of asymmetries, to the benefit of the less developed municipalities (horizontal balance). It is to be received only by those municipalities with a development index below the national average. The assignments of this fund have been inherited from the Cohesion Fund created by the European Union in favour of its less developed Member States, namely in Southern Europe.

#### iii) FBM (Municipal Base Fund)

This fund was created in 2002. It aims at endowing the municipalities with minimum financial capacity for their functioning. It is distributed on equal terms and by equal amounts.

#### iv) FFF (Freguesias Financing Fund)

When the law of local finance began to be enforced, the *freguesias* (smallest administrative units in Portugal) at the outset benefited from an autonomous fund corresponding to 2.5 per cent of the simple arithmetic average of the receipts from direct (personal and corporate) and indirect (VAT - Value Added Tax) taxation, assigned for FFF. This fund is distributed through three territorial units (Continent, Açores and Madeira) in accordance with criteria such as resident population or area. The public transfer under item c) of paragraph 12 of the Budget Law of 2001 (???) was substituted in the following years by FBM. Regional distribution follows the same criteria. **Excess detail?** 

As shown in tables 2.3.1.1 and 2.3.1.2 and in figure 2.3.1.1, transfers to municipalities are higher in per capita terms in the least prosperous regions, Alentejo and Açores. In percentage of regional GDP, public transfers ranged between 0.67 per cent (for the richer area of Lisboa e Vale do Tejo) and 3.04 per cent (the poor region of Alentejo) of regional GDP in 1995, and between 0.78 per cent (for the richer area of Lisboa e Vale do Tejo) and 4.24 per cent (the poor region of Alentejo) in 2001. Taking all these funds together, public transfers to municipalities in terms of regional GDP increased steadily over the period 1995-2001 (with exception of the year 1998), with a higher increase in the poorer regions (Alentejo and

Açores). Looking at figure 2.3.1, it is evident that by 2001 the transfers per capita were relatively higher in less prosperous regions of Alentejo and Açores.

According to these data and to the policy makers and to regional representatives interviewed, transfers from to municipalities are seen to endow the later with the indispensable minimum financial capacity for their functioning, and to have a positive impact on both economic and social cohesion. The recent changes in the legislation suggest that in the future these transfers will still contribute to reduce regional imbalances. Nevertheless, since the scope for higher funding is limited, the quality of local expenditures and the efficiency of the location criteria for the distribution of funds among municipalities are of crucial importance.

*Box 2.3.1.1 - Global assessment of policy impact (transfers to municipalities)* 

| National policy maker perspective   | Positive |
|-------------------------------------|----------|
| Regional representative perspective | Positive |
| Researcher perspective              | Positive |

## 2.3.2 - Transfers to autonomous regions

Açores and Madeira benefit not only from public transfers to municipalities, but from an additional insularity compensation for autonomous regions only. To the extent that these transfers lead to dependency and the distortion of market incentives, their economic impact is negative. In contrast, their impact on social cohesion is positive. Overall, those transfers are bound not be promote sustainable economic growth. The impact of these transfers for the case of Azores is discussed in detail in Chapter 4.

Box 2.3.2.1 - Global assessment of policy impact (transfers to Autonomous regions)

| National policy maker perspective   | Positive |
|-------------------------------------|----------|
| Regional representative perspective | Positive |
| Researcher perspective              | Negative |

Table 2.3.1.1 - Public transfers to municipalities as percentage of regional GDP, 1995-2001

| NUTS II             | Funds                  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---------------------|------------------------|------|------|------|------|------|------|------|
|                     | FEF <sup>1</sup>       | 1,23 | 1,21 | 1,27 | 1,30 | -    | -    | -    |
|                     | FCM                    | _    | _    | _    | _    | 0,32 | 0,34 | 0,34 |
| 3.7                 | FGM                    | -    | _    | -    | -    | 1,00 | 1,02 | 0,93 |
| Norte               | FFF                    | _    | _    | -    | -    | _    | 0,12 | 0,12 |
|                     | alínea c) <sup>2</sup> | -    | -    | -    | -    | -    | -    | 0,17 |
| •                   | Total                  | 1,23 | 1,21 | 1,27 | 1,30 | 1,33 | 1,48 | 1,56 |
|                     | FEF                    | 2,68 | 2,85 | 2,85 | 2,90 | _    | _    | -    |
|                     | FCM                    | -    | _    | -    | _    | 0,70 | 0,72 | 0,67 |
| Camtua              | FGM                    | -    | _    | -    | _    | 2,25 | 1,99 | 2,04 |
| Centro              | FFF                    | -    | -    | -    | -    | -    | 0,22 | 0,26 |
|                     | alínea c)              | -    | -    | -    | -    | -    | -    | 0,46 |
|                     | Total                  | 2,68 | 2,85 | 2,85 | 2,90 | 2,95 | 2,94 | 3,43 |
|                     | FEF                    | 0,67 | 0,68 | 0,67 | 0,66 | -    | -    | -    |
| Lighaga             | FCM                    | -    | _    | -    | -    | 0,07 | 0,07 | 0,07 |
| Lisboa e<br>Vale do | FGM                    | -    | _    | -    | -    | 0,61 | 0,62 | 0,57 |
|                     | FFF                    | -    | -    | -    | -    | -    | 0,06 | 0,06 |
| Tejo                | alínea c)              | -    | -    | -    | -    | -    | -    | 0,08 |
|                     | Total                  | 0,67 | 0,68 | 0,67 | 0,66 | 0,68 | 0,75 | 0,78 |
|                     | FEF                    | 3,04 | 3,14 | 3,09 | 3,79 | -    | -    | -    |
|                     | FCM                    | -    | _    | -    | -    | 0,61 | 0,57 | 0,51 |
| Alamtaia            | FGM                    | -    | -    | -    | -    | 2,82 | 3,02 | 2,65 |
| Alentejo            | FFF                    | -    | -    | -    | -    | -    | 0,30 | 0,31 |
|                     | alínea c)              | -    | -    | -    | -    | -    | -    | 0,77 |
|                     | Total                  | 3,04 | 3,14 | 3,09 | 3,79 | 3,42 | 3,89 | 4,24 |
|                     | FEF                    | 1,82 | 1,86 | 1,83 | 1,74 | -    | -    | _    |
|                     | FCM                    | -    | -    | -    | -    | 0,20 | 0,15 | 0,07 |
| Algarve             | FGM                    | -    | -    | -    | -    | 1,64 | 1,70 | 1,51 |
| Algaive             | FFF                    | -    | -    | -    | -    | -    | 0,15 | 0,14 |
|                     | alínea c)              | -    | -    | -    | -    | -    | -    | 0,34 |
|                     | Total                  | 1,82 | 1,86 | 1,83 | 1,74 | 1,84 | 2,00 | 2,05 |
|                     | FEF                    | 2,60 | 2,95 | 2,95 | 2,87 | -    | -    | =    |
|                     | FCM                    | -    | -    | -    | -    | 0,88 | 0,95 | 1,09 |
| Açores              | FGM                    | -    | -    | -    | -    | 2,09 | 2,17 | 1,59 |
| Açores              | FFF                    | -    | -    | -    | -    | -    | 0,24 | 0,24 |
|                     | alínea c)              | -    | -    | -    | -    | -    | -    | 0,83 |
|                     | Total                  | 2,60 | 2,95 | 2,95 | 2,87 | 2,97 | 3,35 | 3,75 |
|                     | FEF                    | 1,46 | 1,49 | 1,49 | 1,44 | -    | -    | -    |
|                     | FCM                    | -    | -    | -    | -    | 0,50 | 0,58 | 0,48 |
| Madeira             | FGM                    | -    | -    | -    | -    | 1,01 | 1,00 | 0,93 |
| Madena              | FFF                    | -    | -    | -    | -    | -    | 0,12 | 0,12 |
|                     | alínea c)              | -    | -    | -    | -    | -    | -    | 0,34 |
| -                   | Total                  | 1,46 | 1,49 | 1,49 | 1,44 | 1,51 | 1,70 | 1,87 |

Sources: OE, DGO, MF

Notes: 

The Fundo de Equilíbrio Financeiro was replaced by Fundo de Coesão Municipal, Fundo Geral Municipal and Fundo Financiamento das Freguesias in 1999; 

Alínea c) is a public transfer to municipalities that only exists in 2001. After that, it was replaced by FBM

Table 2.3.1.2 - Public transfers to municipalities and GVA per capita, 2001

|                       | Public transfers to       | GVA per |
|-----------------------|---------------------------|---------|
| NUTS II               | municipalities per capita | capita  |
| Norte                 | 0,156                     | 7,32    |
| Centro                | 0,315                     | 6,71    |
| Lisboa e Vale do Tejo | 0,126                     | 11,58   |
| Alentejo              | 0,399                     | 6,58    |
| Algarve               | 0,224                     | 8,11    |
| Açores                | 0,320                     | 6,21    |
| Madeira               | 0,219                     | 8,07    |

Sources: Orçamento Estado, DGO, Ministério Finanças; Eurostat, June 2003

Notes: Public transfers per capita include Fundo de Coesão Municipal, Fundo Geral Municipal, Fundo de Financiamento das Freguesias and item c); the values presented in the figure are in 10<sup>3</sup> euros; GVA = Gross Value Added

Public tranfers per capita to municipalities 16,00 Public transfers per capita to municipalities ----- GVA per capita 0,8 12,00 0,6 8,00 0,4 4,00 0,2 0 0,00 Norte Lisboa e Alentejo Algarve Açores Centro Madeira Vale do Tejo

Figure 2.3.1.1 - Public transfers to municipalities and GVA per capita, 2001

Sources: Orçamento Estado, DGO, Ministério Finanças; Eurostat, June 2003 Notes: Public transfers per capita include Fundo de Coesão Municipal, Fundo Geral Municipal, Fundo de Financiamento das Freguesias and item c); the values presented in the figure are in 10<sup>3</sup> euros; GVA = Gross Value Added

Table 2.3.2.1 - Public transfers to autonomous regions, 2003

|                         | M                     | adeira                     | A                     | Açores                     |  |  |  |
|-------------------------|-----------------------|----------------------------|-----------------------|----------------------------|--|--|--|
|                         | 10 <sup>3</sup> Euros | Percentage of regional GDP | 10 <sup>3</sup> Euros | Percentage of regional GDP |  |  |  |
| Regional Finance Law    | 193.480,53            | 6,20                       | 198.370,45            | 8,99                       |  |  |  |
| Insularity compensation | 143.318,91            | 4,59                       | 146.941,08            | 6,66                       |  |  |  |
| Cohesion Funds          | 50.161,62             | 1,61                       | 51.429,38             | 2,33                       |  |  |  |
| Others                  | 30.884,90             | 0,99                       | 44.347,54             | 2,01                       |  |  |  |

Sources: OGE, MF, own calculations

Note: 2003 values for regional GDP was based on an average growth rate of 4 per cent

#### 2.4 - State aid

Not all measures of public support, even those that may involve public subsidies, are classified as state aid. In the EU, state aids are considered compatible with the common market, as long as they are designed to "promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment" - Article 87, n. 3 (paragraph a) of the EC (European Community) Treaty - or "to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest" - Article 87, n. 3 (paragraph c). The Stockholm European Council in 2001 asked Member States to "demonstrate a downward trend in State aid in relation to GDP by 2003" and also to "redirect aid toward horizontal objectives".

In some EU countries, state aid continues to account for large amounts of public spending<sup>7</sup>. Table 2.4.1 provides an indication that staite aids are being reduced, both in Portugal and in the EU.

Table 2.4.2.A shows the sectoral distribution of state aids in Portugal. State aid to agriculture is declining, but is still higher than that for manufacturing. Aid to manufacturing has kept within a relatively narrow band for a number of years. The most important aid to the manufacturing sector is grants with more than sixty per cent of the total (see table 2.4.2.B).

The share of horizontal aid in Portugal has duplicated in the period between 1997 and 2001 to about 30 per cent whilst aid for particular sectors dropped in the same period by about 25 per cent to close to 45 per cent. Horizontal aid was mainly allocated to training, employment aid, SMEs and R&D. State aid to commerce is very low and exhibits a declining trend (see table 2.4.2.A).

Because of data limitations, it was not possible to obtain the regional breakdown of state aid by recipient regions. Neither could we distinguish how much has been spent on particular categories of policy assistance under the general heading of "regional state aid" because this

<sup>&</sup>lt;sup>7</sup> Midelfart-Knarvik and Overman's (2002) found a weak relationship between industrial relocation in the EU, deeper economic integration and changes in factor endowments. The conclusion spells out for the need to coordinate and regulate state aids at EU level, because national state aids could cause disparities in EU location.

information is generally not publicly available. Notwithstanding, at the outset one can raise a number of questions regarding the regional incidence of state aid, on the basis of the sectoral informations.

State aid to agriculture has been considered by policy makers as very important for the population residing in poorer regions, helping this population to obtain the indispensable minimum financial capacity for survival. Nevertheless, it may not create conditions for sustainable development. n general, the agriculture programme establishes its priorities in accordance with the conditions of the CAP (Common Agricultural Policy), even though the CAP is not in conformity with the characteristics of certain regions.

As far as the manufacturing sector is concerned, grants are the predominant aid instrument. Tax exemptions are the second most used mechanism.

Under the CSF I, II and III, the national funding contributed greatly to the key incentive systems available in Portugal: SIBR<sup>8</sup> (Incentive System of Regional Base), the main regional incentive programme, for PEDIP (Specific Programme for the Development of the Portuguese Industry I & II) and SIPIE (Incentive System to the Small Enterprises Initiatives); SIME (Incentive System to the Enterprises Modernization). The main criteria to calibrate the level of entitlement are the level of local content, capital investment, training, R&D, export orientation, technological content, employment created and wage level, with a clear focus on large projects.

In the first two CSFs the weight of the sectoral programmes was still dominant and omnipresent. This characteristic has been reduced in the CSF III. Although the decision was taken by Portugal, one can say that the CSF I and II implemented between 1989 and 1999 contributed to strengthening an almost exclusively sectoral logic in the organisation of public investments, with the territory becoming only a statistical unit of reference for the accountancy of actions to be implemented.

In this regard, it is worth highlighting that the largest share of business incentives under the CSF I and II (PEDIP II, RIME - Incentive System for Micro-enterprises, PROCOM - Support Programme to Commerce Modernization, SIFIT - Financial Incentives System for

<sup>&</sup>lt;sup>8</sup> SIBR package comprised three main elements; an industrial policy instrument, a location component and an employment component.

the Investment in Tourism) and III (SIPIE, SIME, Measure 2.1, 2.4) were distributed in the Lisboa e Vale to Tejo, Norte and Centro. Algarve, Alentejo and Açores, were the regions with least investments co-participated by the CSF II and III. Within the Norte and Centro there was a polarization towards the coastal areas. <sup>9</sup>

The DG Competition (Directorate-General Competition) web page provides exhaustive information on special state aid cases that have been subjected to the European Commission for consideration and whose primary objective is regional aid (table 2.4.3 summerises some of this information). Madeira and Açores are the Portuguese regions with clear and specific regional state aid instruments.

There are positive aspects related to the externalities associated with the (sectoral) approach followed. It can be argued that a sectoral investment programme co-financed by state aid always has an explicit territorial dimension. The impact on the territory emerges because sectoral programmes pursue national objectives that cross all the territories or because it emerges as an unambiguous priority to cope with important problems at the regional level rather than at the national level. Such a generalisation should be taken with caution, of course. Results from the application of the CSF I and II in the Norte of Portugal for example, suggest that in regard to 'Manufacturing, Science and Technology', 'Tourism' and even 'Infrastructures', it proved to be very difficult to introduce into these programmes qualitative specificities in conformity with the characteristics of regional problems. On the contrary, with respect to the sectoral programmes where the socio-economic cohesion dimension is explicit, such as in the fields 'Education', 'Employment', and 'Social integration' there is a clearer contribution of the sectoral programmes to the qualitative specificities of the regional strategy that are not accounted for by national objectives. Representatives of most of the regions have confirmed these specificities.

Overall, and in spite of the positive evaluation by national policy makers and regional representatives, we consider state aid to have had a negative impact on economic and social regional cohesion on the continent and a negative economic but positive social impact in the autonomous regions. Above all, Portuguese subsidy dependence and exaggerated reliance on

<sup>&</sup>lt;sup>9</sup> Over 60 per cent of the business investments co-financed by CSF II and III were in the industry, while the share of investments in the other sectors was very low. With the exception to Algarve, Madeira and Açores where tourism represents a significant share of the total incentives received (for more, see http://www.poe.min-economia.pt/3000/3210 main1.htm).

state protectionism distort incentives and competition, with a negative impact on national economic growth.

Box 2.4.1 - Global assessment of policy impact

| National policy maker   | Positive  |
|-------------------------|---|
| perspective             |   |
| Regional representative | Positive  |
| perspective             |   |
| Researcher perspective  | Portuguese subsidy dependence and exaggerated reliance on |
|                         | state protectionism need to be changed                    |

Table 2.4.1 - State aid, 2001

|              | State aid as | Trend in the share of | Share of aid to horizontal | Trend in the share of aid   |
|--------------|--------------|-----------------------|----------------------------|-----------------------------|
|              | a % of GDP   | aid to GDP, 1997-     | objectives as a % of total | to horizontal objectives as |
|              | in 2001      | 2001 (1), % points    | aid (2), 2001              | % of total aid (1)(2)       |
| EU           | 0,99         | -0,25                 | 47,00                      | + 12,20                     |
| <br>Portugal | 1,18         | -0,44                 | 38,00                      | + 7,40                      |

Source: State aid scoreboard, EC

Table 2.4.2 - State aids by sector and to the manufacturing sector by aid instrument, 1997-2001

#### A. State Aid by sector/objective, as percentage of total

| Sector/objective  | 1997    | 1998    | 1999    | 2000    | 2001    |
|---|---------|---------|---------|---------|---------|
| Agriculture   | 14,95   | 21,79   | 22,02   | 23,99   | 24,52   |
| Fisheries   | 0,11    | 0,15    | 0,15    | 0,16    | 0,16    |
| Horizontal objectives, of which:  | 14,22   | 22,18   | 27,88   | 29,89   | 30,27   |
| Research and development  | 0,61    | 0,89    | 0,93    | 0,95    | 2,20    |
| Environment   | 0,00    | 0,00    | 0,00    | 0,00    | 0,00    |
| SME   | 0,52    | 1,95    | 2,55    | 7,06    | 7,04    |
| Commerce  | 0,13    | 0,22    | 0,22    | 0,21    | 0,04    |
| Energy saving   | 0,52    | 0,56    | 0,61    | 0,32    | 0,03    |
| Employment aid  | 3,89    | 6,07    | 6,69    | 6,41    | 5,66    |
| Training aid  | 3,26    | 5,85    | 7,89    | 9,07    | 10,04   |
| Other objectives*   | 5,31    | 6,64    | 8,99    | 5,88    | 5,25    |
| Other sectors   | 70,72   | 55,89   | 49,95   | 45,96   | 45,05   |
| Total state aid (10 <sup>6</sup> Euros)   | 2251,90 | 1487,70 | 1382,20 | 1311,00 | 1225,10 |
| Total state aid less agriculture, fisheries and transport                                     | 74,18   | 76,64   | 76,52   | 74,60   | 73,61   |
| of which:   | 74,10   | 70,04   | 70,32   | 74,00   | 73,01   |
| Aid to the manufacturing sector   | 10,25   | 12,95   | 19,30   | 17,11   | 16,54   |
| Aid to the manufacturing sector as a % of total aid less agriculture, fisheries and transport | 13,80   | 16,90   | 25,20   | 22,90   | 22,50   |

Source: State aid Scoreboard, EC

Notes: \* Includes aid for general regional development not elsewhere; \*\* Includes aid for the steel sector as well as aid for rescue and restructuring not elsewhere classified, EC

#### B. State Aid to the manufacturing sector by aid instrument, as percentage of total

| Aid instruments               | 1997   | 1998   | 1999   | 2000   | 2001   |
|-------------------------------|--------|--------|--------|--------|--------|
| Grants                        | 85,80  | 78,40  | 62,90  | 87,20  | 88,60  |
| Tax exemptions                | 5,50   | 3,40   | 15,70  | 8,90   | 7,00   |
| Equity participation          | 0,10   | 6,70   | 2,30   | 0,00   | 0,00   |
| Soft loans                    | 8,60   | 9,80   | 17,40  | 2,70   | 3,10   |
| Tax deferrals                 | 0,00   | 0,00   | 0,00   | 0,00   | 0,00   |
| Guarantees                    | 0,10   | 1,70   | 1,60   | 1,20   | 1,30   |
| Total (10 <sup>6</sup> Euros) | 230,70 | 192,50 | 266,70 | 224,30 | 202,60 |

Source: State aid Scoreboard, EC

Table 2.4.3 - State aids, 1997-2002

| NUTS II                     | 1997   | 1999   | 2000  | 2001                           | 2002  |
|-----------------------------|--|--------|---|--------------------------------|---|
| Lisboa e<br>Vale do<br>Tejo | C23/2002 - Opel,<br>Azambuja   |        |   |                                |   |
| Alentejo                    |  |        |   |                                | N485/2002 - Training<br>Aids to the EPCOS, SA |
| Açores                      | N197/2001 - Modification in aids regime relative to regional products promotion; N563/2000 - aids regime relative to regional development in Açores; N820/1999 - aids regime relative to regional products promotion in Açores; N817/1999 - Aids regime relative to regional products transportation in Açores; C35/2002 - Açores fiscal regime. |        |   |                                |   |
| Madeira                     | N222a/2002 - Aids regime relative to Madeira free zone for the period 2003-2006  | regime | N96/2000 - Fiscal reductions regime relative to investment in Madeira; N55/2000 Madeira fiscal regime; C37/2000 -financial and fiscal aids regime in Madeira free zone. | N762/2001<br>Madeira,<br>SIPPE |   |

 $Source: \underline{[http://europa.eu.int/comm./competition/state\_aid/register/ii/by\_regio\_12.html]}$ 

## 2.5- Employment and social policies

Over the recent years, the Portuguese labour market has depicted a globally positive performance. Between 1998 and 2001, employment in Portugal has grown at an annual average of 1.8 per cent. The employment evolution continues to be more favourable in Portugal than in the rest of the European Union (EU). The unemployment rate in Portugal, still significantly below the EU average, was 4.1 per cent in 2001, up 0.1 per cent from the year before. In the EU, the unemployment rate has dropped from 8.1 to 7.6 per cent in the same period. Since the beginning of 2002, the evolution of the unemployment rate has been significantly negative, because of cyclical reasons.

In March 2000, the Lisbon European Council elaborated a strategy stressing the importance of a "fully decentralised approach, applied in line with the principle of subsidiary in which the Union, the Member States, the regional and local levels, as well as the social partners and civil society will be actively involved, using variable forms of partnership". The Commission supports the role that local and regional actors can play in the development of new forms of governance in the Union. However, the level of involvement of regional and local actors in the European Employment Strategy depends on the political and constitutional structures of each Member State, and has to be determined in accordance with the principle of subsidiary.

Since 1997 the annual PNE (National Employment Plan) is deeply articulated with the interventions supported by structural community financial instruments - ERDF (European Regional Development Fund), EAGGF and FIFG (Financial Instrument for Fisheries Guidance), cohesion fund and in particular ESF (European Social Fund). The PNE has the following general objectives, following the European Strategy for Employment:

- ⇒ Promoting youths' adequate transition to working life;
- ⇒ Promoting the social-professional inclusion and combating long-term unemployment and exclusion;
- ⇒ Improving manpower's basic professional qualifications under the perspective of life-long learning, in particular in regard to permanent vocational training and the fight against technological inadequacy;

⇒ Promoting the quality of employment, namely through the reinforcement of labour protection, notably at the labour security level.

However, the Portuguese employment policy still focuses strongly on unemployment benefits, as illustrated by table 2.5.1 for the period 1995-2001. Besides measures for the disabled, the most important instruments of employment policy are, first, labour market training and, second, unemployment compensation. All these instruments are managed by a Central Authority (MSST - Labour and Social Security Ministry).

The support for the unemployed in Portugal consists in the attribution of the following compensations:

- i) Unemployment Benefits;
- ii) Unemployment Social Benefits (initial or subsequent to the Unemployment Benefit).

These compensations have two purposes: to compensate the beneficiary for the lack of remuneration or reduction because of partial timework earnings and to promote job creation.

In July 1997 the RMG (Guaranteed Minimum Income) was introduced, aimed at guaranteeing minimum living conditions to the beneficiaries and their families in situations of serious economic needs. This income is usually complemented by some measures that aim at the gradual social and professional insertion of the beneficiaries and the members of their families. This model is not included in the system of non-contributory benefits.

Regarding the regional incidence of the employment policy, table 2.5.2 illustrates the different rate of coverage of unemployment benefits. The support to the unemployed in Portugal depicts an unequal regional distribution. On the positive extremity there is the region Centro where about 77 per cent of the unemployed enjoyed this financial support, whereas in the Alentejo about 70 per cent of the unemployed did not benefit from compensation. Still, one needs to draw attention to the positive evolution in the efficiency of this instrument. Recall that the two columns are not added.

As for unemployment social benefits, table 2.5.2 highlights the discrepancy between the regions of Alentejo and Algarve relatively to the gross rate of unemployment benefit coverage. This situation results from the large importance of the agricultural sector in employment and is consequence of the fact that many people do not qualify for

unemployment benefits due to insufficient social security contributions. In these cases, the solution is the attribution of social unemployment benefit. For that reason the gross coverage rate of this instrument is very high in those two regions.

The RMG is a measure in frank expansion: since its implementation the attributed sums have increased every year, having passed from 43.834 thousand euros in 1997 to 261.774 thousand euros in 1999. In terms of the evolution of the number of individuals to whom this income was attributed (titular of the RMG) in 1997 there were 14.184 beneficiaries of this measure while in 1999 this number reached 153 885.

An analysis of the annual evolution of the number of RMG beneficiaries as per cent of the active population (table 2.5.3) leads to the conclusion that Açores is the region that tops the list. Norte, Lisboa e Vale do Tejo and Centro are the regions that over the five years (1998 at 2002) have presented the greatest number of beneficiaries. In 2002, these three regions had about 86.1 per cent of the total of the existing beneficiaries in Portugal (Norte: 37 per cent; Lisboa e Vale do Tejo: 27.2 per cent; Centro: 21.9 per cent).

Programmes promoting self-employment and stimulating measures to integrate disabled workers are managed by central authorities. Training measures are disaggregated between those allocated to employed and to unemployed workers. Both programmes are managed by the IEFP (Professional Training and Employment Institute), in two ways: direct management and participated management. This latter one consists of a partnership of the IEFP with some private professional training centres.

Table 2.5.4 shows the number of unemployed workers participating in these training programs as per cent of the total enrolled unemployed in the period 1999-2001, by region. The regional distribution of this indicator is very similar, with the exception of the case of Alentejo. In almost all regions this percentage is very low, suggesting an insufficient application of this measure.

The Portuguese PNE subscribed to the logic that promoting employment and fighting unemployment is more effective when employment policies are implemented at regional and local levels. This strategy allows a response more adapted to the actual problems, a more

efficient use of resources, a better coordination of initiatives and a greater co-responsibility of the public and private sectors that can contribute to this objective<sup>10</sup>.

Public employment services are managed by IEFP regional delegations, although legislation and general decisions are taken by the central government. As one can see from table 2.6.5, the percentage of people that found a job after being enrolled as unemployed is very low in all regions, a fact that may be interpreted as indicating some inefficiency of this employment measure.

There are also some local programs of employment promotion such as the RRE (Regional Networks for Employment), PTE (Territorial Employment Pacts) and ILDE (Regional Initiatives for Development and Employment). Community initiatives, such as Employment and Urban, also grant central authorities greater flexibility in applying active policy strategies.

