



WP1: Synthesis report

*Ex post evaluation of Cohesion Policy programmes
2007-2013, focusing on the European Regional
Development Fund (ERDF) and the Cohesion Fund (CF)*

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WP1: Synthesis report

*Ex post evaluation of Cohesion Policy programmes
2007-2013, focusing on the European Regional
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List of abbreviations

CBC	Cross-Border Cooperation
CF	Cohesion Fund
DG	Directorate General
EEB	European Environmental Bureau
EAFRD	European Agricultural Fund for Rural Development
EAGGF	European Agriculture Guidance and Guarantee Fund
EIB	European Investment Bank
ERDF	European Regional Development Fund
ESF	European Social Fund
ETC	European Territorial Cooperation
EU	European Union
Eurostat	Statistical Office of the European Union
FDI	Foreign Direct Investment
FI	Financial Instrument
FIFG	Financial Instrument for Fisheries Guidance
FP7	Seventh Framework Programme
GDP	Gross Domestic Product
GDFCF	Gross Domestic Fixed Capital Formation
GERD	Gross domestic expenditure on R&D
GWh	Gigawatts-hours
GNI	Gross National Income
GVA	Gross Value Added
ICT	Information and Communications Technology
IMF	International Monetary Fund
Interreg	Inter-regional Cooperation
IPA	Pre-Accession Assistance fund
ISCED	International Standard Classification of Education
JEREMIE	Joint European Resources for Micro to Medium Enterprises
JESSICA	Joint European Support for Sustainable Investment in City Areas
MA	Managing Authority
OECD	Organisation for Economic Co-operation and Development
NACE	Nomenclature of Economic Activities
NUTS	Nomenclature of Territorial Units for Statistics
OP	Operational Programme
PPS	Purchasing Power Standard
R&D	Research and Development
RTD	Research and Technological Development
RTDI	Research, Technology Development and Innovation
SME	Small and Medium Enterprise
TEN-T	Trans-European Transport Network
TNC	Transnational Cooperation
WP	Work Package

List of Member States

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom

List of Work Packages (WP)¹

WP	Title	Organisation
WP0	Data collection and quality assessment	t33 srl, ÖIR GmbH, Spatial Foresight GmbH
WP1	Synthesis report	Applica, Ismeri Europa, Cambridge Economic Associates
WP2	Support to SMEs – Increasing research and innovation in SMEs and SME development	CSIL, CSES, ZEW
WP3	Financial instruments for enterprises	t33 srl, EPRC, Metis GmbH
WP4	Support to large enterprises	KPMG Advisory Ltd., Prognos AG
WP5	Transport	AECOM, KPMG
WP6	Environment	COWI, Milieu, CSIL
WP8	Energy efficiency in public and residential buildings	Ramboll, IEEP
WP9	Culture and tourism	IRS, Csil, Ciset, BOP Consulting
WP10	Urban development and social infrastructure	Metis GmbH
WP11	European Territorial Cooperation	ADE
WP12	Delivery system	KPMG, Prognos
WP13	Geography of expenditure	WIIW, Ismeri Europa
WP14a	The impact of cohesion policy 2007-2013: model simulations with Quest III	DG Regional and Urban Policy
WP14b	The impact of cohesion policy 2007-2013: model simulations with Rhomolo	DG Regional and Urban Policy
WP14c	Measuring the impact of Structural and Cohesion Funds using regression discontinuity design	University of Rome La Sapienza
WP14d	Propensity score matching	University of Piemonte Orientale

¹ All the reports of the Work Packages are available at:
http://ec.europa.eu/regional_policy/en/policy/evaluations/ec/2007-2013/#1

Executive Summary

This report synthesises the results of the *ex post* evaluation of the Cohesion policy programmes financed from the European Regional Development Fund (ERDF) and the Cohesion Fund. The central aim of the evaluation was to answer three main questions:

- How was the funding provided spent in regions across the EU?
- What were the results and how far did they contribute to Cohesion policy goals?
- What are the lessons for the future design and conduct of Cohesion policy?

This summary, firstly, sets out the objectives of the policy over the period and the context in which it was implemented. Secondly, it indicates the scale of funding and its division between different parts of the EU and policy areas. Thirdly, it outlines the approach adopted to the evaluation. Fourthly, it assesses the extent to which policy achieved its objectives. Fifthly, it draws out the lessons to be learned and their implications for future policy.

The objectives of policy and the political and economic context

The Cohesion policy objectives

The ultimate objective of Cohesion policy, as regards the ERDF and Cohesion Fund, is to reduce regional disparities across the EU. In the 2007-2013 period, the policy had the added task of contributing to the pursuit of the common EU priorities defined in the Lisbon strategy. This, in practice, meant earmarking a minimum proportion of the funds received – 60% in Convergence regions, 75% in Competitiveness and Employment ones – to investments that *‘directly strengthen competitiveness and job creation – in research and innovation, human capital, business services, major European infrastructures and improvement of energy efficiency’*².

From 2010 on, the task became to contribute to the Europe 2020 strategy of pursuing *smart, sustainable and inclusive growth*. Since the strategy was very similar to Lisbon, except for the specific inclusion of the social goal of reducing poverty and exclusion, it did not entail any major diversion of effort. Indeed, both Lisbon and Europe 2020 can be regarded as specifying the channels through which Member States should strengthen the development potential of lagging and problem regions and the means, therefore, for reducing regional disparities across the EU.

The political context – EU enlargement³

The 2007-2013 period was the first full one in which the Central and Eastern European countries which entered the EU in 2004 and the beginning of 2007 were in receipt of support from the ERDF and Cohesion Fund. The development problems they faced were of a different scale and nature to those of the EU15 Cohesion countries and so posed a particular challenge to Cohesion policy, the more so because of their lack of experience of administering programmes. There is, therefore, special interest in seeing how the funding was spent and what the outcomes were.

² ‘Delivering Lisbon through Cohesion Policy’, Press release, European Commission, 1 March 2006 http://europa.eu/rapid/press-release_SPEECH-06-138_en.htm?locale=en

³ ³ Croatia, which entered the EU in 2013, was not eligible for the ERDF or Cohesion Fund in the period but received pre-accession support amounting to EUR 707 million. It is not covered in any detail in the report.

The economic context – the crisis

The onset of the economic and financial crisis radically altered the context in which Cohesion programmes were implemented. The assumption when the programmes were formulated was that growth would continue at the relatively high rate experienced over the previous 10 years or so. The global recession in 2008-2009 and the economic and financial crisis which followed led to severe pressure on public finances. It also led to cutbacks in public investment and in central government transfers to regional and local authorities to carry out such investment. The resources available for co-financing projects were, therefore, reduced and Cohesion policy funding became even more important than before as a source of finance for development expenditure in many parts of the EU, especially in the EU12 countries and the four southern EU15 Member States, Greece, Spain, Italy and Portugal

The crisis had a particularly severe effect on many less-developed regions but the effect was moderated by the expenditure financed under Cohesion policy.

The crisis led as well to some shift in the emphasis of programmes away from tackling long-term structural problems to counteracting the economic downturn, and to measures that had a more immediate and more direct effect on growth and jobs. Indeed, the EU encouraged Member States to use Cohesion policy funding in this way and a number of steps were taken to make it easier to do so. The short-term aim of creating growth and jobs, therefore, became an even more important objective of the policy over the period.

Regional disparities in GDP, employment and other aspects

Two major factors affected the development of disparities during the programming period: the economic and financial crisis and the continuing catching-up of the EU12, in particular the relatively strong economic performance of Poland. The long-term process of convergence of GDP per head in lagging regions towards the EU average was halted by the onset of the crisis in 2008-2011; convergence continued after 2011 but at a much slower rate than before. In Convergence regions in the EU12, GDP per head grew at a faster rate on average between 2007 and 2014 than regions in the rest of the EU and faster than capital city regions in the Czech Republic, Hungary and Slovakia. The same was true of Convergence regions in the EU15, apart from those in Greece, Spain and Italy, where GDP per head declined markedly relative to the EU average.

Regional disparities in employment rates also narrowed across the EU up until the crisis, but since then they have widened, largely due to a reduction in employment in Greece, Spain and Italy. In the EU12 Convergence regions, however, the employment rate rose on average by 2 percentage points more than the EU average over the period. In the Convergence regions of Greece, Spain, Italy and Portugal, the rate remained unchanged; disparities in employment between regions narrowed within these countries. In addition, in a number of EU12 countries – in Bulgaria, Latvia, Lithuania, Poland, Romania and Slovakia – there was a reduction in the proportion of people affected by material deprivation over the period.

Scale of funding and the spending priorities

The ERDF and Cohesion Fund resources made available

In total over the 2007-2013 period, EUR 269.9 billion from the ERDF and Cohesion Fund was devoted to Cohesion policy. An additional EUR 76.6 billion came from the European Social Fund (ESF). Of the ERDF and Cohesion Fund amounts, EUR 231.0 billion, over 80% of the total, was allocated to Convergence programmes. Of the latter

almost two-thirds went to EU12 countries, which consequently accounted for over half of the total funding (55%).

The concentration of funding is more evident if related to population. The overall allocation to Convergence regions amounted, on average, to EUR 1527 per head over the period, while in Phasing-in and Phasing-out regions it averaged EUR 903 per head. By contrast, in the Competitiveness regions, the average was only EUR 91 per head, just 6% of that in Convergence regions.

There was a fairly even spread of funding across different types of region under each Objective, similar amounts going to urban areas as those to rural or intermediate ones in Convergence regions as well as in Competitiveness and Phasing-in or Phasing-out regions.

In most of the EU12, the ERDF and Cohesion Fund amounted to 2-3% of GDP. More relevantly, in nine of them the amount was between 35% and 57% of public investment; and in Romania and Slovenia, as well as Portugal, it was around 25-28%. Cohesion policy funding was, therefore, a major source of finance for development expenditure in all of these countries, as it was in Convergence regions in Greece, Spain and Italy.

The division of funding between policy areas

The major share of funding in the EU12 went to investment in infrastructure – around 70% or more of the total in nearly all of them, reflecting the need to modernise and expand the stock of communal capital, much of it in a poor state of repair. This was especially the case for the transport network, which accounted for half or more of infrastructure investment in most countries, much of it going on the construction or upgrading of roads.

Investment in environmental infrastructure in the EU12 – in clean water supply, wastewater treatment and waste management – accounted for just over 17% of the total on average. A similar percentage went on energy, ICT, social infrastructure (hospitals, schools, housing, etc.) and urban regeneration altogether.

There was much the same concentration on infrastructure in Convergence regions in the EU15, especially in Greece and Spain, where it absorbed around 75% of funding.

In the Competitiveness regions in the EU15, relatively little funding went on infrastructure in most cases, and around half went to support of research and technological development (RTD), innovation and enterprises.

There were some shifts in funding between policy areas over the period. The main additions were to support of investment in enterprises, other than on RTD and innovation (reflecting the need of firms for credit during the crisis), social infrastructure and roads. The main reductions were in environmental infrastructure, rail and other transport (i.e. other than roads) and ICT, reflecting the difficulties and delays in carrying out projects. Despite the shifts, the broad division of funding between policy areas remained much the same in most countries.

The overall support for RTD and innovation amounted on average to 17% of total funding.

The evaluation approach adopted

The division into Work Packages

As in the case of the *ex post* evaluation of the 2000-2006 programmes, the approach adopted was a selective one. Instead of trying to cover all 322 Operational Programmes (OPs) across the EU, which without a major expansion in resources and

time could at best be done very superficially, the evaluation concentrated on policy areas and issues where there was the most need. This was either because the previous *ex post* evaluation had identified particular challenges or because little was known as few evaluations had been undertaken.

The Work Packages (WPs) covered around 75% of the overall funding. In addition, two WPs compiled data to be used in the evaluation, one on indicators, the other on the distribution of expenditure across regions and categories of spending. Two sub-WPs carried out econometric analysis of the effects of Cohesion policy on economic growth, and two estimated the effects of policy using macroeconomic models.

The challenges for the evaluation

It is important to bear in mind that the objectives of policy were multiple ones, encompassing social and environmental aims as well as economic ones. The objectives in particular cases, however, were often not distinguished or spelled out in any detail, making it difficult to assess how far they had been achieved.

Secondly, there is the usual difficulty of any policy evaluation of distinguishing its effects from other factors which were at work at the time.

Thirdly, this difficulty is compounded by the long time-lags often involved between the expenditure undertaken and the effects becoming apparent. This applies especially to infrastructure projects, which represented a large share, especially in Convergence regions as noted above. The evaluation was, therefore, undertaken before many of the projects had produced their full results, or had even been completed, let alone had had time to affect the development of the region or country in which they were located.

Fourthly, these difficulties were reinforced by the crisis, which, as noted above, changed the economic context in which programmes were carried out and had differential effects on regions that are hard to identify and take account of.

The effects of Cohesion policy over the period

The effects shown by economic models

During the programming period there was a reduction in regional disparities in GDP per head across the EU, in particular between Convergence regions and others. The evaluation estimated the contribution of Cohesion Policy to this reduction.

The results of the econometric analysis undertaken suggest that Cohesion policy funding pushed up growth in the Convergence regions, even if by less over the years 2007-2011 than before.

The macroeconomic models, which are the only way of assessing the full impact of Cohesion policy on growth, estimate that, in the EU12, the spending led to GDP in 2015 being increased by 4% above what it otherwise would have been, and in Hungary, by over 5%.

They also indicate that the investment carried out has a continuing effect long after the expenditure has ended because it increases productive potential and pushes up the growth rate that the economies can sustain in the long term. In Poland, for example, by 2023 GDP is estimated to be almost 6% above what it would be without Cohesion policy and rural development investment. The models show too that the policy was both effective and efficient, in that they indicate a return of over EUR 2.70 for each euro invested in Cohesion and rural development policy. All countries, moreover, gain, even the net contributors to the funding, as the income generated by the investment leads to increased imports into the countries supported. This reflects

the closely integrated nature of the EU economies, in which spending in one part benefits all.

Effects in different policy areas

Growth and employment

The model findings, which are based on assumptions of how economies work derived from research evidence and economic theory, complement the evaluations undertaken of real spending on the ground. The various WPs examined the way that policy was carried out and the results of the investment supported. Although their findings do not relate directly to the assumptions incorporated in the macroeconomic models, they demonstrate that the investments concerned produced tangible results which are consistent with them having the kinds of effect assumed.

Support to SMEs and innovation

The overall ERDF support to SMEs totalled EUR 51.9 billion over the period. Much of it went to RTD and innovation in line with the Lisbon strategy. Some 246 000 SMEs across the EU received direct support and around 7% of those engaged in manufacturing – a key sector because it remains a major source of net exports on which the growth of a region in the long term depends. Moreover, an estimated 15% of small firms in manufacturing in the EU (those with 10-49 persons employed) received direct support, and over a third of medium-sized enterprises.

Support, according to core indicator data, resulted in:

- 121 400 new businesses being helped to start up;
- 322 100 new jobs, in full-time equivalent terms, being directly created in SMEs.

A major result of support was that it helped SMEs withstand the effects of the crisis by providing credit when other sources of finance had dried up. It enabled SMEs to invest in modernising or expanding plant and equipment and to continue their R&D and innovation activities, which otherwise would not have been possible. It also in many cases financed working capital, which enabled firms to remain in business and to maintain employment.

Support to large enterprises

Support to large enterprises (those employing 250 people or more at the location supported) amounted to around EUR 6 billion over the period or 20% of total direct support to firms. The evaluation found that most of the projects examined led to gains in productivity, in many cases significant ones, as well as to increased employment. But often there was significant 'deadweight' involved as much of the investment would have occurred without the support (if not on the same scale), at the same time or in the same place. Nevertheless, the evaluation also found there were substantial indirect and wider effects of the investment on SMEs in the local economy, such as knowledge spill-overs or the building of supply chains, in 71% of cases where such effects were specifically planned beforehand.

Support for transport

Investment in transport was a major focus of support from the ERDF and Cohesion Fund in the period 2007-2013. It amounted to EUR 80.9 billion and resulted in:

- construction of 4 900 km of roads, mostly motorways, nearly half on the Europe-wide TEN-T network;
- the upgrading of almost 28 600 km of roads, two-thirds in the EU12;

- the construction of 1 100km of new railways;
- the upgrading of 3 900 km of railway lines, almost 1 600 km in the EU12, and 2 600 km of the lines constructed or upgraded on the TEN-T.

The investment supported increased the accessibility of the countries and regions concerned and opened up the possibility of increased trade with the rest of the EU, which is vital to their economic development.

Support to other policy areas

Support for investment in other policy areas contributed to growth and employment in the short term by boosting demand, but it also strengthened the productive potential of the economy in the longer term. Examples are:

- investment in energy efficiency in housing and public buildings, which stimulated economic activity during the crisis as well as reducing energy use so contributing to the sustainability of development;
- support for culture and tourism, which increased economic activity in regions;
- support for urban development and social infrastructure, which improved the quality of life in local areas and provided essential services, but which also made them more attractive for businesses to locate;
- investment in education infrastructure, which complemented investment in human resources, which in turn is a major factor in economic competitiveness;
- support for Interreg, the interregional cooperation initiative, which helped to overcome the obstacles to economic development that borders often represent while giving rise to closer social relations and joint action to tackle common environmental issues.

Support for the environment

Cohesion policy support for the environment totalled EUR 40.3 billion, mostly spent on investment in waste management facilities, clean water supply and wastewater treatment in the EU12 countries and Convergence regions in the EU15. This resulted in:

- 5.9 million more people being connected to a supply of clean drinking water;
- 6.9 million more people being connected to new or upgraded wastewater treatment facilities.

In addition, many landfill sites not compliant with EU standards were closed down, while in the Czech Republic, Hungary, Lithuania, Poland and Slovenia, as well as Croatia, the proportion of waste recycled was increased by over 10 percentage points.

Support for energy efficiency

The measures for increasing energy efficiency in housing and public buildings (co-financed by about EUR 6.3 billion from ERDF) reduced energy use by 1 438 GWh a year by the end of 2013 in 27 OPs, a cut of 0.2% in total yearly energy consumption in the regions concerned – not large, but significant given the small amount of funding involved (only around 2% of the total).

In Lithuania, energy use in the 864 public buildings renovated was reduced by 236 GWh a year by the end of 2014, a cut of almost 3% in total annual energy consumption in the country.

Social inclusion

Social infrastructure

Much of the support from the ERDF and Cohesion Fund was aimed at achieving social as well as economic and environmental objectives. Investment in social infrastructure led to:

- the modernisation of schools and colleges and their re-equipment in Portugal, benefiting over 300 000 children and young people;
- improvements in the healthcare system in Hungary through construction of care facilities and the purchase of ambulances;
- the upgrading of schools and healthcare facilities in Poland for 1.9 million people;
- the establishment of welcome centres for migrants in Murcia, Asturias, Extremadura and Galicia in Spain, and in southern regions of Italy.

Support for job creation

Creating jobs is a major means of increasing social inclusion. ERDF and Cohesion Fund programmes were responsible for directly creating over 940 000 jobs (gross) at a minimum by the end of 2014 (when only 77% of funding had been spent), according to data reported by Managing Authorities (MAs), which do not cover all OPs.

The delivery system

A dedicated WP looked into the effectiveness of the delivery system, based on case studies, surveys and interviews. According to the study, the delivery system worked well in ensuring that funding was absorbed. By the end of 2015, 90% had been spent on projects. But in a few countries, the share was much smaller – less than 80% in Italy and Romania – with a serious risk that not all the funding available will have been spent in the time allowed.

In a few, predominantly EU12, Member States there were delays in implementing programmes, the causes of which included lengthy and inefficient project appraisal and procurement processes, coupled with high staff turnover.

The rate of programme implementation was slow in many countries up to the last 2-3 years of the period. Spending then accelerated markedly, raising concerns that absorption of funding was given higher priority than the effectiveness of expenditure. The survey conducted as part of the evaluation confirmed that absorption was often accorded larger weight in project selection than effectiveness, a finding which was reflected in the limited extent to which outcomes of programmes were seriously monitored.

Delays in implementation were caused partly by the crisis, which led to difficulties in obtaining co-financing and to projects being postponed because of uncertainty, and partly by the delayed start of programmes as staff were occupied in spending the 2000-2006 funding. But the crisis, and the need to counteract the economic downturn, also gave an added reason for increasing the rate of implementing programmes. In practice, the delivery system proved flexible enough to allow funds to be shifted to areas where expenditure could be accelerated and/or which had a more immediate impact on economic activity.

The Lisbon 'earmarking' seems to have imposed few constraints on the programming of the funds. MAs were able to respect the Lisbon priorities without it significantly affecting the objectives they wished to pursue. This was partly because of the general

way in which the priorities were framed, and partly because of the broad way objectives were expressed in OPs. Although this gave MAs flexibility in spending funds, it also led to vague project selection criteria. Together with the importance attached to absorption, this worked against funding being used in the most effective way.

Improved controls contributed to a reduction over the 2007-2013 period in the error rate of compliance of expenditure with the regulations. However, for a majority of MAs surveyed, especially in the EU15 where programmes were much smaller, the overall administrative burden was perceived as out of proportion to the amount of funding involved. Much of the burden in the EU12 and Convergence regions in the south of the EU seemed to stem from multiple, often poorly coordinated layers of control, contradictory interpretation of the regulations, a lack of capacity at management level, the low uptake of simplification measures and the limited use of digital technology.

Lessons to be drawn and implications for future policy

General policy implications

A number of the findings of the evaluation have implications for the way Cohesion policy is designed and conducted after the 2007-2013 period. Many of them also had been identified in the 2000-2006 *ex post* evaluation and have already been taken into account in the regulations for the 2014-2020 period. These are:

- The general way programme objectives were expressed, making it difficult to define the projects for achieving them or to relate the results to the objectives. (2014-2020: specific objectives required.)
- The excessively wide dispersion of funding over many policy areas or objectives, leading to insufficient spending in particular areas to achieve meaningful results. (2014-2020: obligatory thematic concentration.)
- The lack of relevant indicators to monitor and evaluate outcomes. (2014-2020: obligatory use of common output and result indicators.)
- The lack of programme evaluations carried out in Member States that could be used for the present evaluation exercise. While more evaluations were carried out than in the previous period, they were concentrated in a few countries, unevenly spread across policy areas, and focused mainly on procedures rather than impact. Those that assessed impact were not always of good quality. (2014-2020: programmes are required to undertake evaluations on each priority, but the standard of impact evaluations needs to be improved to ensure the results are reliable.)
- The capacity of the MAs responsible for programmes in Member States to manage and implement them. The evaluation found evidence of a lack of capacity in MAs in a number of countries, due partly to inexperience in several EU12 Member States but also to high staff turnover and institutional inefficiencies. (2014-2020: the capacity of MAs to manage programmes is a particular focus and *ex ante* conditionality has been introduced to try to ensure that capacity is sufficient to carry out programmes.)
- The administrative burden imposed on MAs, which was found to be disproportionate in many EU15 countries with small programmes. Several measures have been introduced in 2014-2020 to reduce the burden, especially on MAs. However, there is a need to consider how to make auditing less costly and more efficient, such as by reducing duplication.
- The excessive focus on the absorption of funding at the expense of effectiveness. This has been tackled by the emphasis on results in the 2014-

2020 programming period. But it raises an issue over the possible conflict between ensuring that the projects selected are the most effective in terms of the results achieved, which may require time, and the rule that funding has to be spent within a certain period. The extension of the period from two to three years, however, should ensure that this potential conflict does not materialise. The rule, combined with delays in implementing programmes, largely due to their late start, was a major reason for the focus on absorption, which became more pressing as the period went on. The present period could be repeating this experience.

A number of other general issues were also identified by the evaluation. In particular:

- The procurement process emerged as a major source of delays in implementation, especially in the EU12. This was because of the widespread practice of awarding contracts on the basis solely of price and neglecting both the quality of the bid and the expertise and financial viability of the tenderer. The practice stems largely from the lack of ability, and confidence, of MAs to use objective criteria to assess quality.
- There is a need not only for better indicators on programme performance but also for better data on the context in which policy is implemented, so that outcomes can be more meaningfully interpreted. While regional data from Eurostat have improved markedly over recent years, there is still a lack of data on a number of policy areas, including the environment and social aspects, as well as on government investment at regional level, to compare with that financed by Cohesion policy.
- There remains a need for meta-evaluations to synthesise the findings of evaluations carried out, which can be used as a reference by MAs across the EU.

There are equally findings from the evaluation with implications for policy in particular areas or for particular types of measure, especially as regards financial instruments.

Specific policy implications

Financial instruments

Financial instruments (FIs) have the potential to be a more effective and efficient means of funding investment across many policy areas than non-repayable grants, but aspects of the way they worked in 2007-2013 deserve careful consideration, in particular:

- the legal provisions for FIs. These were not detailed enough in 2007-2013, which with the inexperience of many implementing bodies led to delays in implementation;
- the failure of MAs to spell out the expected contribution of FIs to the pursuit of programme objectives. Such objectives need to be specified in binding agreements with (private) fund managers to avoid exclusive focus on commercial criteria in the selection of projects;
- the deficiencies of monitoring systems and indicators. The focus needs to shift from the financial performance of funds to their performance in contributing to programme objectives and that of the enterprises receiving support;
- the costs of operating FIs need to be transparent so that their effectiveness can be assessed and compared with other means of supporting investment;

- basic information on the funding recycled and the private money attracted needs to be reliably reported since these are major reasons for the use and spread of FIs.

The implications for policy in specific areas are set out below.

Support for SMEs and RTDI

- The support measures adopted should be tailored to the local context and what they are intended to achieve. This may mean complementing financial aid with support services to increase the effectiveness of measures implemented as well as the greater use of intermediaries with knowledge of local conditions.
- In Competitiveness regions in the EU15, ERDF support can play an important role as a test-bed for innovative measures instead of replicating traditional national schemes. This can generate EU added-value which exceeds the small funding involved.
- The regional distribution of the EU Framework Programme funding should be considered along with ways in which Convergence regions, especially those in the EU13, could compete more effectively for funding.

Support for large enterprises

- Large firms typically do not need government subsidies, but in the right situation support can influence a company's behaviour and create an important source of regional growth. But support needs to be selective and conditional on there being tangible benefits to the local economy and the firms located there.
- Enterprises which are only slightly larger than SMEs deserve special attention. Many experienced similar problems of accessing finance in the crisis to those experienced by smaller firms, and ERDF support prevented a number of strategically important ones from closing.

Support for transport

- The concentration of support on roads in the EU12 in 2007-2013 can be justified by the inadequacy of the network. This is likely to continue to be so for some years. But in the EU15 it is questionable whether Cohesion policy should continue to finance road-building.
- The source of evident difficulties in some countries of carrying out rail projects, which were also manifest in the previous period, needs further attention.
- Consideration needs to be given to the appropriate division of funding between TEN-T projects and those aimed at meeting local and regional needs. Projects which help to reduce regional disparities, the central objective of Cohesion policy, should be regarded as a source of EU added-value to the same extent as those that contribute to the TEN-T.

Support for environmental infrastructure

- Many environmental projects are complex and require a high level of competence in the authorities concerned, which for smaller ones may not exist since they undertake such projects only occasionally. Since waste management projects in smaller local authority areas, in particular, are likely to become more important in future years (in line with the Waste Framework Directive), this is an issue deserving attention.

- Evaluations of Cohesion policy investment in environmental infrastructure should be better aligned with assessments of the implementation of EU Directives.

Support for energy efficiency in residential and public buildings

- Loans or other kinds of FI are likely to be preferable to grants as a means of support for energy efficiency measures. Awareness-raising campaigns might be needed to overcome unwillingness to take them up.
- Energy audits should be a standard part of project selection criteria, to identify the reduction in energy use intended and to verify its achievement.
- Financial support should be complemented by a range of non-financial measures, including advice and guidance, certification schemes and building regulations.

