EVALUATION OF THE MAIN ACHIEVEMENTS OF COHESION POLICY PROGRAMMES AND PROJECTS OVER THE LONGER TERM IN 15 SELECTED REGIONS

(FROM 1989-1993 PROGRAMMING PERIOD TO THE PRESENT)

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Case Study Norte (Portugal)

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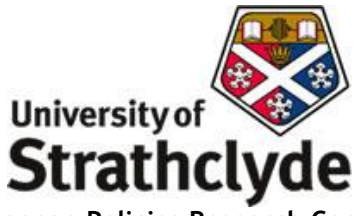

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PREFACE

This report presents the case study for Norte Region of Portugal as part of the study 'Evaluation of the Main Achievements of Cohesion Policy Programmes over the Longer Term in 15 Selected Regions (from 1989-1993 Programming Period to the Present)' which is being managed by the European Policies Research Centre and London School of Economics.

The authors would like to thank everyone who has participated in the study and provided valuable insights, including all interviewees, survey respondents, workshop participants and others who facilitated the research by providing information, contacts, data and documents. In particular, we would like to thank and acknowledge the suggestions, comments, data and logistical support received from Francisco Carballo Cruz, Eduarda Ferreira, José Lúcio and Paula Remoaldo.

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List of Abbreviations

ACCRU – Critical Area for Urban Recovery and Conversion

ADDICT – Agency for the Development of Creative Industries

ADERDOURO – Douro Region Promotion and Development Association

ADR – Entre Douro e Vouga Development Agency

ADRAM – Alto Minho Regional Development Association

ADRAT – Alto Tâmega Regional Development Association

ADRAVE – Ave Valley Regional Development Agency

ADRVS – Sousa Valley Regional Development Agency

AIBT – Territory-Based Integrated Actions

AIR – Annual Implementation Report

AIP – Portuguese Industrial Association

AGRO – Agriculture and Rural Development Operational Programme

AMAVE – Ave River Valley Municipalities Association

ANJE – National Association of Young Entrepreneurs

APCOR – Portuguese Cork Association

APICCAPS – Portuguese National Footwear Association

APDL – Leixões Port Administration

ARDU – Urban Regeneration and Development Actions

AvePark – Ave Sub-region Science and Technology Park

BIC – Business Innovation Centre

CCDR – Regional Development Coordination Committee

CCR – Regional Coordination Committee

CGD – General Deposits Bank

CIENCIA – Science National Operational Programme

CITEVE – Textile Industries Technological Centre in Famalicão

COMPETE – 2007-2013 NOP Competitiveness Factors

CTIC – Leather Technology Centre

DGDR – Regional Development General Direction

DIMTEC – Incentive Scheme for Implementation of Pilot Projects Relating to Products, Processes and Technologically Innovative Systems

DPP – Prospective and Planning Department

EEC – Collective Efficiency Strategies

EFF – European Fisheries Fund

EIME – Incentive Scheme for Micro-Enterprises

EMFF – European Marine and Fisheries Fund

EN – National Road

EP – Roads of Portugal

FCT – Technology and Science Foundation

FDI – Foreign Direct Investment

FIR – Final Implementation Report

GAT – Technical Support Offices

HPTOP (POPH) – 2007-2013 NOP Human Potential

ICEP – Portuguese External Trade Institute

IDEIA – Applied Business Research and Development Programme

IEFP – Public Institute for Employment and Vocational Training

IFDR – Financial Institute for Regional Development

IGFSE – European Social Fund Management Institute

INE – Portuguese National Institute

INEB – Institute for Biomedical Engineering

INEGI – Mechanical Engineering and Industrial Management Institute

INESC – Systems Engineering and Computer Institute

INSTS – National Scientific and Technological System

IPATIMUP – Pathology and Molecular Immunology Institute

IPPAR – Portuguese Institute of Architectural Heritage

IQADE – Regional Agencies Implementation and Improvement

JAE – Autonomous Road Agency

MARE – Fishery Operational Programme

MSW – Municipal Solid Waste

NITEC – Programme for the Development of R&D Nucleus in Enterprises

NSRF – National Strategic Reference Framework

NUTS – Nomenclature of Territorial Units for Statistics

ON – 2000-2006 ROP Operation Norte

ON.2 – 2007-2013 ROP New Norte

PAMAF – Agriculture Operational Programme

PDM – Municipal Master Plans

PEDAP – Specific Programme for the Development of Portuguese Agriculture

PEDIP – Specific Programme for the Development of Portuguese Industry

PIDDAC – Central Administration Investment Programme

PMA – Porto Metropolitan Area

PNAI – National Action Plans for Social Inclusion

PNICIAP – Incentives for Productive Activity Operational Programme

POA - Environment and Urban Regeneration Operational Programme

POAP – Public Administration Modernisation Operational Programme

POAT – Accessibility and Transport Operational Programme

POEFDS – Employment, Training and Social Development Operational Programme

POC – Culture Operational Programme

POCI 2010 – Science and Innovation Operational Programme

POMTE – Economic Modernisation Operational Programme

POVT – 2007-2013 NOP Territorial Enhancement

PPDR – Regional Development Potential Promotion Operational Programme

PPP – Purchasing Power Parities

PRAXIS – Knowledge Basis and Innovation Operational Programme

PRIME – Economy Operational Programme

PROAM – 1989-1993 ROP Alto Minho

PROAVE – 1989-1993 ROP Ave River Valley

PROCOM – Commerce Modernisation Programme

PRODAC – Accessibility Development Programme

PRODEP – Education Development Programme

PROMAB – Programme to Support Wholesale Markets of Public Interest

PRONORTE – 1994-1999 ROP Norte

PROPESCA – Fishing Operational Programme

PRORAMP – 1989-1993 ROP Porto Metropolitan Area

PRORN – 1989-1993 ROP Norte Region

PROTAD – 1989-1993 ROP Trás-os-Montes and Alto Douto

PROVERE – Programme for the Economic Enhancement of Endogenous Resources

RDA - Regional Development Agencies

RDP – Regional Development Programme

RIS – Regional Innovation Strategy

RTD – Regional Technology Development

S&T – Science and Technology

SF – Structural Funds

SIBR – Regional-Based System of Incentives

SIED – Digital Economy Incentive Schemes

SIFIT – System of Financial Incentives for Investment in Tourism

SIME – Incentive Scheme for Business Modernisation

SINPEDIP – Specific Programme for the Development of Portuguese Industry Incentive Schemes

SIPIE – Small Business Initiatives Incentive Schemes

SIR – Regional Incentives System

SME – Small and Medium-Sized Enterprises

SPD – Single Programming Document

TCFTI – Technological Centre for Footwear Industry

UPTEC – Porto University Science and Technology Park

URBCOM – Incentive Scheme for Urban Commerce Projects

WWTP – Wastewater Treatment Plants

ZIP – Priority Intervention Zone

EXECUTIVE SUMMARY

The Regional Development Context

Norte has probably faced the greatest challenge of adjustment during the last 25 years, of any of the EU regions with the exception of Eastern Europe. A mix of both external (textile trade liberalisation in the WTO, Single Market, EU eastern enlargement, change of monetary policy) and internal factors led to a considerable need for restructuring. In the 1980s the region was the most industrialised in the country with a specialisation in labour-intensive, low value-added, traditional industries such as textiles and clothing, footwear and furniture. Whilst there was potential for increased export to the rest of the EU on Portugal's accession to Europe, this was swiftly challenged by competition from Asia and from the new Eastern European economies, with Norte failing to match the lower costs or to make an effective transition to higher value added activities. Despite considerable support for the conversion of the traditional sectors manufacturing employment has fallen consistently since the early 1990s.

These fundamental changes in market conditions led many entrepreneurs to prefer investing in non-tradable sectors, which were profitable and secure, such as construction and public works. All these resulted in rapid deindustrialisation of Norte, accompanied by growing unemployment and a drop in purchasing power.

Twenty-five years ago, the Norte region had a severe lack of basic infrastructure and social amenities, which was very similar to the rest of the Portugal. This meant external diseconomies and a lower quality of life than the rest of Europe. Human resources were the most critical factor in terms of potential development: Norte experienced the lowest levels of schooling in the country, high drop-out levels, incipient professional training, the lowest rates in terms of secondary and university attendance and low R&D investment.

The present situation shows radical improvements in infrastructure, and the younger workforce is more qualified, creative and flexible. The region is home to several universities (which includes the largest university in Portugal – the University of Porto) and internationally reputed research institutes. The region has managed to develop a regional innovation system, particularly in enterprises. However, regional levels of GDP per capita remain the lowest in Portugal, significantly below the EU27, and unemployment has increased in the last five years. On the other hand, the present financial crisis has demonstrated the region's resilience, with a relatively better economic performance than the rest of the country and a surprising capacity for export growth towards new external markets, mainly in traditional sectors.

The relevance of ERDF programmes for the Norte Region

Norte has been eligible for ERDF throughout the period from 1989 till present, always as an Objective 1/Convergence region. ERDF and Cohesion Fund resources allocated to the Norte have been substantial, amounting to €13,153 million.

The analysis of the expenditure data points to a gradual shift of priorities from the domination of infrastructure expenditure (including environment services) in the early periods to a more balanced

distribution in the most recent programming periods including enterprise, spatial cohesion, structural adjustment and innovation priorities.

In the present programming period, infrastructure is still significant but now much more connected to specific investments, particularly education-related equipment. In addition, there is a focus on enterprise support to increase competitiveness on a global scale. At the end of the period, one can expect an expenditure pattern that corresponds more to the current reprogramming objectives: the reinforcement of enterprise support, labour-market-related measures (unemployment issues) and the enhancement of innovation.

Clearly the investment in infrastructure in the earlier period responded to a real need in the region to overcome historic under-investment, facilitate better international connections and also enable better local mobility to access employment opportunities and public services. Support for enterprise and restructuring has also been necessary in responding to the changing competitive environment in which the region found itself. Enterprise policies changed over time as the perceived needs shifted from an export strategy based on traditional sectors to modernisation and diversification. More recently there has been a strengthening of the urban regeneration theme in order to enhance the attractiveness of the historic cities of the region.

The effectiveness of ERDF spending

The programmes have experienced mixed results in terms of their effectiveness. Whilst economic growth and productivity were key objectives, these macroeconomic variables (GDP and employment growth rates in particular) saw no effective convergence with the rest of Portugal or the EU, as Norte's GDP per capita (PPP) remained at around 60% of the EU 15 average.

But on a smaller-scale analysis, on a programme-by-programme basis, programmes effectively achieved their targets in infrastructure endowment and in the improvement of the quality of life conditions. Transport infrastructures (external and internal accessibility) were developed to a good standard to facilitate the Norte region's connection to the rest of the country and to Europe, supporting export growth and economic diversification.

Complementarities and Synergies

The examples of complementarities between different ERDF-funded programmes are relatively scarce, as NOPs were managed centrally by each sectoral ministry and complementarity was seen as too complex and time-consuming.

However, with the creation of the Cohesion Fund and its support for generally large investments in transport and environment, this type of complementarity became relatively usual between ERDF and Cohesion Fund resources to fund shares of a single major investment.

The current "Programme for the Economic Enhancement of Endogenous Resources" (PROVERE) is an interesting example of complementarity between Structural Funds (ERDF, ESF, EAGGF/EAFDR and EFF).

Complementarities between ERDF and the ESF, on one hand, or between ERDF and EAFRD are much rarer, even if some examples were detected.

The utility of ERDF programmes

ERDF programmes contributed to diverse positive effects, such as: the reduction of time of access to global markets improving the competitiveness of regional enterprises; a more efficient access (time and cost) to new markets; a better functional articulation of the regional urban system; the improvement in the accessibility of citizens to services and collective facilities; a wider access to fresh water and sanitation services improving the quality of living of the populations; the improvement of the cultural heritage, landscape and rural areas increasing the potential for local basis economic activities; the promotion of economic dynamism and diversification of regional economy; and the emergence of innovation and knowledge poles.

However, the transformation of the region's economy remains incomplete and the investment in infrastructure has been necessary but not sufficient without greater focus on industrial modernisation and structural adjustment. The significant support for the traditional sectors has simply helped to slow their decline, whilst the development of new sectors has been a challenge that has been too great for the capacity of the region so far.

What learning has taken place?

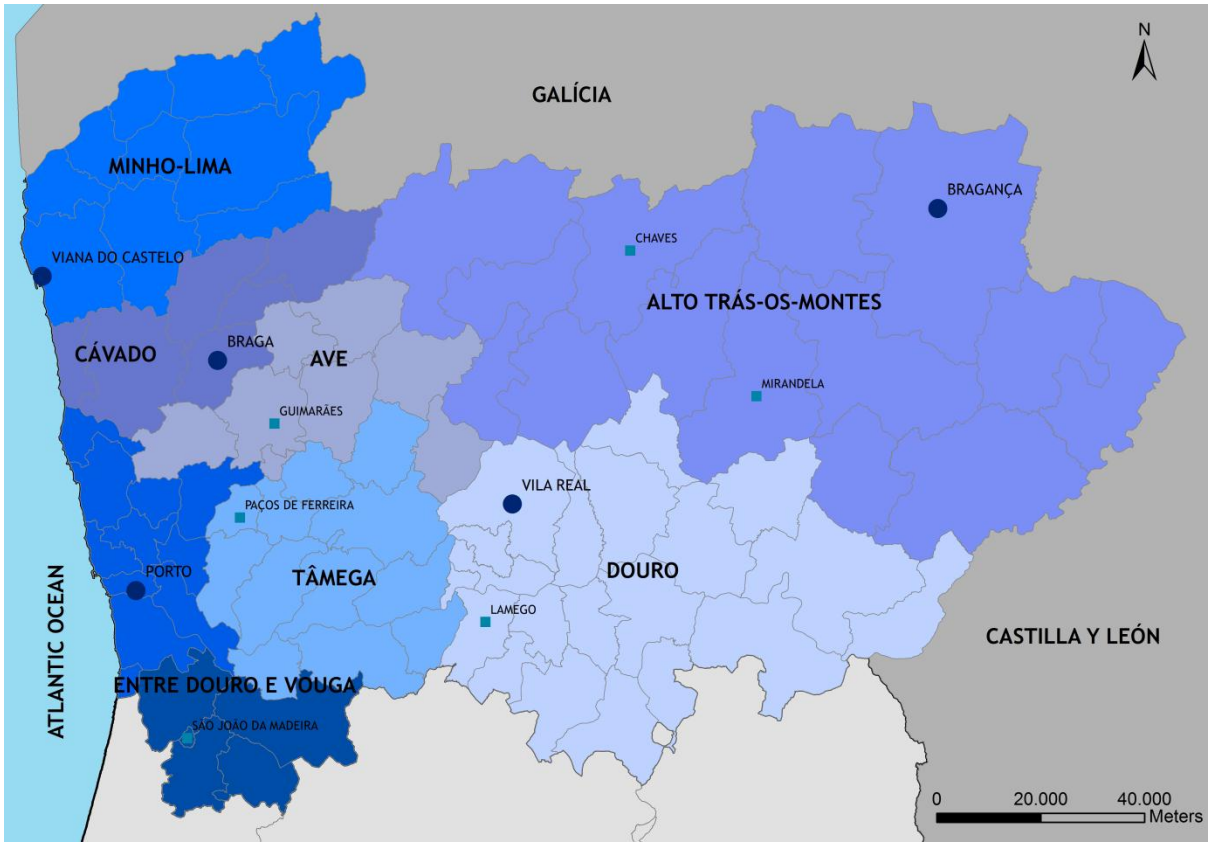
The impact of transport infrastructures has been significant for the economy of a peripheral region. Accessibility improvement has supported the region's export profile and helped the traditional sectors. The modernisation of these traditional sectors was particularly important in a region that is the most populated in the country, with a long manufacturing tradition and a diversified economic basis.

Despite all the international turmoil in the last 25 years, the industrialised identity of the region emerged as more clearly defined. This is a lesson that cannot be forgotten, even if manufacturing and services work increasingly together. Old sectors (wine, footwear, furniture) and new sectors (electronics, automobile components, pharmaceuticals) – leveraged many times by FDI – managed to survive as the region's economic base. Innovation policies were also successful, giving rise to emerging clusters in new sectors, where firms (spin-offs, SMEs, multinationals) work hand-in-hand with universities and research centres to create poles of excellence. All this process is still quite new and will need continued to support.

1. INTRODUCTION

Norte region is Portugal's northernmost region, bordering Spain to the north (Galicia) and east (Castilla y Leon) and the Atlantic Ocean to the west. It is a single NUTS 2 region comprising eight NUTS 3 sub-regions: Minho-Lima, Cávado, Ave, Grande Porto, Tâmega, Entre Douro e Vouga, Douro and Alto Trás-os-Montes.

Figure 1: Norte Region Administrative Divisions (NUTS 3)



Norte region was the birthplace of the nation – the name Portugal derives from Porto. Even before the Middle Ages, the region was already well known for producing flax, silk, wool, cotton, leather, cutlery, ships and goldsmithery. In 1703, the Methuen Treaty between Portugal and the UK laid the foundations for vibrant exports and sustainable wine specialisation.

At the beginning of the 19th century, the region (mainly the area between Braga and Guimarães) was already the country's main textile-production area, and it remains so today. In 1925, the Vale do Ave sub-region alone was responsible for 75 percent of national textile exports. Other important industries were footwear, millinery and furniture. Wine production was found along the Douro valley, particularly the world-renowned 'port wine'. However, the international crisis of the 1930s harmed the region, which was beset by a lack of investment and low productivity.

Portugal's entry into EFTA (1959) brought about a substantial increase in textile and clothing exports, which was further reinforced by the 1972 Free Trade Agreement with the EEC. Initially, the impact of the 1986 European accession was very positive. But the WTO Uruguay Round negotiations – meaning the end of the Multifibre Agreement – and the EU enlargement to 27 Member States (many of them competing in the same sectors but with a better qualified workforce)

came as brutal shocks. As a consequence, Norte has probably faced the most significant adjustments of Western European regions during the last 20 years.

The region is characterised by major territorial disparities with a very high level of agricultural activity (in the east) and industrial employment (in the west) and a very low proportion of services, even by national standards. In 1986, the admission of Portugal to the then European Economic Community (EEC) posed significant challenges to its regional policy. As Simões Lopes (1995) put it: *'there never was a regional policy in Portugal despite so much talk about regional disequilibrium and the need to correct it'*. Portugal is an old highly centralised and non-regionalised State (with the exception of the Azores and Madeira islands), despite large economic, social and territorial imbalances. National cohesion has never been threatened by religious, ethnic or linguistic tensions. The present State is thus the result of a long historical process, in which the coastal areas have always been the most favoured. Amongst other factors, this was due to the recurring wars against Spain and a dynamic maritime trade.

During the period of Salazar's dictatorship (1926-1974) there were virtually no regional concerns, as the model during this period was one of a centralised controlling government. After the 25 April 1974 Revolution – and despite constitutional statements with regard to this matter – no regional policy was developed. That only came about with EEC accession. It may be said that Portugal's cohesion and regional policies were brought into existence with its membership of the EEC.

The only concern over territorial issues occurred in 1976 with the first direct elections for councils and community representatives, which gave rise to a strong form of local power. However, this cannot be classified as 'regional policy', as national budget transfers were scarce and no measures on local or regional growth were adopted.

As a consequence, **all** policy frameworks regarding the promotion of economic, social and territorial cohesion are linked to EU strategies and Structural Funds (SF), namely the Community Support Frameworks (CSF) and the National Strategic Reference Framework (NSRF).

In 1986, Portugal had a poor-performing economy, with a per capita GDP (in purchasing power parities – PPP) barely 53 percent of the EEC average. Because of Portugal's disadvantaged position, the EEC established regional policies to stimulate economic development even before its membership (pre-accession support).

Following the 1988 reform of the Structural Funds (SF), the entire nation was categorised as a 'region whose development is lagging behind' (a category upon which approximately 65 percent of all SF were concentrated). This meant that the whole country was classified as an 'Objective 1' region, i.e. all Portuguese NUTS 2 areas – including Norte Region- had a per capita GDP of less than 75 percent of the EEC average (in PPP).

Due to the nation's highly centralised administrative organisation, there were no effective regional strategies adapted to each region's specific needs. Furthermore, the whole national territory had a substantial infrastructure deficit in the aftermath of a long and turbulent period throughout the 1960s, with a war on three fronts in Africa, followed by the 1974 revolution, intense political turmoil and two IMF interventions (1979 and 1983).

Hence, the main concerns of CSFs I and II were to guarantee a reasonably equitable division among NUTS 2 regions in GDP per capita. As a consequence – and due to the fact that there was no regional policy prior to European accession - Portuguese policies cannot be separated from SF policies.

In CSF III, the Portuguese State became completely dependent on the SF. Alignment with the main principles of regional development became almost impossible, as the SF were used for almost all policies (transport, environment, energy, education, agriculture), even if there were no long-term concerns.

Only with the NSRF has the Portuguese Government started to address regional specificities more directly. Nevertheless, during the NSRF, Norte region has maintained its status of 'Convergence Region' and should retain it in the near-future programme period. The recent financial crisis has also delayed the new specific regional programmes, since large NSRF financial sums are being transferred to address urgent national needs.

After this brief introduction, the Norte region report begins by exploring regional needs over the 20-year study period (Chapter 2) and the relevance of ERDF strategies to the region (Chapter 3), evaluating the degree to which the programmes have been designed to meet their regional needs, and how those needs have changed or have been perceived as changing over the longer term (1989-2013 period).

Chapter 4 analyses the financial evolution of the ERDF programme, showing the level of expenditure over time and the shifts in the orientation of programmes as reflected in the allocation and expenditure of funds. Chapter 5 reviews the achievements of the Cohesion Policy (with a focus on the ERDF), both in terms of achievements reported by the programmes and those reported in interviews and other relevant documentation.

Based on this analysis, Chapter 6 assesses programme effectiveness in terms of the extent to which they have met their objectives, and utility concerning whether the programmes have benefited the region regardless of strategy or perceived needs. Finally, the conclusions in Chapter 7 includes the lessons learnt which may be useful for the next programme period.

This analysis was based on a review of programme documentation (Regional and National Operational Programmes), other studies on the region, and interviews with selected stakeholders, an online survey and a workshop with selected stakeholder representatives.

- Documentation was collected for each of the programmes (regional and national) in each programme period, including where available programming documents and needs assessments, annual and final implementation reports, evaluations (ex-ante, interim and ex-post), plus any other regional documents covering interventions or projects supported by the Structural Funds.
- Interviews were held, mainly on a face-to-face basis, with 36 individual stakeholders (see Annex IV for the list of interviewees) in the programmes and covering the period since 1986. The list includes actual and former local leaders, beneficiaries, regional experts, programme managers and national officials.

- A workshop was also held with a group of key individuals to discuss the initial findings and to explore a few of the emerging issues. This workshop involved 20 participants, including local leaders, fund beneficiaries, programme managers, local associations and regional experts. It enabled both a validation of the findings and the clarification of a few issues that had arisen from documentation analysis.

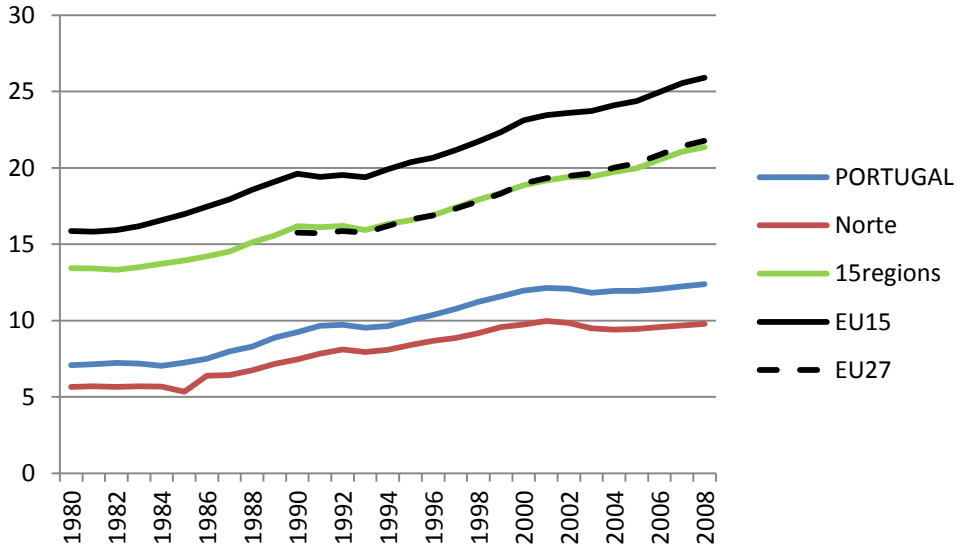
Details of data collected for each programme are contained in Annex II (Structure of the Programmes) and Annex III (Reported Achievements). Comprehensive data were available for the 2000-2006 and 2007-2013 periods, while for the 1989-1993 and 1994-1999 periods data was more limited in its availability and quality.

2. REGIONAL CONTEXT AND ANALYSIS OF NEEDS

Norte region is the most populous in the country (3.7 million in 2011) and the second most important region in terms of GDP (28.3 percent of total GDP), after Lisbon. It is also the region with the highest exports (37 percent of the total, with a yearly average growth of 3 percent between 2007 and 2011), its main client markets being Angola, France, the USA and Germany. Exports are mostly traditional industrial products (textile, clothing apparel, footwear).

Despite containing the second-largest city in the country – Porto[1] - Norte's regional levels of GDP per capita are the lowest in Portugal, lagging significantly behind the EU27[2] and national averages.[3]

Figure 2: Gross Domestic Product per capita



Source: Eurostat, URATE.

In terms of GDP growth, the region performed above the national average as a result of an industrial exports growth following EFTA accession (1959) and the EEC Free Trade Agreement (1972). In 1979 and 1983, Portugal suffered two consecutive bankruptcies that led to IMF interventions. Between 1984 and the European Communities accession in 1986, Portugal benefited from Pre-Accession support, which represented a major boost for the national economic recovery. Since the late 1990s, the joint effects of globalisation, the adoption of the Euro and the recent financial crisis have caused the region to enter into a relative decay during the last 15 years.

Recently published data (Instituto Nacional de Estatística, 2011a) show that Portuguese GDP per capita compared with the EU27 average decreased between 2010 and 2011, from 80.3 percent to 77.4 percent. In spite of not escaping the downturn that affected all the Portuguese regions, Norte performed better than the rest of the country, with a GDP growth rate of 3.5 percent in 2010 (while the national average was -2.6 percent), and an increase in productivity of 5.2 percent (again, above the national average of +3.5 percent). These values are in line with the fall in labour

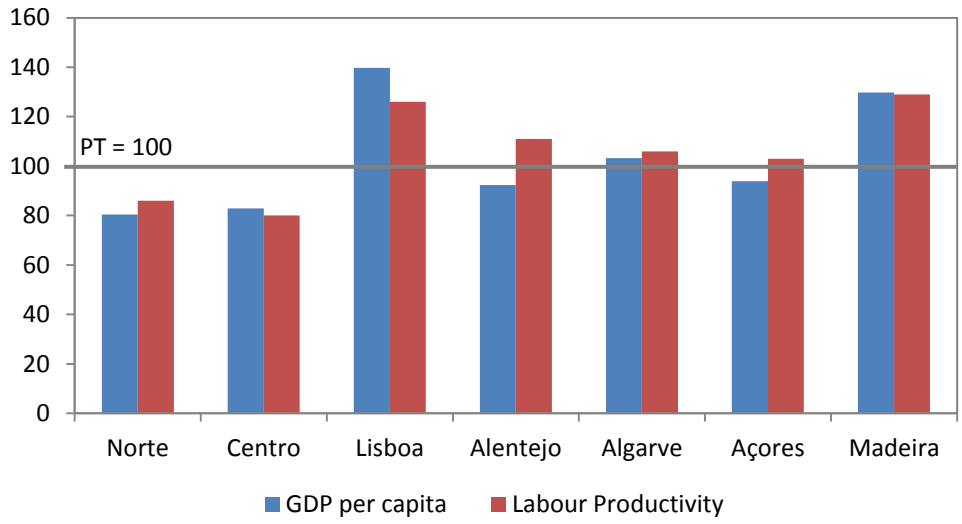
[1] However, per capita GDP in the Porto Metropolitan Area (NUTS 3) is the second highest in the country.

[2] Norte = 65; EU27 = 100 (2010).

[3] Norte = 80; Portugal = 100 (2010).

costs that was felt across the country in the same period, with a 2.4 percent reduction in the Norte region.

Figure 3: Gross Domestic Product per capita and Labour Productivity disparities in NUTS 2 regions (PT average = 100)



Source: National Statistics Institute (INE), 2012 - Regional Accounts 2010/2011.

Structural adjustment. Despite the continued existence of a substantial agricultural sector in Norte (around 10 percent of employment), industry remains crucial for the region's economy (25 percent of employment).[4] Specialisation within manufacturing is extremely high, with the textile and clothing sector accounting for about 50 percent of total manufacturing employment (Instituto Nacional de Estatística, 2011a). Other sectors of relative importance include wood products and metal manufacturing.

The vast majority of traditional sectors that led Portuguese industrialisation are extremely vulnerable, lacking competitiveness, as they are labour-intensive and have little control over value chains. This fact was partially masked in the first decade after EEC accession, due to the increase in exports from the most labour-intensive sectors (knitting, for example). The exception to this general trend is the footwear sector, which has managed to develop a successful global strategy based on quality and design.

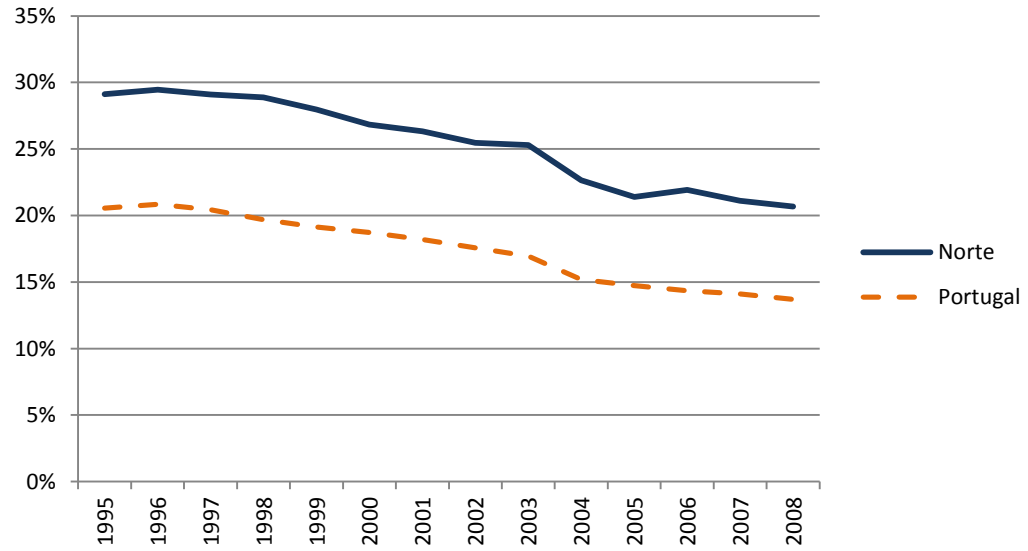
In 2010 there were 340,000 companies in Norte region (32% of national total) that generated 90 billion euros (27% of total) employing more than 1.2 million workers. Manufacture represents 35,000 companies that generate a turn-over of 25 billion euros (36% of total) and employs 370,000 workers, the main sectors being agro-food (10.2% of the regional manufacturing turn-over), apparel (9.4%), metallic products (9.3%), textiles (8.2%), leather products (6.4%), electric equipment (5.9%) and wood and cork products (5.8%). In 2010, Norte region concentrated the largest number of

[4] Industry includes the following activities: mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water abstraction, purification and supply; sewerage, waste management and remediation activities.

manufacturing and energy, construction and commerce companies in the country. The number of exporting companies was 6,717 (38% of national total), 2.8% more than in 2009.

The traditional sectors moved towards a dual structure: a significant number of companies up-graded their position within global value chains; those which did not follow this path are increasingly becoming bankrupt. At the same time, examples of 'specialised suppliers' emerged in sectors such as scientific instruments, machines, information systems, software and steel moulds.

Figure 4: Weight of manufacturing in the total GVA for Norte and Portugal



Source: National Statistics Institute (INE) – Regional Yearbooks.

Innovation. Norte region has shown low innovation content and performance, as has been the case with Portugal as a whole, but it has also lagged significantly behind the more innovation-oriented area of Lisbon, mainly due to the different regional productive structures (traditional sectors *per se* tend to innovate less). For example, in 2006 the Innovation Scoreboard ranking placed Norte in 186th position among 203 European regions with a score of 0.22 (Stockholm, with 0.90, had the best score).

Nevertheless, since the 2000s the region has experienced accelerated growth in its total R&D expenditure and has closed its gap with Lisbon (partially) and with the national economy (fully). This has been the result of both a parallel growth in business R&D spending (from less than 0.1 percent in the early 1990s to above 0.6 percent in the late 2000s) and a continuous rise in public R&D expenditure in the 2000s (which, in 2009, had reached levels directly comparable to those found in the national economy). As a result, Norte region is currently amongst the most successful regions in the country in terms of both R&D expenditure and employment (the former increased from about 0.3 percent to 0.8 percent of GDP in 2009).

The region has a relatively good research and education base, with a number of high-quality specialist research centres (nanotechnologies, health, engineering, ICT), as well as three main public universities. Porto University is one of the oldest in the country, and the other two institutions (Minho University and Trás-Os-Montes e Alto Douro University) were founded in the 1970s and have played a very important role in decentralising regional development.

Although the overall level of education of the workforce is not very high, it has undergone remarkable improvement since the beginning of the period under study, and nowadays the region has a pool of highly educated workers with specialist skills, especially in technology and science. Furthermore, the region has substantially improved its performance in terms of research outputs, with per capita patent application rates currently up to 10 times higher than those of the early 1990s.

Enterprise. Norte's company structure is dominated by small and very small companies. Micro-companies account for 94.5 percent of all registered companies and 43 percent of total employment. The two sectors that provide the largest number of (older) small companies are agriculture, where 90 percent of companies are small, and the tertiary sector, where 96 percent are small. The secondary sector also has a similar structure, in spite of the presence of a number of large companies (e.g. Efacec, in engineering and transport equipment; the Somelos and Manuel Gonçalves groups in textiles; Kyaia, footwear; Osborne, wines; Repsol, chemicals; Portucel, paper; Ikea, furniture), most of which show high levels of competitiveness and export performance.

There is additionally a territorial dimension, in that the inland areas are dominated by public-sector-based activities (municipalities are, typically, the main employers), and there are low rates of entrepreneurship to compensate for the abandonment of rural family-based agriculture.

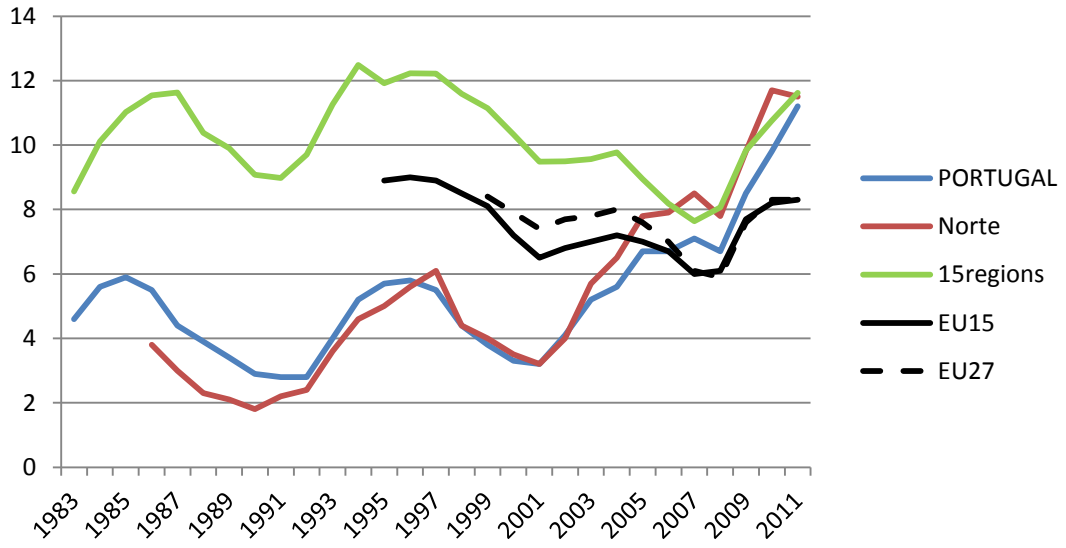
Environmental sustainability. Norte region can be divided into the coastal area and the inland area, the former being mostly urban and industrialised, and the latter mainly rural. Rural emigration and internal migration towards coastal areas throughout the second half of the 20th century had a significant impact on the landscape and has increased development contrasts in the last decades. The coastal region has been the area with more environmental challenges, although those have not been too pressing. Regional levels of urbanisation, although moderate, are causing higher levels of air and water pollution, mostly from road traffic and industrial plants such as the textile and dyeing industries. Wastewater collection was also a problem, although the situation has improved over the period. The most important challenge in the inland area is forest fires, which affect the natural resources of the region almost every year. The region hosts the only National Park on Portugal's mainland (Peneda-Gerês), and the Alto Douro wine region was classified by UNESCO as a World Heritage Site. These are two important natural resources assets, decisive for the image of the region.

Labour market. Unemployment in the Norte region was very low throughout the 1980s and 1990s (around 4.5 percent), but it increased quite sharply in the second part of the last decade (surpassing 14 percent in 2012). With the high unemployment, average monthly wages for employees are low even by Portuguese standards: 710 Euros, 9 percent below the national average (Instituto Nacional de Estatística, 2011b). The majority of the workforce has traditionally consisted of low-skilled workers in the manufacturing sector which, along with commercial activities, absorbed labour from agriculture (both migrant and local small landowners).

Female unemployment has been higher than the male unemployment rate throughout the period (between 15 percent and 20 percent) and has also followed an upward trend. Youth unemployment tripled between 1999 and 2009. Long-term unemployment has historically been rather high and in 2011 stood at 50 percent of total unemployment (rising by some 20 percent since the late 1990s).

Rising unemployment has been accompanied by a slow rate of growth of overall employment (by 0.35 percent per annum in the 10 years prior to the crisis, with a downward trend from 2007 onwards).

Figure 5: Unemployment Rate



Source: Eurostat, URATE.

After a long period of growth above the national average (from 1994 to 2007), the region's employment rate has once again become similar to that of the national rate (see **Figure 6** below).

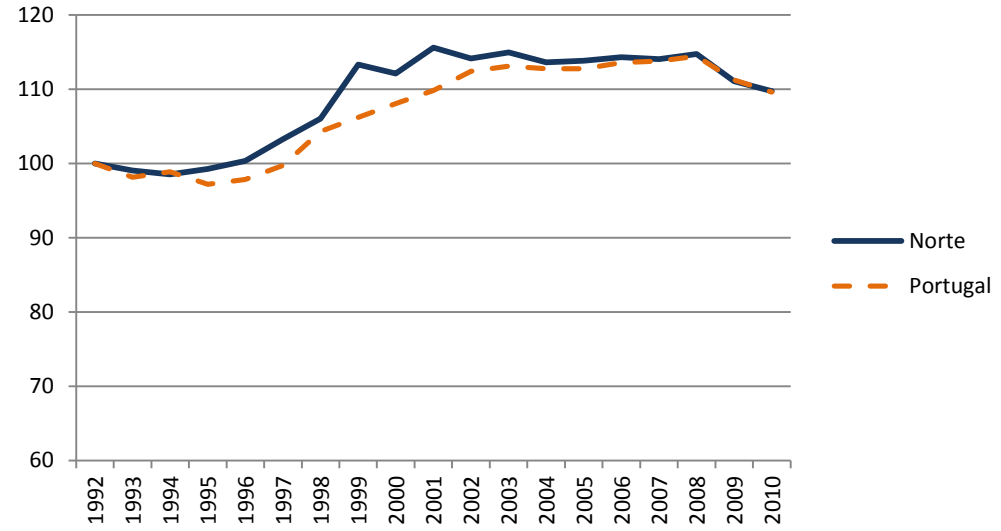
Female employment grew twice as fast, representing 85 percent of total employment expansion in that period and raising the female employment participation rate by 7 percentage points to 67 percent (female and male unemployment rates were respectively 15 percent and 10 percent in 2010 (Instituto Nacional de Estatística, 2011b). However, this increase was lower than the national trend, and thus female employment participation is today below the national average (however, the informal market plays a major role here[5]).

Child labour has also been a problem and a policy concern in the region: in 2001, 5.6 percent of children aged 6 to 15 were declared in a national survey to have performed economic activity, with many of them involved in family-based agricultural tasks but also some in informal manufacturing activity (IEFP, 2003).

The overall evolution of qualifications has been positive. At the beginning of 1989, only 7 percent of the region's active population had obtained a university degree. By 2012, this value had risen to 17 percent, a development that is mirrored in the country as a whole, with the national change being from 9 percent to 19 percent. In spite of this, in 2011 approximately 26 percent of the employed population in the Norte region had a basic educational level equivalent to 4 years of study in school, or less.

[5] An example is the Zara group (from Galicia), which subcontracts a home-based female labour force.

Figure 6: Change in employment in Norte region and Portugal relative to 1992 levels



Source: National Statistics Institute (INE) – Regional Yearbooks.

It is interesting to highlight the rapid decrease in the primary sector active population (from 25 percent in 1986 to 10.6 percent in 1991) (Instituto Nacional de Estatística, 1991). Despite the fact this was a phenomenon common to the whole region, it was obviously more dramatic in the rural areas: for example, Trás-os-Montes e Alto Douro went from 50 percent to 37.1 percent and Minho from 14.3 percent to 6.96 percent. This evolution was viewed as an important positive evolution towards modernisation, mainly due to its speed and to the fact that there was virtually no social turmoil. Due to the relatively advanced age of the northern working force in agriculture, it was possible to make this dramatic change in a very short period of time. Furthermore, the creation of jobs in the coastal areas (construction, building, FDI) justified this process, decisive in terms of regional imbalance.

Social inclusion and community development. Problems of social exclusion and deprivation in Norte region are similar to national levels. The at-risk-of-poverty rate in Norte is just a little higher than the national rate (15.3 percent for Norte, and 14.8 percent for Portugal) with migration not being a relevant factor, despite a shift in net migration trends, going from negative to positive since 1993. Where income distribution is concerned, Norte presents a smaller Gini Coefficient (31.3) than Portugal (33.2). Problems of inequality exist mainly between the eastern (rural) and western (urban, coastal) areas rather than within these areas. Other social indicators such as crime rates do not reveal significant social problems, although health indicators reveal high discrepancies between different areas within the region. Data on school drop-outs seems to follow the high (37.1 percent) national trend (OECD, 2008).

Spatial distribution of economic activity. Norte region exhibits significant east-west (coastal-inland) disparities, with the coastal areas (with the exception of Minho-Lima in the far north) having significantly higher population densities, higher incomes, larger concentrations of industrial and service-sector activity and higher levels of human capital. As a result, these regions, especially the Porto Metropolitan Area (PMA) and the north and south contiguous regions, have the highest levels of GDP per capita and labour productivity, with little variation in their ranking over time. Incomes and productivities are much lower (by a factor of 40 percent compared to the PMA) in the

predominantly rural regions in the east. For example, productivity with regard to the national average varies between 106.9 in Greater Porto and a mere 65.3 in the Tâmega sub-region (Instituto Nacional de Estatística, 2012). Spatial differences in sectoral compositions are rather extreme, with agriculture in the two far-eastern regions accounting even today for over 40 percent of employment (25 percent in Minho-Lima). With the exception of Porto, which has a high share of services in terms of the national level, all other sub-regions have exceptionally high shares of employment in industry (ranging between 50 percent and 60 percent) – while industry in the far-eastern sub-regions accounts for less than 15 percent of total employment. This shows that urbanisation has been supported by industrial growth in the coastal areas, while the peripheral interior has evolved to a social services economy, with the metropolitan areas of Porto and, to some extent, Braga-Guimarães retaining both industry and the more advanced services.

Infra-regional infrastructural endowment. Transport and communication networks were very poor in the 1980s. However, in relative terms (density), the situation changed vastly throughout each programme period. Today, Norte region has a road infrastructure that is comparable to that of Portugal as a whole, with significant investments in the expansion of the motorway network, in the connection of the most relevant urban centres and, to a lesser extent, in the modernisation of the Norte telecommunication and broadband networks,

Despite the modernisation works to accommodate faster trains between Braga and Lisboa, the rail infrastructure is still somewhat old (when compared to the road network), since most internal connections have not seen similar improvements. Transport connections run along both the north-south and the west-east axes, connecting Porto to Vigo (Galicia) to the north, to Valladolid (Castilla-León) to the east, and Coimbra and Lisbon to the south. Leixões is the second main national commercial port in terms of cargo, handling some 30 percent of Portugal's external trade.

Porto has one major international airport (in contrast to the small national one that existed 20 years ago). This has doubled its number of passengers in recent times, mainly due to a vigorous strategy of attracting low-cost air companies and travellers from Galicia.

Overall evaluation of weaknesses and regional needs

The overall evaluation of regional needs draws upon the above discussion, but it summarises it into four main categories corresponding to the different aspects of economic advantages/ disadvantages: endowments, accessibility, structures and disequilibria.

Endowments. In terms of location, Norte region can be considered as relatively disadvantaged. Despite its access to the sea, the region is located away from the main economic centres of Europe. Its degree of urbanisation was never particularly high by international standards, and the urban nodes tended to lack centrality and scale, thus its ability to benefit from substantial agglomeration economies was also not high. This was especially true for the inner sub-regions Trás-os-Montes and Alto Douro. Overall, there are good levels of environmental quality and a very attractive natural landscape (Douro Valley in particular), both in parts of the coastal areas and in the more mountainous inland areas. Besides physical endowments, the region has a high percentage of young people (the Littoral Norte was the youngest region in the whole EU at the beginning of the 1990s), even if in recent years fertility rates have fallen abruptly. In human capital terms, the region has a

below-average educational endowment, although significant parts of the workforce possess good specialist skills and an industrial tradition.

Accessibility. The region has improved significantly in terms of its transport infrastructure and connectivity. In 1989, the road links to the rest of Portugal and to Galicia and Castilla y León were the same as in the 1950s. Today, the road network is both modern and dense, with a high motorway percentage. In fact, before the accession of the two Iberian countries, mutual accessibility was extremely weak, the result of a 50-year-old Portuguese policy (during the Salazar dictatorship) of not connecting to Spain.

Structures. As already mentioned, Norte always had a high concentration of agriculture and industry and a very small share, by international standards, of services. The structure of the economy was dominated by small and very small (micro) companies, but the region was also host to a few very large enterprises (in the western part) with internationalised production. However, within manufacturing, diversification was low, as the region over-specialised in textiles/clothing/footwear. In the last decade, the region has seen a significant expansion in the service sector, including tourism, business services and a substantial shift towards technology and knowledge-based activities, both within industry and in services (engineering, ICT, etc.). This has been supported by a major increase in R&D spending, both private and public (R&D expenditure grew from €96.6 million in 1995 - equivalent to 0.36 percent of the Norte GDP - to €734.7 million in 2010 - equivalent to 1.42 percent of the Norte GDP – *Source: Eurostat*), and a targeted policy effort to create an environment conducive to research and technology. These shifts account for much of the region's productivity growth in the recent period, although – as with per capita incomes – the region today is still significantly lagging relative to the country as a whole. According to the latest data, the region has shown stronger resilience to the crisis then the country as a whole (with, for example, better than national average variations of GDP, GVA, labour productivity and investment between 2009 and 2011).

Disequilibria. By far the main imbalance within the region has always been its east-west divide, largely representing the difference in sectoral specialisation (between agriculture and industry, in the east and west, respectively) and a corresponding difference in population distributions and densities.

Despite the region's progress, these differences persist today and, if anything, have been intensified. This degree of spatial inequality does not seem to translate into wider social problems of inequality and deprivation. Successive studies have reaffirmed that inter-regional disparities were greater at a strictly economic level than at the level of collective consumption and social development in general.

3. PROGRAMME EVOLUTION AND RELEVANCE

3.1 Explicit and implicit strategies and their evolution

Since the very beginning of Structural Funds implementation in Portugal, the initial strategy was based on a consideration of common needs as a starting point for all the different NUTS 2 regions. The EU Cohesion policy 'coincided' with national development policies, as all Portuguese regions were categorised as Objective 1 regions.

The needs identified were, in general terms, public investment infrastructure, mainly focused on accessibility and environment. Pre-accession (1984 and 1985) and 1986-1988 support was already mainly concentrated on these two types of basic projects.

This was also the European Commission standpoint at the time which, in turn, was based on the then dominant economic theories that argued that infrastructure was a main source of economic growth. Probably the key reference for this line of thinking was the work carried out for the European Commission in 1986 by Dieter Diehl ('The Contribution of Infrastructure to Regional Development'), where the infrastructural endowment of each region correlated almost perfectly with its potential development.[6]

However, since the 1989-1993 period, the Structural Funds have been used in the Norte to support not only infrastructure but also enterprises, and to foster the restructuring of the main manufacturing sectors, which have been increasingly exposed to international competition, mainly from the Asian countries. The approach has arisen from the need to support Norte's old manufacturing tradition plus lobbying from some industrial groups and entrepreneur associations. As such, the Norte narrative explains how the region tried to increase its competitiveness, both through restructuring traditional sectors and creating new ones.

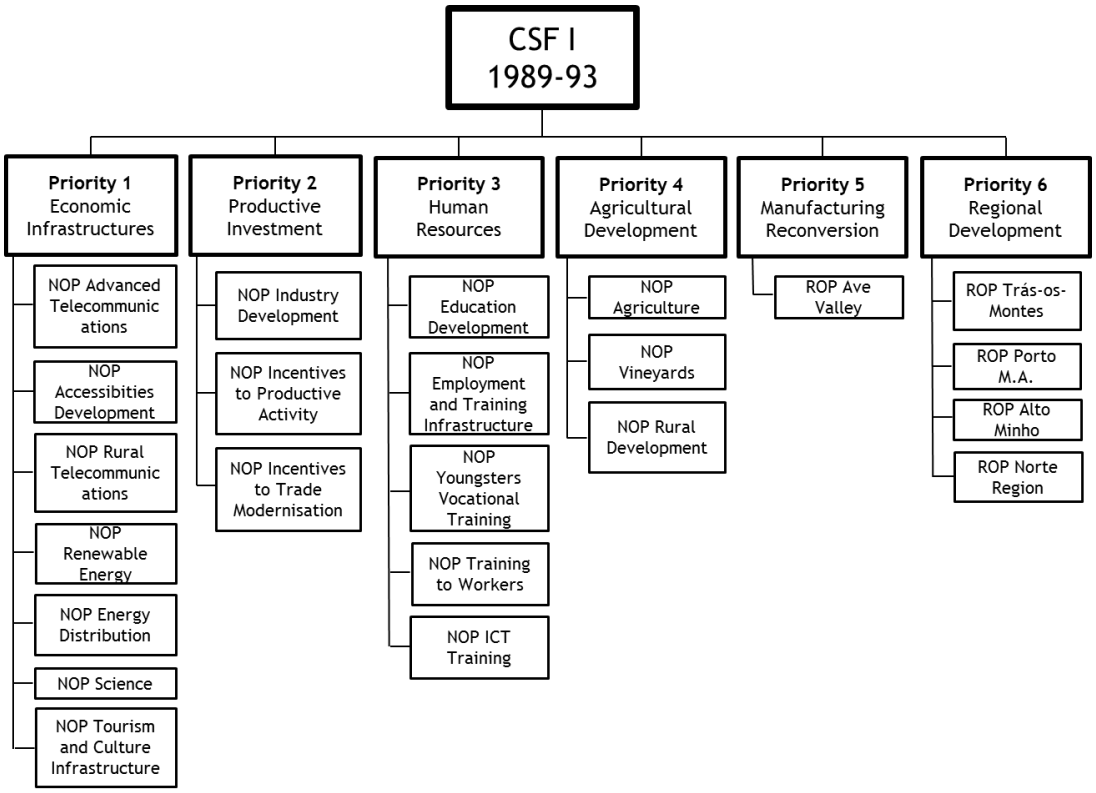
Also since the outset, cooperation with Galicia has been seen as a priority, and has continued to be a steady and permanent goal throughout the study period.