In the autonomous Regions of Açores and Madeira, the support of the Structural Funds, within CSF, is prevailing, integrated in the corresponding regional operational programmes of multi-fund character (PEDRAA - Specific Programme for the Development of Açores Autonomous Region - and PROPAM - Specific Programme for the Development of Madeira Autonomous Region - in the Açores and Madeira, respectively). In regions where employment and unemployment problems are more pressing, the establishment of specific intervention programmes seems justified, featuring committed and comprehensive action in regard to the factors that determine employment evolution, strengthened by means of interventions conceived and stimulated in compliance with the specificities of those regions. Within this context, the regional employment plans of Alentejo and the Metropolitan area of Porto have been created and are being currently implemented; the regional employment plan of Trás-os-Montes and Alto Douro has been concluded in 2001.

The institutionalisation of the ESM (Employment Social Market) in July 1996 allowed for some already existing activities (occupational programmes and protecting employment) to join new initiatives. In the five-year period 1998-2002, action was assured through a set of

.

<sup>&</sup>lt;sup>10</sup> Figueiredo (2001) compares the five Portuguese regions and concludes that there has been a cumulative process of divergence, caused by differentials in regional competitiveness. He argues that national policy only contributes to reducing regional disparities to the extent that it contains a local dimension.

programmes and measures: schools' workshops (1996); joint initiatives and protocols (1996); insertion in companies (1998); digital Alentejo (1999); employment insertion (2000).

These Programmes have a distinct nature, integrating components of occupational, formative and employment nature. What they have in common is the fact that they strengthen employment conditions for the unemployed who attend the training.

The application of training and employment policies in territorial forms is at the origin of the creation of employment regional networks, initiated in 1998 and concluded in December 2000, as a strategic option, with the set up of the last one for the region of Lisboa.

With the local one being the privileged sphere for finding an answer to problems, the Regional Networks are an intervention model which aims the use all the resources and potentialities of each region, stimulating the partnership for local development, for employment promotion and for professional qualification.

The promotion of human resources, the creation of conditions that allow for the fixing of the population and the combat of exclusion are especially highlighted in the context of the objectives stipulated for the regional networks.

The success of the interventions necessarily depends on the intermediaries' capacity tomake the best out of each region. Functioning in networks and partnerships, the decentralised services of the public administration, the municipalities, trade unions and employers and local development associations and other local agents come to increase significantly the possibilities to get an up-to-date diagnosis of the reality where they intervene, thereby giving value effectively to all the local resources (human, material and financial).

The construction of RRE and PTE constitutes the framework for some existing instruments of regional and local policies with incidence in the areas of employment, training and poverty and social exclusion. Thus, these measures stimulate the development of positive and dynamic relations for the training of competences and job finding.

Based on the data, the interviews with national policy makers and regional representatives, the employment policy had a highly positive impact on regional cohesion. However, one should take into account potential trade-offs and pay due attention to and control in the application of this policy to the extent that the short-term impact may well be to distort the incentives to work, thus impairing the functioning of the labour market in the long run,

especially with respect to those with lower skills and in less developed regions. From a researcher point of view, economic and social policies have a positive impact on economic and social cohesion, respectively, given that training in particular enhances the growth potential while social problems are addressed.

Box 2.5.1 - Global assessment of policy impact

| National policy maker   | Highly positive   |
|-------------------------|---|
| perspective             |   |
| Regional representative | Highly positive   |
| perspective             |   |
| Researcher perspective  | Careful attention and control needed in the application of this policy: short-term impact may well be to distort the incentives to work and thus the functioning of the labour market in the long run, especially among those with lower skills and in less developed regions |

Table 2.5.1 - Public expenditure on employment policy as percentage of GDP, 1995-2001

|   | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|------|------|------|------|------|------|------|
| Family Compensation                           | 0,47 | 0,46 | 0,47 | 0,48 | 0,46 | 0,46 | 0,47 |
| Disease and Maternity Compensation            | 0,66 | 0,63 | 0,58 | 0,55 | 0,51 | 0,53 | 0,54 |
| Unemployment compensation                     | 0,85 | 0,78 | 0,71 | 0,66 | 0,67 | 0,70 | *    |
| Subsidized employment                         | *    | 0,00 | 0,00 | 0,00 | 0,01 | 0,00 | *    |
| Measures for the disabled                     | 1,13 | 1,10 | 1,08 | 1,07 | 1,08 | 1,05 | 1,01 |
| Minimum Income                                | _**  | _**  | 0,05 | 0,20 | 0,26 | 0,23 | 0,19 |
| Public Employment Services and Administration | 0,37 | 0,27 | 0,27 | 0,28 | 0,28 | 0,27 | 0,31 |
| Labor Market training                         | 0,89 | 1,03 | 0,93 | 1,08 | 1,15 | 0,82 | 0,87 |

Source: Social Security Account, MSST; Notes: \*no available data; \*\*starts in 1997

Table 2.5.2 - Beneficiaries of unemployment benefits, 1999 and 2001

|                       |      | Gross Rate of Coverage* |                     |  |  |  |
|-----------------------|------|-------------------------|---------------------|--|--|--|
|                       |      | Unemployment            | Unemployment Social |  |  |  |
| NUTS II**             | Year | Benefits***             | Benefits****        |  |  |  |
| Norte                 | 1999 | 45,74                   | 39,65               |  |  |  |
| Notic                 | 2001 | 53,50                   | 38,79               |  |  |  |
| Centro                | 1999 | 60,08                   | 109,46              |  |  |  |
| Centro                | 2001 | 76,86                   | 57,45               |  |  |  |
| Lisboa e Vale do Tejo | 1999 | 45,03                   | 40,71               |  |  |  |
| Lisuda e vale do Tejo | 2001 | 64,35                   | 38,28               |  |  |  |
| Alentejo              | 1999 | 21,73                   | 68,62               |  |  |  |
| Alentejo              | 2001 | 29,41                   | 71,02               |  |  |  |
| Algarve               | 1999 | 39,27                   | 88,58               |  |  |  |
| Algai ve              | 2001 | 44,97                   | 77,54               |  |  |  |

Source: MSST. Notes: \* Gross Rate of Coverage is defined as the ratio between compensated unemployed and unemployed; \*\* no available data to Madeira and Açores; \*\*\* it's the main instrument of compensation of the unemployed; \*\*\*\* is a measure of social protection included in the Programa de Emprego e Protecção Social (PEPS) and is initial or subsequent to the Unemployment Benefit

Table 2.5.3 - Guaranteed minimum income beneficiaries as percentage of total population, 1998-2001

| NUTS II               | 1998  | 1999  | 2000  | 2001 |
|-----------------------|-------|-------|-------|------|
| Norte                 | 3,00  | 4,10  | 4,30  | 3,60 |
| Centro                | 3,70  | 4,90  | 4,70  | 4,00 |
| Lisboa e Vale do Tejo | 2,20  | 2,80  | 2,70  | 2,40 |
| Alentejo              | 3,10  | 4,10  | 4,20  | 3,60 |
| Algarve               | 4,10  | 5,40  | 5,90  | 4,60 |
| Açores                | 11,20 | 12,50 | 11,10 | 9,20 |
| Madeira               | 6,80  | 8,20  | 6,70  | 4,00 |
| Portugal              | 3,20  | 4,20  | 4,10  | 3,40 |

Sources: Banco de Portugal, MSST, own calculations

Table 2.5.4 - Percentage of unemployed participating in training measures, 1999-2001

Professional Training for unemployed

|                       | Direct Management |       |       | Partic | ipated Manag | gement |
|-----------------------|-------------------|-------|-------|--------|--------------|--------|
| NUTS II*              | 1999              | 2000  | 2001  | 1999   | 2000         | 2001   |
| Norte                 | 1,27              | 1,56  | 1,76  | 2,02   | 3,56         | 2,66   |
| Centro                | 3,25              | 2,43  | 1,95  | 0,91   | 0,56         | 0,84   |
| Lisboa e Vale do Tejo | 3,31              | 2,94  | 2,67  | 0,35   | 0,29         | 0,24   |
| Alentejo              | 15,81             | 10,44 | 10,80 | 6,79   | 10,75        | 7,87   |
| Algarve               | 1,38              | 1,55  | 2,58  | 0,00   | 0,00         | 0,00   |
| Portugal              | 3,33              | 3,00  | 2,93  | 0,74   | 1,19         | 0,90   |

Source: IEFP

Note: \* No available data for Madeira and Açores

Table 2.5.5 - Percentage of people reemployed after having been enrolled as unemployed, 1998-2002

|                       |      |      | Index |      |      |
|-----------------------|------|------|-------|------|------|
| NUTS II               | 1998 | 1999 | 2000  | 2001 | 2002 |
| Norte                 | 14,0 | 15,6 | 16,4  | 13,2 | 12,2 |
| Centro                | 20,9 | 24,3 | 36,2  | 24,8 | 23,3 |
| Lisboa e Vale do Tejo | 15,3 | 14,6 | 17,2  | 12,3 | 11,1 |
| Alentejo              | 10,0 | 14,4 | 17,5  | 10,7 | 11,1 |
| Algarve               | 21,2 | 22,5 | 24,5  | 23,2 | 23,5 |
| Açores                | 12,3 | *    | *     | *    | *    |
| Madeira               | 24,5 | *    | *     | *    | *    |

Source: IEFP.

Note: \* No available data; Index = number of collocations of unemployed in year i/enrolled unemployed in year i-1.

Table 2.5.6 - Employment policy, 1998-2002

#### Some Instruments of Employment Policy

**Employment Social Market** 

Pact for Solidarity

Incentives to employment creation (ILDE, SAJE)

Support to enterprise promotion and development (BIC)

Implementation of the Regional Network for Employment

Three Territorial Pacts for Employment (approved by the European Union)

Program of Promotion of Casual employment in the Public Administration

Creation of Fund for Support Innovators Projects (FSIP)

PEDIP measure for support of delocation of industry to inland regions

Source: IEFP

Table 2.5.7 - Government training expenditures by region, 1999-2001

| NUTS II*                      | 1999      | 2000      | 2001      |
|-------------------------------|-----------|-----------|-----------|
| Norte                         | 34,83     | 35,18     | 35,10     |
| Centro                        | 11,70     | 12,36     | 13,05     |
| Lisboa e Vale do Tejo         | 31,35     | 33,83     | 34,23     |
| Alentejo                      | 18,44     | 15,09     | 13,88     |
| Algarve                       | 3,68      | 3,54      | 3,75      |
| Total (10 <sup>3</sup> Euros) | 29.852,00 | 35.911,00 | 35.854,00 |

Source: MSST

Notes: \* No available data to Madeira and Açores; the values presented on table are as percentage of total

# 2.6 - Science and Technology

Up to the 1990s, there was no a clear innovation and technology policy in Portugal. More recently, technology policy received strong support as one of the structural policies needed to improve the prospects of economic development in Portugal. The Government supported the development of local technological capabilities with programmes geared towards technical assistance to local firms, incentives for foreign direct investment, quality and training, and the modernisation of infrastructure. Additional funds have been allocated in Portugal through the EC Structural Funds for the Objective I regions and from RTD (Research and Technological Development) Framework Programmes. R&D has significantly progressed over the past decade thanks to support provided by EC programmes that have financed more than half of the cost of the R&D infrastructure. Portugal evolves significantly over the last few years<sup>11</sup>.

Over the 1990s, Portugal launched a number of specific programmes for the development of scientific and technological activities: CIENCIA (Programme for Creation of National Infrastructures in Science and R&D); Programme "Ciência Viva" launched in 1996-1997 by the Ministry of Science and Technology with the purpose to promote the 'scientific culture' of the Portuguese population, stimulate the geminating of scientific institutions and schools and the scientific occupation of young people in their vacations in institutions of scientific research.

Education was singled out has the cornerstone of Portuguese science and technology policy in the 1990s. The strong public investment in higher education, *via* PRAXIS XXI (Operational intervention for Science and Technology) and PRODEP (Educative Development Programme for Portugal), the MCT (Science and Technology Ministry), which had been more focussed on science than on technology, strengthened its support for higher education and for university-based scientific research. The creation of MCES (Science and Higher Education Ministry) bears witness to the blurring of boundaries between science and higher education. A further improvement is expected from the government's creation of the

Rodrigues, Neves and Mira Godinho's (2003) book puts together the main contributions of the expert team involved in the launching and development of PROINOV (Integrated Programme on Innovation Support) and it includes three main parts dealing with the broad perspective, the organisation, and the ways on how to make the Portuguese innovation system more dynamic.

Commission on the Teaching of Mathematics and Sciences, which aims at increasing the future supply of science and engineering graduates.

In 2000 the government launched PROINOV, an integrated programme which emphasises policy instruments of a horizontal nature, clearly in line with the EC objectives and policy recommendations. In regard to the development of a regulatory framework conducive to innovation, it pursued four main actions: First, the launching of the measures on R&D activities by consortia (see PT 21 in table 2.6.1), under the POCTI (Science, Technology and Innovation Operational Programme) and POSI (Information Society Operational Programme). Second, the measure on mobilising programmes for technological development (PT 23) - the PASI (Action Plan for the Information Society) - under the POE (Operational Programme for the Economy), also aimed at supporting consortia between S&T (Science and Technology) activities and companies to carry out projects concerning the development of new, innovative products and/or processes. Third, the creation of the GAPIs (Industrial Property Support Offices - PT 26) whose aim is to provide support on the strategic use of intellectual property rights. The fourth relevant measure was the revision of the financial incentives for investment in R&D (PT 4). This confirms a trend towards an increased use of tax instead of financial incentives, in accordance with the suggestion by the European Community. In addition, actions were also launched to encourage the creation and growth of innovative enterprises (objective 3). A document by the Economics Ministry spells out the intention to launch a network for providing technology support services to companies. Similarly, the recent PME Digital Initiative envisages the creation of information and technical assistance networks (RIAT - Information and Technical Assistance Networks) to help SMEs to respond to challenges related to the digital economy. Another area where some efforts are being undertaken is the support and development of incubator services for firms.

Life-long learning is another area where some progress was made. A major step was the agreement reached last year at the Social Concertation Council, on employment, labour market, education and training, where specific reference was made to the importance of life-long learning. To that end, the Government has introduced policies to improve the qualification and employability of adults and to develop a national system for training, certification and development of competences in telecommunications and information technologies.

While the national government did not have any specific regional technology strategy, it is possible to explore the regional incidence of main science and technology policy actions in the recent past.

Over time, the Government supported the development of local technological capabilities with programmes geared towards technical assistance to local firms, incentives to FDIs (Foreign Direct Investments), training, and the modernisation of infrastructure. The territorial impact of these measures emerges from its sectoral component, and is largely attributable to the location of the initiatives that receive funding. In general, the most developed regions will have the most dynamic socio-economic actors. Hence, at the outset this suggests that the most developed regions are the ones which will benefit most from these initiatives.

The decentralised component of the operational regional interventions in the domain of science, technology and innovation corresponds to the CIENCIA programme that envisages to strike a balance such that 50 per cent of the investment is outside the Lisboa e Vale do Tejo region, chiefly for the development of actions relative to scientific and technological culture, especially to the creation of "centros de ciência viva" at the district level. The creation of these centres is based on the set-up of local partnerships between cities and scientific institutions, technological educational institutions, companies with R&D activities, centres, or other public and private entities with activities of formation and scientific and technological spreading. During the period under review there was an upsurge in the debate on innovation policy, mainly spurred by initiatives taken by the President of the Republic – the 'Innovation Week' and the launching of COTEC (Entrepreneur Association for Innovation). The launching of COTEC also contributed to an increase in public awareness about innovation.

Nowadays there are two main groups of activities to stimulate and co-ordinate regional initiatives and regional actors with a view to promoting innovation. The first group is concerned with two innovation support actions at regional level: LISACTION (Lisboa e Vale do Tejo Programme on Innovation-Oriented Actions - PT 28), and INOVAlgarve (Programme of Innovative Actions for the Region of Algarve - PT 29). LISACTION was built on the experience of RITTS (Regional Innovation and Technology Transfer Strategies) and was structured around two main themes: the regional economy based on knowledge and technological innovation, and the information society at the service of regional development. The second is associated with Programa Integrado de Suporte à Inovação (PROINOV). Two aspects deserve a mention: The first one concerns the setting up of a systematic collaboration

between the PROINOV Office and the Regional Coordination Commissions, aimed at identifying and developing regional innovation projects. The second is related to the work carried out on the development of clusters. Four clusters were selected for a first round of activities - footwear, software, automotive industry and tourism. Although defined from a sectoral interaction perspective, some of them have a strong regional focus. The work carried out so far in the two most advanced - footwear and software - enabled close cooperation with the main actors, some of them at a regional level, and the definition of a reasonably well-defined set of activities to be launched.

Technological centres are now key institutions in providing technological services to firms throughout the country. Some centres are very active and increasingly involved in providing technology and management support services valued by firms. Examples of this include CTC (Community Technology Centres - footwear), CENTIMFE (Technological Center of the Industry of Moulds, Special Tools and Plastics - mould making industry) and CITEVE (Technological centre of Textile and Clothes Industries - textiles and wearing apparel). Others, however, have still not been able to win a strong recognition in their industries.

Worth mentioning is also the PROINOV's "Advanced Training Course on Innovation Policies and Management", to train 'agents of innovation' who may act as catalysers of innovation processes. Improving key interfaces of the innovation system (objective 4) figures high among PROINOV objectives. The PROINOV Office has developed a systematic way of stimulating interfaces and collaboration between different agents, namely in the context of the cluster development exercise.

'Non-concentrated' actions' are addressed to the development of regionally-based projects with a 'structuring' content. In the case of POE/PRIME (Programme of Incentives for the Modernisation of the Economy) they include, for instance, the setting up or improvement of company location areas, tourism-integrated projects and the strengthening of local endogenous capabilities. The amounts assigned to these 'non-concentrated' actions correspond to around 25 per cent, 3 per cent and 23 per cent, respectively, for the 'old' POE (now PRIME), POCTI and POSI (EC, 2003). By the time of this study, a few initiatives had been put forward. The first was the launching of PRASD (Reconvergence Programme for Depressed Areas and Sectors), to fight the heavy problems of unemployment and divestment faced by some geographic areas and industrial sectors. The second is the *Tecnopolos* initiative. Disclosed by the former Minister for Towns, Territorial Planning and

Environment, a committed supporter of technology parks, the initiative was aimed at regional development and at fostering the synergies between science and industry at a local level. After the quarrelsome resignation of the Minister, the *Tecnopolos* programme seemed to be at stake. Recently, however, the new Minister reassured that it will be implemented soon. A final reference is due to the re-launching of the Oporto Science and Technology Park. This will involve an investment of €12 millions. Besides the Maia pole (branch) already in place, it will have two others in Taipas and Feira which will be focused on automotive technology.

Overall, the territorial impact of these policies is largely attributable to the location of the initiatives that get the funding. In general, the most developed regions are those that have the most dynamic socio-economic actors. Hence, at the outset one may suggest that the most developed regions are the ones which will benefit most from these initiatives.

Table 2.6.1 summarises the policy measures envisaged by Portuguese government targeting of R&D, while table 2.6.2 provides a positive qualitative evaluation of the Portuguese policy according to EU policy priority actions.

Public R&D expenditures are a good indicator of the existence of voluntary policies directed at specific regions. Table 2.6.3 shows a continuous increase in the share of public budget R&D as a percentage of GDP and as per cent of Portuguese government budget.

Table 2.6.4 displays total GERD (Gross Expenditure on R&D) in the Portuguese NUTS II regions in per cent of regional GDP. With the exception to Madeira, GERD as a percentage of regional GDP has been increasing for all regions. Figure 2.6.1 shows a positive relationship between gross expenditure on R&D as percentage of regional GDP and regional GDP per capita.

Traditionally, Lisboa e Vale do Tejo and Centro are the regions with the highest GERD as percentage of GDP. On the other extreme we find Madeira and Algarve, with the lowest value of GERD as a percentage of regional GDP during the period under consideration. In 1999 exceptionally Açores was the region with the highest R&D expenditure as a percentage of regional GDP (2.62 per cent), reflecting rather some extraordinary governmental spending than properly a trend.

Business GERD is very low for all regions compared to EU average (see table 2.6.4), registering significant values only in the richest regions of Lisboa e Vale do Tejo, Centro and Norte. The poor performance of Madeira and Açores in this regard is notorious.

As for government expenditure on R&D in the Portuguese regions, table 2.6.4 indicates that there is a significant concentration in Lisboa and Vale do Tejo in the continental part of Portugal. By 1999, government GERD reached 0.32 per cent of regional GDP in Lisboa e Vale do Tejo, with each of the remaining regions receiving less than 0.1 per cent of regional GDP. It is curious to note that Government GERD is particularly visible in the richest area of Lisboa e Vale do Tejo, and on the Islands, Açores in particular. For the other regions, government GERD never represents more than 0.1 per cent of regional GDP.

A region's public R&D intensity will also depend heavily on the presence of both university and public and non-profit research institutes. Up to 2001, the most visible regional efforts and effects of R&D policy regard the national education programme and tertiary education in particular.

Higher education GERD is less concentrated than government GERD. With the exception of the Islands and of Lisboa e Vale do Tejo, higher education GERD accounts for the largest share of total GERD (see table 2.6.4). This fact results from the growth of universities and polytechnic institutes in many regions all over the country. Higher education GERD has increased continuously over the triennial and represents in 1999 over 0.26 per cent of regional GDP for all regions, with the exception of Madeira.

After the review on the regional incidence of the Portuguese science and technology policy in recent years, we explore next the current situation concerning the technological standing of Portugal and of its seven NUTS II regions.

Figure 2.6.2 shows the results for the 2003 SII-1. Finland and Sweden have by far the highest SII-1 and are confirmed as the European innovation leaders. Spain, Portugal and Greece display the weakest innovation performance. In comparison with the SII 2001, Portugal shifted from a "falling behind" to a "catching up" situation.

In 1999 Portugal's R&D expenditure as a percentage of GDP was 0.77 compared with 1.81 for the EU average. With levels about half of those of the EU average for the supply of new S&E (Science and Engineering) graduates and population with tertiary education, patent applications and business R&D expenditures are particularly low relative to the EU. These indicators show however shows strong signs of catching up.

The indicator public budget to R&D as percentage of GDP increased from 0.45 in 1995 to 0.69 in 2002. Regarding education, the positive development is due to the launching of new

courses by public and private universities in the first half of the 1990s. In spite of these positive developments, University remained to some extent closed to the interaction with the outside world. The promotion of the diffusion of knowledge and technologies, although always included in the agenda, was not accomplished<sup>12</sup>.

In spite of the above improvements, the business sector is among the weaker areas of innovation performance in Portugal<sup>13</sup>. High-tech patent applications, business R&D and, to a lesser extent, the employment shares in high-tech services and medium/high-tech manufacturing are all well below the EU average. The government launched several initiatives to promote R&D, but these may take a long time to show results, because Portugal's specialisation in traditional sectors with low R&D-intensity will take time to change.

Portugal has also improved significantly with respect to two indicators related to the information society: ICT (Information and Communication Technology) expenditures and home Internet access. This suggests that the Portuguese economy is relatively proficient in adopting new technologies. Growth of home internet access started from low base levels in 1998/99 and was spurred by several government initiatives (e.g. POSI).

It remains to be investigated whether these developments apply equally to all of the country, or whether they have a certain regional specificity. To address this question, table 2.6.5 displays the technological standing of the Portuguese NUTS II regions. The regional innovation summary indicator shows a strong concentration of technological capacity in a few regions, namely Lisboa and Vale do Tejo and Centro. These are the two regions above the country average. Nevertheless, they both rank below the EU average. The analysis of statistical similarities between these two regions identified some differences. The first one, Lisboa e Vale do Tejo, has the best-educated workforce and a relative orientation towards services. It is the region with the highest per capita income in Portugal. The second region,

.

There are, however, a few exceptions of interaction between the University and Industry, either directly (namely in the University of Aveiro and Minho) or through inter-face organisations (such as INEGI - Institute of Mechanics Engineering and Industrial Management - in Porto, UNINOVA - Institute for the Development of New Technologies - and INESC - Institute of Engineering of Systems and Computers - in Lisbon, and Institute Pedro Nunes in Coimbra).

Amorim (2002) shows that ere are signs of change, but much remains to be done regarding the innovative behaviour of firms in product and process innovation as well as in complementary organisational modernisation, and interactions between firms and external services.

Centro, has a relative orientation towards manufacturing (European Comission, 2003). The region's per capita income is above the average but below that of Lisboa e Vale do Tejo

Figure 2.6.3 shows that the technological standing of the region is positive related to GERD as a percentage of regional GDP, while figure 2.6.4 shows the relationship between a region's technological standing and its GDP per capita (EU=100). It suggests a positive relationship between a region's innovative performance as measured by its technological standing, and its per capita income. Lisboa e Vale do Tejo, the region with the highest GDP per capita is also the leading Portuguese region in terms of innovative performance. In the European innovation scoreboard (2002 and 2003), Lisboa e Vale do Tejo boasts the highest values for all 14 indicators, with the exception of participation in life-long learning, share of innovative enterprises and innovation expenditures. Açores depicts the lowest values. The high per capita income levels for e.g. Madeira and Algarve, however, do indicate that there are other factors that also generate high incomes.

From a researcher's point of view it emerges that Portuguese Science and Technology policy did not have an explicit regional imprint until the end of the 1990s. Portugal's growth trajectory has been determined by the technology imports of various types. It seems that the conditions under which the inflows of technology can be exploited have changed and there is an increasing need to introduce matching efforts on the side of the recipient regions. We also found that the structural funds and the timing of the adjustment processes at the national level exercised significant influence on corporate performance and innovation dynamics. For example, structural funds and monetary and exchange rate policies conditioned corporate decisions in terms of the speed of modernisation of production processes and furthermore of the selection of suppliers of equipment and engineering services.

From a researcher perspective, the Science and Technology policy resumes to a negative impact on economic cohesion and a neutral one on social cohesion. The cohesion problem raises the issue of the role of an active technology policy in the catching-up process among regions with different levels of socio-economic development. As we have seen, this process might have produced mixed results in different regions due to:

- (a) differences in "demand pull" factors;
- (b) lack of policy co-ordination (human resources vs. education policies and/or research vs. on the job training); and
- (c) differences in the level of institutional efficiency in less developed regions.

As far as the last point is concerned, the comparative study of technology policy and regional technological capacity in Portuguese regions suggests that in order to take full advantage of the local provision of technological externalities it is necessary to introduce institutions designed to facilitate the appropriation of externalities by local agents as they move towards higher value added activities.