Support for culture and tourism

- The potential of the two sectors to contribute to regional development should be more effectively targeted and the support provided should be integrated into a development strategy.
- Serious consideration should be given to supporting the development of creative industries as a potential source of growth and employment in particular regions.

Support for urban development and social infrastructure

- Urban regeneration can strengthen the growth potential of regions but needs to be part of a coherent regional development strategy.
- Involvement of the local community is needed to identify the most appropriate form of regeneration and the most promising development path to pursue.

European Territorial Cooperation

- Programmes need to have a clear strategic focus extending beyond cooperation or joint action, though these have to remain central elements in the way they operate.
- More attention needs to be paid to the notion of a functional region when identifying the border regions to support. This is essential to considering the potential benefits of cross-border cooperation. Although it is difficult, attempting the exercise would focus attention on aspects relevant for the prospective development of the region.
- Interreg and other Cohesion policy programmes need to be better coordinated to reinforce the effects of each on development.
- There is a need to develop monitoring indicators which relate not only to the direct output of projects but to what the programmes are attempting to achieve in terms of initiating or strengthening cross-border cooperation.

Conclusions

The evidence set out in the report demonstrates that Cohesion policy, though operating in a very difficult environment in 2007-2013, worked effectively and produced tangible results. It has made a major contribution over the period to jobs and growth, to the pursuit of both the Lisbon priorities and the Europe 2020 strategy as well as to the reduction of regional disparities. The evidence produced by

evaluations on the ground point to this and it is complemented by the results of the macroeconomic models which indicate the added-value of the policy in terms of the additional GDP generated in all Member States.

The policy also contributed to the closer integration of the EU internal market through improving transport links as well as to the better implementation of EU legislation, notably in respect of the environment, and to a better quality of life.

In both EU12 countries and Convergence regions in the south of the EU, Cohesion policy funding represented the main, and in some cases, the only source of development expenditure over the period.

The evaluations carried out in different policy areas produced concrete evidence of achievements and highlighted the importance of Cohesion policy funding for the projects undertaken.

Interreg programmes financed under the European Territorial Cooperation (ETC) Objective generated a clear EU added-value and would not have taken place without the funding being available. The same is true of the support for transport and of investment in the TEN-T in particular.

The delivery system proved effective in implementing the policy over the period but there is the potential for gains in efficiency through increased administrative capacity as well as through further simplification and differentiation between programmes.

Résumé

Introduction

Le présent rapport synthétise les résultats de l'évaluation ex post des programmes de la politique de cohésion financés par le Fonds européen de développement régional (FEDER) et le Fonds de cohésion. Cette évaluation visait principalement à répondre à trois grandes questions :

- Comment les crédits reçus ont-ils été dépensés dans les régions de l'Union ?
- Quels étaient les résultats et dans quelle mesure ont-ils contribué à atteindre les objectifs de la politique de cohésion ?
- Quelles sont les leçons à tirer pour l'élaboration et la conduite futures de la politique de cohésion ?

Premièrement, ce résumé présente les objectifs de la politique de cohésion au cours de la période considérée et le contexte dans lequel elle a été mise en œuvre. Deuxièmement, il indique l'importance des crédits alloués et leur répartition dans les différentes parties de l'Union européenne et les différents domaines d'action. Troisièmement, il décrit l'approche adoptée pour l'évaluation. Quatrièmement, il évalue la mesure dans laquelle les objectifs de la politique ont été atteints. Cinquièmement, il dresse la liste des leçons à retenir et de leurs conséquences sur la politique future.

Les objectifs de la politique et le contexte politique et économique

Les objectifs de la politique de cohésion

La politique de cohésion a pour objectif final, en ce qui concerne le FEDER et le Fonds de cohésion, de réduire les disparités régionales dans l'Union européenne. Dans la période 2007-2013, cette politique devait également contribuer à la poursuite des priorités communes à l'Union européenne définies dans la stratégie de Lisbonne. Dans la pratique, cela revenait à affecter une proportion minimale des fonds reçus – 60 % dans les régions de convergence et 75 % dans les régions relevant des objectifs de compétitivité et d'emploi – à des investissements qui « *renforcent directement la compétitivité et la création d'emplois – dans la recherche et l'innovation, le capital humain, les services aux entreprises, les principales infrastructures de l'Union européenne et l'amélioration de l'efficacité énergétique.* »⁴

A partir de 2010, la stratégie Europe 2020 visant à atteindre une *croissance intelligente, durable et inclusive* est devenue la priorité.. Étant donné que la stratégie était très proche de celle de Lisbonne, mis à part en ce qui concerne l'inclusion spécifique de l'objectif social visant la réduction de la pauvreté et de l'exclusion sociale, elle n'impliquait aucune segmentation majeure des efforts. En effet, Lisbonne et Europe 2020 peuvent être vues comme des stratégies qui définissent les canaux à utiliser par les États membres pour renforcer le potentiel de développement des régions problématiques et qui accusent un retard, ainsi que les moyens, par conséquent, de réduire les disparités régionales dans l'Union européenne.

⁴ « Delivering Lisbon through Cohesion Policy » (Concrétiser la stratégie de Lisbonne par la politique de cohésion), communiqué de presse, Commission européenne, le 1er mars 2006, (en anglais) http://europa.eu/rapid/press-release_SPEECH-06-138_en.htm?locale=en

Le contexte politique – Élargissement de l'Union européenne⁵

La période 2007-2013 était la première période complète durant laquelle les pays d'Europe centrale et orientale qui sont devenus membres de l'Union en 2004 et au début de 2007 ont bénéficié du FEDER et du Fonds de cohésion. Les problèmes en matière de développement auxquels ces pays devaient faire face étaient d'une ampleur et d'une nature différentes de ceux rencontrés par les pays de l'UE-15 qui ont bénéficié des aides de cohésion et ont ainsi constitué un défi particulier pour la politique de cohésion, en raison de leur manque d'expérience en matière de gestion des programmes. L'analyse de la manière dont les crédits ont été utilisés et des résultats obtenus revêt donc un intérêt particulier.

Le contexte économique – La crise

L'éclatement de la crise économique et financière a radicalement modifié le contexte dans lequel les programmes de cohésion ont été mis en œuvre. Lors de la définition des programmes, il était supposé que la croissance se poursuivrait au rythme relativement soutenu observé les quelques 10 années antérieures. La récession mondiale en 2008-2009 et la crise économique et financière qui s'ensuivit exercèrent une pression considérable sur les finances publiques. La crise a également entraîné une diminution des investissements publics et des transferts des autorités centrales vers les pouvoirs publics régionaux et locaux afin de réaliser ces investissements. Les ressources disponibles pour le cofinancement de projets en ont été réduites et les crédits alloués au titre de la politique de cohésion sont devenus une source encore plus importante de financement pour les dépenses relatives au développement dans de nombreuses parties de l'Union européenne, notamment dans les pays de l'UE-12 et les quatre États membres méridionaux de l'UE-15, la Grèce, l'Espagne, l'Italie et le Portugal.

La crise a eu des conséquences particulièrement graves sur de nombreuses régions moins développées, mais ses effets ont été modérés par les dépenses financées au titre de la politique de cohésion.

La crise a en outre entraîné une certaine réorientation des programmes : la résolution des problèmes structurels de long terme en vue de contrer le ralentissement économique a été reléguée au second plan en faveur de mesures aux effets plus immédiats et directs sur la croissance et l'emploi. En effet, l'Union européenne a encouragé les États membres à utiliser les fonds de la politique de cohésion de la sorte et plusieurs mesures ont été prises afin de faciliter cette approche. Dès lors, l'objectif à court terme visant à créer de la croissance et de l'emploi est devenu encore plus important au cours de la période en question.

Disparités régionales en matière de PIB, d'emploi et d'autres aspects

Deux principaux facteurs ont influencé l'accroissement des disparités durant la période de programmation : l'éclatement de la crise économique et financière et le rattrapage continu des pays de l'UE-12, notamment la performance économique relativement forte de la Pologne. Le long processus de convergence du PIB par habitant dans les régions qui présentent un retard vers la moyenne de l'Union européenne a été interrompu par la survenue de la crise en 2008-2011 ; il s'est poursuivi après 2011, mais à un rythme bien plus modéré qu'auparavant. Dans les régions de convergence de l'UE-12, le PIB par habitant a augmenté plus rapidement en moyenne entre 2007 et 2014 que dans les autres régions de l'Union et plus rapidement que dans les

⁵ La Croatie, qui est entrée dans l'UE en 2013, n'a pas été éligible au FEDER ou au Fonds de Cohésion pour la période, mais a reçu une aide de pré-adhésion d'un montant de 707 millions d'euros. Il n'est pas traité en détail dans le rapport.

régions-capitales de République tchèque, de Hongrie et de Slovaquie. La même observation s'applique aux régions de convergence appartenant à l'UE-15, mis à part celles de Grèce, d'Espagne et d'Italie, où le PIB par habitant a considérablement diminué par rapport à la moyenne de l'Union européenne.

Les disparités régionales en matière de taux d'emploi s'étaient également atténuées dans l'Union européenne jusqu'à l'apparition de la crise, mais se sont accrues depuis, principalement en raison d'une diminution de l'emploi en Grèce, en Espagne et en Italie. Cependant, dans les régions de convergence de l'UE-12, le taux d'emploi a augmenté en moyenne de deux points de pourcentage en plus que la moyenne de l'Union européenne au cours de la période. Dans les régions de convergence d'Espagne, du Portugal, d'Italie et de Grèce, le taux est resté inchangé ; les disparités régionales en matière d'emploi ont diminué dans ces pays. En outre, dans plusieurs pays de l'UE-12 – la Bulgarie, la Lettonie, la Lituanie, la Pologne, la Roumanie et la Slovaquie –, la proportion des personnes touchées par une privation matérielle a diminué au cours de la période.

Importance du financement et priorités en matière de dépenses

Les ressources allouées au titre du FEDER et du Fonds de cohésion

Au total, durant la période 2007-2013, 269,9 milliards d'EUR issus du FEDER et du Fonds de cohésion ont été consacrés à la politique de cohésion. 76,6 milliards d'EUR supplémentaires provenaient du FSE. Des montants issus du FEDER et du Fonds de cohésion, 231,0 milliards d'EUR, plus de 80% du total, ont été alloués aux programmes de convergence. Près de deux tiers de ces derniers ont été affectés aux pays de l'UE-12, qui ont par conséquent bénéficié de plus de la moitié (55 %) du total des crédits alloués.

La concentration des crédits est plus évidente lorsqu'elle est mise en parallèle à la population. Le montant global alloué aux régions de convergence s'élevait, en moyenne, à 1 527 EUR par habitant au cours de la période concernée, tandis qu'il s'élevait en moyenne à 903 EUR par habitant dans les régions qui entraient progressivement dans cette catégorie ou la quittaient. Inversement, dans les régions relevant de l'objectif de compétitivité, la moyenne s'élevait à seulement 91 EUR par habitant, soit à peine 6 % du montant alloué dans les régions de convergence.

Un financement assez équilibré de chaque objectif a été observé entre les différents types de régions, des montants similaires étant attribués aux zones urbaines et aux zones rurales ou intermédiaires dans les régions de convergence ainsi que dans les régions relevant de l'objectif de compétitivité et les régions qui entraient progressivement dans la catégorie de la convergence ou qui la quittaient.

Dans la plupart des pays de l'UE-12, le FEDER et le Fonds de cohésion représentaient 2 à 3 % du PIB. Plus important, dans neuf d'entre eux, le montant était composé de 35 % à 57% d'investissement public et en Roumanie, en Slovaquie et au Portugal, environ de 25-28 %. Dès lors, les crédits affectés au titre de la politique de cohésion constituaient une source principale de financement pour les dépenses en matière de développement dans tous ces pays, comme c'était le cas dans les régions de convergence de Grèce, d'Espagne et d'Italie.

La répartition des crédits entre les domaines d'action

La majeure partie des crédits attribués aux pays de l'UE-12 a été affectée aux investissements dans l'infrastructure : environ 70 % ou plus du total dans presque tous ces pays, reflétant la nécessité de moderniser et d'étendre le stock de capital communal, en grande partie très mal entretenu. C'était particulièrement le cas du

réseau de transport, qui représentait la moitié ou plus des investissements dans les infrastructures dans la plupart des pays, principalement destinés à la construction ou la modernisation de routes.

Dans l'UE-12, les investissements dans les infrastructures environnementales – l'approvisionnement en eau potable, le traitement des eaux résiduaires et la gestion des déchets – représentaient en moyenne 17 % du total des investissements. Un pourcentage similaire a été alloué à l'énergie, l'informatique, les infrastructures sociales (hôpitaux, écoles, logements, etc.) et la réhabilitation urbaine confondues.

La même concentration des fonds dans les infrastructures a pu être observée dans les régions de convergence de l'UE-15, notamment en Grèce et en Espagne, où ce volet a absorbé environ 75 % des crédits.

Dans les régions relevant de l'objectif de compétitivité de l'UE-15, une part relativement modeste des crédits a été allouée aux infrastructures dans la plupart des cas et environ la moitié de ces crédits a été affectée au soutien à la recherche, la technologie et le développement (RTD), à l'innovation et aux entreprises.

Les crédits ont été réorientés vers différents domaines d'action au cours de la période. Les principaux ajouts visaient à soutenir l'investissement dans les entreprises qui n'entraient pas dans la catégorie de la RTD et l'innovation (reflétant la nécessité des entreprises d'obtenir un crédit durant la crise), les infrastructures sociales et les routes. Les principales réductions visaient les infrastructures environnementales, les voies ferrées et les autres transports (c'est-à-dire autre que par route) et les technologies de l'information et de la communication, reflétant les difficultés et retards en matière de réalisation des projets. Malgré ces changements d'orientation, la répartition globale des crédits entre les différents domaines d'action est restée principalement semblable dans la plupart des pays.

Le soutien global à la RTD et à l'innovation s'élevait en moyenne à 17 % du total des crédits.

L'approche d'évaluation adoptée

La division en modules de travail

À l'instar de l'évaluation ex post des programmes 2000-2006, l'approche adoptée était de nature sélective. Au lieu de tenter de couvrir les 322 programmes opérationnels sur l'ensemble de l'Union, ce qui aurait pu être fait au mieux de manière très superficielle à moins de disposer d'une quantité supplémentaire considérable de temps et de ressources, l'évaluation a été axée sur les domaines d'action et points d'attention prioritaires. Ils l'étaient soit par le fait que la précédente évaluation ex post avait permis de mettre en évidence des problèmes particuliers, soit par la maigre quantité de données disponibles en raison du faible nombre d'évaluations réalisées.

Les modules de travail ont couvert à peu près 75 % du financement global. En outre, deux modules de travail étaient destinés à compiler des données à utiliser dans l'évaluation, l'un sur les indicateurs, l'autre sur la ventilation des dépenses entre régions et catégories de dépenses ; deux sous-modules portaient sur une analyse économétrique des effets de la politique de cohésion sur la croissance économique et deux autres visaient à estimer les effets de la politique à l'aide de modèles macroéconomiques.

Les défis lors de l'évaluation

Il importe de garder à l'esprit que les objectifs de la politique étaient multiples ; présentant une portée tantôt sociale, tantôt environnementale et tantôt économique.

Cependant, les objectifs dans certains cas particuliers n'étaient souvent pas distingués ou décrits dans le détail, rendant difficile l'évaluation de leur degré de réalisation.

Deuxièmement, il convient de tenir compte de la difficulté rencontrée lors de toute évaluation de mesures, à savoir de faire la distinction entre leurs effets et les autres facteurs à l'œuvre au même moment.

Troisièmement, cette difficulté est accentuée par la longueur des périodes qui séparent souvent le moment où les dépenses sont engagées du moment où les résultats deviennent visibles. Cet aspect s'applique surtout aux projets d'infrastructure d'envergure, notamment dans les régions de convergence, comme indiqué précédemment. Dès lors, l'évaluation a eu lieu avant que nombre de projets aient produit toute l'étendue de leurs résultats, voire avant qu'ils aient été achevés, et surtout avant qu'ils aient eu le temps d'avoir une incidence sur l'évolution de la région ou du pays concerné.

Quatrièmement, ces difficultés ont été exacerbées par la crise qui, comme indiqué précédemment, a altéré le contexte économique dans lequel les programmes ont été menés et a eu différents effets – difficiles à mettre en évidence et à prendre en considération – sur les régions.

Les effets de la politique de cohésion au cours de la période considérée

Les effets mis en évidence par les modèles économiques

Au cours de la période de programmation, une atténuation des disparités régionales en matière de PIB par habitant a pu être observée dans l'Union européenne, notamment entre les régions de convergence et les autres régions. L'évaluation a permis d'estimer la contribution de la politique de cohésion à cette atténuation.

Les résultats de l'analyse économétrique donnent à penser que les crédits de la politique de cohésion ont permis d'accélérer la croissance dans les régions de convergence, dans une moindre mesure durant les années 2007-2011 qu'auparavant.

Les modèles macroéconomiques, qui constituent l'unique moyen d'évaluer toute l'étendue de l'incidence de la politique de cohésion sur la croissance, permettent d'estimer que dans l'UE-12, les dépenses ont entraîné une augmentation de 4 % du PIB en 2015 en plus de l'augmentation qui aurait été observée en l'absence de la politique, et de 5 % en Hongrie.

Ces modèles permettent également de montrer que les investissements consentis continuent de porter leurs fruits longtemps après la fin des dépenses, car ils augmentent le potentiel de production et relèvent le taux de croissance que les économies sont capables de maintenir à long terme. En Pologne, par exemple, d'ici à 2023, le PIB devrait être supérieur de 6 % par rapport à ce qu'il aurait été en l'absence des investissements au titre de la politique de cohésion et du développement rural.

Les modèles permettent également de démontrer que la politique était à la fois efficace et efficiente, dans la mesure où ils indiquent un rendement de plus de 2,70 EUR pour chaque euro investi dans les régions relevant de la politique de cohésion et de développement rural. En outre, tous les pays bénéficient de cette politique, même les contributeurs nets au financement, car les revenus générés par les investissements entraînent une augmentation des importations dans les pays soutenus. Il est ainsi possible de mettre en évidence la nature étroitement intégrée des économies de l'Union, dans lesquelles toute dépense dans un État bénéficie à l'ensemble de ceux-ci.

Effets dans différents domaines d'action

Croissance et emploi

Les observations du modèle qui sont fondés sur des hypothèses de fonctionnement des économies tirées de données tangibles et de la théorie économique complètent les évaluations des dépenses réelles effectuées sur le terrain. Les différents modules de travail ont examiné les modalités d'application de la politique et les résultats des investissements consentis. Bien que les observations qui en ressortent ne puissent pas être directement liées aux hypothèses intégrées dans les modèles macroéconomiques, elles démontrent que les investissements concernés ont produit des résultats concrets, ce qui est en accord avec l'idée qu'ils ont le type d'effets supposés.

Soutien aux PME et à l'innovation

Le total du soutien du FEDER aux PME s'élevait à 51,9 milliards d'EUR au cours de la période considérée. Une grande partie de celui-ci a été consacré à la RTD et l'innovation, conformément à la stratégie de Lisbonne. Quelque 246 000 PME dans l'Union européenne ont bénéficié d'un soutien direct, tout comme près de 7 % des PME actives dans la fabrication, un secteur clé étant donné qu'il demeure une source importante d'exportations nettes dont dépend la croissance à long terme d'une région. En outre, selon une estimation, 15 % des petites entreprises de fabrication de l'Union européenne (celles employant entre 10 et 49 personnes) et plus d'un tiers des moyennes entreprises ont bénéficié d'un soutien direct.

Sur la base des données sur les indicateurs fondamentaux, il a pu être déterminé que le soutien consistait principalement en :

- l'aide à la création de 121 400 nouvelles entreprises ;
- la création directe de 322 100 nouveaux emplois ETP dans des PME.

L'un des principaux résultats du soutien est qu'il a aidé les PME à résister aux conséquences de la crise en leur fournissant des fonds alors que d'autres sources de financement s'étaient tarées. Il a permis aux PME d'investir dans la modernisation ou l'expansion de leur usine et de leurs équipements ainsi que de poursuivre leurs activités de recherche, de développement et d'innovation, ce qui autrement aurait été impossible. Dans de nombreux cas, ce soutien a en outre financé le capital de travail, permettant aux entreprises de poursuivre leur activité et de maintenir l'emploi.

Soutien aux grandes entreprises

Le soutien aux grandes entreprises (employant 250 personnes ou plus sur le site bénéficiaire) s'est élevé à environ 6 milliards d'EUR au cours de la période considérée, soit 20 % du soutien direct aux entreprises. L'évaluation a permis de conclure que la plupart des projets examinés ont permis d'accroître la productivité – dans de nombreux cas dans une mesure significative – et l'emploi. Cependant, les effets du soutien étaient souvent très limités, étant donné que les investissements auraient été en grande partie réalisés sans celui-ci, sinon à la même échelle, au même moment ou au même endroit. Néanmoins, l'évaluation a également permis de conclure que les investissements ont eu des effets considérables, indirects et plus vastes, sur les PME dans l'économie locale, tels que la diffusion des connaissances ou la construction de chaînes d'approvisionnement, dans 71 % des cas où ces effets avaient été spécifiquement planifiés.

Soutien au transport

Les investissements dans le transport représentaient une part significative du soutien provenant du FEDER et du Fonds de cohésion au cours de la période 2007-2013. Ils se sont élevés à 80,9 milliards d'EUR et ont entraîné :

- la construction de 4 900 km de routes, principalement d'autoroutes, près de la moitié sur le RTE-T ;
- la modernisation de près de 28 600 km de routes, dont deux tiers dans l'UE-12 ;
- la construction de 1 100 km de nouvelles voies ferrées ;
- la modernisation de 3 900 km de lignes de voies ferrées, près de 1 600 km dans l'UE-12 et 2 600 km de lignes construites ou modernisées sur le RTE-T.

Les investissements consentis ont amélioré l'accessibilité des pays et régions en question et ouvert la possibilité d'échanges accrus avec le reste de l'Union, aspect vital pour leur développement économique.

Soutien aux autres domaines d'action

Le soutien aux investissements dans d'autres domaines d'action a contribué à la croissance et à l'emploi à court terme en stimulant la demande, mais il a également renforcé le potentiel de production de l'économie à plus long terme. Voici quelques exemples :

- des investissements dans l'efficacité énergétique des logements et bâtiments publics, ont stimulé l'activité économique durant la crise ainsi que la réduction de la consommation énergétique, contribuant au développement durable ;
- un soutien à la culture et au tourisme, qui a augmenté l'activité économique dans les régions;
- un soutien au développement urbain et aux infrastructures sociales, qui a permis d'améliorer la qualité de vie locale et de fournir des services essentiels, mais qui a également augmenté l'attractivité de ces zones comme siège pour les entreprises ;
- des investissements dans les infrastructures éducatives, qui ont complété des investissements dans les ressources humaines, un facteur significatif de la compétitivité économique ;
- un soutien à Interreg, qui a contribué à surmonter les obstacles au développement économique que constituent souvent les frontières tout en permettant de renforcer les relations sociales et de mettre sur pied des actions conjointes en vue de lutter contre les problèmes environnementaux communs.

Soutien à l'environnement

Le soutien de la politique de cohésion à l'environnement s'est élevé à 440,3 milliards d'EUR, principalement dépensés pour des investissements dans des installations de gestion des déchets, d'approvisionnement en eau potable et de traitement des eaux résiduaires dans les pays de l'UE-12 et les régions de convergence de l'UE-15. Il en a résulté :

- le raccordement de 5,9 millions de personnes supplémentaires à une source d'eau potable propre ;
- le raccordement de 6,9 millions de personnes supplémentaires à de nouvelles installations de traitement des eaux résiduaires ou à des installations modernisées.

De plus, de nombreux sites d'enfouissement non conformes aux normes de l'Union européenne ont été fermés tandis qu'en République tchèque, en Hongrie, en Lituanie, en Pologne, en Slovénie et en Croatie, la proportion de déchets recyclés a augmenté de plus de dix points de pourcentage.

Soutien à l'efficacité énergétique

Les mesures visant à augmenter l'efficacité énergétique dans les logements et les bâtiments publics cofinancées par quelque 6,3 milliards d'EUR provenant du FEDER ont permis de réduire l'utilisation énergétique de 1 438 GWh par an à la fin de l'année 2013 dans 27 programmes opérationnels, une diminution de 0,2 % de la consommation énergétique annuelle totale dans les régions concernées, ce qui est peu, mais considérable vu le faible niveau des investissements impliqués (à peine quelque 2 % du total).

En Lituanie, l'utilisation de l'énergie dans 864 bâtiments publics rénovés a été réduite de 236 GWh par an à la fin de l'année 2014, une diminution de près de 3 % de la consommation énergétique annuelle totale du pays.

Inclusion sociale

Infrastructures sociales

La majeure partie du soutien provenant du FEDER et du Fonds de cohésion visait à atteindre les objectifs sociaux, économiques et environnementaux. Les investissements dans les infrastructures sociales ont mené à :

- la modernisation d'écoles et de collèges au Portugal et leur rééquipement, bénéficiant à plus de 300 000 enfants et jeunes ;
- l'amélioration du système des soins de santé en Hongrie par la construction d'installations de soins de santé et l'achat d'ambulances ;
- la modernisation d'écoles et d'installations de santé en Pologne pour 1,9 million de personnes ;
- l'établissement de centres d'accueil pour les migrants en Murcie, dans les Asturies, en Estrémadure et en Galice en Espagne ainsi que dans les régions méridionales de l'Italie.

Soutien à la création d'emplois

La création d'emplois constitue l'un des principaux moyens d'augmenter l'inclusion sociale. Les programmes du FEDER et du Fonds de cohésion ont directement permis la création brute d'au moins 940 000 emplois à la fin de 2014 (alors que seulement 77% des fonds avaient été dépensés), conformément aux données rapportées par les autorités de gestion, lesquelles ne couvrent pas tous les PO.

Le système de mise en œuvre

Un module de travail spécifique qui reposait sur des études de cas, des enquêtes et des entretiens concernait l'analyse de l'efficacité du système de mise en œuvre. D'après les résultats de l'étude, le système de mise en œuvre était efficace pour assurer l'absorption des crédits. À la fin de l'année 2015, 90 % des crédits avaient été dépensés pour des projets. Cependant, dans quelques pays, cette part était bien plus faible : moins de 80 % en Italie et en Roumanie, avec un risque sérieux que l'ensemble des crédits disponibles ne soient pas dépensés dans les délais impartis.

Dans certains États membres – principalement les membres de l'UE12 –, la mise en œuvre des programmes a été retardée, notamment en raison de la longueur et de

l'inefficacité des procédures d'évaluation des projets et des procédures d'appel d'offres ainsi que d'une rotation élevée du personnel.

Le rythme de mise en œuvre du programme était lent dans de nombreux pays jusqu'aux deux ou trois dernières années de la période, où les dépenses se sont considérablement accélérées, faisant craindre que l'absorption des crédits fût considérée comme plus importante que l'efficacité des dépenses. L'enquête menée dans le contexte de l'évaluation a confirmé que l'absorption pesait souvent davantage dans la sélection des projets que l'efficacité de ceux-ci, une observation qui se reflétait dans le suivi limité des résultats des programmes.

Les retards en matière de mise en œuvre s'expliquaient d'une part par la crise, qui a entraîné des difficultés à obtenir un cofinancement et un report des projets en raison de l'incertitude, et d'autre part par le démarrage décalé des programmes, étant donné que le personnel était occupé à dépenser les crédits de la période 2000-2006. Cependant, la crise et la nécessité de lutter contre le ralentissement économique ont également donné une raison supplémentaire d'accélérer le rythme de mise en œuvre des programmes. Dans la pratique, le système de mise en œuvre s'est révélé suffisamment flexible pour permettre la réorientation des fonds dans des domaines dans lesquels les dépenses pouvaient être accélérées et/ou qui avaient une incidence plus immédiate sur l'activité économique.