3.1.1 1989-1993: The Formalisation of a Regional Policy in Portugal

The national CSF I had three major goals (economic structural modernisation; human resources development; and regional and local development) common to all seven Portuguese NUTS 2 areas. In order to achieve these goals, six priorities were defined. (see Figure 7)

[6]At the Copenhagen summit (June 1993) it was expected that Jacques Delors would present a diagnosis on Welfare State and the Monetary Union recessive effects. Instead, Delors argued that EU unemployment resulted from the lack of competitiveness versus USA and Japan and that the solution lay in infrastructures and high tech investments programmes.

Figure 7: CSF I 1989-1993 Structure



Source: Simões Lopes, 1995.

Whereas Priorities 1 to 4 were managed centrally (in Lisbon, by sectoral ministries), Priorities 5 and 6 were managed by the Norte Regional Coordination Commission (CCRN). Regarding these two last Priorities, the model chosen was to split interventions into five sub-regional ROPs: Alto-Minho, Porto Metropolitan Area, Trás-os-Montes, Vale do Ave and the remainder of Norte region. The Vale do Ave sub-regional ROP was mainly integrated into Priority 5 'Industrial Conversion', while all of the other sub-regions were included under Priority 6 'Regional and Local Development'.

At the outset of the first programme period, Norte region had a set of characteristics that gave a positive perspective concerning the consequences of European accession: (i) a concentration of people and economic activities in the coastal area and in the manufacturing sector; (ii) a strong export orientation towards EC (and EFTA) markets, presenting clear competitive advantages in a range of traditional sectors (namely textile, clothing apparel and footwear sectors); (iii) a high percentage of young people (the coastal area was known as 'the youngest region in Europe'); (iv) a strong demographic density, allowing for economies of scale and agglomeration; (v) a workforce with modest qualifications but with low unemployment; and (vi) significant economic diversity.

On the other hand, there were clearly identified needs, notably: environmental (the textile industry had high pollution levels, as a result of the use of out-dated techniques); transport (poor infrastructure for exporting and difficult geography for significant parts of the region); sectoral adjustment (25% of the active population was still in the agriculture sector, in 1986); and labour market (low human capital endowment).

Figure 8: 1989-1993 Norte ROPs

Source: The authors.

Table 1: CSF I Norte ROPs

CSF Priorities	Priority 5 'Industrial Conversion'		Priority 6 'Regional and Local Development'			
Norte ROPs	ERDF 1989-1993 ROP Ave River Valley (PROAVE) (99.0 million ecus)		ERDF 1989-1993 ROP Alto Minho (PROAM) (58.3 million ecus)	ERDF 1989-1993 ROP Porto Metropolitan Area (PRORAMP) (187.8 million ecus)	ERDF 1989-1993 ROP Trás-os-Montes and Alto Douro (PROTAD) (115.3 million ecus)	ERDF 1989-1993 ROP Norte Region (PRORN) (103.1 million ecus)
ROP Sub-Programmes	1	Infrastructure	Infrastructure	Infrastructure	Infrastructure	Infrastructure
	2	Productive Activity Support and SME Services	Productive Activity Support and SME Services	Productive Activity Support and SME Services	Productive Activity Support and SME Services	Productive Activity Support and SME Services
	3	Human Resources and Vocational Training	Human Resources and Vocational Training	Human Resources and Vocational Training	Human Resources and Vocational Training	Human Resources and Vocational Training
	4	Execution and Monitoring	Agricultural and Rural Development	Agricultural and Rural Development	Agricultural and Rural Development	Agricultural and Rural Development
	5	SINDAVE	Execution and Monitoring	Execution and Monitoring	Execution and Monitoring	Execution and Monitoring

Source: ERDF1989-1993 ROPs Norte Final Execution Reports (ERDF 1989-1993 ROPs Ave River Valley, Alto Minho, Porto Metropolitan Area, Trás-os-Montes and Alto Douro and Norte Region).

The combination of these perceived regional strengths and weaknesses led to the Structural Funds actions in Norte region to be prioritised on transport infrastructure (51.3% of total expenditure), enterprise (in particular aimed at the modernisation of traditional sectors; structural adjustment and enterprise comprised 26% of total expenditure) and environmental sustainability (13.8%).

Infrastructure was considered the basis for regional development and, as such, the key investment priority. Some of the transport investments were also very large, beyond Portugal's financial capacity (such as the motorways A1- Porto-Lisbon and A3 Porto – Valença, on the Spanish border). The implicit rationale was that this was the only possible way to achieve, in a relatively short period of time, a very significant increase in the quality of life and to close the gap with the EU average. Amongst the various sub-regional programmes, the 1989-1993 ROP Trás-os-Montes and Alto Douro focused particularly on the mitigation of the area's peripheral location, while the 1989-1993 ROP 'Rest of the Norte Region' focused on spatial planning issues, SME support, and strengthening the capacity of public institutions.

In addition to the 18 sectorial NOPs and the 5 ROPs, the region also received funding from European Community Initiatives. Particularly important in this programme period, for the Norte region, was INTERREG I:[7] Norte and Galicia are probably the most natural 'Euroregion' in the whole of the EU, as they were politically united until the 12th century, spoke a common language until the 16th century,[8] and the Galician autonomous movement has seen Portugal, up to the present day, as an alternative to the centralising forces of Madrid. LEADER I was also a successful initiative, particularly in the Alto Minho, supporting small businesses operating in the agro-industry, especially firms led by cooperatives and local associations, in line with the characteristics of the region (micro-firms, strong female entrepreneurship).

There was also an implicit regional strategy focused on the need to spread the funding across municipalities and to build a stronger regional identity through building social capital (see the Ermida Bridge Case Study in Annex I).During this programme period, there was scope to involve a large number of actors (in the coastal areas, particularly in the Ave Valley[9], the focus of the textile sector).

3.1.2 1994-1999: Infrastructure and the Restructuring of Traditional Sectors

The 1994-1999 Community Structural Framework presented a more simplified structure than the previous one. It had a lower number of NOPs (seven, as opposed to 18, with 79 percent of funding) and seven ROPs (one for each Portuguese NUTS 2 area[10]).

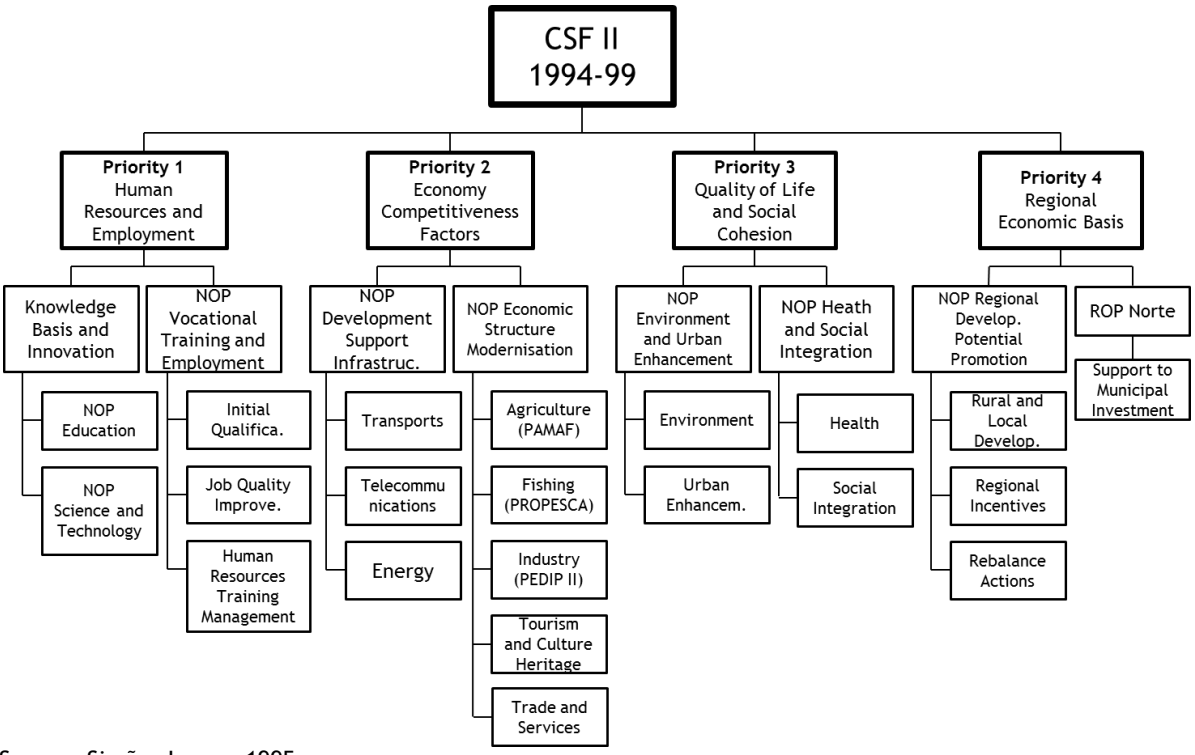
[7] It is interesting to note that INTERREG was born as a Community Initiative due to a common proposal presented to the European Commission by CCR Norte and Xunta de Galicia. As a result, the INTERREG I budget was – according to an interviewed former Norte CCR President - *most generous* to these two regions.

[8] Portuguese and Gallego are mostly similar and perfectly mutually intelligible for both peoples.

[9] The Integrated Development Operation (OID) of Ave Valley was initiated in 1990 and created the Ave Valley Municipalities (AMAVE).

[10] Five in mainland Portugal and two in the islands of Azores and Madeira.

Figure 9: CSF II 1994-1999 Structure



Source: Simões Lopes, 1995.

In this period, there was only one ROP for the Norte region, subdivided into three sub-programmes: (i) local Investments; (ii) regional configuration (iii) regional and local support.

The 1994-1999 programme had two main objectives: first, it was intended to continue to endow the Norte with the social and economic infrastructure which was still needed; second, it aimed to increase competitiveness and support companies.

This latter goal was linked to a confluence of factors that appeared to pose a major threat to the region's productive fabric, namely: (i) the end of the transition period of textile free trade with the EU (prior to 1986, Portugal was part of the Multifibre Agreement, as a textile exporter) and free trade with Spain[11]; (ii) the launching of the Single Market; (iii) the conclusion of the GATT/WTO Uruguay Round negotiations with the end of the Multifibre Agreement and China's entrance into the organisation. Portugal (inside the EU Common External Relations policy) opted for a derogation in this matter, meaning that there was no transition period – in the sense of a gradual adaptation to the increasing world competitiveness – but a one-time liberalisation in 2000);(iv) preparation to enter the Euro - which apart from bringing difficulties in terms of the SF national co-financing also signified the end of a 20-year policy of the escudo 'crawling-peg',[12] to automatically guarantee the competitiveness of exports.

This major threat to the economic basis of the region made both the NOPs and ROP prioritise structural adjustment (10.6% of total expenditure).

[11] During the Salazar and Franco dictatorships – i.e. since the 1930s – Portugal and Spain had been completely closed to bilateral trade. That was the reason why many argued that the real European shock for Portugal would be the 'Spanish shock'.

[12] The national currency was devalued each and every month.

In the aftermath of the first programme period, 1989-1993, the strong dependency of Ave Valley municipalities (Santo Tirso, Guimarães, Famalicão and Fafe) on textile and apparel manufacturing led the Portuguese government to agree with the European Commission on a "Development Integrated Operation" (OID) for this region. The OID main goals were to strengthen productive activity and entrepreneurial capacity; improve education and professional training levels; provide better accessibility of both people and goods; unblock the exhaustion of natural resources; improve quality of living; and capacity building for the development of OID municipalities, public institutions and entities. The Ave Valley OID was put into practice through a ROP (PROAVE) whose main financial component was that of municipal investments, ERDF supported (together with Central Administration investments) in basic sanitation and water supply. It was also strongly supported by the Specific Programme for the Development of Portuguese Industry (NOP PEDIP-ERDF) and the NOP Workers Training (ESF). Other programmes, such as ERDF (NOP Science, ex.), ESF (NOP Education) or EAGGF (NOP Agriculture) financed, also made contributions to this Ave Valley OID.

A main controversy at the time related to the sectors in which the Norte region should specialise in future. Some argued in favour of upgrading the traditional sectors,[13] whereas others viewed the future only in terms of high-tech industries and services. This controversy led to indecisiveness in terms of programmes and projects. It also contributed to a geographical division of the region in terms of Structural Funds support, with the coastal areas given incentives to specialise in modern sectors and the lagging regions in traditional ones.

A national public-private forum to plan clusters was also created, which in Norte meant introducing the goals of developing textile, footwear and wine clusters. To achieve this, attention turned to universities and R&D centres as the main poles of dynamism in the region. This meant ERDF support for innovation (3% of total ERDF expenses in the 1994-1999 period), went in particular to the three public universities of Porto, Minho and Universidade de Trás-os-Montes e Alto Douro (e.g. funding new buildings, laboratories, scientific equipment, and industrial parks).

In 1992, Portugal benefited from the so-called 'Delors Package II' (which for the Norte region meant an increase of about 65 percent in Structural Funds resources between 1992 and 1997). The Cohesion Fund (CF) was also created, which would allow a doubling of total Cohesion policy support. In Norte, the CF supported mainly transport infrastructure projects: the modernisation of the Norte railway (Phases 1, 2, 3 and 4 – €289 million), the bridge 'do Freixo', connecting Gaia to Porto (€18 million), the A3 motorway connecting Valença to Porto (€162 million), the renewal of the Port of Leixões (€40 million), the Norte sub-regions water supply system (€223 million) and sewage networks [14](€223 million).

In terms of ERDF and its support to face the economic competition that lay ahead, the most important programme implemented in the region was the 'Textile-Portugal Programme', also known as 'Triple-O Programme': one country, one sector, one time. This programme was a

[13] This major controversy started with the publishing of Michael Porter's report on Portugal (1994). Porter - who functioned as an adviser to the Portuguese Government - supported the upgrading of traditional sectors and was chiefly criticised by those who argued in favour of a dramatic change in economic specialisation from textile and footwear towards high-tech industries.

[14] Council Regulation (CE) no. 852/95, 10 April 1995, OJ L 86, 20.4.1995, p.10.

Community Initiative (Textile-Portugal[15]) with an initial budget of €418 million. It was intended to compensate Portugal for the entry of Asian textiles into the European market. The Portuguese textile sector also benefited from other European Initiatives (RETEX, ADAPT, Employment and Human Resources Development[16]). In 1995, the Union granted the Community Initiative 'Textile-Portugal' a specific budget line, outside the CSF, given its peculiar nature. This formally changed the programme's nature from being a Community Initiative to become a part of the Portuguese CSF. As such, in April 1995, the European Council approved a specific programme for the Portuguese textile sector, keeping the previous financial amounts and rules, but with a reduction to 13 Community Initiatives.

Other sectors were also subject to similar programmes, such as footwear (see Case Study, Chapter 8) and naval construction.

The 1994-1999 programme period also focused on the rehabilitation/renovation of the most deprived urban local areas, particularly in the Porto Metropolitan Area (PMA), through the URBAN Community Initiative. The PMA also benefited from major cultural investments (the Serralves Foundation, Casa da Música).

3.1.3 2000-2006: A Geo-economic Approach

In 2000 the Norte region was at a critical economic juncture, amidst fears that the envisaged European enlargement to the East would hamper its development prospects. It was clear that enlargement meant that the EU's centre of gravity was moving east and that many of the Norte sectors would be delocalised. Norte had received a high level of foreign direct investment since EFTA accession in 1959 and many of these firms were relocating production from Norte to Eastern Europe and in the textile and apparel sector contracts were being shifted to China. Deindustrialisation was expected, and the solution was seen in a focus on transport and logistics, a transition made all the more pressing by the end of competitive devaluations as a result of Portugal's adoption of the Euro. The Norte region businesses thought of themselves as a service and trading region, which was in line with its historical tradition. In particular, Portugal was realising that with globalisation, it could become a central location, between three continents (Europe, America – especially Brazil - and Africa). For instance, it was geographically the first European country that Asian products passed when traded via the Atlantic. So, the ambitious goal of CSF III, besides education and training, was to make Portugal the European gateway vis-á-vis the rest of the world, exploiting good natural conditions in terms of maritime ports and the support available from Cohesion policy.

So the main rationale of the 2000-06 programme was to concentrate the strategy on two main areas: to increase educational and training levels[17] (taking into account the gap with the EU average) and to exploit the geographical position of the country. As a consequence, the 2000-2006

[15] The 'Textile Portugal' Community Initiative (Communication 94/C 180/04 to the Member States, published in the O.J. C180, 1.7.1994, p.15.

[16] The 'Employment and Human Resources' Community Initiative (Communication 94/C 180/10 to the Member States, published in the O.J. C180, 1.7.1994, p.44) intended to contribute to human resources development and to improve the labour market functioning, its main goal being the growth of intensive employment. It was a follow-up to previous programmes (NOW and HORIZON).

[17] The motto of the prime minister, António Guterres, was 'Education is my passion'.

national programme was structured around 13 NOPs and five ROPs, based on four strategic priorities:

(i) Increasing the Portuguese level of qualifications, promoting employment and social cohesion (22% of total CSF III funding);

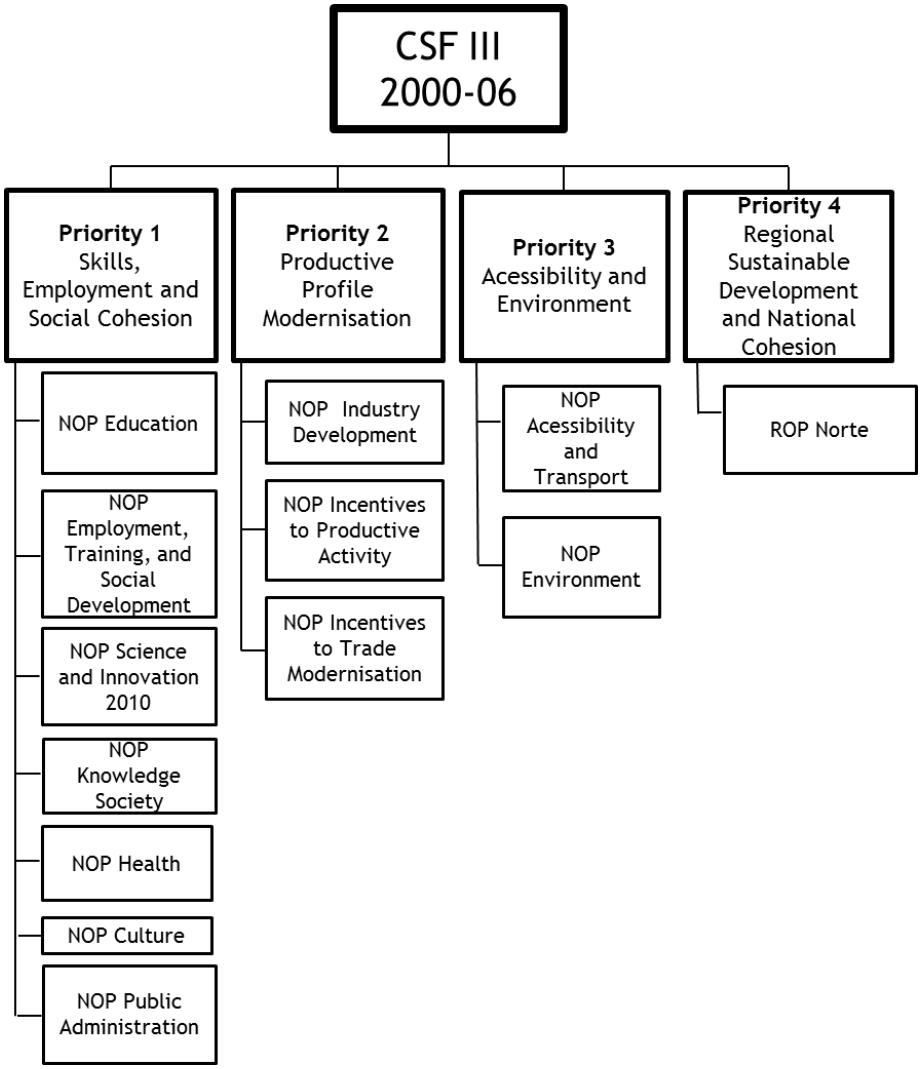
(ii) Changing the production profile towards the 'activities of the future' (agriculture and rural development; Fishing; and Economy NOPs – 22 percent of total CSF III funding);

(iii) Emphasising the territorial value and geo-economic location of the country (Accessibility and transport, and Environment NOPs – 9 percent of total CSF III funding); and

(iv) Promoting sustainable regional development and national cohesion (the seven ROPs – 47 percent CSF III).

The CSF as a whole comprised a total amount of €37,559 million, 33 percent of which was ERDF-financed. Approximately 14 percent of ERDF funding was allocated to the Norte ROP.

Figure 10: CSF III 2000-2006 structure



Source: The authors.

In order to reinforce the geo-economic position of the region, priority was given to transport infrastructure – namely ports (Leixões – see case study - and Viana do Castelo), airports (Porto - Sá Carneiro, Bragança) and roads (A7 Porto to Vila do Conde; A11 Braga to Guimarães; A24 Viseu to Chaves; A41 (Porto External Ring Road) and railways. With regard to the latter, connections with Galicia and Castilla-León in Spain were prioritised as a first step towards accessing the Spanish market as a whole. In particular, the ambition was to enlarge the hinterland of the Leixões maritime port towards those two Spanish regions.

In terms of regional and local development *strictu sensu*, the 2000-2006 ERDF Norte ROP tried to reinforce the inter-municipal dimension and promote new forms of multi-sectoral and public-private partnerships. The Norte ROP was empowered with much larger financial resources and greater sectoral scope than in previous periods. A reason for the choice of the regional scale as the preferential scale of intervention had to do with the government's neo-Keynesian position. As Porter's approach to building clusters in the 1990s (CSF II) had proved to be unsuccessful - arguably due to excessive individualism and poor public policies - this time the government opted to place the public sector in the leading role (in line with the French 'Pôles de Competitivité').
It was from this perspective that Regional Development Agencies (RDAs) were created, co-funded by the ERDF, through the 'Regional Agencies Implementation and Improvement' (IQADE) Project (in some cases also with the support of the LEADER Community Initiative). In the Norte region, it led to the creation of six RDAs.[18] These RDAs were established according to a bottom-up approach and were extremely diverse in terms of their partners and governance models. The IQADE projects[19] were also designed on the basis the RDAs would not receive Structural Funds after the end of CSF III. Only RDAs strong enough to stand on their own feet would survive. Unfortunately, this approach resulted in a high death rate for RDAs as it was too soon to withdraw SF support. From the very beginning RDAs had lacked a robust budget and staff with appropriate expertise (as in other Member States). This project could have been an important tool for economic growth if it had received the same degree of support as infrastructure.

Another key tool within the 2000-2006 strategy was the creation of 'Territorially-Based Integrated Actions' (AIBT), for the promotion of each sub-region. In Norte, AIBT were created for the Douro, Minho-Lima, Entre Douro e Vouga, Vale do Sousa and the Porto Metropolitan Area sub-regions (roughly corresponding to the NUTS 3 divisions). Strategically, these initiatives were aimed at strengthening public policies, as well as the methodologies (e.g. SWOT analysis) based on specific local/regional development needs (a greater match between public support instruments and agent rationalities). Although interesting in principle, in practice these AIBT involved few actors (besides the public sector) and were limited to improving cohesion and not competitiveness.

However, the financial strengthening and strategic widening of the ROPs should not be interpreted as an increase in the degree to which strategies were regionally driven. In order to create the legal conditions to develop a real regional policy in the country, a referendum on regionalisation was held on 8 November 1998. The referendum result was negative: 61 percent of the population voted

[18] Alto Minho Regional Development Association; Alto Tâmega Regional Development Association; Ave Valley Regional Development Agency; Douro Region Promotion and Development Association; Entre Douro e Vouga Development Agency; and the Sousa Valley Regional Development Agency.
[19] There were two IQADE projects (IQADE I and II – CSF II and III- respectively).

against the creation of administrative regions (in Norte, 55 percent voted against)[20]. The most direct consequence for the negative result of this referendum for the CSF III was the reinforcement of centralisation and the weakening of regional strategies. Therefore, every NUTS 2 region continued to replicate the national strategy defined in Lisbon, limiting itself to minor adaptations to local needs.

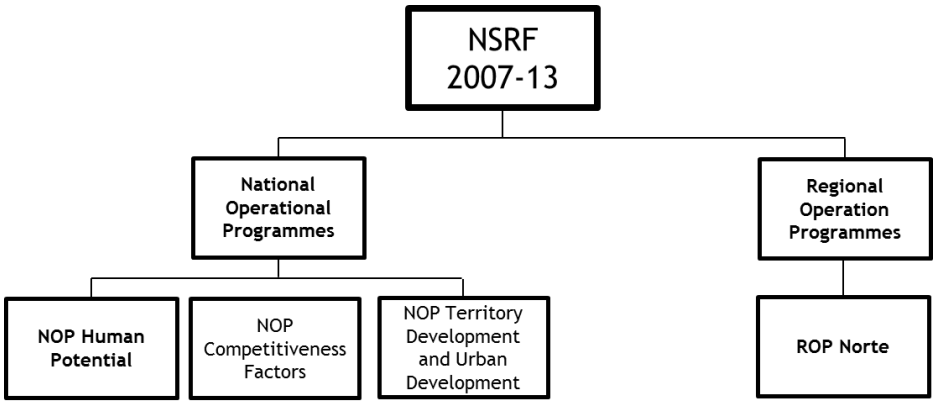
3.1.4 2007-2013: En Route Towards a Regional Policy

The 2007-2013 programme period marked a turning point in the history of regional policy for Norte. The shift of EU regional policy towards the Lisbon/Europe 2020 strategy called for significant adjustments, demanding a new mix of cohesion and competitiveness objectives.

The strategies of the National Operational Programmes closely followed the Community Strategic Guidelines resulting in the allocation of 45 percent of total funding for Norte (c. €6,283 million of total investment for an ERDF co-financing of €1,252 million) for the promotion of competitiveness and job creation.

The decision to streamline future investment into three thematic National Operational Programmes (Territorial Enhancement, Human Capital and Competitiveness Factors) also demonstrates the major concern with economic upgrading. However, the National Strategic Reference Framework (NSRF) continued to seek an appropriate balance between equity and growth objectives.

Figure 11: NSRF 2007-2013 Structure



Source: The authors.

In this programme period, Portugal moved closer to achieving a 'real' regional policy. Firstly, the preparation of the NSRF implied a phase of regional diagnosis aimed at identifying competitive advantages and development challenges. Secondly, there was a process of discussion and consultation among the different actors involved, with the result that Norte prepared its 'Regional Strategy 2015', which formed the basis for the ROP "New Norte".

[20] The main reason for this unexpected result in Norte was arguably the proposed 'horizontal' regional design (very similar to the NUTS 2 region) with no coast-inland divide. This meant that it did not take account of old rivalries. In general, people feared domination by the Porto Metropolitan Area - as one of the interviewees declared: 'It's preferable to receive orders from Lisbon than from Porto'. The multiplication of regional governments was also a concern, with more public servants and expenditure on populist projects.

Enterprise competitiveness (28% of total ERDF+CF expenditures), structural adjustment (8.4%) and innovation (7.3%) were the top priorities during this programme period for Norte region. As such, these three priorities together added up to 43.7% of total ERDF and CF allocations. The approach sought a balance between support for traditional sectors and for new ones (tourism, maritime).

Geographical cohesion, always a delicate issue in the region due to old rivalries between coastal and rural areas, was also a major focus in the Structural Funds policies in this period (8.6% of ERDF +CF allocations). In particular, the Polis XXI programme (urban regeneration, urban competitiveness and differentiation and regional integration) and the 'Programme for the Economic Enhancement of Endogenous Resources' (PROVERE), targeted territorial issues and had a positive response from regional actors, particularly from the rural areas.

Additionally, for the 2007-2013 strategy, there was a major concern to concentrate funding on fewer projects, areas and sectors, in order to be more effective and maximise the funds for competitiveness growth.

However, since then, the country has entered a financial 'red alert' situation and there have been severe restrictions on public expenditure since the signing of a 'Memorandum of Understanding' with the IMF, EIB and EU on 17 May 2011. To date, two reprogramming documents have been approved by the European Commission, in December 2011 and 2012, respectively. According to the most recent reprogramming approved in December 2012, four priorities were chosen: Competitiveness, innovation and knowledge; Economic enhancement of specific resources; Enhancement of the regional space; and Local and urban cohesion. The most important priority is that on 'local and urban cohesion' (44.9 percent of total ERDF support) which encompasses both urban regeneration and the redevelopment of schools.

3.2 Relevance of programmes to regional needs

The region exhibited broad and comprehensive needs across all of the period since 1989 and hence programmes have sought to target particular needs which were seen as being priorities for stimulating economic development. Overall, the region consistently lagged behind the rest of the country in output and the main need has been to stimulate growth. In part this has been seen in terms of necessary infrastructure developments to overcome chronic underinvestment in previous decades, but also in the modernisation of industry, and diversification when the traditional industries started to fail. In parallel, there has been a set of more social problems, represented by the need to upgrade public services such as water or health, and to address territorial disparities between the coastal areas and the less developed interior.

These needs have changed over time as some of the major deficiencies in infrastructure have been addressed, but also as the rapid deindustrialisation during the 1990s brought to the fore the weakness of the traditional industrial base. In this sense what had been seen as an opportunity for increased exports, became a problem of declining competitiveness and associated closures and job losses. From a programmatic perspective needs were also initially seen largely in national terms. Most of the early funding was tied up in national programmes designed to address national problems. As a large region, Norte was reasonably well aligned with this national perspective, but over time there was some divergence due to the particular problems of industrial decline in Norte.

However, as there was a greater focus on regionally-specific programmes in the 2000s those specific needs could be addressed.

In the 1989-1993 period, the main regional needs were perceived to be infrastructure (in order to improve access to the Portuguese and the Spanish markets), environmental sustainability (water supply and sanitation), enterprise (business support) and the reduction of geographical disequilibria. Given that expectations in terms of regional exports were very positive, programme strategies stressed accessibility as well as meeting wider social needs from weak infrastructure The CSF and the related programmes addressed these regional needs, despite the fact that the approach was generally national and not regional.

By 1994, it was clear that major needs were related to guaranteeing a successful restructuring of the economic base. So whilst infrastructure (the region's peripherality and connection to major consumer markets), and the environment (the pollution problems brought about by the textile and apparel companies) continued to be problems, Innovation was newly identified as a need to meet the challenges of adjustment and support was provided to Universities, R&D centres and industrial parks. The region's main exports were increasing, and investments focused on supporting competitiveness (through sectoral adjustment, up-grading and the integration of manufacturing and service activities, as well as support for market-oriented innovation). The programme's imputed objectives followed accordingly, but implementation proved to be difficult. As such – and taking into account the heavy governance model of both NOPs and ROPs and the understanding of the long road ahead – there was a shift during the programme period towards physical infrastructure that would support economic restructuring (industrial areas for clustering, for instance, rather than clustering itself). The centrality of the textile sector ensured it benefited from a specific ERDF support programme.

In CSF III, following a rapid regional deindustrialisation due to the decline of the traditional textile export sector, Norte's needs changed rapidly towards the need to identify alternative sources of growth and jobs. The region still saw part of the solution to this as lying in fostering the openness of the region to the world, namely in terms of maritime ports, airports and roads into Spain. The connection between major companies and S&T centres was seen as the main regional need in terms of development of the productive base, although it could be argued that the funding allocation was insufficient for a major shift in innovation. The programme objectives and priorities were coherent with the region's needs as perceived at the time by the majority of relevant actors. However, this was a time of major doubt and differences of opinion, with some entrepreneurial associations and trade unions calling for clustering and upgrading of traditional sectors, rather than a focus on new industries. Enterprise support had a large funding allocation, but lacked strategic goals.

In 2007-2013, the programme's strategic focus changed fundamentally, mostly due to the new Community Guidelines and Lisbon Strategy but also from a national/regional perception of the altering needs and from the realisation that infrastructure investments were, in essence, complete. The 2007-2013 programme focuses on Enterprise, Innovation (R&D investments connected both with traditional sectors – wine, textile, footwear, furniture – and new sectors – marine, health, ICT and tourism). In addition, the CSF seeks greater support for culture, heritage promotion initiatives and regeneration of urban centres and non-material competitiveness factors in general (marketing, design and commercialisation). At present and following reprogramming in 2011 and 2012, the CSF is viewed as part of the response to the crisis.

Table 2: Comparison of regional needs and programme responses

	Regional need	Response	Project focus
1989-93	Peripheral geographical location, mainly vs. the country and the Iberian Peninsula, as a whole	Connections with Lisbon and Galicia	A1 motorway (Porto - Lisbon); A3 motorway (Porto – Valença, on the Spanish border). URBAN C.I.
	Enterprise support	PEDIP Financial Incentive System (NOP Industry Development) Regional Base Incentive System (NOP Incentive to Productive Activity) Tourism Investment Financial System (NOP Incentive to Productive Activity) Trade Modernisation Incentive System (NOP)	PEDIP – About 500 projects, the most relevant (>5M€)being Textile, Apparel and Footwear Associations; Minho Ind. Association; Porto Industrial Association; Portugal Electricity; Municipal Association SIBR – about 500 projects, the most relevant (> 5M€) being in electric cables, automobile equipment, footwear, textiles and naval construction. Around 90 touristic projects, namely spas, thermal and rural hotels
	Innovation		INESC – Engineering and Computers Institute; Mechanical and Management Institute; Support to the three public universities, S&T centres and industrial parks
1994-99	Structural Adjustment	Specific infrastructure (roads, railways, health, cultural)	Textile-Portugal Programme. RETEX, ADAPT, Employment and Human Resources C.I.
	Infrastructure		Large infrastructure projects (mainly roads, ports and sanitation infrastructure)
	Environment		Water supply and sewage networks
	Enterprise		PEDIP II – more than 1,000 industrial projects,
	Innovation		Cultural projects
2000-06	Enterprise	Specific infrastructure (connections to the rest of the World, in general and Spain, in particular)	FDI (Ikea, Siemens) attraction
	Infrastructure		Roads, ports, airports, Porto Metro
	Innovation		Universities and S&T centres. Technology & Science Parks
2007-13	Enterprise Innovation Reduction of geographical disequilibrium	Strategic adherence to Community Guidelines – innovation, R&D and competitiveness	Support for Clustering Initiatives
	Innovation		Support to education and R&D infrastructure (universities and S&T centres)
	Reduction of geographical disequilibrium	Low-density areas development	

Table 3 builds on the previous analysis and shows the main needs and imputed objectives of the Norte region for the four programme periods and for the eight thematic axes addressed by this study.

The support for the modernisation of Norte enterprises was a major need identified by the programmes from the 1994-1999 programme period, a need that was reflected in the imputed objectives of CSF II and the NSRF, but not so much in CSF III. This was a consequence of the national orientation for the structural adjustment of Norte region, that CSF III followed, which anticipated less investment in the modernisation of the Norte economy's traditional sectors and instead a focus on the support of new productive sectors (such as health, biotechnology, ICT and tourism). This was a major setback for the structural adjustment of the region in this period, since the companies in the traditional sectors were still the major employers and they were struggling to adapt their activity to the changes in the world market.

Innovation was always a relevant need, but it only started to be a part of the programmes' objectives from CSF III. Until then, innovation investments had meant the construction and modernisation of Norte universities and related research centres.

As illustrated in Table 3, the infrastructure theme was a transversal priority of the ERDF programmes, both in needs and imputed objectives. This situation only started to change from CSF III onwards, on one hand because the major infrastructure issues were resolved and, on the other hand, because other needs began to gain relevance. In fact, it is through CSF III and the NSRF that the remaining themes (environmental sustainability, labour market, social cohesion and spatial cohesion) have become a more significant part of the strategies of the regional and national programmes.

Table 3: Needs and imputed objectives for eight thematic axes

	1989-93		1994-99		2000-06		2007-13	
Thematic Axis	Needs	Imputed objectives	Needs	Imputed objectives	Needs	Imputed objectives	Needs	Imputed objectives
Enterprise	=	4	++	4	+	3	++	4
Structural adjustment	=	4	++	4	++	2	++	4
Innovation	+	3	++	3	++	4	++	5
Environmental sustainability	+	4	+	3	+	3	=	3
Labour market	=	2	=	3	=	3	+	5
Social cohesion	+	2	+	3	+	3	+	3
Spatial cohesion	++	1	++	4	++	4	++	3
Infrastructure	++	5	++	5	+	4	-	3

Needs Scale (evaluation of the region at the start of the period)
++ Very high need: the region is highly deprived on this axis
+ High need: the region is somewhat deprived on this axis
= Average need: the region is around the national mean on this axis
- Low need: the region is above the national mean on this axis
-- Very low need: the region is already a European front-runner on this axis

Imputed Objectives
5 Very high effort, this axis is a central aspect of the regional development strategy
4 High effort, this axis is an important element in the regional development strategy
3 Average effort, this axis is included in the regional development strategy but is not particularly important
2 Low effort: this axis is only marginally considered in the regional development strategy
1 No effort at all on this axis

4. EXPENDITURE ANALYSIS

4.1 Financial allocations

From 1989 until the present (data from 2012), the volume of ERDF and CF resources allocated to the Norte has been substantial, amounting to €13,153 million across the four programming periods, allowing, for the first time, a coherent and steady regionally oriented volume of investment. The Structural Funds support was the main financial instrument for regional development and strategic policies.

ERDF resources allocated to the Norte were extremely significant and continually increasing over time: €1,283 million in 1989-1993, €3,136 million in 1994-1999, and €3,462 million in 2000-2006 (Table 4). From 1994 onward the aid allocated to the region was considerably increased, due to the Cohesion Fund intervention (15% of the funding during 1989-2013), peaking in the 1994-1999 programme period.

Table 4: 1989-2013 total ERDF and CF Expenditure (thousands of Euros at 2000 constant prices)

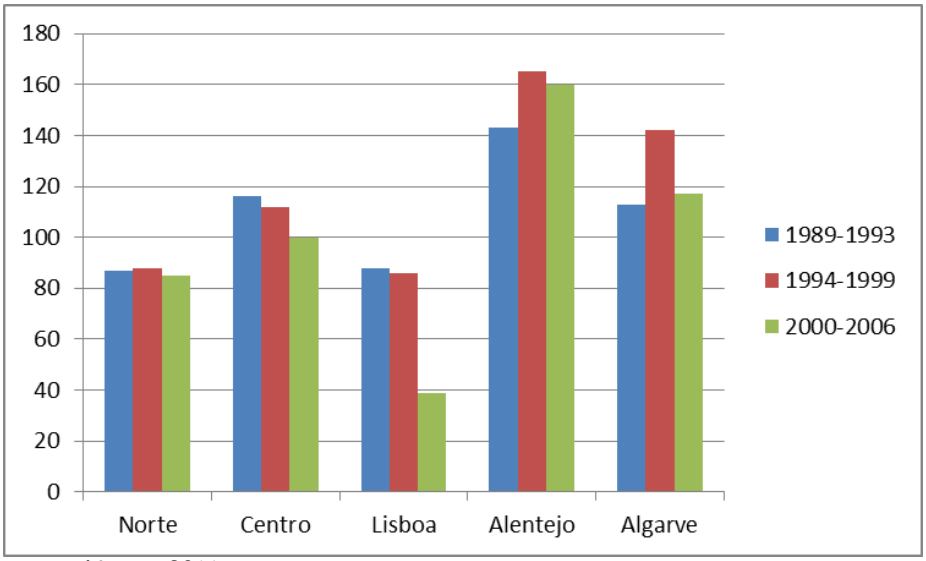
	1989-1993	1994-1999	2000-2006	2007-2013*	Total
ERDF	1,283,071 (100%)	3,136,306 (78%)	3,461,461 (88%)	3,328,284 (85%)	11,209,122 (85%)
CF	0 (0%)	906,135 (22%)	451,465 (12%)	585,977 (15%)	1,943,577 (15%)
Total	**1,283,071**	**4,042,441**	**3,912,926**	**3,914,261**	**13,152,699**

* approved expenditure in December 2012

Source: IDFR - Regional Development Financial Institute.

When analysing the funding distribution across all Portuguese regions, it seems that the ERDF allocation to the Norte region has been kept relatively stable in terms of its percentage of the total (see Figure 12), although it's per capita allocation has been diminishing since the 2000-2006 programme period. However, funding for the Norte has always been less than the average for the other Objective 1 or Convergence regions. This was noted by a significant number of interviewees to have contributed to the region's economic divergence on a range of indicators when compared to the national average.

Figure 12: Community Support Frameworks per capita investment by NUTS 2 (Portugal=100)



Source: Monteiro and Leite, 2011.

ERDF resources were much more concentrated in the national operational programmes in the first programming periods (75 percent in 1989-1993 and 81 percent in 1994-1999), subsequently declining as resources were shifted to the regional programmes: in the 2000-2006 programme period the ROP already accounted for 42% of the total and this has subsequently risen to 58% in the current programme. Such a shift can be explained by a national strategy change (see Chapter 3), which enabled the transfer of programmed investments from the NOPs to the regional programme.

For both the 2000-2006 and the 2007-2013 programmes many forms of investment that had previously been promoted and managed by the Central Authorities were transferred to the regional authorities, which in turn meant the financial reinforcement of the regional programmes (these investments corresponded to 2000-2006 ROP Priority 3 – Regionally De-concentrated Central Administration Interventions).

Table 5: 1989-2013 ERDF expenditure by Operational Programmes (thousands of Euros at 2000 constant prices)

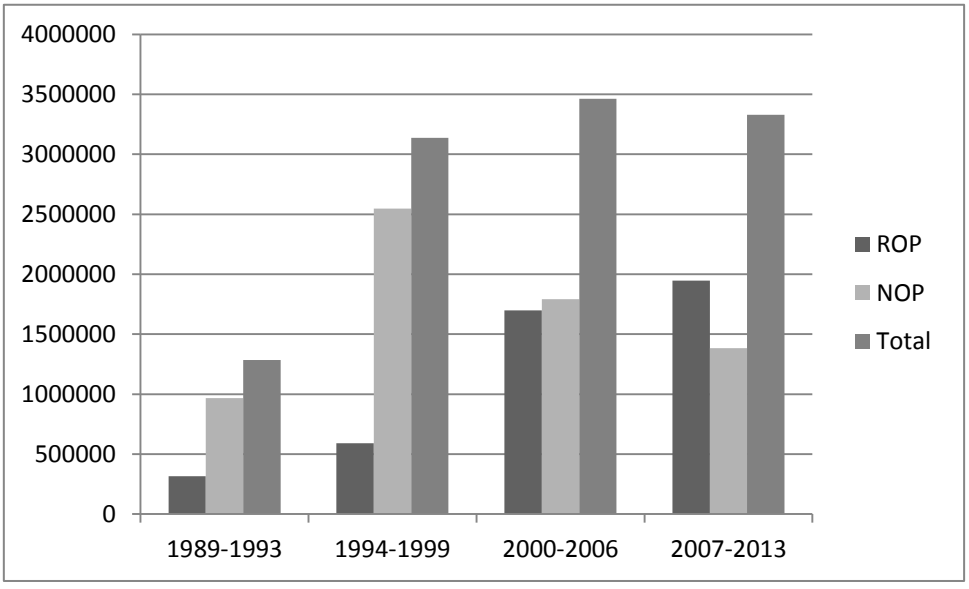
	1989-1993	1994-1999	2000-2006	2007-2013*
ROP	315,672 (25%)	590,400 (19%)	1,699,171 (48%)	1,945,041 (58%)
NOP	967,399 (75%)	2,545,906 (81%)	1,792,290 (52%)	1,383,243 (42%)
Total	**1,283,071**	**3,136,306**	**3,461,461**	**3,328,284**

* approved expenditure on December 2012

Source: IDFR - Regional Development Financial Institute.

Figure 13 illustrates Table 5 summarising the evolution of ERDF expenditure across programming periods and the distribution between NOPs and ROPs.

Figure 13: 1989-2013 NOP and ROP ERDF expenditure (thousands of Euros, 2000 prices)



[2007-2013 data = approved expenditure on December 2012].

Source: Regional Development Financial Institute (IFDR).

4.2 Expenditure compared with allocations

The ERDF expenditure across 1989-2006 accounted for an average of 94% of the initial allocations (€8.38 million initial allocation and €7.88 million expenditure). Total execution rate varied during the programming periods from 100% in 1989-1993, to 96% in 1994-1999 and 95% in 2000-2006. The ROP execution rate is more stable, showing percentages always close to 100% (table 6). In 2000-2006, the ROP expenditures surpassed allocations, due to the existence of a "performance reserve" attributed to the region. On the contrary, the NOPs execution rate presents a decreasing trend.

Table 6: 1989-2006 ERDF initial allocations and expenditure (thousands of Euros at 2000 constant prices)

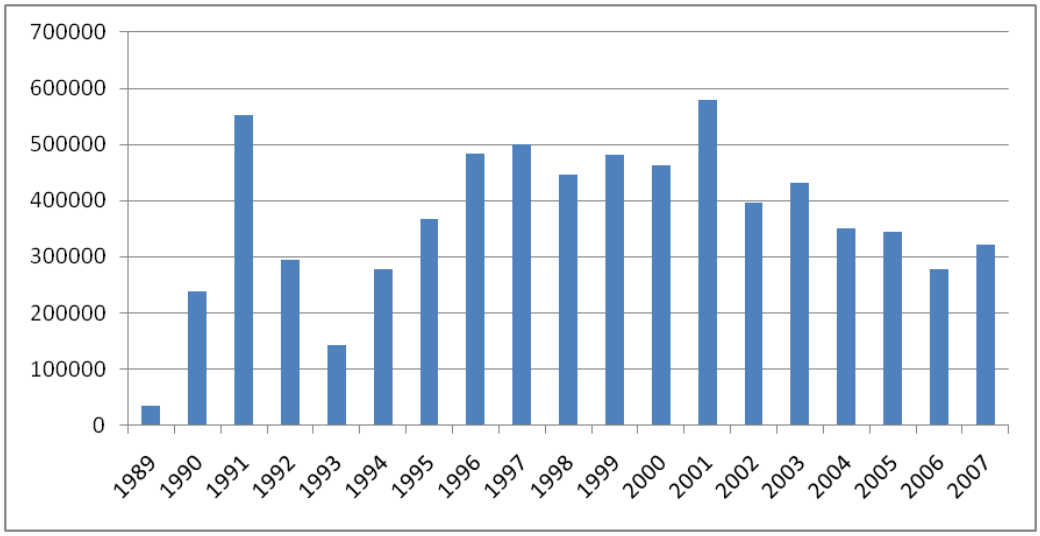
	1989-1993*			1994-1999			2000-2006		
	Alloc.	Expend.	%	Alloc.	Expend.	%	Alloc.	Expend.	%
ROP	315,672	315,672	100	590,991	590,400	99	1,682,348	1,699,171	101
NOP	967,399	967,399	100	2,797,699	2,545,906	91	2,029,773	1,792,290	88
Total	**1,283,071**	**1,283,071**	**100**	**3,388,690**	**3,136,306**	**96**	**3,712,121**	**3,461,461**	**95**

* Initial allocations on this programming period were based on expenditure values

Source: IDFR - Regional Development Financial Institute.

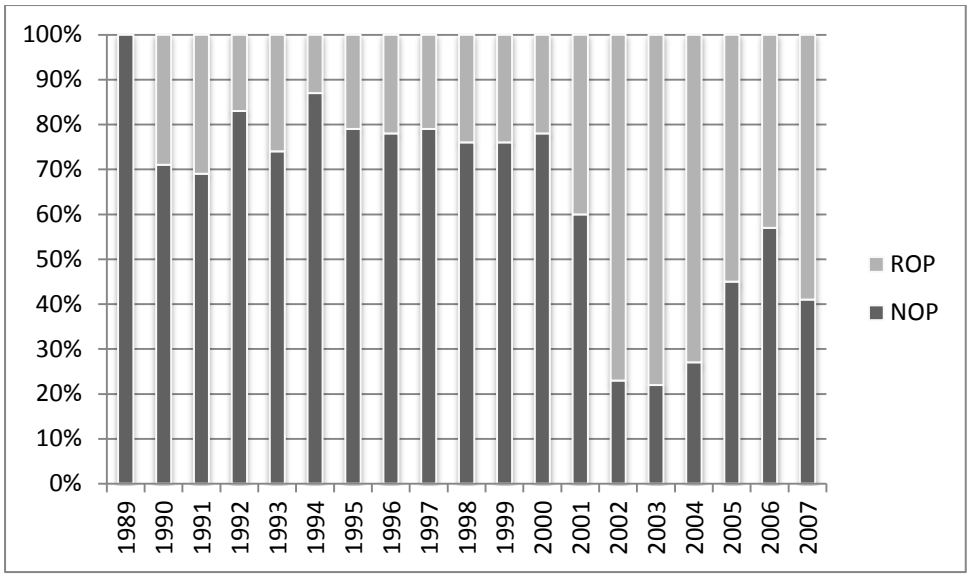
The analysis of the yearly ERDF expenditure in 2000 constant prices shows that it peaked in the middle years of each programme period – 1991, 1997 and 2003 - with the exception of 2001. The first years of implementation of each programme period are times of maturation and adaptation to different procedures and regulations.

Figure 14: Total expenditure on ERDF projects - CSF I, II, III (thousands of Euros in 2000 prices)



Source: IFDR Regional Development Financial Institute (expenditure data after 2008 are still provisional).

Figure 15: Percentage of ROP and NOP expenditure on ERDF - CSF I, II, III



Source: IFDR Regional Development Financial Institute (expenditure data after 2008 are still provisional).

Throughout the entire period, the expenditure peak years were 1991 and 2001 (see Figure 14). The former was in the first period and matched the very high levels of funding spent on national infrastructure projects. It was the first time the region had such amounts at its disposal, hence beneficiaries were urged to apply with eligible projects. At this time regional needs were so important and diverse that there was no problem in finding projects to propose for ERDF support.

Expenditure levels then fell until the 1994-1999 programme middle years (peaking in 1997). This period presented less variation in expenditure between years with high expenditure levels in 1996, 1997 and 1999. The 2001 peak is a reflection of expenditure from two programme periods: 1994-1999 and 2000-2006 programmes. 2001 was the last possible year to complete the 1994-1999 programme projects, which pressed beneficiaries and Managing Authorities to spend the available funding. Accordingly, this peak in 2001 also shows that there were delays in some major projects (for example in the large Porto Metropolitan project).