Box 2.6.1 - Global assessment of policy impact

| National    | policy    | maker   | Positive: education, new support institutions               |
|-------------|-----------|---------|---|
| perspective | e         |         |   |
| Regional    | represe   | ntative | Neutral/Positive: education is the most relevant aspect     |
| perspective | e         |         |   |
| Researche   | r perspec | ctive   | The overall impact of the policy initiatives and new policy |
|             |           |         | orientation on regional cohesion has been limited so far    |

Table 2.6.1 - Trend chart measures, 1994-2006

| Code  | Title  | Start/End Dates              | Action Plan<br>Area(s)                            | Status  |
|-------|--|------------------------------|---|---|
| PT 1  | R&D Activities by Consortia (PRAXIS XXI)   | 1994/2000                    | II.4; II.5; III.2;<br>III.4                       | Terminated  |
| PT 2  | Recruitment of Doctors and Masters (PRAXIS XXI)  | 1994/1999                    | I.2; III.4; III.5                                 | Terminated  |
| PT 3  | PEDIP II Financial Engineering Measures  | 1994/1999                    | II.5  | Terminated  |
| PT 4  | Fiscal Incentives for Investment in R&D (SIFIDE)   | 1997/Depend<br>Budgetary Law | II.6; III.2                                       | Old Improved Conditions from 2001<br>Onwards                  |
| PT 5  | Medium-Term Finance Programme of R&D Units   | 1997/Not<br>defined          | I.1   | Old   |
| PT 6  | Science and Technology Observatory   | 1997/Not<br>applicable       | I.3; I.5  | Old   |
| PT 7  | Development of Technological Capabilities at Enterprise Level (SME Initiative)                   | 1997/2001                    | III.2; III.3;<br>III.4; III.5                     | Terminated  |
| PT 8  | S&T Training (PRAXIS XXI)  | 1994/1999                    | I.1   | Terminated  |
|       | Financial Iniciatives to R&D Industrial Projects (PEDIP II)                                      | 1994/1999                    | II.5; III.2; III.4                                | Terminated  |
| PT 10 | Innovation and Technology Transfer Measure (PEDIP II)  | 1994/1999                    | II.5; III.1; III.4                                | Terminated  |
| PT 11 | Mission for the Information Society  | 1996/1999                    | I.3; I.5  | Gave Rise to the Operational Programme on Information Society |
| PT 12 | PEDIP II Demonstration Actions   | 1994/1999                    | I.4; III.5  | Terminated  |
| PT 13 | Centres for Company Formalities  | 1997/Not applicable          | II.3  | Old   |
| PT 14 | Restructuring of INPI  | 1998/Not<br>applicable       | II.2  | Old   |
| PT 15 | SIPIE - Small Company Initiatives Incentive System (POE)   | 2000/2006                    | I.4; II.2; II.5;<br>III.5                         | Suspended (revaluation being carried out)                     |
| PT 16 | SIME - Company Modernization Incentive System (POE)  | 2000/2006                    | I.4; II.2; II.5;<br>III.2; III.3;<br>III.4; III.5 | Old   |
| PT 17 | Internet Initiative  | 2000/2006                    | I.3; I.4; I.5                                     | Old   |
| PT 18 | SIUPI - Industrial Property Use Incentive System (POE)   | 2000/2006                    | II.2; III.4; III.5                                | Old   |
| PT 19 | Certificate of Basic Competencies on Information Technologies                                    | 2001/Not applicable          | I.1; I.3  | New   |
| PT 20 | Measure for Supporting the Dynamisation of Technology Training and Quality Systems - MTTQS (POE) | 2001/2006                    | I.1; I.4; I.6;<br>II.5; III.2;<br>III.4; III.5    | New   |
| PT 21 | R&D Activities by Consortia (POCTI/POSI)   | 2001/2006                    | I.4; II.5; III.2;<br>III.4                        | New. Replaces PT 1  |
| PT 22 | Integration of Doctors and Masters in Companies and Technology Centres (POCTI)                   | 2001/2006                    | I.2; III.2; III.4;<br>III.5                       | New. Replaces PT 2  |
| PT 23 | Mobilising Projects for Technological Development (POE)  | 2001/2006                    | I.4; I.6; III.2;<br>III.4                         | New. Linkages with the Old PT 10                              |
| PT 24 | Financial Innovation - Action A (POE)  | 2001/2006                    | II.5  | New. Linkages with the Old PT 3                               |
| PT 25 | Financial Innovation - Action B (POE)  | 2001/2006                    | II.5  | New. Linkages with the Old PT 3                               |
| PT 26 | Industrial Property Support Offices - GAPI (POE)   | 2001/2006                    | I.3; II.2; III.4                                  | New. Launched in the Context of SIUPI (PT 18)                 |
| PT 27 | PME Digital Initiative (POE)   | 2001/2006                    | I.3; I.4; III.1;<br>III.5                         | New   |
| PT 28 | Lisbon and Tagus Vallery Programme on Regional Innovation<br>Actions - LISACTION                 | 2002/2003                    | I.6; II.5; III.4;<br>III.5                        | New   |
| PT 29 | Programme of Innovative Actions for the Algarve Region - INOVAlgarve                             | 2002/2003                    | I.6; II.5; III.4;<br>III.5                        | New   |

Sources: EC (2002). European Trend Chart on Innovation. Theme-Specific country report: Portugal. EC DG Enterprise

Table 2.6.2 - National priority actions, 2000

|  | Trend*    |
|--|-----------|
| Objective 1: Coherence of innovation policies                            |           |
| 1.1 Best practice in innovation policies                                 | Increased |
| 1.2 Innovation policy coordination mechanisms                            | Increased |
| 1.3 Monitoring and evaluation of innovation support                      | Stable    |
| Objective 2: A regulatory framework conducive to innovation              |           |
| 2.1 Diffusion of results from publicly funded research                   | Increased |
| 2.2 Fiscal measures to encourage innovation                              | Increased |
| Objective 3: Encourage the creation and growth of innovative enterprises |           |
| 3.1 Favouring the creation and development of start-ups                  | Increased |
| 3.2 Innovation support structures and services                           | Stable    |
| 3.3 Training in entrepreneurship and innovation management               | Increased |
| Objective 4: Improving key interfaces                                    |           |
| 4.1 Innovation at the regional level                                     | Increased |
| 4.2 Lifelong learning  | Stable    |
| 4.3 New missions for universities  | Stable    |
| 4.4 Technology transfer by large public research facilities              | Stable    |
| Objective 5: A society open to innovation                                |           |
| 5.1 Stakeholder debates on innovation                                    | Increased |
| 5.2 Public administration purchasing policies                            | Stable    |

Sources: EC (2002). European Trend Chart on Innovation. Theme-Specific country report: Portugal. EC DG Enterprise.

Note: \* stable/increasing/decreasing

Table 2.6.3 - Budgetary endowment for R&D, 1995-2002

|   | 1995      | 1996      | 1997      | 1998      | 1999      | 2000      | 2001      | 2002      |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| In current prices (10 <sup>3</sup> euros)     | 363.937,9 | 435.759,8 | 476.661,2 | 541.410,2 | 643.753,6 | 713.380,8 | 777.780,5 | 897.906,0 |
| As percentage of GDP                          | 0,45      | 0,50      | 0,51      | 0,54      | 0,60      | 0,63      | 0,64      | 0,69      |
| As percentage of portuguese government budget | 1,54      | 1,71      | 1,79      | 1,88      | 2,00      | 2,06      | 2,11      | 2,55      |

Source: OCES, MCES.

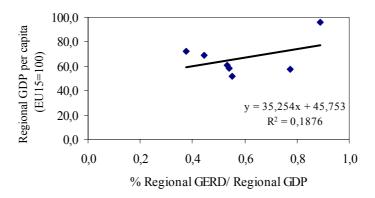
Table 2.6.4 - GERD as percentage of regional GDP and of the total regional GERD, by region and performing sector, 1995, 1997 and 1999

|              |                   | 19       | 995        | 19       | 997        | 19       | 199        |
|--------------|-------------------|----------|------------|----------|------------|----------|------------|
| NUTS II      | Performing sector | % of GDP | % of Total | % of GDP | % of Total | % of GDP | % of Total |
|              | Business          | 0,09     | 23,70      | 0,10     | 23,96      | 0,16     | 29,71      |
|              | Government        | 0,04     | 9,44       | 0,03     | 8,21       | 0,04     | 7,25       |
| Norte        | Higher education  | 0,19     | 49,57      | 0,21     | 50,97      | 0,26     | 48,08      |
|              | PNP               | 0,07     | 17,29      | 0,07     | 16,87      | 0,08     | 14,95      |
| •            | TOTAL             | 0,38     | 100        | 0,41     | 100        | 0,53     | 100        |
|              | Business          | 0,18     | 30,29      | 0,14     | 20,94      | 0,19     | 23,98      |
|              | Government        | 0,02     | 3,62       | 0,02     | 3,57       | 0,05     | 5,90       |
| Centro       | Higher education  | 0,30     | 49,91      | 0,41     | 59,77      | 0,43     | 54,94      |
|              | PNP               | 0,10     | 16,19      | 0,11     | 15,72      | 0,12     | 15,18      |
|              | TOTAL             | 0,60     | 100        | 0,69     | 100        | 0,77     | 100        |
|              | Business          | 0,14     | 19,05      | 0,19     | 24,49      | 0,21     | 23,43      |
| Lisboa e     | Government        | 0,28     | 38,71      | 0,27     | 34,18      | 0,32     | 36,11      |
| Vale do Tejo | Higher education  | 0,20     | 27,96      | 0,23     | 29,68      | 0,28     | 31,63      |
| vale do Tejo | PNP               | 0,10     | 14,28      | 0,09     | 11,65      | 0,08     | 8,83       |
|              | TOTAL             | 0,73     | 100        | 0,78     | 100        | 0,89     | 100        |
|              | Business          | 0,06     | 19,33      | 0,05     | 12,39      | 0,04     | 6,65       |
|              | Government        | 0,05     | 15,35      | 0,09     | 20,91      | 0,09     | 17,60      |
| Alentejo     | Higher education  | 0,17     | 58,11      | 0,21     | 52,54      | 0,31     | 56,89      |
|              | PNP               | 0,02     | 7,20       | 0,06     | 14,16      | 0,10     | 18,86      |
|              | TOTAL             | 0,30     | 100        | 0,41     | 100        | 0,54     | 100        |
|              | Business          | 0,00     | 1,07       | 0,02     | 6,68       | 0,07     | 14,89      |
|              | Government        | 0,03     | 19,02      | 0,05     | 15,77      | 0,05     | 12,09      |
| Algarve      | Higher education  | 0,14     | 76,53      | 0,23     | 75,51      | 0,31     | 70,08      |
|              | PNP               | 0,01     | 3,39       | 0,01     | 2,04       | 0,01     | 2,94       |
|              | TOTAL             | 0,18     | 100        | 0,30     | 100        | 0,44     | 100        |
|              | Business          | 0,01     | 1,20       | 0,00     | 0,30       | 0,00     | 0,13       |
|              | Government        | 0,12     | 26,70      | 0,21     | 38,28      | 2,13     | 81,44      |
| Açores       | Higher education  | 0,27     | 59,84      | 0,27     | 48,28      | 0,40     | 15,23      |
|              | PNP               | 0,06     | 12,27      | 0,07     | 13,15      | 0,08     | 3,21       |
|              | TOTAL             | 0,45     | 100        | 0,55     | 100        | 2,62     | 100        |
|              | Business          | 0,01     | 2,88       | 0,00     | 0,00       | 0,06     | 15,25      |
|              | Government        | 0,32     | 62,83      | 0,29     | 67,60      | 0,23     | 62,12      |
| Madeira      | Higher education  | 0,07     | 13,27      | 0,08     | 19,08      | 0,06     | 15,52      |
|              | PNP               | 0,11     | 21,02      | 0,06     | 13,33      | 0,03     | 7,11       |
|              | TOTAL             | 0,52     | 100        | 0,43     | 100        | 0,38     | 100        |
| Portugal     | TOTAL             | 0,57     | -          | 0,62     | -          | 0,76     | -          |
| EU           | 1011111           | 1,80     | -          | 1,80     | -          | 1,86     |            |

Sources: Inquérito ao Potencial Científico e Tecnológico Nacional, OCES, MCES; own calculations

Note: GERD = Gross Expenditure on Research and Development

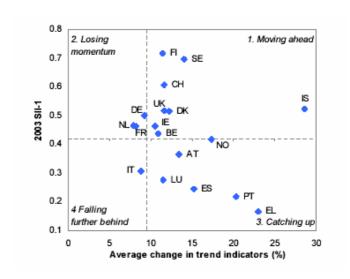
Figure 2.6.1- GERD as percentage of regional GDP and regional GDP per capita, 1999



Sources: Inquérito ao Potencial Científico e Tecnológico Nacional, OCES, MCES; EUROSTAT; own calculations .(for Açores we use the 1997 value as the value observed in 1997 is clearly an exception)

Notes: GERD = Gross Expenditure on Research and Development

Figure 2.6.2 - Overall trend in innovation indicators



Source: 2003 European Innovation Scoreboard, EC (2003).

Note: The 2003 EIS contains 19 main indicators, selected to summarize the main drivers and outputs of innovation. These indicators are divided into four groups: Human resources for innovation (5 indicators); the Creation of new knowledge (4 indicators); the Transmission and application of knowledge (3 indicators); and Innovation finance, output and markets (7 indicators). The current version rescales each indicator to vary between 0 and 1 and then takes a weighted average of these re-scaled values. Trends are calculated as the percentage change between the last year for which data are available and the average over the preceding three years, after a one-year lag. The aggregate trend per country is calculated as a weighted average of the trend values of the various indicators.

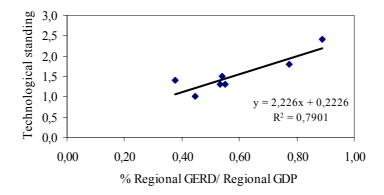
Table 2.6.5 - Regional technological standing

| NUTS II               | Technological standing |
|-----------------------|------------------------|
| Norte                 | 1.3                    |
| Centro                | 1.8                    |
| Lisboa e Vale do Tejo | 2.4                    |
| Alentejo              | 1.5                    |
| Algarve               | 1.0                    |
| Açores                | 1.3                    |
| Madeira               | 1.4                    |

Source: Own calculations

Notes: Based on the Revealed Regional Summary Innovation Index (RRSII) - European Commission (2002): European Innovation Scoreboard: Technical Paper n. ° 3, EU Regions, Brussels. <a href="ftp://ftpnl.cordis.lu/pub/trendchart/reports/documents/report3.pdf">ftp://ftpnl.cordis.lu/pub/trendchart/reports/documents/report3.pdf</a>. We rescale the RRSII, so that a region corresponding to the average of the innovative performance of the EU and Portugal gets 2.5 points.

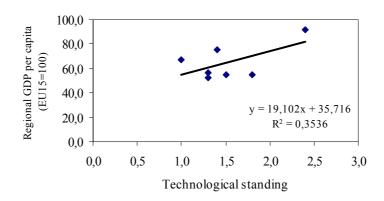
Figure 2.6.3 -GERD as percentage of regional GDP and technological standing, 1999



Sources: Inquérito ao Potencial Científico e Tecnológico Nacional, OCES, MCES; EUROSTAT; own calculations

Notes: GERD= Gross Expenditure on Research and Development (1999). The tecnological standing is based on the Revealed Regional Summary Innovation Index (RRSII) for 2001- European Commission (2002): European Innovation Scoreboard: Technical Paper n.º 3, EU Regions, Brussels. ftp://ftpnl.cordis.lu/pub/trendchart/reports/documents/report3.pdf; We rescale the RRSII, so that a region corresponding to the average of the innovative performance of the EU and Portugal gets 2.5 points

Figure 2.6.4 -Technological standing and GDP per capita (EU=100), 2001



Sources: Inquérito ao Potencial Científico e Tecnológico Nacional, OCES, MCES; EUROSTAT; own calculations

Notes: The technological standing is based on the Revealed Regional Summary Innovation Index (RRSII) - European Commission (2002):

European Innovation Scoreboard: Technical Paper n. 3, EU Regions, Brussels.

ftp://ftpnl.cordis.lu/pub/trendchart/reports/documents/report3.pdf; We rescale the RRSII, so that a region corresponding to the average of the innovative performance of the EU and Portugal gets 2.5 points

## 2.7 – Foreign direct investment

Policies to attract Foreign Direct Investment (FDI) are typically an important part of any regional development strategy. Portugal has come a long way in a few years. The 1986 EU accession, aided by strategic movements induced by single market prospects, represented a *tour de force* in several respects. The magnitude of FDI inflows was multiplied by a factor of 20 between 1986 and 1991. Inward investment increased during most of the 1990s, reflected by increased stock levels both in absolute terms and as a percentage of GDP (see figure 2.7.1). In spite of this evolution, since the beginning of the 1990s has Portugal witnessed the occurrence of disinvestments moves and a decline in the inward FDI growth rate, and there is a danger that this trend will continue and eventually worsen with the cut in EU funds, gradual catching-up of wages, and possible FDI diversion. Other difficulties regard institutional deficiencies, especially in terms of attracting and taking care of subsidiaries thereafter and the science and technology system.

The basic characteristics of this development were a sustained increase in the weight of FDI by EU countries (see table 2.7.1), a decline in the share of manufacturing and concomitant increase in FDI in services. The investment in manufacturing augmented considerably thanks to AutoEuropa (Ford/Volkswagen joint-venture), the largest ever FDI project in Portugal. Within manufacturing, more than half of the investment occurred in the sector metal

products, machinery and transport equipment. Chemicals, plastics, food and beverages were also important recipients of FDI.

Most studies claim that MNEs (Multinational Enterprises) had clearly a positive impact overall, raising productivity levels directly or through competition and demonstrating effects on domestic entrepreneurs. They contributed to investment, value and employment creation which otherwise may not have occurred. However, for the most recent period, the studies also note the over-specialisation of inward FDI, the predominance of rationalised types of subsidiaries with low value-added scope, the scarce *spill-over* potential and the reduced interaction between MNEs and local industry.

It is argued that this situation resulted partly from the weaknesses of the local industrial fabric and from inadequate government policies. The low value-added scope of most subsidiaries located in Portugal is partly related to a weak and fragmented national system of innovation and to a lack of links between industry and University. Regarding policy, the main criticisms refer to the lack of success at targeting, passivity, concession of important incentives without evidence of clear guidelines, apart from a focus on very large projects. State aid, through direct FDI incentives, infrastructure development and indirectly, through the stimulus it provided to domestic consumption, might have fostered FDI. However, the emphasis on Portugal as a cheap labour location did not prove effective. Instead, there was a weakening of the bargaining power of the Portuguese authorities *vis-à-vis* foreign investors.

In the beginning of this century, Portugal rethought her approach towards FDI. The new approach highlights country excellence in science & technology, culture, and business practices. It emphasises Portuguese advantages: strategic access to markets, proactive investment reforms, cost-competitive, qualified and flexible workforce, strategic commitment to education and science, excellent environment to live and work, infrastructure and FDI record of accomplishment. The Portuguese track record in automotive, chemicals, electric and electronics, ICT, life sciences, moulds and tourism evidences a clear commitment to high-value added industries/activities.

API, the new Portuguese Investment Agency was created in November 2002, with the mission to promote large-scale investment in Portugal. This translates into attracting more projects (from new and existing investors), but also higher value-adding initiatives. To promote the competitiveness and the productivity of the Portuguese economy, through the support of investments with a significant impact on the national GVA (Gross Value Added),

the Government elaborated a package of measures, whose general philosophy takes the State as risk partner and intends to reward effective performance and fiscal transparency. Finally, an investment code is being created in Portugal, with the aim to review, simplify and coordinates the normative support for productive investment.

The economic development of the economy of the country as such has been the primary goal of FDI policy, given the general low level of development and the overall need for modernisation and for investment. Concerns about regional imbalances ranked much lower. Overall, the territorial concepts in the definition and formulation of the Portuguese inward investment policy refer to delimitation of areas eligible for financial support and modulation of assistance rates; and measures on the basis of specific territorial criteria. The regional aspects refer mainly to bonus for investments located in regions with PPP (Purchasing Power Parity) below the national average. Nowadays, the large FDI projects are negotiated with API on a case-by-case basis, and the 'Investment Contract' includes all the concessions from the state and from local governments, avoiding unclear situations and duplication of benefits. The policy of incentives for FDI is the same applied to any other large project: the POE allows investments project to accumulate additional points on a regional basis, to the benefit of less developed regions.

Although complete recent data on the regional location of inward investment in Portugal are not available, the available information suggests that FDI inflows have tended to go disproportionately to the economically stronger regions<sup>14</sup>. Based on a database of foreign investments in Europe since 1997, table 2.7.2 shows that Lisboa e Vale do Tejo, Norte and Centro are the main beneficiaries of projects: Lisboa e Vale do Tejo accounted for 36 per cent of the total number of projects between 2001 and 2002, Norte for 33 per cent, and Centro for 22 per cent. Within these regions, investments are mainly located near the coast<sup>15</sup>. These results are not surprising, considering that service agglomeration economies, followed by industry-level economies, seem to have the strongest pull effect on new foreign plant investment in Portugal.

<sup>&</sup>lt;sup>14</sup> Data for Ireland, Spain, Italy and Germany, show that investment was concentrated in a limited number of regions, the most developed ones (EC, 2003).

Guimarães *et al.* (2000) analysis for the period 1985-1992 also point to a concentration of new foreign investments on the more urban coastal part of the country, especially around the largest cities of Lisboa and Porto. To our knowledge, Guimarães *et al.* (2000) is the only previous location analysis of plant openings by foreign-owned companies in Portugal. The study focuses 758 newly created establishments that were totally or partially participated in by foreign capital, using annual data (Quadros de Pessoal) collected by the Ministry of Employment and Social Security from 1985 to 1992.

Moreover, distance to the major Portuguese cities, Porto and Lisboa, apparently deters new plant location. Note that regional GDP per capita *per si* tends to have no influence on regional FDI because it is unlikely that the market served by the foreign firm coincides with the boundaries of the regions considered. Moreover, wages may well be a determinant of the decision to locate in Portugal as opposed to other EC countries, but not a part of the decision to pick a specific location.

In more remote areas, we do find some investments. Large-scale public infrastructure investment in Portugal throughout the 1990s may have improved accessibilities, attracting private investment to more remote regions, hence dispersing economic activities. However, most of these subsidiaries are of 'enclave-type', export-platforms, with few potential of *spill-over* and interaction with local industry<sup>16</sup>.

Based on the above-referred data, confirmed by means of interviews with policy makers and regional representatives, the regional impact of FDI policy resumes to the reinforcement of the concentration of activities on the coast, namely in the Norte, Centro and Lisboa e Vale do Tejo. The growth of medium/high tech manufacturing investments and of the service sector in the total of FDI, contributed to the concentration of the activities in Urban/Metropolitan areas. In the future, the focus on high-value added activities is imperative, and may well reinforce the concentration of activities where critical mass already exists. The relative importance of service agglomeration indicates that developed urban areas will continue to attract most FDI.

Besides the economic cohesion problem, there is the challenge to attract FDI concomittantly with the cut in the EU funds, gradual catching-up of wages, and possibly FDI diversion. At the regional level, Portugal faces a particular dilemma where there is a potential trade-off between wanting investment to go towards laggard regions to provide a stimulus and help them to catch up, and the fact that investment tends naturally to be attracted to the regions which are most dynamic. Inward investment policy alone is not sufficient to prevent this. If the government insists in trying to persuade multinationals to locate in less favourable regions, it runs the risk to discourage the MNE from investing in Portugal altogether. The development of the most backward regions will go hand-in-hand with its degree of attraction as location for inward foreign investment. Wages may well not be a part of the decision to

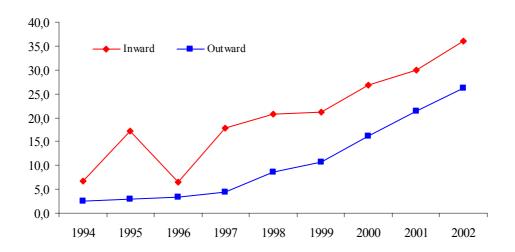
<sup>&</sup>lt;sup>16</sup> Farinha and Mata (1996), Simões (1992) and Tavares (2001) provide an exhaustive examination of MNEs' activities in Portugal.

select a specific location. Instead, a range of high-level services may help overcome the distance and other transaction barriers facing foreign firms in more remote areas. Public policy initiatives to promote infrastructures in general and railway infrastructure in particular may reduce travel time and attract private investment to new localities, helping to spread economic growth and development and hence to contribute to social cohesion. Overall, from a researcher's point of view, FDI has a positive impact on general economic growth.

Box 2.7.1 - Global assessment of policy impact

| National policy maker   | Positive   |
|-------------------------|--|
| perspective             |  |
| Regional representative | Neutral  |
| perspective             |  |
| Researcher perspective  | IDI needs to have regional policy concerns in consideration; |
|                         | The emphasis on high value-added industries might well       |
|                         | promote divergence.  |

Figure 2.7.1 - FDI stocks as percentage of GDP, 1994-2002



Source: UNCTAD (2003) for 2000-2002; UNCTAD (2002) for 1995; UNCTAD (2000) for 1998; UNCTAD (1999) for 1997; UNCTAD (1998) for 1996; UNCTAD (1996) for 1994

Note: FDI = Foreign Direct Investment

Table 2.7.1 - FDI inflows by home country as percentage of total, 1996-1998

| FDI origin countries | %    |
|----------------------|------|
| United Kingdom       | 25,0 |
| France               | 10,6 |
| Spain                | 10,3 |
| Germany              | 5,4  |
| USA                  | 5,7  |
| Sweden               | 3,8  |
| Switzerland          | 8,7  |
| Belgium /Luxemburg   | 10,5 |
| Holland              | 7,9  |
| Others               | 12,1 |

Source: ICEP

Note: FDI = Foreign Direct Investment

Table 2.7.2 - Regional distributon of inward FDI projects, 2001 and 2002

|                       |       |       | 2001-2002 |
|-----------------------|-------|-------|-----------|
| NUTS II               | 2001  | 2002  | % total   |
| Norte                 | 10,00 | 9,00  | 32,76     |
| Centro                | 3,00  | 10,00 | 22,41     |
| Lisboa e Vale do Tejo | 10,00 | 11,00 | 36,21     |
| Alentejo              | 1,00  | 2,00  | 5,17      |
| Algarve               | 2,00  | 0,00  | 3,45      |
| Açores                | 0,00  | 0,00  | 0,00      |
| Nº projects           | 26,00 | 32,00 | 100,00    |

Source: European Investment Monitor database on inward foreign direct investments

Notes: the data have been compiled by Ernst & Young, absolute values (number of projects), all publicised cross-border foreign investment into and within Europe - excluding retail or infrastructure projects or cross-border capital flows linked to mergers, acquisitions and joint ventures (except where these result in stand-alone investment projects).

#### 3 - Regional convergence in Portugal

## 3.1 - Convergence among Portuguese regions

Over the last decades, the Portuguese economy exhibited an outstanding growth performance. Between 1980 and 2000, Portugal ranked fourth among 25 OECD (Organisation for Economic Co-operation and Development) countries in terms of growth of per capita GDP, and third in terms of growth of GDP per worker. This period of fast economic growth allowed the country to consistently reduce its income gap vis-à-vis the EU average. Figure 3.1.1 shows the convergence path of the four cohesion countries with respect to the EU-15 average. The figure suggests that the speed of convergence has not been uniform over the time<sup>17</sup>. The same is true for Greece and Spain, but not for Ireland. GDP per capita depends on demographic factors, labour participation and productivity. Evidence at the country level indicates that Portugal, when compared to other cohesion EU countries, exhibits a high employment rate and a very low productivity level.

The question is whether the Portuguese regions equally shared in growth. To address this question, table 3.1.1 displays the GDP per capita in the Portuguese NUTS II regions, in per cent of the country average and of the EU average<sup>18</sup>. The figures indicate that, between 1995 and 2000, among all Portuguese regions, only Madeira has succeeded in approaching the country level (Açores also improved its position, but only slightly). The regions Norte, Centro, Alentejo Algarve and Lisboa e Vale do Tejo have diverged from the country average.

Because the period under analysis is very short, the data presented in Table 3.1.1 are sensible to asymmetries in the incidence of the business cycle. To overcome this, we focus on a longer time horiozon. Table 3.1.2 compares, in terms of per capita GVA, the relative position of the different Portuguese regions vis-à-vis the country average in 1990 and 2001<sup>19</sup>.

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<sup>&</sup>lt;sup>17</sup> A more profound investigation using the stochastic approach to convergence (see, for example, Carlino, G. and Mills, L., 1993), allowing for structural breaks in the speed of convergence and with an appropriate representation of the business cycle, suggests that the speed of convergence did indeed decline with the oil shock, but no other structural break is identified afterwards, including at the time of EC accession (see Freitas, 2002).