La stratégie de Lisbonne semble avoir imposé peu de contraintes en matière de programmation des fonds. Les autorités de gestion ont pu respecter les priorités de la stratégie de Lisbonne sans modifier considérablement leurs objectifs. Cela s'explique d'une part par la généralité du cadre des priorités, et d'autre part par la formulation très générale des objectifs dans les programmes opérationnels. Bien que cette liberté ait permis une certaine flexibilité aux autorités de gestion pour dépenser les fonds, elle a également entraîné la définition de critères de sélection de projets vagues. Cet aspect, combiné à l'importance accordée à l'absorption, a nui à l'efficacité de l'utilisation des crédits.

L'amélioration des contrôles a contribué à réduire le taux d'erreur en matière de conformité des dépenses avec les réglementations sur la période 2007-2013. Cependant, pour une grande partie des autorités de gestion qui ont fait l'objet de l'enquête, notamment dans l'UE-15, où l'échelle des programmes était bien moindre, la charge administrative globale était perçue comme étant disproportionnée par rapport au montant des crédits concernés. Une grande partie de la charge administrative dans les pays de l'UE-12 et les régions de convergence du sud de l'Union européenne semblait être due à de multiples niveaux de contrôle, souvent mal coordonnés, à une interprétation contradictoire des réglementations, à un manque de capacité à l'échelon de la gestion, à la lente intégration des mesures de simplification et à l'utilisation limitée de la technologie numérique.

Leçons à tirer et conséquences sur la politique future

Conséquences générales des actions

Plusieurs des observations issues de l'évaluation ont des conséquences sur la structure et l'application de la politique de cohésion après la période 2007-2013. Nombre d'entre elles avaient également été mises en évidence dans l'évaluation ex post de la période 2000-2006 et ont déjà été prises en considération dans les réglementations pour la période 2014-2020. Ces observations sont les suivantes :

- la formulation générale des objectifs des programmes, rendant difficile la définition des projets destinés à atteindre ces objectifs ou des liens entre les résultats et les objectifs (2014-2020 : objectifs spécifiques requis) ;

- l'éparpillement des crédits dans de nombreux domaines d'action ou objectifs, entraînant des dépenses insuffisantes dans certains domaines pour parvenir à des résultats tangibles (2014-2020 : concentration thématique obligatoire) ;
- le manque d'indicateurs pertinents pour assurer le suivi et l'évaluation des résultats (2014-2020 : utilisation obligatoire d'indicateurs communs de réalisation et de résultats) ;
- le manque d'évaluations menées dans les États membres et portant sur des programmes susceptibles d'être utilisés pour l'exercice d'évaluation actuel. Tandis que le nombre d'évaluations réalisées était supérieur à celui de la période précédente, ces évaluations étaient concentrées dans quelques pays, inégalement réparties dans les domaines d'action, principalement axées sur les procédures plutôt que sur leurs incidences et celles visant les incidences n'était pas toujours de bonne qualité (2014-2020 : les programmes doivent évaluer chacune de leurs priorités, mais la norme en matière d'évaluation des incidences doit être améliorée en vue de garantir la fiabilité des résultats) ;
- la capacité des autorités de gestion responsables des programmes dans les États membres à gérer et à mettre en œuvre ces programmes. L'évaluation a permis de mettre en évidence des éléments indiquant un manque de compétence de la part des autorités de gestion dans plusieurs États membres, qui s'explique partiellement par le manque d'expérience dans plusieurs États membres de l'UE-12, mais également par une grande rotation du personnel et des inefficacités institutionnelles (2014-2020 : la capacité des autorités de gestion à gérer les programmes constitue un point d'attention particulier et la conditionnalité ex-ante a été introduite pour essayer de faire en sorte que la capacité soit suffisante pour mener à bien les programmes) ;
- la charge administrative imposée aux autorités de gestion, considérée comme étant disproportionnée dans de nombreux pays de l'UE-15 mettant en œuvre de petits programmes. Plusieurs mesures ont été mises en œuvre au cours de la période 2014-2020 en vue de réduire la charge administrative, notamment celle pesant sur les autorités de gestion. Cependant, il est nécessaire de réfléchir à une manière de réduire les doublons en matière d'audit ;
- l'importance excessive accordée à l'absorption des crédits au détriment de l'efficacité des programmes. Ce point a fait l'objet de mesures qui mettent l'accent sur les résultats au cours de la période 2014-2020. Cependant, il soulève une question à propos du conflit potentiel entre veiller à ce que les projets sélectionnés soient les plus efficaces en termes de résultats obtenus, qui peut nécessiter du temps, et d'autre part la règle des n+2/3 (impliquant la répartition des allocations des fonds de l'UE en montants annuels qui doivent être dépensés dans les deux ou trois ans). Cette règle, combinée à des retards dans la mise en œuvre des programmes, en grande partie en raison de leur démarrage différé, était l'une des principales raisons pour laquelle l'accent a été mis sur l'absorption, qui est devenue plus urgente à mesure que la fin de la période approchait. La période actuelle pourrait réitérer cette expérience.

L'évaluation a également permis de mettre en évidence plusieurs autres points d'attention généraux, notamment :

- la procédure de passation de marché s'est révélée être une source majeure de retards de mise en œuvre, plus particulièrement dans l'UE-12. Ce problème s'explique par la pratique très répandue consistant à attribuer les contrats sur la seule base du prix, négligeant la qualité de l'offre ainsi que l'expertise et la viabilité financière du soumissionnaire. Cette pratique découle principalement

de l'incapacité des autorités de gestion à utiliser des critères objectifs d'évaluation de la qualité des offres et de leur manque d'assurance ;

- il convient non seulement de définir des indicateurs mieux adaptés de la performance des programmes, mais également de disposer de données de meilleure qualité sur le contexte dans lequel la politique est mise en œuvre afin que les résultats puissent être interprétés plus clairement. Bien que les données régionales d'Eurostat se soient considérablement améliorées ces dernières années, trop peu de données sont encore disponibles sur plusieurs domaines d'action, y compris en matière d'environnement et d'aspects sociaux ; c'est également le cas des données relatives aux investissements des administrations publiques à l'échelon régional afin de les comparer aux investissements financés par la politique de cohésion ;
- il importe encore d'effectuer des méta-évaluations afin de synthétiser les observations des évaluations réalisées, qui peuvent servir de référence aux autorités de gestion dans l'ensemble de l'Union européenne.

Certaines observations de l'évaluation ont également des conséquences sur la politique dans des domaines particuliers ou sur des types donnés de mesure, notamment en matière d'instruments financiers.

Conséquences spécifiques des actions

Instruments financiers

Les instruments financiers ont le potentiel de constituer un moyen plus efficace et efficient de financer les investissements dans de nombreux domaines d'action que les subventions non remboursables, mais certains aspects de leur mode de fonctionnement au cours de la période 2007-2013 doivent être analysés dans le détail, notamment :

- les dispositions légales applicables aux instruments financiers. Elles n'ont pas été suffisamment détaillées pour la période 2007-2013, ce qui, combiné au manque d'expérience de nombreux organes d'exécution, a entraîné des retards dans la mise en œuvre des programmes ;
- l'incapacité des autorités de gestion à décrire la contribution attendue des instruments financiers dans la poursuite des objectifs du programme. De tels objectifs doivent être spécifiés dans des accords contraignants avec des gestionnaires de fonds (privés) afin d'éviter de mettre exclusivement l'accent sur des critères commerciaux lors de la sélection des projets ;
- les déficiences dans les systèmes de surveillance et les indicateurs. L'accent ne doit plus être placé sur les performances financières des fonds, mais sur leurs performances en matière de contribution aux objectifs du programme et des entreprises bénéficiaires ;
- les coûts du fonctionnement des instruments financiers doivent être transparents afin que leur efficacité puisse être évaluée et qu'elle puisse être comparée à d'autres méthodes de soutien à l'investissement ;
- les informations de base relatives aux crédits recyclés et aux fonds privés attirés doivent être communiquées de manière fiable, étant donné que ces aspects constituent des raisons majeures de l'utilisation et de la diffusion des instruments financiers.

Les conséquences sur les actions dans des domaines spécifiques sont exposées ci-après.

Soutien aux PME et à la RTDI

- Il convient que les mesures de soutien adoptées soient adaptées au contexte local et aux objectifs visés. Ce point peut être concrétisé en complétant l'aide financière par des services de soutien en vue d'augmenter l'efficacité des mesures mises en œuvre et d'accroître l'utilisation d'intermédiaires disposant d'une connaissance de la situation locale.
- Dans les régions relevant de l'objectif de compétitivité dans l'UE-15, le soutien du FEDER peut jouer un rôle important en tant que banc d'essai de mesures innovantes au lieu de reproduire des systèmes nationaux traditionnels. Il pourrait être ainsi possible de générer à l'échelon de l'Union européenne de la valeur ajoutée qui dépasse le faible niveau des investissements impliqués.
- La répartition régionale des crédits accordés au titre du programme-cadre de l'Union européenne doit être examinée à la lumière des manières dont les régions de convergence, notamment celles dans l'UE-13, pourraient se concurrencer plus efficacement pour obtenir un financement.

Soutien aux grandes entreprises

- Les grandes entreprises n'ont en général pas besoin des subventions des pouvoirs publics, mais si ce soutien est proposé dans les circonstances adéquates, il peut influencer le comportement d'une entreprise et créer une source importante de croissance régionale. Cependant, ce soutien doit être sélectif et être apporté à condition qu'il donne lieu à des avantages tangibles pour l'économie locale et les entreprises installées à cet endroit.
- Les entreprises dont la taille est très légèrement supérieure à celle d'une PME méritent une attention particulière. Nombre de ces entreprises ont dû faire face aux mêmes problèmes d'accès aux financements durant la crise que des entreprises de plus petite taille et le soutien du FEDER a empêché la fermeture de plusieurs nouvelles grandes entreprises d'une importance stratégique.

Soutien au transport

- La concentration du soutien sur les routes dans l'UE-12 au cours de la période 2007-2013 s'explique par l'inadéquation du réseau. Il est probable que cette tendance se poursuive durant plusieurs années. Cependant, dans l'UE-15, il convient de se demander si la politique de cohésion devrait continuer à financer la construction de routes.
- La source de difficultés évidentes dans certains pays en ce qui concerne la réalisation de projets ferroviaires, qui étaient déjà manifestes durant la période précédente, requiert une attention particulière.
- La répartition appropriée des crédits entre les projets RTE-T et ceux destinés à satisfaire les besoins locaux et régionaux doit être déterminée ; il convient que les projets qui contribuent à lisser les disparités régionales, à savoir l'objectif central de la politique de cohésion, soient considérés comme constituant tout autant une source de valeur ajoutée à l'échelon de l'Union que ceux qui contribuent au RTE-T.

Soutien aux infrastructures environnementales

- De nombreux projets environnementaux sont complexes et requièrent un haut degré de compétence de la part des pouvoirs publics concernés ; il est probable que les pouvoirs publics locaux ne disposent pas d'une telle compétence, puisqu'ils entreprennent de tels projets seulement à titre occasionnel. Étant

donné que les projets de gestion des déchets dans les zones gérées par des pouvoirs publics locaux, en particulier, sont susceptibles de gagner en importance dans les années à venir (conformément à la directive-cadre relative aux déchets), ce point mérite de l'attention.

- Il convient de mieux aligner les évaluations des investissements dans des infrastructures environnementales au titre de la politique de cohésion sur les estimations des mises en œuvre des directives de l'Union européenne.

Soutien à l'efficacité énergétique dans les bâtiments résidentiels et publics

- Les prêts et autres types d'instruments financiers seront probablement préférables aux subventions en tant que moyen de soutien aux mesures d'efficacité énergétique. Il est possible que des campagnes de sensibilisation soient nécessaires afin de surmonter l'absence de volonté de les mettre en œuvre.
- Il convient que les audits énergétiques soient systématiquement inclus dans les critères de sélection des projets afin de mettre en évidence la réduction en matière d'utilisation de l'énergie visée et d'en vérifier la réalisation.
- Il convient que le soutien financier s'accompagne d'un éventail de mesures non financières, y compris des conseils et des orientations, des programmes de certification et des réglementations en matière de construction.

Soutien à la culture et au tourisme

- Le potentiel de contribution au développement régional de ces deux secteurs devrait être ciblé plus efficacement et le soutien qui leur est apporté devrait être intégré dans une stratégie de développement.
- Il convient d'envisager sérieusement de soutenir le développement des secteurs créatifs en tant que source potentielle de croissance et d'emploi dans certaines régions.

Soutien au développement urbain et aux infrastructures sociales

- La réhabilitation urbaine est susceptible de renforcer le potentiel de croissance de certaines régions, mais elle doit s'inscrire dans une stratégie de développement régional cohérente.
- La participation de la communauté locale est nécessaire pour déterminer la forme la plus intéressante de réhabilitation et la trajectoire de développement la plus prometteuse à suivre.

Coopération territoriale européenne

- Les programmes doivent adopter une orientation stratégique claire dépassant la coopération ou l'action conjointe, bien que ces éléments doivent rester centraux dans leur mode de fonctionnement.
- Il convient d'accorder davantage d'attention à la notion de région fonctionnelle lors de la sélection des régions frontalières à soutenir. Ce point est essentiel pour examiner les avantages potentiels d'une coopération transfrontalière. Bien qu'il s'agisse d'un exercice difficile, celui-ci permettrait de focaliser l'attention sur des aspects pertinents pour les projets de développement de la région.
- Interreg et les autres programmes de la politique de cohésion doivent être mieux coordonnés afin de renforcer leurs effets mutuels sur le développement.

- Il est nécessaire de définir des indicateurs de - suivi qui se rapportent non seulement à la réalisation directe des projets, mais aussi aux objectifs des programmes en termes d'initiation et de renforcement de la coopération transfrontalière.

Conclusions

Le présent rapport permet de montrer que la politique de cohésion s'est révélée efficace et a produit des résultats tangibles, bien qu'elle ait dû être mise en œuvre dans un contexte particulièrement difficile au cours de la période 2007-2013. Au cours de cette période, elle a largement contribué à l'emploi et à la croissance, à la poursuite des priorités de la stratégie de Lisbonne comme à celles de la stratégie Europe 2020 et elle a contribué à la réduction des disparités régionales. Les résultats ont été tirés des évaluations effectuées sur le terrain et sont complétés par ceux des modèles macroéconomiques qui démontrent la valeur ajoutée de la politique en termes de PIB supplémentaire généré dans tous les États membres.

La politique a également contribué à l'intégration accrue du marché intérieur de l'Union européenne en améliorant les tronçons de transport et la mise en œuvre de la législation de l'Union, notamment en matière d'environnement, et à une meilleure qualité de vie.

Dans les pays de l'UE-12 et dans les régions de convergence du sud de l'Union européenne, les crédits accordés au titre de la politique de cohésion ont constitué la principale – et dans certains cas, l'unique – source de dépenses en faveur du développement au cours de la période concernée.

Les évaluations menées dans différents domaines d'action ont fourni des éléments concrets et ont mis en évidence l'importance des crédits accordés au titre de la politique de cohésion pour les projets entrepris.

Les programmes Interreg financés au titre de l'objectif CTE ont généré une valeur ajoutée claire pour l'Union européenne et n'auraient pas vu le jour en l'absence du financement. Les mêmes conclusions s'appliquent au soutien au transport et notamment aux investissements dans le RTE-T.

Le système de mise en œuvre a démontré son efficacité dans la réalisation de la politique au cours de la période concernée, mais celle-ci peut être accrue en augmentant la capacité administrative et en poursuivant la simplification et la distinction entre les programmes.

Kurzfassung

Einleitung

Der vorliegende Bericht fasst die Ergebnisse aus der Ex-post-Bewertung der kohäsionspolitischen Programme aus dem Europäischen Fonds für regionale Entwicklung (EFRE) und dem Kohäsionsfonds zusammen. Das wichtigste Ziel der Bewertung ist die Beantwortung von drei Kernfragen:

- Wie wurde die bereitgestellte Förderung in den Regionen der EU ausgegeben?
- Was waren die Ergebnisse und wie trugen sie zu den kohäsionspolitischen Zielen bei?
- Welche Lehren können für die zukünftige Gestaltung und Führung der Kohäsionspolitik gezogen werden?

Diese Zusammenfassung legt an erster Stelle die Ziele der Politik über den Zeitraum und im Kontext ihrer Durchführung dar. Zweitens gibt sie den Umfang der Förderung und ihrer Verteilung unter den verschiedenen Teilen der EU und den Politikbereichen an. Drittens umreißt sie den Ansatz für die Bewertung. Viertens bemisst sie, inwieweit die Politik ihre Ziele erreicht hat. Fünftens zieht sie die wichtigen Lehren und ihre Auswirkung auf die zukünftige Politik.

Die Ziele der Politik und der politische und wirtschaftliche Kontext

Die Ziele der Kohäsionspolitik

Das wichtigste Ziel der Kohäsionspolitik im Sinne des EFRE und des Kohäsionsfonds ist die Verringerung der regionalen Disparitäten in der EU. In dem Zeitraum 2007-2013 sollte diese Politik zusätzlich auch zu den Zielen der gemeinsamen Prioritäten der EU aus der Lissabon-Strategie beitragen. In der Praxis bedeutete dies, dass ein minimaler Anteil der erhaltenen Mittel - 60 % in den Konvergenzregionen und 75 % in den Regionen des Ziels „Wettbewerbsfähigkeit und Beschäftigung“ - für Investitionen vorgesehen werden mussten, welche *„die Wettbewerbsfähigkeit und Arbeitsplatzschaffung unmittelbar stärken - in den Bereichen der Forschung und Innovation, Unternehmensdienste, großen europäischen Infrastrukturen und Verbesserung der Energieeffizienz.“*⁶

Seit 2010 besteht die Aufgabe darin, zur Strategie „Europa 2020“ für *intelligentes, nachhaltiges und integratives Wachstum* beizutragen. Weil diese Strategie mit Ausnahme der spezifischen Einbeziehung des sozialen Ziels, Armut und soziale Ausgrenzung in der EU zu verringern, der Lissabon-Strategie sehr ähnlich ist, war ihr Verfolgen mit keinen größeren zusätzlichen Aufwänden verbunden. In der Tat können beide Strategien - Lissabon und Europa 2020 - als eine Art Definition der Kanäle zur Stärkung des Entwicklungspotentials von rückständigen und problematischen Regionen und in Folge dessen auch als Festlegung der Methoden zur Verringerung der regionalen Disparitäten in der EU verstanden werden.

⁶ 'Delivering Lisbon through Cohesion Policy', Pressemitteilung, Europäische Kommission, 1. März 2006, http://europa.eu/rapid/press-release_SPEECH-06-138_en.htm?locale=en

Der politische Kontext - Erweiterung der EU⁷

Der Zeitraum 2007-2013 war die erste vollständige Förderperiode, in der die zentral- und osteuropäischen Länder, die der EU in 2004 und Anfang 2007 beigetreten sind, Finanzierung aus den EFRE und dem Kohäsionsfonds erhalten haben. Die Entwicklungsschwierigkeiten, die sie hatten, waren unterschiedlich in ihrem Umfang und Art von den Schwierigkeiten der EU15-Kohäsionsländer und stellten somit eine besondere Herausforderung für die Kohäsionspolitik dar, zumal sie keine Erfahrung mit der Durchführung von Programmen hatten. Deswegen besteht ein besonderes Interesse daran, zu sehen, wie die Finanzierung ausgegeben ist und wie die Ergebnisse aussehen.

Der wirtschaftliche Kontext - die Krise

Der Einbruch der Wirtschafts- und Finanzkrise hat den Kontext der Durchführung von Kohäsionsprogrammen drastisch geändert. Die Prämisse aus der Zeit der Programmformulierung lautete, dass Wachstum weiterhin auf den hohen Niveaus der letzten mehr als 10 Jahr bestehen würde. Die globale Rezession von 2008-2009 und die darauf folgende Wirtschafts- und Finanzkrise führten zu schwerem Druck auf die öffentlichen Finanzen. Sie führten auch zu Kürzungen der öffentlichen Investitionen sowie der Zuschüsse von den Zentralregierungen an die örtlichen Gemeinden für die Durchführung solcher Investitionen. Die Ressourcen für die Kofinanzierung von Projekten wurden somit reduziert und die Finanzierung durch die Kohäsionspolitik gewann mehr an Bedeutung als Finanzierungsquelle für Entwicklungsausgaben in vielen Regionen der EU und insbesondere in den EU12-Ländern und den vier südlichen EU15-Mitgliedsstaaten, Griechenland, Spanien, Italien und Portugal.

Die Krise hatte eine besonders schwere Auswirkung auf viele weniger entwickelte Regionen, doch sie wurde von der Finanzierung durch die Kohäsionspolitik gemildert.

Die Krise führe auch zu einer gewissen Verlagerung des Programmschwerpunktes von der Überwindung von langfristigen Strukturproblemen auf die Gegensteuerung bei dem Konjunkturabschwung und auf Maßnahmen, die eine unmittelbarere Wirkung auf das Wachstum und den Arbeitsmarkt hatten. Die EU forderte in der Tat die Mitgliedsstaaten auf, Finanzierung durch die Kohäsionspolitik auf diese Art zu verwenden und es wurden einige Maßnahmen ergriffen, welche dieses Vorgehen vereinfachten. Das kurzfristige Ziel der Schaffung von Wachstum und Arbeitsplätzen wurde somit zu einem umso wichtigeren Zweck der Politik innerhalb dieses Zeitraums.

Regionale Disparitäten in BIP, Beschäftigung und andere Aspekte

Zwei wichtige Faktoren beeinflussten die Entwicklung von Disparitäten während der Programmperiode: die Wirtschafts- und Finanzkrise und der weitergehende Aufholprozess in der EU12 und insbesondere die ziemlich starke Wirtschaftsleistung von Polen. Der langfristige Konvergenzprozess bezüglich des Pro-Kopf-BIP in rückständigen Gebieten in Richtung EU-Durchschnitt wurde durch den Beginn der Krise in 2008-2011 angehalten. Die Konvergenz wurde nach 2011 fortgesetzt, jedoch bei einer viel langsameren Geschwindigkeit als zuvor. Das Pro-Kopf-BIP wuchs schneller im Durchschnitt zwischen 2007 und 2014 in den Konvergenzregionen der EU12 als in dem Rest der EU und schneller als in den Hauptstadtregionen der Tschechischen Republik, Ungarn und Slowakei. Dasselbe galt für die Konvergenzregionen der EU15, abgesehen von diesen in Griechenland, Spanien und

⁷ Kroatien trat im Jahre 2013 in die EU ein und war daher während der Programmperiode nicht auf Finanzierung aus den EFRE und dem Kohäsionsfonds berechtigt, erhielt aber Unterstützung in der Höhe von EUR 707 Millionen aus dem Instrument für Heranführungshilfe. Es ist wird in diesem Bericht nicht ausführlich behandelt.

Italien, wo das Pro-Kopf-BIP im Vergleich zu dem EU-Durchschnitt deutlich zurückging.

Regionale Disparitäten in den Beschäftigungsquoten in der EU verringerten sich bis hin zu der Krise, doch sie haben sich danach wieder erweitert, was im Wesentlichen auf einen Rückgang der Beschäftigung in Griechenland, Spanien und Italien zurückzuführen ist. In den EU12-Konvergenzregionen wuchs die Beschäftigungsquote jedoch um 2 Prozentpunkte im Durchschnitt mehr als der EU-Durchschnitt für die gleiche Zeit. In den Konvergenzregionen in Spanien, Portugal, Italien und Griechenland blieb die Quote unverändert und die Disparitäten zwischen den Regionen in diesen Ländern verringerten sich. Zusätzlich gab es in einigen der EU12-Länder - in Bulgarien, Lettland, Litauen, Polen, Rumänien und in der Slowakei - über diesen Zeitraum eine Verringerung des Anteils von Menschen, die von materieller Entbehrung betroffen sind.

Finanzierungsumfang und Ausgabenprioritäten

Die Finanzierung durch den EFRE und den Kohäsionsfonds

Insgesamt EUR 269,9 Mrd. wurden in dem Zeitraum 2007-2013 durch den EFRE und den Kohäsionsfonds der Kohäsionspolitik zugewiesen. Zusätzliche EUR 76,6 Mrd. wurden vom ESF übernommen. Von den Beträgen aus dem EFRE und dem Kohäsionsfonds wurden EUR 231,0 Mrd. oder insgesamt über 80 % den Konvergenzprogrammen zugewiesen. Aus dem letzteren Betrag wurden knapp dreiviertel den EU12-Ländern überwiesen, was demzufolge über die Hälfte der Gesamtförderung ausmachte (55 %).

Die Finanzierungskonzentrierung wird offensichtlicher, wenn sie auf die Bevölkerung bezogen wird. Die allgemeine Finanzierungsbereitstellung für Konvergenzregionen betrug im Durchschnitt EUR 1527 pro Kopf über die Periode, während sie in den Phasing-In- und Phasing-Out-Regionen im Durchschnitt EUR 903 pro Kopf betrug. Dagegen war der Durchschnitt in den Wettbewerbsregionen nur EUR 91 pro Kopf, nur 6 % des Durchschnitts in den Konvergenzregionen.

Die Verteilung zwischen den unterschiedlichen Arten von Regionen war je nach Ziel relativ gleichmäßig mit vergleichbaren Beträgen für die Stadtgebiete wie für die überwiegend und teilweise ländlichen Gebiete in den Konvergenzregionen sowie in den Wettbewerbsregionen und in den Phasing-In- und Phasing-Out-Regionen.

Im Großteil der EU12 betragen die EFRE und Kohäsionsfonds 2-3 % des BIP. Von besonderer Relevanz waren die Fonds in 9 dieser Länder, wo sie zwischen 35 % und 57% der öffentlichen Investitionen ausmachten, und in Rumänien, Slowenien und Portugal, wo die Finanzierung durch die Kohäsionspolitik mit zwischen 25 % und 28% eine wichtige Finanzierungsquelle für Entwicklungsausgaben in allen diesen Ländern war, genauso wie in den Konvergenzregionen in Griechenland, Spanien und Italien.

Aufteilung der Fördermittel zwischen den Politikbereichen

Der größte Förderungsanteil in der EU12 wurde Infrastrukturinvestitionen zugeteilt - ca. 70 % oder mehr des Gesamtbetrages in fast allen diesen Ländern, entsprechend der Notwendigkeit für Modernisierung und Erweiterung des gemeinschaftlichen Kapitalbestandes, der sich zum Großteil in einem schlechten Zustand befindet. Das war insbesondere der Fall beim Verkehrsnetz - dafür wurde die Hälfte oder mehr der Infrastrukturinvestitionen in den meisten Ländern zugewiesen und ein Großteil davon wurde für den Bau oder die Modernisierung von Straßen ausgegeben.

Die Investitionen in Umweltinfrastruktur in der EU12, d. h. in Trinkwasserversorgung, Abwasserreinigung und Abfallbehandlung, betragen im Durchschnitt 17 % der

Gesamtmittel. Ähnliche Anteile in Prozent wurden insgesamt für Energie-, ICT-, Sozialinfrastruktur (Krankenhäuser, Schulen, Wohnbau usw.) und Stadterneuerung verwendet.

Einen fast identischen Schwerpunkt auf Infrastruktur gab es auch in den Konvergenzregionen der EU15, insbesondere in Griechenland und Spanien, wo er 75 % der Fördermittel absorbierte.

In den Wettbewerbsregionen der EU15 wurden vergleichsweise in den meisten Ländern wenig Fördermittel für Infrastruktur ausgegeben und ungefähr die Hälfte wurde für die Unterstützung von FtE, Innovation und Unternehmen verteilt.