For the remaining years (2002-2007), expenditure was at an even level, reflecting the improvement in the coordination/articulation in the payment cycle. Nonetheless, similarly to the previous period, the 2000-2006 programme expenditure experienced some delays which extended the programme expenditure to 2007 and 2008, including a lower level of expenditure in 2006 due to reprogramming issues The 2000-2006 reprogramming process aimed to adapt programmes to the changing global context which, at the time, particularly affected the Norte region.

The analysis of the ROP expenditure data against the eight thematic axes used in this study (see Table 7 and Figure 16), shows the gradual shift of priorities from the domination of infrastructure expenditure (including the environment) in the early periods to a more balanced distribution in the most recent programming periods (due to the increase in the enterprise, spatial cohesion, structural adjustment and innovation priorities).

Table 7: 1989-2013 Total ERDF and CF Expenditure by thematic priority (thousands of Euros at 2000 constant prices)

Thematic priority	1989-1993		1994-99		2000-2006		2007-2013*	
	€	%	€	%	€	%	€	%
Infrastructure	658,097	51.29	1,630,054	40.32	1,548,739	39.58	1,384,994	35.38
Environmental sustainability	177,631	13.84	781,447	19.33	614,611	15.71	383,128	9.79
Structural adjustment	123,329	9.61	427,598	10.58	154,772	3.96	327,534	8.37
Enterprise	210,782	16.43	662,260	16.40	936,978	23.95	1.095,087	27.98
Innovation	67,860	5.29	116,623	2.88	153,273	3.92	286,563	7.32
Labour market	404	0.03	706	0.02	20,261	0.52	0	0.00
Social cohesion	37,611	2.93	47,742	1.18	38,823	0.99	102,402	2.62
Spatial cohesion	7,358	0.57	376,011	9.30	445,471	11.38	334,554	8.55
Total	**1,283,071**	**100.00**	**4,042,441**	**100.00**	**3,912,926**	**100.00**	**3,914,261**	**100.00**

* approved expenditure on December 2012

Source: Case study team analysis

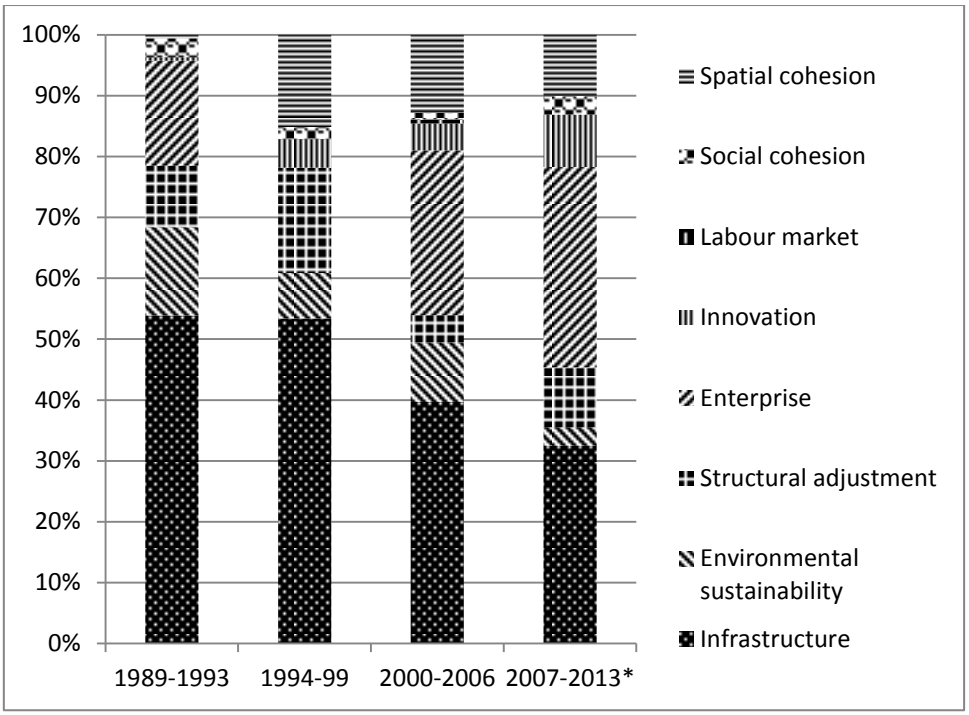
In the first programing period, 1989-1993, more than 60 percent of the ERDF expenditure was focused on two thematic priorities: infrastructure and environmental sustainability. The remaining expenditure was mainly on enterprise (the second most important priority in this period) and structural adjustment.

The second programme period, 1994-1999 – maintained the relative weight of the infrastructure and the environment – and additionally privileged structural adjustment.

For the subsequent programming periods (2000-2006 and 2007-2013), although infrastructure and environmental sustainability remain the most significant areas (around 50%), there was an increase of expenditure in enterprise support, spatial cohesion and innovation, responding to changing perceptions of regional needs.

Leaving out the Cohesion Fund in the analysis of expenditure by thematic priority (given that the CF only financed projects on infrastructure and environmental sustainability) the distribution shows a continuous decrease in infrastructure and a growing importance of enterprise support.

Figure 16: EFDR expenditure (NOPs + ROPs) by thematic priority (expressed as percentages)



Source: Case study team analysis of expenditure data.

The general long term trend is that of a decrease in the importance of expenditure in infrastructure and in environmental sustainability. Structural adjustment gains relative relevance in the second and fourth programming period, while enterprise support is the "rising star" in 2007-2013. Innovation also gained relevance in the long ran.

For the 1989-1993 programme period, the data from Table 8 shows a focus on the infrastructure/environment and enterprise thematic axes, both on the NOP and ROP expenditure. Although with significant differences in the amount of expenditure both the regional and national programmes focused on similar priorities, in which regional programmes were dedicated to local and regional needs (infrastructure endowment and water supply and sewage systems), whereas national programmes were responsible for implementing investments with national dimension and relevance (road and railway systems, connection of the water supply and sewage systems).

According to Porto (1996), with a national average of 100, the Norte ERDF per capita[21] – during CSF I - was 60.7, the lowest of the seven NUTS 2 regions.

[21] NOPs + ROPs.

Table 8: 1989-1993 Expenditures by thematic priority (2000 constant prices)

Thematic priority	ERDF NOP		ERDF ROP	
	€ thousands	%	€ thousands	%
Infrastructure	529,056	54.69	129,041	40.88
Environmental sustainability	53,974	5.58	123,657	39.17
Structural adjustment	104,197	10.77	19,132	6.06
Enterprise	185,555	19.18	25,227	7.99
Innovation	67,860	7.01	0	0.00
Labour market	404	0.04	0	0.00
Social cohesion	18,996	1.96	18,615	5.90
Spatial cohesion	7,358	0.76	0	0.00
Total	**967,400**	**100,00**	**315,672**	**100,00**

Source: Case study team analysis

The ERDF ROP 1994-1999 programme also displays the dominance of infrastructure endowment as an investment priority, as indicated by the percentage of expenditure assigned to this thematic axis (46% of the NOPs and 27% of the ROP). The remaining expenditure were centred on environmental sustainability (connected to improvement in the water supply and sewage systems), structural adjustment and, with a smaller percentage, enterprise support. Also highlight for the relevance of the spatial cohesion theme in the ROP (53%), which reflected its specific measures for economic enhancement of Norte municipalities.

Table 9: 1994-1999 Expenditures by thematic priority (2000 constant prices)

Thematic priority	ERDF NOP		ERDF ROP		Cohesion Fund	
	€ thousands	%	€ thousands	%	€ thousands	%
Infrastructure	1,164,278	45.73	156,483	26.50	309,293	34.13
Environmental sustainability	97,250	3.82	87,356	14.80	596,842	65.87
Structural adjustment	391,887	15.39	35,712	6.05	0	0.00
Enterprise	662,260	26.01	0	0.00	0	0.00
Innovation	116,623	4.58	0	0.00	0	0.00
Labour market	706	0.03	0	0.00	0	0.00
Social cohesion	47,742	1.88	0	0.00	0	0.00
Spatial cohesion	65,161	2.56	310,850	52.65	0	0.00
Total	**2,545,907**	**100**	**590,401**	**100**	**906,135**	**100**

Source: Case study team analysis

For the 2000-2006 programme period, there was a shift in priorities, whereby basic infrastructure endowment, although still dominant, shows a much smaller share (around 30 percent in the ROP and 51% in the NOPs).

In 2000, the Norte region had already made important progress as far as basic infrastructure was concerned. Roads, sanitation, fresh-water supply networks and urban solid waste treatment had been a target for strong investment in the previous programme periods. Accordingly, there was a shift in the OP goals, with new challenges for Norte. This period saw the rise in the relevance of enterprise support, innovation investments and social cohesion policies (anti-poverty and social inclusion policies), whilst the environmental sustainability thematic axis was mainly supported by the Cohesion Fund (61% of CF expenditure). Many of these changes can be assigned to an actual shift in the core priorities of the programme. In short, the new objectives were: to meet the dawn of other important needs, rather than focusing only on basic infrastructure (many needs had already been satisfied) and to minimise the effects of macroeconomic evolution (decline in the competitiveness of the region economic productive basis).

Table 10: 2000-2006 Expenditures by thematic priority (2000 constant prices)

	ERDF NOP		ERDF ROP		Cohesion Fund	
Thematic priority	€ thousands	%	€ thousands	%	€ thousands	%
Infrastructure	525,602	29.33	846,986	50.74	176,150	39.02
Environmental sustainability	81,539	4.55	257,756	15.44	275,316	60.98
Structural adjustment	64,665	3.61	90,107	5.40	0	0.00
Enterprise	936,979	52.28	0	0.00	0	0.00
Innovation	140,698	7.85	12,575	0.75	0	0.00
Labour market	0	0.00	20,261	1.21	0	0.00
Social cohesion	38,823	2.17	0	0.00	0	0.00
Spatial cohesion	3,985	0.22	441,486	26.45	0	0.00
Total	**1,792,291**	**100**	**1.669,171**	**100**	**451,466**	**100**

Source: Case study team analysis

The 2007-2013 programme period was an extension of the trend shift witnessed in the previous period, as can be seen in Table 11. Infrastructure is still significant (38% of the NOPs and 29% of the ROP) but now much more connected to specific and complementary investments and social cohesion (particularly education-related equipment). In addition, enterprise support has a strong share, which shows the focus on the adjustment of regional companies to increasing competitiveness on a global scale.

Nonetheless, the pattern of expenditure is still provisional and partial, illustrating more rapid fund absorption in the axes described above. At the end of the period, one can expect an expenditure pattern that corresponds more to the Community Guidelines for this period (with a stronger share of the innovation theme) and the current reprogramming processes, i.e. the reinforcement of enterprise support, labour-market-related measures (unemployment issues) and the enhancement of innovation.

Table 11: 2007-2013 Expenditures by thematic priority (2000 constant prices)

	ERDF NOP		ERDF ROP		Cohesion Fund	
Thematic priority	€ thousands	%	€ thousands	%	€ thousands	%
Infrastructure	525,853	38,02	554,776	28,52	304,365	51,94
Environmental sustainability	0	0,00	101,516	5,22	281,612	48,06
Structural adjustment	60,246	4,36	267,289	13,74	0	0,00
Enterprise	664,740	48,06	430,347	22,13	0	0,00
Innovation	129,812	9,38	156,751	8,06	0	0,00
Labour market	0	0,00	0	0,00	0	0,00
Social cohesion	0	0,00	102,402	5,26	0	0,00
Spatial cohesion	2,592	0,19	331,962	17,07	0	0,00
Total	**1.383,243**	**100,00**	**1.945,043**	**100,00**	**585,977**	**100,00**

Source: Case study team analysis

5. ACHIEVEMENT ANALYSIS

This chapter analyses the ERDF and CF achievements for the Norte region, throughout the study period. It assesses the reported and actual achievements for each programming period and in the extent to which they have addressed regional needs, drawing upon official documentation and also interviews with key people and academic publications. The chapter also examines institutional factors affecting achievements and complementarities and synergies (both between ERDF-funded programmes and with domestic regional policy).

5.1 Reported & actual achievements

The sources for the analysis of the reported and actual achievements are primarily final implementation reports (FIRs) and evaluation studies (mainly ex-post, but also ex-ante and intermediate), both for the NOPs and ROPs. In the case of the NOP Final Implementation Reports achievements are only presented by sector and not by region, and regional level achievements in most cases can only be estimated by apportioning national achievements according to the level of expenditure in the region. The narrative is complemented by the, by detailed tables of NOP or ROP expenditures (Annex II), and by ROP reported achievements[22] (Annex III).

5.1.1 Programme-level achievements

In the **1989-1993** programme period reported achievements were only available for the ROPs, which predominantly supported infrastructure (Table 8 in previous chapter), mainly water supply and sewage networks (1,264 km) and municipal roads (more than 600 km)[23]. These investments were preceded by the approval of 69 Municipal Master Plans (PDMs) - the government made the approval of this document compulsory, in order that municipalities could benefit from Structural Funds support. These PDMs basically defined 'urban areas' and 'rural areas' in each municipality, which generated strong economic and political interests, as the simple classification of an area as 'urban' meant a high increase in value: this distorted the land use (e.g. by building on agricultural soils). This legislation was at the root of making real estate and infrastructure the most lucrative business in Portugal and, as a consequence, deindustrialising the whole economy

According to the CCDR officials interviewed, field reports show that virtually all the works that were envisaged have been carried out and inspected.

[22] Reported achievements only exist – for the four programme period – at ROP level.

[23] For the 1989-1993 period, there were only available regional programmes outputs (no targeted values).

Table 12: General Overview of 1989-1993 ROP Physical Indicators

Sub-Programme	Measure	Physical Indicators	Executed
1- Infrastructure (ERDF)	1- Accessibility	Km of improved municipal roads	639 km
		Nº of constructed passageways, bridges, overpasses and tunnels	34
	2- Basic Sanitation	Km of constructed/improved water supply and sewage networks	1,264 km
		Nº of constructed/improved adductors, abstractions, water treatment stations, reservoirs and pumping stations	186
	3.1- Support to Productive Activity Facilities	Nº of constructed support facilities	32
	3.2- Other Facilities	Nº of constructed/improved sports facilities	43
		Nº of constructed/improved cultural, recreation and health facilities	30
	4- Small Infrastructure of Local Interest	Nº of interventions (urban centre improvement, small infrastructure and special interventions)	90
	5- Support Studies	Nº of financed Municipal Master Plans (PDM)	69
		Nº of other support studies	43
2- Support for Productive Activity and Services for SMEs (ERDF)	6- Support for Productive Activity and Services for SMEs	Nº of supports for productive activity and services for SME technical actions	41
3- Human Resources and Training (ESF)	7- Human Resources and Training	Nº of trainees	3,485
		Nº of training hours	25,858
4- Rural and Agricultural Development (EAGGF)	8- Rural and Agriculture Develop.	Nº of promoted actions	82
5- Execution and Control (ERDF)	9- Execu. Contr.	Nº of execution control actions	15
	10- Studies	Nº of support studies	40

Source: ROP Final Execution Reports.

Moving on to the **1994-1999 programme period,** for the ERDF NOPs only national output data are available, since information on regional targets and results was not provided in the FIRs and available evaluation reports.

Although infrastructure and public facilities continued to dominate, there was clearly a shift towards economic development becoming the priority. A key NOP in this field was the Programme 'Regional Development Promotion Potential'. It provided incentive schemes such as the 'Regional Incentives System' (SIR) or the 'Incentive Scheme for Micro-Enterprises' (EIME): in the country as a whole, SIR created 4,412 gross qualified jobs and 4,000 gross non-qualified jobs, through 1,447 approved projects; whilst the Incentive Scheme for Micro-Enterprises delivered around 8,824 gross new jobs in 3,129 approved projects. If Norte received a proportional share of these outputs this would be around 31 percent of the national total, however there is no indication whether the Norte share was above or below this benchmark.

The 1994-1999 ERDF NOP Health and Social Integration funded investments in healthcare infrastructure, especially through the construction, upgrading and modernisation of Norte hospitals and healthcare centres. The most important projects were the upgrading (facilities and medical equipment) of Porto's Santo António Hospital (867 beds and 600,000 population covered) and the construction of São Sebastião (300 beds and 180,000 population covered), Matosinhos (430 beds and 220,000 population covered) and Vale do Sousa (390 beds and 392,000 population covered) Hospitals. In addition, rehabilitation interventions (modernisation of the facilities) were carried out on 22 health centres. This NOP provided support to 79,412 individuals in Portugal[24] through the construction and modernisation of child (79) and elderly (141) support centres, homecare support (71), temporary reception centres (6), community centres (71) and local social observatories (12). These investments also underpinned the creation of 1,547 new direct jobs (according to the NOP Health FIR). These investments would be important as the basis of a future health cluster in Norte that successfully evolved during the subsequent CSFs.

The 1994-1999 ERDF ROP for Norte introduced a general set of targets and executed achievements for each Sub-Programme and Thematic Priority intervention (see Annex III). Despite providing the first analysis of achievements-tracking and comparison with targets, the quantified targets should have been more exhaustive and there were gaps in the information system regarding physical indicators.

The programme did not seem to have any problems achieving its initial physical targets, in some cases surpassing them and in others promoting investment in areas not initially foreseen. Targets seem to have been set quite conservatively with some important areas of support having no initial target at all. Further differences can be explained by the flexibility of the programme in terms of ability to transfer between sub-programmes, financial reinforcement of the programmes during the period, and changes in investment typologies not initially eligible for co-financing.

Targets were easily surpassed (see Table 13) in road construction and upgrading (around 150%), urban circulation improvement (around 20,000 km of roads were built or improved, none being programmed) or other accessibility support works (11 bridges and several tunnels and overpasses were built, works not initially eligible for support).[25] The estimate of 20,000 km of local roads improved illustrates some of the problems with this data. Clearly this was not all new construction or significant improvement (resurfacing); although no information was available on precisely how this was measured, despite the figure being repeated in several reports. The level of investment in improving road is highly variable and in some cases is likely to refer to small repairs rather than end-to-end improvements.

[24] The methodology used for this value calculation is not defined. However, the more likely interpretation, according to the CCDR, is that this indicates the maximum capacity of all these health and social centres.

[25] 1994-1999 ERDF ROP Final Report says (p.73): 'The set of PRONORTE approvals points to numbers much higher and with more diversified typologies. As such, there were constructed or improved: - 1,756 km of roads, 1,448 km no SP/A relative to interventions in the municipal road network, and 308 Km in SP/B roads with intermunicipal features, national or regional roads; - 20,681 Km of urban road network, of which 20,517 km in SP/A – urban tissue interventions – and 164 km in SP/B relative to main urban axis or urban rings.'

Table 13: 1994-1999 ROP (PRONORTE) Main Physical Indicators

	Targeted	Executed
Accessibility		
Inter-municipal, national, regional and municipal road network construction and upgrading	700 km	1,756 km
Urban road network construction and upgrading – interventions in main urban axes and ring roads	0 km	20,681 km
Nº of transport-hosting infrastructures	5	3
Nº of support works (tunnels, bridges, overpasses)	0	11
Environment		
Water supply network – construction	1,200 km	2,269 km
Nº of water reservoirs	0	166
Nº of water-treatment plants	0	25
Nº pumping stations	0	39
Nº of water abstractions	0	31
Sewer network – construction	550 km	1,050 km
Storm-water networks	0	95 km
Nº of wastewater treatment plants – construction	35	38
Nº of septic tanks	0	52
Nº of pumping stations	0	22
Nº of municipal solid waste treatment plants - construction	14	2
Nº of transfer and recycling centres and eco-points	0	20
Other infrastructure		
Nº of industrial areas - construction and extension	15	32
Nº of cultural or tourist infrastructures	15	53
Nº of school facilities - upgrading and extension	18	71
Nº of sports infrastructures	6	130
Nº of economic activity support infrastructures	10	16
Nº of urban regeneration interventions	9	62
Nº of heritage recovery interventions	5	8
Nº of hospital improvements	0	1
Nº of fire stations – construction	0	1
Studies and Technical Projects		
Nº of studies and projects	39	98

Source: 1994-1999 PRONORTE ROP Final Implementation Report.

A similar situation occurred with regard to the environmental system. The water supply and sewage networks achievements both exceeded targeted investments, enabling a general regional improvement and a vital increase in the standards of living (Table 14).

Table 14: Population served by water supply and sewage treatment systems between 1995/1999

	% population served by water supply		% population served by sewage treatment	
	1995	1999	1995	1999
Portugal (mainland)	84	89	60	68
Norte Region	70	77	44	51

Source: INE Statistical Yearbooks, 1995 and 1999.

Likewise, collective infrastructure showed greater outputs than had been programmed. Sports, culture and education infrastructures were developed as part of national network strategies that promoted specific infrastructure endowments. For example, the national network of libraries or the national network of museums. Alongside sectoral NOP's, the ROP supported the construction/improvement of municipal pools (Montalegre, Maia, Melgaço, Felgueiras), multi-sports facilities (Monte Aventino in Porto), the Vila Flor Cultural Centre and Castelo de Paiva auditorium (200 seating capacity), municipal libraries (Santo Tirso, Vale de Cambra), the Communications and Transports Museum (32,000 visitors per year) and Diogo Bernardes Theatre (310 seating capacity).

The municipal pools of Montalegre, Maia, Melgaço and Felgueiras are all 25 metre community swimming pools. The municipal pools of Montalegre, Melgaço and Felgueiras are particularly important given that they are located in the interior, and constitute one of the few possibilities of local people to have contact with swimming activities, either for sports training or leisure. The population they serve, according to the 2011 Census, is the following: Melgaço (9,020), Felgueiras (56,398) and Montalegre (10,240). Maia is located near the coast and is more populated (131,000), and the municipal pool is one among other water sports facilities.

Monte Aventino (in Porto Metropolitan Area) consists of a zone of 26,400m^2 with diverse sports facilities, such as tennis courts, gymnasium, squash courts and support services, with an average of 30,000 users per year.

The Vila Flor Cultural Centre is equipped with two auditoriums, four conference rooms, and an exhibition area of 1,000m^2, a restaurant, café-concerto, car park and gardens. This cultural centre has brought about a strengthening and broadening of the cultural and socio-economical profile of the city of Guimarães as well as its surrounding area, being the most flexible and modern cultural facility of the region.

For the **2000-2006** programming period, each NOP FIR continued to assess achievements for the country as a whole, but not for the region. Nevertheless, the most significant ERDF achievements for each NOP will be identified[26].

Education NOP was financed by ESF and ERDF, displaying a total share of financing for Norte of around 35/45% in all measures. This reflects a few interesting outputs, namely in training and

[26] Agriculture NOP (AGRO), Fishing NOP (MARE) and Public Administration NOP (POAP) will not be addressed due to their marginal share of ERDF support.

qualification (ESF) and in infrastructure improvement actions (ERDF): youngsters training and qualification action covered in the country 1,991 training institutions in 19,394 classes, which allowed the training of 235,168 individuals; advanced training actions (in ICT and health sectors) covered 1,794 classes and 49,238 individuals; internships programme involved 153 entities for 1,697 actions and 14,159 trainees; Recognition, Validation and Certification of Competencies (RVCC) initiative enabled the qualification of 119,871 adults in 215 specific centres; advanced teacher's training allowed for 3,447 actions for 1,014,268 trainees.

In addition to ESF financing, ERDF allowed the furnishing of primary, basic and secondary schools (779 projects) and the infrastructure improvement of universities (204,615m^2 of improved floorspace).

Employment, Training and Social Development NOP was mainly grounded on ESF financed projects, developing a few initiatives for local job creation, namely: support to NGO's actions that created 997 new gross jobs in 362 supported projects (in the country as a whole); social and community development action financed 250 public social institutions for a total of 10,279 direct recipients; and the ESCOLHAS programme covered 36,059 individuals, financing their social inclusion and labour market integration.

Economy Modernisation NOP supported 5,730 projects in the region (43% of the total), of which 5,317 (91%) were incentive schemes for companies support. The remaining was focused on the support to productive infrastructures (technological, associative, energetic and tourist) and on internationalisation initiatives. This NOP helped to create 51,167 gross jobs in the country[27].

Accessibility and Transport NOP supported the execution of 284 projects for the whole country, of which 31.1% (88) were in the Norte region. The focus of interventions was on key road connection completions (~60 projects), on improvement of the railway network (~10 projects) and on ports infrastructures (~10 projects), complementing CF and ROP investments. A few projects can be highlighted, such as the Interior Norte and Great Porto motorways operated by a concessionary company, the Minho railway improvement and the Leixões maritime port.

Environment NOP supported the enhancement of the ecologic structure of Serralves Foundation gardens and Porto city (for the "Porto 2001, Culture Capital"), the environmental and urban rehabilitation of Gondomar, Melgaço and Ponte de Lima centres as well as the city beneficiaries of POLIS[28] programme.

Science and Innovation NOP achievements were concentrated in the development of a modern network of R&D institutions, scientific infrastructures and technological/innovation development. 151 projects of R&D centres and scientific equipment were supported; 1,086 scientific and technological development investigation projects and 635 Ciência Viva projects (promotion of scientific culture in primary and basic schools) were financed.

[27] No information available at the regional level of how many jobs this NOP created.

[28] National initiative that enabled the execution of partnerships for the urban rehabilitation and enhancement of a few selected cities. In Norte these were: Viana do Castelo, Matosinhos, Gaia, Vila do Conde, Vila Real and Bragança.

Culture NOP supported 63 interventions in monuments and historic buildings (Arouca Monastery, Serralves Foundation), 43 construction/rehabilitation actions in museums (Douro, Côa Valley, Penafiel and Braga museums) and cultural facilities (Circo Theatre in Braga, Vila Real and Bragança Theatres) and 26 multimedia and audiovisual products (on-line publication of Casa de Mateus, Vila Real bibliographic catalog). These actions enabled the creation of 260 new jobs in museums, monuments and other cultural facilities.

The 2000-2006 programming period was strategically framed by the NOP Accessibility and NOP Environment. In accessibility, the main CF achievements were the continuation of the Norte railway modernisation (Lousada-Nine and Nine-Braga sections) and the regional road system upgrading (IP4 and IP2 sections). In the environment sector, the most relevant outputs were the construction and upgrading of inter-municipal MSW treatment, water supply and sewage systems, as well as multi-sector (combined) systems.

Regarding the ROP reported achievements, the Priority 'Support to Municipal and Intermunicipal Investments' allowed for a general infrastructure upgrading (in line with the previous programmes), and a few local development initiatives (increase in the population served by water supply and sewage systems, municipal roads constructed and/or improved and cultural centres). In addition, it supported interregional cooperation actions (business support services and regional products promotion – Table 15[29]).

The second Priority focused on "Sub-regional Specific Territorial Based Small Actions". This intervention allowed projects at the sub-regional scale, such as urban centre rehabilitation[30], local economy development, traditional products promotion, heritage sites enhancement, as well as municipal roads and the construction/improvement of business accommodation infrastructures. Douro, Minho-Lima, Entre Douro e Vouga and Vale do Sousa were the sub-regions covered by this Priority. In summary their main achievements were:

1. Douro – 143 projects, which assisted 613,000 m² of rehabilitation of buildings in historical centres, as well as 16 interventions in historic (Salzedas Monastery in Tarouca, Wine Villages preservation and improvement programme) and natural (resolution of environmental issues in the Douro wine region, creation of belvederes and natural paths) heritage sites. In addition, Douro programme allowed for the construction of relevant public facilities, such as the Lamego Hotel School, the Vila Real Music Conservatory or the Macedo de Cavaleiros Cultural Centre;
2. Minho-Lima – 48 projects in the sub-region. The main financed areas were industrial parks (63ha of intervened area in 26 projects) and historic centres rehabilitation.

[29] A few significant examples were the Arcos de Valdevez water supply system (example of many others throughout the region), with the construction of 13 reservoirs, 10 pumping stations, 34.28 km of adduction pipes and a distribution network of 78.89 km; the Santo Tiro urban park, that enabled the enhancement of an area adjacent to Ave river; the increase of municipal libraries network with Vila Real and Viana do Castelo libraries; the Porto Casa da Música, an emblematic project that contributed to urban rehabilitation; the Serralves In initiative, an action promoted by Serralves Foundation for the incubation of creative industries; the enhancement of national roads, such as the EN213 between Mirandela and Vila Flor and the variant to EN326 between Mansores and Arouca, an important connection route to Porto Metropolitan Area.

[30] Besides AIBT interventions highlight for the POLIS Programme, which promoted selected urban centres through the country. In the Norte region it enabled urban regeneration actions in Bragança, Chaves, Matosinhos, Porto, Viana do Castelo, Vila Real and Vila do Conde.

3. Entre Douro e Vouga – it enabled 51 projects, mostly focused on industrial parks (128.7 ha of intervened area in 29 projects, such as the São João da Madeira Technologic and Business Centre (creation of 23 firms). The remaining achievements were the natural and cultural heritage preservation, such as Caldas de S. Jorge building (thermal baths);
4. Vale do Sousa – the 41 projects were focused on industrial parks (19 projects). The remaining achievements were dedicated to the enhancement of historical heritage, which is illustrated by the "Route of the Romanesque" (see case study in Annex I).

Finally, the last Priority on "Regional Interventions promoted by the National Government", focused on the construction/enhancement of primary and secondary schools (80% increase in their number), job creation (3,108 private sector gross jobs created, for a targeted value of 2,150) and knowledge society and ICT (the number of institutions involved doubled, as well as the number of projects and the number of trainees in ICT). Additionally, actions in health facilities (such as the Ponte de Lima Hospital or the São João Hospital in Porto and improvements and the construction of new healthcare centres) grew around 50%, as well as sports infrastructures (328,157m^2 of buildings and sports fields executed for a target of 73,500m^2 including the Alfândega da Fé training centre, Resende and Oliveira de Azeméis municipal pools and the Prado Nautical Club upgrading).

The Vila Verde School Centre is a model example of school investments (modern and adequate infrastructures), whereas the Multimedia Institute in Porto is a good achievement regarding ICT initiatives, in this case combined with urban rehabilitation (adaptation of an emblematic building for an ICT learning institute). Regarding vocational training and employment actions, highlight for the support to FORAVE (Vale do Ave NUT3) and ADEMINHO (Minho-Lima NUT3) associations.

In knowledge society and science development there was the Ciência Viva initiative (Vila do Conde centre), the support to digital regions (of which Valimar Digital project in Minho-Lima is an example), and R&D infrastructures (Promonet firm incubation centre in Porto; the AvePark for science and technology on traditional sectors; and TECMAIA, a science and technology park in Maia industrial area.

Additionally, it supported the largest Norte project (320.2M€ ERDF), the Porto Metropolitan Area Underground, a fundamental element for the metropolitan transport system organisation.

Table 15: 2000-2006 Norte ROP Selected Achievements

	Initial	Target	Achieved
% population served by the water supply	63.66	95	98
% population served by wastewater collection and treatment	42.88	90	72
Km roads executed (constructed and improved)	1,707	1,450	1,683
Nº culture and knowledge multifunctional centres (constructed and improved)	31	47	60
Nº of interregional cooperation actions	15	20	45
Nº of business support services actions	19	25	42
Nº of actions to promote regional products	17	30	41
Average No. of training courses/year	230	1,050	1,090
Average No. of trainees/year	3,483	9,200	14,660
No. of primary and secondary new schools	64	47	51
No .of jobs created as part of measures to support job creation	709	2,150	3,108
No. of construction, remodelling and purpose-built health centres	n.a.	98	127
Construction/ modernisation of sports equipment (m^2)	-	73,500	328,157

Source: 2000-2006 ON-Operation Norte ROP Final Implementation Report.

In almost all the indicators, achievements surpass target values. There was a general consensus among interviewees and Implementation Reports that the output indicators system was well designed for the region's characteristics, although given that achievements almost always exceeded targets it can be assumed that targets were generally set too low. The Norte region also benefited from the 'performance reserve', a 4% increase in total funding allocation for the most effective Operational Programmes.

According to the 2000-2006 ERDF ROP Final Implementation Report, the execution of the programme 'induced in the region an annual GVA growth of 0.33 percent and the creation of 8,500 direct new jobs per year, 5,500 in the construction sector (mostly temporary jobs) and 2,500 in manufacturing industries. In addition, it enabled the training of 37,000 people and the establishment of 39,000 internships in regional companies and institutions'. The internships are part of active policy measures for the unemployed. They provided the opportunity of internships for long-term unemployed after attending training.

Nevertheless, even though the programme generated more jobs than expected this was not sufficient to offset the growth in unemployment as a result of the decline in the traditional industries. Furthermore the emphasis on competitiveness was to lead to further job losses as labour intensity was reduced.

Final achievements for the **2007-2013** ERDF ROP Norte cannot be assessed, as the programme is still on-going.[31] The latest available Annual Implementation Report (2010) shows good progress regarding project approvals, despite the fact that the whole National Strategic Reference Framework was suspended twice in order to be reprogrammed (both financially and strategically).[32]

[31] Mid-term Evaluation began in 2011, so there is still no information regarding achievements.

[32] Currently, suspension has been lifted and project approvals are already occurring. Financial reprogramming has been a common practice since CSF I, allowing the re-allocation of funds from measures with slow

So far, the outputs realised (see Annex III for detailed information) are the ones identified in Table 16, which mainly cover SME support and infrastructure (accessibility). Targets are far from being achieved, namely in SME support (direct and indirect) and health services (health facilities requalification projects and covered population). But in roads, urban regeneration and physical schools investments, there is a good balance between targeted and achieved goals.

Table 16: 2007-2013 most significant degrees of implementation

• **Thematic Areas**	• **Indicators**	• **2010 - Execution**	• **Programmed (2015)**
• SME support (direct and indirect)	• Nº of micro and small enterprises supported	• 98	• 450
	• Induced investment to SME's (thousands of €)	• 1,220	• 230,000
• Infrastructure • (accessibility)	• Supported road network (km)	• 170.5	• 190
	• Treatment operations in road black spots (nº)	• 69	• 76
• Urban regeneration	• Intervened areas of urban regeneration operations (m^2)	• 505,841	• 400,000
• Schools investments	• Primary schools remodeled/ expanded (nº)	• 163	• 223
	• Students covered by remodeling/ expansion of primary schools (nº)	• 26,863	• 44,200
• Health services	• Health facilities requalification projects (nº)	• 31	• 71
	• Covered population (nº)	• 44,724	• 1,097,272

Source: 2010 Annual Implementation Report.

(i) Programme indicator system

The number and accuracy of indicators used to report programme achievements have improved modestly over time. But changes in each programme period also had consequences for the design of physical indicators, making comparisons difficult.

The 1989-1993 programmes, both national and regional, presented financial allocation/approval/execution for each measure and fund, and final execution of output indicators for each intervention measure. According to CCDR officials and consultants interviewed, this system was effective to allow the audit and evaluation of all the works carried out.

During the 1994-1999 monitoring system each Managing Authority was responsible for the definition of relevant output indicators for each programme final evaluation. This was new for NOPs, since each national programme would now have a specific control and evaluation mechanism (in CSF I,

execution to others. The strategic reprogramming process has occurred due to government's changes and as a way of allowing the country to combat the economic and financial crisis.

this only happened for the ROPs). There were many inconsistencies between target values and what was indeed achieved (in municipal roads, for example). Benchmark targets were present mainly in the water supply and roads indicators, and they were far from actual execution values. There was also no accounting for sub-regional results.

The European Commission intended to create a monitoring system through hiring a permanent expert team that would monitor the management procedures, detect irregularities, and produce reports for the Monitoring Units of the Managing Authority. However, this proposition was not accepted by the Portuguese authorities.

The information and monitoring system was developed only in CSF III, becoming more complex, comprehensive and integrated.

Assessment of achievements and information system supplied by output and result indicators (called SIGNO). The 2000-2006 ROP systematically addressed achievements for the four funds, the three priorities and the 28 measures. Benchmark targets were adequate to allow a correct estimate of each measure's achievement. The monitoring system addressed each programme individually, but each Monitoring Committee had increased responsibilities (financing criteria, monitor evaluations, implementation results analysis and AIRs and FIRs approval). Monitoring Committees had a consolidated structure, including OP Managing Authorities, the national SF management body, the respective sectorial ministries, municipalities, relevant social and economic partners and the European Commission.

5.1.2 Analysis by theme

(i) Infrastructure

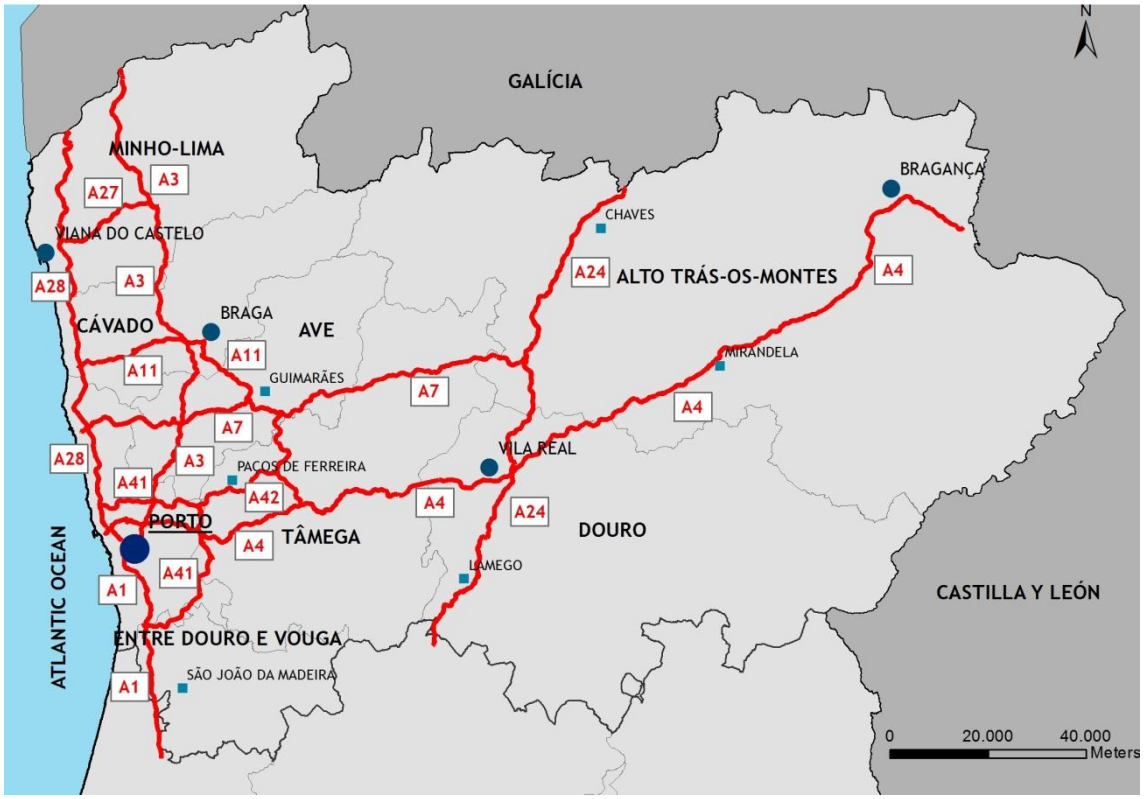
The general opinion among Portuguese politicians and entrepreneurs (in a survey carried out by the main Portuguese Industrial Association in 1990) favoured expenditure on transport infrastructure, primarily roads, as the top priority for regional development. They were seen not only as the symbol of modernity and a basic pre-condition for the competitiveness of companies, but also as a means to promote territorial cohesion (ensuring a better access to economic activities and increasing the attractiveness of the territory). For example, the sectoral report on "Accessibility, Mobility and Logistics", that supports the ongoing revision process of the Land Management Plan for the Norte Region, argues that "road transport is the basis of mobility system for people and freight, and as such it is not surprising that the aspirations of different communities are focused in the improvement of the road network that connects them to the service centers that provide the best supply (…). Thus, the improvement of the road network, whatever its type, is still a central argument of territorial cohesion (equal opportunities), although it causes adverse effects which need to start being considered".[33]

As a result, infrastructure was allocated an estimated €5,522 million of ERDF and CF funds from 1989 until 2012 (equivalent to approximately 40 percent of overall expenditure across the period). The proportion across the successive programme periods declined slightly from 51 percent of expenditure in 1989-1993, to 40 percent in 1994-1999 and in 2000-2006. In the current funding period, expenditure is down to around 35 percent (2012 data).

[33] Source: Babo (2009: 19).

Priorities concerning accessibility changed during the 25 years. In the first two programme periods, a special focus was given to regional and national connections with ERDF support, whilst investments to improve external connectivity to Spain and to promote the integration of Portugal in the Trans-European Transport Networks (TEN-T) were made under the Cohesion Fund. As such, infrastructure works included the completion of the A1 motorway that connects the two main metropolitan areas in the country, Lisbon and Porto, the construction of the A3 motorway that connects Porto with Braga/Valença/Spain-Galicia, and the first section of the A4 motorway in order to solve the main traffic congestion on National Road 15 between Porto and Amarante located east of Porto (Figure 17).

Figure 17: Norte Main Road Network



Source: authors, with geographic information from EP – Roads of Portugal.

Community Support Frameworks I and II also launched important projects related to circulation within the Porto Metropolitan Area (PMA)[34]: such as the Porto metro system and the A20, the Porto Internal Ring Road. In CSF II, the major infrastructural work consisted of the modernisation of the Northern Railway Line (connecting Lisbon and Porto), but other important investments were supported by both ROPs and NOPs. The 1994-1999 ROP devoted considerable resources to transport (251 million Euros; 71.4% ERDF) mainly for road network improvements: 1,756 km of roads constructed/improved (municipal road network, inter-municipal, regional and national roads) and the claimed 20,681 km of urban road network.

In 2000-06, the CSF III priorities saw a relative decrease in these types of accessibility investments, even if some important projects were still undertaken: the A7 and the A11 motorways (linking the central part of the Norte region to the coastal areas, and connecting Braga and Guimarães

[34] The resolution of congestion problems in Port and Lisbon Metropolitan Areas was one of the main objectives of the Transport Operational Intervention (CSF II).

respectively); and the Douro railway line that connects the city of Porto to the eastern Spanish border.

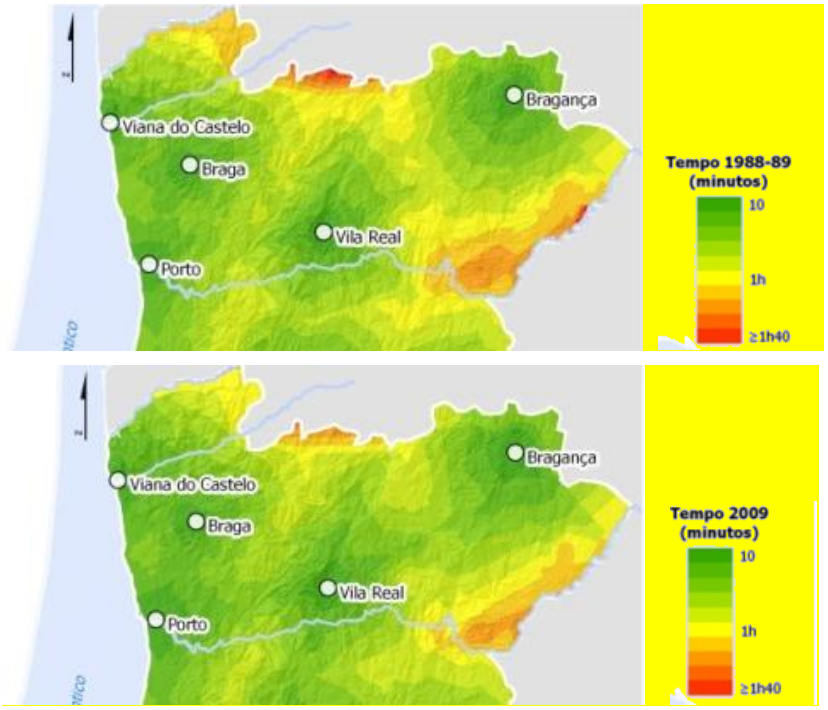
During the 2000-2006 programming period, the NOP made important investments in the port system (Port of Leixões) and to Sá Carneiro international airport. In the first case, the NOP supported investments in security and safety (e.g. installation of Automatic Identification System equipment, fire-fighting equipment in the port area, energy network and lighting), maritime and landside accessibility (e.g. improvements in Dock 4 south and west quay stabilisation, Port of Leixões internal connection road) and port management issues (e.g. Environmental Management Programme, Leixões Port Single Window). Regarding Sá Carneiro international airport case, the NOP supported the airport Expansion Plan which had a total cost of 247.7 million Euros of which 10.1% was covered by ERDF. The main goals were to improve the international connections, and to increase passenger capacity, and as a result Oporto airport has doubled the number of passengers since 2004 (to 6 million per annum), largely due to the low-cost airlines. It has also benefited from an absence of strategy in Galicia, so most Galician passengers use Oporto airport (checking in on the bus to the airport).

In the current programming period (2007-2013), the integration of Norte region into the Portuguese High-speed Train Network (Lisbon-Porto and Porto-Vigo connections) was a priority project (NOP), but this project was suspended. The Transmontana motorway, the modernisation of the Minho Railway Line (*Linha do Minho*) via Trofa and the expansion of the Porto metro system (between Dragão Stadium and Venda Nova) are other transportation projects undertaken by the Territorial Valorisation NOP. The 2007-2013 ROP also has a number of transport projects as a strategic objective, focused on: increasing urban mobility levels and increasing regional urban system connectivity. The ROP has also supported the new cruise terminal of Port of Leixões; an important investment for Norte tourism sector, which enables the port to receive the world largest cruise ships.

The benefits of these investments have been in the improvement of travel times and mobility within the region and with the rest of Portugal, improvements to safety, and better international access for freight and passengers.

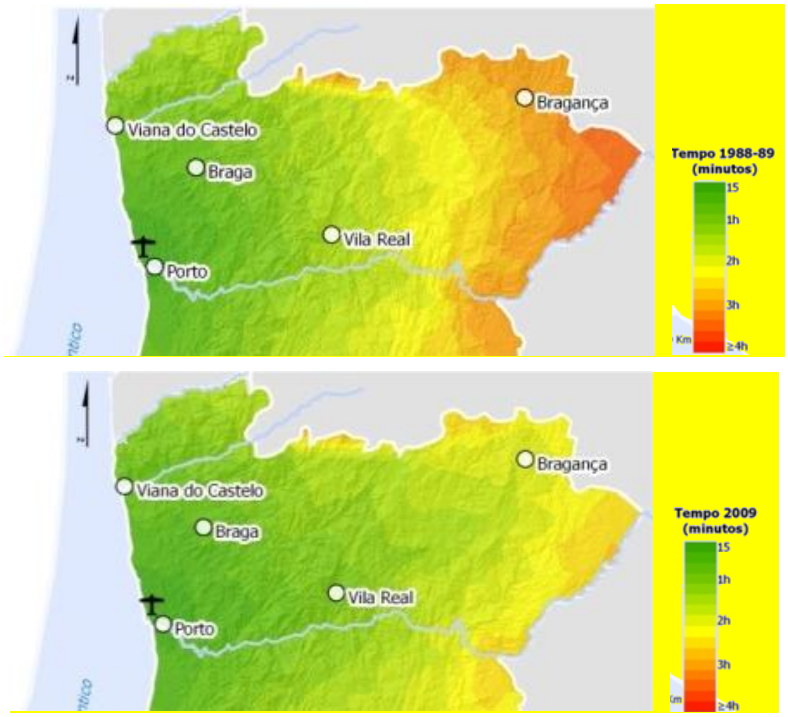
The improvements to the road network have helped to increase connectivity inside the region and to ensure efficient and modern connections both with other Portuguese regions and with Spain. The most important motorways, built between 1989 and 2012, solved serious traffic circulation constraints and improved Norte's territorial connectivity. These benefits can be seen by the following maps of isochrones showing the effects of reduced travel times to the main urban centres of Norte (Figure 18), Sá Carneiro International Airport (Figure 19), the frontier with Spain (Figure 20), and, the city of Porto (Figure 21). Some of the more local investments such as the Porto ring roads have also enabled Porto to solve some of its main problems with urban traffic congestion.

Figure 18: Isochrones from the main Norte cities (1988/89-2009)



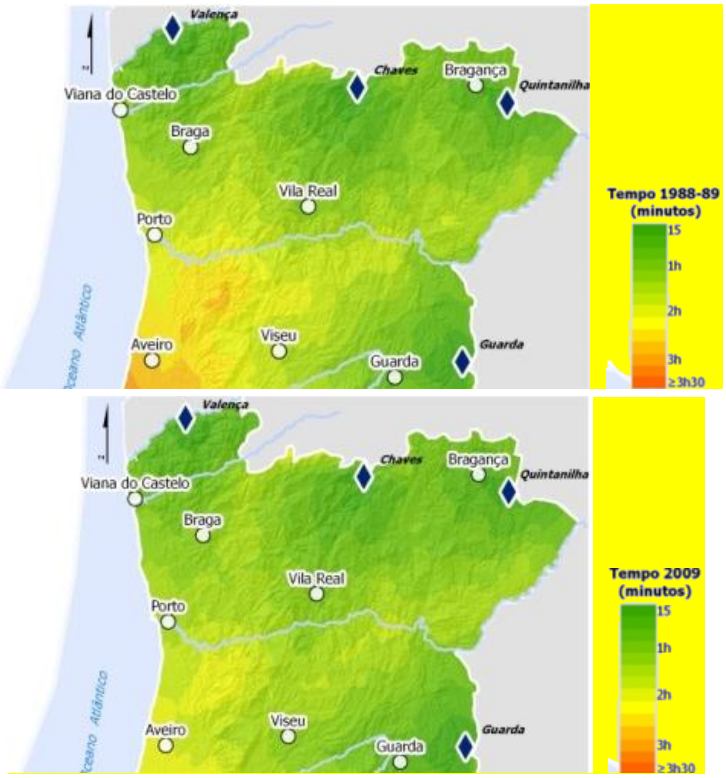
Source: Figueira de Sousa & Fernandes, (2011).

Figure 19: Isochrones from Sá Carneiro International Airport (1988/89-2009)



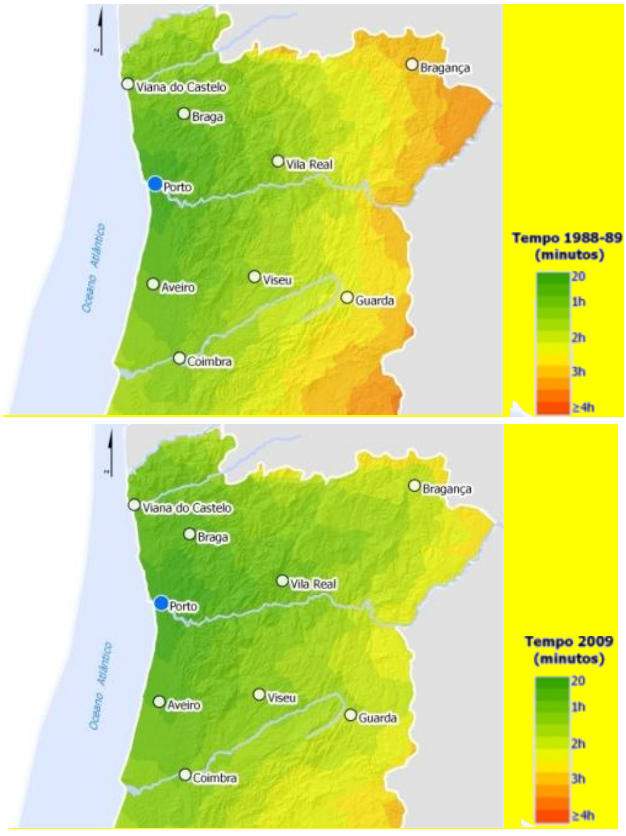
Source: Figueira de Sousa & Fernandes, (2011).