<sup>&</sup>lt;sup>18</sup> Figures on regional output are being subject to successive revisions and data are not necessarily consistent across tables. For this reason, we try to identify in each table the specific database being used. In the latest DGRegio database, data from GDP and GVA appear to reveal some inconsistencies.

<sup>&</sup>lt;sup>19</sup> Data before 1990 are not shown due to lack of reliability.

Comparing the levels of 1990 and 2001, we observe that Norte, Lisboa e Vale do Tejo and Algarve have approached the country average, while Centro, Alentejo, Açores and Madeira have diverged. Taken together, the coefficient of variation of per capita GVA in Figure 3.1.2 points to a slight divergence.

To assess the impact of policy actions on competitiveness, one should abstract from demographic effects. From a policy point of view, demography is rather exogenous. Labour productivity and the employment rate are not. To assess the overall policy impact of the policy, irrespective of whether the underlying mechanism is labour productivity or the reduction of the unemployment rate, we focus on the GVA per working age person. This variable measures what the region gets out of its human resources of working age, independently of whether they are employed, unemployed or out of the labour force.

In columns (2) and (3) of table 3.1.2, the relative per capita GVA is broken down into a demographic component (working age population divided by the total population) and a policy-induced component (GVA per working age person). In columns (4) and (5) the relative GVA per working age person is broken down into GVA per worker and the employment rate. The figures reveal that in 2001 the most developed region, Lisboa e Vale do Tejo, not only enjoyed the highest productivity level (GVA per worker) but also the highest and the most favourable demographic structure. In contrast, Açores suffered from the lowest productivity level, the lowest employment rate and the second-least favourable demographic structure.

To assess dynamics, figure 3.1.3 displays the information depicted in columns (2) and (3) of table 3.1.2 in terms of changes from 1990 to 2001. The y-axis measures the difference between the regional growth rates of GVA per working age person and the country average. The horizontal axis measures the difference between the regional demographic trend and the country average. The dashed line shows the combinations of demographic trends and productivity changes that would allow per capita GVA to grow in tune with the country average. The figure defines four different regions, according to the relative performance of regions with respect to the two variables, as compared to the country average.

As shown in figure 3.1.3, Algarve exhibited quite favourable dynamics, both in terms of demography and productivity, as measured by GVA per working age person. Lisboa e Vale do Tejo experienced an unfavourable demographic trend which, coupled with a neutral

productivity change, implied a reversion towards the country average. Madeira, Açores and Centro enjoyed favourable demographics but their productivity levels diverged from the country average, especially in Açores. Demography in Alentejo and Centro has evolved proportionally to the country average, so that GVA per capita in these regions was mostly determined by changes in productivity. Norte experienced a favourable productivity. Alentejo did not.

Figure 3.1.2 depicts the coefficient of variation of factors (1), (4), (5) and (2) in 1990, 1995 and 2001. The figure suggests that both demography and the employment rate have pushed the GVA per capita towards convergence, so that differences in per capita GVA are mostly accounted for by differences in GVA per worker<sup>20</sup>.

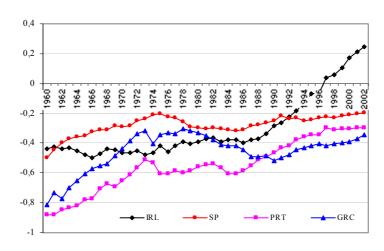


Figure 3.1.1 - Per capita GDP, 1960-2002

Source: AMECO

Notes: GDP is in PPS; EU15 = 0.0

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<sup>&</sup>lt;sup>20</sup> Breaking down differences in per capita GDP among Portuguese NUTS II and NUTS III regions into different components such as labour average productivity and demographic effect, Ramos and Rodrigues (2001) conclude that regional disparities are only partially accounted for by differences in regional production efficiency (labour productivity).

Table 3.1.1 - GDP per capita of Portuguese regions, 1995 and 2000

|                       | (EU-15 = 100) |      | (PT = | 1 00) |
|-----------------------|---------------|------|-------|-------|
| NUTS II               | 1995          | 2000 | 1995  | 2000  |
| Norte                 | 59,0          | 56,0 | 85,0  | 82,0  |
| Centro                | 57,0          | 54,2 | 81,0  | 77,0  |
| Lisboa e Vale do Tejo | 90,7          | 90,9 | 132,0 | 135,0 |
| Alentejo              | 59,2          | 54,5 | 84,0  | 79,0  |
| Algarve               | 71,7          | 66,0 | 96,0  | 91,0  |
| Açores                | 51,5          | 51,7 | 71,0  | 72,0  |
| Madeira               | 66,2          | 74,4 | 90,0  | 99,0  |

Source: Eurostat, June 2003.

Note: Lisboa e Vale do Tejo is no longer an Objective 1 region.

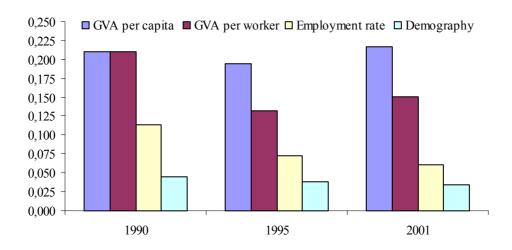
Table 3.1.2 - Cohesion accounting, 1990 and 2001

|                          |              | Of which:         |   |                                  |                   |                 |
|--------------------------|--------------|-------------------|---|----------------------------------|-------------------|-----------------|
|                          |              |                   | Working Age                                     |                                  | Of                | which:          |
|                          |              | Per capita<br>GVA | Population<br>divided by<br>Total<br>Population | GVA per<br>working age<br>person | GVA per<br>worker | Employment rate |
| NUTS II                  | Years        | (1)               | (2)   | (3)                              | (4)               | (5)             |
| NUISII                   |              |                   | 1.01  | 0.70                             | 0.00              | 0.00            |
| Norte                    | 1990         | 0,80              | 1,01  | 0,79                             | 0,80              | 0,99            |
|                          | 2001         | 0,84              | 1,01  | 0,84                             | 0,86              | 0,98            |
|                          | 1990         | 0,82              | 0,96  | 0,86                             | 0,79              | 1,08            |
| Centro                   | 2001         | 0,78              | 0,98  | 0,80                             | 0,81              | 1,00            |
| Lisboa e Vale<br>do Tejo | 1990<br>2001 | 1,37<br>1,35      | 1,04<br>1,02                                    | 1,32<br>1,32                     | 1,32<br>1,25      | 1,00<br>1,05    |
| Alentejo                 | 1990<br>2001 | 0,80<br>0,75      | 0,92<br>0,92                                    | 0,86<br>0,82                     | 1,00<br>0,89      | 0,87<br>0,92    |
| Algarve                  | 1990<br>2001 | 0,86<br>0,95      | 0,97<br>0,99                                    | 0,89<br>0,95                     | 0,79<br>1,00      | 1,13<br>0,96    |
| Acores                   | 1990<br>2001 | 0,79<br>0,71      | 0,92<br>0,96                                    | 0,87<br>0,74                     | 1,01<br>0,85      | 0,85<br>0,86    |
| Madeira                  | 1990<br>2001 | 0,96<br>0,94      | 0,96<br>1,00                                    | 1,00<br>0,94                     | 1,19<br>1,00      | 0,84<br>0,94    |

Source: EC, DGREGIO, June 2003

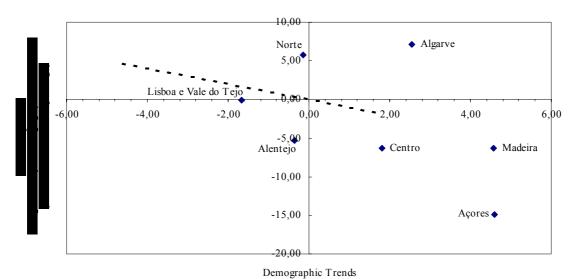
Notes: (1)=(2)\*(3); (3)=(4)\*(5); Portugal = 1.00

Figure 3.1.2 - Coefficients of variation, 1990, 1995 and 2001



Source: Own calculations based on data from table 3.1.2

Figure 3.1.3 - Productivity and demographic trends, 1990-2001



Change in the ratio "Working age Population to Total Population" 1990-2001 (diffs relative to the country average)

Source: Own calculations based on data from table 3.1.2

#### 3.2 - Regional profiles

The data provided in this section draws on secondary data as well as on primary qualitative data collected through interviews with policy makers, regional leaders and academics. The interviews were based on a pre-defined questionnaire on the impact of national/regional policies on the development path of each region in the recent past. In addition, open-ended exploratory questions allowed for the collection of comprehensive data on regional specificities that were not predicted at the outset.

Hereafter, all seven Portuguese regions are characterised in terms of their evolution over the decade 1991-2001, their specialisation pattern and the evolution of regional indicators. Then, a SWOT analysis evidences strengths, weaknesses, opportunities and threats for the development of the regions. Finally, we present interview evidence on the assessment by regional representatives of the domestic policies' impact on regional cohesion and contrast it with a researcher's perspective.

## 3.2.1 - Regional profile: Norte

The Norte is the largest Portuguese NUTS II region in terms of population and population employed. It is thus of major concern to see that per capita GDP and GVA per head of this region have persistently been below the national and the European average, placing itself amongst the poorest regions Europe-wide<sup>21</sup>. Moreover, table 3.2.1.1 shows that, between 1995 and 2001, the Norte has worsened its GDP per capita level with reference both to the EU average and to the national average. Nevertheless, in table 3.1.2 above (see subsection 3.1), we observed that in terms of per capita GVA, Norte has approached the country average over 1990-2001. The development is characterised by a favourable productivity trend coupled with a neutral demographic change (see figure 3.1.3, subsection 3.1).

<sup>&</sup>lt;sup>21</sup> Figures on regional output are being subject to successive revisions and data are not necessarily consistent across tables. For this reason, we try to identify in each table the specific database being used. In the latest DGRegio (Regional Policy Directorate-General) database, data from GDP and GVA appear to reveal some inconsistencies.

The Norte region has been traditionally industrial. Accordingly to the 2001 Census, industry accounts for 43 per cent of total employment in the region, the highest value in the country and amongst the highest shares Europe-wide. The region specialises in traditional industry (see Box 3.2.1.1), and the restructuring process over the last decades reinforced this pattern.

Box 3.2.1.1 – Chief industrial specialisation

| Textile/apparel, leather/footwear;          | Beverages;          |
|---|---------------------|
| Electric machinery and products;            | Transport material; |
| Metal-working machinery and metal products; | Commerce.           |
| Wood/furniture, cork.                       |                     |

In a context where agriculture based on 'minifondia' (small holdings) is dominant and where entrepreneurial spirit is lacking, there has been no room for productivity increases and farming employment has been clearly declining. The decline in the share of agricultural employment in the total employment has probably contributed to the increase in the overall level of productivity.

Behind the overall indicators, one must add an intra-regional phenomenon characterised by significant intra-regional divergence. The Norte coast is the most developed part of the Norte region, with the metropolitan city of Porto accounting for about 98 per cent of the industry in the Norte region, and it displays a more diversified structure. The case study of Norte-Portugal points to a very high concentration of investments in transport infrastructure in the area of larger Porto, to the detriment of internal areas of the hinterland. Agriculture is still an important activity, especially in the internal mountain areas and along the Douro Valley. Cow's milk and wine, horticultural and fruit production, olive oil, sheep and goats are the most significant products.

In the last decade, this region enjoyed faster growth of GVA per capita than the country on average. According to recent DG REGIO data, by the year 2000 this region reached the country average in terms of GVA per capita. These figures may not be, however, entirely reliable, as the path of GDP per capita points towards divergence from 1990 to 2001.

The fast growth of GVA per capita was largely accounted for by the growth of GVA per worker, which grew from 80 per cent of the country average to 86 per cent.

The fall in the share of (low productivity) agricultural unemployment explains part of this development.

In aggregate terms, the employment rate has remained close to the country average that is remarkably high by EU standards.

The unemployment rate has remained low, albeit fluctuating along the business cycle, and in spite of the structural changes and restructuring which dictated the closing down of many firms in traditional industries.

The percentage of employment in agriculture declined considerably, although it is still high when compared to the EU average. By the end of the century, agricultural employment was still above 10 per cent, pointing to the continuation of the structural adjustment process in the coming years. Rural development policy hence deserves careful attention in this setting.

Considering the strong industrial character of the Norte, it is relatively surprising to verify that the technological standing of the region (measured by means of the re-scaled Revealed Regional Summary Innovation Index) is very low (1.3)<sup>22</sup>. Regarding technological standing, the Norte pairs with Açores, and Algarve is the only region with lower technological standing. The low value of 1.3 for Norte's technological standing highlights that the Norte has clear limitations as far as dynamic competitive factors are concerned: the region continues to lack technical specialists with technical-based formal education; during the CSF

<sup>&</sup>lt;sup>22</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the RRSII, so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

I and II, the investments supported by EU funding reinforced the specialisation pattern of this region, with large-scale investments directed towards industry and towards the existing knowledge base: textiles/shoes, wood/furniture, and transport material; commerce (coastal area) and tourism (interior); in spite of some signs of transition and modernisation, the industrial firms seem to be moving slowly in given the large proportion of non-innovative firms and the generous financial support offered. These features are well reflected in the following SWOT analysis.

Box 3.2.1.3 - SWOT analysis

| Strengths                                      | Weaknesses  |  |  |
|--|---|--|--|
| Tourism: rich historical and architectural     | Low technological standing;   |  |  |
| heritage;                                      | Low intra-regional cooperation;   |  |  |
| Transport infrastructures (harbour, airport);  | Workforce with low education level and low                                |  |  |
| Strong urban network on the coast;             | factor mobility;  |  |  |
| Hosts the second largest city in Portugal:     | Very low productivity in agriculture                                      |  |  |
| Porto;   | suggesting that a large fraction of it may be for subsistence;            |  |  |
| Interaction with the northern border region of |   |  |  |
| Spain: Galicia.                                | Insufficiencies in the urban transport system,                            |  |  |
|  | especially in Porto, and traffic problems.                                |  |  |
| Opportunities                                  | Threats   |  |  |
| Development of healthcare industries;          | EU enlargement and world trade  |  |  |
| Domestic market-oriented business services;    | liberalisation imply high adjustment costs in                             |  |  |
| Rural development.                             | the traditional export sectors, namely for the textile and shoes sectors. |  |  |

As far as the impact of domestic policies on regional cohesion is concerned, table 2.2.5 (see section 2.2) shows that in relation to regional GDP, public expenditures and transfers from central government to the Norte region are below the country average. Nevertheless, the region received considerable funding under CSF I and II. Table 3.2.1.3 shows relevant figures on structural funds and cohesion fund financing for 2000-2006.

According to the regional representatives, national policies overall had a highly positive impact on regional sustainable development and cohesion (5 on a 5-point scale). Table 3.2.1.4 indicates the quantitative evaluation of domestic policies from a regional representative perspective.

According to the interviewees, public expenditures on training and infrastructures in particular and public transfers from the government had a highly positive impact on regional competitive dimensions and on raising families' income.

Along with macroeconomic developments, employment policy and S&T were considered positive for cohesion. While employment policy, through the recycling of competencies and financial support for families, fostered intra-regional cohesion (these problems are of major concern in lower income regions), S&T policy worked to the benefit of the most developed areas within the region. The present regional development plan, expressed in the NORTINOV (Regional Programme of Innovative Actions of Region Norte) programme coordinated by the CCRN moved from a generalist to a more selective strategy. Automobile, automation, robotics, communication and information technologies are the industries under focus. These developments indicate clear efforts to promote structural change based on the development of high value-added selected industrial clusters, maximising the potential of areas in which there is already a knowledge-base.

The interviewees were more critical about the impact of state aids and foreign direct investment policy, given that, despite some signs of transition and modernisation, the industrial firms seem to be moving slowly considering the high percentage of non-innovative firms and the generous financial support offered. Moreover, under the CSF I and II, the state aid to business investments in the Litoral (Porto coastal area in particular) also accounted for the largest share of the total business state aid attributed in the region, contributing to the concentration of investments in the coastal area. In contrast, several districts of the interior Norte show considerable positive investment dynamics under the CSF III (e.g. Tourism, Territorial Improvement Programmes).

Foreign Direct Investment is not considered to have had a significant impact on regional cohesion. Moreover, it has contributed to intra-regional divergence, with larger investments located at central and larger poles. One may also predict low interaction between the local fabric and MNEs, based on the opinion that MNEs establish in distinct industries, hence reducing *spill-over* effects.

As referred above, the Norte is characterised by significant intra-regional divergence. FDI, S&T and state aids seem to have worked to the detriment of internal areas of the hinterland. In these areas agriculture is still an important activity. Income support is very low. Opportunities for the rural areas will occur mainly within the context of the rural development policy (with progressive CAP reform). One cannot ignore that the receptivity to this type of policy represents a very strong asset, mainly because a major part of rural areas still preserve a major capacity to fix people and activities. In the Douro-valley with its large potential in terms of image, resource-landscape and heritage or in rural areas where rural tourism is already developed and organised, the challenge is not one of starting from zero but, on the contrary, to strengthen a tendency whose effects already start to be perceived by the population. It is these areas of the Norte region which benefited most from the LEADER initiative by developing the component of rural development, by improving the endowment with social and cultural facilities, etc. In territories where desertification progressed irreversibly, the environmental component of CAP will become a key factor enabling rural income to reach a threshold essential for fixing people.

As reflected in table 3.2.1.5, with the exception of business support and tourism, domestic policies overall are considered to have had a strongly positive impact on a variety of areas, from social to economic dimensions.

In order to improve policy efficiency, regional representatives call for greater involvement of private firms, associations and institutions in the design and implementation of regional policy. Increasing efficiency in the allocation of resources and changes in governance are suggested to improve the policies' impact. The regional representative argues that decentralization to regional and local entities has been minimal. There is higher coordination between regional and local levels, but communication with national programme leaders is difficult.

In spite of not being the primary aim of this research, the fieldwork did provide some insights about the impact of prominent European Community policies on regional cohesion. The relevance of structural funds was clearly highlighted. (5 on a 5-point scale). While environmental policy had a positive impact, fisheries and agricultural policies had a negative to neutral impact on regional cohesion. Agriculture programmes were not able to eliminate the problems inherited from the past: very small holdings, auto-sufficiency agriculture and

low productivity; yet, these measures influenced the quality of life and the environment positively.

Table 3.2.1.1 - Evolution of regional indicators, 1991-2001

|   |         | Ye      | ear     |         |
|---|---------|---------|---------|---------|
| Variable  | 1991    | 1995    | 2000    | 2001    |
| (1) GDP per head (PPS) EU-15 = 100  | -       | 59,0    | 56,0    | 56,8    |
| (2) GDP per head (PPS) Portugal = 100                                     | 88,0    | 85,0    | 82,0    | 84,0    |
| (3) Population (thousands)  | 3.514,2 | 3.558,0 | 3.638,0 | 3.653,0 |
| (4) % Population < 15 plus % Population > 64                              | 33,0    | 31,7    | 31,5    | 31,7    |
| (5) Working age population  | 67,0    | 68,3    | 68,5    | 68,3    |
| (6) Employment rate <sup>1</sup>  | 69,0    | 64,5    | 69,2    | 70,2    |
| (7) Unemployment rate <sup>2</sup>  | 2,7     | 6,3     | 4,1     | 3,7     |
| (8) GVA per worker (1995 - $10^3$ euros)                                  | 12,8    | 13,8    | 15,1    | 15,2    |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 4,0     | 4,7     | 4,8     | 4,3     |
| (10) Employment on agricultural sector/total employment                   | 17,1    | 13,7    | 11,1    | 10,6    |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003

Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the labour force)\*100; <sup>1</sup> is defined as the percentage of working-age people who have jobs; <sup>2</sup> is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.1.2 - Transfers from Central Government, 1999-2001

| _ | Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|---|------------------------------------|--|----------------|-------|
|   | Municipal Cohesion Fund (FCM)      | 31,3   | 33,0           | 1,6   |
|   | Municipalities' General Fund (FGM) | 91,9   | 79,0           | 0,0   |
|   | Total                              | 123,2  | 81,0           | 0,8   |

Note: Scale for region i =  $5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is the

distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.1.3 - European regional policy, 2000-2006

|   | Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|---|------------------|--|----------------|
| = | Structural Funds | 0,74   | 85,39          |
|   | Cohesion Funds   | n.a.d.                                       | n.a.d.         |
|   | Total            | -  | -              |

Note: n.a.d. = no available data

Table 3.2.1.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 4               |
| Public expenditures               | 5               |
| Transfers from Central Government | 5               |
| State aid                         | 3               |
| Employment and social policies    | 4               |
| Science and Technology            | 4               |
| Foreign direct investment         | 3               |

Note: \* 1- Highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Table 3.2.1.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral |
|--|-------------------|-------------------|---------|
| Transport and communications           | ✓                 |                   |         |
| Business support and local development |                   | $\checkmark$      |         |
| Tourism                                |                   | $\checkmark$      |         |
| Cultural and recreation services       | $\checkmark$      |                   |         |
| Agriculture, forestry and fishing      | $\checkmark$      |                   |         |
| Energy and water supply                | $\checkmark$      |                   |         |
| Environment                            | $\checkmark$      |                   |         |
| R&D                                    | $\checkmark$      |                   |         |
| Health                                 | $\checkmark$      |                   |         |
| Education                              | $\checkmark$      |                   |         |
| Housing                                | ✓                 |                   |         |

Impact of support from EU funds on ex-ante divergence from national average: 5

# 3.2.2 - Regional profile: Centro

The Centro is the third largest Portuguese NUTS II region in terms of population and population employed. It is thus significant that the per capita GDP and GVA per head of this region are persistently below the national and European average. Table 3.2.2.1 shows that, between 1995 and 2001, Centro has worsened its GDP per capita levels with reference both to the EU average and to the national average<sup>23</sup>.

Table 3.1.2 above (see subsection 3.1) compared, in terms of per capita GVA, the relative position of the different Portuguese regions vis-à-vis the country average in 1990 and in 2001<sup>24</sup>. Comparing the levels of 1990 and 2001 in each region, we observed that Centro has diverged from the country average. As shown in figure 3.1.3 (see subsection 3.1), Centro enjoyed favourable demographics but its productivity level diverged from the country average.

According to the 2001 Census, industry accounts for 32 per cent of the region's total employment, the second-highest value in the country. Traditional industries such as footwear manufacturing and wood/cork still account for a significant share of employment in the region. Nevertheless, the Centro has witnessed the development of a modernised and technology-based sector composed of ceramics and glass, and new areas in metal working machinery and products, electronics and transport material. Within industry, the funds reinforced the regional specialisation pattern, with large-scale investments directed towards the existing knowledge-base in textiles and leather/footwear. Under the CSF III the area of specialisation, namely the electronics and automotive sectors, receive more funding.

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Figures on regional output are being subject to successive revisions and data are not necessarily consistent across tables. For this reason, we try to identify in each table the specific database being used. In the latest DGRegio database, data from GDP and GVA appear to reveal some inconsistencies.

<sup>&</sup>lt;sup>24</sup> Data before 1990 is not shown due to lack of reliability.

Box 3.2.2.1 – Chief industrial specialisation

Textiles/apparel, leather/footwear;

Electric machinery and products;

Metal-working machinery and metal products;

Ceramics and glass.

Transport material;

Chemicals, rubber and plastics;

Natural resources (wood and cork).

Agriculture still accounts for over 16.7 per cent of total employment. It is still an important activity. Cow's milk and wine, horticultural and fruit production are the most significant products. Agriculture in this region suffers from the same problems as the interior Norte. Within a context where agriculture based on 'minifondia' (small holdings) is dominant and where entrepreneurial spirit is lacking, there has been no room for productivity increases and farming employment has been clearly declining. Direct income support is very low.

As in the Norte, the opportunities for the rural areas will emerge mainly within the rural development policy. In territories where desertification progressed irreversibly, the environmental component of CAP will also become a key factor facilitating that rural income reaches a threshold essential for fixing people in the region.

*Box 3.2.2.2 – Characterisation of the region's evolution over the last decade* 

In the last decade, despite a fast convergence in terms of GVA per worker (partly explained by a significant fall in agricultural employment) this region did not converge to the country average in terms of GDP per capita. The main factor explaining this lack of convergence was a large fall in the employment rate. The initial level of employment had, however, been very high.

The Centro undergoes a process of industrial restructuring. Industry witnesses the closing down of hundreds of firms in traditional industries and the development of a modernised technology-based group of industries: ceramics and glass, electronics, metal working machinery and products, transport material.

By the year 2001, GDP per worker in this region was the lowest in Portugal although the data suggest that there is large scope for further decline in agricultural employment the industrial sector's ability to absorb it is questionable. Probably a significant part of the adjustment process will be driven by demography, given that most workers in agriculture are aged.

During the last decade, the unemployment rate remained low, the second lowest among

Portuguese regions. At the same time, the percentage of employment in the agricultural sector has fallen considerably, although it still high in a European Union context.

In spite of its ranking below the European average, the Centro is among the top two in terms of technological standing in the country (RRSII equals 1.8)<sup>25</sup>. It is characterised by the development of human resources and of a modernised and technology-based sector composed of ceramics and glass, new areas in metals and electronics and transport material. These characteristics are evidenced in the following SWOT analysis.

Box 3.2.2.3 - SWOT analysis

| Strengths                                    | Weaknesses                                   |
|--|--|
| Quality of natural resources (geological     | Significant imbalances between supply and    |
| resources, water, forest and landscape);     | demand in terms of qualifications;           |
| Historical and architectural heritage;       | Low interaction high Education system and    |
| Good accessibilities: harbour, roads - IP5   | business;                                    |
| (connection between Aveiro - Viseu - Spain); | Lack of a regional R&D network;              |
| Foreign direct investment;                   | Weak urban networks;                         |
| Key role in national territory management;   | Lack of intra-regional cooperation;          |
| Innovation in agricultural production        | Demographic dynamics: depopulation of the    |
| (tobacco, bio-agriculture, and so on);       | oriental (interior) region;                  |
| Some quality tradition in animal and         | Scarce dimension of the regional market;     |
| agricultural products;                       | Weak financial and managerial resources of   |
| Geographic location: between two dynamic     | traditional companies;                       |
| regions (Lisboa e Vale do Tejo and Norte).   | Undeveloped supply of business services      |
|  | High employment in agriculture.              |
| Opportunities                                | Threats                                      |
| Taking the internalisation process further:  | Loss of competitive advantages based on cost |

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<sup>&</sup>lt;sup>25</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the RRSII, so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

stronger presence in the market;

Adding value to traditional products: add engineering, art and design;

Using the technological infrastructure to provide international services;

Developing logistics services;

Developing business services for the national market;

Telecommunications cluster: Aveiro (PT Inovação and University specialization);

Developing biological production and clean energy (using forest biomass to produce energy).

factor: closure of traditional industries

Closure of enterprises without access to new energies;

Difficulty of supplying enterprises with forest materials;

Compliance with environmental legislation could substantially aggravate costs in the short run;

Closure of traditional enterprises means unemployment;

Reduction in agricultural employment may lead to an excess supply of unskilled workers, who may not be easily absorbed in the context of economic adaptations following EU enlargement.

The Centro has received a significantly high amount of public expenditures (tables 2.2.4 and 2.2.5, see section 2.2), public transfers (tables 2.3.1.1 and 2.3.1.2, see section 2.3, and table 3.2.2.2 below), and business state aid under the CSFs. These budgets are relatively positive when analysing per capita values at a country level. Furthermore, its share out of the CSFs total has increased over the CSF I, II and III, mainly at the expense of Lisboa e Vale do Tejo. Table 3.2.2.3 shows financing by structural funds and cohesion funds for 2000-2006.