In der Förderung gab es über den Zeitraum einige Verlagerungen zwischen den Politikbereichen. Eine wesentliche Erhöhung gab es in der Unterstützung für Investitionen in Unternehmen ausgenommen für FtE und Innovation (entsprechend dem Bedarf der Unternehmen an Krediten während der Krise), Sozialinfrastruktur und Straßen. Einen wesentlichen Rückgang der Förderung gab es in den Bereichen der Umweltinfrastruktur, Schienenverkehr und anderen Transportsysteme (d. h. im Gegensatz zu Straßenbau) sowie der ICT-Infrastruktur entsprechend den Schwierigkeiten und Verspätungen bei der Durchführung von Projekten. Trotz der Verlagerungen blieb die allgemeine Aufteilung der Förderung zwischen den Politikbereichen in den meisten Ländern fast gleich.

Die allgemeine Unterstützung für FtE und Innovation betrug im Durchschnitt 17 % der Gesamtförderung.

Der gewählte Bewertungsansatz

Die Aufteilung in Arbeitspakete

Wie bei der Ex-post-Bewertung der Programme für den Zeitraum 2000-2006, wurde hierfür auch eine gezielte Herangehensweise für die Auswertung gewählt. Anstatt zu versuchen, alle 322 operationellen Programme in der EU auszuarbeiten, was ohne erheblichen Zeitaufwand und Erweiterung der Ressourcen bestenfalls nur sehr oberflächlich getan werden könnte, wurden nur diese Politikbereiche und Probleme einbezogen, bei den der größte Bedarf darauf bestand. Diese Herangehensweise wurde entweder deswegen ausgewählt, weil früheren Ex-post-Bewertungen spezielle Herausforderungen identifiziert haben, oder weil unzureichende Kenntnisse über einige der Bereiche auf Grund von wenigen Bewertungen vorhanden waren.

Die Arbeitspakete bezogen ca. 75 % der Gesamtförderung ein. Außerdem stellten zwei Arbeitspakete Daten für die Bewertung zusammen - eines über die Indikatoren und das andere über die Verteilung der Ausgaben in den Regionen und den Ausgabenkategorien, zwei untergeordnete Arbeitspakete führten eine ökonometrische Analyse über die Effekte der Kohäsionspolitik auf das wirtschaftliche Wachstum durch und zwei weitere bewerteten die Effekte der Politik durch Verwendung von makroökonomischen Modellen.

Die Herausforderungen an die Bewertung

Es ist wichtig, zu beachten, dass die Politik vielfältige Ziele umfasste - soziale, umweltpolitische sowie wirtschaftliche. In besonderen Fällen waren die Ziele jedoch oft weder bezeichnet noch detailliert beschrieben, was die Erfolgsbewertung erschwerte.

Zweitens besteht das übliche Problem jeder Politikbewertung, die Effekte der Politik von anderen gleichzeitig präsenten Faktoren zu unterscheiden.

Drittens wird dieses Problem durch die oft langfristige Verzögerung zwischen der Durchführung der Ausgaben und der Verdeutlichung der Effekte erschwert. Das gilt

insbesondere bei Infrastrukturprojekten, die - wie oben erwähnt - insbesondere in Konvergenzregionen einen Großteil der Projekte darstellten. Die Bewertung wurde daher durchgeführt, bevor viele der Projekte ihre endgültigen Ergebnisse erbracht hatten oder sogar bevor sie vervollständigt waren oder gar Zeit hatten die Regionalentwicklung ihres Einsatzortes zu beeinflussen.

Viertens wurden diese Schwierigkeiten von der Krise bestärkt, die - wie oben erwähnt - den wirtschaftlichen Kontext der Programmdurchführung änderte und unterschiedliche Auswirkungen auf die Regionen hatte, die schwer zu identifizieren und einzuschätzen sind.

Die Effekte der Kohäsionspolitik in der Periode

Die Effekte entsprechend den ökonomischen Modellen

Während des Programmplanungszeitraums konnte eine Verringerung der regionalen Disparitäten in Pro-Kopf-BIP in der gesamten EU über diesen Zeitraum und insbesondere zwischen den Konvergenz- und den anderen Regionen festgestellt werden. Die Bewertung schätzte den Beitrag der Kohäsionspolitik zu dieser Verringerung ein.

Die Ergebnisse der durchgeführten ökonometrischen Analyse deuten darauf hin, dass die Förderung durch die Kohäsionspolitik das Wachstum in den Konvergenzregionen gesteigert hat, selbst wenn diese Steigerung im Zeitraum 2007-2011 kleiner war als zuvor.

Die makroökonomischen Modelle, welche die einzige Art zur Bewertung der vollständigen Auswirkung der Kohäsionspolitik auf Wachstum darstellen, deuten darauf hin, dass die Ausgaben in der EU12 in 2015 zu einem BIP geführt haben, das um 4 % höher ist, als es sonst gewesen wäre und in Ungarn sogar um mehr als 5 %.

Sie weisen auch darauf hin, dass die getätigte Investition lange nach Abschluss der Ausgabe einen anhaltenden Effekt hat, weil sie das Ertragspotenzial erhöht und die Wachstumsrate steigert, welche die Wirtschaften langfristig erzielen können. Es wird darauf hingedeutet, dass zum Beispiel das BIP von Polen bis 2023 fast 6 % über dem Niveau ohne Investitionen durch die Kohäsionspolitik und der Politik für die Entwicklung des ländlichen Raums (und ELER) liegen wird. Die Modelle zeigen auch, dass die Politik sowohl effektiv als auch effizient war, weil für jeden Euro Ausgabe durch die Kohäsionspolitik und der Politik für die Entwicklung des ländlichen Raums, eine zusätzliche Ausgabe von über EUR 2,70 erzielt wurde. Außerdem profitieren alle Länder, selbst die Nettozahler der Förderung, weil das über die Investitionen erwirtschaftete Ergebnis zu erhöhtem Import in den unterstützten Ländern führt. Das widerspiegelt die enge Verzahnung der EU-Wirtschaften, bei der die Ausgaben in einem Teil allen zu Gute kommen.

Effekte nach unterschiedlichen Politikbereichen

Wachstum und Beschäftigung

Die Ergebnisse der Modelle welche auf Annahmen über die Funktionsweise der Wirtschaften beruhen, die von Forschungsergebnissen und Wirtschaftstheorie abgeleitet werden, ergänzen die Bewertungen der echten Ausgaben vor Ort. Die unterschiedlichen Arbeitspakete haben die Art der Politikdurchführung und die Ergebnisse der geförderten Investitionen untersucht. Obwohl sich ihre Ergebnisse nicht direkt mit den Annahmen verbinden lassen, die in den makroökonomischen Modellen einbezogen sind, stellen diese dar, dass die betroffenen Investitionen greifbare Ergebnisse haben, die mit den vermuteten Effekten übereinstimmen.

Förderung für KMU und Innovation

Die allgemeine Unterstützung für KMU durch den EFRE über den Zeitraum betrug EUR 51.9 Mrd. Entsprechend der Lissabon-Strategie konzentrierte sich davon viel auf FtE und Innovation. Ungefähr 254 700 KMU in der EU haben direkte Förderung erhalten und 7 % davon sind im Bereich der Produktion tätig - ein Schlüsselbereich, der eine wichtige Quelle von Nettoexporten bleibt, wovon das langfristige Wachstum einer Region abhängig ist. Außerdem erhielten 15 % der Kleinunternehmen (Unternehmen mit 10-49 Beschäftigten) sowie mehr als ein Drittel der mittleren Unternehmen im Bereich der Produktion in der EU direkte Förderung.

Den Daten aus den Hauptindikatoren nach ergab die Unterstützung:

- 121 400 neue Unternehmen, die eine Starthilfe bekamen;
- 322 100 neue Arbeitsplätze nach Vollzeit berechneten Stunden, die direkt in den KMU entstanden sind.

Ein wichtiges Ergebnis der Förderung war die Hilfe für KMU, die Effekte der Krise zu überwinden, indem sie Kredite bereitstellte, als die anderen Finanzierungsquellen versiegten. Sie ermöglichte den KMU, in Modernisierung und Erweiterung der Betriebe und der Ausstattung zu investieren sowie ihre F&E- und Innovationsaktivitäten weiter zu führen, was sonst unmöglich gewesen wäre. Bei vielen wurde dadurch das Umlaufkapital finanziert, was den Fortbestand der Unternehmen und die Arbeitsplätze sicherte.

Förderung für Großunternehmen

Die Förderung für Großunternehmen (mit 250 Beschäftigten oder mehr in der geförderten Region) war in Höhe von ca. EUR 6 Mrd. über dem Zeitraum oder 20 % der gesamten Direktförderung für Unternehmen. Die Bewertung stellte fest, dass die Mehrheit der überprüften Projekte zu einer oftmals wesentlichen Produktivitätssteigerung sowie zu Beschäftigungszuwachs geführt hat. Doch oft war ein wesentliches „Eigengewicht“ eingebunden, weil ein Großteil der Investitionen auch ohne die Unterstützung stattgefunden hätte - wenn nicht im selben Umfang, dann zur selben Zeit oder am selben Ort. Dennoch ergab die Bewertung, dass wesentliche indirekte und breitere Wirkungen der Investition auf den KMU in der lokalen Wirtschaft wie Wissens-Spillover oder Aufbau von Lieferketten entstanden. In 71 % der Fälle wurden solche Effekte im Voraus konkret geplant.

Verkehrsförderung

Die Verkehrsförderung war ein wesentlicher Schwerpunkt der Förderung durch den EFRE und den Kohäsionsfonds für die Periode 2007-2013. Sie belief sich auf EUR 80,9 Mrd. und die Ergebnisse waren:

- Bau von 4 900 km Straßen, meist Autobahnen, fast die Hälfte davon im Rahmen des TEN-T
- die Modernisierung von fast 28 600 km Straßen, zwei Drittel davon in der EU12
- der Bau von 1 100 km neue Schienenwege
- die Modernisierung von 3 900 km Bahnstrecken, fast 1 600 km davon in der EU12 und 2 600 km Neubau oder Modernisierung der Wege auf dem TEN-T.

Die geförderte Investition verbesserte die Zugänglichkeit der betroffenen Länder und Regionen und eröffnete neue Möglichkeiten für verstärkten Handel mit dem Rest der EU, was für ihre wirtschaftliche Entwicklung unentbehrlich ist.

Förderung für andere Politikbereiche

Die Förderung für Investitionen in anderen Politikbereichen unterstützte das kurzfristige Wachstum und die Beschäftigung durch Nachfragebelebung, sie steigerte jedoch auch das langfristige Ertragspotential der Wirtschaft. Beispiele dafür sind:

- Investitionen in Energieeffizienz bei Wohn- und öffentlichen Gebäuden, die für Ankurbelung der Geschäftstätigkeit während der Krise sorgten als auch für Senkung von Energieverbrauch und so zur Unterstützung der Nachhaltigkeit der Entwicklung;
- Förderung für die Kultur und Tourismus, die die Geschäftsentwicklung in den Regionen unterstützte;
- Förderung der Stadtentwicklung und der Sozialinfrastruktur zur Steigerung der Lebensqualität in Ortsbereichen und zur Bereitstellung von grundlegenden Dienstleistungen, die sie auch attraktiver für die Unternehmen gemacht haben;
- Investition in Bildungsinfrastruktur zur Unterstützung der Investition in der Personalwirtschaft, die ein wichtiger Faktor für die wirtschaftliche Wettbewerbsfähigkeit ist;
- Unterstützung für INTERREG, welche dazu beitrug, die Hindernisse für die wirtschaftliche Entwicklung zu überwinden, die die Grenzen oft darstellen, derweil sie engere Sozialbeziehungen und gemeinsame Maßnahmen für die Überwindung gemeinsamer Umweltbelange hervorrief.

Umweltschutzförderung

Die Umweltschutzförderung durch die Kohäsionspolitik belief sich auf EUR 40,3 Mrd, wobei der Großteil davon in den EU12-Ländern und den Konvergenzregionen in der EU15 für Investitionen in Abfallentsorgungsanlagen, Trinkwasserversorgung und Abwasserbehandlung ausgegeben wurde. Als Ergebnis wurden:

- 5,9 Millionen Menschen mehr mit Trinkwasser versorgt;
- 6,9 Millionen Menschen mehr an neue oder modernisierte Abwasserbehandlungsanlagen angeschlossen.

Außerdem wurden viele Deponien stillgelegt, die den EU-Standards nicht entsprachen, während der Anteil des verwertetes Abfalls in der Tschechischen Republik sowie in Ungarn, Litauen, Polen, Slowenien und Kroatien um mehr als 10 Prozentpunkte stieg.

Förderung der Energieeffizienz

Die Maßnahmen zur Steigerung der Energieeffizienz von Wohn- und öffentlichen Gebäuden, die durch den EFRE mit ca. EUR 6,3 Mrd. kofinanziert wurden, haben den Energieverbrauch um 1438 GWh p. a. zum Ende 2013 in 27 OP gesenkt - das entspricht einer Reduzierung des jährlichen Gesamtenergieverbrauchs in den betroffenen Regionen um 0,2 %, die noch nicht groß, jedoch in Verhältnis zum kleinen Umfang der Förderung bedeutsam ist (nur ca. 2 % der Gesamtförderung).

In Litauen wurde der Energieverbrauch in den 864 modernisierten öffentlichen Gebäuden um 236 GWh p. a. zum Ende 2014 reduziert - eine Senkung von fast 3 % des jährlichen Gesamtenergieverbrauchs des Landes.

Soziale Eingliederung

Sozialinfrastruktur

Ein Großteil der Förderung aus den EFRE und den Kohäsionsfonds bezweckte die Erfüllung von sozialen sowie von wirtschaftlichen und umweltschutztechnischen Zielen. Die Investitionen in Sozialinfrastruktur führten zu:

- Modernisierung von Schulen und Hochschulen sowie zu ihrer Neuausstattung in Portugal, wo diese 300 000 Kindern und jungen Menschen zugute kam;
- Verbesserung des Gesundheitssystems in Ungarn durch Bau von Pflegeeinrichtungen und Kauf von Krankenwagen;
- Modernisierung von Schulen und Gesundheitseinrichtungen in Polen zu Gunsten von 1,9 Millionen Menschen;
- Bau von Willkommenszentren für Migranten in Murcia, Asturias, Extremadura und Galicien in Spanien sowie in den Südreigionen Italiens.

Förderung der Arbeitsplatzschaffung

Die Arbeitsplatzschaffung ist ein wichtiges Mittel zur Steigerung der sozialen Eingliederung. Nach Angaben der Verwaltungsbehörden waren die Programme des EFRE und des Kohäsionsfonds welche jedoch nicht alle umfassen, für die unmittelbare Beschaffung von mehr als 940 000 Bruttoarbeitsplätze bis Ende 2014 verantwortlich (als nur 77% der Fördermittel ausgegeben waren).

Das Durchführungssystem

Ein Arbeitspaket wurde der Untersuchung von der Effizienz des Durchführungssystems auf der Grundlage von Fallstudien, Umfragen und Interviews gewidmet. Der Studie nach hat das Durchführungssystem die Aufnahme von Finanzmitteln effektiv gewährleisten können. Bis Ende 2015 wurden 90 % für Projekte ausgegeben, die die oben genannten Ergebnisse erbracht haben. Aber in wenigen Ländern war der Anteil deutlich kleiner - weniger als 80 % in Italien und Rumänien – was das ernste Risiko in sich birgt, dass nicht alle zur Verfügung gestellten Finanzmittel innerhalb der vorgesehenen Zeit ausgegeben sind.

In wenigen, überwiegend EU12 Mitgliedsstaaten gab es Verspätungen bei der Durchführung der Programme. Zu den Ursachen gehören langwierige und ineffiziente Projektbewertungs- und Auftragsvergabeverfahren gekoppelt mit hoher Mitarbeiterfluktuation.

Die Durchführungsrate der Programme war in vielen Ländern bis hin zu den letzten 2-3 Jahren der Periode niedrig. Die Ausgaben wurden dann deutlich beschleunigt, was Bedenken weckte, dass die Aufnahme der Förderung eine höhere Priorität als die Ausgabeneffizienz erhalten hat. Die im Rahmen der Bewertung durchgeführte Umfrage bestätigte, dass bei der Projektvergabe der Absorption oft eine höhere Gewichtung als der Effizienz beigemessen wurde - das ist eine Erkenntnis, die in dem begrenzten Umfang der ernsthaft überwachten Programmresultate widerspiegelt ist.

Verzögerungen bei der Durchführung sind zum Teil durch die Krise bedingt, die zu Schwierigkeiten beim Bezug von Kofinanzierung sowie zu Projektverschiebungen auf Grund von Verunsicherung führte, und zum Teil durch Verspätungen beim Start der Programme bedingt waren, weil die Mitarbeiter mit der Ausgabe der Fördermittel für die Periode 2000-2006 beschäftigt waren. Aber die Krise und die Notwendigkeit zur Gegensteuerung gegen den Wirtschaftsabschwung war auch ein zusätzlicher Grund für die Beschleunigung der Programmdurchführung. In Wirklichkeit hat sich das Durchführungssystem als ausreichend flexibel erwiesen, damit Finanzmittel in solchen

Regionen eingesetzt werden könnten, wo die Ausgaben beschleunigt und/ oder diese eine unmittelbarere Wirkung auf die Wirtschaftsaktivitäten hatten.

Der Zweckbindungsgrundsatz von Lissabon scheint wenige Einschränkungen auf die Mittelplanung bewirkt zu haben. Die Verwaltungsbehörden waren in der Lage, sich den Prioritäten aus Lissabon ohne wesentliche Auswirkungen auf die eigenen Ziele unterzuordnen. Zum Teil war das auf die allgemeine Weise der Prioritätengestaltung und zum Teil auf der ungenauen Beschreibung der Ziele in den OP zurückzuführen. Obwohl diese Tatsache den Verwaltungsbehörden Flexibilität bei den Ausgaben sicherte, führte sie auch zu Ungenauigkeiten der Projektauswahlkriterien. In Zusammenhang mit der größeren Gewichtung der Absorption wirkt dies entgegen einer möglichst effizienten Anwendung der Förderung.

Die verbesserte Kontrolle trug während des Zeitraums 2007-2013 zur Verringerung der Fehlerrate bei der Einhaltung der Vorschriften in Verbindung mit den Ausgaben in dem Zeitraum 2007-2013 bei. Der Großteil der geprüften Verwaltungsbehörden insbesondere in der EU15, wo die Programme wesentlich kleiner waren, empfand den vermeintlichen Verwaltungsaufwand unverhältnismäßig hoch für den Förderungsumfang. Ein hoher Anteil des Aufwandes in den EU12- und den Konvergenzregionen im Süden der EU schien das Ergebnis von mehreren, oft schlecht koordinierten Kontrollinstanzen, widersprüchlichen Deutungen der Verhältnisse, Kapazitätsmangel auf der Führungsebene, der geringen Aufnahme von Vereinfachungsmaßnahmen sowie der begrenzten Verwendung von Digitaltechnologien zu sein.

Lehren und Auswirkungen für die zukünftige Politik

Allgemeine Auswirkungen für die Politik

Etliche Erkenntnisse aus der Bewertung haben Auswirkungen für die Gestaltung und Führung der Kohäsionspolitik nach der Periode 2007-2013. Viele davon sind schon in der Ex-post-Bewertung der Periode 2000-2006 identifiziert worden und sie wurden schon bei den Vorschriften für den Zeitraum 2014-2020 berücksichtigt. Diese sind:

- Die allgemeine Art der Zielsetzung bei den Programmen, die es schwierig macht, die Projekte zu Gunsten ihrer Durchführung zu definieren oder die Ergebnisse mit den Zielen in Beziehung zu setzen. (2014-2020: konkrete Ziele notwendig.)
- Die unverhältnismäßig breite Verteilung der Förderung durch die Politikbereiche oder Ziele, die das Erreichen aussagekräftiger Ergebnisse durch unzureichende Investitionen verhindert (2014-2020: obligatorisch thematische Ausrichtung).
- Der Mangel entsprechender Indikatoren für Kontrolle und Bewertung der Ergebnisse. (2014-2020: obligatorische Verwendung von allgemeinen Output- und Ergebnisindikatoren.)
- Der Mangel an durchgeführten Bewertungen von Programmen in den Mitgliedsstaaten, die für die vorliegende Bewertung hätten verwendet werden können. Obwohl für diese Periode mehr Bewertungen als für die letzte durchgeführt wurden, fanden diese in nur wenigen Ländern unter ungleichmäßiger Verteilung durch die Politikbereiche statt und sie hatten den wichtigsten Schwerpunkt auf das Verfahren anstatt auf die Wirkung und die, die eine Wirkungsbewertung einbezogen, waren von nicht immer guter Qualität. (2014-2020: Die Programme sollen jede Priorität bewerten, aber der Standard für Wirkungsbewertungen muss verbessert werden, damit die Verlässlichkeit der Ergebnisse garantiert werden kann.)

- Die Kapazitäten der Verwaltungsbehörden, die für die Verwaltung und Durchführung der Programme in den Mitgliedsstaaten zuständig sind. Die Bewertung stellte Hinweise auf Kapazitätsmängel bei den Verwaltungsbehörden in einigen der Länder fest - zum Teil wegen Unerfahrenheit in einigen der EU12-Mitgliedsstaaten, jedoch auch wegen hoher Mitarbeiterfluktuation und institutioneller Unzulänglichkeiten. (2014-2020: Die Kapazitäten der Verwaltungsbehörden für die Verwaltung von Programmen ist ein besonderer Schwerpunkt der Programme und die Ex-ante-Konditionalität wurde eingeführt, um sicherzustellen, dass diese Kapazität für die Programmumsetzung ausreichend ist.)
- Der Verwaltungsaufwand der Verwaltungsbehörden, dass in vielen EU15-Ländern mit kleinen Programmen als unangemessen empfunden wurde. In 2014-2020 wurden einigen Maßnahmen für die Entlastung im Verwaltungsaufwand insbesondere bei den Verwaltungsbehörden eingeführt. Dennoch muss überlegt werden, wie die Doppelauditierungen reduziert werden können.
- Der übermäßige Fokus auf Absorption der Fördermittel auf Kosten von der Effizienz. Das wurde bewältigt durch den Fokus auf Ergebnisse für die Periode 2014-2020. Jedoch besteht ein möglicher Konflikt zwischen der Gewährleistung, dass die ausgewählten Projekte die effektivsten in Bezug auf die erzielten Ergebnisse sind und die Zeit, die es Anspruch nimmt diese auszuwählen, und die n+2/3 Rege (welche eine Aufteilung der EU-Fondsmittel in jährlichen Beträge bewirkt, die innerhalb von zwei oder drei Jahren ausgegeben werden müssen). Diese Regel als auch die Verzögerungen in Programmumsetzung war ein wichtiger Grund hinter dem Fokus auf Absorption, der im Laufe der Periode anstieg. Der jetzige Programmzeitraum könnte diese Erfahrung wiederholen.

Bei der Bewertung wurden weitere etliche allgemeine Probleme identifiziert. Insbesondere:

- Das Auftragsvergabeverfahren stellte sich als wichtige Ursache für die Verspätungen bei der Durchführung insbesondere in der EU12 heraus. Grund dafür war die weitverbreitete Praxis der Vertragsvergabe ausschließlich nach Preis und der Missachtung der Angebotsqualität sowie der Erfahrung und der finanziellen Tragfähigkeit des Bieters. Diese Praxis basiert meist auf dem Mangel an Fähigkeit und Selbstvertrauen an der Seite der Verwaltungsbehörden, objektive Kriterien für die Bewertung der Qualität anzuwenden.
- Es sind nicht nur bessere Indikatoren der Programmleistung erforderlich, sondern auch bessere Daten über den Kontext der Programmdurchführung, damit die Ergebnisse sinnvoller interpretiert werden können. Obwohl die Regionaldaten aus Eurostat in den letzten Jahren deutlich besser geworden sind, besteht ein Mangel an Daten über viele Politikbereiche, darunter auch über Umweltschutz und die sozialen Aspekte sowie über Regierungsinvestitionen auf der regionalen Ebene für den Vergleich mit der Förderung durch die Kohäsionspolitik.
- Es besteht weiterhin ein Bedarf an Meta-Evaluierung für die Synthese von Bewertungsergebnissen zur Verwendung als Bezugsdaten durch die Verwaltungsbehörden in der EU.

Es gibt auch Ergebnisse aus der Bewertung mit Folgen für die Politik in konkreten Bereichen oder für besondere Arten von Maßnahmen, insbesondere was Finanzierungsinstrumente betrifft.

Spezifische Auswirkungen der Politik

Finanzierungsinstrumente

Finanzierungsinstrumente (FI) können potentiell eine effektivere und effizientere Art von Förderinvestition in vielen Politikbereichen als die nicht rückzahlbaren Zuschüsse darstellen, doch einige Aspekte ihrer Funktionsweise im Zeitraum 2007-2013 sollten sorgfältig geprüft werden und insbesondere:

- die Rechtsvorschriften über FI. Sie waren in 2007-2013 nicht ausreichend detailliert, was in Zusammenhang mit der Unerfahrenheit vieler Durchführungsstellen zu Verspätungen bei der Durchführung führte;
- das Misslingen der Verwaltungsbehörden, den erwarteten Beitrag der FI bei der Verfolgung der Programmziele zu konkretisieren. Solche Ziele müssen in verbindlichen Vereinbarungen mit den (privaten) Fördermittelverwaltern konkretisiert werden, damit ein übermäßiger Fokus auf die Handlungskriterien bei der Projektauswahl vermieden werden kann.
- die Schwächen der Kontrollsysteme und der Indikatoren. Der Schwerpunkt muss von der finanziellen Leistung der Förderung auf die Leistung bei der Zielverfolgung und auf die Leistung der unterstützten Unternehmen verlagert werden;
- die Kosten der operativen FI müssen transparent sein, damit ihre Effizienz bewertet und mit anderen Arten von ergänzenden Investitionen verglichen werden kann;
- grundlegende Information über den finanziellen Rückfluss und das angezogene Privatkapital muss auf zuverlässiger Art und Weise berichtet werden, weil das wichtige Gründe für die Verwendung und Verbreitung der FI sind.

Die Auswirkungen für die Politik in konkreten Bereichen sind nachstehend erwähnt.

Unterstützung von KMU und FtE

- Die Unterstützungsmaßnahmen müssen an den örtlichen Kontext und an die beabsichtigte Umsetzung angepasst werden. Das könnte bedeuten, dass die finanzielle Hilfe durch Supportleistungen zur Steigerung der Effizienz der durchgeführten Maßnahmen sowie zur erweiterten Einsetzung von Vermittlern mit Kenntnissen über die lokalen Gegebenheiten ergänzt werden muss.
- In Wettbewerbsregionen in der EU15 kann die Unterstützung durch den EFRE eine wichtige Rolle als Prüffeld für innovative Maßnahmen spielen, anstatt herkömmliche nationale Systeme zu wiederholen. Das kann einen Mehrwert für die EU erzeugen, der die kleine Förderung wesentlich übersteigt.
- Die regionale Verteilung der Finanzierung durch die EU Forschungsrahmenprogramme soll untersucht werden als auch Möglichkeiten für die Konvergenzregionen und insbesondere in der EU13 sich effektiver für Finanzierung zu bewerben.

Förderung für Großunternehmen

- Die Großunternehmen brauchen üblicherweise keine staatlichen Subventionen, doch in den richtigen Umständen kann eine Unterstützung das Verhalten des Unternehmens beeinflussen und eine wichtige Quelle von Wachstum in der Region schaffen. Allerdings muss die Unterstützung darauf gezielt und bedingt sein, dass konkrete Vorteile für die lokale Wirtschaft und die dort ansässigen Unternehmen geschaffen werden müssen.

- Unternehmen, die nur wenig größer als KMU sind, verdienen eine besondere Aufmerksamkeit. Viele davon haben dieselben Schwierigkeiten beim Zugang zu Finanzierung während der Krise erlebt wie die kleineren Unternehmen und die EFRE-Unterstützung hat die Abwicklung von einigen solchen strategisch wichtigen Unternehmen verhindert.