Figure 20: Isochrones from the frontier with Spain (1988/89-2009)



Source: Figueira de Sousa & Fernandes, (2011).

Figure 21: Isochrones from Lisbon and Porto (1988/89-2009)



Source: Figueira de Sousa & Fernandes, (2011).

Road traffic accidents have also fallen in the region, and although this does not depend only on the quality of the road network (other factors such as driver behaviour or developments in car technology are involved), this is a contributing factor. There was a significant reduction in accidents in the Norte region in the period 1998-2009 in the number of accidents (-21.3%), the number of deaths (-61.3%) and serious injuries (-44.1%) (Table 17).

Table 17: Evolution of the number of road accidents with victims, number of deaths and injuries in Norte Region (1998-2009)

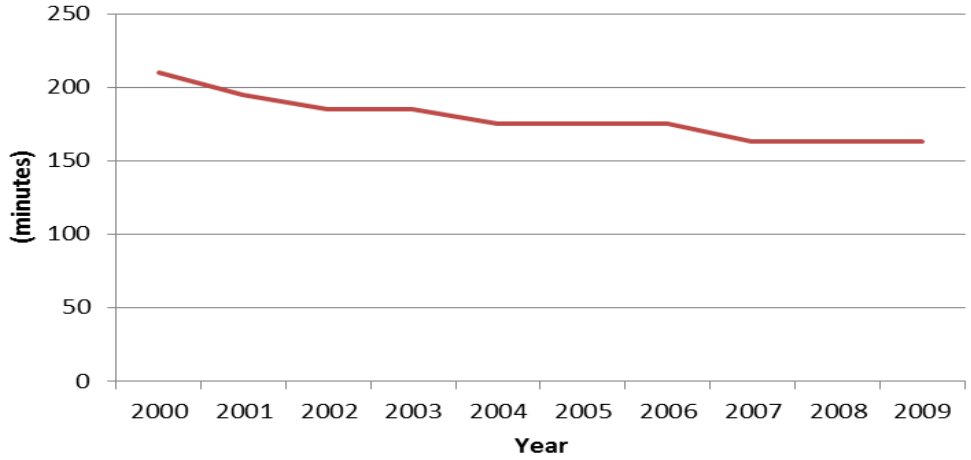
	Nr. Accidents with victims	Nr. Deaths	Nr. Injuries
1998	13,143	466	1,119
1999	12,859	444	1,049
2000	11,828	377	993
2001	11,792	384	1,051
2002	10,912	372	909
2003	11,627	332	1,010
2004	10,570	310	959
2005	10,105	274	881
2006	9,724	219	830
2007	9,802	195	732
2008	9,540	197	679
2009	10,337	180	625

Source: ANSR and DGV, Road Accidents Reports.

Railway investment reduced the travel time between Lisbon and Oporto and increased line capacity in urban areas with increased security; technological modernisation; increased quality and reliability; increased line capacity for freight trains; reduced maintenance costs; and the reduction of operational disruptions after the investment. The investments on the Norte Line resulted in a reduction in travel times between Lisbon and Oporto: from 210 minutes in 2000 to 163 minutes in 2009 (Figure22). Line capacity and safety levels were also improved.

The elimination of 439 level crossings in the Norte railway network in the period 2000-2009 resulted in an important reduction of the number of accidents. At a national level, the number of accidents was reduced from 154 accidents in 1999 to 49 in 2009.

Figure 22 Evolution of travel time between Lisbon and Oporto, 2000-2009 ("Alfa Pendular" Service")



Source: Figueira de Sousa & Fernandes, (2011).

The Porto Metro System, opened in 2002 was the most important infrastructure work in the Norte region in financial terms at a total of €3500 million (with support from CSF II/ERDF, CSF III/ERDF and the Cohesion Fund until 2006). The network has 66.6 km of track (Figure 23), and 81 stations and in 2011 carried 55.7 million passengers (5.9 in 2003, with only 11.8 km of track)[35].

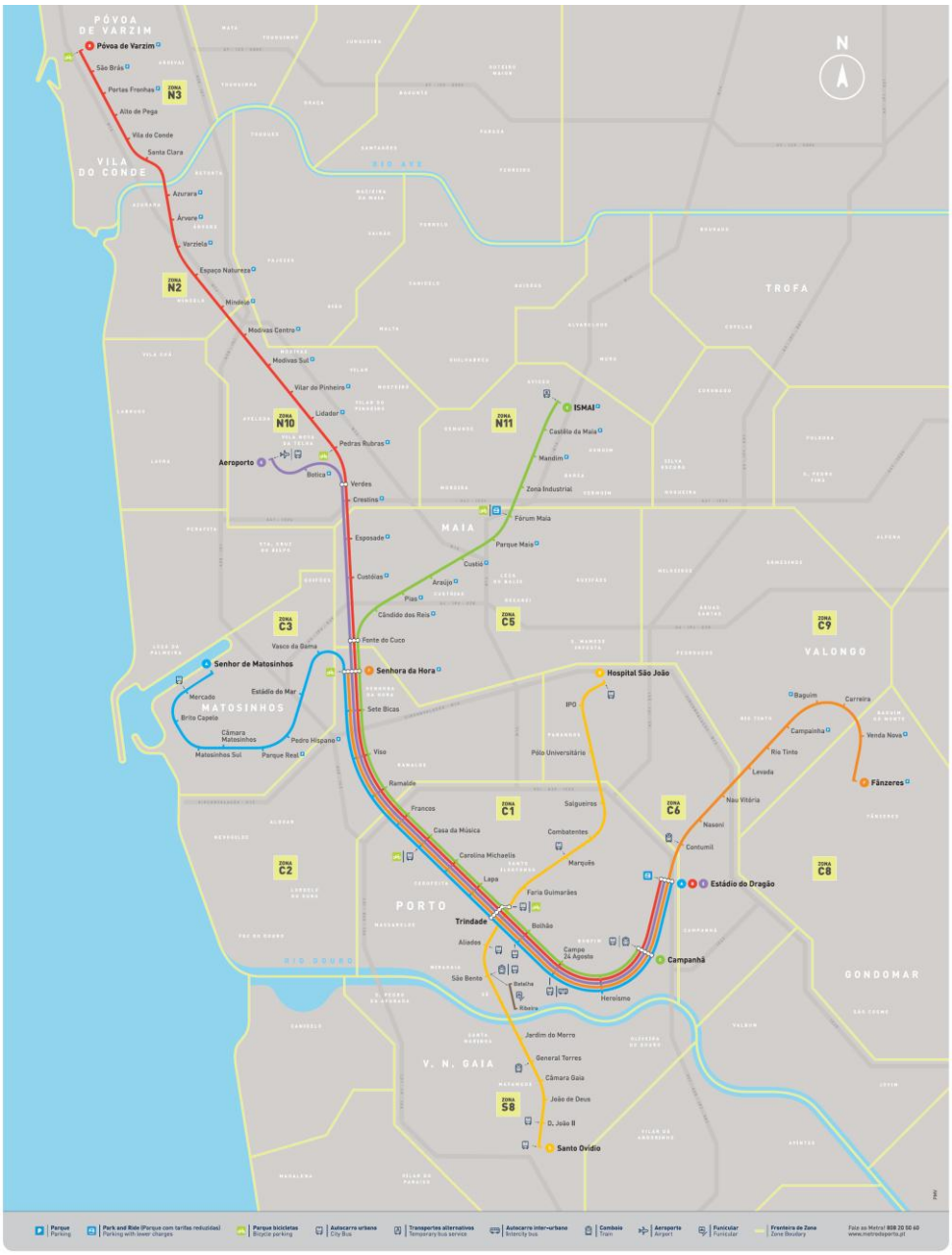
Use of the metro is expected to continue to grow, as the sectoral report on "Accessibility, Mobility and Logistics" (for the revision process of the Land Management Plan for the Norte Region) states, "the consolidation of the habits of using the metro system, the "network" effect, the articulation with other transport modes (rail, STCP bus network and "P + R" in fare integration system) and, finally, the consolidation of "Andante"[36], will soon produce a chain reaction that will increase the demand in the coming years, even without network extension"[37].

[35] Source: Metro do Porto (2012).

[36] "Andante" is a ticket for public transports in Oporto Metropolitan Area.

[37] Source: Babo (2009).

Figure 23 Porto Metro System Network



Source: Metro do Porto, SA (www.metrodoporto.pt/en).

The main investments in the principal port of Norte, the Port of Leixões, during the programming periods, made an important contribution to the port's development strategy[38], improving its competitiveness (e.g. better maritime and landside accessibility, better management systems), both for freight and passengers (cruise passengers).Despite reductions in 2009 due to the effects of the current economic and financial crisis, between 2004 and 2008 seaport traffic grew by 14.1% (from 13.7 to 15.6 million tons). Containerized cargo increased significantly in this period: from 3.5 to 4.6 million tons (30.5%).

[38] The "Strategic Plan for the Development of Port of Leixões" define the following main objectives for port development: to consolidate and promote "Porto de Leixões" brand in an integrated and consistent way; to organise the offer of quality services in line with market needs; to give the port the necessary material and immaterial conditions to support their activity; to improve urban integration and external connectivity conditions (APDL, 2004: 47-48).

Table 18: Evolution of Seaport Traffic in Port of Leixões (2004-2009)

	2004	2005	2006	2007	2008	2009
General Cargo	4,026,621	4,035,265	4,461,853	5,199,574	5,302,402	4,958,666
Break-bulk	467,036	487,152	569,865	740,121	647,656	345,922
Containerized	3,548,831	3,539,005	3,866,366	4,426,654	4,632,604	4,545,689
Ro-Ro	10,755	9,108	25,622	32,799	22,143	67,054
Solid Bulk	2,378,268	2,302,441	2,150,199	2,106,289	2,191,051	2,085,842
Liquid Bulk	7,298,616	7,713,004	7,404,130	7,642,622	8,141,646	7,098,032
Total	13,703,505	14,050,710	14,016,182	14,948,486	15,635,100	14,142,539

Source: IPTM (www.imarpor.pt)

Regarding the evolution of cruise activity in the Port of Leixões (table 19), 2012 was the first year of full activity for the new cruise terminal and quay with an increase of 81% in passengers and 30% in cruise ship calls. 75,613 passengers came through Leixões in 2012 and visited Porto and the North of Portugal. This increase in passenger numbers was due to the greater number and larger cruise ships".[39]

Table 19: Evolution of Cruise Ships and Cruse Passengers (2005-2012)

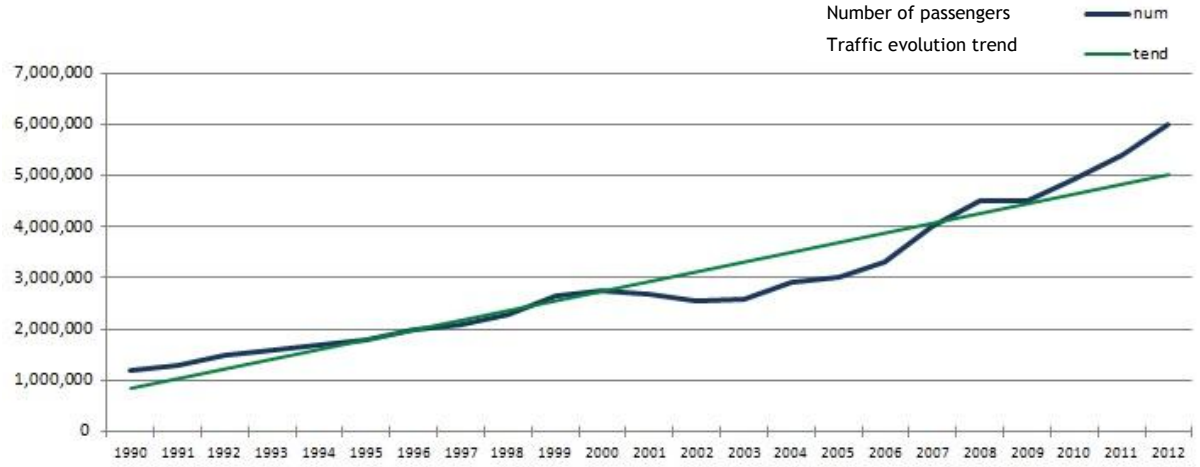
Year	Cruise Ships	Cruise Passengers
2012	73	75,672
2011	56	41,829
2010	49	27,494
2009	38	17,624
2008	54	25,465
2007	41	15,863
2006	45	20,629
2005	50	17,716

Source: APDL (www.apdl.pt)

The Sá Carneiro International Airport has also seen improvements in operational capacity and level of service due to the investments in airport infrastructure. Tourist traffic is increasing (both inbound and outbound) supported by regular and, especially, low cost airlines. Between 1990 and 2009, the number of passengers increased almost four times, to stand at about 4.5 million passengers in the last year.

[39] Source: APDL (www.apdl.pt)

Figure 24: Evolution of the number of passengers in Sá Carneiro Airport (1990-2009)



Source: INAC (2010).

The overall benefits of transport investment have been to ease the flows of people around the region, to the rest of Portugal, and beyond. There were considerable improvements in mobility, especially within Porto as a result of the metro, and the enhancements to the port and airport allowed the region to accommodate the greater flow of tourists into the region. However, whilst the port investment has led to some increase in freight, this has not been the level of transformation that was desired, within a transport-led development strategy, particularly the geo-economic approach pursued in 2000-06.

(ii) Enterprise

Enterprise has been an important theme across successive programmes in Norte with an overall expenditure of €2,905 million of ERDF and CF funds from 1989 until 2012 (equivalent to approximately 22 percent of overall expenditure across the period). The proportion across the programme periods varied from 16 percent of expenditure in 1989-1993 and in 1994-1999, to 24 percent in 2000-2006, and in the current funding period, expenditure is around 28 percent (2012 data).

The emphasis of the strategy towards enterprise has varied over time. At the beginning in the 1989-1993 programme period the main goal was to prepare Portuguese firms for the European Internal Market through productivity increase and employment up-grading. The 1994-99 programmes focused more on local endogenous potential and productivity, and that theme has continued with some modification since with a general emphasis on upgrading firms to meet the challenges of a tougher competitive environment, especially faced with the accession of new member states from the East. However in practical terms, due to the weak results in attracting investment to new sectors and/or upgrading old ones and to an elastic concept of what is productivity support (for example, building an industrial park or an exhibition fair was considered productivity support) results did not followed according to what was planned.

Throughout the period enterprise has largely been supported by a series of mainly national incentive programmes funded from the NOPs, and hence achievement data relates to these individual programmes, which have provided funding to specific firms. Among the most important programmes in 1989-93 with major impact in Norte region were the following: (i) Specific

Programme for the Development of Portuguese Agriculture (NOP PEDAP) (ii) (NOP PEDIP) (iii) Productive Activity Incentives NOP (iv) STAR (Telecommunications NOP); (v) VALOREN (Energy NOP) (vi) Ave Valley OP for the textile sector.

- PEDAP (Specific Programme for the Development of Portuguese Agriculture) supported agricultural modernisation, particularly in forestry, agro-food (wine structures in Norte region, in particular), commercialisation, and in amalgamating land lots. It achieved an average annual increase in productivity of 7.4% and supported between 2,500 and 3,000 young farmers (under the age of 45) in the region to help address the adverse age profile of agriculture in Portugal.
- PEDIP (Specific Programme for the Development of Portuguese Industry) developed two different manufacturing investment incentives schemes: the first was the "PEDIP System of Incentives" which supported around 1,000 investments in Norte region. However, the most important (>5M €) focused on entrepreneurs associations, public companies or technological centres, such as: EDP (Portugal Electricity); 2 exposition centres connected to entrepreneurial associations (EUROPARQUE and EXPONOR); the Viana do Castelo Shipyards; and the Footwear Association Technological Centre. The second was the "Regional-Based System of Incentives" supported around 500 investment projects, the most relevant being in the following sectors: mineral water; textiles; shipyards; automobile industry equipment; and electric cables and conductors.
- The "Productive Activity Incentives System" (SIPE) supported around 80 investment projects, the most relevant (> 200,000 €) being in natural resources and mining sectors.
- This programme period also established the "Tourism Financial Incentives System" (SIFIT – NOP PEDIP) which has supported about 30 projects in Norte region. Among the most relevant (>1.5 M€) one finds several hotels in rural areas.

The 1994-1999 programme very much followed on the previous one with the continuation of some schemes. So, the Specific Programme for the Development of Portuguese Industry (NOP PEDIP II) continued with the same two enterprise incentives as in the previous period: the "PEDIP System of Incentives II" and the "Regional-Based System of Incentives II". The former supported around 1,000 investment projects across a variety of sectors: oil refinery; beverages; textile; paper; glass; automobile parts; tyres; electrical and phone cables; and semiconductors. The latter (SIBR II) supported around 5,000 investment projects, the largest in the mineral water, textile and paper sectors. The "Tourism Financial Incentives System" (SIFIT II) also continued and supported 90 projects, the large majority from the public sector such as the Pousadas National Company, National Company of Tourism - ENATUR, Serralves Foundation, and the Youth Institute.

In the 2000-2006 programme period enterprise was supported mainly through the NOP for Economic Modernisation Incentives (PRIME) whose goals were productivity and competitiveness reinforcement and the promotion of economic growth. This funded 5,730 projects in the region, which focused mostly on manufacturing upgrading (~50% of total funding). Norte was the region that benefited the most from these investments (~40% of approved projects). These projects enabled the creation of around 21,000 new jobs (permanent and temporary), of which 60% were in SMEs. Around 200 new

enterprises were created (95% being SMEs[40]). The largest investments were in the pharmaceutical, tyres, semiconductors, and wind energy sectors.

The benefits to companies were argued to have been very positive in this period according to interviewees, although for 21,000 jobs this gives a cost per job or around €44,000 so the performance is not outstanding. It was also argued however that policies should have been more selective and there should have been a more integrated approach with more interconnected projects to strengthen institutional capacity and clustering. Complementarities between enterprises and technological institutions could also have been more fully explored, the absence of which undermined the possibility of achieving critical mass. The ROP during this period enabled the development of sub-regional trade and industrial associations, an action which was criticised as these institutions would only organise fairs, expositions, etc., with no clear results. It was said that the ERDF programmes "fell into the temptation to support each and every investment".

The 2007-2013 programmes include the NOP "Competitiveness Factors" that supports enterprises through financial engineer tools and entrepreneurial development collective actions. However, the recession and the major change in the economic climate have made it difficult to achieve its targets. The current economic and financial crisis started in 2008 (almost simultaneously with the beginning of the NSRF) and was experienced more severely with the austerity agreement with the IMF/EIB/EU in 2011. The NSRF has been reviewed twice since then. In the current situation, investment is barely taking place due to the general uncertainty (both economic and political). Current programmes were designed before 2007 in a very different context to that in which they are being put into practice.

One recent case study of enterprise success, however, which was ERDF-supported, deserves to be highlighted. It is the 'Douro Boys' case, which won the 2012 **European Enterprise Promotion Award**, in the category of 'Supporting Internationalisation'**.** The 'Douro Boys' are the leaders of five great Douro estates which have joined forces: Quinta do Vale Meão, Quinta do Crasto, Quinta Vale Dona Maria, Quinta do Vallado and Niepoort Vinhos (Nápoles). The five companies have worked together to jointly market their wine and have been highly creative in introducing new marketing concepts. Starting from 2002, they have been able to increase the scale of their vineyards from 240 to 526 ha, and their production has increased from 460,000 to 2,300,000 of bottles of still wines, mainly exported (Rebelo and Muhr, 2012).

A number of other companies have been supported in modernisation and export. Bial is an innovative pharmaceutical company, located between Oporto and Braga, with almost 1,000 workers and products available in more than 50 countries. Its R&D structure has developed rapidly in the last twenty years – always with ERDF support, according to one of its directors, during the interview by the authors. It employs 119 researchers (31 Ph.D.), from eight different countries. Since 1993 it has launched six new medicines and two new vaccines. Its R&D is concentrated in the production of vaccines and diagnosis in the area of allergy and immunotherapy. Ramirez is a traditional canned fish company, more than 100 years old, that has specialised in the last ten-fifteen years in high-quality raw material, being the first sardine fishing and canned fish EU Company to obtain the blue eco-label "Marine Stewardship Council. In the textile sector, new firms are developing new types of

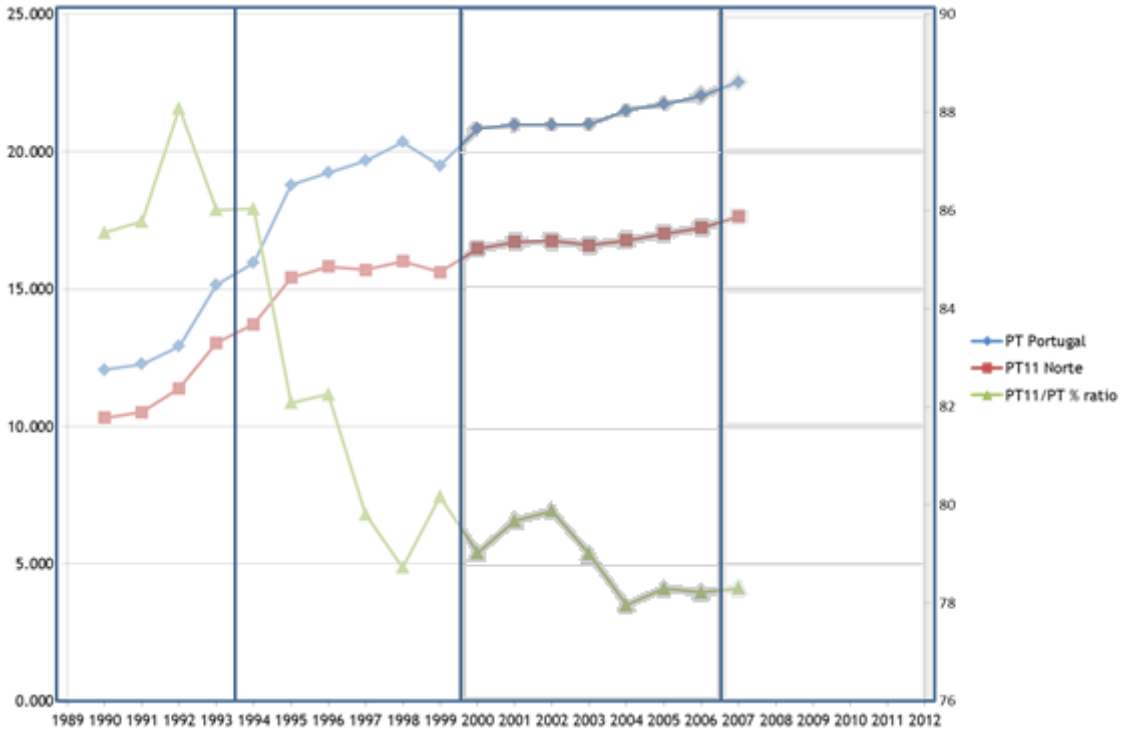
[40] Data retrieved from the Economy Modernisation (PRIME) National Operational Programme Final Implementation Report.

fabrics such as anti-mosquito or anti-vandalism materials (used, for example, in the London Underground).

Although there is no single indicator of firm competitiveness, which can be based on many different features of the production system of the country, productivity is a sufficiently good proxy, since it measures the capability of firms to produce GVA with an efficient use of its labour force. The total GVA per employee for Norte and for Portugal is presented in Figure 18, where data are available for the 1991-2007 period. It is evident that Norte was quite significantly below the Portuguese mean throughout the period of analysis, and that Norte followed the national cycles quite closely, including the fast rise of productivity in the early 1990s, and the relative slowdown afterwards. Until 1998, however, Portugal increased productivity more than Norte, and the gap widened, with Norte falling from 88% to 79% of the national mean. Given that the main focus of the enterprise strategy was to enhance competitiveness and modernise the industry base these results have been disappointing, reflecting also the region's inability to pursue a shift to new higher value adding industries as is further explained in the next section.

Figure 25: Real GVA per employee and Structural Funds expenditure on general support to existing firms for competitiveness (on top)

(16.43%) (16.40%) (23.95%) (27.98%)



Source: Core team analysis.

(iii) Structural Adjustment

Industrial restructuring can take many different forms, affecting either the sectoral composition or the functions performed in the regional economy, notably the abandonment of old industrial sectors or production phases. For this reason, the impact of industrial restructuring on a region, measured by GVA or employment, can be either positive or negative, but in all cases the

productivity of manufacturing should increase since restructuring allows the concentration on production or production phases of higher value-added per employee. Industrial GVA per employee is therefore a good proxy of the scale and success of industrial restructuring in a region. In Norte, the real GVA per employee in the manufacturing sector compared with that for Portugal was lower, at around 81% of the country value in 1990. Despite investment to promote restructuring, Norte was not able to catch up with the rest of the country, where manufacturing productivity has grown steadily, and the gap has widened.

In the first programme period, Norte remained relatively stable in terms of relative manufacturing productivity, but in 1994-1999, despite stronger investment, it was not possible to counterbalance a trend of relative decline by Norte compared with the rest of Portugal, although Norte still experienced an increased manufacturing productivity in absolute terms, . The pattern of absolute increase and relative decline continued at least through to 2007.

Industrial restructuring was an important concern for Cohesion policy in Norte region. On the whole, the ERDF support amounted to at least €1,572 million from 1989 to 2010 (equivalent to approximately 5% of overall expenditure across the period). It is estimated that industrial restructuring represented 13.7% of investment during 1994-1999, while it was lower at 1.2% in 2000-2006 and not obviously present in 2007-2013. Despite this there are also overlaps with enterprise policy.

Norte's economic base has always lain in manufacturing, with an important focus on the 'traditional sectors' of textiles, clothing, footwear, and furniture.[41] As a consequence these sectors were the focus of much of the support for industrial restructuring throughout the whole period, but especially in the 1990s. A Community Initiative ("Textile-Portugal"[42]) – later transformed in a NOP was designed to compensate Portugal for the entry of Asian textiles into the European market. Its budget was maximised by the support of EU Initiatives, namely that of RETEX.

In 1996, the textile sector provided 41% of Portuguese manufacturing employment and 13.6% of total manufacturing turnover. The Norte region accounted for almost 50% of the total approved incentives of "Textile-Portugal". In a total of 2,747 projects, 706 were from Porto and 407 from Braga. Specifically, projects on internationalisation and image promotion significantly improved the overall image of the Portuguese textile industry in foreign markets. This achievement was accomplished through support to national companies in the sector that have opted for a strategy of internationalisation and also integrated actions of image promotion, implemented either by governmental institutes or by business associations.

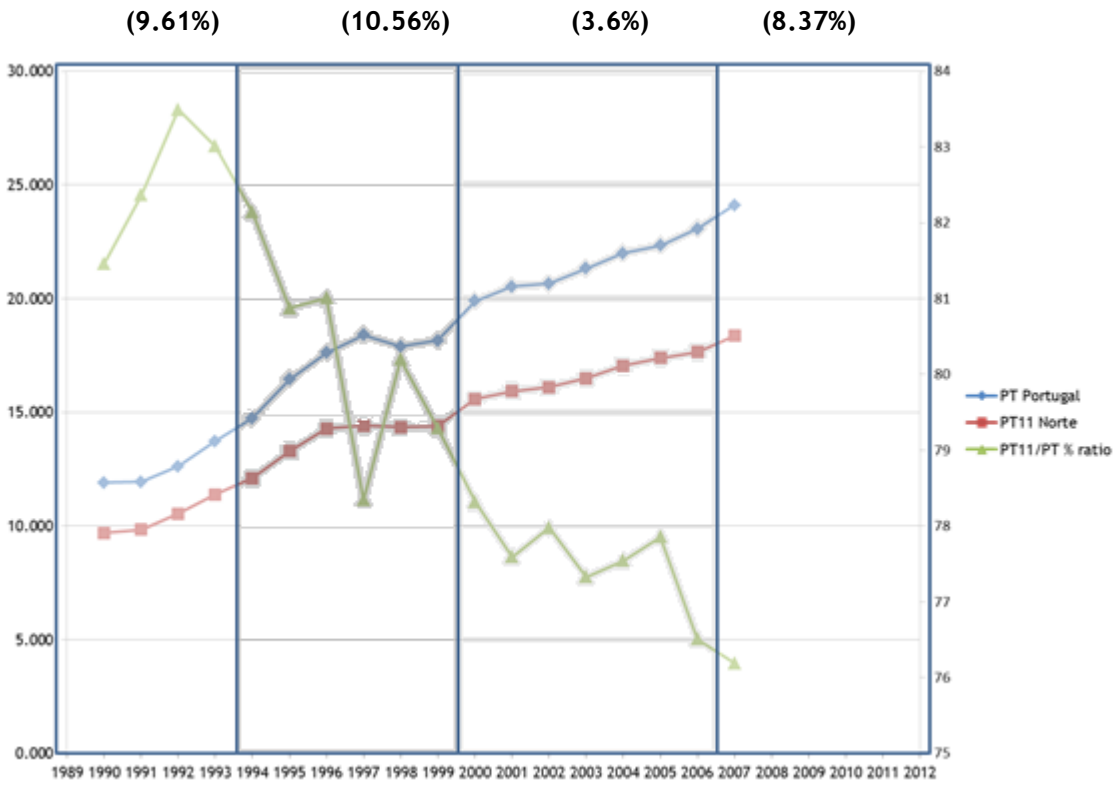
The main consequence of these structural adjustment programmes in the textile and apparel sectors was to split the company sector into two main groups: those who took advantage, modernising and rationalising their functioning and which were, in general, successful, and those – mainly SMEs - which did not react in time and went bankrupt. Successful textile firms specialised in market niches (home textiles, for example), but clothing apparel firms did not do well. Many

[41] In the mid-1990s, the textiles and clothing sector represented one-third of both regional industrial employment and GVA (Source: 'Company Statistics' and 'Harmonised Employment Survey', National Statistics Institute, various years).

[42] The 'Textile Portugal' Community Initiative (Communication 94/C 180/04 to the Member States, published in the O.J. C180, 1.7.1994, p.15.

firms have only been able to survive through subcontracting relationships, such as with the Galician-based Zara Group, rather than aiming to develop a brand identity which would enhance their abitlity to access international markets and achieve higher levels of value added.

Figure 26: Real GVA per employee in the manufacturing sector and Structural Funds expenditure on industrial restructuring (on top)



Source: Core team analysis.

The 2000-2006 programme – the NOP Economic Modernisation, in particular – was directed much more towards the introduction of new sectors and technologies than to the modernisation of traditional activities (Table 20).

Table 20: Evolution of the Number of Individuals Employed and Number of Enterprises in the Norte Traditional Sectors

	Year	Employment (Nº)	Enterprises (Nº)
Textile Sector	2000	99,321	4,614
	2004	84,382	6,935
	2007	71,156	6,038
Clothing Sector	2000	136,285	9,747
	2004	121,519	12,400
	2007	109,179	11,227
Footwear Sector	1984	30,850	971
	2000	50,000	1,600
	2011	32,377	1,254
Furniture Sector	1998	40,950	3,676
	2002	37,000	2,900
	2005	34,000	2,400

Source: ATP for Textile Sector data; APICCAPS for Footwear Sector data; AIMMP for furniture sector data.

An exception in the traditional sectors area was footwear (case study, analysed in detail in Section 8.2.), which was able to define a global strategy for the sector, investing in R&D and design projects, which resulted in a higher level of competitiveness. As the president of APICCAPS (Footwear Association) explained, when interviewed by the authors, major investments were made, with ERDF support, in different types of equipment in cooperation with the Footwear Technology Centre (FTC). Applications to the ERDF were only made by the FTC, and companies could only apply for support via the sectoral association. Design was also a major concern (as is discussed in the case study presented in Annex I).

The Portuguese footwear industry is dominated by small and medium-sized companies. Such companies usually lack the resources to carry out major structural adjustment, and until the 2000-2006 programme period firm development incentive schemes did not address this issue, as a way of improving competitiveness. During the 2000-2006 period, the NOP PRIME programme (*Programa de Incentivos à Modernização da Economia* – Economy Modernisation Incentives Programme) focused on modernising traditional industries and enhancing their competitiveness in a globalised economy.

The programme was recognised as being particularly effective in the case of the footwear industry because it put in place a comprehensive scheme of incentives that mostly supported the overall business environment (60 % of the incentives, i.e. around €55 million). A key partner for the implementation of this programme was the Portuguese National Footwear Association (APICAAPS). This association used this programme to help companies upgrade the skills of their workforce, for example by running an industry-specific training centre and carrying out large-scale R&D projects that benefited a wide array of companies due to economies of scale.

APICAAPS also promoted proactive benchmarking by supporting visits to international fairs and exhibitions. Encouraging companies to develop a close relationship with customers, suppliers, competitors and institutions allowed for the constant introduction of changes in processes and product designs.

Restructuring of the furniture sector occurred as a result of the IKEA investment. Furniture manufacture in Portugal is highly concentrated in two neighbouring municipalities (Paços de Ferreira and Paredes) in the Norte region. It is mainly wooden furniture using local wood (there is also some metal furniture but a much smaller proportion), and is very SME-based (more than 70% of the companies have less than 20 workers and 50% have less than 9 workers). The region is well endowed with wood which is a major strength of the sector. The region has a growing positive trade balance in the sector, as distinct from the EU overall deficit. About 80% of Norte's furniture exports go to the EU (France =33%. Spain = 31%. UK = 9%, in 2010).

IKEA came to the Norte region in 2005, with ERDF financial assistance, and seeking to benefit from the traditional sectoral know-how of the local workforce at a time when the furniture sector – which was never as important in the region as textiles – was also in a fragile situation, needing new design and commercialisation channels. Since 2008, IKEA has opened three new factories in Norte region which export to Spain, the US and Asia – 92% of the production is exported (a novelty in the sector). Fift percent of raw-material inputs have a Portuguese origin of which 50% is local (Norte and Centro regions). As such, 5 million euros are invested in the local economy/year, and 80% of the workers come from a 20 km radius. Wages are all above the minimum wage. There is continuous training, and 80% of operational managers come from internal promotion. The factories are self–sufficient in thermal energy and generate zero residues.

Despite the fact that more IKEA investments are anticipated between 2015 and 2020, it has focused until now on cheaper market segments. Overall the quality of Portuguese products is good but the design is completely outdated. As a consequence, during a large part of the 2000s exports declined (before growth started again around 2008). As usual, the problem is the lack of cooperation among firms aggravated by the existence of several sectoral associations that compete among themselves.

At the same time, examples of highly specialised suppliers emerged in new sectors such as scientific instruments, information systems, software and steel moulds.

Nevertheless, for traditional sectors the results of ERDF action were limited: there was a (relatively small) group of companies who managed to take advantage of the opportunity that the Structural Funds represented, but that was not the case for the vast majority of sectors and entrepreneurs.

The picture is less pessimistic with regard to other less traditional sectors. There were several entrepreneurial projects of all sizes and areas – what one interviewee referred to as a regional 'specificity' - that managed to grow and prosper, even if not integrated into any particular regional cluster or innovation project. Examples of such companies include EFACEC (a major transport and engineering equipment group), FREZITE (engineering tools), ADIRA (sheet metal working machines, laser cutting, and press brakes).

SIMOLDES (steel moulds, robots, polymers, graphic computation), founded in 1974, managed to progress thanks to its cooperation with the University of Minho and now exports to PSA-Vigo (automobiles), which is the largest EU automobile platform. A local product engineering cluster (Maia) also exports to Vigo. Norte was also able to attract FDI, partly due to grant aid supported by the ERDF, of which the more significant cases were Nokia-Siemens, IKEA, Bosch, Grundig and Enercon (during the 2000-2006 period). Nokia-Siemens Networks has invested in 2012 in a services centre for South, North and Eastern Europe. Bosch continues to work in the Norte region, producing

components for automobiles (mainly for VW in Setubal, near Lisbon), electrical tools, security systems and domestic appliances. Grundig delocalised in 2004 (selling its plant to Delphi). Enercon continues to operate in the Norte region and exports its wind energy equipment to Brazil.

But clearly the most striking change in regional structural adjustment was the development of the tertiary sector. This was due both to the integration of services in industrial activities and to the rise of new sectors, of which the most important (and unexpected) was tourism. As an old industrial region, Norte never considered its touristic potential. But a set of factors (patrimony and urban recovery, increased integration with Spain benefiting both from the increase of Spanish tourists and the Santiago de Compostela touristic boom[43], international and Douro cruises, wine tourism) made this a vibrant and - to a certain degree - sophisticated sector.

Reference to the rise in maritime cruises (the new cruise terminal of Leixões port, ERDF-financed, is a sign of an important increase in the number of American tourists in the so-called 'North of Europe' line – that goes from Lisbon to St. Petersburg – a growing alternative to the mature Caribbean and Mediterranean lines. Since 1993, the increase in the number of tourists and ships is estimated at 635% (Source: Lisbon Port). River Douro cruises are also on an upward trend: the 'Douro Azul' boats leave from Porto, visiting the cellars of Porto's vineyards along the Douro valley. Visits across the border to Salamanca in Spain, to old churches and pre-historical sites complete the touristic package.

Overall the structural restructuring saw some positive developments but much support over the whole period was focused on supporting the traditional sectors which still declined despite the assistance. Without this support the decline would potentially have been much larger, as shown by the relative success of footwear maintaining market share as a result of assistance, but the strategy of investing in new industries was perhaps delayed too long.

(iv) Innovation

Innovation has never been a major priority in Norte despite the apparent need for the modernisation of local industry and over the study period the total investment from the ERDF was around €624 million from 1989 until 2012 (equivalent to approximately 8 percent of overall expenditure from ERDF and CF across the period). The proportion across the successive funding periods varied from 5 percent of expenditure in 1989-1993, to 3 percent in 1994-1999, to 4 percent in 2000-2006, and in the current funding period, expenditure on innovation is around 7 percent (2012 data).

Although not a major priority, during CSFs I and II a series of technology centres were created through the NOPs PEDIP I and II (Specific Programme for Portuguese Industry I and II). These included: CITEVE (Textile Industries Technology Centre in Famalicão); CTIC (Leather Technology Centre; Footwear Technology Centre in S. João da Madeira; Wood and Furniture Industries Technology Centre (Lordelo); and APCOR (Portuguese Cork Technical Centre) in Santa Maria das Lamas.

[43] In the Middle Ages, there was a 'Portuguese Way' made by pilgrims to travel to Santiago Cathedral, which is now being recovered.

In the footwear industry the Technology Centre for the Footwear Industry (TCFTI) has played a key role in modifying a traditional and very threatened traditional sector into one of the most competitive footwear industries in the world. The ERDF-financed physical facilities, professional training sectors, marketing actions and R&D projects, and joint action between companies, R&D university centres and the TCFTI was undoubtedly decisive for the successful renewal of the sector (see case study in annex). TCFTI has assisted 450 companies in its assay laboratory. It has developed R&D projects with 50 companies, through the Leonardo Programme. It has organised training courses (ESF supported) for more than 1,000 companies and prepared investment projects (under the current NSRF, with ERDF support) for about 120 companies. It has also collaborated with APICAPS (the sectorial association) in the external promotion of the footwear sector. Other sectors may have been not so successful, but they also benefited from these technology centres.

The ERDF has also supported two key research institutions in Porto throughout the last 20 years: INESC 'Systems Engineering and Computer Institute', an institute that operates between the university and the entrepreneurial world, mainly in the areas of information technology, telecommunications and electronics; and INEGI 'Mechanical Engineering and Industrial Management Institute', an interface institute between the university and company innovation and technology transfer. These are two leading institutions, which have been working not only with companies from Norte but also with institutions from across the country as a whole and even from abroad. INEGI has already worked with more than 1,000 companies in innovation activities, at an average of 120 per year, the large majority being in the Norte region. The main activity sectors are metalworking equipment, automobiles and transportation goods.

The 2000-2006 programme period was the most ambitious to date in terms of policies for innovation, largely due to the diversity of the instruments involved. An investment-driven perspective was still predominant in the allocation of ERDF, though there was a simultaneous significant push to invest in universities to enhance capacity to form highly qualified human capital and significantly raise R&D investment levels. As a result, ERDF-financed major investments were made in the Universities of Porto and Minho. The University of Porto is an old institution that has battled severe financial problems, and research was virtually non-existent 15 years ago. Minho University is relatively new - created in 1973 - with campuses in Braga and Guimarães. These two universities benefited from ERDF support in terms of facilities and the financing of R&D projects (NOP Programme CIÊNCIA and several calls by the Portuguese 'Fundação para a Ciência e Tecnologia' (Technology and Science Foundation – FCT), a public institution which received ERDF support throughout all the CSFs.

In the last five years, both universities appear to have improved their positions in both European and international rankings. For instance, in 2010, Porto University was in the top 250 world universities (according to the 'Times Higher Education World Ranking'), and several Faculties from Minho University (Economics, Engineering and Health Sciences) are also in high positions in several international rankings.

During the 2000-2006 programme period, ERDF investments in both universities were 'gigantic' (as one interviewee described it). A particular focus of investment was around institutions making up a health cluster in the Porto area bringing together approximately 100 organisations (universities, hospitals, pharmaceutical companies and medical-device and material producers). ERDF investments in this field include: the Pathology and Molecular Immunology Institute (*Instituto de*

Patologia e Imunologia Molecular – IPATIMUP, Porto University); the Abel Salazar Biomedical Sciences Institute (*Instituto de Ciências Biomédicas Abel Salazar*, Porto University); the Institute for Biomedical Engineering (*Instituto de Engenharia Biomédica - INEB,* Porto University); the Health Sciences School (Minho University); Crioestaminal Maximum (a staminal cells company in AvePark); Bial (a large pharmaceutical company located between Porto and Braga whose products are available in more than 50 countries - and which in recent years has launched six new medicaments and two new vaccines.). The Bial Financial director, when interviewed by the authors, confirmed that the company received ERDF support during all CSFs, for virtually the totality of its investments, with co-financing rates between 25 and 50%.

However, the 2000-2006 mid-term evaluation report is clear about the main bottleneck observed: a 'lack of minimally credible evidence pointing to a connection between the huge effort made in non-business R&D and investment with innovative content supported in the incentive schemes of PRIME'.

The 2007-2013 period has witnessed a change in conception (from investment-driven policies to innovation-driven policies), with an increasing focus on entrepreneurial R&D and new instruments to foster close collaboration between universities and enterprises, such as the 'R&DT voucher', 'innovation voucher' and 'company-directed co-promotion'. This new ERDF approach has contributed to combining a territorial perspective regarding path dependency and structural specificity with the need to link policy instruments so as to be able to respond in a context-based systemic way. Central to this new strategy are the two science and technology parks: AvePark and UPTEC.

AvePark was founded in 2006 by Porto and Minho Universities, Guimarães City Hall, Minho Industrial Association and Guimarães Commercial Association. It has about 20 S&T companies[44] and was ERDF-financed through the 2000-2006 ERDF ROP. AvePark has an objective to create 4000 jobs by 2020, although this seems to be excessively ambitious and unlikely to be achieved.

UPTEC – the Science and Technology Park of the University of Porto - has just received the 2013 RegioStars Award in the section 'Intelligent Growth'. The UPTEC mission is to promote the creation of technology-based companies and to attract innovation units of large national and international companies. UPTEC promotes the creation of synergies between universities and business to deliver innovative products and services. It is organised into four poles (technology, biotechnology, creative industries and maritime-related activities) and incorporates incubators and business innovation centres. The park currently hosts 143 organisations, which have resulted in the creation, since its founding in 2007, of more than 900 highly skilled jobs. Supported by the ERDF from the previous programme period (2000-2006), UPTEC is currently co-funded by the 2007-2013 ERDF ROP with €15.4 million. In the coming years, UPTEC intends to create 350 new businesses and 5,000 new jobs by 2020.

UPTEC is divided into four distinct centres (Technology Centre, Creative Industries Centre, Sea Technology Centre and Biotechnology Centre) and includes two types of support structures for businesses, including Incubators and Centres for Business Innovation: The four UPTEC centres have

[44] Examples of enterprises located in AvePark include Newtextiles Lda. (textiles with applications in the health sector), Sketchpixel Lda. (new 3D technologies) and CriticalMaterials (aeronautics and defense).

the following number of companies (June 2013): 88 by the Technology Centre, 34 by the Creative Industries Centre, 8 by the Sea Technology Centre and 11 by the Biotechnology Centre (a total of 141). 35 of the companies are pre-incubation, 82 are in incubation, 18 are company innovation centres and there are 6 anchore companies.

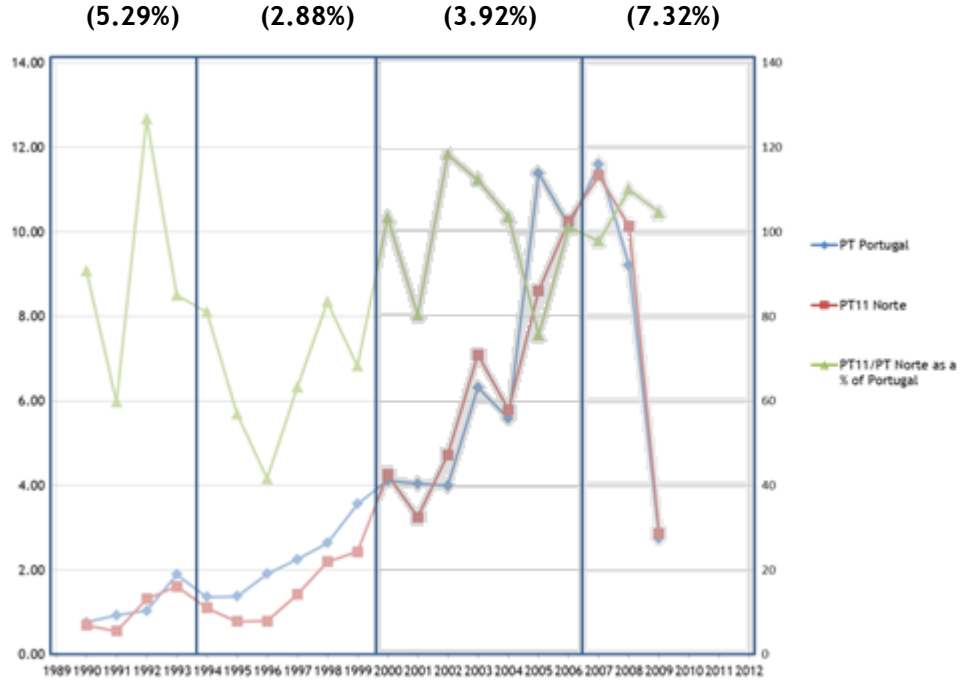
- The Technology Centre aims to promote and validate business-oriented projects, based on the knowledge and skills generated within the University of Porto, and also resulting from the cooperation between university, industry and private businesses. The strategy also involves the attraction of innovation centres (national and international) oriented to the development of new products and services to market, based on technology and knowledge transfer. The Centre includes 37 companies and innovation centre that work on biotechnology, pharmaceuticals, healthcare, chemicals, energy, energy efficiency, polymers and composite materials, information and communication technology, monitoring and robotics, telecommunications and geo-referencing.
- The Creative Industries Centre of the Science and Technology Park of the University of Porto (UPTEC PINC) is a joint project between UPTEC and INESC Porto (the Institute of Systems Engineering and Computers of Porto). The UPTEC PINC brings together the knowledge and skills developed in various areas of the creative industries such as architecture, visual arts, design, video and film, publishing, radio and television, educational software and entertainment. It has now 25 companies associated with this project, covering a wide range of business areas ranging from the cinema, audiovisual and video, television and radio and multimedia design to the areas of visual and performing arts, music and educational software entertainment. Its location at the heart of the new creative district of Porto means it contributes along with several other entities to the regeneration of the urban centre of Porto. It has created 'Porto Digital', an organisation that focuses on digital infrastructure and strengthens the link between the university and the city through the support of 'start-up' creative enterprises among students and graduates. At the same time, the COMPETE programme (2007-2013 ERDF NOP Competitiveness Factors) has launched ADDICT, a platform to develop entrepreneurship and the creative economy, the starting point for a future regional cluster.
- The Sea Centre of the Science and Technology Park of the University of Porto (UPTEC MAR) operates as a business incubator to accommodate operators and/or institutions with a maritime vocation, promoting technological entrepreneurship, providing services and joint research support and helping the dissemination of scientific and technological cooperation with civil society. It was a €5.4 million investment, of which €3.6 million was ERDF-financed. Being responsible for the incubation of technology-based companies connected with the sea, this centre is part of the Park of Science and Technology of the Sea of the University of Porto, which will host several other facilities (such as R&D and scientific publication). This structure involves, in addition to UPTEC, the University of Porto, the Port Administration of Douro and Leixões (APDL) and the Municipality of Matosinhos. Four companies are already based at this incubation centre, however with the current construction of new infrastructure and the evolution of this project, it is anticipated that the cluster will grow, allowing the development and application of new technologies to the marine environment, the promotion of entrepreneurship in technology-based economic activities of the sea, and the evolution of new processes of technology transfer through cooperation between companies and the existing R&D located at this centre.

- The Biotechnology Centre of the Park of Science and Technology (UPTEC BIO) offers a range of equipment and technological infrastructure that will promote development and accelerate projects. The strategy also involves the installation of innovation centres (national and international) oriented to the development of new products and services to market, based on technology and knowledge transfer, working with the incorporation of highly qualified and skilled human resources. At present, this cluster hosts two Innovation Centres; however, it plans to foster a larger number of start-ups and spin-offs related to biotechnology and health following the opening of its dedicated incubator.

Clusters of ICT activities are also becoming relevant, particularly in software production. Their formation has mainly come about as the result of local start-ups co-generated by university institutions (and ERDF-financed) but, more recently, major international companies have been locating facilities, as well as an important number of SMEs in the Braga area. In addition, there are a few examples of external location decisions concerning R&D activities pursued by public or non-profit entities. Examples include the 'Fraunhofer Institute', currently beginning its operations (R&D and technology brokerage in ICT) on the campus of the University of Porto; the European Centre for Tissues Engineering, a Minho University project, which will bring together R&D European technicians in AvePark 300; and a joint initiative of the Portuguese and Spanish national governments to develop an 'Iberian Nanotechnology Laboratory' in Braga which, when fully operational, will bring together around 300 researchers.

Although the outcome of R&D does not necessarily lead to patents and much innovation is not based on patents, they remain the most-used proxy for the effects of R&D, and are available for longitudinal analysis through the patent offices. Figure 27 plots the number of patents per million inhabitants of Norte and of Portugal, and, to allow comparisons, the value of Norte as a percentage of the national total is also plotted. It is evident that Norte was around the average for Portugal over the whole period (and Portugal is not a front-runner at the European level), and it followed the national patterns of growth and its oscillations. Portugal, and Norte, started to increase their number of patent applications in the late 1990s, and this process accelerated in the 2000s, until a major decline due to the start of the economic crisis. Norte tended to lag behind the national average a little in the 1994-1999 programme period, while it recorded greater numbers of applications in the 2000-2006 programme period, varying between 80% and 120% of the national mean. With the beginning of the crisis, Norte could not avoid being significantly affected by the national drop in patents, despite the strong investment by Cohesion policy, but it remained around the national mean.