According to the regional representatives interviewed, national policies had a highly positive impact (5) overall on regional sustainable development of the region and on intra-regional cohesion.

Table 3.2.2.4 shows the quantitative evaluation of domestic policies from the regional representatives' perspective. Employment policy was decisive for cohesion through the recycling of competencies and financial support for families. Public transfers, investments in education, in basic infrastructures and communication networks were essential to increase regional attractiveness overall as well as to avoid the desertification of less developed areas within the region. There is a generalised view that these transfers fostered intra-regional cohesion since the referred problems (unemployment, lack of infrastructures and

accessibility) were of major concern in low income areas. State aid, business incentives for R&D and SMEs were considered important for industrial restructuring.

While macroeconomic developments and FDI were considered to have had a neutral impact on regional cohesion, public expenditures are said to have had a negative impact in spite of the relatively high amounts received in the region.

As reflected in table 3.2.2.5, with the exception of support for business, transports, tourism and agriculture, domestic policies are considered to have had a strongly positive impact overall on a variety of areas, ranging from social to economic dimensions.

In order to improve policy efficiency, regional representatives call for higher involvement of regional entities, private firms, associations and institutions in the design and implementation of policy.

Regarding Community Policies (CPs), while environment policy had a positive impact, fisheries and agricultural policies had negative and neutral impact on regional cohesion, respectively. Agriculture programmes were not able to eliminate the inherited problems from the past: very small holdings, auto-sufficiency agriculture and low productivity.

Table 3.2.2.1 - Evolution of regional indicators, 1991-2001

|   |         | Ye      | ear     |         |
|---|---------|---------|---------|---------|
| Variable  | 1991    | 1995    | 2000    | 2001    |
| (1) GDP per head (PPS) EU-15 = 100  | =       | 57,0    | 54,2    | 55,0    |
| (2) GDP per head (PPS) Portugal = 100                                     | 82,0    | 81,0    | 77,0    | 78,0    |
| (3) Population (thousands)  | 1.727,2 | 1.741,1 | 1.778,3 | 1.785,5 |
| (4) % Population < 15 plus % Population > 64                              | 35,4    | 34,6    | 34,5    | 34,5    |
| (5) Working age population  | 64,6    | 65,4    | 65,5    | 65,5    |
| (6) Employment rate <sup>1</sup>  | 74,3    | 65,7    | 70,8    | 71,4    |
| (7) Unemployment rate <sup>2</sup>  | 2,3     | 4,0     | 2,0     | 2,4     |
| (8) GVA per worker (1995 in 10 <sup>3</sup> euros)                        | 12,6    | 13,3    | 14,4    | 14,4    |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 4,1     | 5,2     | 4,2     | 3,7     |
| (10) Employment on agricultural sector/total employment                   | 28,5    | 21,0    | 17,4    | 16,7    |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003

Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the labour force)\*100; <sup>1</sup>is defined as the percentage of working-age people who have jobs; <sup>2</sup> is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.2.2 - Transfers from Central Government, 1999-2001

| Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|------------------------------------|--|----------------|-------|
| Municipal Cohesion Fund (FCM)      | 60,6   | 64,0           | 3,8   |
| Municipalities' General Fund (FGM) | 181,8  | 151,0          | 3,4   |
| Total                              | 242,4  | 159,1          | 3,6   |

Note: Scale for region  $i = 5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is the

distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.2.3 - European regional policy, 2000-2006

|   | Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|---|------------------|--|----------------|
| _ | Structural Funds | 0,96   | 109,95         |
|   | Cohesion Funds   | n.a.d.                                       | n.a.d.         |
|   | Total            | -  | -              |

Note: n.a.d. = no available data

Table 3.2.2.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 3               |
| Public expenditures               | 2               |
| Transfers from Central Government | 4               |
| State aid                         | 4               |
| Employment and social policies    | 4               |
| Science and Technology            | 4               |
| Foreign direct investment         | 3               |

Note: \* 1- Highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Table 3.2.2.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral |
|--|-------------------|-------------------|---------|
| Transport and communications           |                   | ✓                 |         |
| Business support and local development |                   | $\checkmark$      |         |
| Tourism                                |                   | $\checkmark$      |         |
| Cultural and recreation services       | ✓                 |                   |         |
| Agriculture, forestry and fishing      |                   | $\checkmark$      |         |
| Energy and water supply                | ✓                 |                   |         |
| Environment                            | ✓                 |                   |         |
| R&D                                    | ✓                 |                   |         |
| Health                                 | ✓                 |                   |         |
| Education                              | ✓                 |                   |         |
| Housing                                | ✓                 |                   |         |

Impact of support from EU funds on ex-ante divergence from national average: 5

# 3.2.3 - Regional profile: Lisboa e Vale do Tejo

Lisboa e Vale do Tejo includes the Portuguese capital (Lisboa) and a surrounding area that has been very attractive to medium/high-tech manufacturing (e.g. automotive sector in Palmela), showing high investment and educational dynamics. With the highest GDP per head in Portugal, Lisboa e Vale do Tejo is the only Portuguese NUTS II region which does not qualify as Objective 1. This region was covered under Objective 1 up to 1999 and has meanwhile passed the 75 per cent income threshold. Nevertheless, the unemployment rate is one of the highest in the country.

Lisboa e Vale do Tejo still enjoys not only a high productivity level but also a high employment rate and a favourable demographic structure<sup>26</sup>. However, table 3.1.2 above (see subsection 3.1), shows that Lisboa e Vale do Tejo's per capita GVA has decreased towards the country average between 1990-2001. As shown in figure 3.1.3 (see subsection 3.1), Lisboa e Vale do Tejo experienced an unfavourable demographic trend which, coupled with a neutral productivity change, implied a reversion towards the country average value.

The status of the region is related to various systemic conditions, which favour continuous development and opportunities for growth. Services account for over 60 per cent of the population employed, while the share of employment in agriculture (3.8 per cent) is the lowest in the country (see table 3.2.3.1). Probably due to conditions existing from the outset, namely strong tertiary education, high-value services, accessibilities and centrality close to decision centres, the region appears to have made the best out of policy conditions.

<sup>&</sup>lt;sup>26</sup> In Table A.2.1.2, the relative per capita GVA is broken down into a demographic component (working age population divided by total population) and a policy-induced component (GVA per working age person). In Columns (4) and (5), the relative GVA per working age person is broken down into GVA per worker and the employment rate.

Box 3.2.3.1 – specialisation pattern

Heavy industries

Services

Commerce

Transport material

Natural resources

**Tourism** 

The main developments in the last decade are summarised below.

*Box 3.2.3.2 - Highlights the main characteristics of the evolution over the last decade* 

In the last decade, GDP per capita evolved at a rate slightly above the country average. This was not due to fast growth of GDP per worker (already large by Portuguese standards), but rather to an increase in employment.

By the year 2001, the employment rate reached 76 per cent. Probably this reflects a large migration of people of working age attracted by higher wages, and a reverse move when they retire.

During the last decade, the unemployment rate has risen almost by one percentage point. The percentage of employment in the agricultural sector maintained its declining trend; the level is now similar to the most developed regions in Europe, so the scope for further reductions seems limited.

Medium to high/tech industry specialisation was reinforced by high inward foreign direct investments (e.g. in the automotive sector), at the expense of heavy industry. Strong development of public and private high value-added activities in the tertiary sector, including urban tourism.

The good performance in the 1990s means that this region is no longer (since 2000) an Objective 1 region. Income disequilibria between the rich and the poor have risen, though.

Lisboa e Vale do Tejo ranks close to the EU average but well above the country average, being the top Portuguese region in terms of technological standing (RRSII equals 2.4)<sup>27</sup>.

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<sup>&</sup>lt;sup>27</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the RRSII, so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

Compared to the country, Lisboa e Vale do Tejo's advantages regarding tertiary education, employment in high-tech services, employment in medium/high-tech manufacturing, public and business R&D expenditures, high-tech EPO (European Patent Office) patent applications, regional per capita GDP and life-long learning are clear, and have probably increased over the past decade. The automobile industry is the major contributor to this success.

The main characteristics of the region in terms of strengths and weaknesses are summarised in the Box below.

Box 3.2.3.3 - SWOT analysis

| Strengths   | Weaknesses  |
|---|---|
| Good communication infrastructure: harbours,  | Inappropriate transport system;   |
| airport, trains;  | Urban disorganisation, congestion, pollution;   |
| High R&D activity;  | Inappropriate protection of natural resources   |
| R&D networks with universities, research  | and eco-systems experiencing fast decay;  |
| centres, institutes;  | Destroyed habitat and poverty areas;  |
| Developed supply of business services;  | Weaknesses of health system and its   |
| Potential of urban tourism;   | infrastructures.  |
| High productivity in agricultural sector.   |   |
|   |   |
| Opportunities   | Threats   |
| Opportunities  Using the technological infrastructures to   | Threats  Compliance with environmental legislation  |
| ^^  |   |
| Using the technological infrastructures to  | Compliance with environmental legislation   |
| Using the technological infrastructures to provide international services;  | Compliance with environmental legislation might aggravate costs in the short run;   |
| Using the technological infrastructures to provide international services;  Taking the internalisation process further:   | Compliance with environmental legislation might aggravate costs in the short run;  Congestion costs: pollution level; population  |
| Using the technological infrastructures to provide international services;  Taking the internalisation process further: stronger presence in the market;  | Compliance with environmental legislation might aggravate costs in the short run;  Congestion costs: pollution level; population density; inequalities between the rich the and |
| Using the technological infrastructures to provide international services;  Taking the internalisation process further: stronger presence in the market;  Developing biological agriculture and clean | Compliance with environmental legislation might aggravate costs in the short run;  Congestion costs: pollution level; population density; inequalities between the rich the and |

Recall from tables 2.3.1.1 and 2.3.1.2 (see section 2.3.1) and table 3.2.3.2 that this region receives the lowest amounts of public transfers, as a percentage of regional GDP and in per capita terms, respectively. The region's share of incentives was very high within the CSF I and II, but has been declining (table 2.2.4 and 2.2.5, see section 2.2 and table 3.2.3.3 below). During the CSF II a significant share of business incentives were for industrial investments, and reinforced the pattern of specialisation of this region, with large-scale investments directed towards automotive, tourism and commerce. Tourism and other services assumed particular relevance in the CSF III while the share of the industry has decreased significantly.

According to the regional representatives, policies had a very positive impact overall on regional sustainable development and cohesion (5). As shown in table 3.2.3.4, this region attributed the highest values to the impact of domestic policies on regional development and cohesion. Lisboa e Vale do Tejo is the region which most benefited from (and contributed to) country economic growth in the recent past. It benefited greatly from the CSF I and II, as well as from large-scale investments in infrastructures, education and health.

Table 3.2.3.5 shows the policies' impact per area. The area benefiting less from the domestic policies is agriculture, forestry and fishing. Regional representatives also referred to negative policy aspects, which relate mainly to the agglomeration of activities in Lisbon centre and the poor spatial planning and organisation of the territory.

Regarding European policies, the approach to transports, energy and communications is regarded as highly negative, a source of congestion and of decrease in the quality of life. Environmental policy and the CAP are said to have had an important positive impact, while the fisheries policy had a negative impact.

Table 3.2.3.1 -Evolution of regional indicators, 1991-2001

|   |         | Ye      | ear     |         |
|---|---------|---------|---------|---------|
| Variable  | 1991    | 1995    | 2000    | 2001    |
| (1) GDP per head (PPS) EU-15 = 100  | -       | 90,7    | 90,9    | -       |
| (2) GDP per head (PPS) Portugal = 100                                     | 130,0   | 132,0   | 135,0   | 136,0   |
| (3) Population (thousands)  | 3.350,0 | 3.368,9 | 3.348,8 | 3.462,7 |
| (4) % Population < 15 plus % Population > 64                              | 31,1    | 30,7    | 31,2    | 31,3    |
| (5) Working age population  | 68,9    | 69,3    | 68,8    | 68,7    |
| (6) Employment rate <sup>1</sup>  | 70,8    | 69,2    | 74,6    | 75,7    |
| (7) Unemployment rate <sup>2</sup>  | 4,4     | 9,1     | 5,0     | 5,3     |
| (8) GVA per worker (1995 in 10 <sup>3</sup> euros)                        | 20,3    | 19,5    | 22,4    | 22,3    |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 5,5     | 11,5    | 12,5    | 11,3    |
| (10) Employment on agricultural sector/total employment                   | 7,6     | 4,9     | 4,0     | 3,8     |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003

Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the labour force)\*100; <sup>1</sup>is defined as the percentage of working-age people who have jobs; <sup>2</sup> is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.3.2 - Transfers from Central Government, 1999-2001

| Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|------------------------------------|--|----------------|-------|
| Municipal Cohesion Fund (FCM)      | 10,7   | 11,3           | 0,0   |
| Municipalities' General Fund (FGM) | 91,5   | 71,6           | 1,1   |
| Total                              | 102,2  | 60,3           | 0,0   |

Note: Scale for region i =  $5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is the

distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.3.3 - European regional policy, 2000-2006

| Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|------------------|--|----------------|
| Structural Funds | 0,42   | 48,01          |
| Cohesion Funds   | n.a.d.                                       | n.a.d.         |
| Total            | -  | -              |

Note: n.a.d. = no available data

Table 3.2.3.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 4               |
| Public expenditures               | 5               |
| Transfers from Central Government | 5               |
| State aid                         | 5               |
| Employment and social policies    | 5               |
| Science and Technology            | 5               |
| Foreign direct investment         | 5               |

Note: \* 1- Highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Table 3.2.3.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral      |
|--|-------------------|-------------------|--------------|
| Transport and communications           | ✓                 |                   |              |
| Business support and local development |                   | ✓                 |              |
| Tourism                                | $\checkmark$      |                   |              |
| Cultural and recreation services       |                   | $\checkmark$      |              |
| Agriculture, forestry and fishing      |                   |                   | $\checkmark$ |
| Energy and water supply                | $\checkmark$      |                   |              |
| Environment                            | $\checkmark$      |                   |              |
| R&D                                    | $\checkmark$      |                   |              |
| Health                                 |                   | $\checkmark$      |              |
| Education                              | $\checkmark$      |                   |              |
| Housing                                |                   | ✓                 |              |

Impact of EU funds on ex-ante divergence from national average: 5

# 3.2.4 - Regional profile: Alentejo

The table 3.2.4.1 displays the GDP per capita in the Alentejo, in per cent of the country average and of the EU average<sup>28</sup>. It shows that, between 1995 and 2001, Alentejo worsened its GDP with reference to the national and the EU average.

Comparing the relative position of the different regions vis-à-vis the country average in 1990 and 2001 (see table 3.1.2, subsection 3.1), we observe that Alentejo has diverged in terms of per capita GVA<sup>29</sup>. As shown in the figure 3.1.3 (see subsection 3.1), this path was mostly determined by changes in productivity. A detailed analysis provided in subsection 3.1 further revealed that Alentejo suffers from a low productivity level and an unfavourable demography.

Services account for over 60 per cent of the population employed, while agriculture is still relevant with a share of 18.7 per cent of the total employment by 2001. This region reveals an unfavourable demography but high educational dynamics. The University gained increasing role in this regard and as an engine for regional development.

Box 3.2.4.1 - Principal industrial specialisation

| Heavy industries;                | Food, beverages and tobacco; |
|----------------------------------|------------------------------|
| Electric machinery and products. | Natural resources.           |

Box 3.2.4.2 - Highlights the main characteristics of the evolution over the last decade

In this period, the unemployment rate has reduced significantly, but it is still high in the national context. This reduction is the result of an important development, which reduced the high immigration verified in 70's and 80's. To these situation also contributes the low rate of activity. The percentage of employment on agricultural sector has reduced but it still high in the European Union context.

<sup>28</sup> Figures on regional output are being subject to successive revisions and data are not necessarily consistent across tables. For this reason, we try to identify in each table the specific database being used. In the latest DG REGIO database, data from GDP and GVA appear to reveal some inconsistencies.

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<sup>&</sup>lt;sup>29</sup> Data before 1990 is not shown due to lack of reliability.

Alentejo reveals a poor technological standing with relation to the EU, but higher than most of the Portuguese regions (RRSII equals 1.5)<sup>30</sup>. As stimulating characteristics we highlight the development of tourism, the geo-strategic location of Sines port, the development of competitive advantages in wine, cork and decorative stones, technological innovation, products and design on several traditional activities, the restructuring of Beja airbase, and the Growth of the Évora University.

Box 3.2.4.3 - SWOT analysis

| Strengths  | Weaknesses   |
|--|--|
| Geo-strategic location of Sines harbour;  Development of tourism, logistic and recreation activities possible due to the availability of low populated areas;  High tourist potential of sun and sea activities, as well as natural, cultural and historical riches and diversity of local food and landscape and rural spaces;  Identification of growing investment dynamics in the tourism sector (on multifunctional compounds in Alentejo Litoral associated with golf activities and second residences);  Dynamics in agriculture related products: wine, cheese, meat, olive oil, fruit and | Low level of R&D and lack of innovation infrastructures; Aging of local population; Lack of human resources with high technical skills; Low quality of labour, supporting equipments, and services related to tourism Tourism highly concentrated on high seasons; Low productivity in agriculture; Lack of strong partnerships, specially at an international level; Inappropriate flow of distribution channels and its logistic structures. |
| vegetables, cork).   |  |
| Opportunities  | Threats  |
| Development of Sines harbour as an international distribution cargo platform  Job and qualification creation in the region;  | Territorial dispersion: the urban system is composed by a regional city – Évora – and sub-regional cities – Portalegre, Beja, Sines –  |

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<sup>&</sup>lt;sup>30</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the RRSII, so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

High quality tourist construction in Alqueva;

Sun and sea and rural tourism growth;

High quality in meat production;

Constant growth related with bio-agricultural products;

Development of competitive advantages in wine, cork and decorative stones;

Technological innovation, products and

design on several traditional activities;

Use of Beja's airbase for other purposes.

and smaller cities;

High dependency on funds;

Strong competition in foreign markets;

Lack of incentives for the population to return and not to leave the rural area;

Low technological innovation capabilities.

As shown in tables 2.3.1.1 and 2.3.1.2 (see section 2.3.1) and table 3.2.3.2 below, the transfers per capita to the less prosperous region of Alentejo is relatively higher than to other richer regions. Otherwise, recalling Tables 2.2.4 and 2.2.5 (see section 2.2), under the CSF I and II, public expenditures per capita for the poor region of Alentejo was substantially lower than those for the richest regions of Lisboa e Vale do Tejo. The investments in commerce and in the industry were relatively low, with the large scale of investments directed towards natural resources. Table 3.2.3.3 summarises the EU funding for the 2000-2006 period.

Overall, domestic policies had a positive impact on regional development and cohesion (4). As summarised in table 3.2.4.4, public expenditures (in infrastructures and health), employment and social policy had the most positive effect, while the public transfers and state aid were severely criticised. As for state aid, the significant concentration of business incentives in the metropolitan areas of Lisbon and Porto is considered to have contributed to divergence rather than to convergence. Regarding public transfers, it is referred that the region lost with changes in the criteria for allocation of funds (the area is not considered). The intra-regional concentration in few urban areas fosters intra-regional disequilibrium.

Table 3.2.4.5 shows the policies' impact per area. The areas benefiting less from the domestic policies are business support and local development and R&D.

In spite of not being explicitly the aim of the research, our interviewer revealed some aspects of matter regarding European Community policies and regional cohesion. In this regard, the structural funds were considered important in what concerns investments in infrastructures and education. Transports, energy and communications as well as environmental policy are said to have had a strong positive impact on regional development and cohesion. PAC had neutral impact: positive by raising income for beneficiaries, and negative by promoting products for which the region does not have the most suitable conditions and by promoting farming 'structural' unemployment. These farmers will never be absorbed by other sectors because of their low educational level.

Table 3.2.4.1 - Evolution of regional indicators, 1991-2001

|   |       | Ye    | ear   |       |
|---|-------|-------|-------|-------|
| Variable  | 1991  | 1995  | 2000  | 2001  |
| (1) GDP per head (PPS) EU-15 = 100  | -     | 59,2  | 54,5  | 55,3  |
| (2) GDP per head (PPS) Portugal = 100                                     | 76,0  | 84,0  | 79,0  | 79,0  |
| (3) Population (thousands)  | 536,3 | 530,2 | 526,3 | 528,4 |
| (4) % Population < 15 plus % Population > 64                              | 36,6  | 36,4  | 37,1  | 62,8  |
| (5) Working age population  | 63,4  | 63,6  | 62,9  | 37,2  |
| (6) Employment rate <sup>1</sup>  | 61,4  | 57,8  | 65,1  | 65,7  |
| (7) Unemployment rate <sup>2</sup>  | 9,1   | 11,8  | 5,7   | 5,7   |
| (8) GVA per worker (1995 in 10 <sup>3</sup> euros)                        | 15,4  | 16,1  | 15,9  | 15,9  |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 6,0   | 13,6  | 14,1  | 13,4  |
| (10) Employment on agricultural sector/total employment                   | 29,2  | 21,4  | 19,7  | 18,7  |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003

Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the labour force)\*100; <sup>1</sup> is defined as the percentage of working-age people who have jobs; <sup>2</sup> is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.4.2 - Transfers from Central Government, 1999-2001

| Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|------------------------------------|--|----------------|-------|
| Municipal Cohesion Fund (FCM)      | 50,0   | 53,0           | 3,0   |
| Municipalities' General Fund (FGM) | 251,0  | 209,0          | 5,0   |
| Total                              | 301,0  | 198,0          | 5,0   |

Note: Scale for region  $i = 5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is the

distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.4.3 - European regional policy, 2000-2006

| Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|------------------|--|----------------|
| Structural Funds | 2,06   | 236,47         |
| Cohesion Funds   | n.a.d.                                       | n.a.d.         |
| Total            | -  | -              |

Note: n.a.d. = no available data

Table 3.2.4.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 3/4             |
| Public expenditures               | 4               |
| Transfers from Central Government | 2               |
| State aid                         | 1               |
| Employment and social policies    | 4               |
| Science and Technology            | 3               |
| Foreign direct investment         | 3               |

Note: \* 1- highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Table 3.2.4.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral      |
|--|-------------------|-------------------|--------------|
| Transport and communications           |                   | ✓                 |              |
| Business support and local development |                   |                   | $\checkmark$ |
| Tourism                                | ✓                 |                   |              |
| Cultural and recreation services       |                   | $\checkmark$      |              |
| Agriculture, forestry and fishing      |                   | $\checkmark$      |              |
| Energy and water supply                |                   | $\checkmark$      |              |
| Environment                            | ✓                 |                   |              |
| R&D                                    |                   |                   | $\checkmark$ |
| Health                                 | ✓                 |                   |              |
| Education                              |                   | $\checkmark$      |              |
| Housing                                |                   | ✓                 |              |

Impact of support from EU funds on ex-ante divergence from national average: 5

# 3.2.5 - Regional profile: Algarve

The Algarve is the smallest Portuguese region in terms of population and population employed. Table 3.2.5.1 shows that between 1995 and 2001, Algarve worsened its GDP per capita levels with reference both to the EU average and to the national average.

Comparing the levels of 1990 and 2001 in each region in Table 3.1.2 (subsection 3.1), it emerged that Algarve has approached the country average in terms of per capita GVA<sup>31</sup>. As shown in the figure 3.1.3 (see subsection 3.1), Algarve exhibited quite favourable dynamics, both in terms of demography and productivity changes.

Employment in the primary sector is slightly above 10 per cent of total employment and about 22 per cent in the secondary sector. Algarve is characterised by tourism. Most of the services are related to tourism and to commerce and the sector accounts for over 65 per cent of total employment. Box 3.2.5.2 summarises the main developments over the last decade.

*Box 3.2.5.1 – Specialisation pattern* 



Box 3.2.5.2 – Characterisation of the region's evolution over the last decade

In this period, the unemployment rate remained basically unchanged, translating into a good performance compared with the European Union unemployment rate.

The percentage of employment in the agricultural sector has decreased significantly although it is still high in the European Union context.

### **Technological standing (5 point scale):** <u>1.0</u>

<u>Note</u>: Based on the RRSII - European Commission (2002): European Innovation Scoreboard: Technical Paper no 3, EU Regions, Brussels. <u>ftp://ftpnl.cordis.lu/pub/trendchart/reports/documents/report3.pdf</u>.

We rescale the RRSII, so that a region corresponding to the average of the innovative performance of Portugal gets 2.5 points.

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<sup>&</sup>lt;sup>31</sup> Data before 1990 is not shown due to lack of reliability.

Algarve reveals a very poor technological standing, the lowest in the country (RRSII equals 1.0)<sup>32</sup>. In spite of the growth in the tertiary education, Algarve ranks very poorly in all other relevant indicators for this index. The SWOT analysis (Box 3.2.5.3) contributes to explain this ranking regarding technological standing.

Box 3.2.5.3 - SWOT analysis

| Strengths                                    | Weaknesses                                     |
|--|--|
| Environmental quality, good climate, diverse | Health system;                                 |
| landscapes and a rich biodiversity;          | Concentration of tourism activities on the     |
| Cultural and architectural legacy;           | coast;   |
| High potential of research and innovation    | High dependency on funds;                      |
| activities in new technologies and           | Seasonality in employment: hotels,             |
| information;                                 | restaurants;                                   |
| Tourism.                                     | Lack of specific infrastructure to effectively |
|  | support innovation and technology diffusion.   |
| Opportunities                                | Threats  |
| Development of tourism, logistics and        | Low availability of R&D investment;            |
| recreation activities;                       | High dependency on tourism.                    |
| Foreign direct investments.                  |  |

The Algarve has received a low share of public expenditures (tables 2.2.4 and 2.2.5, see section 2.2. and), public transfers (tables 2.3.1.1 and 2.3.1.2, see section 2.3, and table 3.2.5.2 below) and business state aid. These amounts are relatively low when analysing per capita values and regional GDP at country level.

According to the regional representatives, domestic policies had a positive impact overall on regional development and cohesion (4).

The region's wealth is extremely dependent on tourism, which in turn is closely related to the macroeconomic performance of the country and abroad. Algarve has benefited from the increase in Portuguese well-being, but also suffers with the present crisis. With respect to the housing sector, all over the country around some industrial cities, the traditional deficit of residential buildings was clearly bypassed and a large excess supply has emerged. Given that in the Algarve the demand was mostly driven by tourism, excess supply should be easier to invert with the business cycle. The other domestic policies with strongest positive impact on the development of the region regard public expenditures on education, infrastructures and network communications as well as employment policy.

The regional representatives argue that the policy regarding public transfers and state aid penalised the region. The reduced share of business incentives to this region (mainly to tourism) implies a negative impact on cohesion.

Criticism of the impact of domestic policies is also reflected in the quantitative evaluation of the impact per area. Agriculture, forestry and fishing, R&D and housing were the areas over which domestic policies had a neutral impact.