Verkehrsförderung

- Der Fokus auf Verkehrsförderung in der EU12 in 2007-2013 kann mit der Unzulänglichkeit des Verkehrsnetzes begründet werden. Es ist wahrscheinlich, dass er in den kommenden Jahren beständig bleibt. Andererseits ist es in der EU15 zu bedenken, ob der Straßenbau weiterhin durch die Kohäsionspolitik finanziert werden muss.
- Die Ursache der offensichtlichen Schwierigkeiten in einigen Ländern, Schienenprojekte durchzuführen, die auch in der vorherigen Programmlaufzeit offenkundig waren, bedarf weiterer Aufmerksamkeit.
- Eine angemessene Verteilung der Förderung zwischen TEN-T-Projekten und Projekten von lokaler oder regionaler Bedeutung muss mitbedacht werden. Projekte, die zur Verringerung der regionalen Disparitäten beitragen - das Hauptziel der Kohäsionspolitik - müssen genauso als Quelle für Mehrwert für die EU gesehen werden wie die Projekte, die zur TEN-T beitragen.

Förderung der Umweltinfrastruktur

- Viele Umweltprojekte sind aufwändig und bedürfen einem hohen Kompetenzniveau der durchführenden Behörden, was bei kleineren Behörden nicht vorhanden sein könnte, da sie solche Projekte nur selten durchführen. Weil die Projekte über Abfallwirtschaft insbesondere in den kleineren Kommunen wahrscheinlich in den kommenden Jahren immer wichtiger werden (entsprechend der Abfallrahmenrichtlinie), ist das ein Thema, dass in Betracht gezogen werden muss.
- Die Bewertungen der Investitionen in Umweltinfrastruktur über die Kohäsionspolitik müssen besser an die Bewertungen der Durchführung von EU-Richtlinien angepasst sein.

Förderung der Energieeffizienz von Wohn- und öffentlichen Gebäuden

- Kredite und andere Arten von FI sind möglicherweise besser als Förderung als Unterstützungsmittel für Maßnahmen der Energieeffizienz. Aufklärungskampagnen können vonnöten sein, damit der Widerwille zur Aufnahme eines Kredits überwunden wird.
- Energieaudite sollten Standardteil der Projektauswahlkriterien sein, um die beabsichtigte Minderung des Energieverbrauchs zu identifizieren und den Erfolg zu überprüfen.
- Die finanzielle Unterstützung sollte mit einer Reihe von nicht finanziellen Maßnahmen ergänzt werden - darunter Beratung und Anleitung, Zertifizierungssysteme und Bauvorschriften.

Förderung von Kultur und Tourismus

- Das Potential beider Branchen, zur Regionalentwicklung beizutragen, sollte wirkungsvoller angesteuert werden und die angebotene Förderung sollte in einer Entwicklungsstrategie zusammengefasst werden.

- Die Unterstützung der Entwicklung der Kreativbranchen als mögliche Quelle von Wachstum und Beschäftigung in einigen Regionen sollte ernsthaft in Betracht gezogen werden.

Förderung der Städteentwicklung und der Sozialinfrastruktur

- Die Stadterneuerung kann das Wachstumspotential der Regionen stärken, doch sie muss Teil einer einheitlichen Regionalentwicklungsstrategie sein.
- Das Engagement der Kommune ist notwendig zur Feststellung der angemessensten Art der Erneuerung und des vielversprechendsten Entwicklungsweges.

Europäische territoriale Zusammenarbeit

- Die Programme müssen über einen klaren strategischen Schwerpunkt verfügen, der über die Zusammenarbeit und die gemeinsamen Maßnahmen hinaus geht, obwohl diese Arbeitsweisen im Mittelpunkt ihrer Funktionsweise bleiben müssen.
- Es muss dem Konzept der funktionalen Region mehr Aufmerksamkeit bei der Entscheidung zur Förderung der Grenzgebiete geschenkt werden. Das ist äußerst wichtig bei der Berücksichtigung der möglichen Vorteile von grenzüberschreitender Zusammenarbeit. Obwohl das schwierig ist, könnte der Versuch in dieser Richtung den Schwerpunkt auf Aspekte legen, die für die zukünftige Entwicklung der Region wichtig sind.
- INTERREG und andere Programme der Kohäsionspolitik müssen besser koordiniert werden, um die Effekte jedes Programms auf die Entwicklung zu verstärken.
- Es besteht ein Bedarf Kontrollindikatoren zu entwickeln, die nicht nur mit den direkten Output von Projekten verbunden sind sondern auch mit den anvisierten Zielen der Programme grenzüberschreitende Zusammenarbeit zu erreichen oder zu verstärken.

Schlussfolgerungen

Die in dem Bericht dargelegten Befunde demonstrieren, dass die Kohäsionspolitik effektiv funktioniert hat und konkrete Ergebnisse gebracht hat, obwohl sie in dem Zeitraum 2007-2013 in einer sehr schwierigen Umgebung durchgeführt wurde. Über diesen Zeitraum leistete sie in der Verfolgung der Lissabon-Prioritäten und der Strategie Europa 2020 einen wichtigen Beitrag zu Beschäftigung und Wachstum sowie zu Verringerung der regionalen Disparitäten. Dies geht aus den Ergebnisse der Bewertungen vor Ort hervor und wird durch die Ergebnisse der makroökonomischen Modelle ergänzt welche den Mehrwert der Politik im Sinne des zusätzlich erzeugten BIP in allen Mitgliedsstaaten darlegen.

Die Politik trug auch zur engeren Integration des EU internen Marktes durch Verbesserung der Verkehrsverbindungen bei sowie zur besseren Anwendung der EU-Gesetzgebung insbesondere hinsichtlich der Umwelt und einer besserer Lebensqualität.

In den EU12-Ländern sowie in den Konvergenzregionen im Süden der EU stellte die Förderung durch die Kohäsionspolitik die wichtigste und in einigen Fällen auch die einzige Quelle von Entwicklungsmitteln in diesem Zeitraum bereit.

Die Bewertungen von unterschiedlichen Bereichen der Politik haben konkrete Beweise über die Erfolge erbracht und die Bedeutung der Förderung durch die Kohäsionspolitik für die durchgeführten Projekte veranschaulicht.

Die durch das Ziel „Europäische territoriale Zusammenarbeit“ geförderte INTERREG-Programme haben einen deutlichen Mehrwert für die EU erzeugt und sie hätten ohne die Bereitstellung dieser Förderung nicht stattfinden können. Dasselbe gilt für die Förderung für den Transportsektor und insbesondere für die Investition in TEN-T.

Das Durchführungssystem hat sich als effektiv bei der Durchführung der Politik in diesem Zeitraum erwiesen, es gibt jedoch Potential für Effizienzgewinne durch Steigerung der Verwaltungskapazität sowie durch weitere Vereinfachung und Spezialisierung der Programme.

Introduction

The present report synthesises the findings of the *ex post* evaluation of Cohesion policy programmes financed by the European Regional Development Fund (ERDF) and the Cohesion Fund over the 2007-2013 programming period. It attempts to answer three main sets of questions:

- How the funding provided was used in regions across the EU or what the money was spent on.
- What the results were and how far they contributed to the goals of Cohesion policy.
- What the lessons to be drawn from the experience over the period are and what the implications are for Cohesion policy in the future or how the design and operation of the policy can be improved to make it more effective.

The report complements that which has been produced recently on the *ex post* evaluation of the European Social Fund (ESF), which is aimed at supporting human resource development and disadvantaged groups across the EU. As such, it too is an integral part of Cohesion policy and is directed towards the same end of furthering economic and social cohesion in EU Member States. While the evaluations have largely been carried out separately – though the assessment of the operation of the management and implementation system that is common to all three Funds was undertaken jointly – they, therefore, need, to be considered together when assessing the effectiveness of policy over this period.

In addition, two other EU funds, the European Agricultural Fund for Regional Development (EAFRD) and the European Fisheries Fund (EFF), also provided support over the period to assist regional development, in the first case in rural areas, in the second case in coastal areas dependent on fishing. Though not formally part of Cohesion policy, they have a similar objective and need to be taken into account when assessing the effects of overall EU support for regional development over the period.

One point needs to be stressed at the outset. Cohesion policy is, and was, a shared responsibility between the EU and Member States. While the EU decides on the overall scale of funding made available and its division between countries as well as between broad categories of region, the distribution of funding to individual regions is determined by Member States. Equally, while the EU sets the framework and identifies the common objectives which need to be pursued, the Member States and regions decide how the funding should be invested within this framework and in what.

Objectives of Cohesion policy over the 2007-2013 period

The ultimate objective of Cohesion policy, at least so far as the ERDF and Cohesion Fund are concerned, was and remains to reduce regional disparities across the EU. According to the Treaty as it was at the time when the programmes for the 2007-2013 period were being prepared, the objective was '*to promote economic and social progress and a high level of employment and to achieve balanced and sustainable development, in particular through the strengthening of economic and social cohesion*⁸' and '*In particular, the Community shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions or islands, including rural areas.*⁹ The only change since then has been, in the Lisbon Treaty which came into force in 2009, to add the word '*territorial*' to '*economic*' and '*social*' cohesion.

⁸ Treaty of Amsterdam, Article B, 1997.

⁹ *Op.cit.* Article 158.

The process involved in formulating the programmes to be funded for 2007-2013 began with the European Commission proposing the strategic guidelines for Cohesion policy for the period in close consultation with Member States. These were then officially adopted by the Council (i.e. by the Member States acting together) and formed the basis for the National Strategic Reference Frameworks prepared by the Member States. These set out the development strategy which it was intended to follow and the policy priorities which the funding would be used to pursue in carrying out this strategy. It also identified the way that the pursuit of the strategy would contribute to the achievement of the common EU objectives which were defined in the Lisbon strategy for growth and employment. These were to invest in people in order to adjust to globalisation and a changing job market; to expand research, development and innovation; to create a more dynamic business environment; and to bring about a greener economy to combat climate change. This meant in practice channelling funding into investments that *'directly strengthen competitiveness and job creation – in research and innovation, human capital, business services, major European infrastructures and improvement of energy efficiency'*¹⁰.

While there were common priorities in the 2000-2006 programming period, priorities, therefore, became more formalised in 2007-2013 and Member States were required to specify how the programmes they intended to implement would help to achieve them. Those in receipt of support under the Convergence Objective were also required to earmark at least 60% of their funding for the pursuit of these common priorities. Those receiving support under the Competitiveness and Employment Objective were required to earmark at least 75% of their funding for their pursuit. It was left open to Member States to decide the precise way in which they pursued these priorities in terms of the division of funding between policy areas and the measures and projects to be implemented within these policy areas.

The pursuit of these common priorities was conceived as the operational means by which Member States and regions could best achieve the objectives of sustainable development and to reduce disparities with other parts of the EU. There was, therefore, no conflict between the pursuit of the aims of the Lisbon strategy and those of Cohesion policy. Indeed, in practice, there is no evidence that the requirement imposed on Member States to earmark a relatively large proportion of funding for these common priorities led them to adopt less favoured strategies.

It is important to recognise, however, that sustainable development has a social and environmental dimension as well as an economic one, which is manifest in the emphasis on strengthening economic, social and territorial cohesion as a means of reducing regional disparities. In practice, it means that Cohesion policy has multiple goals and cannot be reduced simply to narrowing differences in GDP per head across regions. Disparities in social inclusion and the quality of life as well as in environmental aspects are equally relevant for sustainability and are legitimate priorities along with growth and employment. Indeed, employment is an objective which links the economic and social dimension since it is a major means of increasing social inclusion and was emphasised as such in the revised Lisbon strategy in 2005, which put more emphasis on growth and jobs.

The relative weight attached by Member States and regions to these different priorities is likely to vary across the EU, to some extent in line with GDP per head insofar as regions where this is low might be expected to give more importance to growth than social aspects, though neglecting the latter could well impinge on the ability to sustain growth. This inevitably complicates this evaluation since account needs to be taken of

¹⁰ 'Delivering Lisbon through Cohesion Policy', Press release, European Commission, 1 March 2006, http://europa.eu/rapid/press-release_SPEECH-06-138_en.htm?locale=en

the effects of the programmes pursued on social and environmental – or sustainability – aspects as well as economic ones, and since these tend to be more intangible and difficult to measure (quality of life being a prominent example). Moreover, where social aspects are measurable, the data to do so are more limited than for economic aspects. It is no accident that despite a decade or more of economists emphasising the limitations of GDP as an indicator of progress and calling for it to be supplemented by specific indicators of social well-being and the sustainability of growth, it is still routinely used as the sole measure of an economy's performance.

The evaluation is further complicated by the fact that the relative weights attached to the different objectives were rarely spelled out in programme documents or policy statements but were at best implicit in the division of funding between priorities and policy areas.

An additional aspect to take into account as regards objectives is the adoption in 2010 of the Europe 2020 strategy as a response to the crisis. This followed the Lisbon strategy in defining the policy agenda for the present decade but went further than before in setting quantitative targets for the main objectives. In particular, as compared with Lisbon, it gave more weight to social goals and for the first time set a concrete target for reducing poverty and social exclusion in the EU as well as for increasing the employment rate, though like Lisbon it stopped short of spelling out the national targets which were implied by this.

Although the strategy was launched mid-way through the 2007-2013 period when programmes had to a large extent been defined, the Structural Funds, as was the case in respect of Lisbon, were seen as the main source of finance at EU level to support its implementation. Member States were, therefore, encouraged to devote unused financial resources over the remainder of the period to the pursuit of the Europe 2020 objective of smart, sustainable and inclusive growth. This was not only, it should be emphasised, in order to achieve the targets for employment and poverty specified in the strategy, but also as the best way of *'reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions'*. In practice, however, the objectives of Europe 2020 were so similar to the Lisbon priorities that it made little difference to how Member States were expected to use Cohesion policy funding.

The economic and financial crisis

The economic and financial crisis is another major aspect which needs to be taken explicitly into account and which further complicates the evaluation. The global recession struck soon after the 2007-2013 period began but too late to affect the initial design of the programmes. This was predicated largely on economic growth continuing at a similar pace to the relatively high rates sustained in most parts of the EU throughout much of the previous decade. Over a large part of the EU, Cohesion policy funding became an even more important source of finance for investment not only for infrastructure but also for stimulating economic activity to offset the effects of the recession. Funding, therefore, was diverted in many cases from the long-term structural objective of strengthening the development potential of economies to more pressing short-term aims of countering the economic downturn through projects with more immediate effects on activity and jobs and of lending support to enterprises in financial difficulty.

In addition to prompting shifts in funding, the crisis which followed the recession had a number of effects on Cohesion policy programmes. Firstly, it delayed the take-up of funding because of the inability of potential recipients, public authorities as well as enterprises, to find the necessary co-financing. As a result, it meant that programmes became vulnerable to the risk of de-commitment for not being able to spend the

funding available within the time allowed (within two years, or three in the case of most countries in receipt of the Cohesion Fund).

Secondly, it increased the importance of the Cohesion policy funds, as public finances became increasingly constrained by the widespread attempt to keep down rising government deficit and debt levels. The funds, in consequence, became the primary, and in some cases the only, source of financing for public investment and for public support of enterprises in many countries, in the EU12 in particular but also in the southern Member States. This led to growing interest in gaining access to the funds and increased competition for them, or for the projects they helped to finance.

Thirdly, the increased competition resulted in contractors reducing prices, sometimes below costs, in an attempt to secure work, which led in turn to them becoming vulnerable to financial difficulties, and possible bankruptcy, and the projects they were working on becoming delayed as a result. It also led in a number of countries to an increased tendency for losing tenderers to contest the results of the procurement process and to take legal action in an attempt to reverse decisions and to get the process undertaken again, so again causing delays in projects being implemented.

Fourthly, it led the EU to increase co-financing rates for countries finding it difficult to obtain the counterpart funding for the support available, which meant that there was less funding for them to find for particular projects but which also meant that the overall amount of expenditure that could be financed was reduced.

These differing consequences showed up throughout the evaluation and are referred to at various points in the present report.

However, although the crisis had adverse consequences for programmes and the rate at which they were implemented, it did demonstrate one positive feature of the way that Cohesion policy operated over the period. This is that it was flexible enough to play an important role in offsetting the effects of the economic downturn. As a result of the changes to the regulations made relative to the previous period, it proved relatively easy for Managing Authorities (MAs) to shift funding from one area, or from one form of support, to another. So long as the shifts were within priorities and there was no substantial change in objectives, MAs were therefore free to make changes in the way that the funding was spent, so that they were able to increase its immediate impact on the economy and employment, as indicated above.

The approach adopted

As in the case of the *ex post* evaluation of the 2000-2006 programmes, the approach adopted was a selective one. Instead of trying to cover all the 322 Operational Programmes (OPs) in 27 Member States, as well as the Instrument for Pre-Accession Assistance (IPA) in Croatia, which without a substantial expansion of resources and time could at best be done only superficially, the evaluation concentrated on policy areas and issues where there seemed to be the most need for an assessment. This was either because the areas were particularly important in terms of the funding absorbed, or because the 2000-2006 *ex post* evaluation had shown there to be particular problems in the areas concerned or because relatively few evaluations had been undertaken on these areas or issues. In the last case, the motivation was, therefore, to increase knowledge about how the funding was spent in these areas and what the effects were.

Unlike for the 2000-2006 period, the support provided by the Cohesion Fund and the projects co-financed by this were included together with the ERDF in the evaluation, instead of being evaluated separately, and no distinction was made between them when examining what the funding was spent on and assessing the effects. This reflects the fact that in 2007-2013 the Cohesion Fund was considered to be an explicit

part of Cohesion policy with the same objectives as the ERDF of reducing regional disparities and strengthening economic and social cohesion. The Interreg programmes funded under the European Territorial Cooperation (ETC) Objective were also included as part of the evaluation for the same reason. Whereas previously these programmes had been formally separate from Cohesion policy as such, in the 2007-2013 period they were part of it and formed an Objective in themselves.

In relation to the 2000-2006 period, therefore, the number of Objectives remained at three – Objective 1 being effectively renamed the Convergence Objective; Objective 2, which applied only to selected regions or areas, being replaced by the Competitiveness and Employment Objective (termed the 'Competitiveness' Objective throughout the present report), which was potentially open to all regions to receive support under; and the support provided under Objective 3 being divided between these two Objectives, while the ETC Objective was added. At the same time, two Community Initiatives, EQUAL and URBAN, were subsumed under the Convergence and Competitiveness Objectives too.

The policy areas and issues selected for evaluation by individual WPs were as follows:

- Support to SMEs – increasing research and innovation in SMEs and SME development (WP2)
- Financial instruments for enterprise support (WP3)
- Support to large enterprises (WP4)
- Transport (WP5)
- Environment (WP6), which was focused on environmental infrastructure
- Energy efficiency in public and residential buildings (WP8)
- Culture and tourism (WP9)
- Urban development and social infrastructures (WP10)
- European Territorial Cooperation (WP11)
- Delivery system (WP12)

Although these WPs did not cover the whole of expenditure from the two funds, it covered around 75% of the total. It did not cover in detail, in particular, support for research, development and innovation outside of SMEs, to which a significant amount of funding was devoted but which has been the subject of a large number of evaluations. In addition, two further WPs were concerned with providing key data for the evaluation for use by the other packages. They were:

- Data collection and quality assessment (WP0), which assembled the monitoring data from the Annual Implementation Reports (AIRs) on indicators, both core and selected country-specific ones, and verified their reliability.
- Geography of expenditure (WP13), which collected data from MAs on expenditure and allocations in the different NUTS 2 and NUTS 3 regions within Member States by category of expenditure, estimating the data that were missing on the basis of the most relevant indicator available.

Moreover, four WPs (under WP14) involved estimating the effect of the funding provided under Cohesion policy, as well as by the EAGGF, on economic growth, two on the basis of macroeconomic models, the other two through econometric analysis using counterfactual techniques.

On top of this, an analysis was also made of the macroeconomic context in which Cohesion policy was implemented over the period and of the extent of the various

dimensions of regional disparities, not only the economic aspects but also the social and other ones, as well as the way that they changed over the period. The aim was to identify the changing nature and scale of the problems of development faced by lagging regions which Cohesion policy was intended to help overcome. The results are summarised in Chapter 1 below.

Additionally, a seminar was held with a group of leading academic economists to examine how far it was possible, on the basis of current understanding of the determinants of regional development, to identify the policies which are best designed to achieve the common objectives of growth and employment across the EU. What emerged was a consensus that it was not possible to determine an optimal set of measures, or mix of projects, for achieving these common objectives which is applicable everywhere, but that, instead, this varies between regions according to their features, attributes, level of development and so on, as well as the circumstances prevailing at the time.

The implication is that there is a need for flexibility in the way that Cohesion policy is implemented so that it can be adapted both to local circumstances and changes in these over time. This proved important over the programming period when the crisis hit, which affected priorities; and while it did not alter the structural problems which regions faced, it made them more acute.

The further implication is that there is no ideal common strategy which can be defined centrally against which the programmes implemented by Member States or regions can be judged. There is, therefore, no substitute for examining in detail the circumstances which prevailed in different parts of the EU and the outcome of the measures taken and projects completed. Accordingly, much of the evaluation carried out in the different WPs took the form of case studies of the investment supported by the ERDF and Cohesion Fund in different policy areas in different countries and regions in order to identify the effects of the policy.

EU12 vs EU15, Convergence vs Competitiveness regions

An additional feature of the 2007-2013 programming period which distinguishes it from the previous one is that it was the first full period when the Central and Eastern European countries which entered the EU in 2004 and at the beginning of 2007 were in receipt of Cohesion policy funding. There is a special interest, therefore, in examining the performance of the policy over this period, given the particular needs of the countries concerned to strengthen their endowment of infrastructure and to overcome other constraints on development which exist (such as the competitiveness of their firms and the relatively low expenditure on R&D). Accordingly, the concern is to see how the funding they received from the ERDF and Cohesion Fund was invested and what the results were, as well as how well the policy was managed over the period given the inexperience of the countries concerned in administering such large-scale funding.

Throughout the present report, therefore, a distinction is made between the EU12 countries and the EU15 ones, as well as between Convergence and Competitiveness regions within the EU15, in view of the much larger amount of funding going to Convergence regions than Competitiveness ones over the period. A further distinction is made between the four southern EU15 countries, Greece, Spain, Portugal and Italy, and the rest of the EU15. This is motivated by the fact that Greece, Portugal and Spain were in receipt of the Cohesion Fund, the last on a transitional basis, and in Italy there is a sharp divide between the Convergence regions in the south of the country and those with significantly higher levels of GDP per head in the north.

The Cohesion Policy Objectives

Convergence Objective: covered NUTS 2 regions with a GDP per head of less than 75% of the EU average.

Competitiveness and Employment Objective: covered all areas not eligible for support under the Convergence Objective.

Phasing-out: transitional support for regions which were eligible for Objective 1 support in the 1994–1999 period but were no longer eligible in 2000–2006. The regions concerned are: Hainaut in Belgium; Brandenburg-Südwest, Lüneburg, Leipzig and Halle in Germany; Kentriki Makedonia, Dytiki Makedonia and Attiki in Greece; Asturias, Murcia, Ciudad de Ceuta and Ciudad de Melilla in Spain; Basilicata in Italy; Burgenland in Austria; Algarve in Portugal; and Highlands and Islands in the UK.

Phasing-in: transitional support for NUTS 2 regions that were covered by Objective 1 in 2000-2006 but had a GDP per head above 75% of the EU15 average when eligibility for Convergence Objective support was determined. The regions concerned are Border, Midland and Western in Ireland; Sterea Ellada and Notio Aigaio in Greece; Castilla y León, Valencia and Canarias in Spain; Sardegna in Italy; Cyprus; Közép-Magyarország in Hungary; Madeira in Portugal; Itä-Suomi in Finland; and Merseyside and South Yorkshire in the UK.

ETC Objective, cross-border cooperation: covered NUTS 3 regions on land-based internal borders and some regions on external borders as well as on maritime borders separated by a maximum distance of 150 km.

Transnational cooperation: covered 13 areas across the EU.

Interregional cooperation: covered all regions.

Croatia, which was in receipt of pre-accession funding, in the form of IPA, was also covered in the evaluation, though not in as much detail as the other countries because of the much smaller amount of support received than other countries with similar levels of GDP per head.

The challenges faced by the evaluation

The evaluation confronted much the same challenges as the one carried out on the 2000-2006 programmes when trying to identify the effect of the funding provided on the ultimate objectives of the policy, with the additional problem of the effect of the crisis to deal with:

- There was a lack of precision in the objectives that programmes were intended to pursue, which makes it difficult to assess how far they were achieved.
- The funding was very often dispersed over a wide range of policy areas, which means that tangible evidence of results was difficult to observe.
- Many other factors affected regional developments over the period, making it difficult to isolate the effects of Cohesion policy.
- There were often lengthy time lags between projects being completed, many of which involved investment in infrastructure which often took many years to build, and their results becoming evident; and a longer one still between expenditure and the effect on regional development appearing. Accordingly, this *ex post* evaluation has been undertaken too soon to be able to identify many of the results and much too soon to be able properly to assess its contribution to helping regions overcome obstacles to their development.

At the same time, there are also areas of improvement as compared with 2000-2006. In particular:

- The monitoring systems in place in Member States to track the output and results of expenditure were superior to those that existed in the 2000-2006 period. These included both country-specific indicators and a common set of core indicators which could be aggregated to produce an overview of outcomes across regions. Although their use was not obligatory, and so they were not applied in all programmes, and although there were some inconsistencies in the way that they were calculated, they nevertheless give some indication of the achievements from the investment financed which was not available before.
- Many more evaluations were carried out on Cohesion policy programmes over the period than in the previous one. While it was no longer compulsory for Member States to undertake evaluations of programmes at specific points in time, MAs were encouraged to carry out evaluations in order to know more about the performance and results of programmes. In practice, a large number of evaluations were undertaken – at least 917¹¹ altogether and probably quite a few more – but they were concentrated in comparatively few countries. Most, too, were concerned with procedural and implementation aspects, and though a significant number (around a quarter) were directed at assessing the results or impact of the expenditure supported, they were very unevenly distributed across policy areas as well as countries. They were therefore of limited usefulness for this evaluation.

One aspect on which there was little improvement relative to the previous period, however, was the targets set in monitoring systems against which the indicator data could be compared. Targets seem rarely to have been fixed in a meaningful way and were often achieved many times over or were not achieved by a wide margin. The comments made in the synthesis report on the 2000-2006 *ex post* evaluation remain valid: *'In most cases, they did not play a central role either in the design or in the monitoring of policy and rarely featured in the policy debate. No authorities were held accountable for not meeting the targets set and few questions were asked when the targets were easily achieved. In consequence, whether the targets were achieved or not cannot be taken as evidence of success or failure of the measures implemented and they are generally of limited relevance for the evaluation.'*¹²

An additional aspect where there has been some improvement, but not enough, relates to the data available on the context in which programmes were carried out or which can be used to help interpret or assess their performance. There is still a lengthy delay before data on the growth of regional economies become available¹³, and there are still no data for most countries on public investment at regional level which can be used to assess the relative scale of the EDRF and Cohesion Fund support provided. Nor are there data at regional level on many factors which would help to put the output or results of programmes into context, and into perspective, or at least data which are relatively complete, such as on the population connected to wastewater treatment facilities of various kinds or the proportion of waste recycled.

¹¹ This was the number counted by the Network of Evaluation Experts over the period up to the third quarter of 2013 plus those counted by the pilot Evaluation Helpdesk project in 2014 and the latter part of 2013.

¹² 'Ex-Post Evaluation of Cohesion Policy Programmes 2000-06 co-financed by the ERDF (Objective 1 & 2), Synthesis report', Applica, Ismeri Europa and wiiw, April 2010. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/synthesis_eval2000_2006.pdf

¹³ At the time of writing, there are no coherent data on the growth of gross domestic product (GDP), or of gross value-added (GVA), for NUTS 2 regions beyond 2011 available from Eurostat.