Figure 27: Patents applications to the EPO per million inhabitants (Structural Funds expenditure on innovation on top)



Source: Own elaborations on Eurostat Data.

(v) Environmental Sustainability

Although it might be said that an 'environmental agenda' in ERDF priorities and strategies in Norte only really began in the 2000–2006 period, the two previous programming periods addressed various important environmental problems in the form of water supply, sewage and municipal solid waste (MSW) infrastructures. As a result, this theme saw total investments of €1,956 million of ERDF and CF funds from 1989 until 2012 (equivalent to approximately 15% of overall expenditure across the period). The proportion across the successive funding periods varied from 14% of expenditure in 1989-1993, to 19% in 1994-1999, to 16% in 2000-2006, and in the current funding period, expenditure on environmental sustainability is around 10% (2012 data).

Most of the funding under this theme was devoted to the basic infrastructures of water supply, sewage and MSW, as the Norte region in the 1980s was extremely deficient in this regard relative to the rest of the country. Despite large investments from the ERDF and CF projects in these areas during the first two programming periods, these were not sufficient to help the region reach the national average of provision. In 2004, still only 83.1 percent of the Norte population had access to piped water supply compared with 92.4 percent in the country as a whole. Regarding sewage treatment, the regional average was 51.6 percent compared with 61.7 percent in the country as a whole (Source: INE).

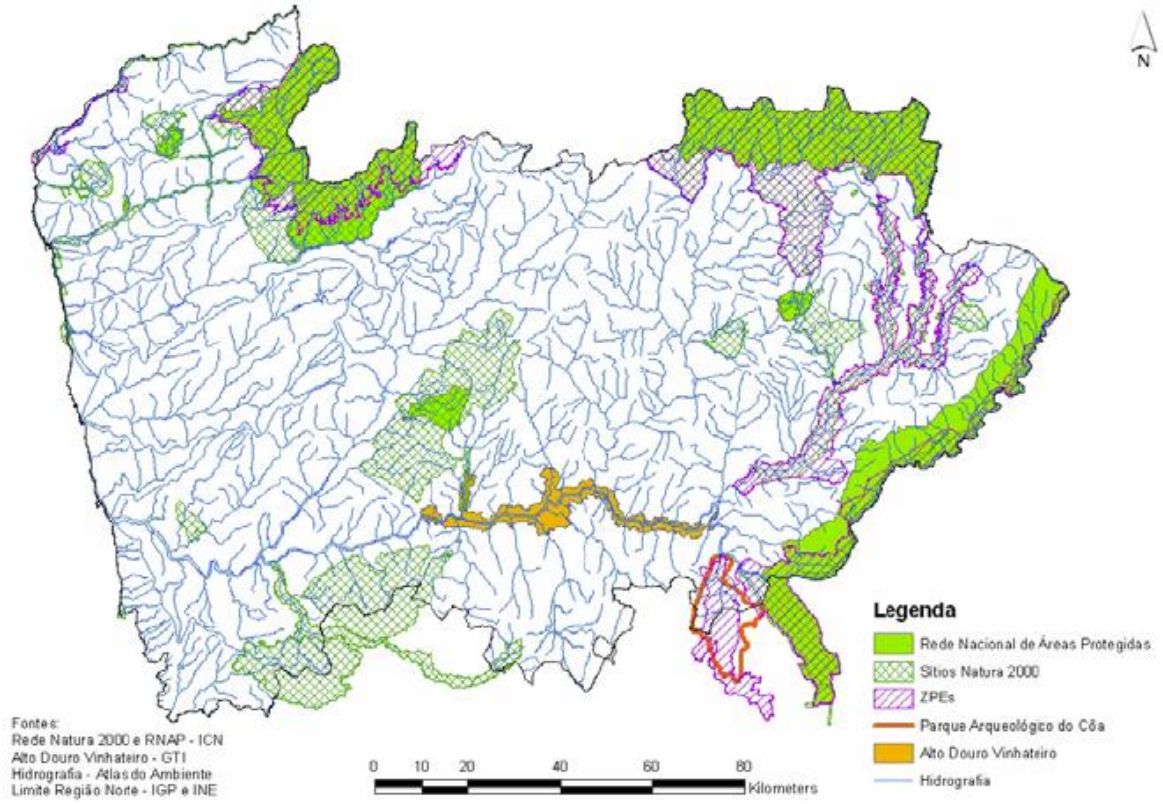
But by 2007, the entire region was fully covered by waste treatment networks, guaranteeing better protection for soil and water resources. Water treatment systems, embodying new technologies, benefited all the municipalities of Ave Valley and the city of Gaia. As such, the number of regional companies operating in the recycling and water sector more than doubled during this programme period. On the other hand, there were MSW sub-systems which were operating close to full capacity

(Ave Valley and Douro South), and the public network water supply coverage in some areas (e.g., Támega, Ave, Entre Douro e Vouga) was still below the national average.

The 2000-2006 ERDF NOP on the Environment (POA) was an important step. Its aim was to restore and enhance the natural heritage and urban environment and improve information sources, awareness and environmental management. The actions supported consisted of restoring, improving, monitoring and increasing environmental protection.

The NOP has particularly supported projects in the Peneda-Gerês National Park, the three other Natural Parks in the region (Alvão, Montesinho and Douro International) and areas included in the '*Rede Natura 2000*' (see Figure 28). These included installation of signs marking routes, the prohibition of hunting and fishing, projects to provide information and increase the public awareness of and participation in environmental protection, rehabilitation of infrastructures for visitors and the certification and dissemination of regional products. According to the Nature Conservation Institute (ICN, 2004), these investments have been focused on developing the regional eco-tourism potential. The yearly expected number of visitors, as a result of those interventions, is as follows: 2,872,000 in Peneda-Gerês, 322,130 in Alvão, 160,000 in Montesinho, and 600,000 in Douro International, although it is not clear what the baseline for these figures is. Whilst increased tourism may be desirable for the local population in these areas, the sensitivity of the parks, and particularly the Peneda-Gerês National Park, is such that large increases in tourism may undermine the conservation objectives and particularly the protection of wildlife.

Figure 28: Sites with special protection status



Source: NSRF Norte Environmental Programme.

The current programme period launched a set of initiatives for the improvement of natural resources, including the management of the *Natura* network and biodiversity preservation. The

protection of maritime resources was a new area of intervention, in line with the priority of assuring the maritime sustainable development of the region.

The scale of the problem and limitations of achievements in environmental conservation in the Norte can be seen through analysis of land-use data (Table 21). Land-use data are available, though only for three points in time, from the Corine Land Cover survey in the ESPON database: 1990, broadly corresponding to the beginning of the interventions covered in this study; 2000, broadly corresponding to the end of the first two periods of intervention; and 2006, broadly corresponding to the end of the third period of intervention.

Table 21: Environmental achievements in terms of land use

	% change 1990-2000			% change 2000-2006		
	European Union (27 countries)	Portugal	Norte	European Union (27 countries)	Portugal	Norte
Artificial surfaces	26.69	41.18	47.74	-5.76	29.39	24.90
Urban fabric	22.32	30.87	42.76	-5.55	29.93	18.96
Discontinuous urban fabric	22.96	32.36	45.01	-5.46	33.59	21.18
Dump sites	16.86	33.92	n.r.	-9.84	109.39	n.r.
Artificial, non-agricultural vegetated areas	77.33	66.02	88.63	-18.81	41.18	-11.81
Agro-forestry areas	1.38	-1.48	-0.51	3.26	11.05	-54.70
Forest and semi-natural areas	53.58	0.13	-1.74	-7.77	-0.52	-0.71
Forests	54.44	-1.46	-4.29	-4.20	-17.26	-18.24
Broad-leaved forest	9.96	6.18	9.81	-5.33	-17.53	-18.50
Natural grasslands	22.61	-4.85	-7.75	-29.11	-7.21	-2.83
Open spaces with little or no vegetation	34.32	-8.07	-2.33	-14.15	2.79	7.53
Beaches, dunes, sands	8.43	-0.46	-4.68	-21.98	-2.47	-2.02
Burnt areas	-13.67	-30.08	-12.95	-25.61	4.02	35.22
Wetlands	181.90	-0.14	1.85	-8.71	0.98	-0.23

Source: Authors' elaborations from ESPON database, Aggregation from Corine Land Cover. NUTS 0 and NUTS 2 data obtained by the authors as sum of relevant NUTS 3 data.

The Norte achievements in terms of land use in the decade of 1990-2000, are not very positive in terms of land consumption. In particular, artificial surfaces, urban fabric and discontinuous urban fabric increased more than in the rest of Portugal (between 42 percent and 47 percent), in a period in which Portugal (between +30 percent and +41 percent) was already less effective relative to the EU in avoiding the consumption of its land. In terms of artificial, non-agricultural vegetated areas, the performance of Norte was instead significantly better than the one of Portugal, and also better than the EU mean. In terms of forests, however, Norte was in line with the rest of the country, i.e.

able to protect them but not to incrementally increase them as happened in the rest of Europe. Natural grasslands and beaches also decreased slightly, and slightly more than for Portugal. Over 2000-2006, Norte continued to build and increase its land-take, even though its increase in artificial surfaces, urban fabric and discontinuous urban fabric was lower than the rest of the country. In this period, Norte also significantly reduced its forests and broad-leaved forest, slightly more than the rest of Portugal and significantly more than the EU average. Overall then the effect of the environmental sustainability investment had little positive effect on the nature of land use in the region.

(vi) Social Cohesion

Along with environmental issues, the social inclusion priority only became explicit in the 2000-2006 programing period. Although, since the very beginning, social cohesion was a major concern of Structural Funds interventions, in Portugal social cohesion was supposed to be addressed mainly through infrastructures. Since 2000 the Structural Funds (the European Social Fund and Community Initiatives, in particular) have adopted a new and more direct approach to social cohesion: in the form of programmes such as AGE or PROGRESS, designed to directly eradicate poverty in the EU by 2010. Consequently Member States, Portugal included, have been required to develop National Action Plans for Social Inclusion. As a result social cohesion has become somewhat more important in the strategy for regions such as Norte.

On the whole, social cohesion has not been a significant field of investment in the ERDF programmes in Norte with an estimated €226 million in the period from 1989 to 2012 (equivalent to approximately 2 percent of overall expenditure across the period). With such a small budget the ERDF investments were mainly part of an integrated approach, joining with funds from the ESF and other EU initiatives.

The Social Integration subprogramme of the 1994-1999 NOP Health and Social Integration aimed to: promote social development in disadvantaged communities; the reintegration of long-term unemployed in the labour market; the socioeconomic integration of persons with disabilities; and the economic and social integration of disadvantaged social groups. Most of the measures of this programme were ESF funded, but ERDF support was provided for the acquisition, construction or upgrading of infrastructures, the acquisition of equipment and the reimbursement of operating expenses. This programme supported the creation of diverse facilities in the Norte, such as 48 social centres, 27 centres for leisure activities for children, 24 home support services for elderly, 24 community centres, and 13 training and socio-professional reintegration centres. The 1994-1999 NOP Health and Social Integration promoted synergies and complementarities with other programmes at Community and national level, such as Horizon (Integration of disabled and disadvantaged people in the labour market) and NOW (Equal opportunities for women in employment).

The Health sub-programme of the 1994-1999 NOP Health and Social Integration, included ERDF support for the construction (Hospital de Matosinhos: 430 beds and 220,000 population covered), improvement (Hospital Conde de Bertiandos at Ponte de Lima, 210 beds) and equipment of health centres. This measure has been particularly important to the Norte region, which received 65% of total national expenditure of the programme. The Norte was the region with the largest shortcomings at primary care level, associated with the strong concentration of population,

particularly in the Porto Metropolitan Area. By improving the health centres network bringing health services closer to citizens, this programme contributed to improving the National Health System primary care efficiency (22 new health centres were built reaching a population of more than 930,000 people).

The 2000-2006 NOP for Employment, Training and Social Development included some measures on infrastructures and equipment that were ERDF supported. This programme aimed to equip employment and training policies with adequate conditions for the development of their actions through the creation, acquisition and/or development of infrastructures and equipment. From the 51 projects supported nationwide, 24 were in the Norte, benefiting a population of approximately 23,500 people.

The ERDF funding of the 2000-2006 NOP Employment, Training and Social Development, social infrastructures for children and the elderly, included in the measure of "Development of Equipment Network and Promotion of Social Development Services", contributed to the integration of working age women (usually responsible for family support) into the labour market, providing the conditions for both work activities and training.

The current programme has sought to provide effective answers to major social concerns in the region. The 'National Action Plan for Social Inclusion' - NOP (2008-2010) - launched a set of social initiatives, such as support for the handicapped, gender policies, and professional training. This includes a set of initiatives eligible to receive ERDF funds, such as the 'Local Cohesion Facilities', launched in 2010, for the construction of 26 facilities for young children. This network will be able to receive more than 1,100 children from all across the Norte region.

(vii) Geographical Issues

The main geographical problem - the divide between inland and littoral - is clearly far from resolved, despite ERDF investment. In fact, most ERDF programmes in the Norte aimed to support the already more-developed coastal areas in order to face the impact of European accession, hoping that in the long term the less-developed inland areas would be pulled along. What has clearly improved as a result of the ERDF is the accessibility of the interior regions to the main cities of the region, to the rest of the country and to Spain. Around €1,163 million of ERDF funds from 1989 till 2012 (equivalent to approximately 9 percent of overall expenditure across the period) was devoted to territorial development, but mainly in the form of urban regeneration projects rather than rural development.

Urban rehabilitation was a major area of intervention of ERDF co-financed projects. The main goal was the development of the tourism assets of the region and the creation of employment. As an example, 'Porto Vivo' was established in 2004 in order to carry out the rehabilitation of Porto's Historic Centre, a UNESCO World Heritage area[45]. Suburbanisation processes are leading to on-going

[45] Porto Vivo is a partner in JESSICA for Cities Working Group (J4C), which has been promoted by the EIB JESSICA Task Force in order to develop a greater understanding of the JESSICA initiative by providing a 'JESSICA Toolbox for Cities'. Based on WG partners' experiences, it should enable European cities to use the opportunities offered by this tool more effectively. Partners of the J4C WG are: the Regional Government of Tuscany, Managing Authority ERDF 2007 – 2013 (Florence, IT) as Lead Partner, AGMA Association Grater Manchester Authority (UK), Porto Vivo, RU–Sociedade de Reabilitação Urbana, S.A. (PT), Brasov Metropolitan Association (RO), Municipality of Athens, Development Agency (GR) and Poznan City Hall (PL).

movement of residents out of the historical inner city, and most of the old buildings in the centre of Porto were in a precarious condition. Porto Vivo improved the building conditions in the World Heritage area (7,000 inhabitants and 1,796 buildings) and in two larger surrounding circular areas (total of 124,660 inhabitants, 28,620 buildings). The project was ERDF co-financed and owners were stimulated to cooperate.

The city of Porto, built along the hillsides overlooking the mouth of the Douro River, is an urban landscape with a 2,000-year history. Its continuous growth, linked to the sea (the Romans gave it the name Portus, or port), can be seen in the many monuments, from the cathedral with its Romanesque choir, to the neoclassic Stock Exchange or the Renaissance Church of Santa Clara. The historical centre ("Morro da Sé") is a sensitive area, on the one hand, the focus of many social problems (aging population, poverty and deprivation, drug trafficking and drugs, unemployment), trade and economic decline, but on the other hand, a UNESCO World Heritage classified site, grouping together a city of great architectural value and a historic tourist centre.

Porto Vivo's main objectives are the revitalisation of Morro da Sé's neighbourhood; the physical rehabilitation of the buildings; the functional conversion of this area; the attraction of new residents, in particular young people; the deployment of new economic activities and tourism services; and the improvement of the image of the area and more generally of the historic site. In order to achieve these objectives, the main management tools were the Master plan on Urban and Social Rehabilitation of Porto City Centre (2005) and the Management Plan of the Historic Centre of Porto World Heritage (2008). The archaeological reports on the buildings and the works in public space have been finalised. A residence for elderly people is finished and the relocation programme is about to start. So far a number of private interventions are ready, several under way, or have architectural projects waiting to be implemented.

Quarterly impact reports for the Carlos Alberto and Cardosas quarters calculate the multiplier effect as being close to 6 (1 euro of public investment attracted 6 euros of private investment). The urban rehabilitation in the Carlos Alberto quarter amounted to 5 million euros, which has increased the building value by 281%. The Carlos Alberto quarter physical and functional recovery has housed 135 companies and 3,000 workers and attracted new residents (+132%). In the Cardosas quarter, the main strategy was to guarantee the dominance of residential functions, which meant the demolition of old buildings and the construction of a square inside the quarter, a 5 star hotel and underground parking. A Welcome Centre is also under conclusion (tourism office, shopping centre, regional products).

Another good example of ERDF co-financed projects was Guimarães, a medium-sized city, considered the historical cradle of the Portuguese nation. The city is also classified as a UNESCO world heritage site, but some parts of the town still continued to suffer from severe deterioration of buildings. Its traditional economic base has made the city particularly vulnerable to industrial decline, and unemployment has soared well above the regional and national averages. In order to respond to the need for a new development model, the municipal government launched a comprehensive strategy creating various cultural and economic assets, ranging from arts and cultural facilities to sites for science and technology. Former industrial facilities in abandoned areas were transformed into cultural amenities. For example, a 10 ha area traditionally devoted to leather treatment and tanning, progressively abandoned to degradation and pollution, was refurbished into a 'leather multipurpose complex', including high-quality tourism hotels,

educational facilities and a cultural centre. The University of Minho worked in close collaboration with the municipal authority to develop a 'science and technology city' strategy. Several innovation centres are now operating in an effort to draw specifically on the city's historical assets (e.g. the Civil Engineering Centre specialises in the restoration of historic monuments and traditional building techniques) and from its previous economic base. For example, the Living Lab specialised in e-mobile health. One of the results of this new dynamic in Guimarães was its choice as host of the '2012 European Cultural Capital'. The programme for the Cultural Capital drew heavily on cultural assets created with support from ERDF over the previous decade, and the cultural programme itself was supported by €18 million from the Norte OP towards a total operating budget for the event of €41 million. As for the impact on tourism activity, there is no data yet, although prior to the event it had been anticipated that visitors to the city would increase to 2.5 million for the year from 500,000 per annum previously. Interviewees reported that these interventions have significantly increased levels of tourism.

During the present programme period there are two major urban rehabilitation projects in the Norte region.

- The **'Urban Quadrilateral for Competitiveness, Innovation and Internationalisation'** project – which includes the cities of Braga, Barcelos, Guimarães and Vila Nova de Famalicão, in addition to Minho University, Minho industrial Association and the Textiles and Clothing Apparel Technology Centre – is a unique network in the country and can be considered the third most important R&D concentration in Portugal. The sub-region where the four poles are located has a significant concentration of population (half-a-million inhabitants in the cities and one million in the surrounding region).The main objectives included the implementation of an optical fibre infrastructure and of an integrated sub-regional transport/mobility system, and as a future goal the creation of a more integrated metropolitan area.
- The **'Douro Alliance Network'** is an urban axis that brings together the cities of Lamego, Régua and Vila Real in a partnership with the University of Trás-os-Montes e Alto Douro, and the Peso da Régua and Vila Real Industrial and Commercial Associations and the Lamego and Vila Real Entrepreneurial Associations. These belong to the same natural and economic unit, the Upper Douro Winegrowing Region, strongly interconnected through institutional, social, economic and cultural ties which have increased over the last few years. The main ambition of this Urban Network is to develop a strategic cooperation between the different urban stakeholders, which enables the transformation of the Urban Axis into the City of Douro, a multifaceted and tri-nucleated city that brings to the fore the brand image and the existing economic potential, capable of promoting the best of each of the three municipalities in a more attractive, efficient and effective way. This project aims to strengthen business cooperation capabilities through the establishment of an intercity cooperation network for the creation of promotional means and support between SMEs in the Network and national and European institutions.

These projects are still on going and represent a new approach to stimulate greater integration between municipalities.

Overall, actions to promote territorial cohesion have focused on the regeneration of Porto and the integration of the smaller cities near the coast rather than the rural hinterland.

5.1.3 Institutional factors affecting achievements

The achievements of the ERDF programmes from 1989 to the present were stimulated and constrained by different institutional factors.

One of the first measures after Portugal's entry into the Structural Fund programming was the creation in 1983 of the Directorate-General for Regional Development (DGDR), a Central Administration body. DGDR developed a governance framework centred on the relationship between regional development authorities (the Regional Coordination and Development Commissions - CCDRs) and sectoral ministries. With time, the regional institutional framework changed considerably due to the emergence of other institutions with strategic regional knowledge (business associations) and to the steady upgrading of local administration. These changes mostly affected the capacity for consensus building, making it more demanding and lacking in resources. There has been little tradition of cooperation between municipalities in the past and so consensus has been hard to achieve.

Another factor of internal organisation instability was introduced by the way the components of territorial and environmental planning were adopted, through a series of organic laws that regulated CCDR activity. In these, CCDR action does not consist merely of exercising the functions of strategic coordination and consensus building; it also involves the representation of central authority in the region. The CCDR adopted an active role in this domain, in relation to the lengthy bureaucratic processes of licencing and inspection, a function that has been found to be a major consumer of internal resources.

The relations that CCDR maintain with municipalities create a permanent tension between two positions in the region: that of a strategic consensus building and that of a decentralised institution intervening on behalf of central government through a complex maze of municipal bureaucratic procedures. This permanent tension undermines the development of a more ambitious role in the strategic coordination of the Structural Funds.

This situation has been aggravated by the active participation of the CCDRs in the management of the ROPs since the 1994-1999 period. In the new context the CCDR through the ROP is responsible for managing more than half of the Structural Fund expenditure in the region, and plays a leading role in territorial policies, besides the previously-mentioned functions of tutelage over planning and the environment. The situation became much worse in the 2000-2006 programming period: the "Regionally Decentralised Management Model" (MGRD), by which a very strong sectoral investment was introduced into the ROPs without the sectoral ministries being bound to a regional coordination approach, governed by the CCDR, makes the management of the ROPs a very delicate process.

With respect to the coordination of municipal investments, the ROPs management model also has some vicissitudes that undermine the binding nature of the CCDR action. In fact, municipal investments were initially controlled under a management unit, with a majority participation of the municipalities, which was empowered to approve projects. In this context the management of the ROPs had no formal binding power on municipal action, given the powers of the management units and their presence in most municipalities.

It may therefore be concluded that the role of strategic centre for streamlining the allocation of resources and for strategically coordinating territorial policies has faced extremely adverse context costs.

Meanwhile, the role of the CCDR as an important player is emerging in the context of a new legislative framework. The new legislation established the CCDR as peripheral service of the Ministry of Environment, Territorial Planning and Regional Development, with decentralised administrative functions and enjoying administrative and financial autonomy. The operational range of the CCDR is established so that it can intervene in the areas of the environment, territorial and town planning and regional development, in the coordination of decentralised services of regional scope, while retaining the power to provide technical assistance to local authorities and their associations.

In addition, the further potential that could be gained from boosting the operating conditions of the Regional Councils cannot be ignored. The Regional Council is the consultative body of the CCDRs which should represent the various public interests related to its coordination functions.

It should be noted that the competencies of the regional council include: i) Pronounce on projects of national importance to be implemented in the region; ii) Opinions/reports on the coordination of regional operating resources and investment priorities; iii) Opinions/reports on regional development plans and programmes; iv) Pronounce on sectorial plans with a territorial impact on the region and on regional territorial planning schemes; v) Pronounce on decentralisation and administrative measures that have impact on the model and on the regional and local territorial organisation of public policies.

Besides the opportunities inherent to the powers of the two bodies, it is useful to note that there is real potential for public policy territorialisation to both influence their practical operation and inspire an inter-institutional desire to establish territorialisation as a focal point of their operations. When one looks at the composition and extent of their (albeit consultative) competencies, what is striking is that the model defined for their membership is too formal to follow up the progressive reach of some of their competencies.

The removal of the inter-municipal association approach to the composition of the regional council (abandoned in favour of representing the agendas of regional development), the adoption of a formal approach to the participation of civil society, the absence of any business-related institutions and the non-voting participation of decentralised services amount to options that are inconsistent with the wealth of functions that their competencies stimulate. It is therefore felt that, in the context of their current legislative framework, and with changes in terms of composition, the action of the CCDRs in relation to strategic concertation and coordination could be considerably improved by using the activation of the space of the regional councils and councils for cross-sectorial coordination and including the issue of public policy territorialisation in their practices.

Currently, the consultative bodies of the CCDRs referenced earlier and the different municipal association experiments, together with the outsourcing of public policies and investments, represent the only spaces available in the present governance model to validate the benchmarks at the basis of these policies. But the appearance of new strategic streamlining centres at regional

level is a necessary condition for the gradual but sustained improvement of the quality of regional development projects, which is measured largely by their strategic content and the contribution they might make to the emergence an innovation-driven growth model. This question crucially involves the upgrading of the investments and the principle of selectivity.

5.2 Complementarities and synergies

5.2.1 Complementarity between ERDF-funded programmes

In general terms, during the whole period of Cohesion policy intervention in Portugal, there was never a high degree of complementarity among funds. The main reason for this is that programmes were designed by the central administration, and the implementation was undertaken by the different ministries. As such, programmes were not thought through to make the different programmes or funds work together.

That being said, there are examples in the Norte region of complementarities between ERDF and Cohesion Fund resources to fund shares of a single major investment. For instance, some roads that had been initiated with finance from the CF were then continued with funding from the ERDF and then again funded by the CF. However, it cannot be said that this type of practice is 'fund complementarity', but rather 'fund aggregation'. This means, for instance, that a large project may be financed by ERDF in one CSF, by CF in the second CSF and ERDF in the third.

Furthermore, the 2000-2006 ERDF NOP Environment (POA) showed an interesting complementarity with both the Cohesion Fund and the ROP. A series of investments in the urban water cycle - relating to the processes of water assembling, treatment and transport - resulted from an original agreement between municipalities and the "Water National Institute", where the former are simultaneously stakeholders and clients of the latter.

By contrast, there has been an almost total absence of complementarity between ERDF and EAGGF/ EAFRD, EFF and ESF. An exception was the "Ave Valley Region Integrated Programme" (PROAVE) – approved in 1989 to function between 1990 and 1993 – that included 4 sub-programmes, three financed by the ERDF and one by the ESF.

Another exception was the already mentioned NOP for the Economic Enhancement of Endogenous Resources (PROVERE), which is an interesting example of funds complementarity, since each approved initiative can be supported by a different fund. In principle, there could be bottom-up proposals for structural interventions in eligibility domains regarding the EAFRD or in fisheries. PROVERE does not have a financial endowment of its own: each project must comply with the eligibility rules set forth by different SF programmes. However, once a group of projects is recognised as a 'PROVERE Collective Efficiency Strategy' (as the result of a tender), the so-called 'anchor projects' benefit from a financial reserve in the relevant OP and the 'complementary projects' benefit from a higher subsidy rate ceiling according to the bonus laid down in the general NSRF. The 'Romanesque Route' (see annex) is an example of a 'PROVERE Collective Efficiency Strategy'.[46]

[46] The other 'PROVERE Collective Efficiency Strategies' in the Norte region are: Terra Fria Transmontana; Aquanatur; Complexo Termal do Alto Tâmega; Innovarural; Minho In; Alto Douro Vinhateiro; Paisagens

In terms of synergies[47] between funds, the situation is somewhat different, as it is possible to identify several cases of this in action. There are examples in the different programme periods of ERDF/ESF, ERDF/EAGGF and ERDF/EFF synergies.

ERDF/ESF synergies were especially numerous in CSFs I and II, particularly in the professional training of workers in strategic sectors. For example, IKEA localised in the Norte region with ERDF support benefiting from the long tradition of carpentry in the region and to the ESF training schemes which were running.

The same happened between ERDF and EAGGF, namely in the enhancement of rural institutions. A few outputs with regional impact were the support for wine cooperatives, namely Porto Wine and Vinho Verde or to the Peneda-Gerês National Park Development Association projects.

5.2.2 Complementarity with domestic regional policy

There is no tradition or experimentation in regional policy in Portugal that is separate from Structural Funds programming. The lack of a robust set of regional development policies prior to EU membership can be explained by the unique nature of the institutionalisation of regional planning in Portugal. Historically, the CCRs represent a complement to a planning framework whose territorial development culture is limited and dominated by approaches of adapting sectoral policies of public investment. The strong link between the change in SF programming cycles and regional development policies in Portugal explains why the 1980s, especially until 1988 when Structural Funds reform took place, were not a generous decade in terms of significant achievements in regional development policies.

Until the start of the SF programming cycles, the Portuguese system placed special emphasis on objectives to overcome the effects of market segmentation and remove barriers to the free circulation of factors. The influence of new paradigms in the regional economy is late and out of step with the research and literature on the subject, changing only with the exogenous effect of European integration and Community regional policy.

The change in regional development policy closely followed the succession of SF programming cycles. Although the influence of the Regional Development Plans (PDRs) should not be overstated, the truth is that the requirement to create, during each programming period, a systematic document like the PDR in which the territorialisation of problems is absolutely necessary, has tended to make a decisive change. The establishment of the Directorate-General for Regional Development (DGDR) has introduced a level of coordination into the planning framework that matches, at central level, the role played by the CCRs at regional level.

The first version of the PDR, which corresponds to the 1986-1990 period, follows the generic nature of the first generation of plans. The weakness of the regional statistical base provides good evidence of the difficulties in creating a regional approach to planning and the predominance of the sectorial perspective.

Milenares do Douro Verde; and the 'Montemuro, Arada and Gralheira Integrated Rural Development Association'.

[47] 'Synergies' means that as a result of a project financed by one SF, another project emerges, financed by another SF. 'Complementarities' refers to a project that is co-financed by two or more SF.

During preparations to join the ERDF, a combination of institutional changes to new incentive schemes took place. In addition to the creation of the Directorate-General for Regional Development in 1983, the first PDR (1986-1990) was drawn up following the creation of a "basic document on regional development policy and the means and instruments for its implementation".

The 1989-1993 period clearly shows a stronger influence of the Community framework in the development of regional policy in Portugal, most notably through the following elements: (i) Concerted preparation of the National Development Plan Options, the Regional Development Plan (PDR) and Operational Programmes (OP); (ii) Complete coverage of national territory by the PDR, a circumstance that transforms the PDR into a global development policy more than a regional policy reference; (iii) Concerted presentation of the PDR with a Community initiative proposal for national territory (cross-border regions, outermost regions and the construction of a natural gas network); (iv) The start of the creation of units specifically dedicated to SF management based on a principle of decentralised management.

However, what leaves an indelible mark on this programming period is the transformation of the PDR into a fundamental document for national development strategy and policy. This choice is a corollary of the controversial decision made at that time to consider the mainland territory as a "single region".

Also the "Ave Valley Integrated Development Operation" - responding to the beginning of industrial decline experienced by this textile area – was a first attempt to combine financial support from different sources, both national (special incentives system to the Ave Valley; tax exemptions; social security special status) and European (NOP PEDIP, RETEX, PERIFRA – a common initiative of the European Commission and European Parliament to compensate regions for special negative effects).

The 1994-1999 and 2000-2006 programming periods brought a new momentum to regional development policies in Portugal, although Community guidelines continued to have a significant effect. Especially within the context of the 1994-1999 period, the influence of the Single European Act and the Delors Package II was decisive, introducing some innovations in territorial policy: the implementation of the Cohesion Fund increased the funding for infrastructure allocation; the ERDF openness to the areas of education and health; civil society slowly began to participate in the creation of a benchmark for planning; the integrated operation model for development disappeared, and was followed by the creation of a typology of operational executor type-based programme, national-sectoral and regional in scope, with a resulting limitation on the public-public and public-private partnership model; the European Social Fund increased its presence in sectoral programmes; and the share of public investment co-funded by SF increased considerably.

The changes brought about by the second CSF were contradictory. If, on the one hand, the impact of the SF became widespread, they tended to enhance the structural aspects of programming; which would turn out to be detrimental in terms of their contribution to structural change in the Portuguese economy. The expanded infrastructural aspect of programming, even when weighted by the increase in intangible action from the ESF, can undoubtedly be associated with this programming period.

The less consistent nature of these justifications offered by the 1994-1999 Community framework with the approval of the European Commission (which ultimately adopted the document as its own)

is a good example of the difficulties of a consolidation of a regional development perspective. Indeed, it is hard to locate credible empirical research that demonstrates how *"the overall development of the country, and especially its more prosperous regions, has a very important leveraging effect on the less developed regions"*.

Some important changes took place in the configuration of the ROPs during 1994-1999. These changes consist of establishing support for inter- or supra-municipal infrastructure projects, structural projects with a significant regional scope and greater impact on the development of each region or sub-region. There was also the introduction of a component of actions into the structure of ROP measures during 1994-1999 known as "intangible measures": design, marketing, enhancement of assets and cultural resources.

Many of these actions occurred in territories that went beyond the scope of municipal action, often carrying the status of projects related to NUTS III regions or municipal associations. This component also allowed the types of stakeholders to be diversified considerably.

This new component of the ROPs appears in 1994-1999, linked to the NOP Promote Regional Development Potential (PPDR). The primary goal of this programme is to participate in the revitalisation of the rural and inland communities of the country by promoting new conditions for competitiveness. As part of this programme, a plan is drawn up, for the first time in Portugal, to create the Regional Development Agencies (ADRs), largely through the influence of Community authorities from the DG XVI.

The PPDR is important because, for the first time, it systematically introduces a framework of policy instruments for local economic development, combining actions based on increasing the value of assets, incentives for investment projects and the creation of rural support centres, disseminating a new supply of services in rural areas. The PPDR also has the unique feature of emerging as a possible interface between the ROPs and the SOPs, in so far as it was managed nationally but its operation was strongly territorialised.

The creation of the ADRs deserves some critical reflection. Firstly, the significant influence that the Community authorities had in this process should be recognised, associating their creation with the actual design and approval of the PPDR itself, in other words, viewing the ADRs as a decisive instrument to implement this programme and its different actions. Secondly, this was essentially a bottom-up process that challenged local and regional civil societies to form interest consortia. Thirdly, although the CCRs have been involved, the process occurred without clarification of the future relationship between the CCRs and the ADRs. The CCR logically assumed that it would take on a future leading role as a regional agency, as it had not been possible to assess the possibility of agencies coexisting with different scales of spatial intervention. One element of concern arose from the difficulty in agreeing upon the achievement of a minimum scale of intervention for each ADR.

6. ASSESSMENT OF ACHIEVEMENTS AGAINST OBJECTIVES AND NEEDS (EFFECTIVENESS AND UTILITY)

6.1 Overall achievements of ERDF programmes measured against programme objectives (effectiveness)

Programme effectiveness is the extent to which the objectives of those programmes were achieved through the projects funded. As such, the objectives can be split into two levels: overarching high-level achievements (overall regional development), usually set in terms of aggregate regional indicators such as narrowing gaps with the rest of the country in terms of per capita GDP or employment; and specific objectives/targets of individual measures, and indicators relating to the outputs, rather than the changes resulting from the interventions. As a consequence, in assessing effectiveness, it is necessary to reconstruct the logic of how measures contributed to the overall objectives and how the achievement of projects and measures fit the regional performance indicators used to define the high-level objectives.

Throughout the period 1989-2013, ERDF programmes in the Norte region had as a constant and permanent implicit objective to converge with European norms. However this main goal was not achieved, as relative to the EU 15 Norte maintained a position at around 60% of the average GDP per capita (PPP). The performance relative to the national average on GVA and productivity continued to lag, and the region struggled to match national growth rates.

During the first programme period, the region kept a GDP per capita growth rate in line with the national average. The unemployment rate - which in 1989 was considerably below the national average – was now approaching that level in 1993. In CSF II, regional GDP per capita followed a similar behaviour to that in the previous programming period. The weight of manufacturing in the total GVA decreased at a similar pace to that in the country as a whole. Regional unemployment was changeable, ending the programming period virtually equal to the national rate. CSF III saw a major rise in regional unemployment which, in 2006, had largely surpassed the national average. Regional GDP per capita rose below the national average while the decrease of manufacturing in the GVA followed the country average. The NSRF first year's most striking development was the rise of unemployment to well above the national average.

Even taking into account the very small number of socioeconomic variables considered above, one can argue that ERDF programme effectiveness appears to have been very poor, in terms of such strategic goals as economic growth and the unemployment rate. Particular reference should be made to unemployment, which has risen during the whole period, particularly after 2000.

A DPP analysis on the economic convergence of Portuguese Regions (1995-2006) – both at NUTS II and III levels - corroborates in global terms the above conclusions : "inequalities assumed new configurations in the last two decades, with a differentiation between the exporting Norte, in crisis, and Lisbon region and other southern sub-regions, be it in terms of dimension indicators (population, employment and GVA regional shares) be it in terms of quality indicators (GVA per capita and labour appearing productivity)". Transport infrastructures (external and internal accessibility) were the most important areas of investment in response to the perceived peripheral location of the region, its long history of poor transport connections to Spain, export profile and difficult geography. This last point meant that many local roads were ERDF supported without

sufficient coordination, as a result of lobbying by local interests. Overall though transport improved and met its narrow output objectives. Projects were completed, and good new infrastructure made travel within the region and externally much easier. In some cases the targets were exceeded, although in part this was due to conservative target-setting, and overstating the length of roads improved. Overall though, despite the effective delivery of the transport objectives, it was insufficient on its own to deliver the growth needed.

Investment in environmental sustainability (water supply, sanitation, MSW) improved quality of life, and ensured that European norms were met; but due to the large and dispersed population it took the three first programme periods to endow the whole region with the necessary facilities. Health and education infrastructures were also privileged.

Central to the growth objectives of the region was the investment in strengthening the competitiveness of the productive system. Firm upgrading and diversification were encouraged during the 1989-1993 and 1994-1999 programme periods through several business support initiatives through for example the Specific Programme for the Development of Portuguese Industry (PEDIP) I and II. Agriculture also benefited from a specific programme (PEDAP) that has focused on productivity although with a corresponding 15% reduction in the active population involved in agriculture in just 5 years. Structural adjustment went hand-in-hand with enterprise capital formation support particularly in the textile and apparel sector, which also benefited from a specific programme ("Textile-Portugal"), intended to compensate for the entry of Asian textiles into the European market. Despite considerable investment and some partial successes in footwear and furniture, the region performed poorly in manufacturing.

Table 22 shows the main objectives, outputs and achievements of the ERDF programmes from 1989 up to 2013.

Table 22: Outputs and achievements according to aggregate objectives

	Aggregate objectives / targets	Output	Achievements
1989-1993	Convergence to the EU 15		In 1986, GDP per capita was 49% of EU12 average and in 1995 was 60% of EU 15.
	Accessibility Development	International connections (A3 – Porto-Spain	Reduction of travel time (-50%) between Porto and Valença (Spain)
		National connections (A1 -Porto-Lisbon motorway).	Reduction of travel time (-44%) between Porto and Lisbon
		Regional connections (A4 motorway – Porto-Amarante)	Reduction of travel time (-60%) between Porto and Amarante
	Enterprise Support	PEDIP I System of Incentives	Around 1,000 investments
		Regional-Based System of Incentives I	Around 500 investments
		Productive Activity Incentives System	Around 80 investments
		Tourism Financial Incentives System I	Around 30 investments

	Aggregate objectives / targets	Output	Achievements
	Environment Sustainability	Basic infrastructures of water supply, sewage and MSW	1994 - population served by: water supply (70%); sewage treatment (44%).
1994-1999	Convergence to the EU 15		Both in 1995 and 2000 GDP per capita was 60% of EU15 average
	Accessibility	Porto metro system Porto Internal Ring Road Northern Railway Line modernisation	55 million passengers/year (2010) Reduction of travel time (-30%) between Porto and Lisbon by train 1,756 km of municipal roads constructed/improved -10% in the no. accidents between 1998 and 2000 -19% in the no. deaths in accidents between 1998 and 2000 -11% in the no. injuries in accidents between 1998 and 2000
	Environment Sustainability	Basic infrastructures of water supply, sewage and MSW	1999 - population served by: water supply (77%); sewage treatment (51%).
	Enterprise Support	PEDAP Systems of Incentives PEDIP II System of Incentives Regional-Based System of Incentives II Tourism Financial Incentives II	Active population in agriculture decreased from 25% to 10.6% (1986-1991) Around 1,000 investments Around 5,000 investments Around 90 investments GFCP[48] year growth rate of +6.6%
2000-2006	Convergence to the EU 15		In 2000, GDP per capita was 60% of EU15 average and in 2006 was 58.2

[48] Gross Fixed Capital Formation.

	Aggregate objectives / targets	Output	Achievements
	Accessibility	Douro railway line (Porto - eastern Spanish border) A7, A11 and A 24 motorways Leixões maritime port Oporto international airport	18% reduction in the no. accidents between 2000 and 2006 42% reduction in the no. deaths in accidents between 2000 and 2006 16% reduction in the no. injuries in accidents between 2000 and 2006 Leixões port became one of the most productive ports in the world in terms of its dimension (average number of containers/ hour grew from 6.9 to 9.3 – 1995-2005) Double no. passengers/year = 6 million (2012)
	Enterprise Support	NOP Economic Modernisation Incentives (PRIME)	About 5,730 projects that generated 21,000 new jobs and 200 new enterprises (95% SMEs) GFCP[49] growth of 16.3% (2000-2006)
	Environment	Basic infrastructures of water supply, sewage and MSW Peneda-Gerês National Park Alvão, Montesinho and Douro International Natura Parks *Natura* network and biodiversity preservation management	In 2004, sewage treatment = 51.6% of the population. In 2007 = 100% In 2004, water supply = 83.1% of the population. In 2007 = 100% 2,872,000 visitors/year 322,130, 160,000 and 600,000 visitors/year, respectively
2007-2013	Convergence to the EU 15		In 2007, GDP per capita was 59% of EU15 average and in 2011 was 60%
	Accessibility		Reduction in travel time from 210 minutes in 2000 to 163 minutes in 2009 (-22%) in the railway Porto-Lisbon. -8% in the no. deaths in accidents between 2007 and 2009 -15% in the no. injuries in accidents between 2007 and 2009
	Enterprise support		2nd place in World Top Footwear Exporters - Average Prices

[49] Gross Fixed Capital Formation.

Across most of the programmes the objectives measured in terms of outputs were achieved, if not in many cases surpassed. However, the objectives had been typically framed in terms of physical achievements such as construction projects, and as such were easily controllable. Road construction was the dominant element, but the same consequences were visible in areas as diverse as water infrastcuture, school facilities, hospitals and healthcare centres and urban regeneration sites. By setting targets against objectives in the form of construction projects, effectiveness could be seen to be high. It may be argued that effectiveness was too easily achieved as many targets were exceeded, perhaps because targets were not sufficiently challenging.

Effectiveness was more dififcult to achieve and assess in terms of interventions to assist business competitiveness. Here the outputs were more difficult to discern and whilst information was available on the numbers of firms assisted, it was hard to identify the extent to which objectives to enhance competitiveness were achieved. Aggregate data on the regional economy suggested that effectiveness was low, with at least in the 190s much funding being devoted to existing sectors which continued to decline. Without a clearer set of objectives though the scale of effectiveness is difficult to judge.

An overview of the objectives compared with achievements is provided in Table 23 below. It illustrates the extent to which, in each thematic axis, achievements have been above or below what was expected, given the level of effort and investment. Overall, there are few thematic axes across the programmes where achievements have exceeded expectations.

Table 23: Achievements compared with imputed objectives for eight thematic axes

	1989-93		1994-99		2000-06		2007-13	
Thematic axis	**Imputed objectives**	**Achieve-ments**	**Imputed objectives**	**Achieve-ments**	**Imputed objectives**	**Achieve-ments**	**Imputed objectives**	**Achieve-ments**
Enterprise	+	3	+	3	+	3	+	3
Structural adjustment	+	3	+	3	+	4	++	4
Innovation	-	3	+	3	+	3	++	4
Environmental sustainability	+	3	+	4	+	3	=	3
Labour market	--	3	-	3	=	3	+	3
Social cohesions	-	2	=	3	+	3	=	3
Spatial cohesion	+	3	+	3	+	3	+	3
Infrastructure	+	5	+	5	+	5	=	4

Imputed Objectives
++ Very high effort - this axis is a central aspect of the regional development strategy
+ High effort - this axis is an important element in the regional development strategy
= Average effort - this axis is included in the regional development strategy but is not particularly important
- Low effort - this axis is only marginally considered in the regional development strategy
-- No effort at all on this axis

Achievements scale (end of period with respect to beginning of period)
5 Very high achievement - the results for this axis are greatly above expectations given the effort put in and ex-ante conditions
4 High achievement - the results for this axis are above expectations given the effort put in and ex-ante conditions
3 Average achievement - the results for this axis are those which could be expected given the effort put in and ex-ante conditions
2 Negative achievement - the results for this axis are below expectations given the effort put in and ex-ante conditions
1 Very negative achievement - the results for this axis are considerably below expectations or even nil

6.2 Overall contribution of ERDF programmes to regional development (utility)

Utility in this report is used as a notion that refers to the extent to which programmes led to impacts that are in line with the needs of society or socio-economic problems. Utility may differ from goals stated explicitly in the programmes or may not even have been explicitly stated in the operational documents. The analysis of utility requires a reassessment of the needs that the programmes should have addressed. It is a crucial concept that facilitates the long time-span of the present evaluation. Political circumstances and priorities have changed during the period under study, so it is relevant to discuss what was done from a fixed perspective, i.e. what is considered relevant today. This requires a reconstruction of the intervention logic of the programmes and their reframing based on currently available knowledge.

The initial needs of the region were very broad as identified in chapter 2 with the region having the characteristics of both an underdeveloped region, with poor quality infrastructure, poorly developed public services, and weak development of urban and rural communities, as well as all the problems of a traditional manufacturing region with declining low value added sectors. These needs changed over the life of the programmes as the investment in infrastructure rectified many of the initial weaknesses from underdevelopment, even as the problems of de-industrialisation became exacerbated.

Whilst Norte had a very broad range of needs, it can be argued that the main weakness which has not been successfully overcome has been the poor competitiveness of the regional economy. Although a major share of ERDF investment was focused on enterprise and structural change, the region still diverged from the Portuguese national performance. By failing to reach the economic development objectives of the programmes in terms of effectiveness, the programmes also fall short in terms of utility.

The strategy to enhance competitiveness was always a twin-track approach with investment in infrastructure, especially transport, as a pre-condition for export-based growth and varying strategies of direct support for industry. Initially the expectation was that there were growing export opportunities in Europe, simply needing better logistics and industrial modernisation to be achieved, but these opportunities did not materialise as a result of competition from Eastern Europe and Asia. Attention then shifted to underpinning the competitiveness of the ailing textile and clothing sectors, but employment continued to decline. Finally, the strategy shifted to diversification.

Overall these actions have probably helped to maintain a higher level of employment in some of the traditional sectors than would have been expected otherwise, especially in footwear, so there has been some benefit from the focus on traditional industries. An earlier focus on diversification and a greater weight for innovation support might have achieved slightly better outcomes, but the dependence on the traditional sectors was so strong that a policy of abandoning them was never a realistic option. The balance between old and new industries was the key decision and was over-influenced by vested interests and optimism, but also reflecting the weak structures for decision-making in the region. The likelihood was that Norte would always underperform the rest of Portugal as the lock-in to the traditional industries would not enable a shift to growth sectors without considerable transition costs.

The focus on transport infrastructures as a symbol of modernity and a basic pre-condition for regional competitiveness was also seen as a means to promote territorial and social cohesion, to ensure a better access to economic activities and generally increasing the attractiveness of the territory. Priorities concerning accessibility changed during the period. In the first two programme periods, a special focus was given to regional and national connections (ERDF), despite the investments to improve external connectivity and to promote the integration of Portugal in TEN-T (CF). The 2000-2006 strategy saw a relative shift to the external connections.

As the International Bank for Reconstruction and Development (The World Bank) states, “efficient transport is a critical component of economic development, globally and nationally. (…) Transportation investments link factors of production together in a web of relationships between producers and consumers to create a more efficient division of production, leverage geographical

comparative advantage, and provide the means to expand economies of scale and scope"[50]. In this context, the utility of those investments must be analysed in the context of their effects - direct and indirect effects -, both in a quantitative and qualitative way.

The analysis of direct or induced effects of investments in transportation infrastructures makes clear their impact on network performance effects, in the reduction of travelling time (both for passengers and freight), which implies a better connectivity of the regional territory, a better performance of the transport system in congested areas during peak periods, and support for internationalisation[51]. It is believed within the region that the investment in transport has better positioned Norte in terms of its integration in global logistic chains and the reduction of time and cost to access global markets, a better functional articulation of the regional urban system, and an improvement in the accessibility of citizens to services and collective facilities (e.g. health, social, sports, education and cultural facilities). Transport infrastructures were also important in reducing the socio-economic cost of road and rail accidents.

However the lack of a significant improvement in the region's economic performance casts doubt on these assumptions. Recent research by Crescenzi and Rodríguez-Pose (2012) suggests that the investment in motorways either within a region or in neighbouring regions has had little effect on economic growth in EU regions from 1990 to 2004. Investment in innovation was much more influential, and so the opportunity costs of such a high focus on transport and indeed other forms of infrastructure in Norte must be questioned. A balance of expenditure that placed more emphasis on R&D, innovation and a new generation of entrepreneurs might now be paying off, even if transport infrastructure had been slowed. Furthermore there is clear evidence of over-provision of transport in the existence of surplus capacity within the completed schemes, and rates of usage that have grown relatively slowly compared with the scale of investment. This heavy investment also carries with it a continuing burden as higher levels of infrastructure need higher levels of maintenance, so not only is there an opportunity cost in the initial funding period as innovation investments are held back whilst roads are built, but later on there is a need to continue with higher maintenance spending.

Environment sustainability investments also increased the quality of life of the population, through a steady improvement in access to fresh water, MSW and sanitation services which had been at very poor levels previously. Support to rural areas and urban rehabilitation recovered the region's cultural heritage and landscape and supported the development of locally based economic activities in the form of rural and nature tourism and cultural tourism. These coupled with investments in public services in health and education all enhanced the region's attractiveness as a location for investment, albeit they would never be adequate on their own to promote economic growth. These constitute a set of basic 'hygiene' conditions that must be met to attract and retain investment and talent, especially faced with lots of alternative regions across Europe meeting the same set of criteria. They are not enough to promote growth on their own.

Some of the building blocks of future growth have been put in place though, especially by some of the more recent investments in developing the universities and various research and knowledge

[50] Source: The International Bank for Reconstruction and Development/The World Bank (2011: 2).

[51] "Reducing cost and time for existing passenger and freight movements increase transport's contribution to economic growth" (The International Bank for Reconstruction and Development/The World Bank, 2011: 2).

infrastructures, and developing platform for the emergence of a tourism industry in a region that had been largely ignored by tourism in the past. But the region continues to lag behind in economic growth,[52] employment[53] and wages.[54] The most up-to-date R&D centres cannot provide leadership if they are not associated with companies that connect with them in virtuous circles.