Table 3.2.5.1 - Evolution of regional indicators, 1991-2001

|   |       | Ye    | ear   |       |
|---|-------|-------|-------|-------|
| Variable  | 1991  | 1995  | 2000  | 2001  |
| (1) GDP per head (PPS) EU-15 = 100  | -     | 71,7  | 66,0  | 67,0  |
| (2) GDP per head (PPS) Portugal = 100                                     | 101,0 | 96,0  | 91,0  | 93,0  |
| (3) Population (thousands)  | 340,9 | 356,1 | 388,5 | 390,1 |
| (4) % Population < 15 plus % Population > 64                              | 35,0  | 34,1  | 33,3  | 33,4  |
| (5) Working age population  | 65,0  | 65,9  | 66,7  | 66,6  |
| (6) Employment rate <sup>1</sup>  | 78,2  | 67,8  | 68,0  | 68,7  |
| (7) Unemployment rate <sup>2</sup>  | 3,9   | 6,5   | 3,6   | 3,6   |
| (8) GVA per worker (1995 in 10 <sup>3</sup> euros)                        | 12,7  | 14,7  | 17,3  | 17,7  |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 3,1   | 8,5   | 13,7  | 13,5  |
| (10) Employment on agricultural sector/total employment                   | 19,5  | 14,5  | 12,1  | 11,6  |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003

Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the

<sup>&</sup>lt;sup>32</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the RRSII, so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

labour force)\*100; <sup>1</sup> is defined as the percentage of working-age people who have jobs; <sup>2</sup> is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.5.2 - Transfers from Central Government, 1999-2001

| Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|------------------------------------|--|----------------|-------|
| Municipal Cohesion Fund (FCM)      | 13,8   | 15,0           | 0,3   |
| Municipalities' General Fund (FGM) | 164,7  | 137,0          | 3,0   |
| Total                              | 178,5  | 118,0          | 2,1   |

Note: Scale for region i =  $5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is

the distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.5.3 - European regional policy, 2000-2006

| Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|------------------|--|----------------|
| Structural Funds | 1,16   | 133,38         |
| Cohesion Funds   | n.a.d.                                       | n.a.d.         |
| Total            | -  | -              |

Note: n.a.d. = no available data

Table 3.2.5.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 4               |
| Public expenditures               | 4               |
| Transfers from Central Government | 2               |
| State aid                         | 1               |
| Employment and social policies    | 4               |
| Science and Technology            | 3               |
| Foreign direct investment         | 3               |

Note: \* 1- Highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Table 3.2.5.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral      |
|--|-------------------|-------------------|--------------|
| Transport and communications           | ✓                 |                   |              |
| Business support and local development |                   | $\checkmark$      |              |
| Tourism                                | ✓                 |                   |              |
| Cultural and recreation services       | ✓                 |                   |              |
| Agriculture, forestry and fishing      |                   |                   | $\checkmark$ |
| Energy and water supply                |                   | $\checkmark$      |              |
| Environment                            |                   | $\checkmark$      |              |
| R&D                                    |                   |                   | $\checkmark$ |
| Health                                 |                   | $\checkmark$      |              |
| Education                              | ✓                 |                   |              |
| Housing                                |                   |                   | ✓            |

Impact of support from EU funds on ex-ante divergence from national average: 5

# 3.2.6 - Regional profile: Região Autónoma dos Açores

Açores is one the two Portuguese regions with na autonomous regional administration. It accounts for 2.3 per cent of the total population. By 2001, Açores displayed the lowest per capita GVA and per capita GDP in the country, both well below the EU average (see table 3.2.6.1).

Comparing the data for 1990 and 2001 in each region (see table 3.1.2, in subsection 3.1), we observed that Açores has diverged from the country average in terms of per capita GVA. As indicated by figure 3.1.3 (see subsection 3.1), Açores enjoyed favourable demographics but its productivity level diverged from the country average.

Services account for nearly 60 per cent of employment, while the share of agriculture is still high (16.8 per cent) compared to EU standards. The unemployment rate is one of the lowest in the country.

*Box 3.2.6.1 – Specialisation pattern* 

| Food, beverages and tobacco. | Fisheries;   |
|------------------------------|--------------|
|                              | Agriculture. |

Box 3.2.6.2 – Characterisation of the region's evolution over the last decade

In this period, the unemployment rate remained low compared with European levels, being the lowest in Portugal.

The percentage of employment in the agricultural sector decreased, but it is still high in the European Union context.

Açores pairs with the Norte with respect to technological standing (RRSII equals 1.3)<sup>33</sup>. The lack of specific infrastructures to effectively support innovation and technology diffusion, as well as the low industrialisation level, contribute heavily to the poor technological standing of Açores.

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<sup>&</sup>lt;sup>33</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the RRSII, so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

Box 3.2.6.3 - SWOT analysis

| Strengths  | Weaknesses  |
|--|---|
| Good environmental conditions;   | Low level of R&D  |
| Natural resources;   | Low industrialisation level;  |
| Tourism;   | Insular localisation;   |
| Regional government that contributes to a better coordination of policies. | Lack of specific infrastructures to effectively support innovation and technology diffusion;  Lack of concise investment in professional training and low productivity in agriculture;  Low population density. |
| Opportunities  | Threats   |
| Strategic localisation of military base (Lajes                             | Low availability of R&D investment;   |
| Base);   | High dependence on funds (Community and   |
| Sun and sea and rural tourism.   | national transfers).  |

As shown in tables 2.3.1.1 and 2.3.1.2 (see section 2.3.1) and table 3.2.6.2 below, the transfers per capita to the less prosperous region of Açores are relatively higher than to other, richer regions. Regarding public transfers, the autonomous regions received additional funds mainly through the regional finance law with a view to insularity costs and cohesion. Otherwise, recalling tables 2.2.4 and 2.2.5 (see section 2.2), under the CSF I and II, public expenditures per capita for the poor region of Açores were substantially lower than those for the richest regions of Lisboa e Vale do Tejo. Table 3.2.6.3 summarises EU funding for the period 2000-2006. In the CSF III the Portuguese autonomous region of Açores (as well as Madeira) enjoys a special treatment, with specific priorities defined for those autonomous regions according to their needs.

Overall, domestic policies had a highly positive impact on regional development and cohesion (5). The regional representatives highlighted the positive impact of macroeconomics, public expenditures and transfers from central government. The region benefited from the highest funding per inhabitant from the structural funds, the highest public transfers as a percentage of regional GDP, and the largest scale of public transfers. Regarding public transfers, the autonomous regions received additional funds mainly by means of the regional finance law to meet to insularity costs and cohesion. In the CSF III the Portuguese

autonomous regions (Madeira and Açores) enjoy a special treatment, with specific priorities defined for these regions according to their needs.

Otherwise, the share of business incentives for this region has been relatively insignificant, which helps to explain that state was considered to have had a negative impact on regional cohesion. Support from the EU agriculture and fisheries policies, while providing a subsistence minimum to a few, does not create conditions for sustainable development. These sectors of activity continue to suffer from low productivity and declining employment.

According to the interviewees, domestic policies had a strongly positive impact on tourism, agriculture, forestry and fishing, as well as on energy and water supply. Otherwise, domestic policies had a neutral impact in terms of R&D in the region.

Table 3.2.6.1 - Evolution of regional indicators, 1991-2001

|   | Year  |       |       |       |
|---|-------|-------|-------|-------|
| Variable  | 1991  | 1995  | 2000  | 2001  |
| (1) GDP per head (PPS) EU-15 = 100  | -     | 51,5  | 51,7  | 52,5  |
| (2) GDP per head (PPS) Portugal = 100                                     | 77    | 71    | 72    | 70    |
| (3) Population (thousands)  | 239,2 | 238,7 | 237,9 | 238,9 |
| (4) % Population < 15 plus % Population > 64                              | 38,3  | 36,2  | 34,2  | 34,2  |
| (5) Working age population  | 61,7  | 63,8  | 65,8  | 65,8  |
| (6) Employment rate <sup>1</sup>  | 60,8  | 56,8  | 61,4  | 62,0  |
| (7) Unemployment rate <sup>2</sup>  | 3,7   | -     | 3,0   | 2,2   |
| (8) GVA per worker (1995 in 10 <sup>3</sup> euros)                        | 15,3  | 14,1  | 15,4  | 15,2  |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 7,6   | 9,5   | 10,0  | 8,8   |
| (10) Employment on agricultural sector/total employment                   | 23,8  | 18,9  | 17,1  | 16,8  |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003

Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the labour force)\*100; <sup>1</sup> is defined as the percentage of working-age people who have jobs; <sup>2</sup> is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.6.2 - Transfers from Central Government, 1999-2001

| Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|------------------------------------|--|----------------|-------|
| Municipal Cohesion Fund (FCM)      | 80,0   | 84,0           | 5,0   |
| Municipalities' General Fund (FGM) | 158,0  | 132,0          | 2,8   |
| Total                              | 238,0  | 157,0          | 3,5   |

Note: Scale for region i =  $5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is the

distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.6.3 - European regional policy, 2000-2006

| Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|------------------|--|----------------|
| Structural Funds | 3,58   | 410,50         |
| Cohesion Funds   | n.a.d.                                       | n.a.d.         |
| Total            | -  | -              |

Table 3.2.6.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 4               |
| Public expenditures               | 4               |
| Transfers from Central Government | 4               |
| State aid                         | 2               |
| Employment and social policies    | 3               |
| Science and Technology            | 3               |
| Foreign direct investment         | 3               |

Note: \* 1- highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Note: n.a.d. = no available data

Table 3.2.6.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral      |
|--|-------------------|-------------------|--------------|
| Transport and communications           |                   | ✓                 |              |
| Business support and local development |                   | $\checkmark$      |              |
| Tourism                                | $\checkmark$      |                   |              |
| Cultural and recreation services       |                   | $\checkmark$      |              |
| Agriculture, forestry and fishing      | ✓                 |                   |              |
| Energy and water supply                | ✓                 |                   |              |
| Environment                            |                   | $\checkmark$      |              |
| R&D                                    |                   |                   | $\checkmark$ |
| Health                                 |                   | $\checkmark$      |              |
| Education                              |                   | $\checkmark$      |              |
| Housing                                |                   | ✓                 |              |

Impact of support from EU funds on ex-ante divergence from national average: 4

# 3.2.7 - Regional profile: Região Autónoma da Madeira

Madeira is one of the two Portuguese regions with an autonomous regional administration. It accounts for about 2.5 per cent of the Portuguese population, with an employment structure that resembles the one of Açores. Agriculture employment is high (10.4 per cent) but clearly declining, while the share of employment in services is over 60 per cent. Within services, tourism has been gaining increasing relevance. Unemployment is very low (see table 3.2.7.1).

Madeira displays the second highest per capita GDP and per capita GVA among Portuguese regions. The table above shows that, between 1995 and 2000, Madeira has improved its GDP per capita levels with reference both to the EU average and to the national average. Nevertheless, comparing the levels of 1990 and 2001 among regions (see table 3.1.2 above, in subsection 3.1), we observed that Madeira's per capita gross value added (GVA) has diverged from the country average. As shown in the figure 3.1.3 (see subsection 3.1), Madeira enjoyed favourable demographics but its productivity level diverged from the country average.

*Box 3.2.7.1 – Specialisation pattern* 

| Tourism. | Bananas       |
|----------|---------------|
|          | Madeira wine. |

Box 3.2.7.2 - Characteristics of the region's evolution over the last decade

Fall in unemployment, a good performance compared with the Portuguese general picture and with the European Union unemployment rate.

The percentage of employment in the agricultural sector has decreased, although it is still high in a European Union context.

#### Technological standing (5 point scale): <u>1.4</u>

<u>Note</u>: Based on the RRSII - European Commission (2002): European Innovation Scoreboard: Technical Paper no 3, EU Regions, Brussels. <u>ftp://ftpnl.cordis.lu/pub/trendchart/reports/documents/report3.pdf</u>.

We rescale the RRSII, so that a region corresponding to the average of the innovative performance of Portugal gets 2.5 points.

Madeira shows a relatively low technological standing (RRSII equals 1.4)<sup>34</sup> taking into consideration its per capita GDP. The RRSII indicator might be biased towards (high value-added) industries that are not present in Madeira. Looking at recent data on regional innovation performance, Madeira appears as a leading region in Europe in terms of innovation expenditures in services (as a percentage of turnover in services) Furthermore, industry is not a very attractive activity from the point of view of many local leaders. This follows because Madeira has a sensitive and rich habitat that would possible be destroyed with industry intensification.

Box 3.2.7.3 - SWOT analysis

| Strengths  | Weaknesses   |
|--|--|
| Natural resources;   | Low qualification of human resources;  |
| Tourism;   | Low availability of R&D investment;  |
| Emigrants' communities keep up distinct  | Low productivity in agriculture;   |
| Emigrants' communities keep up distinct connections;                                     | Insular localisation implying distance from central regions;                             |
| High dynamics of financial system due to the existence of an offshore banking zone/area; | High dependence on continental Portugal as far as connections with the EU are concerned; |
| The university contributes to the reception and  | Bad conditions in inter-regional accessibility,  |
| diffusion of scientific information;   | particularly at the local level and inter-   |
| Demographic structure with a youth rate above the national and the Community average;    | islands; High transportation costs.  |
| Good development and level of professional   |  |
| training;  |  |
| Own regional government that contributes to a  |  |

<sup>&</sup>lt;sup>34</sup> The calculations are based on the Revealed Regional Summary Innovation Index (RRSII) (European Commission, 2002). We rescaled the Revealed Regional Summary Innovation Index (RRSII), so that a region corresponding to the average of the innovative performance of EU gets 2.5 points.

| better coordination of policies.              |   |
|---|---|
| Opportunities                                 | Threats   |
| Development of competitive advantages in wine | Lack of specific infrastructures to effectively |
| and bananas;                                  | support innovation and technology diffusion;    |
| Tourism demand consolidation                  | High dependence on funds;                       |
| Funchal airport;                              |   |
| New opportunities/advantages opened up by     | Low technological innovation capabilities;      |
| CAP reform.                                   | Loss of competitiveness by tourism sector.      |

As shown in tables 2.3.1.1 and 2.3.1.2 (see section 2.3.1) and table 3.2.7.2 below, the transfers per capita to the region of Madeira are relatively high. Regarding public transfers, the autonomous regions received additional funds mainly through the regional finance law to meet insularity costs and cohesion. Otherwise, recalling Tables 2.2.4 and 2.2.5 (see section 2.2), under the CSF I and II, public expenditures per capita for the region of Madeira were rather low. Table 3.2.7.3 summarises EU funding for the period 2000-2006. In the CSF III, the Portuguese autonomous region of Madeira (like Açores) enjoys a special treatment, with specific priorities defined for those autonomous regions according to their needs.

From the point of view of regional leaders, domestic policies had a positive impact on regional cohesion. Table 3.2.7.4 shows the quantitative evaluation of the impact of a range of domestic policies over regional cohesion from the point of view of the regional representative.

Public expenditures, in training and infrastructures in particular, and employment policy had a positive impact through the recycling of competencies and financial support for families. Public sector transfers and state aid are the two policies most severely criticised. Nevertheless, one should recall that these values are relatively high in the light of Madeira's GDP per capita.

As shown in table 3.2.7.5, and according to the interviewees, domestic policies had a positive impact on most of the areas, with the exception to agriculture, forestry and fishing and R&D, where the impact of policies was considered neutral.

In spite of not being the primary aim of this research, the fieldwork provided some insights about the impact of major European Community policies on regional cohesion. The relevance of structural funds was clearly highlighted. While environmental policy had a positive impact, fisheries and agricultural policies had a negative to neutral impact on regional cohesion. Agriculture programmes were not able to eliminate the problems inherited from the past: very small holdings, auto-sufficiency agriculture and low productivity. These measures also impacted positively on the quality of life and on the environment.

Table 3.2.7.1 - Evolution of regional indicators, 1991-2001

|   | Year  |       |       |       |
|---|-------|-------|-------|-------|
| Variable  | 1991  | 1995  | 2000  | 2001  |
| (1) GDP per head (PPS) EU-15 = 100  | -     | 66,2  | 74,4  | 75,6  |
| (2) GDP per head (PPS) Portugal = 100                                     | 97,0  | 90,0  | 99,0  | 99,0  |
| (3) Population (thousands)  | 252,6 | 248,6 | 244,8 | 245,8 |
| (4) % Population < 15 plus % Population > 64                              | 35,4  | 34,0  | 32,7  | 32,8  |
| (5) Working age population  | 64,6  | 66,1  | 67,3  | 67,2  |
| (6) Employment rate <sup>1</sup>  | 60,3  | 62,4  | 66,9  | 67,7  |
| (7) Unemployment rate <sup>2</sup>  | 3,0   | -     | 2,5   | 2,8   |
| (8) GVA per worker (1995 in 10 <sup>3</sup> euros)                        | 18,0  | 15,9  | 17,9  | 17,7  |
| (9) GVA per worker on agricultural sector (1995 in 10 <sup>3</sup> euros) | 2,7   | 4,3   | 5,4   | 5,0   |
| (10) Employment on agricultural sector/total employment                   | 20,0  | 13,7  | 10,9  | 10,4  |

Sources: (1) - Eurostat, April 2003; (2), (3), (4), (5), (6), (8), (9) and (10) - Eurostat, June 2003; (7) - Eurostat, July 2003 Notes: (5) Working age population = (Population older than 15 years and younger than 64 years/total population)\*100; (6) Employment Rate = (Employment/Working age population)\*100; (7) Unemployment rate = (Number of unemployed people/Number of people in the labour force)\*100; 1is defined as the percentage of working-age people who have jobs; 2 is defined as the percentage of the labour force that actively seeks work but is unable to find work at a given time

Table 3.2.7.2 - Transfers from Central Government, 1999-2001

| Fund                               | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 | Scale |
|------------------------------------|--|----------------|-------|
| Municipal Cohesion Fund (FCM)      | 58,0   | 61,0           | 3,6   |
| Municipalities' General Fund (FGM) | 109,0  | 91,0           | 1,7   |
| Total                              | 167,0  | 110,0          | 1,8   |

Note: Scale for region i =  $5\left(\frac{x_i - x_m}{x_M - x_m}\right)$ . M is the maximum and m is the minimum value for the regional funds. The numerator is

the distance relatively to the minimum and the denominator is the total amplitude. The minimum scale is 0 and the maximum is 5.

Table 3.2.7.3 - European regional policy, 2000-2006

| Fund             | Funds per inhabitant (10 <sup>3</sup> euros) | Portugal = 100 |
|------------------|--|----------------|
| Structural Funds | 2,87   | 329,06         |
| Cohesion Funds   | n.a.d.                                       | n.a.d.         |
| Total            | -  | -              |

Note: n.a.d. = no available data

Table 3.2.7.4 - Quantitative evaluation of principal domestic policies' impact on regional cohesion

| Policy area                       | Scale (1 to 5)* |
|-----------------------------------|-----------------|
| Recent macroeconomic developments | 4               |
| Public expenditures               | 4               |
| Transfers from Central Government | 2               |
| State aid                         | 2               |
| Employment and social policies    | 4               |
| Science and Technology            | 3               |
| Foreign direct investment         | 3               |

Note: \* 1- highly negative; 2- Negative; 3- Neutral; 4- Positive; 5- Highly positive

Table 3.2.7.5 - Qualitative evolution of domestic policies' impact on regional conditions

| Circumstances                          | Strongly Positive | Slightly Positive | Neutral      |
|--|-------------------|-------------------|--------------|
| Transport and communications           |                   | ✓                 |              |
| Business support and local development |                   | $\checkmark$      |              |
| Tourism                                | $\checkmark$      |                   |              |
| Cultural and recreation services       | $\checkmark$      |                   |              |
| Agriculture, forestry and fishing      |                   |                   | $\checkmark$ |
| Energy and water supply                | $\checkmark$      |                   |              |
| Environment                            | $\checkmark$      |                   |              |
| R&D                                    |                   |                   | $\checkmark$ |
| Health                                 | $\checkmark$      |                   |              |
| Education                              | $\checkmark$      |                   |              |
| Housing                                | ✓                 |                   |              |

Impact of support from EU funds on ex-ante divergence from national average: 5

### 4 - The impact of EC policies on cohesion

# 4.1 - Two regional case studies - potential effects

The contribution of CPs to cohesion has been subject to increasing attention in recent years. As far as the Portuguese economy is concerned, recent estimates from Ministério do Planeamento (DPP, 2001) point to an overall additional growth of GDP by 0.4 percentage points due to the CSF II. The study conducted by the evaluates the macroeconomic impact of the CSF II at the country level, without analysing the regional incidence of the programme. This raises the question as to whether these developments have had diverse impacts on different regions in Portugal.

At the regional level, Cappelen, Castellacci, Fagerberg and Verspagen's (2003) suggests that EU regional support had a significant and positive impact on growth performance. The authors argue that the major reform of the structural funds undertaken in 1988 may have succeeded in making EU regional policy more effective. However, they also conclude that the economic effects of such support are much stronger in developed environments, accompanying policies that improve the competence level of the receiving environments. In contrast, Freitas, Pereita e Torres (2003) found no evidence that eligibility for objective one EU funding has resulted in extra growth, as compared to what would be expected, given the region attributes.

A fact that has been pointed out is that CPs differ in their results, depending on the region and that in some cases different policies contradict each other. The second intermediate Report on Economic and Social Cohesion explicitly recognizes that "the content of these policies should also consider the enormous diversity and the greater territorial imbalances in the extended Union". The two regions that we focus on, Açores and Algarve, provide a good illustration of differential impact of the community policy package on regional development. The aim of these two regional case studies is to examine on the ground the effects of CPs on regional development, both in terms of convergence and progress of the region. The goal is not to examine in detail all community initiatives but rather those that are most relevant for the regions at hand.

The analysis is extensive to issues not directly budget-related, such as the extent to which CPs have contributed to reinforce the capacity of endogenous regional development, namely

through its influence on the local governance and capability to implement coordinated policy actions aiming the development of the region as a whole.

The analysis and subsequent conclusions are based on discussions with key actors in the region. This includes government officials with responsibility for managing relevant Community Programmes, as well as private associations and academics with relevant research experience.

### 4.2 - Regional case study 1: Açores

### Context and Background

Açores is one of the poorer regions in EU. The economic potential of Açores is largely affected by its location. The territory is located in the middle of the Atlantic Ocean. This translates into high transport costs, which affect regional competitiveness.

Because the territory is composed of nine islands, spread over an area of 66.000 square kilometres, the domestic market is highly fragmented. The resident population in some islands is small enough to generate natural monopolies. Lack of economies of scale also limits the ability to realise the full benefits of self-financed basic infrastructures, such as hospitals, roads, courts and schools. In order to compensate for ulytra-periphery, this region has been recipient of considerable transfers from the rest of the country.

The economy of the archipelagos is largely dependent on the public administration and on the flow of official (and also private) transfers. The bulk of regional GDP is accounted for by non-tradables, such as government services, public administration, schools, hospitals, courts (which are present in each island), housing construction, commerce, health care, etc.

The most important tradable good in the region is milk. This is a direct consequence of the CAP policy. Fishing had a significant weight in the past, but is now of decreasing importance. The sector of tourism has been recently elected as a key sector in the development strategy and has consequently received a significant official impulse. However, the flow of tourists into the region is still too low to meet the region's financing needs. The average hostel's occupation stands at around 50 per cent, according to the interviewers. There are some concerns as to whether such an emphasis on tourism may be risky due to the climatic conditions of Açores.

The economy of Açores was mostly affected by the 1989 revision of the contract with the United States for the use of the Lages military base. With this revision, the US government stopped paying a rent, that was an important source of resouces for the regional government. Facing a fall in revenues, the regional government accumulated arrears to the rest of the economy, causing a general liquidity problem and a recession in the region. Between 1989 and 1996, the economy of Açores followed a diverging path.

In 1998, a new financial regime for the autonomous regions of Madeira and Açores came into operation (including a newly created cohesion fund). As a consequence, official transfers from the continent rose significantly. Under the new financial framework, the economy of Açores entered a new period of economic growth and convergence.

### Progress towards cohesion

Growth in Açores has been polarised: universities and training centres are localised in the three main urban centres: Ponta Delgada, Angra do Heroísmo and Horta. Because of agglomeration effects and network economies, there is a natural tendency for regional imbalances to increase. Economic policy has tried to offset this tendency, equipping each island with basic infrastructures, such as hospitals, schools, public administration, airports and harbours. This effort translates into a dramatic loss of economies of scale.

To assess the impact of policy actions on competitiveness, one needs to abstract from demographic effects. In columns (2) and (3) of table 3.1.2 (see subsection 3.1), the relative per capita GVA is broken down into a demographic component (working age population divided by total population) and a policy induced component (GVA per working age person). In Columns (4) and (5), the relative GVA per working age person is broken down into GVA per worker and the employment rate (employed divided by working age population). Figure 3.1.3 (see subsection 3.1) displays the same information depicted in columns (2) and (3) of table 3.1.2, but in terms of changes, from 1990 to 2001.

The y-axis measures the difference between the growth rates of GVA per working age person in the region and the country average. The horizontal axis measures the difference between the demographic trend in the region and the country average. The dashed line shows the combinations of demographic trends and productivity changes that would allow per capita GVA to grow proportionally to the rest of the country. The graph defines four different regions, according to the regions relative performance vis-à-vis the country average.

The figures reveal that Açores enjoyed favourable demography, but that productivity levels diverged from the country average. Since the second effect dominated the first, the economy diverged in terms of per capita GVA, from 79 per cent of the country average in 1990 to 71 per cent in 2001.

From 1998 to 2001 the living conditions have improved, however, significantly. Because of the large subsidies received, the living conditions of the resident population have improved and the benefits were reasonably shared across the population. Notwithstanding a general perception that the latest policy package has contributed to improve the citizens' quality of life in Açores, there is disagreement as far as the impact of specific policies on competitiveness is concerned.

In general, the economy is highly dependent on external funding and affected by wrong incentives. A policy shift towards the market would be desirable, to promote competitiveness and self-sustained development. More focused policies and "getting the prices right" are necessary steps to achieve greater efficiency and a pattern of production more in accordance with the comparative advantages.

Revising the existing incentives does not mean that the region should receive less financial support. Because of its geographical conditions, it is important for Açores to keep receiving substantial aids. However, progress towards a less distortionary fund allocation would be advisable.

# 4.2.1 – Impact of specific policies

#### a) Structural Funds and the Cohesion Fund

Açores has benefitted from substantial amounts of Structural Funds. Under the CSF II, it was a recipient of 45.372 thousand euros up to the end of 1999. In 1994, the Region has been designated as ultra-peripheral, which implies that it will be elegible for objective one funding, irrespectively of its per capita income level. In any case, per capita GDP in Açores is below 75 per cent of the EU average.

The main development plan in Açores is PRODESA (Operational Programme for the Economic and Social Development of Açores), co-financed by the regional government and the European Commission. The plan integrates a significant part of the available structural funds in the region. It covers the construction of public infra-infrastructures, the shaping of

the public administration and support for the private sector. Other relevant community programmes include: REGIS (Community Initiative Programmes for the Development of Ultra-Peripheral Regions), POSEIMA (Programme of specific options to address distance and insularity of Madeira and Açores), INTERREG (Interregional Co-operation Programme) and LEADER.

ERDF funding has been of major importance for the region. By supporting the provision of essential infrastructures, this policy has contributed to increase the territory's competitiveness. The same applies to the Cohesion Fund. ERDF is quite a visible policy. Thanks to significant investments in roads, airports and, to a lesser extent, harbours, mobility within the region and into the region has increased significantly. The development of Airport infrastructures was considered fundamental in this process, because it created new opportunities, namely in the tourism sector. Improvements in hospitals, schools, water supply and drainage of urban residuals also had a considerable impact on the citizens' living conditions, especially outside the main urban centres. The effort to spread the infrastructures over the entire territory has led, however, to the loss of economies of scale. The policy has been less generous as far as urban transports are concerned. Insufficient support to this industry is giving rise to geographical imbalances in the labour market, especially in the minimum-wage segment where people cannot afford to buy a car.

The ESF has a lower financial impact than ERDF, but its effect on competitiveness is perceived to be large. Unfortunately, ESF spending in Açores is not proportional to the existing needs. Açores is the European region with the lowest education level. With equity and cohesion concerns, regional governments tried to provide all islands with basic infrastructures, so that each one of the nine islands now boasts a professional school. Despite this, the amount of ESF allocated to Açores is very low, as compared to other Portuguese regions. The regional government has begun to promote market-oriented training actions based on a survey conducted in order to discover market needs. More than 90 per cent of the firms all over Açores responded. It was reported that all training actions are now following the guidelines identified in this survey, that is, training courses are only approved if they meet local employmentl needs. Thus far, the existing indications suggest that this change in policy has been positive. However, there are some reported cases of people who, after having received specific training, were not able to take up jobs because of the lack of an efficient transport system or because of the cultural characteristics of Azorean people.