Administrative capacity

A final aspect which needs to be highlighted is the growing acceptance of the importance of the capacity of the authorities responsible to manage Cohesion policy funding and to design and implement programmes for furthering the development of Member States and regions. It is now widely appreciated that the effectiveness of the programmes financed by the ERDF and the Cohesion Fund in achieving sustainable development and in reducing the gap in economic performance and living standards between regions depends critically on the competence of authorities across the EU to determine the uses to which the funding is put and to ensure that they are carried out efficiently.

The different manifestations of poor governance, or an inadequate level of administrative capacity, were a particular focus of the evaluation, since they have implications for the future effectiveness of Cohesion policy in different parts of the EU as well as for its performance over the 2007-2013 period. This is recognised in the greater emphasis in the 2014-2020 programming period on improving the capacity of authorities across the EU to manage funding and making receipt of funding conditional on this.

Outline of the Report

The present report is not a summary of the various Work Packages and other studies which have been undertaken as part of the evaluation but a synthesis of the findings which attempts to draw out the main points which emerged from each of them. The structure of the report is as follows:

Chapter 1 – The context in which Cohesion policy was implemented

- The economic context, which focuses on the crisis and the tightening constraints on public finances which it led to.
- The scale of Cohesion policy funding in relation to public investment in the different Member States.
- The performance of regions supported under the Convergence Objective as compared with others in terms of GDP and employment.
- Changing regional disparities in other aspects in addition to GDP and employment, particularly social aspects – specifically, the incidence of low household income and material deprivation, as well as education levels and expenditure on R&D, which contribute to economic and social development.

Chapter 2 – The implementation of Cohesion policy over the period

- The division of funding between policy areas, which reflects the underlying development strategy being pursued.
- The time profile of expenditure over the period, which indicates the rate of implementation of programmes and absorption of funding.
- The consequences for overall funding of the increases in EU co-financing rates, introduced to reduce the co-funding that Member States needed to find.
- Changes in the division of funding between policy areas, which indicate both the changes in priorities and the difficulties of carrying out expenditure in the areas from which funding was shifted.
- The division of funding between regions and its relationship to their GDP per head.

- The efficiency of the management and implementation system, which summarises the main findings of WP12 on the delivery system.

Chapter 3 – Results of Cohesion policy in main policy areas

This chapter sets out the main findings of the WPs undertaken on the different policy areas. It covers each of the packages listed above in turn, in each case indicating:

- the funding going to the policy area concerned, how it was distributed between regions in different parts of the EU and the division between categories of expenditure (such as support services for SMEs as opposed to investment in them, or roads as opposed to rail);
- the rationale for public support of investment, and for EU support in particular, and the objectives of the investment concerned according to the authorities responsible;
- what the funding was spent on in practice in terms of the projects undertaken and the measures implemented;
- the achievements resulting from the support provided;
- the lessons learned from the experience over the period and the implications for Cohesion policy in the future.

Chapter 4 – Effects of Cohesion policy on regional growth and employment

This chapter sets out the results of four studies undertaken to estimate the effects of Cohesion policy on economic growth in the regions receiving support. Two of the studies use macroeconomic models, Quest and RHOMOLO, to do this (both general equilibrium models, but one a country-level model and the other a regional model). Both models estimate the effect on countries or regions which were net contributors to Cohesion policy funding in the period as well as on those which were net recipients.

The other two studies are econometric analyses using counterfactual methods, which attempt to estimate the effect of Cohesion policy expenditure in the different regions on their economic growth over three successive programming periods – 1994-1999, 2000-2006 and 2007-2013 – taking explicit account of the different levels of expenditure involved.

Chapter 5 – Conclusions and implications for future policy

The final chapter summarises the main findings from the foregoing analysis and draws out those that have implications for the future design and conduct of Cohesion policy. Many of them have already been taken into account in the regulations for the current programming period since they also emerged from the *ex post* evaluation of 2000-2006. As such the evaluation confirms and reinforces the findings of the latter. There are, however, a number which remain to be considered, especially those relating to particular policy areas.

Chapter 1 – The context in which Cohesion policy was implemented

The concern here is to set out both the macroeconomic context in which the Cohesion policy programmes were implemented over the 2007-2013 period and the context in the different regions which conditioned the implementation of programmes and affected the outcomes as well as the objectives which the programmes were aimed at achieving. The concern is also to indicate the scale of ERDF and Cohesion policy funding for the programmes and the extent of economic, social and other disparities between regions which the funding provided was intended to narrow, in addition to the way these disparities changed over the period.

1.1 Macroeconomic context

The economic situation which prevailed across most of the EU over the period was very different from what it was at the time the programmes were drawn up and agreed. Then the relatively high and stable growth rates which had existed in most countries over the previous 10 years or so could reasonably be assumed to continue over much of the period. Instead, the global recession struck in 2008, which resulted in the biggest fall in GDP and the largest job losses since the inter-war years. This was followed by an economic and financial crisis which persisted over the next 5-6 years and which gave rise to at best hesitant growth in some countries and at worst an almost continuous decline in GDP and increasingly high unemployment rates in others.

In this context, nearly all countries experienced problems of public finances, with the fall in GDP leading to tax revenues declining and pushing up public expenditure on income support, in particular, though also, initially, on special measures to counter the downturn in economic activity, to assist sectors hit hardest by the crisis and to help keep people in jobs. While the measures succeeded in moderating the extent of the economic downturn and avoiding a prolonged recession in most countries, they added to budget deficits and mounting levels of government debt. This led, in turn, to nearly all governments from 2010-2011 onwards implementing fiscal consolidation measures to curb the increase in budget deficits and the rise in debt. Public expenditure was, therefore, cut back, with much of the reduction being concentrated on public investment directly or on central government transfers to regional and local authorities which resulted in public investment being reduced indirectly.

Accordingly, the effect of the crisis and the response of many governments across the EU to it was to reduce the funding available for development expenditure, which meant that the funding provided under Cohesion policy became even more important in many countries than it was before. It also meant, however, that it was more difficult to find the co-financing required to take up the funding concerned and to carry out the programmes which were planned. At the same time, the depressed economic situation and the high level of uncertainty about future economic prospects reduced investment and, accordingly, the demand for funding to support it, which added to problems of absorbing the funding available and to delays in the expenditure planned being carried out.

The following sections describe the developments in more detail, starting with the changes in GDP which occurred over the period in different Member States and the counterpart changes in employment and unemployment, and going on to the state of public finances and the changes in public expenditure and public investment. It ends by indicating the scale of Cohesion policy funding in relation to development expenditure across the EU.

1.1.1 Changes in GDP over the programming period

In the years immediately leading up to the 2007-2013 programming period, growth of GDP in the EU averaged close to 3% a year, following the slowdown in the early part of the decade resulting from the bursting of the 'dotcom' bubble which affected only a minority of countries (Table 1.1). In all of the EU12 countries, except Malta, Cyprus and Hungary, it averaged over 5% a year, and over 8% a year in the three Baltic States. The growth rate in Ireland and Luxembourg was also over 5% a year, but these were the only EU15 countries where the rate was over 4% a year. At the same time, growth was less than 2% a year only in Portugal and Italy.

Table 1.1 Changes in GDP at constant prices, 2004-2015

	2003-07	2007-09	2009-11	2011-15	2006-15	2006-15 % change
	<i>Annual average % change</i>					
EU27	2.7	-2.0	1.9	0.8	0.7	6.0
Poland	5.5	3.3	4.4	2.4	3.6	37.1
Slovakia	7.7	-0.1	4.0	2.3	3.0	30.8
Malta	2.5	0.4	2.7	4.2	3.0	30.6
Luxembourg	5.3	-3.1	4.1	3.1	2.5	24.4
Romania	6.8	0.4	0.1	2.7	2.1	20.2
Lithuania	8.2	-6.5	3.8	3.0	1.8	17.8
Bulgaria	7.1	0.6	0.8	1.5	1.8	17.6
Ireland	5.6	-3.9	1.5	3.6	1.6	15.6
Sweden	3.8	-2.9	4.3	1.8	1.5	14.0
Czech Republic	5.9	-1.1	2.1	1.2	1.3	12.7
Germany	2.2	-2.3	3.9	1.0	1.1	10.6
UK	2.7	-2.3	1.8	2.1	1.1	10.2
Belgium	2.9	-0.8	2.2	0.7	1.0	9.4
Austria	3.0	-1.2	2.4	0.6	0.9	8.5
Estonia	8.4	-10.2	5.0	2.7	0.7	6.4
Netherlands	2.8	-1.1	1.5	0.4	0.7	6.1
Slovenia	5.2	-2.4	0.9	0.5	0.6	5.9
France	2.3	-1.4	2.0	0.5	0.6	5.9
Latvia	10.2	-9.1	1.1	3.0	0.5	4.6
Hungary	3.4	-2.9	1.2	1.7	0.4	3.7
Spain	3.7	-1.3	-0.5	0.0	0.0	0.4
Finland	4.0	-3.9	2.8	-0.6	0.0	0.3
Denmark	2.4	-2.9	1.4	0.5	0.0	-0.3
Cyprus	4.5	0.8	0.9	-2.4	-0.2	-1.4
Portugal	1.7	-1.4	0.0	-0.7	-0.4	-3.2
Italy	1.5	-3.3	1.1	-1.0	-0.8	-6.9
Greece	3.6	-2.3	-7.3	-2.6	-3.0	-23.8
<i>Croatia</i>	<i>4.5</i>	<i>-2.8</i>	<i>-1.0</i>	<i>-0.5</i>	<i>-0.5</i>	<i>-4.5</i>

Note: Countries ranked by GDP growth 2006-2015. EU27 excludes Croatia which is shown separately. Source: Eurostat, National accounts.

In sum, high rates of growth were a feature of nearly all EU12 countries in the run-up to the 2007-2013 period, while with only a few exceptions growth rates in EU15 Member States, though lower than in the EU12, were also relatively high by the standards of the previous 25 years or so.

In 2008 and 2009, however, only a year after the beginning of the programming period, the EU was hit by the global recession and GDP fell on average by 2% a year, most of the fall occurring from mid-2008 to mid-2009. The decline in GDP over these two years was common to most countries and only in Poland did GDP growth average

more than 1% a year¹⁴. The reduction in GDP was especially marked in countries which had experienced a housing market and construction boom in the years before – in Ireland and the three Baltic States, in particular – where, as a result, there was a virtual collapse in the construction industry. Although the experience was similar in Spain, GDP fell by much less, though as indicated below this led to a larger reduction in employment than elsewhere.

In the following two years, 2009-2011, there was some recovery in output in the EU as a whole, averaging 2% a year, less than in the pre-recession period and not quite making good the reduction in the previous two years. The recovery, however, was far from being general across countries. In Germany, Sweden and Malta (marginally), the growth rate exceeded that in the 2003-2007 period, but these were the only countries where this was so. In Greece, GDP declined sharply and it also fell slightly in Spain, while in Portugal it remained flat. In Ireland and Cyprus too, the other two countries in which special rescue programmes were implemented, growth averaged only around 1% a year. This was also the case in Italy, where financial instability was also a major problem.

In some of the EU12 countries growth was relatively high: around 4% a year or more in Estonia, Lithuania and Slovakia, countries in which there had been a particularly large fall in GDP in 2009. It was also over 4% a year in Poland. But in the other countries, apart from Malta and the Czech Republic, it was only around 1% a year or less and there was virtually no growth at all in Romania.

Over the next four years, 2011-2015, two years of very little growth in most countries and a renewed decline in many, though nowhere near on the same scale as three years earlier, was followed by two years of modest growth in the majority of countries. On average over the four years, growth was less than 1% a year in the EU and in five countries, four of them in the south of Europe, Cyprus, Portugal, Italy and Greece – the fifth being Finland – GDP declined over these four years; while in another southern country, Spain, it remained unchanged. Only in Malta, Ireland and, marginally, Luxembourg, did growth average more than 3% a year over these four years and in most countries it was less than 2% a year. In most countries too – the only exceptions being these three countries plus the UK – the growth rate of GDP was less than half the rate experienced in the four years immediately before the onset of the crisis.

Over the programming period as whole, 2006-2015 – i.e. including the two years 2013-2015 which Member States have to spend the ERDF and Cohesion Fund support available to them – growth in the EU averaged just 0.7 a year, a quarter of what it had been in the four years 2003-2007. In the EU12, only in Poland did growth average more than 3% a year and only in another three countries, Malta, Slovakia and, marginally, Romania, was it more than 2% a year. In five of the 12 countries – Estonia, Slovenia, Latvia, Hungary and Cyprus, in the last of which GDP was lower in 2015 than 9 years earlier – growth averaged less than 1% a year over these 9 years. In all countries, apart from Malta, therefore, growth was substantially less than over the years preceding the programming period.

The same was true in the EU15. Growth averaged more than 2% a year only in Luxembourg and was much more than 1% a year only here and in Ireland and Sweden. In three countries, Spain, Finland and Denmark, GDP was virtually the same in real terms in 2015 as in 2006 before the beginning of the programming period; and in another three countries, Portugal, Italy and Greece, it was less. Indeed in Greece GDP was almost a quarter (24%) less than it had been in 2006.

¹⁴ Poland was also the only country in which GDP did not fall in 2009. In Bulgaria, Romania and Slovakia, a high rate of growth in 2008 was followed by a substantial decline in GDP in 2009 of over 5% in each case.

The change in GDP in Croatia

In Croatia, which was in receipt of Pre-Accession Assistance funds (IPA) over the period, GDP fell by almost 3% a year over the two years 2007-2009 and it continued to decline over the subsequent 5 years, increasing only in 2015 and then by less than 2%. Accordingly, GDP was almost 5% lower in real terms in 2015 than it had been 9 years earlier at the start of the programming period.

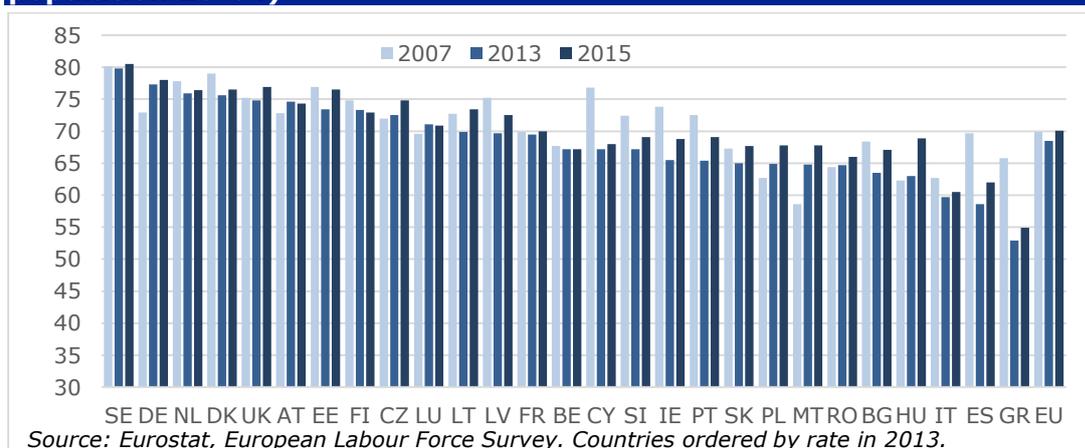
1.1.2 Changes in employment

Lack of jobs is a long-term problem of many of the EU12 Member States and the Cohesion countries in the EU15. In 2007, even after a prolonged period of relatively high economic growth and job creation, five of the seven countries with the lowest employment rates in the EU were in the EU12 (Slovakia, Romania, Poland, Hungary and Malta) and the other two were Greece and Italy. In all these countries, the employment rate was over 10% below the 75% Europe 2020 target (i.e. 67.5% or less). In Bulgaria and Spain too, the employment rate was below the EU average, if only slightly. Even before the crisis hit, therefore, job creation was a major priority in these countries.

Job creation was one of the main casualties of the economic recession which hit the EU in 2008-2009. Over the two years 2008 to 2010, the total number employed in the EU fell by over 5 million. In relation to the population of working age (here defined as those aged 20-64 as in the Europe 2020 strategy), it remained broadly unchanged over the next three years and began to rise only in 2014 and 2015, though at 70% remaining well short of the 75% Europe 2020 target.

The experience in different countries, however, varied markedly, reflecting not only the change which occurred in GDP but also the extent of job-saving measures of various kinds and the general attitude of employers, which mirrored in turn their confidence or otherwise in economic activity picking up. In eight Member States, the employment rate was higher in 2013 than at the beginning of the period in 2007, but only in three countries – Germany, Malta and Poland – was it over 2 percentage points higher relative to the total aged 20-64 (Figure 1.1).

Figure 1.1 Employment rates of those aged 20-64 in 2007, 2013 and 2015 (% population 20-64)



In all the other countries it was lower: most markedly in Spain and Greece (11 percentage points less in the first, 13 percentage points less in the second) and only slightly less so in Cyprus (down by almost 10 percentage points) and Ireland (down by over 8 percentage points). In 2013, around half the Member States (14 of the 27) had an employment rate which was 10% or more below the Europe 2020 target. Except for Belgium, where it was only slightly below, all of them were either EU12 countries

or southern EU15 Member States. In Italy, Spain and Greece, the rate was over 20% below the target.

Over the next two years, 2013 to 2015, employment rose in nearly all Member States, the only exceptions being Belgium, Austria, Luxembourg and Finland, where it either remained unchanged or fell slightly. However, in another seven countries, the increase in the rate was less than 1 percentage point. In 14 of the 27 countries, the rise was not enough to make good the decline which occurred in the earlier years of the period, and the employment rate in 2015 was less than it had been in 2007.

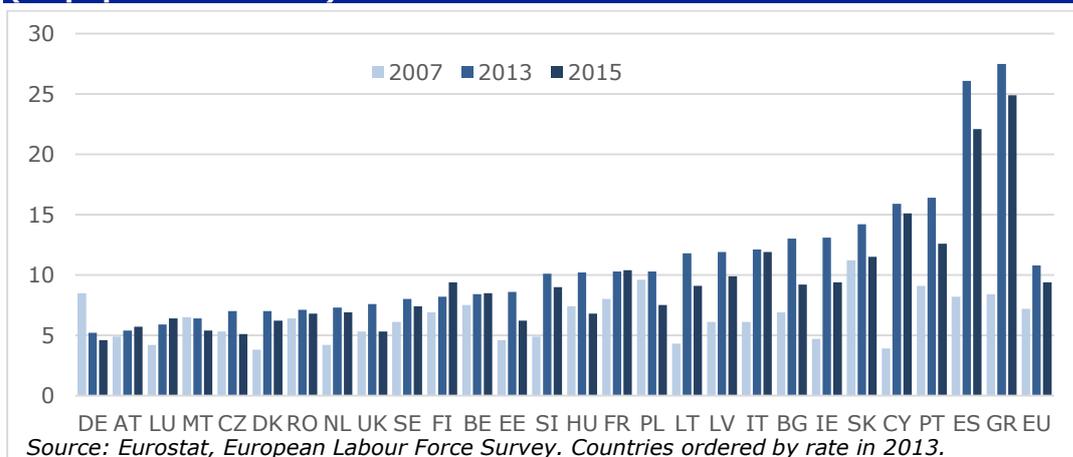
Among the other Member States, the rate was more than 2 percentage points above what it was in 2007 only in five cases – Germany, the Czech Republic, Poland, Malta and Hungary. In the last three of these, the rate remained well below the EU average. Moreover, in Hungary, the increase in the employment rate occurred over a period when there was hardly any growth in GDP, which implies that it was at the expense of a decline in productivity which is unlikely to be sustainable.

Across most of the EU, therefore, employment was below the desired level over the period. This is reflected in the unemployment rate, which rose sharply in all but a few countries when the economic recession hit and remained persistently high over much of the period.

1.1.3 Changes in unemployment

At the beginning of the programming period, in 2007, unemployment in the EU averaged just over 7% of the workforce. In Slovakia, Poland and Portugal it was 9% (over 11% in the first), and in Greece and Spain it was over 8% (it was also over 8% in Germany). Over the next two years it went up by almost 2 percentage points, and it continued to rise until 2013, when it was close to 11%. In 2007 there was only one country, Slovakia, where unemployment was over 10%, and there were nine countries in which it was below 5%. In 2013 unemployment was above 5% in all Member States, and was below 7% in only four countries, Germany, Austria, Luxembourg and Malta (Figure 1.2). It was above 10% in 14 of the 27 countries, all of them, apart from Ireland and France, either EU12 or southern EU15 Member States. In Cyprus and Portugal it was above 15%, and in Spain and Greece it was above 25%.

Figure 1.2 Unemployment rates of those aged 20-64 in 2007, 2013 and 2015 (% population 20-64)



Although unemployment fell with the increase in employment in 2014 and 2015, it still averaged 9.4% in the EU and remained above 10% in seven Member States – the four southern EU15 countries together with Cyprus, Slovakia and France – and well over 20% in Spain and around 25% in Greece. Only in Germany was the rate less than 5%

and only in Germany, Malta, the Czech Republic, Hungary and Poland was the rate lower in 2015 than at the beginning of the period.

Accordingly, creating jobs to bring down unemployment was a political priority for nearly all governments during much of the period.

Employment and unemployment in Croatia

Lack of jobs is also a long-term problem in Croatia. In 2007, the employment rate was 6 percentage points below the EU average and 15% below the Europe 2020 target. Unemployment was around 10%. As in most other countries, the global recession reduced employment significantly and pushed up unemployment. In 2013, after five years of declining GDP, the employment rate had fallen to 25% below the Europe 2020 target and unemployment had climbed to over 17%. In the next two years, despite only very slow growth, the employment rate increased but was still 20% below the Europe 2020 target and unemployment fell, though only slightly, to just over 16%.

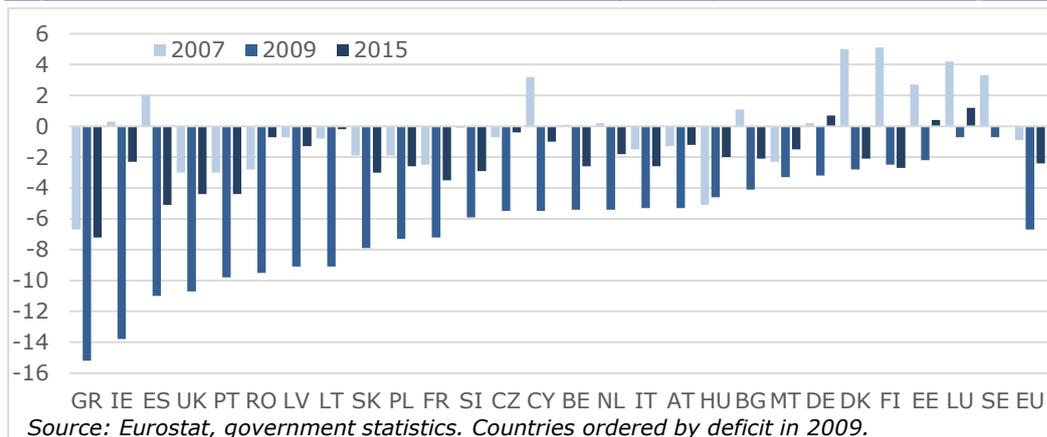
1.1.4 Public sector finances

In most EU Member States, government budgets were either roughly in balance or in deficit in the period preceding the global recession. Only in the three Nordic Member States plus Luxembourg, Spain and Cyprus was the budget in surplus in 2007. In the next two years, the average deficit in the EU increased from just under 1% of GDP to close to 7% as the recession struck and GDP declined, reducing tax revenue and pushing up public expenditure as expansionary measures were taken to counteract the fall in economic activity (Figure 1.3). In four countries the deficit rose to over 10% of GDP – in Greece to over 15% – and it remained below 5% of GDP only in five countries (the three Nordic Member States, Luxembourg and Estonia). At the same time, accumulated government debt increased to 73% of GDP on average in the EU; and in 12 Member States it increased to over 60% of GDP, the limit set in the Growth and Stability Pact – in many of them well over¹⁵.

The response was the introduction of fiscal consolidation measures to reduce budget deficits and to curb the rise in debt. Taxes were, therefore, raised and government expenditure cut back, as illustrated below. As a result, the average deficit was reduced to just over 2% of GDP by 2015, despite the slow rate of growth over this period. The reduction in many countries was substantial, amounting to around 8% of GDP in Latvia, Lithuania and Ireland, as well as in Greece, where GDP fell by well over 20% between 2009 and 2015. Only in Finland, where there was hardly any growth over the period, was the budget deficit not reduced. Although there were only three Member States where the budget was in surplus in 2015 – Germany, Luxembourg and Estonia – the deficit was less than 2% of GDP in another nine countries, in spite of the level of economic activity remaining depressed.

Accordingly, the scale of the fiscal consolidation needed to reduce the budget deficit so much over this period, given the limited growth in most countries, was considerable. Indeed, the consolidation measures taken in unison across the EU seem to have reinforced each other and were a primary reason for the depressed rate of growth which occurred.

¹⁵ See 'The macroeconomic situation in the EU over the 2007-2013 programming period', a report produced as part of the ex post evaluation.
http://ec.europa.eu/regional_policy/en/policy/evaluations/ec/2007-2013/#1

Figure 1.3 Government financial balance, 2007, 2009 and 2015 (% GDP)

In Croatia, the budget deficit, which had risen from just over 2% of GDP to 6% in 2009, was reduced to just over 3% in 2015 through fiscal consolidation measures in a context in which GDP declined over much of the period.

1.1.5 Cutbacks in government expenditure

Reductions in government expenditure, or restraints on increases in spending, were a prominent part of fiscal consolidation measures. Between 2007 and 2009, total General Government expenditure increased from 45% of GDP to just over 50%. While most of the increase is attributable to the decline in GDP (i.e. to the denominator falling), expenditure rose in real terms by an average of almost 4% a year in the EU in the first three years of the programming period. In 2009, this was partly as a result of measures to counteract the recession. There were only two Member States, Sweden and the UK, where there was no growth in government spending; in most countries (19 of the 27, or 20 out of the 28 including Croatia) the increase averaged over 5% a year, and it was well over 10% a year in five countries (Lithuania, Estonia, Romania, Bulgaria and Slovakia (Table 1.2).

Over the next six years, government expenditure was reduced markedly in relation to GDP and rose hardly at all in real terms in the EU as a whole. In 11 countries it was reduced in real terms, and in another five it increased by less than 1% a year. In many countries this had the effect of offsetting the expansion that occurred in the first three years, so that over the programming period as a whole growth in expenditure on average in the EU was only around 1% a year in real terms, and in the majority of countries it was less than 2% a year. Only in six countries – Estonia, Poland, Luxembourg, Malta, Bulgaria and Slovakia – was it much more than 2% a year and only in three – the last three – was it over 3% a year.

Government expenditure in Croatia was also reduced over the last six years of the period, declining by around 1% a year in real terms, more than offsetting the increase which occurred in the first three years, so that overall it was slightly lower in 2015 than at the beginning of the period.