Entrepreneurship was considered almost as 'given', taking into account the Norte region Schumpeterian tradition. But entrepreneurs belonged to another era, one before globalisation, and were not able to lead the process of change. Non-tradable sectors (public works in infrastructure, real estate) presented short-term profitable advantages over more sophisticated and risky new activities. With the large investments in accessibility and other ERDF-supported infrastructure, the public works market became highly attractive. There was always demand and projects were well-paid with short delays. Accordingly, tradable sectors (both traditional and modern) were less attractive to potential entrepreneurs. So the heavy focus on infrastructure may also have directly weakened opportunities within the private sector by displacing economic activity away from new export-oriented industries towards local grant-dependent activities. So a strategy that was understood to be the received wisdom at the time, and was politically desirable and more easily implementable – develop a suitable infrastructure to support export activities – may have led to an erosion of that capacity for export-oriented growth and left the region with high future costs without growth in revenues, thereby reinforcing dependency on the Structural Funds.

6.3 Key elements of success and failure

6.3.1 Good practices and successes

In Portugal, there is no tradition or experimentation in regional policy that is separate from Structural Funds programming. No established body of public policies exists with characteristics that can be considered autonomous from the different public policy instruments co-funded by the European Community. In this regard, the experimentation and learning processes that have taken place during the application of this type of policy occur exclusively within the Structural Funds programming framework.

The change in regional development policies closely follows the succession of Structural Funds programming cycles. The requirement to create, during each programming period, a systematic document like the Regional Development Plans (PDRs), in which the territorialisation of problems is absolutely necessary, must be viewed as a factor of positive change.

It must be remembered that the planning framework was based on the primacy of the sectorial intervention approach in which the territorial perspective was no more than a factor for adapting the policy itself. There was no formal space in which to connect with a global territorial strategy. The PDRs were the first opportunity for this connection to emerge, even though their practical effects tended not to reach their potential for integration. Alongside this new context of

[52] Regional exports grew between 2004 and 2012 by around 32 percent versus 46 percent for the country as a whole in the same period

[53] Employment grew between 1995 and 2010 by around 8.4 percent versus a global increase in Portugal of 13.5 percent.

[54] Gross family revenue, in current prices, increased by 86.3 percent in the region between 1995 and 2010. In the country, for the same period, the growth was 95 percent.

programming creation, the establishment of the Directorate-General for Regional Development (DGDR), in 1983, has introduced a level of coordination into the planning framework that matches, at central level, the role played by the CCRs at regional level.

As regards policy innovation, the "Development Integrated Operations" (OIDs) represented the primary influence of Community regional policy guidelines and a good example of the exogenous effect of the Structural Funds, which is not merely financial, but also leads to new paradigms of planning and development. The period corresponding to the application of the first CSF (1989-1993) clearly showed a stronger influence of the Community framework in the development of a regional policy in Portugal, most notably through the following elements: (i) concerted preparation of the National Development Plan Options (GOP), the Regional Development Plan (PDR) and Operational Programmes (PO); (ii) concerted presentation of the PDR with a Community initiative proposal for national territory (cross-border regions, outermost regions and the construction of a natural gas network); (iii) the start of the creation of units specifically dedicated to Structural Funds management based on a principle of decentralised management, though always subject to political and technical supervision and accountability by the Ministry of Planning through the Directorate-General for Regional Development, respectively. The Integrated Development Operation (OID) experiment was one of the most successful forms of planning during the period following European integration. Within a planning framework whose structure was characterised by the predominance of the sectorial approach and low levels of horizontal cooperation among the different sectorial ministries, the OIDs were a breath of fresh air in Portuguese planning.

In the case of the Norte region, the activity of the Technical Assistance Offices (GAT) proved vital to the process of increased ability to create, monitor and control infrastructure projects. It was in the Norte region that the actions of the GATs were clearly linked to a technical strengthening of future municipal associations. A very interesting process of cooperation can be observed between decentralised entities (the GATs dependent upon the CCRs) and the municipalities in the creation and consolidation of experiments in inter-municipal associations.

The idea that "the directed effort of a regional nature should complement the structuring actions of a national nature" became a stronger feature of the second CSF with the linking between regional programmes (ROPs) and sectoral programmes (SOPs). In fact, the relationship between ROPs and SOPs became clear through support for inter- or supra-municipal infrastructure projects, structural projects with a significant regional scope and greater impact on the development of each region or sub-region. Among successful initiatives was the Vale do Ave Municipal Association (AMAVE) experiment and its heavy involvement in the environmental clean-up projects of the Ave River and the construction of the Inter-municipal Road (VIM). It is also the first time that the possibility of support for a strategy to develop medium-sized cities is considered.

A new component of the ROPs appeared in the programming of the second CSF, linked to the Programme to Promote Regional Development Potential (PPDR). The primary goal of this nationwide programme, designed to promote the potential of endogenous development in the regions, was to participate in the revitalisation of the rural and inland communities of the country by promoting new conditions for competitiveness. As part of this programme, a plan was drawn up, for the first time in Portugal, to create the Regional Development Agencies (ADRs), largely through the influence of Community authorities from the DG XVI who associated its creation with the realisation and approval of the PPDR, even though they did not have a coherent order in the

framework of regional policy instruments from the actual programming period in which they were created.

Support for recovery projects in rural centres, whose main objective *"was the creation of conditions to sustain the socio-economic well-being of small rural centres, assigning them infrastructures associated with economic activities",* and the different incentive schemes for investment and job creation (local initiatives for job creation), combining ERDF and ESF aid, was another form of intervention for local development, which previously did not exist within the framework of a single programme. The scope of the PPDR must therefore not be confused with the less successful achievement of the ADRs.

The application of the URBAN Community initiatives (urban regeneration and social inclusion) was important in term of the integrated planning approach. These initiatives are now regarded as successful examples of public policy territorialisation.

The 2007-2013 programming period introduced changes in the balance of top-down and bottom-up approaches to territorial competitiveness, reducing the disproportion of financial resources involved in this process.

6.3.2 Bad practices and failings

Bearing in mind the highly centralised nature of the programming process and the inflexibility of the project cycle model, certain perverse effects can be perceived in organisational learning. The approach of maximising the opportunities for executing programmed financial commitments tends to devalue the innovation component of public policies that the Structural Funds should be encouraging. What leaves an indelible mark on the first programming period is the transformation of the PDR into a fundamental document for national development strategy and policy. This choice was a corollary of the controversial decision made at that time to consider the mainland territory as a "single region". In other words, what could have been a good start, the association of national development strategy with regional policy, would eventually become an inability to territorialise national development policy in a consistent and coherent manner.

One observer of this period is clear in his appraisal: *"Naturally, this duality of positions appeared during the creation of the PDR, with most participants favouring investment in the 'Atlantic region' and disregarding the less developed interior, which would not be part of 'the same championship'. In this perspective, we must also highlight the weak impact that the contributions encouraged by the CCRs had on the overall balance of the PDR when these were confronted by the sectorial proposals of various ministries: as a rule, the sectorial approach ended because of the superimposition of regional concerns..."* (Pires, 1998:93).

The changes brought about by the 1994-1999 programming period were contradictory. If, on the one hand, the impact of Structural Funds became widespread, they tended to enhance the structural aspects of programming; which would turn out to be detrimental in terms of their contribution to structural change in the Portuguese economy. The expanded infrastructural aspect of programming, even when weighted by the increase in intangible action from the ESF, can undoubtedly be associated with this programming period. Cohesion programmes continued to favour an outlook of national-sectoral intervention, citing three primary reasons as justification: -

"The development disparities in Portugal compared with the Community average are higher than those observed between the less prosperous regions of the country and the national average; - Recent studies on regional assessment would show that the overall development of the country, and especially its more prosperous regions, would have a very important leveraging effect on the less developed regions; - Considering the size of the country, the directed effort of a regional nature would complement the structuring actions of a national nature."

The less consistent nature of these justifications, with the approval of the European Commission (which ultimately adopted the document as its own), is a good example of the difficulty experienced in Portugal and consolidation of a regional development perspective. Indeed, it is hard to locate credible empirical research that demonstrates how *"the overall development of the country, and especially its more prosperous regions, has a very important leveraging effect on the less developed regions"*.

On the other hand, in this programming period, the integrated operation model (OIDs) for development disappeared, and was followed by the creation of a typology of operational executor type-based programme, national-sectoral and regional in scope, with a resulting limitation on the public-public and public-private partnership model. And the share of public investment co-funded by Structural Funds increased considerably. The early abandonment of the OIDs in Portugal reflects a perverse effect of the change to the Community programming framework. The OIDs were a source of resource coordination in specific territories, especially during the period in which they corresponded to some spatial selectivity. Their replacement by the operational programme framework would prove detrimental to the potential for coordination, as the regional operational programme assessments would be forced to conclude.

The creation of the Regional Development Agencies (ADRs) in the 1994-1999 programming period deserves some critical reflection. Firstly, the significant influence that the Community authorities had in this process should be recognised, associating their creation with the actual design and approval of the PPDR itself, in other words, viewing the ADRs as a decisive instrument to implement this programme and its different actions. Secondly, this was essentially a bottom-up process that challenged local and regional civil societies to form interest consortia. Thirdly, although the CCRs had been involved since the beginning, that is, since the first awareness-raising meetings of regional agents, the process occurred without clarification of the future relationship between the CCRs and the new ADRs. The CCRs logically assumed that they would take on a future leading role as a regional agency, as it had not been possible to assess the possibility of agencies coexisting with different scales of spatial intervention. This all led to the flawed implementation of the ADRs.

Finally, the input of the Structural Funds on the emergence of institutional innovation patterns is doubtful. For the institutional framework supporting local development, the effects of the investment-driven growth period have not only generalised the input-based financing models, but they have tended to produce the additional effect of prematurely atomising the local institutional fabric. There has been a long period of growth in the Portuguese economy, driven by the strengthening of the productive and infrastructure capacity, which is showing for several years now signs of exhaustion. The gradual and conservative evolution observed in the pattern of structural change in the Portuguese economy suggests that the investment-driven growth period was not fertile in terms of accumulating technological knowledge, compared with other experiences of late industrialisation. This process tended to co-determine a (path-dependent) evolution of the

institutional framework, resulting in a dominant pattern of supply-oriented, input-based public policies, far removed from an approach marked by proximity to companies and with a low level of accountability and ex-post appraisal of actions undertaken and resources expended. These public policy systems are known to react badly to periods of budgetary restraint or result-based public finance policies.

7. CONCLUSIONS

7.1 EQ1: To what extent did the programmes address regional needs and problems over time?

EQ1a: What were the initial regional needs and problems and what has been their evolution?

Twenty-five years ago, the Norte region had major deficit in infrastructure such as transport and environmental facilities, very much at the same level as that of the rest of the country. This caused external diseconomies and a lower quality of life. Today, a large part of these needs have been met. Norte possesses transport and environmental (water supply, sewage and MSW) infrastructures comparable to those in many regions of the most developed European countries.

On the other hand, twenty-five years ago, Norte was the most industrialised and export-oriented region in the country. But it presented a profile specialised in labour-intensive industries, with low levels of value-added. In particular, facing the challenges posed by Asian and Eastern-European competition, the region's weaknesses were shown to be a lack of competitiveness and qualified entrepreneurship. As such, the region presented strong needs in enterprise and structural adjustment. Today, in spite of developments both in traditional (wine, footwear) and new (renewable energy, pharmaceutical, electronics, tourism) sectors, the region has suffered a rapid deindustrialisation process. The result was rising unemployment (the rate has increased from 4.5% in the 80's to 14% in 2012) and a lack of convergence with the EU average (GDP per capita was 60% of EU 15 average both in 1995 and 2011).

Another initial regional need was related to the large geographical disequilibrium, namely between coastal and rural areas. Despite various interventions in regeneration and improved access of the rural population to education and healthcare, there remain major regional needs of this form.

EQ1b: What was the strategy of ERDF programmes of each programming period? What has been their evolution?

In the first two programme periods, actions in the Norte region particularly focused on transport, enterprise and environmental services.

At the outset, the first priority for the region was accessibility - roads, mainly. These were seen as the basic pre-condition for the competitiveness of companies and a mean to promote territorial cohesion (ensuring a better access to economic activities and increasing the attractiveness of the territory). As such, during the first two programme periods, a special focus was given to regional and national connections (ERDF), despite the investments to improve external connectivity and to promote the integration of Portugal in RTE-T (CF). Basic infrastructures of water supply, sewage and MSW of the Norte region in the 1980s were extremely deficient, and the investments of ERDF and CF projects on these areas during the first two programming periods were not sufficient to achieve the national average.

Enterprise support combined a series of regional incentives to business (manufacture, tourism, commerce) with infrastructure support, particularly focused on the textile sector. The main consequence of these structural adjustment programmes in the traditional sectors was to split the company sector into two main groups: those who took advantage, modernising and rationalising

their functioning and which were, in general, successful, and those – mainly SMEs - which did not react in time and went bankrupt.

During programme period 2000-2006 enterprise support strategy was re-oriented around innovation and R&D, following the logic that the future would involve small, highly specialised niche markets. On the other hand an approach aimed at further exploiting the geographical position was adopted. To achieve this, good natural conditions for ports were crucial, especially to service the Spanish hinterland.

Transport investment focused on railroad modernisation, the Porto underground and large investments in Leixões maritime port and Sá Carneiro airport.

By the end of the 2000-2006 programme period the entire region was fully covered by waste treatment networks, and attention had shifted to other forms of environmental projects including the development of national parks.

Finally, the current 2007-2013 programme period brought the issue of enterprise support back to the foreground. Unemployment and the financial crisis called for investment in the knowledge economy and innovative sectors. Two other priorities for the region were to focus, firstly, on the regeneration of urban centres and, secondly, on intangibles (culture, creative industries) which together could strengthen Norte as a tourist area.

EQ1c: What were the priorities and objectives of ERDF programmes of each programming period? What has been their evolution? Were the objectives SMART?

During each and every programming period, the main priorities were accessibility, environmental sustainability, enterprise support and structural adjustment.

Accessibility (transport Infrastructures) was one of the main areas of SF intervention. These investments were linked to overcoming the problems of peripherality relative to the main European markets but also the improvement of mobility within the region and to neighbouring regions in the rest of Portugal and in Spain.

Investments in water supply, sanitation, and waste disposal were made, particularly in the first three programmes, to endow the region with the necessary living conditions and to meet European Union norms.

Enterprise support shifted over time form an initial focus on the modernisation of existing companies to a process of structural adjustment and sustaining productivity, to a new focus from 2000 on diversification, competitiveness and increased added-value through connection with universities, technical centres, R&D and regional innovation systems.

With regard to whether the objectives were SMART:

- Programme objectives were not particularly specific and have generally been inexplicit and broad enough to allow for different interpretations. Even at the level of specific programmes, it was possible to provide support for projects that only tentatively fitted the

respective objectives. Much of the early programmes were oriented to a national strategy rather than the specific needs of the Norte region.

- Programme objectives were generally not expressed in **measurable**, form particularly in terms of socio-economic results (number of jobs created or targeted economic growth rate). At most the achievements were measurable in terms of physical outputs (kilometres of roads built or number of renovated schools, for example). However, the 2000-2006 NOPs introduced some quantified objectives, focused mainly on outputs. With time – particularly during the current programming period – quantification became more usual and the general rule is the presentation of goals with measurable objectives but still with a focus on outputs (such as no. of direct jobs created, Increase in population served by interventions in urban transport systems expansion, no. of students benefitted, no. of supported start-ups or SMEs).
- Programme goals were generally **achievable**, inasmuch as the specified targets were capable of being reached. However, the overall regional goal of reducing the gap compared to the national average - one that could be interpreted as an on-going objective - was not achieved, as the statistics show.
- The objectives were **relevant**, leading to improvements in living conditions, educational level or development of new economic activities. Programmes addressed genuine regional needs to the best available knowledge at the time, although with hindsight an alternative strategy might have been pursued.
- Finally, the objectives of the programmes were in general **timely.**

EQ1d: What has ERDF support been spent on in each programming period? Have there been significant transfers from initial allocations of ERDF resources to other priorities in any period?

When analysing the expenditure data against the eight thematic priorities used in the present report, it is possible to observe a gradual shift of priorities. In fact even if infrastructure were - in each and all the four programme periods - the main beneficiary (ERDF + CF) there is a shift towards a more balanced distribution in the later periods.

Infrastructure expenditure fell from 51.3% to 35.4% across the four programme periods, showing a slow but steady negative trend. In contrast, enterprise support has gained increased importance: growing from 16.4%, to 28%, to which can be added investment in structural adjustment which was always around 10% of expenditure. Environmental sustainability started at 13.8% (in 1989-1993) increased to 19.3% (1994-1999) but has decreased since to 9.8% in the current programme period.

2007-2013 was the first programme period where for the budget for the regional specific programme surpassed that of the national programmes. However, in the current ROP, infrastructure is still the most important theme (28.5% of ROP total budget) followed by enterprise (22.1%), spatial cohesion (17.1%) and structural adjustment" (13.7%).

Across all four programming periods the Norte presented a good capability to absorb the Structural Funds. The execution rates (NOPs+ROPs) varied from 100% in 1989-1993, to 96% in 1994-1999 and 95% in 2000-2006. The ROPs execution rates are significantly higher than those of the NOPs. It is particularly the case during the 2000-2006 programming period (101% vs. 88%).

7.2 EQ2: To what extent do ERDF achievements meet regional objectives and needs in each programming period and across all periods?

The assessment of effectiveness is hampered by the lack of clarity in the objectives of the programmes, particularly in the 1990s when expenditure was dominated by national programmes. The overall imputed objective of broadly based economic growth and convergence with the national trend was not achieved, although some of the output targets of specific programmes were met.

Objectives in terms of improved accessibility were attained through large investments in motorway connections and internal roads, rail improvements, a new metro system, a new airport and port upgrading. Investments in environmental services also generally met their objectives. These infrastructure projects were at the heart of regional objectives and responded to genuine needs, so in this respect the programmes did achieve at least partial effectiveness.

Elsewhere, in support for business, the achievements were more variable. Large numbers of projects were delivered and a considerable number of firms enhanced their competitiveness, but there is not the clarity of regional objectives or the data that permits clear assessment of effectiveness.

EQ2a: What are the reported achievements of each programming period?

The 1989-93 programmes achieved considerable improvements in road networks and the first stage of investments in the modernisation of water and waste processing systems. Considerable investment was also made in support for the modernisation of industry although an overview of achievements is not available. Support was also provided to the development of the three public universities and other R&D facilities.

In the programme period 1994-1999, further investment in transport delivered improvements in circulation inside the Porto Metropolitan Area: through the Porto metro system, the Porto Internal Ring Road and the modernisation of the Northern Railway Line. Further improvements were made in municipal water, sanitation and MSW systems. Enterprise support continued with arguably the same business incentives as in the previous period: again with large numbers of projects but unclear outcomes.

During the 2000-2006 programme period, transport investments shifted to externally oriented projects including the port system (Port of Leixões), Sá Carneiro international airport, and also the motorways A7 (linking Porto to the coastal areas) and A11 (Porto-Braga -Guimarães) and the Douro railway line (that connects the city of Porto to the eastern Spanish border). Enterprise incentives enabled the implementation of 5,730 projects in the region, which focused mostly on manufacturing upgrading (~50% of total funding). These projects enabled the creation of ca. 21,000 new jobs (permanent and temporary), of which 60% were in SMEs. Around 200 new enterprises were created (95% being SMEs). In this programme period, the main environmental achievements were the restoration and enhancement of the natural heritage and urban environment, particularly through projects such as the Peneda-Gerês National Park.

Finally, in the current programme period, the ERDF and CF have been supporting the development of the Transmontana motorway, the modernisation of the Minho Railway Line (*Linha do Minho*) –

Variant of Trofa and the expansion of Porto metro system (between Dragão Stadium and Venda Nova). The ROP has also supported the new cruise terminal of the Port of Leixões, an important investment for Norte tourism sector, which enables the port to receive the world largest cruise ships.

In the field of enterprise support, financial engineering tools and entrepreneurial development collective actions have been supported. However, the recession and the country's financial bail-out have made all these types of actions more difficult and slower in terms of final results.

EQ2b: To what extent were objectives achieved in each programme period?

Reported achievements fundamentally focused on outputs (motorway kilometres, number of schools repaired), but some NOPs and the most recent ROPs have identified objectives relating to results such as the number of jobs created or other specific information, such as traffic intensity or number of inhabitants benefited by water supply systems. In general, the information on reported achievements improved throughout the programme periods. However, there was a lack of analysis on the specific impact of ERDF and CF achievements in terms of global regional development.

Where simple output indicators were expressed, then these were achieved, and in many cases exceeded, although this may have been largely due to low targets being set. Wider objectives in terms of economic growth were not achieved as the programmes struggled to cope with the scale of restructuring in the region as the traditional industries lost competitiveness relative to Eastern European and Asian firms. The region was able to start the process of diversification in the period since 2000, but successes were small relative to the scale of the problems.

EQ2c: To what extent were needs met in each programming period? To what extent can observed changes in regional needs and problems be imputed to ERDF programmes over time?

The scale of needs in Norte meant that they could not be met in a single period and hence even those needs which could be simply addressed through investment projects could only be met over several programme periods. The needs that were easiest to meet were those defined in terms of inadequacies in infrastructure, such as communications, water systems, hospitals and such like. These were substantially improved over the period such that it was recognised in the most recent period that many of these needs have now been met. Much of the basic infrastructure has been improved to European standards, and in some cases is now of a higher quality and with spare capacity than is needed.

However the needs in terms of the region's economic structure have not been met, even if some improvement has been achieved. GVA still lags the rest of the country, and the position has worsened rather than improved. Unemployment has risen throughout the period and having started as less than the national average, spent most of the 2000s tracking above the national average. Productivity is low, again relative to the rest of Portugal, and the region remains dependent on labour intensive traditional industries. Most of the basic indicators of regional need have not improved over the period and hence the success of the programmes remains elusive. Whilst the basic building blocks of change have been assembled with ERDF assistance, the combination of policies has not been able to improve the position on the core regional needs.

EQ2d: What have been the complementarities and synergies of ERDF interventions with ESF; EAGGF/EAFRD; and with domestic regional policy interventions?

The examples of complementarities between different ERDF-funded programmes are relatively scarce, as NOPs were managed centrally by each sectoral ministry. However, with the creation of the Cohesion Fund and its support for generally large investments in transport and the environment, complementarity became relatively usual between ERDF and Cohesion Fund resources to fund shares of a single major investment. The Leixões maritime port or the National Park Peneda-Gerês (classified by UNESCO as a Biosphere World Reserve) are good examples of that type of complementarity. The Peneda-Gerês National Park has also received support from several Community Initiatives (Interreg, Leader, Life), during the 2000-2006 programme period.

The current Programme for the Economic Enhancement of Endogenous Resources (PROVERE) is an interesting example of complementarity between Structural Funds (ERDF, ESF, EAGGF/EAFRD and EFF), as shown in the Romanesque Route case study.

Complementarities between ERDF and the ESF, on one hand, or between ERDF and EAFRD are much rarer even if some examples were detected (schools and training actions, communication infrastructures in urban and rural municipalities). ERDF/ESF synergies were relatively usual in CSFs I and II, particularly in the professional training of workers in strategic sectors. The same occurred between ERDF and EAGGF, namely concerning the enhancement of rural institutions.

There was little evidence of complementarities with domestic regional policy interventions as there is a serious lack of experimentation in regional policy in Continental Portugal, separate from Structural Funds programming.

EQ2e: What has been the overall contribution of ERDF programmes to regional development?

There is no evidence of any econometric model which has tried to estimate the effects of Structural Funds (or ERDF) in the Norte during any of these programming periods. Econometric model results developed at national level provide no real insights at the regional scale. As such, to grasp the overall contribution of ERDF programmes to the region, the four main pillars of sustainable development can be assessed: economic, social, environmental and institutional.

On an economic level, the Norte presents – in comparison with the other Portuguese regions and according to the latest published data – a lower level of both GDP per capita and labour productivity. In 1995, the Norte was the second richest region of the country, with a GDP per capita of around 60% of the EU 15 average. But by 2012, despite the permanent convergence goal of ERDF programmes, the region was not able to increase on the same GDP per capita (PPP) at around 60% of that average. Today (2010), Norte is the poorest region among the seven Portuguese NUTS II regions with a GDP per capita of 80% the national average. In labour productivity, Norte is the last but one region in the country (2010). So the contribution of the ERDF programmes to economic development has been limited to maintaining the region's position at best. It may be argued the region would have performed even worse without support due to the collapse of traditional industries, but industries, but certainly results have been poor.

On a social level, Norte is similar to the national average and its employment rate is just above that of the national rate, despite an overall positive evolution of qualifications. Child labour has

virtually ceased since the turn of the century. The at-risk-of-poverty rate in Norte is just a little higher than the national rate (15.3% for Norte, and 14.8% for Portugal).

In terms of environmental development, Norte presented major improvements in almost all indicators (% of population served by wastewater treatment system, by solid waste, by sanitation, by MSW). This is one area where the programmes made a genuine leap forward in achievement.

In institutional terms, the establishment of a specialised body in regional development and management of European funds have facilitated the coordination and the design of appropriate policy mechanisms. The dialogue and coordination between central and regional scales was continuous and managed to solve most of the problems.

Many problems persist: lack of economic growth and competitiveness, low levels of human capital, geographical disparities between coastal and coastal areas, just to name a few. And clearly the current economic and financial crisis aggravates them. However the ERDF programmes have made a significant contribution to prepare Norte to better meet the current difficult challenges.

7.3 EQ3: What are the main lessons learnt on the effectiveness and utility of ERDF interventions?

EQ3a: What are the main good / bad practices?

Good practices include:

i. the requirement to create, during each programming period, a systematic Regional Development Plan (PDR), in which the territorialisation of problems is absolutely necessary;
ii. the steady development of a regional approach to planning;
iii. the spirit of territorial integration of actions such as Development Integrated Operations (OIDs) was more successful at sub-regional scales, where decentralised interventions were introduced with the support of both sectoral ministries and CCDR;
iv. the Interreg Community initiative was beneficial in trans-border cooperation in such different areas as R&D, tourism or accessibility;
v. an increasingly balanced top-down and bottom-up approaches to territorial competitiveness.

In terms of bad practices the fact that a large part of ERDF and CF interventions were in infrastructures meant that the private sector was not called upon to participate as actively as it was needed in programme design and implementation. This would have been highly valuable in this period, where regional basic sectors went through huge challenges of global competitiveness and restructuration, needing a more concerted action between public and private sectors.

Also the excessive centralisation of programme design and implementation at Lisbon level is viewed as most detrimental to Norte development and partially the cause for the non-convergence regional process over these last twenty-five years.

EQ3b: What conclusions can be drawn for improving ERDF programme design, implementation, results-based management, achievements?

The region would benefit from more territorially specific programmes which draw on stronger inputs from local interests and particularly the private sector. Greater attention needs to be placed on the setting of regionally specific objectives with a clearer sense of the desired results and the steps by which these would be realised.

8. ANNEX I – ANALYSIS OF PROJECT SAMPLES

8.1 Leixões Maritime Port

Summary Description

Traditionally, Norte is the country's most important export region. The dispatch of goods is usually made by road and sea.

The exports growth that resulted from Portugal's accession to the EU strongly raised the demand for transport. It took several years to adjust the transport infrastructure to the new level of transportation demand, leading to tensions between supply and demand and creating a modal redistribution that has favoured land modes, namely road transportation.

The maritime port of Leixoes is the only commercial port in the Norte region with the potential to make maritime transportation competitive. The area it covers ranges from the Centro region of Portugal until the area covered by the Vigo maritime port in Galicia, Spain.

At the beginning of the 1990s, Leixões port management – the Douro and Leixões Ports Administration (Administração do Porto do Douro e Leixões, APDL) - developed a set of initiatives designed to modernise the port's infrastructure and traffic supervision.

The overarching goal was the quality improvement of Leixões port services and the promotion of maritime transport through heavy investment in accessibility, intermodality and logistics.

The first projects undertaken focused on modernisation and expansion. In the last decade, interventions addressed certain traffic management aspects and integration in logistic chains. APDL investment and financing sources are extremely diversified. Besides self-financing, APDL presented applications to ERDF and CF through several OPs (ERDF OP AT, OP VT and ROP Norte).

The amount of the investments and the EU participation are presented in the following table.

Table 24: Leixões Port investments and funding (1986 to present) Euros, constant 2000 prices

APDL Main Investments	Eligible Investment	ERDF Contribut.	Co-financing Rate	Year of the Decision
Cohesion Fund				
Study concerning the development of the area between the south jetty and quay nº 3	138,666	117,886	85.01%	1993
Reorganisation and modernisation of Leixões port 1st phase	8,484,596	7,211,907	85.00%	1994
Reorganisation and modernisation of Leixões port 2nd phase	16,948,441	6,759,320	39.88%	1996
Land access and rationalisation of the exploitation area in Leixões port	30,266,547	24,213,238	80.00%	1997
CF Total – Leixões Port Planning and Modernisation	**55,838,250**	**38,302,351**	**68.59%**	
OP AT 2000-06				
Rehabilitation and reinforcement of a section of south pier D1	2,311,654	959,957	41.53%	2001
VILPL - Inland connection of Leixões port	12,881,978	6,377,830	49.51%	2001
Strategic plan for the development of Leixões Port and complementary measures	522,500	235,125	45.00%	2004
Improvement of the safety conditions in Leixões port	2,411,619	1,229,926	51.00%	2004
Environmental management programme	320,336	112,118	35.00%	2004
Improvement of sea accessibility in Leixões port	27,196,272	13,598,136	50.00%	2006
Stabilisation of south and west pier on dock 4	590,146	295,073	50.00%	2006
Main gate in Leixões port	13,354,975	6,677,488	50.00%	2006
Improvement of the safety conditions in Leixões port (2nd phase)	2,760,980	1,322,509	47.90%	2006
Unique port window of Leixões port	3,039,801	1,063,930	35.00%	2006
Multi-use terminal of Leixões port	11,977,866	6,997,551	58.42%	2007
Total OP AT	**77,368,127**	**38,869,643**	**50.24%**	
ROP Norte 2000-06				
Modernisation works to improve operating conditions in Leixões port	4,324,298	2,378,364	55.00%	2008
New cruise terminal in Leixões port	49,753,671	25,500,000	51.25%	2010
Total ROP Norte	54,077,969	27,878,364		
OP VT 2000-06				
Integration of Leixões port in Motorways of the Sea (1st phase)	7,600,853	4,722,562	62.13%	2008
Integration of Leixões port in Motorways of the Sea (2nd phase)	16,524,407	8,800,238	53.25%	2011
Total OP VT	**24,125,260**	**13,522,800**		
Total	**211,409,607**	**118,573,158**	**56.09%**	

Source: Leixões Port Administration (APDL).

Underlying Problem and Context

During the last 25 years, the main goal of the investments in Leixões port was to eliminate the region's deficit in port infrastructure. Interventions were devoted to improving the qualitative and quantitative endowment in order to meet the increased demand for transport resulting from the expansion of international trade after Portugal's accession to the EU.

At the beginning of the 1990s, the situation of the Leixões port was extremely difficult. There was a generalised consensus on its lack of competitiveness and low level of attractiveness. The reasons for this state of affairs were, amongst others, poor cost efficiency, high levels of bureaucracy, unfitting prices employment, manual shipping, turnover tasks and the calculation of port taxes.

The investments that were made adjusted the infrastructure offer to meet the strains of growing demand and progressively increased its market share in the Portuguese context. During the last 15 years, Leixões Port has mainly grown by gradually attracting road and containerised cargo. In the near future, the specialisation and repositioning of the Iberian Peninsula's northwest are the major challenges for the outlined APDL sustainable growth strategy.

Detailed Description

In 1995, as a result of a diagnosis of problems, APDL developed the 'Leixões Port Planning and Development Plan', designed to improve the quality of the services and to foster short-distance maritime transportation in Leixões through investments in accessibility, intermodality and logistics.

Initially, the Plan's envisaged projects were financed by CSF II. The main financing source was the CF. Total investment was around €56 million (2000 constant prices) with a Community participation that exceeded €38 million, i.e. the average contribution rate was 68.5 percent.

In CSF III, this development strategy continued through the 'OP Accessibility and Transport'.

In this programme period, ERDF-financed Leixões port investments mainly involved the following:

- land accessibility to Leixões port, with new road connections;
- maritime accessibility to Leixões port, through the deepening of the rotation basin and of the access channel to interior docks, and through the construction of a new mobile bridge;
- rehabilitation of underutilised structures; new equipment and technological reconversions of electric networks; investments in informatics and telecommunications; and security and environmental improvements.

Table 25: Port of Leixões on-going investments and funding

Project	Goal	Target date	Invest.	Funding sources
Expansion of the Southern container terminal	- Exploiting underused areas in order to increase port operations; - Increasing the longevity of the types of cargo in higher growth in Leixões port; - Increasing railway-maritime intermodality.	07/2012 to 12/2013	30 M€	Concessionaire's self-financing and community contribution (OP VT).
Logistic port platform of Leixões	- Creating added value for the merchandise; - Encouraging modal shift; - Increasing the cargo volume passing through Leixões; - Attracting new logistic players; - Improving cargo-related services.	12/2011 – Works in Pole 1 03/2012 – Access works to the terminal 2014 – Works in Pole 2	180 M€	APDL self-financing; community contribution by POVT; Previously agreed BEI loan.
New cruise terminal in Leixões port	- Creating conditions for the development of cruise ship tourism, a potentially growing segment on a global scale, aiming at regional development and tourist promotion of Portugal's Norte Region.	04/2011 – Maritime works 10/2013 – Building	49.7 M€	PONorte2
Building a new container terminal with foundations descending to 14 m (ZHL)	- Accommodating large vessels necessary for export purposes; - Reinforcing routes to the South Atlantic and establishing regular lines.	Three-year execution (not to begin before 01/2014)	160 M€	European Investment Bank and RTE-T
Purchasing two 60-ton tug boats	- Increasing safety in ship manoeuvres; - Complementing the investment destined to improve sea accessibility to Leixões port.	05/2011 to 09/2013	8.3 M€	Included in POVT approved candidacy, with a contribution rate of 56.26%
Multi-use terminal	- Improving the moving conditions of containerised Ro-Ro cargo, with an expectation of a terminal dedicated to short sea-shipping services and motorways of the sea.	02/2007 to 09/2012	21.5 M€	Included in POVT approved candidacy.

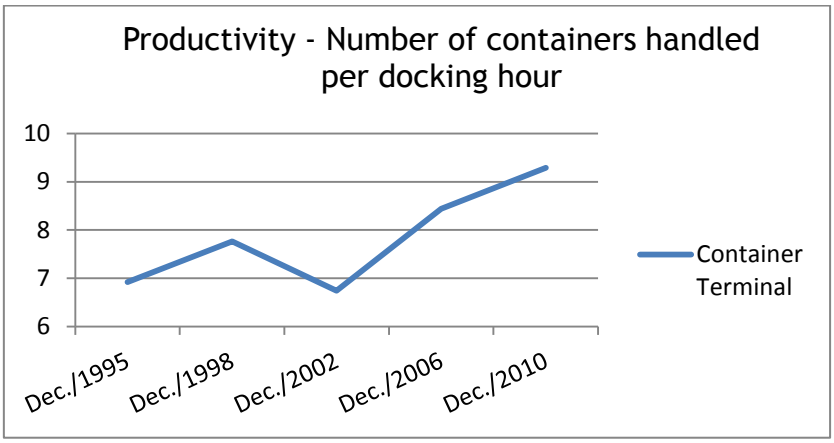
Source: Leixões Port Administration (APDL).

The projects currently under implementation are those referred to in Table 25, which also presents information on goals, investments, financing sources and the envisaged execution/conclusion dates for the main projects.

Outputs and Achievements

The majority of these projects have surpassed their initially defined goals. They have also had a considerable direct impact on the port's importance for Portugal. In 2000, after some of the first interventions, Leixões port became the nation's first commercial port in terms of movement of goods. It also gained competitiveness and efficiency, thanks to its infrastructure and services. These advances enabled relatively low prices to be fixed vs. the prices in highly competitive European ports such as Rotterdam, Valencia or Barcelona.

Figure 17: Leixões port container movements



Source: Leixões Port Administration (APDL).

The improvements due to the EU-financed projects have enabled a notable increase in port productivity. Between 1995 and 2005, the average number of containers moved per hour grew from 6.92 to 9.29. These data place Leixões port as one of the most productive ports in the world in terms of its dimension.

Table 26: Port of Leixões evolution in demand

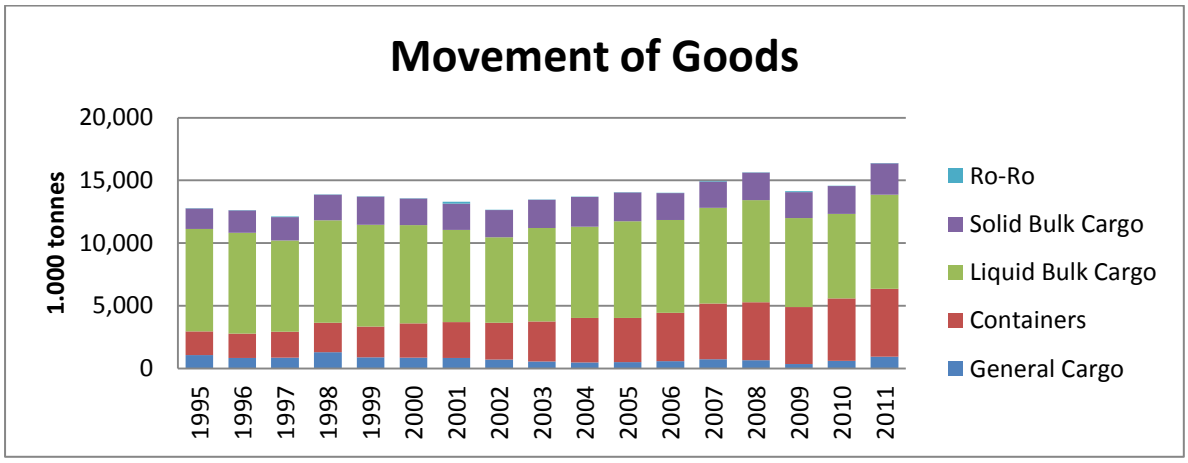
Size	1995	1998	2001	2004	2007	2010	2011
Number of ships	2,590	2,876	3,128	2,802	2,778	2,589	2,638
Merchandise	12,778	13,878	13,287	13,704	14,948	14,577	16,363
Number of Containers	132,152	160,309	195,390	228,207	282,443	305,334	327,563
TEUs	195,486	243,158	298,374	349,495	433,506	483,309	514,088

Source: Leixões Port Administration (APDL).

Today, Leixões port receives an average of 3,000 ships per year, around 350,000 containers and 520,000 TEUs.[55] The accumulated growth since 1995 has been c. 148 percent in the number of containers and 163 percent in TEUs (**Error! Reference source not found.**).

[55] TEU refers to twenty-foot equivalent unit, a standard unit to measure a shipping terminal's cargo-handling capacity.

Figure 18: Port of Leixões demand evolution – Type of traffic



Source: Leixões Port Administration.

In terms of type of moved merchandise, traffic growth has experienced an unequal evolution. Both solid and liquid bulk and general cargo experienced significant changes. However, containerised cargo followed a growing trend that was especially strong after the last part of the 2000s (see figure 18).

Value-added

The main results of the EU co-financed projects were seen in the productivity increase, the traffic growth and the change of the merchandise typology, with containerised cargo of particular note. The development and modernisation of the Leixões port has had a strong impact on the Norte region. The improvement in the off-flow conditions for the region's industrial production and the integration of this infrastructure in international logistic chains are fundamental elements for value-creation. The investments that were made have enabled an improvement in Norte region's relative position in terms of territorial competitiveness. It also guaranteed suitable contextual conditions for the development of productive activities of a different nature.

Conclusions

The investment projects developed in Leixões port throughout the successive programme periods have enabled the modernisation of an infrastructure of great importance to the Norte region.

The increases in productivity and in port efficiency were factors in attracting new forms of traffic, while at the same time allowing retention of existing traffic which in a context of external competitiveness could have moved to the immediate hinterland ports.

Port specialisation and repositioning in the Iberian Peninsula are part of the present APDL strategy, in order to guarantee the total use of the capacity of Leixões port and to guarantee future success through growing integration in international logistic chains.

8.2 The Norte Footwear Industry

Summary description

The Portuguese footwear industry is dominated by small and medium-sized companies, which are mainly concentrated in the South of Porto, mostly in the Santa Maria da Feira, São João da Madeira and Oliveira de Azeméis Municipalities.

Such companies usually lack the resources to carry out major innovation processes, and until the 2000-2006 programme period firm development incentive schemes did not address specific innovation (as a way of improving competitiveness) issues. During the CSF III (2000-2006) period, the central government ran the PRIME programme (*Programa de Incentivos à Modernização da Economia* – Economy Modernisation Incentives Programme) to modernise the economy by upgrading traditional industries among other strategic axes and enhancing their competitiveness in a globalised economy.

The programme was recognised as being particularly effective in the case of the footwear industry because it put in place a comprehensive scheme of incentives that mostly supported the overall business environment (60 percent of the incentives, i.e. around €55 million). A key partner for the implementation of this programme was the Portuguese National Footwear Association (APICAAPS). This association used this programme to help companies upgrade the skills of their workforce, for example by running an industry-specific training centre and carrying out large-scale R&D projects that benefited a wide array of companies due to economies of scale.

The association also promoted proactive benchmarking by supporting visits to international fairs and exhibitions. Encouraging companies to develop a close relationship with customers, suppliers, competitors and institutions allowed for the constant introduction of changes in processes and product designs.

Underlying problem and context

The industrial Norte region was and still is under strong competitive pressure from low-cost value-added production from parts of Asia and North Africa, Morocco and Turkey, as well as from other labour-intensive industries in Eastern Europe.

Shortly following the start of CSF III, APICCAPS published a strategic plan for the sector. Unlike earlier industry plans, the current tone of rhetoric concerning the internationalisation of national footwear manufacture has been mainstreamed through institutional support from the trade association and the '*Instituto para o Comércio Externo de Portugal*' (Portuguese External Trade Institute - ICEP) and their combined support for internationalisation trips involving invited industry members and the relocation of economic units.

The introduction of the DÍNAMO programme (2003-2006) developed an explicit industry cluster programme for the very first time, based on three strategic goals: image, design and internationalisation; human resources improvement; and innovation and development.

In 2007, APICCAPS presented a new strategic plan, also PRIME-programme-financed. The strategic lines defined for the future were to follow-up what had been done in the last few years: innovation; increase in human capital; internationalisation; cooperation and networking.

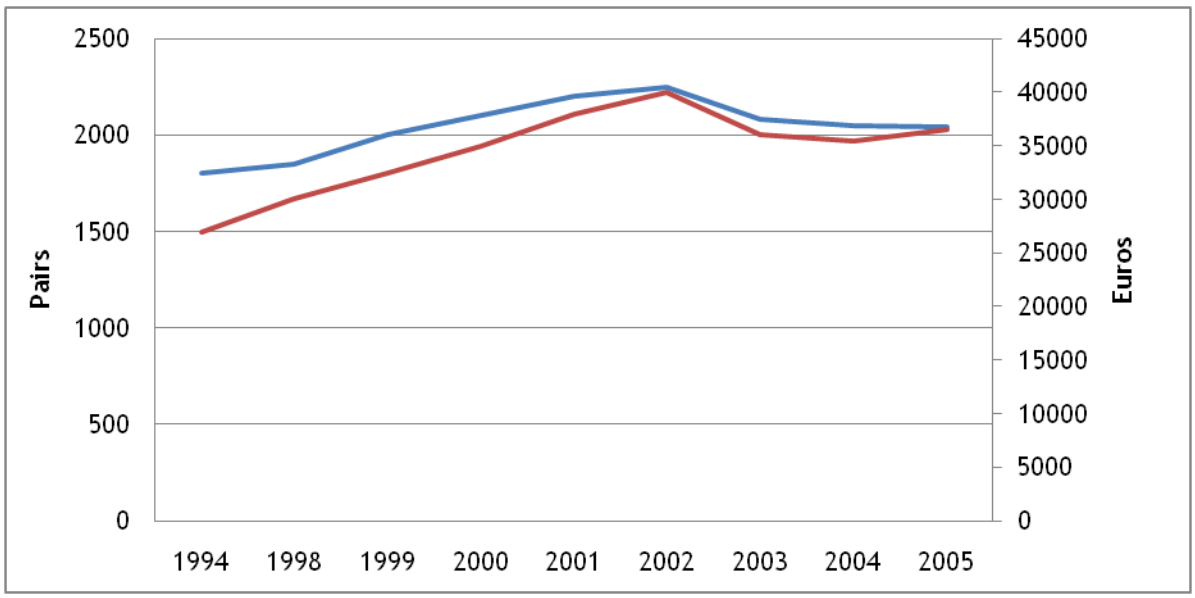
Detailed description

As a result of the industry's participation in specific PEDIP I (1988-1993) and PEDIP II measures (1994-1999), an 'elite' group of footwear industry companies emerged concomitant with an increase in industry performance, albeit unevenly distributed. As a consequence, a more regularised strategic planning approach was adopted by APICCAPS, attempting to coordinate with the SF, which in large part has continued to the present day.

Unsurprisingly, when Professor Michael Porter from Harvard University came to Portugal to conduct what was a reference study on Portuguese Competitiveness, in 1995, he considered footwear as one of the few industries where Portugal could succeed in the long term. The efforts primarily undertaken by the sector after the beginning of the 1990s in terms of design, quality control, industrial promotion, increased productivity and flexibility inducements, organisational and technological innovation were made widely available, above all through the PRISMA programme.

Today, Portugal is the Member State where the footwear industry has the most important weighting in terms of manufacturing GVA (3.3 percent). During the last decade, the Portuguese footwear industry has obtained productivity gains: physical productivity (pairs of shoes/number of workers) grew by 15 percent and the gross value of production/number of workers increased by 33 percent (see figure 19).

Figure 19: Footwear Industry Productivity

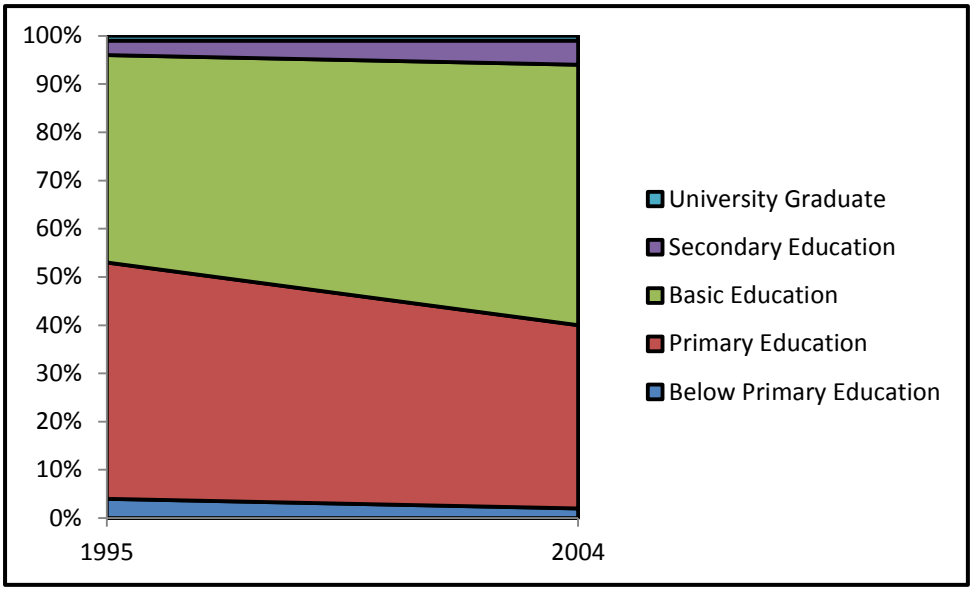


Source: APICCAPS Strategic Plan 2007-2013.

Productivity gains are also explained by the improvement in worker competences. Figure 19 shows that between 1995 and 2004 there was a general upgrading in workers' qualifications. In 1995, around 50 percent of footwear industry workers had only studied primary education at the most,

whereas in 2004 this value was reduced by 10 percentage points, in favour of basic and secondary education qualification growth.

Figure 20: Qualification of the Workers in the Footwear Industry



Source: APICCAPS Strategic Plan 2007-2013.

Many of the investment projects were developed in partnership with the Technology Centre for the Footwear Industry (*Centro Tecnológico do Calçado*). Among them, the most important were the following:

- FACAP – Development of New Footwear Facilities
  FACAP was an investment of €6,329,000 with €4,936,000 of SF incentives that brought together a 17-institution consortium (technology-based companies, footwear and footwear components companies and three institutions from the National Scientific and Technological System - INSTS). The project ran from January 1996 to December 2000.

- FATEC - Development of New Footwear Facilities and Technologies
  FATEC was an investment of €10,132,000 with €5,937,000 of incentives. The execution period lasted from July 2002 to June 2005. It also brought together 17 institutions: four INSTS, five technology-based companies and eight other (footwear, components and leather) companies.

- SHOEMAT – Development of New Materials and Components
  SHOEMAT was an investment of €3,420,000 with €2,218,000 of European incentives. A consortium of 20 institutions (7 INSTS, 10 materials and components companies and three footwear companies) worked within SHOEMAT from October 2003 to August 2006.

In conclusion, the investments supported by the European Union funds seem to have been focused on areas where several constraints on the development of a modern industrial sector were visible.

Table 27: Investments and Incentives – PRIME Programme

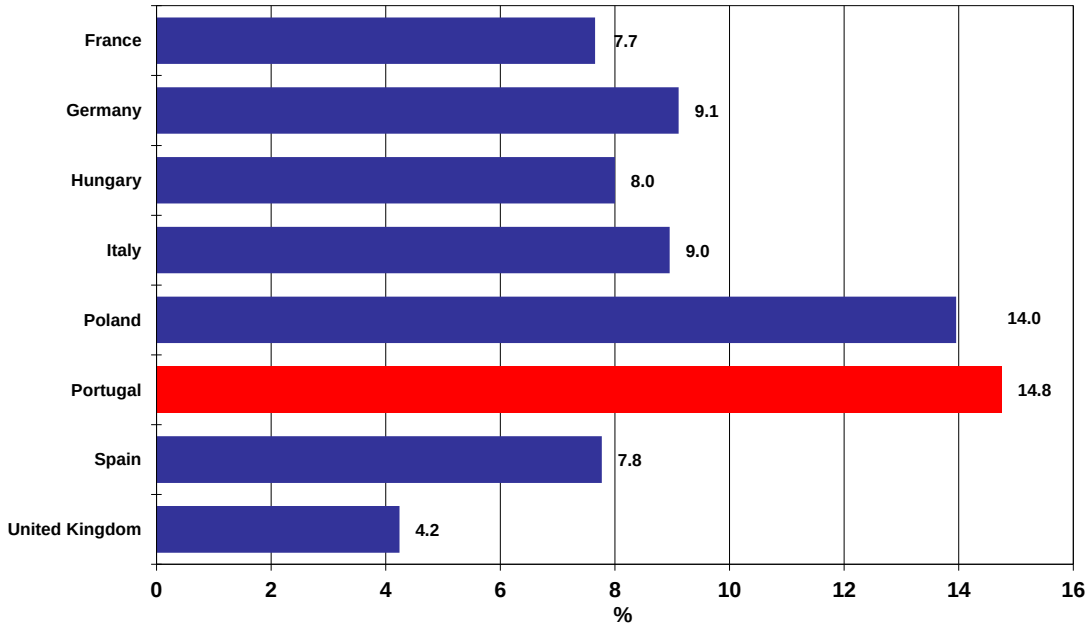
Instrument	Number of Projects	Investments	Incentives	% Incentives
Entrepreneurial Projects (SIME, SIPIE, SIME International, SIED, Professional Training Projects)	80	31,049	13,265	23%
R&D (Mobilising Projects, IDEIA, NITEC, DEMTEC, Young-Inov)	17	14,376	8,356	15%
PIP Internationalisation	8	36,578	27,290	49%
Other Connected Projects	15	10,341	6,401	13%
TOTAL	**120**	**92,343**	**55,311**	**100%**

Source: APPICAPS.