In order to raise efficiency in the allocation of funds, the authorities require a bank collateral in the application process for job creation subsidies. This allows the government to cut the subsidy when the job is closed before the agreed term.

Without question, investment in human capital is of crucial importance in Açores. There is an opportunity given that the population in Açores is very young. More than 50.000 students are registered at school, representing one third of the current working age population. This will impact significantly on the structure of the labour force over the next twelve years. If the authorities are well succeeded in educating the younger people, the competitiveness of the economy may improve significantly. So far, the qualification rate, defined as the proportion of workers endowed with a technical course within the total workforce, has risen from 1.4 per cent in 1996 to 5 per cent in 2003. Within three years time this ratio is expected to rise to 10 per cent. The target for 2010 is 25 per cent.

### b) Common Agricultural Policy

The CAP has been the dominant source of EU funding and plays a very important role in the economy of Azores. Most of this aid comes through production support. CAP pillar II and agro-tourism initiatives play a limited role in the region, the farmers not being motivated for these dimensions.

Without CAP aids, Açores would suffer a dramatic economic and social problem. As far as economic cohesion is concerned, however, this policy is rather ineffective: it creates dependency, it gives rise to significant distortions in resource allocation and it has raised significant environmental problems. As it stands, the CAP is more effective a tool for social cohesion than a competitiveness-enhancing policy.

Owing to the Açores' climatic and soil conditions, during the 1990s a regional cluster based on cattle derivatives (butter, cheese, beef and other) has emerged: farmers were induced to engage in cattle creation. Milk production became and still is the most important sector in Açores. Although some other cultures subsist (pineapple, garden-beet), farmers were led in the 1990s to expand milk production to benefit from higher levels of funding. Because of the CAP, the Federation of Farmers became an important political lobby, which has to be heard on any policy subject in Açores.

Since most exploitation are of small scale, CAP aids play an important role in Açores, as far as social cohesion is concerned. CAP aids are well distributed among farmers and over the

territory. This contrasts with the general rule of CAP that 80 per cent of the aid goes to 20 per cent of the farmers. Pillar I aids represent a reasonable share of farmer incomes, helping the rural population to remain *in situ*. The drawback is that the policy has created dependency and is contributing to keeping the exploitation sizes small.

Due to the existing milk quotas, a plan is now being developed involving farmers and the authorities to promote beef production, under a common umbrella of geographical certification. This may involve some CAP pillar II funding. This plan is based on the recognition that, because of the increasing EC regulation, the minimum scale for milk production has risen over the last few years. According to the farmers' representatives, CAP regulations are driving some small producers out of the market (through anticipated retirements). According to this plan, smaller farmers would be induced to shift from milk production to beef production. The process of anticipated retirements is also envisaged in order to promote the rescaling of exploitations.

To the extent that aids are proportional to production, they give rise to a distortion, measured by the deviation opf the actual production pattern in respect to the one that would be achieved by means of the law of comparative advantage. Although the natural conditions in Açores are favourable for milk production, one should note that milk production was not that important before CAP protection schemes were put in place. As in other European regions, it may well be the case that other cultures with higher ex ante profitability are being neglected because of the community policy.

The production bias has also impacted negatively on the environment. The excessive use of chemical products (phosphates) in agriculture is contaminating water resources all over the territory and two important lagoons (Sete Cidades and Furnas) are under ecological distress (recall that the Açores tourist bet is based on its natural beauty). A generalised problem of water pollution could thus threat the recent development strategy formulated for the archipelagos.

The de-linkage of aids from production is desirable from an efficiency point of view. However, the Federation of Farmers reacted negatively to the PAC reform. Aparetntly, farmers first want to obtain a rise in the milk quota, as to increase the total amount of aids received before considering the de-linkage option. The farmers also reacted negatively to the modulation mechanism, that is, the progressive reduction of aids for those farmers receiving

more than 5.000 euros per annun. Although in Açores most of the exploitations are small-scale, farmers actually receive more than 5.000 euros per annum under a special programme called POSEIMA. If farmers in Açores did not enjoy a special regime, modulation would result in significant losses within the farmer community.

Although this is pure rent-seeking, it should be noted that a significant fraction of farmers is aged and not suitable to be transferred to other sectors. Had these subsidies been removed, a dramatic social and economic problem would have emerged in the economy of Açores.

#### c) Competition Policy

Because of geographical discontinuation, the advent of the internal market had only limited effects in the economy of Açores. Firms are partially protected from external competition. Moreover, wherever the local market is not big enough to support a large number of competitors, this translates into local natural monopolies and consumer losses.

To compensate for the costs caused by the physical barriers, both direct and indirect taxes in Açores are lower than in mainland Portugal. The reduction in VAT is however uniform across products, thus not depending on the actual transport costs. This gives rise to significant distortions. For example, software industries, which are not affected by transport costs, are not surprisingly moving from the continent to Açores, so as to profit from lower direct and indirect taxes. On the other hand, in industries where transport costs are important (milk, beef), relative prices have moved in the wrong direction.

A main competition problem was identified in connection flights. In Açores, airlines are being explored under monopoly or under special arrangements involving the operators. As a consequence, airfares for non-residents are well above market prices. In Açores, where periphery and transport costs are a key issue, such an extra inefficiency is rather unwelcome.

#### d) State Aids

Because of its insularity, the region benefits from a wide range of investment-supporting packages. The EC approved a special aid programme for the regional development of Açores called SIDER (Incentive System for Regional Development). With this instrument, the regional government is able to support firms operating in a wide range of industries. The use of this ability has lead however to significant price distortions. Funds have been distributed over almost all sectors in the economy, including services, housing construction and tourism-related activities.

From a social cohesion point of view, this policy is probably effective. However, such a generosity lacks an economic rationale. It is questionable whether firms operating in non-tradable sectors like housing construction or street shops should be supported by SIDER. Non-tradables are, by definition, isolated from external competition in every economy. Hence, there is no point of these industries being eligible for a subsidy specific to insular economies. Moreover, some of these activities only exist because their demand is derived from subsidies attributed elsewhere. Tradable sectors, on the contrary, are highly affected by transport costs. Unfortunately, the policy does not distinguish these two situations. Rather than spreading the subsidies all over the economy, a more focused policy would be desirable.

#### e) Environment

The environment policy has produced relevant effects in three main areas:

- the implementation of structural policies has been accompanied by studies evaluating their environmental impact. In general, whenever a negative impact was foreseen, alternative solutions have been proposed, without any particular political or social problem.
- over the last years, the production of urban waste has risen significantly in Açores. A significant amount of ERDF has been used to improve the waste collection system and the drainage of urban liquid residuals. Since the Açores do not have the minimum scale for an incinerator, waste has been exported abroad. This is, of course, an expensive solution, especially because nine islands are involved.
- in Açores, air pollution caused by carbon emissions is negligible. However, cattle creation has led to a fast deterioration of the quality of water sources. At the moment, the authorities are dealing withthe problem of excess phosphates in the lagoons of Sete Cidades and Furnas, in São Miguel. This affects roughly 60 farmers. The intervention is however, restricted to these areas. According to the opinions collected, there is no general approach for dealing with the pollution caused by agriculture in the archipelagos.

In general, environmental protection rules are well accepted in the region. Azoreans perceived environmental policy as having been dominated by specific interventions in order to face up to particular problems. The actions undertaken are perceived, however, as prompt and efficient. On balance, there is no perception that environment regulations are constraining theregion's growth perspectives. On the contrary, there is an understanding that environmental protection is essential for sustained development.

#### f) Innovation and Research and Development

Innovation Policies are not significant in Açores. A notable exception is the research undertaken to explore geothermal energy. With ERDF co-financing geothermal electric generator was created in S. Miguel. Research and development in the region is mostly undertaken by the University of Açores. Excellence has been achieved in the areas of geothermal energy and oceanography.

Biological agriculture is negligible in the region. There is no link between agriculture and regional innovation policy. In general, R&D policies do not have a major impact on the economy of Açores. Firms are not involved in R&D activities and government initiatives became more visible in the couple of last years.

In general, innovation policy is perceived as having a 'broadly neutral' effect.

#### g) Common Fisheries Policy (CFP)

Although the weight of fishing-related activities in GDP is declining, there are still some important fishermen communities. By contributing to the modernisation of the fleet and regulating the industry, the CFP had an important role in driving fishermen's incomes up to levels comparable to those of other activities. The reduction of the fleet led however to some early retirements and may have contributed to some long-term unemployment in specific communities.

We perceived the Fishing Sector as to be largely ignored within the Açores community. A general concern is whether the openness of the exclusive fishing area to other EU countries will threat the existing fish stocks, because the exclusive ocean area is huge and the Azorean authorities do not have sufficient means at their disposal to patrol the entire area. For some authorities this problem already exists with respect to some Spanish fishermen.

#### h) Transports, energy and telecommunications

Improvements in airport infrastructures on all islands (especially in Ponta Delgada, Angra do Heroísmo and Horta) had a significant impact in the region. Although mobility within the archipelagos has improved, it is still dependent on random factors, such as weather conditions.

As far as energy and water supply is concerned, there is still a lot to be done. For example, it was reported that the existing electricity network and water supply only reach 5 per cent of the farmers.

# 4.2.2. Co-ordination between policies

Despite the large degree of policy interdependency in a small region like Açores, the different programmes are perceived to be implemented in a rather independent (and, in some cases, conflicting) manner. As far as agriculture and tourism is concerned, the natural link via agro-tourism is not being explored.

#### 4.2.3.- Governance

The existence of a regional government constitutes an advantage for Açores with respect to other Portuguese regions. However, the administration's structure is not perceived to be fully adapted to promote an effective intervention. The desirability of greater co-ordination between the regional government and other levels of the administration was referred by almost all of the persons interviewed. It appears, however, that co-ordination problems are now a matter of increasing attention by the administration.

Access to EC funds has helped the local authorities (as well as private agents) to improve their planning capabilities. As in other regions, the elaboration of PRODESA was preceded by an overall discussion involving key actors in the region, enriching the debate and the understanding of the global problems facing the economy. Because of the eligibility requirements, the policy was also forced to incorporate some concerns (e.g., environment) that otherwise could have been neglected.

The Federation of Farmers complains about the slow official response to project applications (IFADAP - Institute of Financing and Support to the Development of Agriculture and Fisheries - and regional government). A usual practice has been to proceed with project implementation prior to approval, using some special credit lines offered by the banking system. Nevertheless, the risk exists that projects be rejected because of this. This was pointed out as an example of lack of coordination and bad governance.

In general terms, CPs have contributed to improving the planning and management capabilities of the regional administration.

# 4.2.5 - Summary and guidelines for Community Action

The economy of Azores is largely dependent on the size of the public administration and on transfers from abroad, such as CAP aids. Without these transfers, the economy would collapse.

Transfers are however necessary to compensate for the insularity.

The cohesion fund and the regional structural funds have been tremendously beneficial for the region, contributing to improving the production capabilities of the region. In general, subsidies are well succeeded in reaching a large share of the population and are relatively well distributed across islands.

However, some of the existing mechanisms (CAP, SIDER) are giving rise to significant market distortions. In some sectors, policies may promote dependency rather than enhancing competitiveness. "Getting the prices right" should be a matter of more attention by the regional authorities.

In the following box we present some guidelines for Community action with the view to avoiding the negative impact of Community Policies in Açores.

Box 4.2.1 - Guidelines for community action

⇒ "Get the prices right" (changes in the structure of VAT, a special tax regime for transport costs);
 ⇒ More sectoral discrimination (tradable sectors, rather than non-tradable sectors);
 ⇒ De-link CAP subsidies from production;
 ⇒ Protection of water sources;
 ⇒ More attention to the public transportation network;
 ⇒ Increase competition in connection flights;

\_ Reinforce training actions;

Greater co-ordination between agriculture, tourism and environment.

# 4. 3 - Regional case study: Algarve

#### Context and Background

Algarve is a region with roughly 350.000 inhabitants. Tourism-related activities (including hotels and real state) represent the bulk of regional GDP. In 1998, the number of tourists entering in Algarve through Faro airport and Andaluzia exceeded 4.7 million.

Agriculture and fishing represent roughly 8 per cent of regional GVA and 10 per cent of employment. Manufacturing accounts for less than 5 per cent of regional GVA. Due to tourism, most of activity is located in the coastal area of the south (Campina).

### Progress towards cohesion

Over the last years, the Algarve economy has performed relatively well. The region has been able to converge towards the country average in terms of per capita GDP and this progress encompassed the coastal as well as the rural areas.

The impulse provided by Community Policies in promoting economic cohesion has perceived to be very positive. The region is now better endowed in terms of infrastructures and ability to converge than one decade ago. In general, intervention did not give rise to excessive distortions or dependency.

Special attention is needed, however, in regard to two dimensions: human capital and environmental protection.

To assess the impact of policy actions on competitiveness, one should abstract from demographic effects. In columns (2) and (3) of table 3.1.2 (see subsection 3.1), the relative per capita GVA is broken down into a demographic component (working age population divided by total population) and a policy induced component (GVA per working age person).

In columns (4) and (5), the relative GVA per working age person is broken down into GVA per worker and the employment rate (employment divided by working age population).

Figure 3.1.3 (see subsection 3.1) displays the same information depicted in columns (2) and (3) of table 3.1.2, but in changes, from 1990 to 2001. The y-axis measures the difference between the growth rates of GVA per working age person in each region and the country average. The horizontal axis measures the difference between the demographic trend of each region and the country average. The dashed line shows the combinations of demographic trends and productivity changes that would allow regional per capita GVA to grow proportionally to the country average. The graph defines four different zones, according to the relative performance of the different regions vis-à-vis the country average.

The figures reveal that Algarve enjoyed both favourable demography and a fast rise in productivity. This twin advantage translated into a fast convergence towards the country average of per capita GDP.

# 4.2.1 – Impact of specific policies

#### a) Structural Funds and the Cohesion Fund

Algarve has received large amounts of Structural Funds, which are managed under a regional programme called PROALGARVE - Algarve Operational Programme in the CSF III - (PROA in CSF II). The cohesion fund has been used mostly for environmental issues. The region also receives direct support from community initiatives, such as INTERREG and PIC (Programmes of Community Initiative) LEADER + and EQUAL (European Social Fund Initiative).

The fund that was perceived to have had most impact in the region is EDRF. This Fund has been used to improve public infrastructures, such as roads, hospitals, water supply, drainage of urban residuals, etc. Although most funds are spent in the coastal area (Campina), this is also the region where most of the population lives. In proportion of the residential population, the understanding is that investments have been higher in rural areas. EFRD funding is perceived to have impacted positively on living standards and on competitiveness both in rural and urban areas.

The improvement in accessibilities allowed the flow of tourists into the region increased significantly. For example, tourists entering by the Spanish border and/orthe airport increased

from 2.1 million in 1990 to 4.7 million in 1998. The railways now connects Faro directly with Lisbon. This allows travellers to move from the North of Portugal to the South without changing train. There is a perception, however, that the investment effort made in the regional railways system was too low. Since the railroad connects the main cities in Algarve, its improvement could have a positive impact on labour mobility and on traffic conditions in the main urban centres. The improvement in municipal roads helped people living in the countryside to share in the benefits of economic development, as long as they afford to have a car. People are now able to live in the rural areas of Barrocal and Serra and work on the coast (Campina).

The Portuguese IEFP has been surveying the employers, with the aim to identify training opportunities, rather than to offer courses according to the jobless' requirements. The results so far have been promising. It was reported, however, that some unemployed, after receiving appropriate training, were unable to take jobs outside their residential areas because of the lack of an appropriate public transport system.

In the Algarve region, the labour market is significantly affected by seasonality. Since most demand for labour arises in the summer, a large share of the employment created is short-term. A significant share of the workforce engages in summer work, enjoying high monthly wages and benefitting from unemployment protection during the winter. The authorities tried to reduce this phenomenon, supporting longer-term employment with training actions during the winter<sup>35</sup>. However, only the larger firms (those that usually hire long-term) have responded. Small firms (the target of the policy) are insisting in hiring only short-term workers.

ESF spending, depending on private bids, is thus highly concentrated in the more polarised regions of Campina. To offset this, attempts are being made by the national and regional authorities to promote specific training actions in the less favoured regions of Barrocal and Serra.

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<sup>&</sup>lt;sup>35</sup> Employment policies are implemented through the Plano Nacional de Emprego (PNE), which is designed according to EC guidelines and targets and came into operation in 1999. The implementation of PNE in Algarve is undertaken by three different structures (National Employment Networks). This applies however only to operational purposes, given that there is no regional autonomy in the policy formulation.

Despite being one of the European regions with a lower level of human capital, ESF spending has been evolving at a slow pace. Although the seasonal nature of the labour market may explain this, it may also reflect a cultural problem. Remarkably, training actions specifically directed at the municipalities' own staff (accounted for in PROALGARVE) reveal very low spending as well. This pattern, in a region with such a low level of human capital should be a matter of concern in the future policy formulation.

#### b) CAP

The CAP policy is administrated in the region at two different levels. The bulk of the CAP policy is under the national framework, named AGRO (Agriculture and Rural Development Operational Programme in the CSF III). Pillar II policies, because they are more linked to the region, were incorporated in PROALGARVE, under the name AGRIS (Generic Assignment of the Measures Regionally Disconcentrated of Agriculture and Rural Development). This includes rural development, diversification, incentives for workmanship, urban interventions in small villages, support for small-scale production, quality development, environmental protection, etc. From a cohesion point of view, this dimension of the CAP is of great importance.

Due to the fact that agriculture in Algarve is predominantly of the Mediterranean type, CAP supports are not as important as in other EU regions. Consequently, CAP aids do not constitute a significant share of farmers' incomes. Still, farmers in Algarve have benefitted from considerable investment supports. Most of the aid is taking the form of investment subsidies, thus contributing to the modernisation of agriculture without giving rise to significant dependency.

The sectors that received help include citrus production, horticulture and forestry (pinewood, cork, eucalyptus). These were and still are some of the most important cultures of the region. The traditional cultures (almonds, figs and carobs), are not so dynamic, but have a high social value. Milk production has practically disappeared and the production of cereals is declining every year. Contrary to other regions, in Algarve the CAP has not caused a significant move toward production patterns that are contrary to the comparative advantage. In this framework, de-linkage of supports from production is not likely to cause any significant change.

Under the CAP's second pillar there has also been some investment in the development of rural areas and supports for production diversification. Biological agriculture and agrotourism have not yet reached a visible scale in Algarve. However, the bulk of the CAP policy originates in the first pillar.

Important from the social point of view is the small-scale production of agricultural derivatives, such as cheese, liqueurs and olives. Although special supporting programmes were designed for these activities, eligibility requires producers to satisfy a heavy set of consumer protection rules. It has been reported that many small-scale producers prefer to remain on the sidelines, not satisfying the requirements (and in some cases not paying taxes), rather than to benefit from CAP pillar II aids.

To the extent that the CAP's first pillar promotes extensive production, it is likely to have a detrimental impact on the environment. In Algarve, some contamination of water resources is likely to be caused by extensive horticulture.

Some of the research projects undertaken in Algarve are related to agriculture. The most significant ones involve the Regional Direction of Agriculture, the University of Algarve and, in some cases, Spanish entities (under INTERREG).

#### c) State Aid

Subsidies for private business are attributed at the national level. Some of these are however accounted for in the regional programme, PROALGARVE. Some of them constitute support for local small-scale investment (firms with fewer than 20 workers), information society and PITER - Regional Programme for Tourism Development. These are all co-financed by ERDF.

#### d) Common Fisheries Policy

The Fisheries policy is defined at the national level. Regarding implementation, however, there are two levels. The measures accounted for in the national policy framework are called MARE (Fisheries Operational Programme). Those accounted for in PROALGARVE are call MARIS (Generic Assignment for the Measures Regionally Disconcentrated of Fisheries) and include infrastructure development (ERDF) and quality improvement (FIFG). In practice, however, all policy is mediated by the national government. Since the regional director of fisheries has no autonomy, de-centralisation is only virtual.

From 1994 to 1999, the number of registered fishermen has declined from 8.200 to 6.800. The same trend is foreseen until 2008. The number of ships has also declined, from 2.900 to 2.300. The fleet is now more modern and with better working and safety conditions than before. In this process, there has been a tendency for the ships' fishing capacity to increase. Despite these developments, 30 to 40 per cent of the fleet is still obsolete.

In general, the implementation of CFP has been perceived to be positive for the sector. Fishermen's incomes have improved and the re-scaling of the fishing sector has not caused significant social effects. Early retirements were well accepted and transfers of workers to other sectors were smooth. However, a problem of false retirements was identified: because pensions are very low, some retired fishermen are maintaining a fishing activity, under the umbrella of "sport fishery". Since, in Algarve, sport fishery is not being subject to adequate supervision, this is a problem that needs to be taken into account in the future.

Some fishermen in Algarve were affected by the failure of EU negotiations with Morocco. Those who were forced to stop their activity have been supported by different mechanisms in the last few years, but are now facing the threat of an early retirement.

The reduction of the exclusive fishing area to 12 miles is a matter of concern among fishermen in Algarve. This is because most of the fishing activity takes place between the coast and within the 20 mile zone. Fishermen claim that the Portuguese government has discriminated them. In particular, they claim that the licensing of ships in Portugal obeys to stricter rules than in Spain, giving rise to an unfair competition in terms of fishing capacity.

## e) Environmental Policies

After decades of negligence and insufficient monitoring, there is now an understanding that environmental protection is crucial for sustained development, particularly in a region where tourism plays such a special role. Those urban areas that have grown chaotically in the past (excess building, lack of green areas) are losing competitiveness to alternative areas where planning and environment protection are accounted for. This process of "flight to quality" is not sufficient, however, as a disciplinary device. Because of the externalities involved, individual decisions tend not to incorporate the social losses, giving rise to excess building and environment problems.

The situation has evolved differently in the countryside. Up to the 1980s, housing construction has led to a fast deterioration of the rural landscape. In 1990, PROTAL -

Territorial Order Plan (MA - Environment Ministry) imposed serious restrictions on housing construction in rural areas. According to this plan, house construction in rural areas was only allowed as a replacement for earlier buildings. Restricting the supply, this law has lead to a general improvement in the housing quality outside the urban centres. At the moment, PROTAL is under revision and pressures exist so to make it looser.

Environmental policies have received substantial Community support over the last years, mostly through ERDF and the Cohesion Fund. Remarkably, the bulk of the Cohesion Fund received under CSF II was allocated to environmental policies (improvements in the water supply, collection and drainage of waste and urban residuals, etc). Evidence from environmental indicators shows that the policy had a very positive impact.

The policy was enacted by the Regional Direction of Environment. This body has also been involved in the evaluation of the environmental impact of projects that are not usually subject to such requirement by the EC (small roads, for example).

POLIS (Urban Requalification and Environmental Valuation Programme) is a national initiative aiming at the re-qualification of distressed urban centres. The first wave of projects is being realised in Albufeira and Silves. An extension of the POLIS programme to other municipalities would be of great interest for the region.

A significant proportion of the territory is now subject to environmental protection, under Reserva Ecológica Nacional, Natura 2000, or other protection schemes. In the areas of special protection (Ria Formosa, Costa Vicentina, Guadiana), the Nature Protection Institute (ICN - Nature Protection Institute) has managed to avoid a further deterioration of environmental conditions.

Despite the progress made, environmental issues should be kept on the top of the policy agenda in the future. The erosion of the coast, a final solution for solid urban residuals, and interventions in the urban centres that have grown chaotically and protection of natural areas are aspects in need for urgent intervention. Given the extreme sensitivity of the region and the economic interests involved, a strict governance system is required.

#### 4.3.2 - Co-ordination between policies

During the preparation of the regional operational programme the policy debate was enriched by the participation of key actors in the region. This includes the CCR (Regional Coordination Commissions), the regional directorates representing the national government (agriculture, economy, employment, etc), the municipalities (AMAL - Algarve Municipalities Association, representing the 17 municipalities of this region), business associations, academics and the Tourism Regional Commission (where both the central government and the municipalities are represented). This debate allowed key actors and government officials in the region to get in contact with the problems identified by each other and to incorporate different solutions in the new programme. A strategic document was prepared, containing the main policy options for the region. After the creation of the operational programme, called PROALGARVE, the co-ordination effort lost impetus.

In PROALGARVE, two main innovations with respect to PROA were introduced:

- □ In order to avoid more dynamic areas to absorb the bulk of the financial resources, a special dimension was created called "Territorial Actions". Territorial actions were introduced to promote a more balanced development across the territory, taking into account the two different dimensions: a coastal area subject to urban pressures (Campina) and the rural periphery (Barrocal and Serra). Although expenditures in territorial actions are evolving at a slower pace than planned, since resources cannot be re-allocated between actions, authorities trust this mechanism to become an effective cohesion tool.
- De-centralisation: attempt to incorporate into the regional plan some spending from national policy. For example, the agriculture policy was split into AGRIS (regional) and AGRO (national). The fisheries policy was split into MARE (national) and MARIS (regional). For the employment policy, the split between policies is less obvious: initiatives for unemployed are under PROALGARVE, while initiatives for youth and job-training actions are kept as a national policy.

In practice, however, the procedures and the decision process for policies contained in the regional plan obey to the same rules as for those policies that remain under the national umbrella. In agriculture, for example, AGRIS rules are equal in all Portuguese regions and the final decision is given to the Ministry. This means that, from the co-ordination point of

view, the incorporation of national policies in PROALGARVE is little more than an accounting change.

In general, co-ordination between different levels of government (regional, national, municipalities) is perceived to be deficient.

Specific co-ordination problems were identified at the launch of POLIS. This initiative was to be co-financed by both the European Funds (Cohesion Fund, Sectoral Operational Programs) and the Portuguese Government. The policy was however only formulated after the CSF III was on its way. Since the selection and eligibility criteria of POLIS (Programa de Requalificação Urbana e Valorização Ambiental) had not been subject to the scrutiny of the EC, negotiations had to be conducted thereafter. This led to a significant delay. Three years after the initiative was announced, no physical interventions have yet taken place.

Rural development, electrification of isolated areas, promotion of small-scale activities in areas with low density (cheese, liqueurs, olives, workmanship) involves different funds such as ERDF, CAP/AGRIS, and LEADER. Co-ordination between these initiatives was claimed to be low.

#### 4.3.3 - Governance

In Algarve, there is no regional government. The regional development programme is managed by CCR, which has neither executive power nor direct authority over the regional directions or the municipalities. This gives rise to significant accountability and governance problems. Since, in contrast, municipalities have their own political legitimacy, this translates into an excessive weight of municipalities in the decision-making process. Perhaps this explains the excess of symbolic infrastructure and some lack of scale in policy formulation.

During CSF II, Algarve displayed a low spending capability as compared to the rest of the country. This was not so much a problem of regional governance (actually, funds depending on the regional plan were spend at a normal pace), but mostly the failure of regional directorates in driving resources into the region. Since these "national policies" represent the bulk of the budget, PROALGARVE attempted to re solve the problem incorporating into the regional plan some "national" policies (de-centralisation).

Under INTERREG, cross-border partnerships involving bodies from Algarve, Andaluzia and Alentejo have been supported. Within the current framework, eligibility requirements are stricter than under CSF II: only effectively integrated projects are being supported. Two problems were identified in terms of the implementation of this programme. The first is that, contrary to what happens in Spain, in Portugal, there are no regional governments. This means that, in some matters, the dialogue takes place between the authorities in Andalusia and the Portuguese government. On the other hand, some communication problems may have resulted from the fact that Andalusia is economically much larger than Algarve. Notwithstanding, roughly 50 projects supported by INTERREG III are under way.