Table 1.2 General Government expenditure 2006-2015

	% GDP			Change in real terms, % a year		
	2007	2009	2015	2006-09	2009-15	2006-15
EU27	44.9	50.3	47.4	3.6	0.2	1.1
Greece	47.1	54.1	55.3	9.3	-3.8	-0.7
Italy	46.8	51.2	50.5	2.9	-0.5	-0.1
Hungary	50.1	50.7	50.7	0.2	1.5	0.2
Cyprus	37.7	42.3	40.1	7.7	-2.2	0.2
Portugal	44.5	50.2	48.3	5.4	-1.1	0.4
Latvia	34.1	43.7	37.2	9.5	-0.3	0.8
Germany	42.8	47.6	43.9	3.0	0.6	0.9
Netherlands	42.5	48.2	44.9	6.1	-0.4	1.1
UK	42.8	49.6	43.2	-2.2	-0.3	1.2
Denmark	49.6	56.8	55.7	5.2	0.5	1.2
Austria	49.1	54.1	51.7	5.0	0.4	1.2
Sweden	49.7	53.1	50.4	-1.5	1.8	1.3
Spain	38.9	45.8	43.3	8.6	-1.0	1.4
France	52.2	56.8	56.8	4.2	1.1	1.6
Slovenia	42.2	48.2	48.0	7.7	0.6	1.6
Czech Republic	40.0	43.6	42.6	8.6	1.1	1.8
Ireland	35.9	47.2	35.1	8.5	-2.0	2.0
Lithuania	35.3	44.9	35.1	13.5	-0.9	2.1
Finland	46.8	54.8	58.3	5.9	1.6	2.1
Romania	38.2	40.9	35.5	12.5	-0.5	2.2
Belgium	48.2	54.1	53.9	6.1	1.2	2.2
Estonia	34.1	46.1	39.5	12.8	0.8	2.5
Poland	43.1	45.3	41.5	5.2	1.6	2.7
Luxembourg	38.2	46.0	41.5	7.6	1.7	2.9
Malta	41.2	41.9	43.3	4.1	4.3	3.3
Bulgaria	37.4	39.5	40.2	16.8	1.6	3.8
Slovakia*	36.1	43.9	45.6	17.0	3.5	5.0
Croatia	45.0	47.6	46.9	5.6	-0.9	-0.1

Note: Change in real terms is money expenditure adjusted by the GDP deflator. Changes relate to the annual average % change over each of the periods. EU27 excludes Croatia which is shown separately.

** Real expenditure is reported to have increased by 13% in 2015 alone.*

Source: Eurostat, government statistics.

The expansion in government expenditure in 2009 to counteract the effect of the recession took the form primarily of an increase in public investment. Partly as a result of this, expenditure on fixed investment increased by over 5% a year in real terms in the three years 2006-2009, rising by well over 10% a year in eight Member States (Table 1.3). On the other hand, it declined in real terms in Ireland and more substantially in Malta and Hungary – in the last of which fiscal consolidation measures were implemented well before those in other countries as part of the package agreed with the IMF to reduce government borrowing and to tackle foreign debt problems.

Table 1.3 General Government gross fixed capital formation, 2006-2015

	% GDP			Change in real terms, % a year			% change
	2007	2009	2015	2006-09	2009-15	2006-15	2006-15
EU27	3.2	3.7	2.9	5.4	-2.7	-0.3	-2.4
Greece	4.9	5.7	3.8	2.8	-10.3	-7.2	-49.0
Ireland	4.6	3.7	1.8	-3.4	-8.5	-6.2	-43.9
Cyprus	2.9	4.0	1.9	12.3	-13.2	-6.2	-43.7
Spain	4.6	5.1	2.5	8.1	-11.6	-6.1	-43.0
Portugal	3.2	4.1	2.2	8.9	-10.7	-5.2	-38.0
Italy	2.9	3.4	2.3	6.0	-7.0	-3.6	-27.9
France	3.9	4.3	3.4	4.3	-2.4	-0.8	-6.8
Netherlands	3.9	4.3	3.5	5.3	-2.9	-0.8	-6.6
Latvia	5.9	4.9	4.4	2.3	0.8	-0.7	-5.8
Lithuania	5.4	4.4	3.6	4.9	-0.3	-0.1	-1.3
Estonia	6.0	6.2	5.3	6.6	0.8	0.6	5.4
Austria	2.9	3.4	3.0	8.1	-0.8	1.4	13.7
UK	2.6	3.4	2.7	2.0	-2.0	1.4	13.7
Romania	6.3	6.0	5.1	12.2	-0.9	1.8	17.8
Finland	3.5	4.0	4.0	7.0	0.8	2.0	19.1
Sweden	4.1	4.5	4.3	0.2	2.0	2.0	19.7
Czech Republic	4.6	5.5	5.2	11.0	0.3	2.0	19.8
Germany	1.9	2.4	2.2	6.6	0.6	2.1	20.2
Slovenia	4.5	5.0	5.1	10.5	0.9	2.6	26.4
Belgium	2.0	2.3	2.3	8.2	1.0	2.8	28.1
Denmark	3.0	3.1	3.8	3.0	4.1	2.9	29.4
Hungary	4.3	3.4	6.7	-11.8	13.3	3.3	34.0
Luxembourg	3.6	4.5	3.8	13.1	0.7	3.9	41.7
Malta	3.8	2.4	4.6	-11.6	15.4	4.6	49.9
Poland	4.5	5.1	4.4	13.2	0.7	4.6	50.1
Bulgaria	5.2	5.0	6.2	17.5	5.2	6.5	76.2
Slovakia*	3.1	3.8	6.2	12.1	11.8	8.9	116.2
Croatia	6.1	5.8	2.8	4.3	-11.9	-8.0	-52.8

Note: Change in real terms is money expenditure adjusted by the GDP deflator. Changes relate to the annual average % change over each of the periods. EU27 excludes Croatia which is shown separately.

** Real expenditure is reported to have increased by 67% in 2015 alone.*

Source: Eurostat, government statistics.

The fiscal consolidation measures subsequently taken were also concentrated disproportionately, in most countries, on public investment, which was reduced on average in the EU by almost 3% a year in real terms between 2009 and 2015. Although a reduction in investment occurred in a minority of countries (12 of the 27, or 13 of the 28 including Croatia), there were only six countries where investment was increased by more than 1% a year, and two of these were Hungary and Malta where the increase can be regarded as compensating for the large reduction which occurred in the three years before.

The reduction in investment was particularly large, over 10% a year, in the four southern countries of Greece, Cyprus, Spain and Portugal, while it was almost 9% a year in Ireland. As a result, investment in real terms in 2015 in these five countries was around 40% or more below the level in 2006 at the beginning of the period (in Greece, close to 50% lower). In Italy too, the reduction was substantial (almost 30%) and there were another four countries (France, the Netherlands, Latvia and Lithuania) where public investment was also less than nine years earlier. By contrast, in five EU12 countries, Hungary, Malta, Poland, Bulgaria and Slovakia, together with

Luxembourg, government investment was over a third higher in real terms in 2015 than it had been at the start of the period.

In Croatia, public investment was reduced considerably after 2009, by an average of 12% a year in real terms, so that in 2015 it was over 50% lower than at the beginning of the period.

1.1.6 The scale of ERDF and Cohesion Fund support

Support from the ERDF and Cohesion Fund accounted for a substantial proportion of the public investment carried out by Member States over the programming period. Although there are no official figures which relate one to the other, a reasonable estimate can be made of the relative scale of the support by relating the amount of funding for the period to General Government capital expenditure – i.e. the sum of fixed investment and capital transfers – which was carried out in the years 2007-2013¹⁶. The latter can be regarded as a proxy for government spending on development.

Overall, some EUR 269.9 billion was provided from the ERDF and Cohesion Fund for the period, or EUR 261.2 billion if the funding for ETC programmes and the pre-accession funding for Croatia is excluded¹⁷. This amounted to around 0.3% of EU GDP and 6.5% of government capital expenditure in the EU over the years 2007-2013 (Table 1.4).

While the overall amount of support was largest in Poland, at EUR 57.2 billion for the period, which represents 2.3% of GDP, in relative terms it was largest in Hungary, at 3% of GDP. Relating the support provided to government capital expenditure, however, gives a clearer indication of its importance. In Hungary it amounted to 57% of such expenditure over the period, implying that most of the expenditure carried out was co-financed by the ERDF and Cohesion Fund; while in Poland it amounted to 41%, which with co-financing implies again that most of the capital expenditure undertaken by government was related to Cohesion policy. Indeed, in another six EU12 countries the support provided under Cohesion policy amounted to around 40% or more of government capital expenditure, and in the Czech Republic, it amounted to over a third.

Although, in a further three countries, the share of expenditure over the period accounted for by EU support was less, it still amounted to around a quarter in Slovenia and Romania and slightly more in Portugal. In addition it amounted to almost 20% in Greece.

In the other countries – where, apart from Cyprus, most of the regions were supported under the Competitiveness Objective – the funding provided was much less, though in Convergence regions it amounted to a significant proportion of government capital expenditure (in Spain perhaps close to 20%, and in Italy close to 15%)¹⁸. The same applies to Convergence regions in other EU15 countries, especially

¹⁶ Although ERDF and Cohesion Fund support for the 2007-2013 period can be spent up to the end of 2015, i.e. for a further two or three years, the same applies to the funding for the 2000-2006 period, which in practice could be spent up to the end of 2009. Relating the amount available to expenditure over the same seven-year period, therefore, seems the most appropriate calculation to make to get an indication of its relative size. It should be noted, as described in the note to Table 1.4, that the figures for government capital transfers have been adjusted to allow for support of organisations in financial difficulty during the crisis, which is not part of development expenditure.

¹⁷ The funding for ETC programmes cannot easily be assigned to individual countries, while the pre-accession funding for Croatia was significantly less than it would have received if it had been fully entitled to the ERDF and Cohesion Fund over the period.

¹⁸ The lack of regional data on government expenditure means that it is difficult to calculate a precise figure and those given here are estimated on the assumption that expenditure in the Convergence regions is roughly in line with their GDP.

Germany, where such regions account for less than 20% of national GDP; and even though they might well account for a larger share of government capital spending, it would still imply that EU support over the period might have amounted to around 10% of the latter.

In Croatia, where the scale of funding under IPA was much less than under the ERDF and Cohesion Fund, support amounted to only around 4% of government capital spending.

Table 1.4 ERDF and Cohesion Fund support relative to GDP and government capital expenditure, 2007-2013

	ERDF+ Cohesion Fund (EUR m)	% GDP	% Government capital expenditure
EU27	261 217	0.3	6.5
Hungary	21 281	3.0	57.1
Lithuania	5 747	2.7	52.1
Slovakia	9 999	2.1	52.1
Latvia	3 947	2.7	50.5
Malta	728	1.6	42.5
Poland	57 178	2.3	40.9
Estonia	3 012	2.6	39.4
Bulgaria	5 415	2.0	38.6
Czech Republic	22 146	2.0	34.3
Portugal	14 558	1.2	27.5
Romania	15 374	1.7	25.1
Slovenia	3 345	1.3	24.5
Greece	15 846	1.0	18.9
Cyprus	493	0.4	7.1
Spain	26 590	0.4	7.0
Italy	20 989	0.2	4.4
Germany	16 100	0.09	2.5
Finland	977	0.07	1.7
France	8 051	0.06	1.1
Belgium	987	0.04	1.1
UK	5 387	0.04	1.0
Sweden	935	0.04	0.8
Austria	646	0.03	0.7
Ireland	375	0.03	0.7
Netherlands	830	0.02	0.4
Denmark	255	0.01	0.4
Luxembourg	25	0.01	0.2
<i>Croatia</i>	<i>706</i>	<i>0.2</i>	<i>3.9</i>

Note: The first column shows the total decided amounts of funding for the 2007-2013 period as at 14 April 2016. This is then related to aggregate GDP and government capital expenditure over the years 2007-2013.

Government capital expenditure is the sum of General Government gross fixed capital formation plus capital transfers, the latter being adjusted approximately for abnormal transfers to banks and other companies during the crisis.

Source: Eurostat, government statistics.

1.2 Regional developments over the programming period¹⁹

The concern here is to examine the regional context in which Cohesion policy was implemented over the period and, in particular, the extent and nature of disparities

¹⁹ It should be noted that Croatia, which entered the EU at the beginning of 2013 and was in receipt of pre-accession funding in the 2007-2013 period, which was on a much smaller scale than if it had been an EU Member State over the period (as indicated in Table 1.4), is not included in this section.

between regions across the EU that policy is aimed at narrowing. It is important to emphasise at the outset that these disparities are long-term ones which have existed for several decades in many cases and which, accordingly, cannot be expected to be reduced very quickly. They have a number of dimensions, though underlying most of them are the disparities in economic performance, in GDP per head and the rate of job creation, which are important determinants of social disparities, differences in living conditions and the quality of life, and the incidence of poverty and social exclusion.

It is also important to recognise that the economic and financial crisis affected regions differentially, in part according to the structure of their economies, and could well have accentuated existing disparities through, for example, an intensification of competition for markets and a reduction in transfers to regions from central government. Such potential effects need to be taken into account when assessing the impact of Cohesion policy.

The section begins by reviewing the extent of economic disparities over the long term as measured by GDP per head. It then examines the performance of regions in these terms, grouped by their eligibility for Cohesion policy support, dividing them between different parts of the EU – in particular, between the EU12 countries, the four southern EU15 countries in which a large number of regions were in receipt of support under the Convergence Objective, and the rest of the EU15. Finally, it considers other dimensions of disparity, social as well as economic, and the extent of differences in these between the different groups.

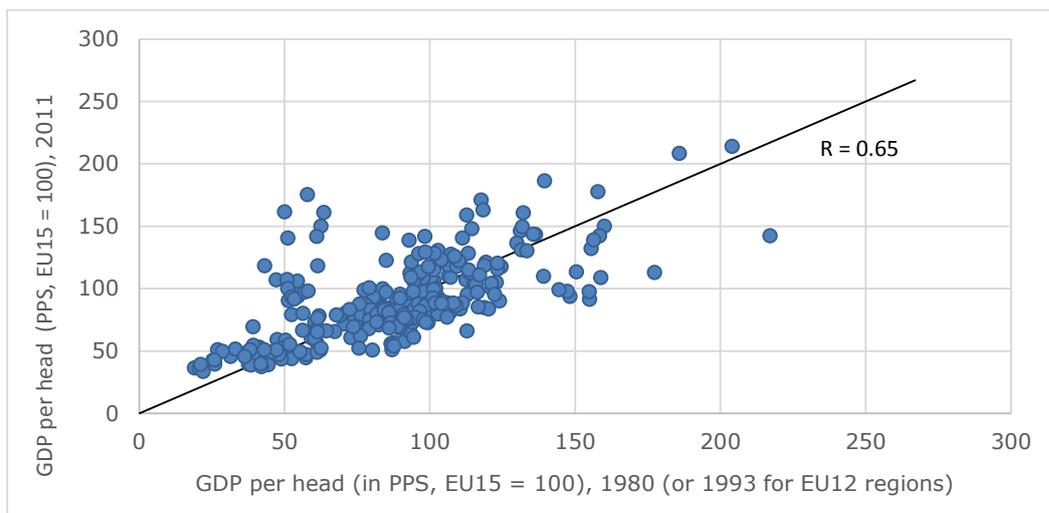
Throughout the analysis, the regional groups are defined in terms of their eligibility for funding in the 2007-2013 period, irrespective of whether or not they had a different level of eligibility in earlier periods. In practice, those that were in receipt of 'phasing-in' funding in 2007-2013 were Objective 1 regions in the 2000-2006 period; and those that received 'phasing-out' support were Objective 1 regions in 1994-1999 but not in 2000-2006 when they were also in receipt of transitional support. The purpose of maintaining common groups is so that their performance can be compared between periods as the amount of support they received diminished.

1.2.1 Long-term disparities in economic performance

GDP per head has increased markedly in all regions over the past three decades or so. However, there has been comparatively little change in the relative levels of GDP per head (measured in PPS, or purchasing power standard, terms²⁰) in regions in the EU15 over this period. There is therefore a relatively close relationship between GDP per head in regions in 2011 and in 1980, in the case of EU15 regions, or in 1993 in the case of regions in the EU12 (Figure 1.4). Regions in the south of Europe with relatively low GDP per head in 1980 continued to have relatively low levels in 2011 and the same is true of those in the EU12, though there are fewer years of data for these.

²⁰ The PPS measure adjusts for differences between countries in price levels – i.e. in what a given amount of GDP can buy.

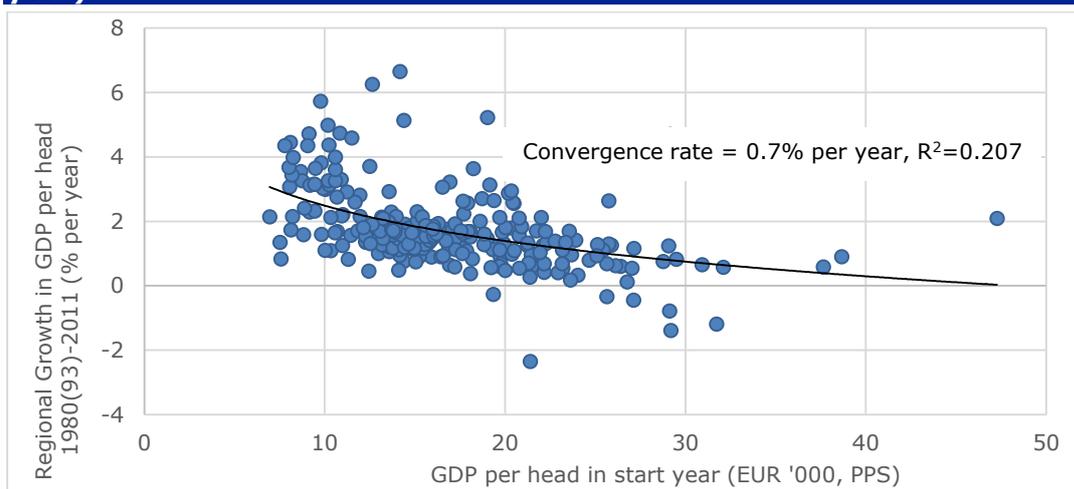
Figure 1.4 GDP per head in PPS in NUTS 2 regions in 1980 (1993 for EU12) and 2011 (EU15=100)



Source: Cambridge Econometrics regional database.

Nevertheless, there is evidence of convergence among both the lagging regions in the EU15 and those in the EU12 over the long term, even though the pace at which it has happened is slow. Regions with relatively low levels of GDP per head have, therefore, tended over the past 20-30 years to experience higher rates of economic growth than others, though not by much on average. (Figure 1.5 shows the relationship between the initial level of GDP per head and the growth in GDP per head in real terms, i.e. measured at constant prices, over the period 1980 to 2011 for the EU15 countries and 1993 to 2011 for the EU12 Member States. In both cases, 2011 was the latest year for which data were available for the growth of regional GDP in real terms at the time of the analysis.)

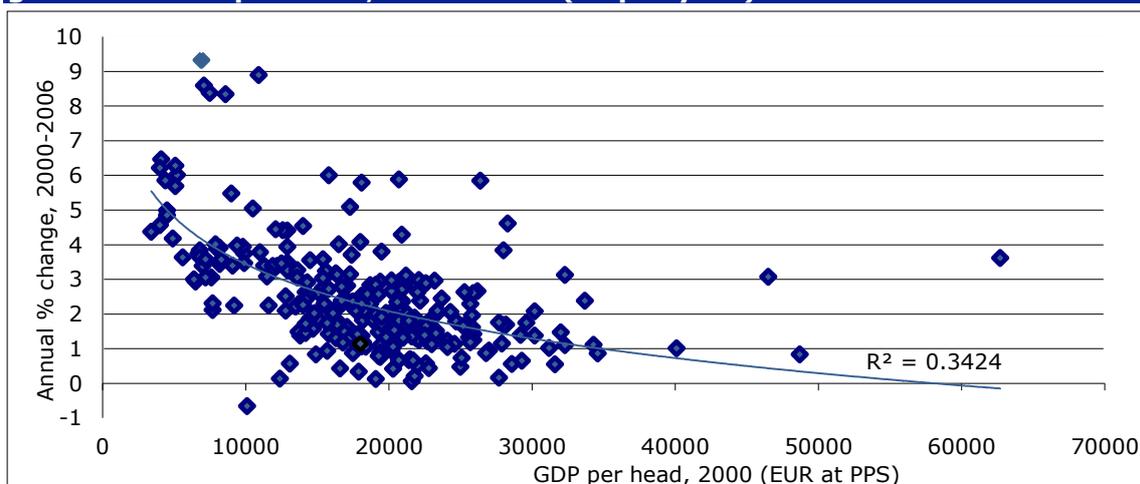
Figure 1.5 GDP per head in NUTS 2 regions in PPS, in 1980 (1993 for EU12) and average rate of growth in GDP per head, 1980 (or 1993) to 2011 (% per year)



Source: Cambridge Econometrics regional database.

The pace of convergence, however, which was slow before the crisis hit, was even slower after. Over the period 2000-2006, therefore, there is evidence of convergence continuing, with regions with relatively low levels of GDP per head in both the EU12 and EU15 tending to grow more quickly (Figure 1.6).

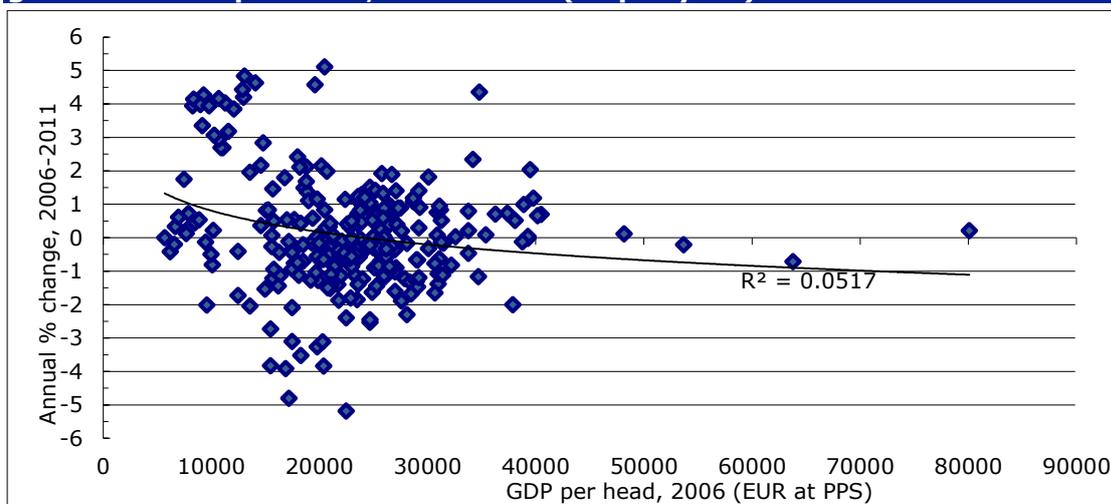
Figure 1.6 GDP per head in PPS in NUTS 2 regions in 2000 and average rate of growth in GDP per head, 2000-2006 (% per year)



Source: Cambridge Econometrics regional database.

This is less apparent in the following five years, when there was a much less close relationship between the initial level of GDP per head and the subsequent rate of growth (Figure 1.7). The onset of the crisis, therefore, seems to have slowed down the rate of convergence, suggesting perhaps that the regions with low GDP per head were more affected.

Figure 1.7 GDP per head in PPS in NUTS 2 regions in 2006 and average rate of growth in GDP per head, 2006-2011 (% per year)



Source: Cambridge Econometrics regional database.

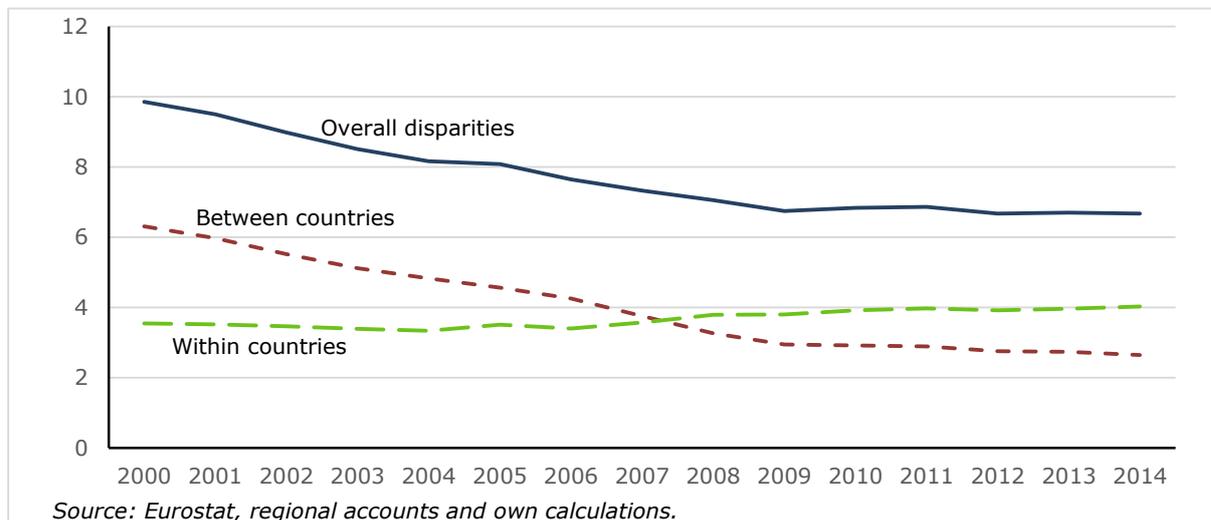
1.2.2 Economic performance over the 2007-2013 period

The extent of convergence in economic performance between regions can also be seen by examining the way that the dispersion in regional GDP per head has changed over time. Although a complete set of data on the growth of GDP in EU regions are available on a consistent basis only up to 2011 at the time of writing, data on GDP per head are available up to 2014. It is, therefore, possible to examine changes at regional level over most of the programming period (if this is defined in terms of the period in which expenditure can take place – i.e. up to the end of 2015 or 2016) instead of just the first five years.

Over the 2000-2006 programming period, there was a significant reduction in disparities in GDP per head (measured in PPS terms) between (NUTS 2) regions in the EU, which continued up to 2009. Between then and 2011, disparities widened slightly before narrowing marginally from then until 2014 (Figure 1.8, which shows the change

in the Theil index measure of disparities, a lower value signifying less disparity²¹). The crisis, therefore, seems to have halted the long-term tendency for regional disparities to diminish.

Figure 1.8 Disparities in GDP per head in PPS between NUTS 2 regions in the EU27, decomposed into between-country and within-country disparities, 2000-2014 (Theil index)



If overall disparities in regional GDP per head across the EU are decomposed into those that are a result of disparities between countries and those that stem from disparities between regions within countries, it is evident that the overall reduction between 2000 and 2009 was entirely due to disparities between countries lessening. There was very little change in the extent of regional disparities within countries up to 2007, after which disparities widened as the recession hit before again remaining unchanged over the years 2010-2014.

The effect of commuting on GDP per head

The extent of disparities in GDP per head between regions is greatly affected by commuting, which increases the level in regions of inward commuting, since commuters add to GDP there but are not counted in the population, and similarly reduces it in regions of outward commuting. Making an explicit adjustment for commuting reduces the scale of disparities but does not have a major effect on the changes in disparities over the period – i.e. the pattern of change is much the same as for the unadjusted data. (The adjustment is made by relating the total number employed in the region according to the regional accounts to the number in employment that live in the region, according to the Labour Force Survey; the difference between the two gives the number of commuters.)