According to the table above, each pair of shoes received 8.8 cents of EU incentive. This way, there was a close relationship between industrial needs, European Union Funds and Projects/ Programmes.

Unsurprisingly, the rate of investment (Investment/GVA) was higher in Portugal than in its main sectoral competitors (see Figure 21).

Figure 21: Investment Average Rate (2000-2006) in the Footwear Sector



Source: Eurostat.

Table 28: Portuguese Footwear Industry between 2000 and 2011

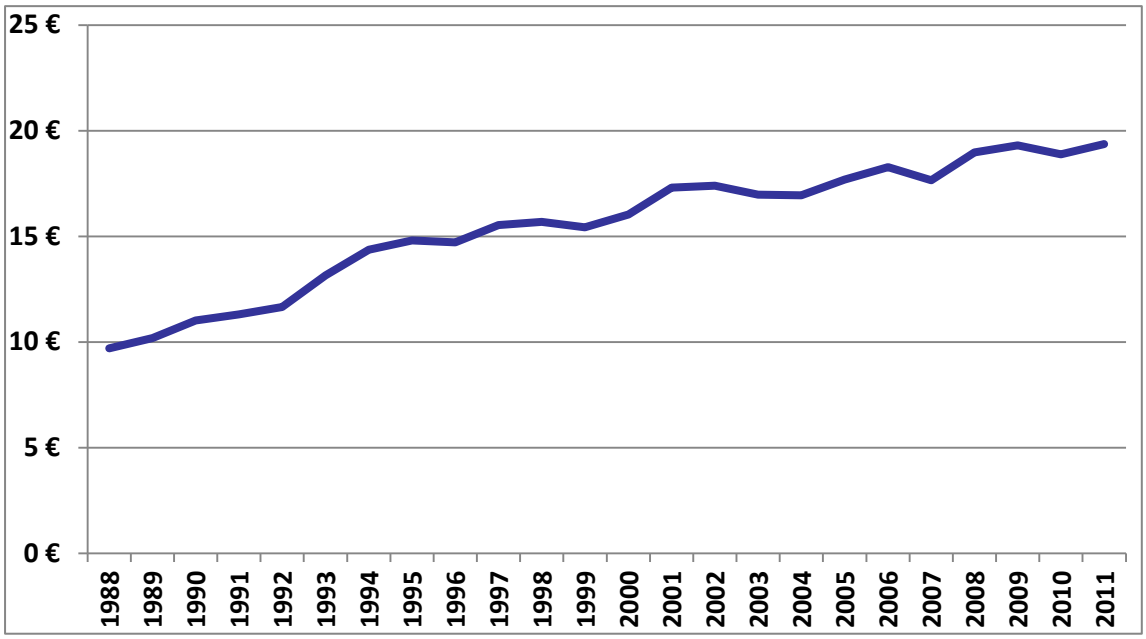
		2000	2011
Number of companies		1,600	1,254
Employment		50,000	32,377
Production (thousands of pairs)		108,042	72,072
Exports (thousands of pairs)		94,229	77,566
Export Rate (value)		85.0%	95.9%
Source: APPICAPS			

Outputs and achievements

The Norte Footwear Industry can be perceived as a successful case of adaptation to globalisation and its challenges. There was a global upgrade process in terms of exports, brands and value-added. Today, the Portuguese footwear industry is the second in the world in terms of average prices, only surpassed by the world's main exporter, Italy.

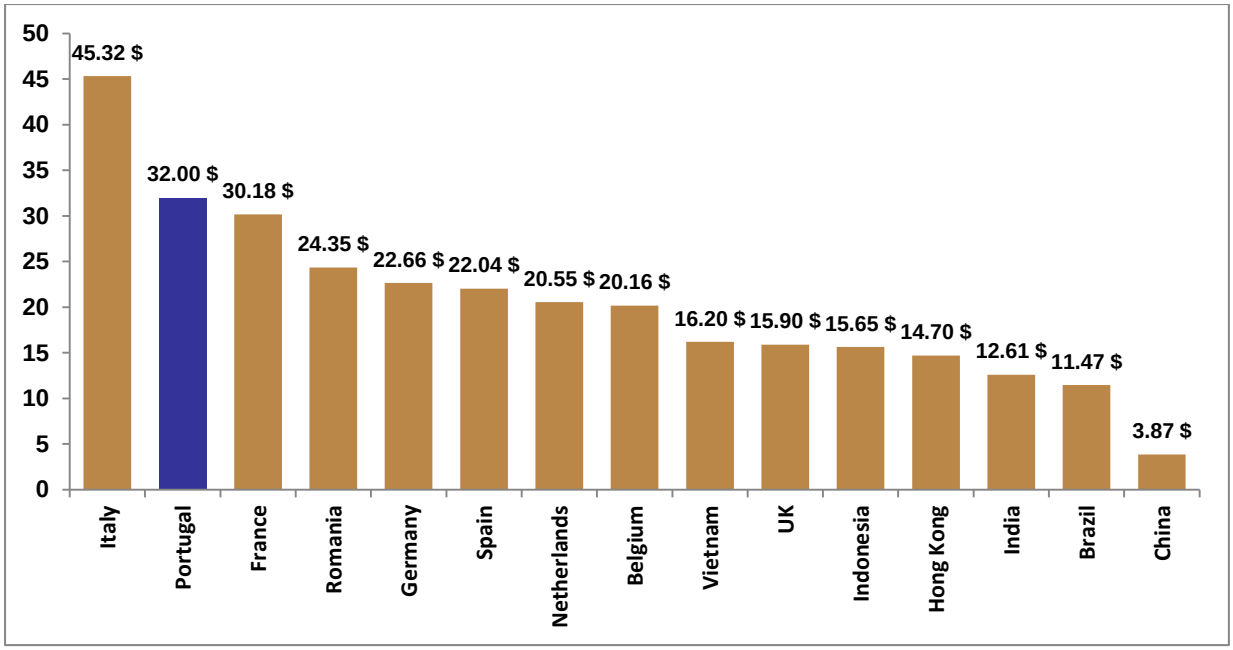
In 2011, the Portuguese footwear industry attained net exports (exports-imports) of €1000 million, ranking first among all Portuguese industries. The industry was able to establish and maintain several world-renowned brands, highly rated even in the most demanding international markets.

Figure 22: Average Price of Portuguese Footwear Exports (Euros per pair)



Source: APICCAPS.

Figure 23: World Top 15 Footwear Exporters - Average Prices 2011



Source: World Footwear Yearbook 2012.

Value-added

The Norte Footwear Industry has provided evidence that it is possible for a traditional sector to overcome dimension, design, international markets or vertical integration problems. The creation of specific brands – FLY LONDON, Pablo Fuster, Foreva, Aerosoles, Cubanas – has allowed footwear companies to successfully enter into highly competitive international markets, being perceived as a benchmark for other Portuguese economic activities. As a consequence, Norte footwear has changed its image of low quality and low-price products to one involving an expensive and fashion-design product.

Conclusions

The Norte footwear industry represents an interesting example of success both for national and regional development. It was possible to join forces at central and local levels in order to improve professional training, design, brand creation and exports. The geographical concentration of companies, the technology centre and professional associations created what can be considered one of the first real clusters[56] in Portugal, involving strategic planning and a 'bottom-up' surge from a small number of entrepreneurs who were able to join efforts to facilitate this case of real success.

However, as Fortunato Frederico (President of APICCAPS and CEO of Kyaia) stated in an interview with the authors, 'the modernisation of our industrial activity was only possible due to European Union funds'.

[56] In the sense of Michael Porter's cluster, in opposition to Alfred Marshal's 'industrial district'.

8.3 Ermida Bridge Project

Summary description

The Ermida Bridge project consisted of the building of a road bridge over the Douro river to connect the four less-developed councils in the Norte region during the 1990s (according to a composite index of 25 socioeconomic indicators developed by the CCDR-N): the municipalities consisted of Baião, Mesão Frio (right bank), Resende and Cinfães (left bank).

Due to the high cost of the work, no Cost-Benefit Analysis (CBA) could justify the investment. But all of the Norte municipalities devoted a part of their budget to help finance the bridge. This led to a reinforcement of the social capital in the region and was a symbol of cooperation amongst Norte's 84 councils.

Underlying problem and context

In the last decade of the 20th century, there was still no bridge over the Douro river in the stretch between Mosteiró and Régua (about 30 km). In this region, orography is very varied, and therefore road-building is extremely expensive due to the 1000 metres difference in altitude between the top of the Serra do Marão and the Carrapatelo dam as well as the deep water lines.

The population was dispersed into dozens of villages, each with more than 10 children who had to walk miles to school every day. Despite the existence of extremely good quality agricultural land, there were virtually no manufacturers or cooperatives to transform local products. The CCDR-N (Norte Region Development Coordination Commission) supported the 'Eça de Queiroz Foundation', a small cultural centre, with some tourist potential.

These four councils operated as if there were a barrier between them, without any exploitation of scale economies whatsoever in the areas of facilities and economic activity. As a consequence, the idea of building a bridge here was viewed as a major contribution to the development of these four councils, particularly in terms of education and economic growth.

Detailed description

The total investment budget amounted to 2.8 billion escudos (€14 million in 2000 prices), 75 percent of which were ERDF-funded (1.8 billion escudos), under the Norte 2000-2006 ERDF RP* programme (Norte region CSF II 1994-1999 specific programme), more precisely Sub-Programme B (Regional Development). The Ermida Bridge was one of 11 special works built through this OP.[57] However, it stands out because it had the greatest investment volume of the ERDF RP* programme OP.

The project allowed four interior municipalities to be connected more quickly and efficiently (decreasing time-distance ratios), more precisely National Roads 108 and 222. Thus, despite the individual objectives of the municipalities, the work contributed to wider regional goals: the improvement of regional infrastructure, the exploitation of scale economies and a viable connection between urban centres.

[57] The programme was not originally intended to help in the construction of any special works, whether they were bridges, viaducts, tunnels, dams, dykes or any other.

The project's main objectives can be summarised as follows:

- enhancement of regional and local accessibility (improving the connectivity between national roads and safety and road conditions);
- improvement in the connectivity between four urban centres, decreasing time-distance ratios;
- increase in the population's mobility - mainly school-aged children; and
- increase in scale and agglomeration economies.

This bridge was a very desired investment for the region. Local authorities and stakeholders, particularly Albino Brito de Matos, the former Resende Municipality Mayor, had tried numerous times to raise national government awareness of their problems, but due to a lack of funding the work was only possible with support from EU Cohesion policy.

The national counterpart was guaranteed on one side by funds from PIDDAC (the Central Administration Investment Programme), from the 'National Roads Council' and from the Ministry of Public Works, and on the other side by the budgets of the region's municipalities. They were required to give up part of their budget to ensure the amount of ERDF investment needed. Therefore, the Ermida Bridge construction provides an example of mutualism and cooperation towards a common goal, a case where regional interests prevailed over an individualist logic.

Finally, on 4 July 1998, the 430-metre-long and 72-metre-high bridge was opened for the circulation of traffic.

Outputs and achievements

The output planned and achieved with this project was the design and construction of a bridge over the Douro river, in order to improve infra-regional connectivity. The high level of cooperation among all 81 Norte municipalities was determinant for the fulfilment of this achievement. This meant a lot in terms of governance and social capital in a society not well known for its capacity to work together.

The works to improve access to the bridge were not entirely achieved. The definitive route of the road linking Baião to Ermida Bridge was only opened in 2008, with a connection to the A4 motorway. The improvement in the connection between the Ermida Bridge and Resende was also delayed, and only started in 2010.[58]

Value-added

The value-added for this project is two-fold:

- Firstly, the technical and engineering expertise that enabled the construction of a bridge in a particularly difficult terrain and within an 'acceptable' budget.
- Secondly, the possibility to get all the municipalities of the Norte region working together - and even sacrificing part of their financial resources - in order to support a less-developed territory. This contributed towards enhancing the identity of Norte, to improving governance and to strengthening the CCDR-N leadership.

[58] To date, these interventions remain uncompleted.

Conclusions

The Ermida Bridge construction was at the time a very important project at local and regional levels, since it reflected not only the local population's needs but the joint effort of the main regional stakeholders (the CCDR-N and municipalities).

One of Portugal's major issues since 1989 - and one of the areas with the highest degree of ERDF support - was its weak accessibility and the poor quality of road infrastructure. The Ermida Bridge is an example of what has been done to connect urban centres and to diminish time-distance ratios all over the country.

And for the Baião, Mesão Frio, Resende and Cinfães populations, this was more than a bridge, as it represented the 'fall' of a natural barrier that had been dreamed of and desired for generations.

8.4 The Route of the Romanesque

Summary description

Created in 1998 and established in 2006,[59] the Route of the Romanesque is a VALSOUSA[60] (Sousa River Valley Municipalities Association) project, extended in 2010 to the remaining municipalities of the Tâmega NUTS 3.[61]

Although anchored in a set of monuments of great value and exceptional characteristics, the Route of Romanesque grew up to be more than a cultural and heritage promotion project. In fact, it can be considered a true regional development project, only possible with Cohesion policy funding.

Therefore, the Route of the Romanesque's mission is to contribute to the sustainable development of the Tâmega and Sousa region through the following goals:

- promote regional planning through the enhancement of the heritage;
- create a new productive sector, capable of generating wealth;
- change the internal and external image of the region;
- qualify the human resources of the region; and
- ensure qualified employability.

Underlying problem and context

Originally a heritage conservation and enhancement project inserted into a broader instrument for integrated territorial action (AIBT), the Route of the Romanesque has developed into a regional development initiative. Thus, the project success and its shift towards a more regional development approach can be explained by four reasons.

[59] This expression means that between 1998 and 2006 the Route existed within the operations of the VALSOUSA management body.

[60] Composed by the following municipalities: Felgueiras, Paços de Ferreira, Lousada, Paredes, Penafiel and Castelo de Paiva.

[61] Amarante, Baião, Cinfães, Marco de Canaveses, Celorico de Basto, Penafiel and Resende.

- The general inability of the Sousa River Valley AIBT remaining measures, due to a shift in the context of action. This meant that measures were targeted at an economic and social reality that changed during the CSF III period, a situation not accounted for (it shifted from a situation of almost full employment and economic dynamism in the main sectors to increasingly higher unemployment rates and loss of competitiveness – a business structure based on micro-firms without a sectoral logic).
- The maturation time enabled by the intervention model nature. Between its creation and formal establishment, there was an 'incubation' period of eight years that gave time for a structured and well-conducted development. This process allowed the perpetuation of the Route beyond the CSF III period.
- Cooperation between local stakeholders. One of the factors for the Route's success is the coordination created between municipalities, municipalities' associations, CCDR-Norte, local associations and NGOs, firms and business associations, schools and others actors, all aware of the Route's relevance for regional strategies/goals.
- Level of embeddedness with the territory. Also determinant to its success is the degree to which the Route relates with its territory. Such a cooperation dynamic is only possible due to theme of the route – existing common ground between all municipalities around Romanesque heritage.

Detailed description

The foundations of the Route of the Romanesque were formed in 1998 as a partnership between VALSOUSA, the former IPPAR (Portuguese Institute of Architectural Heritage) and the extinct DGEMN (General Directorate of National Buildings and Monuments), with the drafting of a series of preliminary reports intended to identify, inventory and select the monuments that defined the Romanesque heritage and could be suitable for recovery and be part of the route. This was done in the PROSOUSA (Programme for the Integrated Development of the Sousa River Valley Region) context, an ERDF-based financing instrument (part of the 1994-1999 CSF) specifically for the Sousa River Valley area.

Financial constraints and proximity to the CSF end hindered the project development at that time. It was the next (2000-2006) CSF that allowed the project continuation, this time inserted and financed through what was called an AIBT[62] (Territory-Based Integrated Action). This model of intervention for the Sousa River Valley[63] comprised two main axes: (i) firm relocation and planning and (ii) Route of the Romanesque and heritage recovery. Within a context of loss of firm dynamism and issues related to the rise of unemployment, the Route of the Romanesque project became the Sousa River Valley's main project for the 2000-2006 period.

The project core investments occurred throughout the CSF III period, particularly regarding heritage conservation and enhancement. Despite the inherent relevance of these investments, for the Route of the Romanesque team, the most important project was the 2006 'Communication,

[62] AIBT were included in Axis 2 of the 2000-2006 Norte ROP. There were AIBT for 4 regions: Douro, Minho-Lima, Entre Douro e Vouga and Sousa River Valley.

[63] Collaboration between VALSOUSA, CCDR-N (Norte Regional Coordination and Development Commission), the extinct DGEMN, Tourism Institute of Portugal, the former IPPAR, the extinct Association for Touristic Development in the Northern Region, the former GAT (Sousa River Valley Office of Technical Support) and the Porto Diocese.

Information and Interpretation Programme'. It gave the Route substance, meaning and coherence, allowing it to be more than a heritage conservation and enhancement project. This programme permitted the establishment of a full-time management team as well as the publication of tourism guides, brochures, maps, promotional material, information boards and centres, road signaling and website design – in short, the official establishment of the Route of the Romanesque brand.

Paraphrasing the Route Director (Dra. Rosário Machado), this project was only possible due to the nature of the intervention model. It allowed the route to develop slowly and to mature optimally within the region. More recently (already in the 2007-2013 period), the project expanded to the remaining Tâmega NUTS 3 municipalities, a sign of general acknowledgment of the route's relevance for the whole region.

Despite the change in the intervention model for the 2007-2013 period, the Route of the Romanesque continues its development obtaining EU funding to enhance and improve its actions. Special mention must be made of the PROVERE initiative,[64] a strategic partnership between the Route and local stakeholders for the cultural, touristic and economic promotion and dissemination of the Route and the region; and of the e-CREATE initiative,[65] an INTERREG IV C project that aims to increase the competitiveness of service-oriented tourism enterprises in rural areas along cultural routes by promoting the use of new technologies.

The Route management team's current focus is to improve the relationship/interactivity between the Route heritage and the local surroundings, which means improving the accessibility and mobility of all citizens to the monuments, contributing to the conservation of the natural environment (rivers, forest and agricultural areas), strengthening the regional identity around the Romanesque brand, and raising the awareness of the school community about the importance of the historic and artistic heritage.

Table 29: Route of the Romanesque core investments

Project	Context/Period	Period	Funding
Conservation, protection and enhancement – Phase 1	Sousa River Valley AIBT	2000-2006	€2,244,590 (75% ERDF)
Training programme for the route promotion and development	Sousa River Valley AIBT	2000-2006	€421,097 (75% ESF)
Conservation, protection and enhancement – Phase 2	Sousa River Valley AIBT	2000-2006	€794,901 (75% ERDF)

[64] Programmes for the Economic Enhancement of Endogenous Resources are a specific instrument particularly designed for areas with lower development opportunities because of their low density (of population, institutions or economic activity). They are intended to stimulate economic initiatives aimed at improving the competitiveness of these areas, adding value to local resources (natural resources, historic heritage, traditional knowledge, etc).

[65] The e-CREATE project intends, through the identification of good practices, to elaborate policy recommendations addressing decision-makers at local and regional levels in order to provide a basis for the enhancement of supply-side-oriented policies. It involves 13 partners from nine EU Member States and Norway and runs from January 2012 to December 2014.

Project	Context/Period	Period	Funding
Redefinition and restoration of the Pombeiro Monastery Yard	Sousa River Valley AIBT	2000-2006	€1,293,470 (75% ERDF)
Abragão civic centre urban intervention	Sousa River Valley AIBT	2000-2006	€574,455 (75% ERDF)
Mosteiro de Paço de Sousa Church recovery and conservation and urban requalification of the surrounding urban area	Sousa River Valley AIBT	2000-2006	€1,244,218 (75% ERDF)
Studies for the enhancement and protection of the Route of the Romanesque monuments surroundings – Phase 1 and 2	Sousa River Valley AIBT	2000-2006	€94,501 (75% ERDF)
Communication, information and interpretation programme	Sousa River Valley AIBT	2000-2006	€605,800 (75% ERDF)
Studies to define the model of management and economic and financial viability	Sousa River Valley AIBT	2000-2006	€90,145 (75% ERDF)
Sectoral plan for accessibility promotion	NOP PH (Human Potential)	2007-2013	€428,200 (71,65% ESF)
Conservation, protection and enhancement – RRVS Information Centres – Overbooking	Sousa River Valley AIBT	2000-2006	€94,080 (75% ERDF)
PROVERE Partnership (Endogenous Resources Economic Enhancement Programme) – Preparatory Actions	Norte ROP	2007-2013	€60,000 (70% ERDF)
Tourism enhancement and qualification programme (in execution)	Norte ROP	2007-2013	€985,545 (71% ERDF)
Stimulation, coordination, monitoring and management of the PROVERE Partnership – Phase 1 (in execution)	Norte ROP	2007-2013	€400,946 (80% ERDF)
Mural Painting on the Route of the Romanesque (in execution)	PRODER (Rural Development Programme)	2007-2013	€68,528 (60% EAGGF)
Heritage conservation and restoration – Phase 1 (in execution)	Norte ROP	2007-2013	€1,273,384 (80% ERDF)
Implementation of the monitoring system and certification of the tourism and cultural product Route of the Romanesque (in execution)	Norte ROP	2007-2013	€343,359 (80% ERDF)
Protection and promotion of the region's vernacular and intangible heritage – Phase 1 (in execution)	Norte ROP	2007-2013	€101,398 (80% ERDF)
Route of the Romanesque – Tâmega – Phase 1 (in execution)	Norte ROP	2007-2013	€2,950,575 (80% ERDF)
Cultural and touristic promotion (in execution)	Norte ROP	2007-2013	€3,360,113 (80% ERDF)
Project e-CREATE – cultural routes, entrepreneurship and technology promotion (in execution)	INTERREG IVC	2007-2013	€1,917,546 (85% ERDF)
Stimulation, coordination, monitoring and management of the PROVERE Partnership – Phase 2 (awaiting approval)	Norte ROP	2007-2013	€161,283 (80% ERDF)
Heritage conservation and restoration – Phase 2 (awaiting approval)	Norte ROP	2007-2013	€4,862,655 (80% ERDF)
Protection and promotion of the region's vernacular and intangible heritage – Phase 2 (awaiting approval)	Norte ROP	2007-2013	€46,805 (80% ERDF)

Project	Context/Period	Period	Funding
Route of the Romanesque – Tâmega – Phase 2 (awaiting approval)	Norte ROP	2007-2013	€2,095,623 (80% ERDF)

Outputs and achievements

Overall, the Route of the Romanesque has developed into a successful initiative, at the start addressing exclusively heritage conservation and enhancement issues and subsequently building up to become a broader territorial development project/strategy.

In terms of outputs, the Route created 18 specialised jobs in its management team and managed a total investment of €7,945 thousand, while €9,580 thousand are currently being invested and €7,166 are awaiting approval (total of €24,692 thousand). Regarding the Route's specific actions, a total of 13 projects were initiated (one in CSF II; 10 in CSF III; and two in the NSRF), of which nine are still being implemented and four are awaiting approval.

Interventions encompassed 21 monuments all across the Tâmega NUTS 3 area, including monasteries, churches, bridges, towers and memorials. It was possible to perform most of the planned infrastructural interventions on the monuments and their surroundings, but a few monuments managed by the former IPPAR still require work, as well as maintenance and a few other actions for the conservation and enhancement of the monuments' surroundings. With regard to the project's non-material outputs, the highlights include the creation of four information centres, the website, a promotional DVD, informational maps and brochures, Route and road signalling, and training and awareness sessions in local schools.

Due to its meaningful results and positive effects, the Route achieved a greater visibility at the regional level. The project was resized in order to integrate new work areas and expand their effects to the remaining Tâmega municipalities. As a result and as preparation for the 2007-2013 NSRF, the Route grew, formalising a full-time management body. In fact, its relevance has increased, and today it is significant for regional development.

Throughout the years, the Route has achieved a high national and international profile. In 2010, the Route was distinguished with the most prestigious national award for the tourism sector, the 'Tourism of Portugal Award' in the category of 'Public Rehabilitation Project'.[66] Later that year, the Route was awarded the 'XXXV Tourist, Hotel, Restaurant and Catering International Trophy',[67] granted by the Editorial Ofice and the Trade Leaders' Club. At the EU level, the Route is part of the association 'Romanesque Europe', based in Aguilar del Campo, Spain, and of the association 'Trans-Romanica', based in Germany.

Value-added

The Route of the Romanesque project's main outcome is the way it worked with the territory, its level of embeddedness, and also the high degree of cooperation achieved between stakeholders

[66] The award recognises interventions of a physical nature by public entities, which contribute significantly to quality increases in the tourism offer and enhance the attraction of a tourism destination.

[67] It annually distinguishes the most relevant companies and institutions in the tourism sector on a worldwide scale.

(regional and national entities, technical teams, local actors, residents and visitors), thus influencing individual and collective regional strategic action.

It adopts a broader view of regional development, supporting the idea that unique territorial characteristics can be protected, enhanced and promoted.

Conclusions

The Route of the Romanesque is a very interesting project with unique characteristics. Its success is determinant for the Tâmega regional development and its work and perseverance can serve as an example for the whole Norte region and the country.

Nonetheless, it should be noted that without EU financial support the Route of the Romanesque project would not have achieved its current size and capacity or the amount of physical intervention in monuments.

9. ANNEX II: STRUCTURE OF PROGRAMMES 1989-2013 IN NORTE

CSF I 1989-1993

Programme	Sub-Programme	ERDF expenditure
Science	I. Promotion of R&D Infrastructure in Priority Axes	22,062
	II. Advanced Training and Innovation in Priority Axes	4,089
	III. Global Support to Scientific and Technological Systems	3,560
ENVIREG	1 - Sanitation, Planning and Protection of Biotopes in Coastal Areas	26,747
	3 - Maritime Pollution	1,164
	4 - Hazardous Waste	72
EUROFORM	ERDF	404
HORIZON	Creation/Adaptation of Socio-Professional Integration Infrastructure	334
INTERREG	P1 - Integration and Articulation Roads	52,328
	P4 - Recovery of Tourism Heritage	8,475
	P5 - Conservation of Water Resources and Sanitation	1,325
	P6 – Cross-border Cooperation Actions	7,358
NOW	Services Installation	464
OP Alto Minho	1. Infrastructures	32,937
	2. Productive Activity Support and SME Services	536
	5. Execution and Monitoring	937
OP Porto Metropolitan Area	1. Infrastructure	90,362
	2. Productive Activity Support and SME Services	440
	5. Execution and Monitoring	1,344
OP Norte Region	1. Infrastructure	62,189
	2. Productive Activity Support and SME Services	467
	5. Execution and Monitoring	1,284
OP Trás-os-Montes e Alto Douro	1. Infrastructure	71,800
	2. Productive Activity Support and SME Services	1,012
	5. Execution and Monitoring	938
OP Vale do Ave	1. Infrastructure	39,996
	2. Productive Activity Support and Services	566
	4. Execution and Monitoring	799
	5. SINDAVE	25,227
PEDIP 1	PEDIP 1.1 - Basic Infrastructure	95,665
	PEDIP 1.2 - Technological Infrastructure	51,324
PERIFRA	NORTE - Textile services centre	1,364
PNICIAP	Economic Promotion Agents	266
	SIBR	118,616
	SIFIT	22,327
	SIFIT II	8,577
	SIPE	1,672
PODAEEF	Measures to Employment Promoting	2,418
	Personnel Employment and Training Structures	6,070
	Training of Trainers and Strengthening of Training Structures	8,756
PRISMA	PRISMA	9,443
PRODAC	Regional Accessibility	11,193
	Porto Metropolitan Area Accessibility	58,643
	Continent Accessibility	111,815

Programme	Sub-Programme	ERDF expenditure
PRODEP	Construction and Equipping of New Classrooms	84,666
	Vocational Education	11,589
	Higher Education	56,710
PRODIATEC	1 - Cultural Facilities of Tourist Interest	16,416
	2 - Tourist Accommodation	4,137
RDP Projects 94 - 99	RDP Projects 94 - 99	2,449
PROTEDE	1 - Transport and Distribution of Electricity	14,786
	2 - Natural Gas Distribution	6,557
	4 - Electricity Generation through Renewable Energy	3,472
PROTER	PROTER	20,990
RECHAR	RECHAR	2,836
Regulation 3904/92	Regulation 3904/92	2,196
SIMC	Incentive Scheme for Trade Modernisation	12,470
SNIG	Experimental Actions for Local Development Centres - Pilot	88
STAR	SISAT	7,316
	STAR	15,309
STRIDE	Production System Diversification - Science and Technology Parks	6,886
	Promotion of National Technological Capacity	2,088
	Science and Technology System Internationalisation	3,971
TELEMATIQUE	1 - Support the Use of Advanced Telecommunications Services in SMEs	6,229
	2 - Support to Services Development in the Public Sector	2,811
VALOREN	SIURE	2,368
	VALOREN	16,866

Expenditure calculated in thousands of euros in 2000 prices.

CSF II 1994-1999

Programme	Sub-Programme	ERDF expenditure
Regional and Local Boosting	Environment	70,925
	Urban Revitalisation	31,793
Knowledge and Education Basis	Science and Technology	46,990
	Education	243,389
Employment and Human Resources Development	Support for Employment and Human Resources Development	938
Vocational Training and Employment	Support for Training and Human Resources Management	21,535
	Training of Public Administration	69
Development Support Infrastructure	Energy	72,584
	Telecommunications	34,523
	Transport	374,516
INTERREG II	Energy Networks	12,801
	Environment and Architectural Heritage	12,212
	Socio-economic Development	16,848
	Improve Border Permeability	59,448
Economic	Trade and Services	62,982

Programme	Sub-Programme	ERDF expenditure
Modernisation	Industry	485,002
	Fisheries	7,286
	Tourism and Cultural Heritage	104,212
NORTE	Regional and Local Boosting	43,567
	Regional Structuration	243,838
	Local Investments	310,850
Fishery	Fishery	637
SME	Competitiveness Improvement and SME Modernisation	58,865
	Improving the Business Environment for SMEs	1,475
Regional Development Potential Promotion	Rebalancing Specific Actions	69,296
	Regional and Local Incentives	138,461
	Local Development Initiatives	19,976
RECHAR II	RECHAR II	4,808
RETEX	Access to Capital	8,919
	Internationalisation and Image Promotion	107,847
	Productivity and Technical Assistance	85,927
Health and Social Integration	Social and Economic Integration of Disadvantaged Social Groups	26,175
	Health	349,641
URBAN	Gondomar-S. Pedro da Cova	6,848
	Porto-Vale de Campanhã	22,871

Expenditure calculated in thousands of euros in 2000 prices.

CSF III 2000-2006

Programme	Priority Axis	ERDF expenditure
Employment, Training and Social Development	Promotion of Social Development	13,538
	Promotion of Equity and Effectiveness of Employment and Training Policies	7,074
URBAN Porto / Gondomar	Technical Assistance	1,091
	Building Cohesion in Urban Space	4,610
	Social Inclusion and Professional Enhancement	676
	Social, Cultural and Sports Revitalisation	1,242
Accessibility and Transportation	Integration of the Territory Structuring Corridors in the European Transport Network	34,544
	Promotion of Quality, Efficiency and Safety of the Transport System	22,338
	National Cohesion Strengthening	173,371
	Strengthening of Intermodal Coordination	111,564
Agriculture and Rural Development	Improve Agro-Forestry Competitiveness and Rural Sustainability	3,072
Science and Innovation 2010	Science and Higher Education	30,846
	Mobilisation of Scientific, Technological and Innovative Development for Public Policies	1,823
	Science and Innovation for Technological Development	12,927
	Development Scientific, Technologic and Innovation System	37,406
	Fostering Scientific and Technological Culture	2,180
Culture	Enable the Access to Culture Goods	25,929

Programme	Priority Axis	ERDF expenditure
	Enhance Historic and Cultural Heritage	38,735
Environment	Sustainable Management of Natural Resources	36,726
	Environment Integration in Economic and Social Activities	44,812
Norte	Integrated territorial-based actions	157,648
	Support to Investment of Municipal and Intermunicipal Interest	672,427
	Regionally Decentralized Central Government Interventions	855,993
Education	Technical Assistance	831
	Youngsters Initial Qualifying Training	72,368
	Learning Society	33,779
Fisheries	Creating Conditions for Greater Sectoral Competitiveness	508
Health	Improving Access to Quality Health Care	105,721
	Promote Health and Prevent Disease	17,071
	Promoting New Partnerships and New Actors in Health	5,835
Information Society	The Knowledge Society as a Tool to Support Territorial Decentralisation	3,594
	Skills Development	6,403
	Open State: Modernising Public Administration	123
	Integrated Innovation in ICT	1,242
	Massify Access the Knowledge Society	765
	Digital Portugal	17,213

Expenditure calculated in thousands of euros in 2000 prices.

NSRF 2007-2013

Programme	Measure name	€ERDF expenditure
Competitiveness Factors	Knowledge and Technological Development	116,838
	Innovation and Renewal of Corporate Model and Pattern of Specialisation	414,545
	Funding and Sharing of Innovation Risk	85,764
	Efficient, Good-Quality Public Administration	60,764
	Business Development Networks and Collective Action	39,224
Territory Enhancement	Infrastructure for the Connection of Territories	10,576
	National Infrastructure for processing Urban Solid Waste	40,432
	Development of the National Urban System	300,285
Human Potential	ESF funding	
ON.2	North Portugal Regional Operational Programme	336,869

2010 data - Expenditure calculated in thousands of euros in 2000 prices.

10. ANNEX III: REPORTED ACHIEVEMENTS

The National Operational Programmes reports only present achievements on a national basis.

10.1 1989-1993 Regional Operational Programmes (PROAVE, PROAM, PRORAMP, PRORN and PROTAD)

The regional programmes comprised in CSF I did not have a formal monitoring system to track achievements. Information on achievements is thus confined to a limited number of outputs.

	Executed
PROAVE	
Sub-Programme 1	
Km of constructed municipal roads	29km
Nº of large dimension works of art (bridges, overpasses or tunnels)	3
Nº of multiple purpose damns constructed	1
Nº of constructed Wastewater Treatment Plants	3
Km of constructed sewage interceptors	30km
Nº of MSW treatment facilities constructed	1
Nº of libraries constructed	1
Nº of sports facilities constructed	2
Nº of interventions in historic centres (Guimarães)	1
Nº of support studies	14
Sub-Programme 2	
Nº of productive activity support projects	4
Sub-Programme 3	
Nº of industry workers covered by training actions	475
Nº of trainees in ICT training actions	628
Nº of vocational schools created	4
Sub-Programme 4	
Nº of execution and control projects	3
Nº of advertising and publicity actions	3
Nº of congresses supported	1
Sub-Programme 5	
Nº of interventions in the SINDAVE sphere	19
PROAM	
Sub-Programme 1	
Km of constructed and benefited municipal roads	140km
Nº of uneven passages constructed	5
Km of constructed water supply network	128km
Km of constructed sewage network	120km
Km of constructed sewage interceptors	16km
Nº of pumping stations constructed	9

Nº of markets constructed	4
Nº industrial areas constructed	3
Nº of municipal pools constructed	5
Nº of sports centres supported	1
Nº of cultural equipment supported	3
Nº of recreational equipment supported	1
Nº of interventions in historic centres	3
Nº municipal master plans supported	9
Nº of construction projects studies supported	13
Nº of regional mapping actions	1
Sub-Programme 2	
Nº of development support offices supported	6
Sub-Programme 3	
Nº of trainees in 'New Local Actors' training actions	18
Nº of training hours in 'New Local Actors' training actions	955
Nº of trainees in 'Dynamisation and Tourist Animation' training actions	82
Nº of training hours in 'Dynamisation and Tourist Animation' training actions	540
Nº of trainees in 'Environmental Management and Preservation' training actions	24
Nº of training hours in 'Environmental Management and Preservation' training actions	414
Nº of trainees in 'Local Administration Agents' training actions	17
Nº of training hours in 'Local Administration Agents' training actions	168
Nº of trainees in other training actions	178
Nº of training hours in other training actions	215
Sub-Programme 4	
Nº of tourism support, wine sector and handicraft promotion actions	20
Sub-Programme 5	
Nº of execution and control actions	3
Nº of support and advertising studies	11
PRORAMP	
Sub-Programme 1	
Km of constructed and benefited roads	86km
Nº of uneven passages constructed	13
Km of constructed water supply network	220km
Km of constructed intake pipes	7km
Nº of constructed water reservoirs	26
Nº of water supply remote management and control projects	1
Km of constructed manifolds networks	145km
Nº of projects for the regularisation of water streams	1
Nº of wastewater dispersal projects	1
Nº of constructed or benefited wastewater treatment plants	5
Nº of constructed pumping stations	10

Km of wastewater dispersal networks constructed	10km
Nº of constructed hospitals	1
Nº of constructed continued care nursing homes	1
Nº of constructed of benefited recreational and sports equipment	4
Nº of other regional interest equipment constructed or benefited	12
Nº of technical support studies conducted	13
Sub-Programme 2	
Nº of productive activity support projects	8
Sub-Programme 3	
Nº of trainees in 'Cultural Animation and Heritage Protection' training actions	444
Nº of training hours in 'Cultural Animation and Heritage Protection' training actions	8,067
Nº of trainees in 'Local and Regional Administration Agents' training actions	624
Nº of training hours in 'Local and Regional Administration Agents' training actions	1,822
Nº of trainees in other training actions	188
Nº of training hours in other training actions	1,256
Sub-Programme 4	
Nº of projects supporting urban green areas protection, local organisations' activities, rural municipalities' enhancement and the fishing sector	17
Sub-Programme 5	
Nº of execution and control actions	3
Nº of support and advertising studies	4
PRORN	
Sub-Programme 1	
Km of constructed and benefited roads	77.5km
Km of constructed urban roads	21km
Nº of uneven passages constructed	4
Km of constructed or benefited water supply network	260km
Km of constructed water mains	30km
Nº of water abstractions constructed	2
Nº of water treatment plants constructed	5
Nº of water reservoirs constructed	26
Nº of pumping stations constructed	8
Km of constructed sewage networks	75km
Km of wastewater dispersal networks constructed	5.5km
Nº of constructed or benefited wastewater treatment plants	8
Nº of sewage pumping stations constructed	7
Nº of landfills benefited	1
Nº of decontaminated rivers	1
Nº of equipment for productive support constructed or benefited	4
Nº of equipment for industry support constructed or benefited	4
Nº of sports equipment constructed or benefited	16

Nº of culture and recreational equipment constructed or benefited	9
Km of constructed and benefited municipal and local roads	14km
Km of benefited urban streets	5km
Km of constructed local water supply and sewage network	12km
Nº of small water abstractions constructed	2
Nº of small water reservoirs constructed	3
Nº of small pumping stations constructed	2
Nº of small wastewater treatment plants constructed	2
Nº of small equipment for productive support constructed or benefited	4
Nº of municipal master plans supported	21
Nº of technical projects supported	1
Sub-Programme 2	
Nº of productive activity support projects	7
Sub-Programme 3	
Nº of trainees in 'New Local Actors' training actions	75
Nº of training hours in 'New Local Actors' training actions	5,823
Nº of trainees in 'Local Administration Agents' training actions	99
Nº of training hours in 'Local Administration Agents' training actions	196
Nº of trainees in 'Environmental Management and Preservation' training actions	13
Nº of training hours in 'Environmental Management and Preservation' training actions	456
Nº of trainees in 'Cultural and Tourist Animation' training actions	13
Nº of training hours in 'Cultural and Tourist Animation' training actions	60
Sub-Programme 4	
Nº of tourism support, wine sector and natural and historic heritage promotion actions	27
Sub-Programme 5	
Nº of execution and control actions	3
Nº of support and advertising studies	14
PROTAD	
Sub-Programme 1	
Km of constructed and benefited roads	285km
Nº of bridges constructed	7
Nº of transport terminals constructed	2
Km of constructed or benefited water supply network	134km
Nº of dams constructed	4
Nº of water treatment plants constructed	9
Nº of water reservoirs constructed	27
Km of constructed or benefited sewage network	83km
Nº of wastewater treatment plants constructed	4
Nº of primary sewage treatment systems constructed	20
Nº of municipal markets constructed	4
Nº of industry support infrastructures constructed	6

Nº of sports equipment constructed	10
Nº of recreational and cultural equipment constructed	12
Area (ha) of urban spaces recovered	14ha
Nº of interventions in urban areas	6
Nº of municipal master plans supported	36
Nº of technical projects supported	3
Sub-Programme 2	
Nº of productive activity support projects	16
Sub-Programme 3	
Nº of trainees in 'Specific Areas' training actions	352
Nº of training hours in 'Specific Areas' training actions	1,067
Nº of trainees in 'Local and Regional Administration Agents' training actions	159
Nº of training hours in 'Local and Regional Administration Agents' training actions	677
Nº of trainees in 'Cultural Animation and Heritage Preservation' training actions	56
Nº of training hours in 'Cultural Animation and Heritage Preservation' training actions	2,362
Nº of trainees in 'New Local Actors' training actions	40
Nº of training hours in 'New Local Actors' training actions	1,780
Sub-Programme 4	
Nº of actions for indigenous breeds development supported	4
Nº of studies for forest development supported	2
Nº of projects for the preservation of classified areas	3
Nº of tourism development projects	3
Nº of other agriculture and rural development projects	7
Sub-Programme 5	
Nº of execution and control actions	3
Nº of support and advertising studies	6

10.2 1994-1999 Regional Operational Programme (PRONORTE)

It is important to note that, despite their indisputable relevance as the first means of achievements-tracking, the 1994-1999 PRONORTE monitoring system presents two major problems:

The set of quantified targets is not completely understandable and should be more exhaustive given the programme's various domains of intervention. This prevents a proper assessment of effectiveness.

There are gaps in the availability of information on physical indicators, particularly concerning their achievement at specific times.

	Targeted	Executed
Accessibility		
Sub-Programme A		
Municipal road network construction and upgrading	450 km	1,448 km
Urban road network construction and upgrading – interventions in urban main axes and circulars	0 km	20,517 km
Transport hosting infrastructure	0	2
Works of art (tunnels, bridges, overpasses)	0	5
Sub-Programme B		
Intermunicipal, national and regional road networks construction and upgrading	250 km	308 km
Urban road network construction and upgrading – interventions in urban main axes and circulars	0 km	164 km
Transport-hosting infrastructure	5	1
Works of art (tunnels, bridges, overpasses)	0	6
Environment		
Sub-Programme A		
Water supply networks construction	700 km	1,695 km
Water reservoirs	0	97
Water treatment plants	0	12
Pumping stations	0	25
Water abstraction	0	23
Sewer networks construction	400 km	607 km
Stormwater networks	0 km	62 km
Wastewater treatment plant construction	20	18
Septic tanks	0	52
Pumping stations	0	7
Municipal solid waste treatment plant construction	4	0
Transfer centres	0	1
Recycling centres	0	4
Sub-Programme B		
Water supply networks construction	500 km	574 km
Water reservoirs	0	69
Water treatment plants	0	13
Pumping stations	0	14
Water abstraction	0	8
Dams	0	4
Sewer networks construction	150 km	443 km
Stormwater networks	0 km	33 km
Wastewater treatment plant construction	15	20
Pumping stations	0	15
Municipal solid waste treatment plant construction	10	2

Transfer centres	0	2
Recycling centres	0	2
Ecopoints	0	11
Equipment		
Sub-Programme A		
Industrial areas construction and extension	15	19
Cultural or touristic infrastructure	15	27
School facilities upgrading and extension	0	68
Sports infrastructure	0	87
Economic activity support infrastructure	0	11
Urban regeneration interventions	0	53
Heritage recovery interventions	0	3
Sub-Programme B		
Industrial areas construction and extension	0	13
Cultural or touristic infrastructure	0	26
School facilities upgrading and extension	18	3
Sports infrastructure	6	43
Economic activity support infrastructure	10	5
Urban regeneration interventions	9	9
Heritage recovery interventions	5	5
Hospital extension	0	1
Fire station construction	0	1
Studies and Technical Projects		
Sub-Programme A		
Studies and projects	30	88
Sub-Programme B		
Studies and projects	9	10
Sub-Programme C		
Measure 1 – Economic Promotion		
Social institutions supported	16	191
Cooperation networks created	7	0
Actions for development promotion supported	150	356
Information and disclosure initiatives supported	20	38
Studies	0	81
Technical support actions	0	59
Measure 2 – Technical Assistance		
Number of hired technicians and support staff	40	46
Disclosure initiatives and number of discussions held	15	148
Number of advertising campaigns	20	43
Number of contractual agreements supported	0	5
Strategic studies supported	0	23

10.3 2000-2006 Regional Operational Programme (ON-Operation Norte OP)

The interest assigned to the efficiency analysis in this CSF is much greater than in the previous one. The list of indicators is much more complete and adequate. Thus, they have meaning and value to serve as a strong support to achievement analysis.

Overall, execution and implementation levels are adjusted to the regional programme's established goals. There are only a few situations where execution values depart from estimated ones.