It was reported, as an example of "bad governance", that projects submitted to PROALGARVE have a faster approval than those supported by national policies.

# 4.3.5 - Summary and guidelines for Community Action

With no doubt in Algarve CPs have played a crucial role in promoting economic cohesion. Public infrastructures, such as accessibilities, water supply and drainage of urban residuals have been the main vehicles. Greater attention should be paid, however, to public transport and in particular to the regional railway system which lacks modernisation. Despite being one of the regions in Europe with the lowest level of human capital, in Algarve ESF spending has evolved at a slow pace. Contrary to other regions, in Algarve the CAP is not leading to significant distortions.

Environmental problems caused by deficient planning and excess construction are a main concern in Algarve. Although stricter rules are now in place, economic pressures are very strong. A co-ordinated intervention, involving different actors and ministries would be of interest, so as to avoid further damage for the competitiveness of the territory.

In CSF III, an effort was made to decentralise some policies. This effort gave rise to the formulation of a strategic plan in which many key actors have intervened, enriching the debate. In the implementation phase, however, governance problems related to the absence of a regional authority have emerged. National policies, even when accounted for in PROALGARVE, are subject to government approval and the programme manager has little influence in the decision process.

In the following box we present some guidelines for Community action with the view to avoiding the negative impact of Community Policies in Algarve.

*Box 4.3.1 - Guidelines for community action* 

Stricter environmental protection;

raising the effectiveness of training actions: market orientation rather than orientation according to preferences of the unemployed;

Support for the re-qualification of urban areas;

Reinforcement of the authority of the CCR;

Improvements in the railways system;

Strict control over fishing;

Reduction of official incentives for seasonal unemployment.

#### 5 - Conclusions

Portugal is a centralised state. In general (with the exception of two autonomous regions), regional authorities' policy discretion is very limited. Most policies that take place at the regional level are mere extensions of policies determined nationally which in turn tend not to have an explicit regional dimension. To a large extent, Portugal features national policies with regional concerns as a consequence and in the moulds of EU policy, in particular according to the requirements of the CSF programmes. There is a good match between national and EU designations of territories for regional and other forms of economic development assistance. The structural funds framework that is widely adopted for national policy and most government spending on promoting economic and social cohesion goes through the CSF. Since the CSF is rather demanding in terms of national contributions, the scope for other national initiatives involving public expenditures is very limited.

Given that some national public expenditures in Portugal are closely tied to EU funding, the regional distribution of CSF funds serves as a useful indicator for the regional incidence of public expenditures. Under the second Community Support Framework, however, regional problems were largely disregarded. This is shown by the fact that the funds per capita for the poorest regions (Açores and Alentejo) were substantially lower than those for the richest regions (Lisboa e Vale do Tejo, Centro and Madeira).

Not surprisingly, the evidence for the period 1995-2000 is of divergence between the Portuguese regions, both in per capita terms and in terms of GVA per worker. Among all Portuguese regions, only Madeira has approached the country average in terms of per capita

GDP. Taking a longer time horizon (1990-2001) to avoid the differential impact of the business cycle, we observe that only Algarve and Norte have succeded in growing faster than the country average, both in terms of GVA per capita and GVA per working age person. As far as regional convergence is concerned, the overall picture has been disappointing.

Box 5.1 below summarises our main conclusions on the impact of national policies on regional (economic and social) cohesion and on the national economy. Column 1 and 2 regard the policy areas and sub-areas under analysis; column 3 lists the main institutions and instruments through which the policy is implemented; column 4 points out whether or not the policy design differentiates among regions; columns 5a and 5b summarise the impact of the policy at hand on regional cohesion; column 5a (5b) addresses specifically the issue of whether there is a differential impact among regions as far as economic (social) cohesion is concerned; column 6 summarises the impact of the policy on the national economy.

In general, macroeconomic developments have had a positive impact on cohesion. The regime shift (to EMU, with the SGP) has doubtlessly created favourable conditions for economic development in the poorer regions. However, the transition to the new regime gave rise to adjustment costs not equally shared by all regions.

It is a common concern to EU member states, including Portugal, to ensure that the level of provision of public goods does not differ too much between localities. Unfortunately, given the available data, the relative scale of public expenditure in different regions in Portugal cannot be duly assessed. In broad terms, the principle of covering the entire territory with education, health, judicial services, public order, etc., has a competitiveness-enhancing effect on the less prosperous regions. This also translates into a significant social-cohesion effect, as employment in the public administration tend to be an important source of income in less populated areas. However, those expenditures that are a counterpart of CSF II (1994-1999) did not properly address the need to reduce regional imbalances. It is only under the CSF III (2000-2006) that the 'regional cohesion problem' is clearly addressed.

Transfers from the central government include transfers to municipalities and additional transfers to autonomous regions, which are the expression of a specific regional policy towards overseas regions. To the extent that the delegation of decision-making results in more efficient resource allocation, the economic impact of these transfers on cohesion is positive. However, the high discretionary capacity of the regional authorities regarding the

use of subsidies to firms has translated into important distortions, dampening incentives, reducing efficiency and creating dependency.

By the same token, state aids may have a potential role regarding social cohesion (preservation of jobs), but are highly inefficient, since they distort trade and competition between firms, regions and countries and delay structural change (this is especially true for sectoral aid). The evidence is that of excessive concentration on the richest regions, thus acting against social cohesion, and in the autonomous regions, working against economic cohesion.

Labour market regulation in Portugal has been indicated as a major shortcoming that prevents adaptability and structural reform. However, its differential impact tends to advance cohesion to the extent that there is more *de facto* flexibility in less prosperous regions.

Training actions are of special relevance, as they have a potential productivity-enhancing effect. The existing evidence, however, is that, with the exception of Alentejo, training expenditures have not been proportionally higher in the poorer regions.

Social expenditures do have implications for the effective distribution of public expenditures between regions, not because the amount spent in any region is determined by regional concerns, but because of the regional distribution of people elegible for social benefits. While it is obvious that social policies have a positive impact on reducing regional per capita income disparities, their effectiveness depends on the ability of the policy to cover all the territory equitatively. The evidence on unemployment compensations points, however, to a higher coverage rate in the more prosperous regions.

Science and technology policy, not having a regional dimension, does not counterbalance the general tendency of the concentration of research activities in the main centres. Large-scale FDI, with most potential positive externalities, as a tendency, also goes to the most prosperous regions. FDI policies, in turn, have attempted to take into account a regional dimension. Still, the success of the policy in avoiding concentration in the most developed regions has been negligible.

Larger regional discretion, however, may be worse than centralisation. This is because the potential positive effects – higher efficiency of resource allocation due to proximity of decision power and information advantage – may be overcompensated by market distortions and dampened incentives due to a lack of competition.

|                          | Sub-area (2)   | Institutions and instruments (3)  | Explicit regional dimension (4) | Assessed impact on regional cohesion   |   | Impact on the national   |
|--------------------------|--|---|---------------------------------|--|---|--|
| Policy area (1)          |  |   |                                 | Economic (5a)  | Social (5b)   | economy (6)  |
| Macroeconomi<br>c policy | Monetary policy Fiscal Policy Wage and income policies | Single market;<br>nominal<br>convergence;<br>common<br>monetary<br>policy;<br>Stability and<br>growth pact;<br>automatic<br>stabilisers | No                              | Broadly positive: Less prosperous regions are more exposed to the costs of inflation and exchange rate uncertainty and volatility  | Positive impact: Democratisation of credit; reduction of the inflation tax; Concerns about adjustment costs, namely speculative price rises in the housing market: pricing-out of lower-income segments of the population located mainly in the larger metropolitan areas | Highly positive: Reduction of uncertainties, providing a sounder framework for investment decisions Reduction of transaction costs enhances efficiency |
| Public expenditures      | Structure of public expenditure s                      | General services; Infrastructures;  | No                              | Net impact positive: The principle of covering the entire territory with education, health, judicial services, public order, etc., has a competitiveness-enhancing effect on the less prosperous regions; However, the allocation of expenditures under CSF II did not address regional cohesion | Positive impact:  Public expenditures tend to be relatively high in less prosperous regions, with a significant employment role of public administration;  Concerns about dependency  | Positive:  Investment in basic infrastructures and accessibilities;  Concerns about sustainability and negative environmental impact                   |

| Policy area                                | Sub-area   | Institutions and instruments  | Explicit regional dimension | Assessed Impact on regional cohesion Economic   | Social   | Impact on the national economy   |
|--|--|---|-----------------------------|---|--|--|
| Transfers<br>from<br>central<br>government | Transfers to municipalities  Transfers to autonomous regions | Local and regional finance laws   | Yes                         | Positive: Financial capacity to carry-out initiatives that are decided according to the subsidiarity principle enhances policy effectiveness at the local level; Concerns about local governance issues, namely with the preferences of local decision makers and corruption; Neutral to negative: Reduces insularity costs and raises the ability to address regional problems, potentially enhancing efficiency; However, actual regional policies are causing significant distortions in the incentive system; | Positive: Funding tends to benefit less prosperous municipalities; Concerns about financial dependency Positive: These policies play a major role in regional employment and direct income support | Positive: Delegation of decision-making to levels with relevant information should increase efficiency of resource allocation Negative: Dependency and distortion of market incentives questionable allocation of funds among regions; |
| State aid                                  | Autonomous regions   | Subsidies<br>for<br>companies;<br>sectoral aid;<br>horizontal<br>aid;<br>Subsidies<br>for<br>companies;<br>horizontal<br>aids | No<br>Yes                   | Negative: Anti competitive; Risk of slowing restructuring through artificial preservation of jobs On the continent, concentration of state aids in the richest regions  | Negative: Concentration of state aids in the richest regions  Positive impact: Preservation of jobs; regional dimension of aid   | Negative: Anti-competitive; not compatible with European Single Market Risk of slowing restructuring; opportunity cost of the funds raised.  |

| Policy area                              | Sub-area        | Institutions and instruments  | Explicit regional dimension      | Assessed Impact on regional cohesion   |  | Impact on the national  |
|--|-----------------|---|----------------------------------|--|--|---|
|  |                 |   |                                  | Economic   | Social   | economy   |
| Employme<br>nt and<br>social<br>policies | Social policies | Labour market regulation;  National bargaining system;  training;  unemployment compensation; guaranteed minimum income; pensions | Yes<br>(for some<br>instruments) | Negative: Rigidities of labour market regulations are more binding in prosperous regions; With exception of Alentejo, training expenditures have not been proportionally higher in less prosperous regions  Positive: Distortions caused by taxation to finance these social policies are more concentrated in more prosperous regions | Positive:  Social dimension of employment protection and training;  Slightly positive: Equalising effects on current household incomes are more important in less prosperous regions; However, the coverage rate of unemployment benefits is larger in prosperous regions. | Uncertain: too high an employment protection prevents structural adjustment and lowers productivity; training improves employability & adaptability and prevents social unrest; Uncertain: Social policies contribute to sustained growth but there is a trade-off between efficiency and equity; |

| Policy area                  | Sub-area             | and reg  | Explicit                  | Assessed Impact on regional cohesion   |  | Impact on the national   |  |
|------------------------------|----------------------|--|---------------------------|--|--|--|--|
|                              |                      |  | regional dimension        | Economic   | Social   | economy  |  |
|                              | R&D                  | Incentives;  |                           | Negative:  | Negative:  | Positive: Higher labour productivity   |  |
| Science<br>and<br>technology | Technology diffusion | Universities and research institutions   | No                        | Network externalities and agglomeration effects: most benefits go to richest regions   | Most effort goes to richest regions  | and employability;<br>contributes to<br>modernisation of economic<br>fabric; stimulates new<br>industries, product &<br>process innovation |  |
| FDI policy                   |                      | Incentives<br>and support<br>packages to<br>attract<br>footloose<br>investment | Yes<br>(in some<br>cases) | Negative, as most investment goes to the richest regions; occasional positive effects related to the occasional policy of avoiding concentration in more prosperous regions; positive skill and technology spill-overs from the centre to some regions | Negative, as most jobs are created in the richest regions; occasional positive effects related to policy success in avoiding concentration in more prosperous regions; positive social spill-overs | Positive: Technology transfer and capital accumulation   |  |

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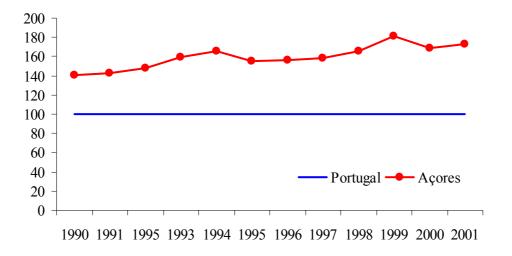
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# Appendix A - Supplementary Statistics for the regions of Açores and Algarve

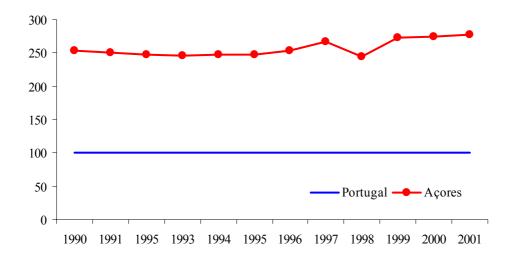
# A.1 - Açores

Figure A.1.1 - Percentage of regional employment in agriculture, 1990-2001



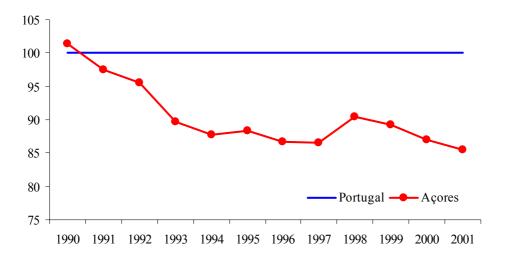
Source: Eurostat, 2003

Figure A.1.2 - Percentage of regional GVA derived from agriculture, 1990-2001



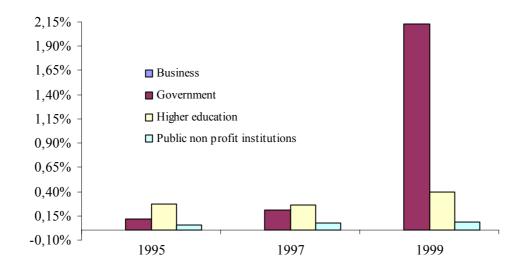
Source: Eurostat, 2003

Figure A.1.3 - Regional GVA per worker, 1990-2001



Source: Eurostat, 2003

Figure A.1.4 - Gross expenditure on R&D by performing sector, 1995, 1997 and 1999

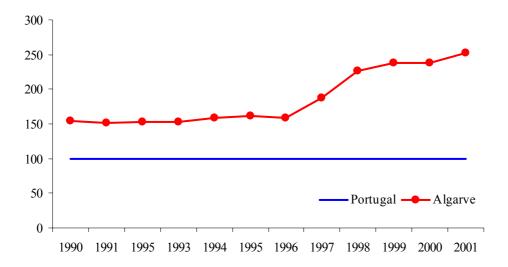


Sources: Inquérito ao Potencial Científico e Tecnológico Nacional, OCT. MCT

Note: as percentage of regional GDP

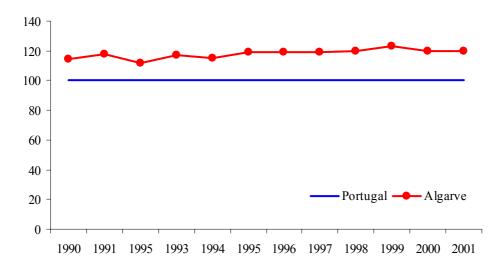
# A.2 - Algarve

Figure A.2.1 - Percentage of regional GVA derived from agriculture, 1990-2001



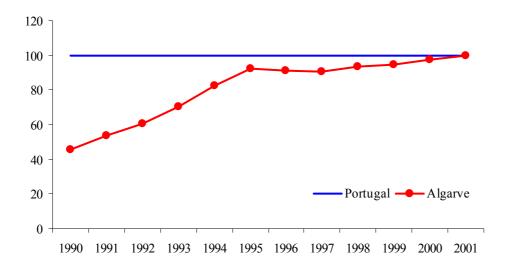
Source: Eurostat, 2003

Figure A.2.2 - Percentage of regional employment in agriculture, 1990-2001



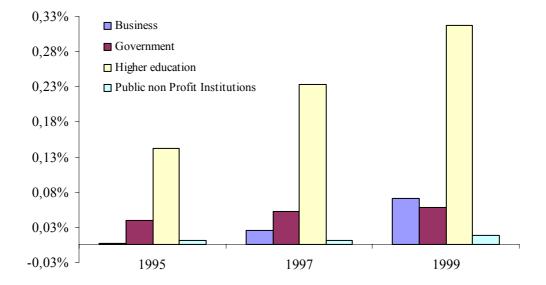
Source: Eurostat, 2003

Figure A.2.3 - Regional GVA per worker, 1990-2001



Source: Eurostat, 2003

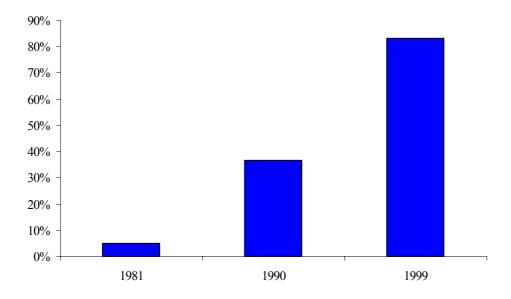
Figure A.2.4 - Gross expenditure on R&D by performing sector, 1995, 1997 and 1999



Sources: Inquérito ao Potencial Científico e Tecnológico Nacional, OCT. MCT

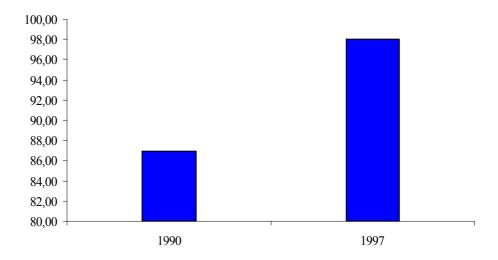
Note: as percentage of regional GDP

Figure A.2.5 - Percentage of population covered by residual waters treatment, 1981, 1990 and 1999



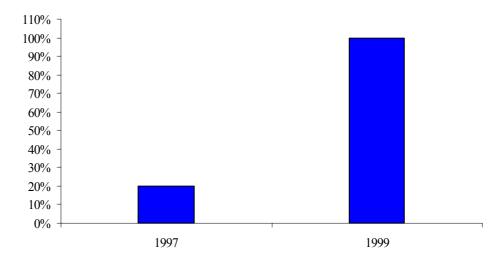
Source: PDR 2000-2006 and Plano Nacional da Política do Ambiente

Figure A.2.6 - Percentage of population covered by urban solid residuals collection, 1990 and 1997



Source: PDR 2000-2006 and Plano Nacional da Política do Ambiente

Figure A.2.7 - Percentage of population covered by solid urban residuals treatment, 1997 and 1999



Source: PDR 2000-2006 and Plano Nacional da Política do Ambiente

# Appendix B - Portuguese brief summary of the major objectives and findings of the paper / Sumário dos principais objectivos e resultados deste estudo

Este estudo avalia o impacto das políticas nacionais portuguesas na coesão regional, usando a definição NUTS II. O estudo enquadra-se num trabalho mais geral para o conjunto da União Europeia, disponível em Begg et al. (2004). O enfoque é primordialmente na coesão económica embora os aspectos ligados à coesão social também sejam tidos em consideração.

Embora Portugal como um todo tenha convergido para a média comunitária desde a sua adesão à Comunidade Europeia em 1986, esse processo não foi igualmente partilhado pelas regiões. De acordo com as estatísticas disponíveis, na última década verificaram-se assimetrias significativas nos padrões de crescimento das 7 regiões NUTS II.

A evidência para o período 1995-2000 mostra divergência entre as regiões portuguesas, quer em termos per capita quer em termos de VAB por trabalhador. Apenas a Madeira se aproximou da média do País em termos de PIB per capita. Considerando um horizonte temporal mais amplo (1990-2001), para abstrair do impacto diferencial do ciclo económico, observamos que apenas o Algarve e a Região Norte cresceram mais depressa que a média do País, quer em termos de VAB per capita quer em termos de VAB por pessoa com idade para trabalhar.

Além da evidência quantitativa, baseada em dados oficiais das instituições nacionais e comunitárias, este estudo também se baseou em evidência qualitativa coligida através de entrevistas junto de decisores públicos, líderes regionais e especialistas/académicos. Essa evidência é contrastada com a perspectiva dos autores.

Existem várias e diversas políticas nacionais com impacto potencial (positivo ou negativo) na coesão. Algumas têm uma dimensão regional explícita. Outras apenas afectam indirectamente a coesão regional. Em geral (com a excepção dos Açores e Madeira), a discricionariedade das autoridades regionais é muito limitada. As políticas implementadas a nível regional são, na sua maioria, meras extensões das políticas gizadas a nível nacional que por seu turno tendem a não ter uma dimensão regional explícita.

Examinamos as seguintes políticas:

- f) Política macroeconómica, com efeitos na estabilização da procura e do nível de desemprego. Em termos gerais os desenvolvimentos macroeconómicos recentes tiveram um impacto positivo na coesão. A alteração de regime (para a União Económica e Monetária, com o Pacto de Estabilidade e Crescimento) criou sem dúvida condições favoráveis para o crescimento económico das regiões mais pobres. Contudo, a transição para o novo regime (o efeito "esticão do euro", com a consequente rápida expansão do crédito interno e a procura interna exacerbada por uma política fiscal pró-cíclica) deram origem a custos de ajustamento partilhados de forma diferente pelas várias regiões.
- g) Despesas públicas, cujo impacto se faz sentir através duma variedade de canais, também têm uma dimensão territorial embora sejam definidas ao nível do país. É uma preocupação comum a todos os Estados Membros da UE, incluindo Portugal, assegurar que o nível de provisão não difere demasiado entre localidades. Infelizmente, dada a informação disponível, não é possível avaliar a escala relativa de despesa pública nas diferentes regiões em Portugal. Em termos gerais, o princípio de cobertura de todo o território com a provisão de bens públicos tem um efeito estimulador da actividade económica nas regiões menos prósperas. Isso também se traduz num efeito significativo na coesão social, dado que o emprego na administração pública tende a representar uma fonte importante de rendimento em regiões menos povoadas. Contudo, as despesas utilizadas como contrapartida do segundo Quadro Comunitário de Apoio (1944-1999) não internalizaram adequadamente a necessidade de reduzir os desequilíbrios regionais. Apenas no âmbito do terceiro Quadro Comunitário de Apoio (2000-2006) o problema da coesão regional é explicitamente considerado. Na medida em que algumas despesas públicas em Portugal estão estreitamente ligadas ao financiamento comunitário, a distribuição regional dos fundos dos quadros comunitários de apoio serve como um indicador útil sobre a orientação regional das despesas públicas.
- h) Transferências do governo central para os municípios e para as regiões autónomas. Estas políticas desempenham um papel importante na coesão económica.
- i) Uma maior coincidência entre a esfera de intervenção e a dimensão territorial dos efeitos da política resulta, em princípio, em maior eficiência. Nessa medida, uma descentralização selectiva resultará em maior eficiência. Contudo, uma maior capacidade discricionária por parte das autoridades locais na utilização dos fundos pode também resultar em distorções significativas, reduzindo a eficiência e criando

- dependência. Esse efeito não é significativo nas transferências para as autarquias, cuja margem de manobra é limitada, mas é particularmente visível nas transferências para as regiões autónomas. Isso mostra que uma maior discricionariedade regional não é necessariamente superior à centralização. As transferências do governo central, influenciando a distribuição regional do rendimento, também têm um impacto sobre a coesão social e actuam como um instrumento de estabilização da procura regional.
- j) Ajudas de Estado, que têm um papel potencial na coesão social (preservação de empregos) mas que são tendencialmente ineficientes, uma vez que distorcem o comércio e concorrência entre as empresas, regiões e países e atrasam as mudanças estruturais (especialmente no caso de ajudas sectoriais). A evidência aponta para uma excessiva concentração nas regiões mais ricas, o que significa que este instrumento tem também actuado contra a coesão social, e nas regiões autónomas, reforçando os efeitos negativos apontados em c).
- k) Emprego e políticas sociais, que nalguns casos têm uma condicionalidade específica à região, podem actuar a favor da competitividade e coesão social de uma região. Entre estas, a formação profissional tem especial relevância, devido aos seus efeitos potenciais sobre o reforço da produtividade. A evidência existente aponta contudo para o facto de as despesas em formação não terem sido proporcionalmente mais elevadas nas regiões mais pobres, com uma excepção no Alentejo. A regulação do mercado de trabalho tem sido apontada como uma das maiores deficiências em Portugal, bloqueando a adaptabilidade e as reformas estruturais. Contudo, o seu impacto diferencial tende a favorecer a coesão na medida em que existe de facto mais flexibilidade nas regiões menos prósperas. As despesas sociais têm implicações sobre a distribuição efectiva das despesas públicas entre as regiões, não porque os montantes dispendidos em cada região sejam determinados de acordo com preocupações regionais, mas devido à distribuição regional das pessoas elegíveis para apoio social. Embora seja de esperar que as políticas sociais tenham um impacto positivo na redução das disparidades no rendimento regional per capita, a sua efectividade depende da capacidade de cobertura equitativa de todo o território. A evidência relativa aos subsídios de desemprego aponta contudo para uma taxa de cobertura mais elevada nas regiões mais prósperas.
- Política de ciência e tecnologia pode melhorar a capacidade concorrencial das empresas localizadas em regiões menos prósperas. Contudo, podem-se registar tensões entre tentativas de reforço da competitividade nacional e o desejo de

- distribuição dos benefícios decorrentes do uso de alta tecnologia pelas várias regiões. A evidência sugere que a política de ciência e tecnologia em Portugal, não tendo uma dimensão regional, não consegue contrariar a tendência geral para a concentração das actividades de investigação nos principais centros do país.
- m) A política de investimento directo estrangeiro (IDE) é uma componente importante de uma estratégia de desenvolvimento regional. Não só tem uma incidência directa sobre a actividade económica, o rendimento e o emprego mas constitui também um veículo de transferência de tecnologia, novas técnicas de gestão e conhecimentos. Aqui aplica-se o mesmo dilema da política anterior: IDE de grande escala, com externalidades potenciais mais elevadas, tende a localizar-se nas regiões mais prósperas. Embora as políticas de promoção de IDE tenham incorporado uma dimensão regional, aparentemente daí não resultaram resultados práticos significativos.

Outras políticas poderiam ter sido analisadas mas foram deixadas fora deste estudo cujo objectivo principal não é examinar em detalhe as várias iniciativas mas sim analisar as políticas nacionais cujo impacto é potencialmente mais relevante ao nível regional.

Embora o objectivo deste estudo seja analisar o impacto das políticas nacionais na coesão, duas regiões (uma continental e outra ultraperiférica) são objecto de uma análise mais profunda, que inclui uma discussão sobre o impacto das políticas comunitárias. Esse contraste é importante para Portugal (especialmente durante o período em análise, 1990-2001) na medida em que as políticas nacionais estão fortemente ligadas aos fundos da União Europeia. Dada a falta de tradição de uma política regional portuguesa, em geral, as políticas nacionais em Portugal incorporam preocupações de carácter regional como consequência e nos moldes das políticas da União Europeia. Como os quadros comunitários de apoio são bastante exigentes em termos das contribuições nacionais, o espaço para outras iniciativas nacionais envolvendo despesas públicas é muito limitado.