Measure	Fund	Indicator	Initial Situation	Programmed Goal (2006)	Achievement 2000-2009
Support to Investment of Municipal and Intermunicipal Interest					
1.1 Local Environmental Systems	ERDF	% population served by water supply	63.66	95	98
	ERDF	% population served by wastewater collection and treatment	42.88	90	72
	ERDF	Km water supply network executed (remodelled requalified and built from the ground)	1,700	3,100	4,227
	ERDF	Km drainage network executed (remodelled requalified and built from the ground)	936	2,600	2,734
1.2 Local Transport Networks and Systems	ERDF	Km roads executed (remodelled requalified and built from the ground)	1,707	1,450	1,683
1.3 Territorial Qualification	ERDF	Nº culture and knowledge multivalency centres (remodelled requalified and built from the ground)	31	47	60
	ERDF	Nº and area of cities and towns interventions of urban arrangement	[62;619]	[100;3,450]	[283;3,799]
	ERDF	Nº and area (ha) of business location	[26;100]	[10;45]	[13;65]
1.4 Regional and Local Enhance. and Promotion	ERDF	Nº of actions of cultural and tourist entertainment	94	100	119
	ERDF	Nº of interregional cooperation actions	15	20	45
	ERDF	Nº of business support services actions	19	25	42
	ERDF	Nº actions to promote regional products	17	30	41
1.5 Territorial Dynamics Qualification	ESF	Average Nº of training courses per year	230	1,050	1,090
	ESF	Nº of training courses per year	n.a.	85	87
	ESF	Nº of grants for internships	n.a.	280	274

	ESF	Nº of supports for training courses (e-learning)	n.a.	2	2
	ESF	Nº of studies – human resources management	n.a.	7	6
	ESF	Average Nº of trainees covered per year	3,483	9,200	14,660
	ESF	Average Nº of trainees covered per year – Men	1,557	4,112	7,768
	ESF	Average Nº of trainees covered per year – Women	1,926	5,088	6,892
	ESF	Average Nº of trainees covered per year	n,a,	1,100	2,260
	ESF	Average Nº of trainees covered per year – Men	n,a,	550	839
	ESF	Average Nº of trainees covered per year – Women	n,a,	550	1,421
	ESF	Coverage Rate: Trainees / potential universe	8	31	49
1.6 Territorial Enhancement Specific Actions	ERDF	Nº of actions related to the construction / improvement of cultural facilities	0	8	13
	ERDF	Nº of actions related to the construction / improvement of cultural facilities within the Porto 2001 European Capital of Culture	0	2	2
	ERDF	Nº of actions related to urban renewal and heritage restoration	0	11	21
	ERDF	Nº of actions related to urban renewal and heritage restoration within the Porto 2001 European Capital of Culture	0	7	8
1.9 Sanitation - Priority Intervent. Areas	ERDF	Km water supply network executed (remodelled requalified and built from the ground)	n.a.	250	283
	ERDF	Km drainage network executed (remodelled requalified and built from the ground)	n.a.	600	737
Territory-Based Integrated Actions					
2.1 Douro	ERDF	% population served by urban rehabilitation actions	180,400 Inhabitants	30	30
	ERDF	Area of cities and towns urbanistic arrangements (thousand m^2)	210	550	613
	ERDF	Nº of heritage and landscape enhancement interventions	15	10	11

	ERDF	Nº of interventions for stimulating economic and social development of villages and rural centres	1	17	17
	ERDF	Nº of equipment for enhancing competitiveness	-	7	13
	ERDF	Nº of animation, promotion and dissemination of products actions	-	20	22
2.2 Minho-Lima	ERDF	ha infrastructured to host business	20	63	63
	ERDF	Nº of interventions in buildings of heritage interest recovered / valued	0	9	10
	ERDF	Km of municipal road network benefited	0	57	66
	ERDF	Nº of infrastructure and equipment reconstruction interventions caused by weather damage	0	11	11
	ERDF	Nº of enhancement of heritage and landscape interventions	0	2	3
	ERDF	Nº of works of art interventions	0	13	16
	ERDF	Nº of recreational areas / thermal resorts recovered	1	1	1
	ERDF	Nº and area (thousand m^2) of major operations commercial and historic areas qualification	0	[8; 180]	[8; 199]
2.3 Entre Douro e Vouga	ERDF	ha infrastructured to host business	40	45	129
	ERDF	Nº of promotional and / or enhancement heritage and landscape actions	0	3	6
	ERDF	Nº of infrastructure and equipment reconstruction interventions caused by weather damage	0	12	12
	ERDF	Nº of recreational areas / thermal resorts recovered	0	3	4
2.4 Vale do Sousa	ERDF	ha infrastructured to host business	0	75	91
	ERDF	Km of municipal road network benefited	0	32	51
	ERDF	Nº of infrastructure and equipment reconstruction interventions caused by weather damage	0	12	12
	ERDF	Nº of enhancement of heritage and landscape interventions	0	15	26

	ERDF	Nº of works of art interventions	0	33	36
2.5 Territory Based Integrated Actions - Employability	ESF	Average Nº of training courses per year	n.a.	110	119
	ESF	Average Nº of trainees covered per year	n,a,	1,900	2,371
2.6 Cities Qualification and Metropolitan Requalification	ERDF	Nº of parking spaces created to discourage the use of cars in urban centres	-	1,000	3,698
	ERDF	Km of cycleway created/ extended	-	10	13
	ERDF	Nº of population covered by urban renewal interventions	-	500,000	958,300
Regionally Decentralised Central Government Interventions					
3.1 Pre-School, Primary and Secondary School Infrastr.	ERDF	Nº of primary and secondary new schools	64	47	51
	ERDF	Nº of sports infrastructure in primary and secondary schools	309	75	80
	ERDF	Nº of laboratories in primary and secondary	1,505	100	154
	ERDF	Nº of new classrooms for preschool	0	330	357
	ERDF	Nº of new classrooms in schools	0	260	284
	ERDF	Nº of new rooms, remodeled and / or equipped in secondary and professional education	901	170	226
3.2 Vocational Education	ESF	Nº of trainees in vocational education	47,750	36,720	36,781
	ESF	Nº of training hours	62,075,000	45,182,488	41,181,756
	ESF	Nº of beneficiaries that concluded vocational education with level III qualification	12,598	7,817	9,234
	ESF	Nº of vocational schools supported	372	203	203
3.3 Local Level Employability and Employment Promotion	ESF	% non-long-term unemployed who received active policy actions	11	34.16	35.93
	ESF	Nº of non-long-term unemployed who received active policy actions	5,694	18,500	19,452
	ESF	Nº of jobs created as part of measures to support job creation	709	2,150	3,108
3.4 Support to Local Develop. Investment	ERDF	Nº of supported projects	n.a.	300	374

3.5 Science, Technology and Information	ERDF	Nº of Live Science Centres to benefit	2	6	7
3.6 Knowledge Society	ERDF	Nº of approved actions under integrated projects	-	36	37
	ERDF	Nº of computer software / database developed	-	12	25
	ERDF	Nº of mailboxes in organisms that provide e-mail to employees	n.a.	1,000	5,866
	ERDF	Nº of municipalities involved in integrated processes	-	8	35
	ERDF	Nº of forms available but without online submission in integrated projects	-	24	977
	ERDF	Nº of education institutions involved in integrated projects	-	12	31
	ERDF	Nº of organisms with Internet connection	n.a.	300	365
	ERDF	Nº of organisms that use ICT in common processes	n.a.	300	367
	ERDF	Nº of integrated projects within the Information Society	-	12	20
	ESF	Nº of local networks installed	n.a.	300	390
3.7 ICT Certification	ESF	Nº of training courses	-	563	527
	ESF	Nº of trainees	-	5,632	8,030
	ESF	Nº of certified trainees	-	5,006	7,130
3.8 Health	ERDF	Nº of hospitals with adequate wastewater pre-treatment	n.a.	1	1
	ERDF	Nº of construction interventions, remodelling and adequacy health centres facilities	n.a.	98	127
	ERDF	Nº of remodelling and adequacy of hospital facilities interventions, including day hospitals	n.a.	22	26
	ERDF	Nº of interventions in health centres equipment	n.a.	63	84
	ERDF	Nº of interventions in hospital facilities equipment, including day hospitals	n.a.	22	21
3.9 Culture	ERDF	Nº of castles recovered / enhanced	n.a.	10	10
	ERDF	Nº of audio-visual / multimedia editions	n.a.	2	8

	ERDF	N° of edited publications	n.a.	10	15
	ERDF	N° of archaeological sites recovered / enhanced	n.a.	4	19
3.10 Sports Equipment Development	ERDF	Area (m^2/inh.) of sport infrastructure per capita	2.09	2.11	2.18
	ERDF	Construction/ modernisation of sports equipment (m^2)	-	73,500	328,157
3.11 Agriculture and Rural Development	EAGGF	N° of approved projects	-	7,231	7,047
	EAGGF	Public support (€1000)	-	68,444	65,703
	EAGGF	N° of approved projects for the development and modernisation of productive units of quality products	-	52	48
	EAGGF	N° of approved projects that incentive quality products	-	6	6
	EAGGF	Public support (€1000)	-	5,427	4,643
	EAGGF	N° of forest producers organisations constituted	-	43	43
	EAGGF	N° of entities providing forest services installed	-	1	1
	EAGGF	N° of approved projects to support forest service provision	-	9	3
	EAGGF	N° of approved projects to support biotic risk prevention	-	1	0
	EAGGF	N° of approved projects to support abiotic risk prevention	-	86	114
	EAGGF	Forest area covered by biotic risk prevention plans (ha)	-	1,250	0
	EAGGF	Forest area covered by abiotic risk prevention plans (ha)	-	11,400	2,735,460
	EAGGF	N° of approved projects for the enhancement and conservation of forest areas with public interest	-	1	0
	EAGGF	Forest area of public interest covered by valorisation and conservation projects (ha)	-	25	0
	EAGGF	Public support (€1000)	-	25,500	22,347
	EAGGF	N° of approved projects for the installation of replacement and management services	-	18	18

	EAGGF	Nº of approved projects to develop other services to agriculture	-	124	132
	EAGGF	Public support (€1000)	-	20,663	21,028
	EAGGF	Nº of approved projects for collective and traditional irrigation	-	208	224
	EAGGF	Nº of farmers covered by projects on collective and traditional irrigation	-	10,400	18,774
	EAGGF	Area benefited by traditional and collective irrigation projects (ha)	-	8,800	17,141
	EAGGF	Irrigation network created or benefited under the projects of traditional and collective irrigation (km)	-	320	793
	EAGGF	Nº of rehabilitation and modernisation of irrigation schemes approved projects	-	1	1
	EAGGF	Nº of farmers affected by the rehabilitation and modernisation of irrigation schemes	-	170	170
	EAGGF	Area benefited from rehabilitation and modernisation of irrigation schemes (ha)	-	580	580
	EAGGF	Nº of land consolidation approved projects	-	10	10
	EAGGF	Nº of farmers affected by land consolidation projects	-	12,500	14,423
	EAGGF	Area benefited from consolidation projects (ha)	-	5,500	56,512
	EAGGF	Public support (€1000)	-	97,496	82,916
	EAGGF	Nº of agricultural and rural roads approved projects	-	310	465
	EAGGF	New road network (km)	-	109	0
	EAGGF	Benefited road network (km)	-	75	687
	EAGGF	Nº of farms benefited by the projects of agricultural and rural roads	-	9,200	25,817
	EAGGF	Nº of electrification approved projects	-	523	597
	EAGGF	Linhas de média tensão instaladas (km)	-	8	173
	EAGGF	Low voltage lines installed (km)	-	23	189

	EAGGF	Nº of agricultural and agro-industrial units that benefited from electrification projects	-	700	1.814
	EAGGF	Public support (€1000)	-	42,263	53,946
	EAGGF	Nº of recovery and enhancement of heritage, landscape and rural centres approved projects	-	1,346	1,340
	EAGGF	Nº of conservation of the environment and natural resources approved projects	-	88	79
	EAGGF	Public support (€1000)	-	26,572	27,613
	EAGGF	Nº of approved projects	-	35	37
	EAGGF	Public support (€1000)	-	3,343	3,109
3.12 Fishery - Port Infrastructures	ERDF	Nº of improvement or construction projects in fishing harbours	4	2	2
	ERDF	Nº of studies of spatial planning in port areas allocated to the fisheries sector	-	1	1
3.13 Fishery - Equipment and Transformation	FIFG	Nº of collective projects for aquiculture support	-	5	5
	FIFG	Nº of certification projects and designations created, quality and promotion	-	12	12
	FIFG	Nº of fishing ports equipment projects	-	5	6
3.14 Economy	ERDF	Nº of natural gas distribution total customers	41.300	63,138	63,138
	ERDF	Extension of the Natural Gas distribution network - Primary + Secondary (km)	1.190	540	650
	ERDF	Nº of regional wholesale markets created	1	2	2
	ERDF	Nº of operators in local markets of relevant interest	-	240	231
	ERDF	Nº of network operators in regional wholesale markets	200	160	203
	ERDF	Nº of youth hostels to create	8	4	6
	ERDF	Nº of local markets of relevant interest restructured	3	1	1
	ERDF	Nº of youth hostels to remodel	8	2	4
3.15 Accessibility and Transportation	ERDF	Km of railroad to build or rehabilitate	-	70	57

	ERDF	N° of stations to build and remodel	0	66	58
	ERDF	Km of roads to rehabilitate	-	1,250	2,002
	ERDF	Average % reduction in travel time of road projects approved	-	10%	10%
3.16 Environment	ERDF	Population served with treatment and disposal MSW infrastructure to build or benefit	2,900,000	3,400,000	3,496,090
	ERDF	Km of coast intervened	-	12	18
	ERDF	N° monitoring facilities to install or renew	-	5	6
	ERDF	% of territory covered with digital cartography at 1/10.000 scale	15%	50%	53%
	ERDF	N° of public information posts in the urban environment domain to create	-	4	10
	ERDF	N° of actions to support the recovery of environmental liabilities	0	1	2

10.4 2007-2013 Regional Operational Programme (ON.2-New Norte OP)

The structure of indicators in the 2007-2013 programme period is very comprehensive. The programme's 2010 Implementation Report shows the following evolution:

Achievement Indicators		2007	2008	2009	2010	2015
Priority Axis 1 – Competitiveness, Innovation and Knowledge (axis Indicators)						
N° of R&D units supported	Executed	0	0	0	0	-
	Contracted	0	0	1	61	-
	Goals	-	-	-	30	100
Annual mean variation of expenditure in R&D, observed in the R&D units supported	Executed	0	0	0	0	-
	Contracted	0	0	0	0	-
	Goals	-	-	-	+5%	+10%
N° of technology-based supported firms	Executed	0	0	0	2	-
	Contracted	0	92	310	449	-
	Goals	-	-	-	250	500
% of supported technology-based firms still in activity	Executed	-	-	-	-	-
	Contracted	-	-	-	-	-
	Goals	-	-	-	60%	60%
Area of infrastructure/ equipment in business host	Executed	0	0	0	0	-
	Contracted	0	0	57,723	144,145	-
	Goals	-	-	-	115,000	350,000

integrated operations (m²)						
% of occupied area in the supported infrastructured spaces	Executed	0	0	0	-	-
	Contracted	-	-	-	-	-
	Goals	-	-	-	30%	60%
N° of micro and small enterprises supported	Executed	0	0	0	98	-
	Contracted	0	140	495	803	-
	Goals	-	-	-	130	450
Annual mean variation rate (GVA/sales in supported firms)	Executed	0	0	0	-	-
	Contracted	-	-	-	-	-
	Goals	-	-	-	2%	2%
N° of supported business development collective actions	Executed	0	0	0	-	-
	Contracted	0	0	72	94	-
	Goals	-	-	-	10	35
N° of entities involved in supported collective actions	Executed	0	0	0	-	-
	Contracted	0	0	7	9	-
	Goals	-	-	-	20	105
N° of projects of digital economy and knowledge society promotion	Executed	0	0	0	0	
	Contracted	0	0	2	30	
	Goals				100	300
% of firms supported with WEB active portals and access to broadband Internet	Executed	0	0	0	0	
	Contracted	0	0	0	0	
	Goals				40%	100%
N° of energy-efficiency pilot projects	Executed	0	0	0	0	
	Contracted	0	0	0	0	
	Goals				6	22
Energy consumption mean reduction in supported equipment	Executed	0	0	0	0	
	Contracted	0	0	0	0	
	Goals				15%	15%
Axis 1 – Competitiveness, Innovation and Knowledge (core community indicators)						
N° of R&D projects	Executed	0	0	0	0	
	Contracted	0	33	178	289	
	Goals	-	-	-	-	450
N° of cooperation firms-institutions projects	Executed	0	0	0	0-	
	Contracted	0	5	28	54	
	Goals	-	-	-	-	80
N° of projects to support SME investment	Executed	0	0	0	8	-
	Contracted	0	245	906	1,432	
	Goals	-	-	-	-	1,600
N° of new start-ups supported	Executed	0	0	0	0	-
	Contracted	0	30	135	216	

	Goals	-	-	-	-	230
Induced investment to SME's (thousands of €)	Executed	0	0	0	1,220	-
	Contracted	0	53,084	140,478	226,634	-
	Goals	-	-	-	-	230
N° of society information projects	Executed	0	0	0	1	-
	Contracted	0	63	182	310	
	Goals	-	-	-	-	400
N° of tourism projects	Executed	0	0	0	0	-
	Contracted	0	13	40	86	-
	Goals	-	-	-	-	250
Axis 2 – Economic Enhancement of Specific Resources (axis indicators)						
N° of touristic resources qualification and promotion actions, under the Vale do Douro Programme	Executed	0	0	1	1	-
	Contracted	0	0	21	47	-
	Goals	-	-	-	50	100
N° of Porto and Norte de Portugal brand promotion integrated actions	Executed	0	0	0	0	-
	Contracted	0	0	0	0	-
	Goals	-	-	-	2	4
Increase in the value of the average revenue per bed in supported projects	Executed				-	-
	Contracted				-	-
	Goals	-	-	5%	12%	-
N° of collective infrastructures and equipment of support to economic enhancement of maritime resources	Executed	0	0	0	0	-
	Contracted	0	0	0	2	-
	Goals	-	-	-	2	5
N° of visitors of collective infrastructures and equipment of support to economic enhancement of maritime resources	Executed	0	0	0	0	
	Contracted	0	0	0	187	
	Goals	-	-	-	200,000	1,500,000
N° of supported events (to support regional internationalis.)	Executed	0	0	0	0	-
	Contracted	0	0	0	11	-
	Goals	-	-	-	20	70
N° of visitors in events supported	Executed	0	0	0	-	
	Contracted	0	0	0	2,072,456	-
	Goals	-	-	-	808,889	3,538,889
Infrastructured area to business hosting and included in integrated plans (m^2)	Executed	0	0	0	0	-
	Contracted	0	0	195,880	252,880	-
	Goals	-	-	-	200,000	600,000
% of occupied area	Executed	0	0	0	0	

in infrastructured spaces and included in integrated plans	Contracted	0	0	0	0	
	Goals				30%	60%
N° of supported action programmes for tourism development	Executed	0	0	0	0	
	Contracted	0	0	0	0	
	Goals				2	5
N° of supported integrated actions for economic enhancement of endogenous resources	Executed	0	0	0	0	
	Contracted	0	0	8	8	
	Goals				3	10
N° of jobs created under the supported projects for economic enhancement of endogenous resources	Executed	0	0	0	0	
	Contracted	0	0	0	0	
	Goals				200	700
Axis 2 – Economic Enhancement of Specific Resources (core community indicators)						
N° R&D projects	Executed	0	0	0	0	-
	Contracted	0	0	0	4	-
	Goals	-	-	-	-	450
N° of tourism projects	Executed	0	0	1	1	-
	Contracted	0	0	21	48	-
	Goals	-	-	-	-	250
Axis 3 – Regional Space Enhancement (axis indicators)						
Awareness, information and dissemination-raising actions, under the natural, technical and sanitary risks prevention (n°)	Executed	0	0	0	0	
	Contracted	0	0	0	313	
	Goals	-	-	-	7	23
People covered by awareness, information and dissemination-raising actions, under the natural, technical and sanitary risks prevention (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	1,558,022	-
	Goals	-	-	-	1,000,000	
Awareness actions to stimulate waste recycling and reutilisation (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	0	5
	Goals	-	-	-	3	12
People covered by awareness actions to stimulate waste recycling and reutilisation (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	283,144	-
	Goals	-	-	-	500,000	1,800,000
Support actions to recovery of	Executed	0	0	0	0	-
	Contracted	0	0	0	5	-

environmental liabilities (n°)	Goals	-	-	-	8	20
Population benefiting from environmental liabilities interventions (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	31,718	-
	Goals	-	-	-	2,000	5,000
Increase in classified area covered by active management interventions (%)	Executed	0	0%	0%	0%	-
	Contracted	0	13.78%	43.10%	43.10%	-
	Goals	-	-	-	7%	25%
Active manage. interventions in classified areas (n°)	Executed	0	0	0	1	-
	Contracted	0	8	36	36	-
	Goals	-	-	-	16	50
Increase in population served by intervened water supply public systems (n°)	Executed	0	0%	0%	0	
	Contracted	0	0%	0%	+143,123	-
	Goals	-	-	-	+385,000	+550,000
Water supply network intervened (km)	Executed	0	0	0	0	-
	Contracted	0	0	0	372.7	-
	Goals	-	-	-	400	600
Increase in population served by intervened wastewater network public systems (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	+27,113	-
	Goals	-	-	-	+520,000	+1,300,000
Wastewater network intervened (km)	Executed	0	0	0	0	-
	Contracted	0	0	0	256.25	-
	Goals	-	-	-	440	1,100
Students covered by remodelling/ expansion of primary schools (n°)	Executed	0	2,635	3,744	20,484	-
	Contracted	0	52,907	55,933	66,466	-
	Goals	-	-	-	22,100	44,200
Primary schools remodelled/ expanded (n°)	Executed	0	12	17	134	-
	Contracted	0	241	254	292	-
	Goals	-	-	-	112	223
Population covered by health services reconfiguration/ requalification projects (n°)	Executed	0	0	0	44,724	-
	Contracted	0	2,818,728	3,004,026	3,004,026	-
	Goals	-	-	-	1,097,272	
Health services reconfiguration/ requalification projects (n°)	Executed	0	0	0	5	-
	Contracted	0	18	31	31	-
	Goals	-	-	-	71	90
Users of supported social equipment (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	1,082	-
	Goals	-	-	-	230	800
Supported social equipment (n°)	Executed	0	0	0	0	-
	Contracted	0	0	0	27	-

	Goals	-	-	-	7	25
Axis 3 – Regional Space Enhancement (core community indicators)						
Increase in the population served by water supply systems intervened	Contracted	0	0	0	143,123	
Increase in the population served by wastewater treatment systems intervened	Contracted	0	0	0	27,113	
Nº of MSW projects	Contracted	0	0	3	5	
Nº of air quality improvement projects	Contracted	0	0	1	1	
Nº of risk prevention projects	Contracted	0	0	0	32	
Nº of tourism projects	Contracted	0	21	38	56	
Nº of education projects	Contracted	0	241	254	292	
Nº of students benefiting from interventions	Contracted	0	52,907	55,933	66,466	
Nº of health projects	Contracted	0	18	31	31	
Axis 4 – Local and Urban Cohesion (axis indicators)						
Integrated interventions of urban requalification (nº)	Executed	0	0	0	0	-
	Contracted	0	8	55	55	-
	Goals	-	-	-	2	8
Population covered by supported urban regeneration operations (nº)	Executed	0	0	0	185,509	-
	Contracted	0	0	220,570	1,127,271	-
	Goals	-	-	-	100,000	400,000
Cities involved in urban networks for competitiveness (nº)	Executed	0	0	0	0	-
	Contracted	0	0	14	14	-
	Goals	-	-	-	8	16
Public space integrated in urban requalific. projects which no longer have motor traffic	Executed	0	0	0	0	-
	Contracted	0	0	6,250	15,065	-
	Goals	-	-	-	8,000	40,000
Supported protocols in partnerships for urban regeneration (nº)	Executed	0	0	0	0	-
	Contracted	0	8	37	36	-
	Goals	-	-	-	12	30
Intervened areas by urban regeneration operations (m^2)	Executed	0	0	0	505,841	-
	Contracted	0	0	138,030	3,078,818	-
	Goals	-	-	-	160,000	400,000
Population covered by supported urban	Executed	0	0	0	185,509	-
	Contracted	0	0	0	1,127,271	-

regeneration operations (n°)	Goals	-	-	-	24,000	60,000
Passenger interfaces supported – Porto Metro (n°)	Executed	0	0	0	4	-
	Contracted	0	0	0	5	-
	Goals	-	-	-	4	15
Reduction of accidents in accidents accumulation points intervened (%)	Executed	0	0	0%	30%	-
	Contracted	0	0	0%	30%	-
	Goals	-	-	-	30%	30%
Treatment operations in road black spots (n°)	Executed	0	0	0	0	-
	Contracted	0	0	4	65	-
	Goals	-	-	-	22	76
Mean reduction in supported road projects journey time (%)	Executed	0	0	0	10%	-
	Contracted	0	0	10%	10%	-
	Goals	-	-	-	10%	10%
Supported road network (km)	Executed	0	0	0	170.5	-
	Contracted	0	0	364,534	1,134	-
	Goals	-	-	-	50	190
Axis 4 – Local and Urban Cohesion (core community indicators)						
N° of transport projects	Contracted	0	0	49	139	
N° of new roads (km)	Contracted	0	0	7.3	76.8	
N° of reconstructed roads (km)	Contracted	0	0	357.2	1,057.9	
N° of new railways (Metro Porto-km)	Contracted	0	0	0.7	8	
Increase in population served by expansion interventions in urban transport systems (Metro Porto)	Contracted	0	0	38,940	161,342	
N° of projects that ensure sustainability and improve the attractiveness of cities	Contracted	0	0	14	387	
N° projects that aim to stimulate entrepreneurial activity, entrepreneurship and the use of new technologies	Contracted	0	0	0	0	
Axis 5 – Technical Assistance (axis indicators)						
N° of supported 'Citizen Offices'/ Multiservice Centres	Executed	0	0	0	0	
	Contracted	0	67	82	93	
	Goals	-	-	-	25	61

Population served by supported 'Citizen Offices'/ Multiservice Centres	Executed	0	0	0	0	-
	Contracted	0	1,721,213	2,168,468	2,416,662	-
	Goals	-	-	-	650,000	2,400,000
N° of supported projects promoting capacity-building and regional development	Executed	0	0	9	9	-
	Contracted	0	9	9	22	-
	Goals	-	-	-	90	270
N° of supported institutions involved in promoting capacity-building and regional development	Executed	0	0	423	423	-
	Contracted	0	423	423	1,164	-
	Goals	-	-	-	350	1,000
Axis 5 – Technical Assistance (core community indicators)						
N° of information systems projects	Executed	0	0	0	0	-
	Contracted	0	27	46	63	-
	Goals	-	-	-	-	400

11. ANNEX IV: LIST OF INTERVIEWEES

	Name	Position (current and former roles where relevant)	Type	Place	Date	Form (face to face / telephone)
1	Manuel Porto	European Parliament Deputy	Strategic	Lisboa	6/6/12	Face to face
2	Guilherme Oliveira Martins	Former Finances and Education Minister	Strategic	Lisboa	15/6/12	Face to face
3	Mira Amaral	Former Industry Minister	Strategic	Lisboa	21/6/12	Face to face
4	João Proença	General Union of Workers General Secretary	External	Lisboa	29/6/12	Face to face
5	Henrique Granadeiro	Portugal Telecommunications President and former IFADAP (Institute of Finance and Support to the Development of Agriculture and Fishing) President	Operational	Lisboa	2/7/12	Face to face
6	Rui Madaleno	AIP (Portuguese Industrial Association) Economics Department Director	External	Lisboa	9/7/12	Face to face
7	Manuel Brandão Alves	ISEG (Economics and Management Institute) Professor; Microcredit Association President	External	Lisboa	13/7/12	Face to face
8	Mário Rui Silva	Porto University Professor; Executive Member of the OP Norte 2007-2013 Executive Committee	Strategic	Porto	31/7/12	Face to face
9	Silva Peneda	Former Labour Minister; Economic and Social Council President	Strategic	Porto	8/8/12	Face to face
10	Valente de Oliveira	Former CCDR-N President; Former Spatial Planning and Regional Development Minister; AEP (Portuguese Business Association) Vice-President	Strategic	Porto	9/8/12	Face to face
11	Ricardo Magalhães	CCDR-N Technician; Douro Task Force Director	Operational	Porto	9/8/12	Face to face
12	José Silva Costa	Porto University Professor	External	Porto	10/8/12	Face to face
13	Nuno Vitorino	Former DGDR General Director; Former Consultant of European Commission Instrument for Pre-Accession Assistance	Operational	Lisboa	13/8/12	Face to face

14	Luís Braga da Cruz	Former Economy Minister; Former CCDR-N President; Porto University Professor; Serralves Foundation Vice-President	Strategic/ Beneficiary	Braga	23/8/12	Face to face
15	José Cadima Ribeiro	Minho University Economics Department Director	External	Braga	23/8/12	Face to face
16	Francisco Carballo Cruz	Minho University Economics Department Vice-Director	External	Braga	23/8/12	Face to face
17	Gregório Rocha Novo	CIP (Portugal Business Confederation) Vice-President	Project Holder/ Beneficiary	Porto	10/8/12	Face to face
18	António Figueiredo	Quaternaire, SA CEO; Former CCDR-N Technician; Porto University Professor	Strategic/ Operational	Porto	30/8/12	Face to face
19	Rui Nuno Baleiras	Former Regional Development Secretary of State; Minho University Professor	Strategic	Braga	17/9/12	Face to face
20	Artur Rosa Pires	Former Regional Development Secretary of State; Spatial Planning and Regional Development Consultant to the President of the Republic	Strategic	Lisboa	18/9/12	Face to face
21	Mário Ferreira	Douro Azul Cruises CEO	Beneficiary		10/8/12	Telephone
22	Artur Cristóvão	UTAD (Trás-os-Montes and Alto Douro University) Professor	External	Vila Real	4/9/12	Face to face
23	Mário Pereira	ASSNA (Norte Agrícola Association) and FATA (Trás-os-Montes and Alto Douro Farmers Federation) President	Project Holder/ Beneficiary	Bragança	3/9/12	Face to face
24	Mesquita Machado	Braga Municipality President	Beneficiary	Braga	11/9/12	Face to face
25	Daniel Campelo	Former Ponte de Lima Municipality President; Forests and Rural Development Secretary of State	Beneficiary	Lisboa	18/9/12	Face to face
26	António Magalhães da Silva	Guimarães Municipality President	Beneficiary	Guimarães	12/9/12	Face to face
27	Henrique Carvalho	PNPG (Peneda-Gerês National Park) Financial Director	Project Holder/ Beneficiary	Braga	5/9/12	Face to face
28	Paulo Vaz	ATP (Portuguese Textile and Clothing Association) General Director	Project Holder/ Beneficiary	Famalicão	10/9/12	Face to face
29	Fortunato Frederico	Kyaia Footwear Group CEO	Beneficiary	Guimarães	12/9/12	Face to face

30	Rosário Machado	Route of the Romanesque Director	Beneficiary	Lousada	6/9/12	Face to face
31	Raquel Miranda	Sabrosa Municipality Advisor to the President	Beneficiary	Sabrosa	5/9/12	Face to face
32	Teresa Forte	Fladgate Partnership (Porto Wines) Financial Director	Beneficiary	Gaia	6/9/12	Face to face
33	Francisco Laranjeira	ENERCON Portugal Director	Beneficiary	Viana do Castelo	11/9/12	Face to face
34	Amélia Castro	Leixões Port General Manager	Beneficiary	Matosinhos	18/9/12	Face to face
35	José Neves	BIAL Group Board Member	Beneficiary	Lisboa	25/9/12	Face to face
36	Ana Paula Delgado	Porto Vivo Urban Rehabilitation Society	Project Holder		26/9/12	Telephone

12. ANNEX V: OVERVIEW OF SOURCES USED FOR THE CASE STUDY

Programme name	OP	AIR	FIR	Spend (by measure & year)	Evaluation reports	Strategic interviews	Operational interviews	External interviews	Stakeholder/ Beneficiary interviews	Workshop
1989-93 Ave Valley ROP (PROAVE)	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
1989-93 Trás-os-Montes ROP (PROTAD)	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
1989-93 Porto M.A. ROP (PRORAMP)	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
1989-93 Alto Minho ROP (PROAM)	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
1989-93 Norte Region ROP (PRORN)	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
1994-99 Norte ROP (PRONORTE)	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1994-99 Education NOP (PRODEP II)	No	No	Yes	No	Yes	Yes	No	Yes	No	No
1994-99 Science NOP (PRAXIS XXI)	No	No	Yes	No	Yes	Yes	No	Yes	No	No
1994-99 Vocational Training and Employment NOP	No	No	Yes	No	Yes	Yes	No	Yes	No	No
1994-99 Development Support Infrastructures NOP	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
1994-99 Economic Structure Modernisation NOP (POMTE)	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
1994-99 Environment and Urban Enhancement NOP (POA)	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
1994-99 Health and Social Integration NOP	No	No	Yes	No	Yes	Yes	No	Yes	No	No
1994-99 Regional Development Potential Promotion NOP	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes
2000-06 Norte ROP (ON)	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2000-06 Education NOP (PRODEP III)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No

2000-06 Employment, Training and Social Development NOP (POEFDS)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No
2000-06 Science and Innovation NOP (POCI)	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No
2000-06 Knowledge Society NOP (POSC)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No
2000-06 Health NOP (SAUDEXXI)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No
2000-06 Culture NOP (POC)	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes
2000-06 Public Administration NOP (POAP)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No
2000-06 Agriculture and Rural Development NOP (AGRO)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No
2000-06 Fishing NOP (MARE)	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No
2000-06 Accessibility and Transports NOP (POAT)	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
2000-06 Environment NOP (POA)	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
2000-06 Economy NOP (PRIME)	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
2007-13 Norte ROP (ON.2)	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
2007-13 Territory Enhancement NOP (POVT)	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
2007-13 Human Potential NOP (POPH)	Yes	Yes	No	No	No	Yes	No	Yes	No	No
2007-13 Competitiveness Factors (COMPETE)	Yes	Yes	No	No	No	Yes	No	Yes	Yes	Yes

13. ANNEX VI: REFERENCES

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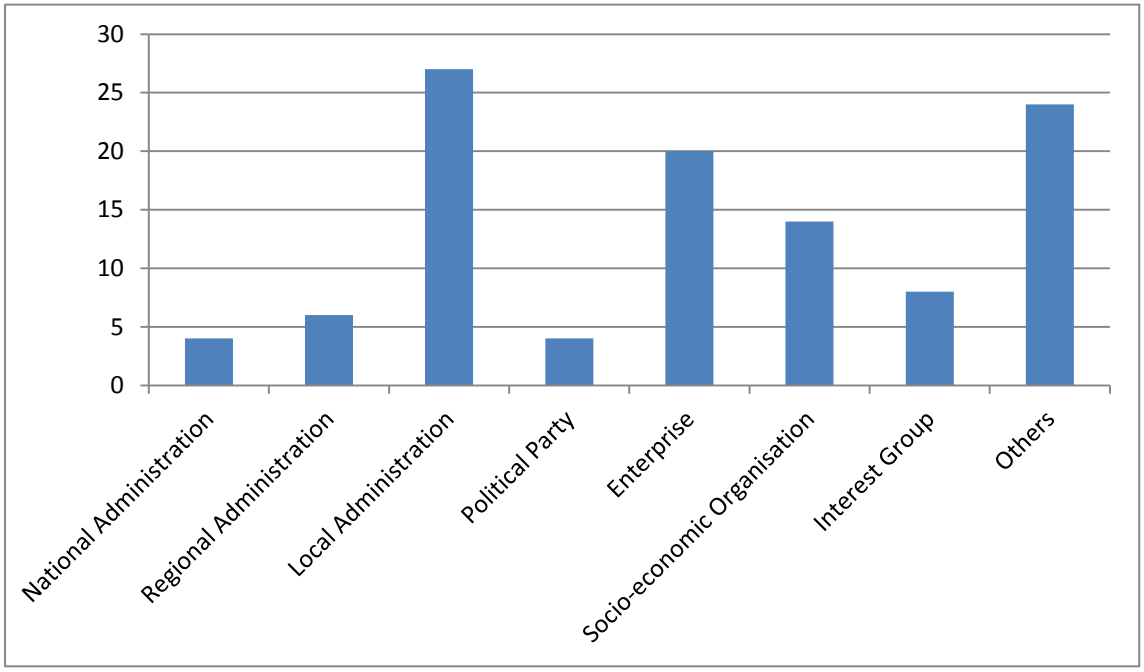
14. ANNEX VII: SUMMARY OF SURVEY RESULTS

The survey results for the Norte region show that 58 individuals responded to the survey (low response rate), of which 54 percent (31 respondents) completed all the survey questions and 31 percent (18 respondents) left their questionnaire incomplete.[68] Therefore, the conclusions underlined by this analysis have limitations that should be taken into account.

An overview of the survey results shows that answers were relatively balanced, vis-à-vis the nature of the respondents (organisations) and that most answers were from local administration (municipalities) with 27 percent (13 responses) and enterprises with 20 percent (10 responses). In addition, the high percentage of the 'Others' group (24 percent, which corresponds to 12 responses) shows a wide diversity of respondents (see figure 24Figure 24:).

Figure 24: Organisation Represented by the Respondents (%)



Source: core team survey results.

Regarding enterprises, 78 percent (7 responses) were from micro and small enterprises, which matches the Norte productive profile – domination of SMEs. Concerning socio-economic organisations (14 percent of total), there was also a good balance between the number of respondents, with 57 percent (4 responses) of enterprise associations and 43 percent of non-profit institutions (3 responses).

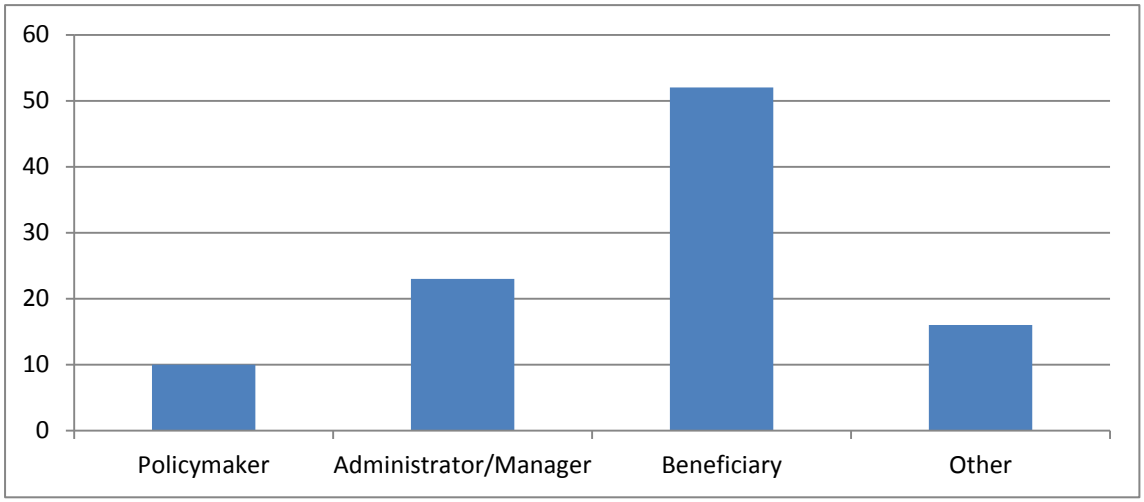
Involvement of the respondents in ERDF programmes is mostly direct (see Figure 31) with 43 percent (20 responses), while indirect involvement (see Figure 32) has a share of 34 percent (16 respondents) and simultaneous involvement gathers a share of 23 percent (11 respondents). The direct involvement[69] occurs mainly with beneficiaries (52 percent - 16 responses), whereas other

[68] This means that nine respondents started the survey but did not answer a single question.

[69] 31 respondents of 47 had a direct involvement in ERDF programmes. Of the 31 respondents, 11 had a direct and indirect involvement.

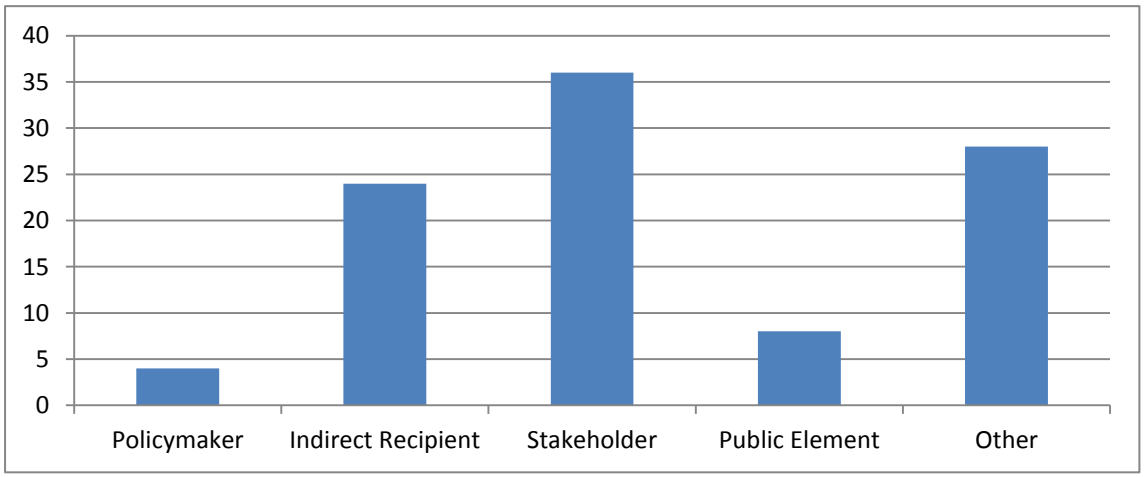
categories show values of around 20 percent. In turn, stakeholders (36 percent) are the group mostly involved indirectly with ERDF programmes,[70] followed by the 'Others' group with 28 percent (7 responses).[71]

Figure 25: Form of Direct Involvement in ERDF Programmes (%)



Source: core team survey results.

Figure 26 Form of Indirect Involvement in ERDF Programmes (%)



Source: core team survey results.

For the period of involvement with ERDF programmes,[72] it is possible to observe that most respondents were involved in more than one period (58 percent of respondents) and that respondents focused in the 2007-13 and 2000-06 programme periods, with respectively 89 percent and 64 percent of the share between the 45 responses (see figure 27Figure 27:).

[70] 25 respondents of 46 were involved indirectly with ERDF programmes. Of the 25 respondents, 11 had a direct and indirect involvement.

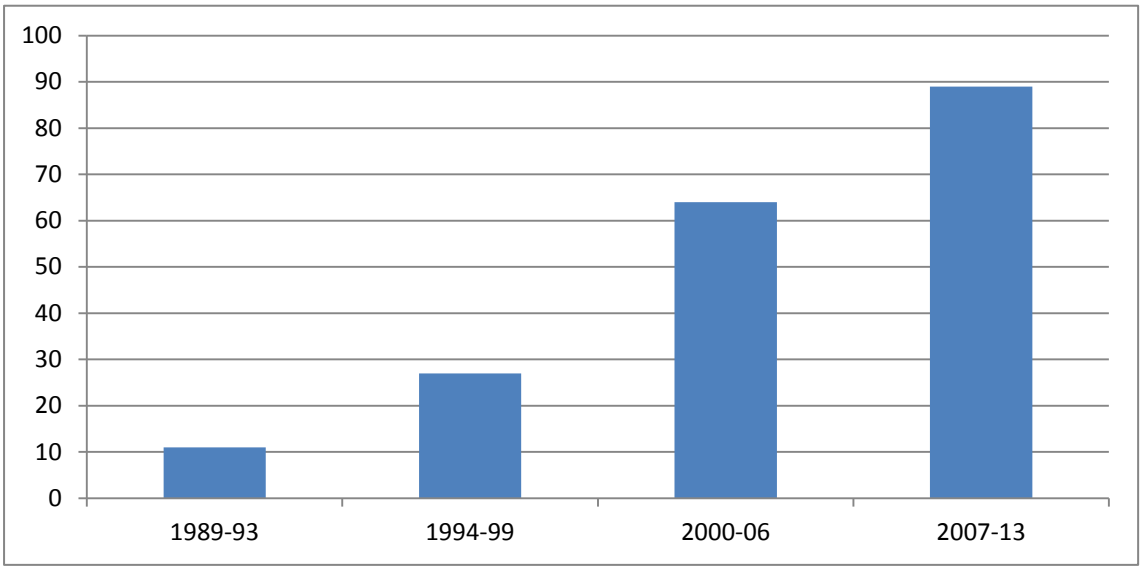
[71] The individuals that answered 'Other' included a journalist, a consultant, an ERDF manager, a project assistant, a project coordinator and a programme manager/consultant.

[72] There were 86 different periods marked through the 45 responses.

In addition, a few remarks can be made regarding each programme period:

- The 11 percent of respondents involved in the 1989-93 period were also involved in subsequent periods;
- 25 percent of respondents involved in the 1994-99 period were also involved in subsequent periods, whereas only 2 percent were involved in the previous period;
- 56 percent of respondents involved in the 2000-06 programme were also involved in the 2007-13 period;
- 38 percent of the respondents that were involved in the 2007-13 period had no involvement in previous programmes.

Figure 27: ERDF Programmes Involvement Periods (percent)



Source: core team survey results.

Regarding the achievement levels of ERDF programmes, most answers display, in the outlined fields, a significant level of achievements, followed by quite 'significant' and 'very significant' levels. This means that respondents acknowledged the relevance of ERDF programmes for regional development in a number of different fields.

The areas that congregate the greatest number of 'very significant' and 'significant' answers are: environmental quality improvement (83 percent), enterprise competiveness improvement and exports growth (74 percent), enhancement of regional accessibility (71 percent) and tourism and creative industries growth (69 percent). The fields outlined as having the most modest or even non-existent achievements were FDI attraction (21 percent), manufacturing industry growth (18 percent) and shift to growing clusters (17 percent).

In sum, the achievements rank delineated from the responses was:

1. The construction and modernisation of regional infrastructure – environment systems, accessibility/transport and social and tourism infrastructure;
2. Increase of the enterprise competitiveness capacity, associated with R&D and innovation enhancement;

3. Information access improvement, as well as the knowledge and know-how (of the programme managers and the population in general);
4. Increase of training actions and support to job-creation initiatives.

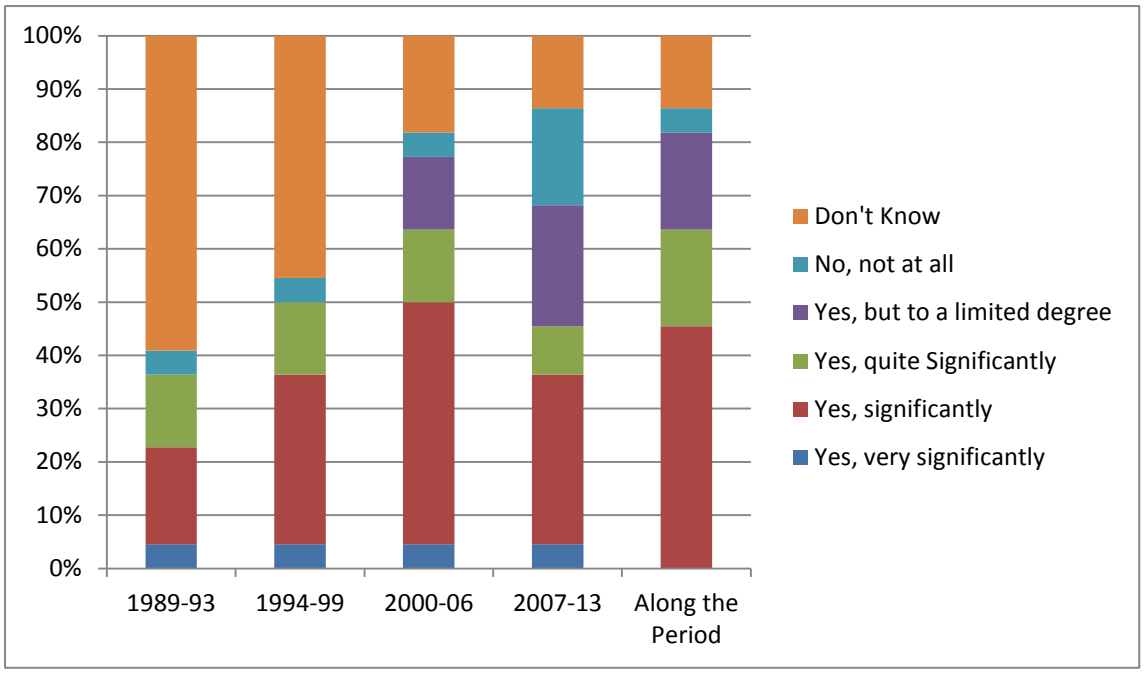
The 2000-06 and 2007-13 programmes respondents concentrate the respondents' experience. Therefore, their knowledge of the first two programmes is very limited, which explains the 45 percent of responses unaware of goals against needs. For the recent periods, responses show that programme objectives account significantly for regional needs (51 percent of responses for 2000-06 and 49 percent for 2007-13).

In addition, responses show that there were incompatibilities - but not too substantial - between regional needs and ERDF programmes in each period (51 percent across the period). In their opinion, these incompatibilities did not undermine the relevance and the achievements of ERDF programmes. Hence they were explained by the respondents as follows:

- ERDF programmes priorities were always more sectoral that territorial and the decision of what to support was very centralised, thus conditioning municipalities' options (insufficient consultation of local administrations), colliding with their specific visions for the region;
- Initial ERDF programmes were very focused on the most populated areas; hence the interior did not benefit as it should have done. Progressively, these conditions changed, especially when Lisbon, the Algarve and Madeira entered Phasing-Out status;
- A significant percentage of ERDF financing was not used to promote the potential of R&D centres localised, as should have happened; it was used as an alternative source to the Government General Budget.[73]

[73] Particular vision of R&D centres related respondents.

Figure 28: Programmes Goals and Regional Needs (%)



Source: core team survey results.

Regarding the analysis of each programme period's specific characteristics, the survey shows that in a general way (i.e. for the whole period, 1989-2013) respondents consider programme strategies, design and implementation adequate, as well as the fund distribution, the complementarities between programmes and their effectiveness and utility.

For the 1989-93 programme period,[74] there was a general agreement among the responses regarding the programme relevance and performance; nonetheless the main positive highlights were the appropriateness of the programme strategies (33 percent) and their flexibility accommodating the region socioeconomic needs (33 percent). For the following period (1994-99),[75] the answers were more diverse but still emphasising the adequacy of the programme, especially its strategy (accommodating evaluation conclusions from the previous programme – 67 percent) and integration with other EU policies (50 percent). Most negative responses stressed the lack of flexibility (accommodating regional and beneficiaries' changing needs – 33 percent) of ERDF programmes.

The majority of responses for the 2000-06 programme period display a pattern similar to the previous periods. Most responses are positive towards EU programmes' adequacy, as negative answers only account for ~25 percent of the total.[76] For this period, the most positive answers were related to the programme strategies' appropriateness (88 percent), implementation effectiveness (75 percent) and good integration with EU policies (75 percent) and domestic policies (63 percent). On the negative side, the lack of articulation between funds distribution and regional needs and, as

[74] For the 1989-93 programme period, there were only 3 responses.

[75] For the 1994-99 programme period, there were only 6 responses.

[76] For the 2000-06 programme period, there were only 8 responses.

in the 1994-99 period, the programmes' lack of flexibility accommodating regional and beneficiaries' changing needs.

Lastly, for 2007-13[77] the responses were much more mixed and balanced, but nevertheless with a predominance of positive answers. Particular highlights for the positive answers related to the adequacy of ERDF programme strategies (63 percent) and the appropriateness of allocated support (56 percent). The programmes' efficiency due to the Funds concentration in selected domains and on a few large projects brought mixed views from the respondents, since positive answers match negative ones. It is not possible to discern patterns of response based on the nature of the respondents, which allows the conclusion that answers are more related to the vision of the programme that each respondent has than to the nature of the organisation she/he represents.

The remaining predominantly negative answers were related to the funds distribution against regional needs (44 percent) and, again, the lack of flexibility in accommodating regional and beneficiaries' changing needs.

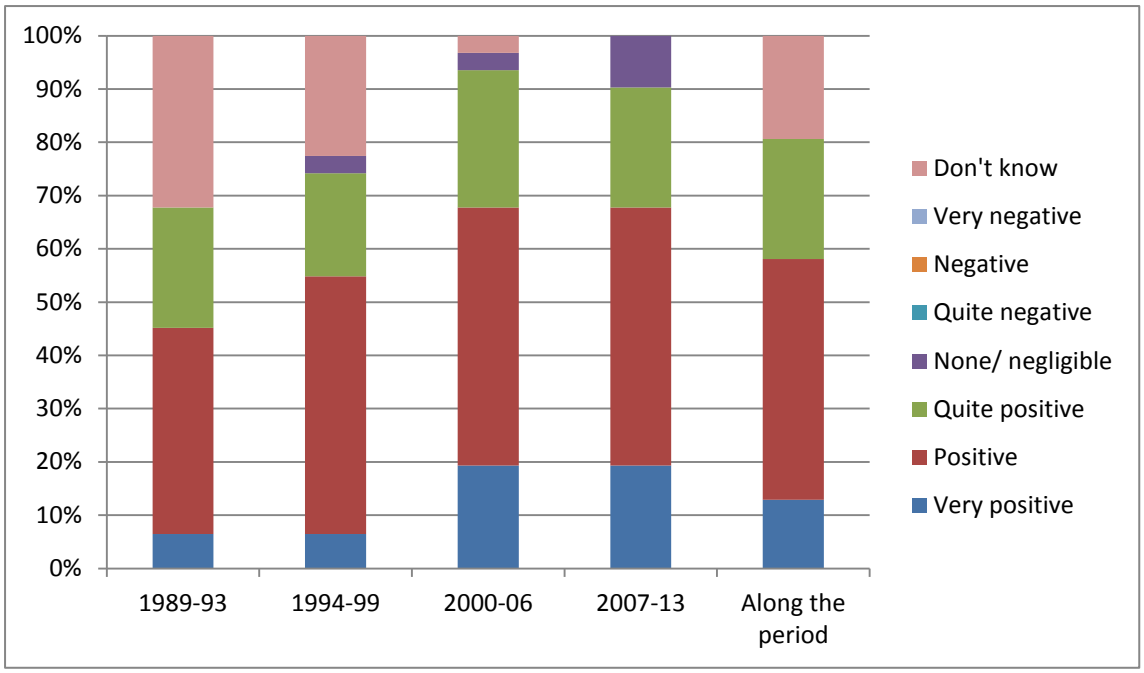
In summary, the positive and negative trends highlighted by the responses along the entire study period were the following:

- General consensus regarding the adequacy of ERDF programmes in every period;
- Responses were recurrent in affirming that programme strategies were adequate to regional needs but the articulation between those and funds distribution was not so positive;
- Positive views regarding the complementarities between ERDF programmes and other EU programmes and domestic policy;
- The main failure of ERDF programmes was their lack of flexibility in accommodating regional and beneficiaries' changing needs;
- Negative or positive responses to stated affirmations do not follow patterns associated with the nature of the respondent organisations. In fact, one can conclude that answers were based on each respondent's vision of the programmes.

The positive views regarding ERDF programmes' relevance for the region are also confirmed when analysing their impact in the region. For each single period, responses highlighting the positive impact of the programmes clearly outnumber negative ones. As Figure 35 outlines, there are no negative responses on the ERDF impact in the region (transversal to all respondent organisations).

[77] For this period, the number of responses was much more satisfactory (18), thus allowing for a more representative analysis.

Figure 29: ERDF Programmes' Impact by programme period (%)



Source: core team survey results.

Regarding the future of ERDF-funded programmes, the respondents outlined five issues as the main needs for improvement, despite the diversity of answers provided, essentially responding to what was discussed above:

1. The need to use evaluations of previous programmes to outline strategies more related with regional needs (74 percent of the respondents highlighted this need);
2. Increase flexibility during programme periods in order to adapt to changing regional needs (71 percent);
3. Simplification in fund administration for the programme beneficiaries (65 percent);
4. The need to increase the involvement of local authorities to outline strategies more related to regional needs (58 percent);
5. Increase flexibility during programme periods in order to adapt to beneficiaries' needs (55 percent).

There are few recommendations for the improvement of the ERDF programmes' impact. According to the respondents' opinions, in the next programme period, each region's specificities and potentialities should be evaluated and accounted for. Thus, the projects supported should integrate the local stakeholders vision of the region needs, in order to increase programme impact. In addition, the programmes should emphasise job-creation issues, as well as the intra-regional cohesion projects (support to disadvantaged territories) and the promotion of endogenous resources.