Decomposing further shows a marked difference between the EU15 and EU12 countries. In the EU15, there was less of a reduction in regional disparities in GDP per head than in the EU27 as a whole between 2000 and 2007, and the reduction occurred

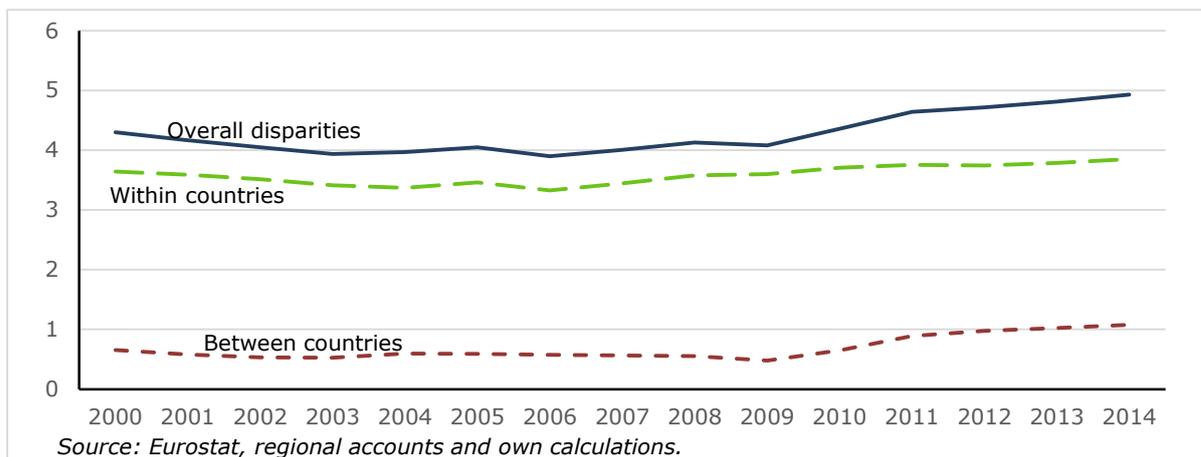
²¹ The Theil index is a summary measure of inequality that reflects the extent to which the distribution of GDP across regions differs from the distribution of population. It has a value of zero if all regions have the same level of GDP per head and the value increases as the extent of inequality in GDP per head increases. The index as calculated from the equation:

$$T = \sum_{i=1}^N f_i \left(\frac{y_i}{m} \right) * \ln \left(\frac{y_i}{m} \right)$$

where f_i is the ratio of population in region to total EU population (i.e. a weighting factor which takes accounts of the different sizes of regions in these terms), y_i is the GDP per head in PPS of the region, m is the arithmetic mean of GDP per head in PSS of all regions in the EU and \ln is the natural logarithm.

marginally more between regions within countries than between countries (Figure 1.9). From 2007 to 2014, overall disparities between regions widened, most especially between 2009 and 2011, mostly because of an increase in disparities between countries, reflecting, in particular, falling GDP in the southern Member States and growth in Germany and a number of neighbouring countries. Disparities between regions within countries also widened between 2007 and 2014, though by less after 2011 than before.

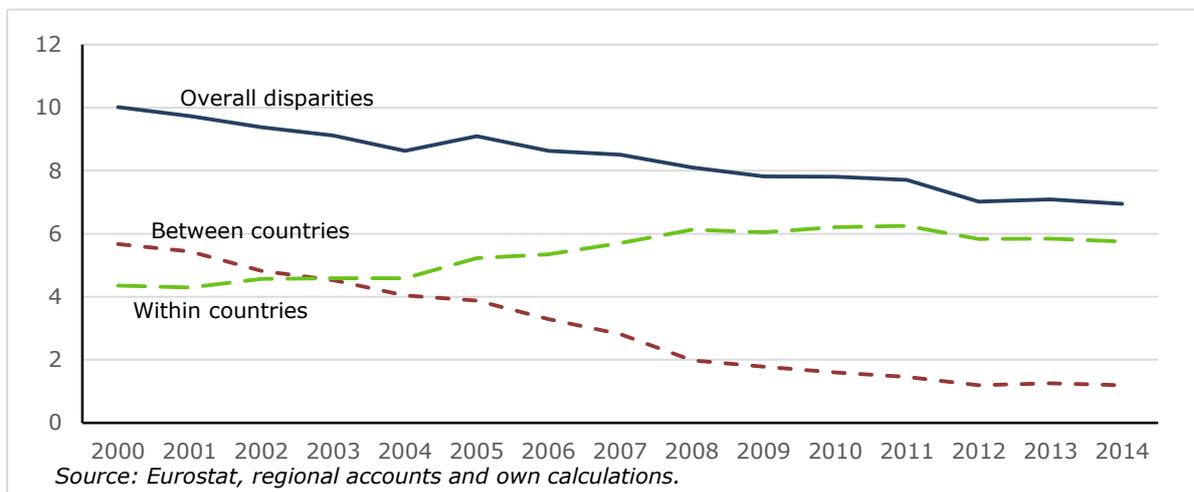
Figure 1.9 Disparities in GDP per head in PPS between NUTS 2 regions in the EU15, decomposed into between-country and within-country disparities, 2000-2014 (Theil index)



The picture is very different in the EU12. Here, regional disparities in GDP per head continued to diminish after the recession hit, though at a very slow rate between 2009 and 2011 (Figure 1.10). Moreover, after 2011 there was a reduction in regional disparities within countries as opposed to the marked increase which occurred before the onset of the crisis (the latter mainly reflecting the growing disparities between capital city regions and the others). This tendency, which was evident before 2000 as well as after, seems, therefore, to have come to an end since the crisis hit.

The very small reduction in overall disparities in GDP per head between regions in the EU which occurred over the 2007-2014 period, therefore, is wholly attributable to a narrowing of disparities in the EU12 which offset the increase in the EU15.

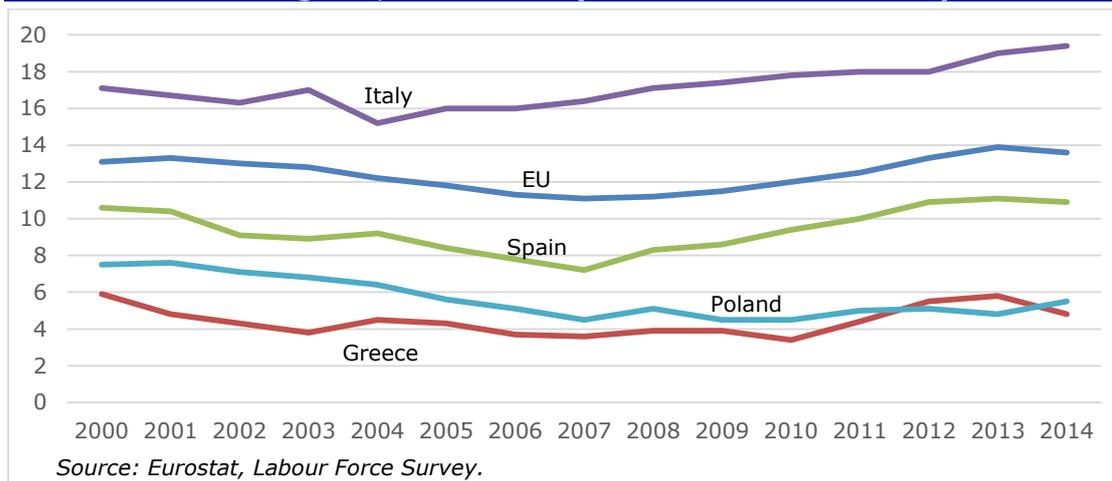
Figure 1.10 Disparities in GDP per head in PPS between NUTS 2 regions in the EU12, decomposed into between-country and within-country disparities, 2000-2014 (Theil index)



Disparities in employment rates between regions in the EU27 show a similar picture to that of GDP per head in the EU15. Whereas there was a widespread narrowing of

disparities in the employment rate (here measured as the co-efficient of variation) between NUTS 2 regions between 2000 and 2007 – though less so in Italy where GDP growth and the rate of job creation was relatively slow – disparities in the employment rate rose from then until 2013 (Figure 1.11). Over this period there was little growth in GDP, and employment fell before remaining virtually unchanged. In Poland, however, where GDP continued to grow, though at a slower rate, regional disparities in the employment rate, while fluctuating from year to year, remained broadly unchanged over the period.

Figure 1.11 Dispersion of employment rates (relative to population 15-64) between NUTS 2 regions, 2000-2014 (co-efficient of variation)



In other countries the dispersion in employment rates between regions narrowed over the period 2009 to 2014 in Germany, France and the UK, and (in the EU12) in the Czech Republic, Hungary and Bulgaria, though they widened in Romania.

Again much of the widening of disparities in employment rates between regions across the EU was, therefore, due to the relatively low rate of job creation in the four southern EU15 Member States and, most especially, in the less-developed regions in these countries.

1.2.3 Economic disparities by Objective over the 2007-2013 period

The following sections examine economic developments over the 2007-2013 programming period in regions across the EU grouped by Cohesion policy Objective and compares these with developments over the two previous programming periods. It should be recalled that regions are grouped according to their eligibility for Cohesion policy support in 2007-2013 and the same groups are maintained for earlier periods. In practice, all of the Convergence regions in 2007-2013 were Objective 1 regions in 2000-2006 and most of them in 1994-1999, though all the Objective 1 regions in 2000-2006 were not necessarily Convergence regions in 2007-2013, since some became Phasing-in or Phasing-out regions²².

The first section below examines developments in GDP per head in PPS terms in Convergence regions over the last programming period as compared with those in the previous period and in relation to developments in other regions. The second section reviews the counterpart changes in employment rates, and the third section the changes in population which occurred at the same time. The differences in the latter

²² This is not quite true in that two Portuguese regions, Centro and Alentejo, which were Convergence regions in 2007-2013, were only partially eligible for Objective 1 support in 2000-2006 (74% and 69% of the regions respectively, the rest being eligible for phasing-out support). See above, p.55 for a list of the phasing-in and phasing-out regions.

changes between regions are largely a consequence in turn of differences in net migration rates which to a significant extent are a reflection of variations in economic performance across regions and in the availability of jobs – and these are considered at the same time. The following sections then examine differences in educational attainment levels and R&D expenditure across regions, which are two of the major factors underlying differences in economic performance. Finally, variations across regions in social indicators, specifically at-risk-of-poverty rates and rates of material deprivation, which reflect the differences in economic performance (especially employment rates and the associated access to income from work), are also considered.

GDP per head in PPS

As indicated above, disparities in GDP per head, measured in terms of PPS, narrowed over the 2007-2013 programming period. There was a parallel convergence in GDP per head in Convergence regions across the EU towards the EU average, just as there was over the previous programming period, in both cases reflecting a higher rate of growth than in other regions (Table 1.5)²³. Although the average level in these regions was still only around two-thirds of the overall EU average in 2014, 14 years earlier it had been only just over half of the latter. The pace of convergence, though relatively slow (at the pace which occurred, it will take another 35 years or so for the level to converge to the average), was consistent over the 14 years. The rate of convergence of these regions occurred at much the same rate over the 2006-2014 period, despite the crisis, as over the previous six years²⁴.

In Transition regions, on the other hand, GDP per head declined significantly relative to the EU average between 2006 and 2014, contrary to the increase over the previous period.

Again, however, there are marked differences in relative performance between different parts of the EU, especially between regions in the four southern EU15 countries and those elsewhere. In these four countries, GDP per head in Convergence regions declined slightly relative to the level in Competitiveness ones over the 2006-2014 period and it declined more relative to the EU average. In other EU15 countries, GDP per head in Convergence regions, which are mainly those in Germany, increased in relative terms in the 2006-2014 period, as it had done over the previous six years.

GDP per head in Transition regions in the four southern Member States fell by more than in Convergence regions relative to both the level in Competitiveness regions and the EU average over the 2006-2014 period, whereas it had risen relative to both in the earlier period. GDP per head in these regions also fell in relative terms in the rest of the EU15 over the 2006-2014 period, again unlike in the previous period.

In the EU12, the gap in the level of GDP per head between the Convergence regions and the EU average narrowed markedly between 2006 and 2014, more so than over the previous six years and more so than in the other regions in these countries. This

²³ GDP per head in PPS terms can converge as a result of both a higher rate of growth than in other regions and a favourable move in the PPS adjustment (i.e. relative prices in terms of a common currency increasing by less than elsewhere). The first tends to be the main factor – there is a close correlation between changes in GDP per head in PPS and changes in GVA per head at constant prices – but the latter was significant in some cases. It should be noted that growth in GVA per head over the period 2006-2011 shows a similar picture in terms of the pattern of relative changes in the different groups of regions as the GDP per head figures in PPS terms.

²⁴ Note that the 14-year period is divided in this way since 2006 is the year before the start of the 2007-2013 programming period, so it represents the basis for assessing the change that occurred over the period. For the same reason, 1999 rather than 2000 should be taken as the base year for the 2000-2006 period but consistent data for 1999 are not available. In practice, much of the EU funding for development expenditure in 2007 and 2008 came from the 2000-2006 allocation, so it is difficult to divide periods in terms of the programming periods they represent.

contrasts with the earlier period when GDP per head in the two capital city regions, Praha and Bratislava, which received funding under the Competitiveness Objective, increased particularly rapidly.

Overall, therefore, apart from in the four southern EU15 countries, there was a marked convergence of GDP per head in the least-developed regions of the EU towards the EU average over the 2007-2013 programming period. This, however, was not the case in the Transition regions – those which are slightly more developed – where GDP per head declined significantly relative to the average. (The maps in the Annex to this chapter show the disparities in GDP per head between regions in 2014 in the three broad groups of country – the EU12, the four southern EU15 countries and the rest of the EU15. In each case, GDP per head in each of the NUTS 2 regions is expressed in relation to the average for the group concerned.) How far the higher growth of GDP in the Convergence regions over this period is attributable at least in part to Cohesion policy is not possible to say simply from the mere fact alone. Nor is it possible to say, in relation to the Convergence regions in the four southern countries – or indeed in relation to Transition regions generally – how much further GDP per head would have declined in the absence of Cohesion policy support. Chapter 4 below attempts to answer these questions on the basis of both economic model simulations and econometric analysis.

Table 1.5 GDP per head in PPS in regions by Objective, 2000, 2006 and 2014

	GDP per head in PPS (EU27=100)			% Competitiveness		
	2000	2006	2014	2000	2006	2014
EU12 Competitiveness	130	164	178			
EU12 Convergence	42	49	63	32.1	30.2	35.4
EU12 Transition	84	101	102	65.0	61.9	57.3
EU4 Competitiveness	131	123	112			
EU4 Convergence	72	73	65	55.0	59.0	57.9
EU4 Transition	90	96	81	68.8	78.2	71.9
Other EU15 Competitiveness	125	121	121			
Other EU15 Convergence	76	80	85	60.8	65.5	70.9
Other EU15 Transition	87	88	84	69.3	72.3	70.0
French DOMs	65	68	71			
All Competitiveness	127	122	119			
All Convergence	53	59	66	41.9	48.1	55.1
All Transition	88	94	84	69.9	77.0	70.5
All NUTS 2	100	100	100			

Note: EU4 is the four southern EU15 countries of Greece, Spain, Italy and Portugal. French DOMs are the French overseas Departments and Territories, all of which received Convergence Objective funding.

Source: Eurostat, regional accounts data and own calculations.

Regional disparities in GDP per head in individual Member States

There were marked differences in experience over the period between countries. Apart from only two countries – Cyprus and Slovenia – GDP per head of all the EU12 Member States converged towards the EU average between 2006 and 2014. By contrast, for the three EU15 Cohesion countries, Greece, Spain and Portugal, the gap in GDP per head with the EU average widened over the period, in the first two

countries substantially; in Greece it fell to a level below Estonia, Lithuania or Slovakia²⁵.

Within EU12 countries, disparities in GDP per head between Convergence regions and the capital city region narrowed over the period in the Czech Republic and Hungary, having widened over the previous six years, but widened in Slovakia (Table 1.6).

Table 1.6 GDP per head in PPS in regions by Objective in individual Member States, 2000, 2006 and 2014

		EU27=100			% Competitiveness regions		
		2000	2006	2014	2000	2006	2014
Czech Rep	Convergence	62.9	68.8	72.5	44.5	39.8	42.0
	Competitiveness	141.5	173.0	172.7			
Hungary	Convergence	42.3	46.0	50.7	<i>51.3</i>	<i>45.1</i>	<i>47.3</i>
	Transition	82.4	102.0	107.3			
Slovakia	Convergence	41.9	52.0	62.8	39.3	35.8	33.8
	Competitiveness	106.9	145.3	186.2			
Greece	Convergence	68.8	73.7	56.0	<i>72.7</i>	<i>70.0</i>	<i>68.7</i>
	Transition	94.7	105.3	81.5			
Spain	Convergence	71.5	80.2	70.0	60.2	64.2	62.2
	Transition	88.4	92.5	80.0	74.5	74.1	71.1
	Competitiveness	118.7	124.9	112.6			
Italy	Convergence	76.1	69.1	61.2	55.1	56.3	55.0
	Transition	84.3	77.0	71.5	61.0	62.8	64.2
	Competitiveness	138.1	122.7	111.4			
Portugal	Convergence	66.0	65.8	66.3	47.8	53.6	59.6
	Transition	76.8	82.5	76.0	55.6	67.2	68.2
	Competitiveness	113.5	113.5	106.5			
Belgium	Transition	86.6	76.3	76.4	63.2	62.5	61.6
	Competitiveness	137.0	122.2	123.9			
Germany	Convergence	75.8	78.6	87.2	59.0	62.8	65.4
	Transition	85.7	83.5	93.4	66.8	66.8	70.1
	Competitiveness	128.3	125.1	133.3			
Ireland	Transition	88.0	104.1	88.3	60.3	64.4	58.8
	Competitiveness	146.0	161.6	150.2			
Austria	Transition	85.0	81.2	88.7	64.2	64.2	68.0
	Competitiveness	132.3	126.4	130.4			
Finland	Transition	91.6	93.0	90.9	73.0	76.6	78.4
	Competitiveness	125.5	121.5	115.9			
UK	Convergence	74.6	79.0	70.2	61.4	64.7	64.1
	Transition	87.7	93.9	80.7	72.2	76.9	73.7
	Competitiveness	121.5	122.1	109.5			

Note: Countries included only if they have more than one group of regions defined by their eligibility for Cohesion policy funding. Figures in italics are expressed as % of Transition regions since there are no Competitiveness regions in the country.

Source: Eurostat, Regional accounts.

In the four southern EU15 Member States, differences in GDP per head between Convergence regions and Competitiveness ones were reduced in Portugal but widened

²⁵ GDP per head in Greece averaged 72% of the EU average in 2014, in Lithuania, Estonia and Slovakia, between 75% and 77%.

in Greece, Spain and Italy – in the last two, contrary to the experience over the previous six years. The same was true of Transition regions in Spain; but in Italy there was a slight narrowing of the difference.

In the rest of the EU, the gap in GDP per head between both Convergence and Transition regions and others narrowed in Germany, as it did between Transition regions and others in Austria and Finland. In the UK, on the other hand, the gap widened slightly between Convergence regions and others and by more between Transition regions and others. The gap also widened between the Transition region and the rest of the country in Belgium and Ireland.

Employment rate

The change in the employment rate shows a similar picture to the change in GDP per head. Between 2006 and 2015 (there is one additional year of data for employment), the proportion of those aged 20-64 in employment in Convergence regions in the EU increased by just over 4 percentage points as opposed to a rise of just under 2 percentage points in Competitiveness regions and a decline of almost 3 percentage points in Transition regions (Table 1.7)²⁶. Unlike the change in GDP per head, however, this differs from the experience in the previous period, when the proportion in Convergence regions increased by less than in others.

Table 1.7 Employment rates in regions by Objective, 2000, 2006 and 2015

	Employment rates, 20-64 (% population, 20-64)			Difference (%-point difference)	
	2000	2006	2015	2000-06	2006-15
EU12 Competitiveness	77.7	76.9	77.1	-0.8	0.2
EU12 Convergence	64.3	64.0	68.3	-0.3	4.4
EU12 Transition	66.2	69.7	71.4	3.4	1.7
EU4 Competitiveness	64.4	70.2	68.4	5.8	-1.8
EU4 Convergence	54.7	59.4	59.4	4.7	-0.1
EU4 Transition	60.2	66.7	60.7	6.4	-5.9
Other EU15 Competitiveness	70.2	72.0	74.7	1.8	2.8
Other EU15 Convergence	65.8	68.8	77.1	2.9	8.3
Other EU15 Transition	64.3	66.9	71.4	2.6	4.4
French DOMs	49.0	50.0	54.2	1.1	4.2
All Competitiveness	69.0	71.6	73.4	2.6	1.7
All Convergence	61.8	63.1	67.2	1.3	4.2
All Transition	62.2	67.1	64.5	4.8	-2.5
All NUTS 2	66.2	68.6	70.9	2.4	2.3

Note: EU4 is the four southern EU15 countries of Greece, Spain, Italy and Portugal. French DOMs are the French overseas Departments and Territories, all of which received Convergence Objective funding.

Source: Eurostat, Labour Force Survey.

Also unlike the change in GDP per head, the relative performance of Convergence regions in terms of employment rates was much the same in the different parts of the EU. Rates, therefore, remained broadly unchanged in these regions while they declined in others in the four southern Member States and increased by more than in others in both the rest of the EU15 and the EU12. In the previous period, only in the rest of the EU15 did rates in Convergence regions increase by more than in other regions and then only slightly.

²⁶ The change in employment rates of those aged 15-64, which was the focus above of the dispersion of employment rates, was very similar.

The performance of Transition regions in these terms, as in the case of changes in GDP per head, was much worse than that of other regions in the four southern Member States, the average employment rate declining by 6 percentage points between 2006 and 2015 – in contrast to the previous six years, when the rate increased by more than elsewhere. In the rest of the EU15 the employment rate rose on average by less than in Convergence regions, but by more than in Competitiveness ones. The poor employment performance of Transition regions overall, therefore, is predominantly a consequence of the large fall in the rate in the southern EU15 countries.

Population change and net migration

There was a marked tendency over the 2007-2013 period, as over the preceding one, for population to decline in Convergence regions or to increase at a slower rate than in other regions, which is largely a reflection of net outward migration (Table 1.8)²⁷. The only part of the EU where there was an increase in population in Convergence regions was in the southern Member States, where there was both net inward migration from third countries, especially from North Africa and the Middle East, and particularly in the years 2000-2006 (before the recent upsurge in migrant inflows), and labour movements from Romania and Bulgaria. In Convergence regions in both the rest of the EU15 and the EU12, there was a net movement out to other parts of the EU and to countries outside the Union, reflecting the better job opportunities and high income levels available elsewhere.

Table 1.8 Change in population and net migration in regions by Objective, 2000-2014

	Total change in population (%)			Net migration (% population in base year)		
	2000-06	2006-14	2000-14	2000-06	2006-14	2000-14
EU12 Competitiveness	-2.1	6.7	4.5	-1.0	5.1	4.0
EU12 Convergence	-2.3	-2.9	-5.1	-1.2	-2.0	-3.2
EU12 Transition	2.7	5.5	8.3	4.0	6.0	10.2
EU4 Competitiveness	6.7	5.0	12.0	6.6	4.9	11.8
EU4 Convergence	2.8	1.4	4.3	2.1	1.4	3.5
EU4 Transition	8.6	1.0	9.8	8.0	0.6	8.7
Other EU15 Competitiveness	3.4	3.5	7.1	2.2	1.9	4.2
Other EU15 Convergence	-3.7	-4.3	-7.9	-1.4	-1.6	-2.9
Other EU15 Transition	1.9	1.8	3.7	1.9	1.4	3.3
French DOMs	9.7	3.3	13.3	0.2	-5.7	-6.0
All Competitiveness	4.0	3.9	8.0	3.1	2.5	5.7
All Convergence	-1.0	-1.8	-2.8	-0.4	-1.1	-1.5
All Transition	5.7	1.7	7.6	5.5	1.4	7.1
All NUTS 2	2.5	1.9	4.5	2.1	1.3	3.4

Note: Net migration is measured as the total change in population less the natural change. EU4 is the four southern EU15 countries of Greece, Spain, Italy and Portugal. French DOMs are the French overseas Departments and Territories, all of which received Convergence Objective funding.

Source: Eurostat, demographic statistics.

²⁷ There is a lack of data on regional migration flows as such, but estimates can be made of net flows in and out of regions on the basis of the overall change in population and data on birth and death rates, which together determine the natural change. The difference between this and the overall change can be attributed to net migration, though it also includes statistical errors in the estimates.

While, however, the outflow of people of working age, which they predominantly were, may have tended to reduce unemployment in Convergence regions in the short term, in the longer term it could well create problems for development if the outflow is concentrated among the better educated and more skilled. This is likely to make such regions less attractive to enterprises considering places in which to invest.

There was not the same outflow from Transition regions, which between 2006 and 2014 experienced an increase in population in all parts of the EU.

Education level

The education level of the workforce is a major determinant of a region's growth potential as well as being an important factor for social cohesion, in the sense that the better educated the population, the more likely it is to be socially cohesive. In Convergence regions across the EU, the relative number of people with tertiary (or university) education tends to be smaller than in other regions. In 2015, the proportion in the EU was, on average, only 75% of that in Competitiveness regions. Moreover, between 2006 and 2015 the gap between the two remained unchanged, the proportion in both increasing by the same amount, whereas in the previous six years the gap had widened (Table 1.9). The gap was particularly wide in the EU12 and here it widened further over the period 2006 to 2015, which might reflect the net outward movement of the better educated.

In the four southern EU15 Member States, on the contrary, the gap narrowed as the proportion with tertiary education increased by more in the Convergence regions than in others over the later period, whereas it had widened over the previous six years. In the rest of the EU15 there was only a marginal increase in the proportion over the 2006-2015 period, while that in other regions rose significantly. This, however, reflects the fact that these regions are concentrated in Germany where the relative number of people with tertiary education has changed little over recent years.

Table 1.9 Proportion of the population aged 25-64 with tertiary education, 2000, 2006 and 2015

	% population 25-64			% -point change	
	2000	2006	2015	2000-06	2006-2015
EU12 Competitiveness	25.7	27.7	39.5	2.0	11.8
EU12 Convergence	12.7	16.2	24.1	3.5	7.8
EU12 Transition	22.1	28.1	37.8	6.0	9.8
EU4 Competitiveness	15.1	20.2	25.8	5.1	5.7
EU4 Convergence	12.0	15.9	24.6	3.9	8.7
EU4 Transition	19.2	24.4	28.3	5.2	3.9
Other EU15 Competitiveness	23.9	27.2	35.0	3.3	7.8
Other EU15 Convergence	29.1	27.4	28.1	-1.7	0.6
Other EU15 Transition	20.8	23.0	29.9	2.1	6.9
All Competitiveness	22.0	25.7	33.1	3.7	7.3
All Convergence	14.2	17.3	24.6	3.1	7.3
All Transition	20.1	24.3	29.5	4.2	5.2
All NUTS 2	19.4	23.0	30.4	3.6	7.4

Note: Tertiary education is defined as the successful completion of ISCED level 5 or 6 in 2000 and 2006 and ISCED 5, 6, 7 or 8 in 2015. Note that the data for 2000 are not fully consistent with those for 2006, but this ought not to affect the relative changes in the different groups of regions too much. EU4 is Greece, Spain, Italy and Portugal French DOMs are the French overseas Departments and Territories, all of which received Convergence Objective funding.

Source: Eurostat, Labour Force Survey.

In Transition regions, the proportion of people with tertiary education increased overall, but not as much as for those in Competitiveness regions in all parts of the EU.

Accordingly, there continues to be a disproportionate number of university-educated people in the higher-income regions than in others across the EU; and, except in the southern EU Member States, the extent of the disparity widened over the last programming period.

Research and development (R&D)

The rate of innovation is another important determinant of a region's economic growth, and expenditure on R&D is a major way in which this can be stimulated – as recognised in Europe 2020, which set a target of raising R&D spending in the EU to 3% of GDP. Most regions at present are well below this target. In Competitiveness regions across the EU, expenditure on R&D averaged 2.3% of GDP in 2013 (Table 1.10 – there is a lack of consistent data for the earlier period).

Table 1.10 Expenditure on research and development in regions by Objective, 2006 and 2013

	% GDP		% -point difference 2006-13	EU27=100		Relative to Competitiveness (%)	
	2006	2013		2006	2013	2006	2013
EU12 Competitiveness	1.8	2.3	0.42	103	112		
EU12 Convergence	0.6	1.0	0.32	36	47	34.8	42.1
EU12 Transition	1.2	1.4	0.26	64	70	62.5	62.4
EU4 Competitiveness	1.3	1.5	0.19	71	72		
EU4 Convergence	0.8	1.0	0.20	43	48	61.2	66.7
EU4 Transition	0.7	0.9	0.11	41	42	58.2	58.2
Other EU15 Competitiveness	2.2	2.4	0.25	122	120		
Other EU15 Convergence	1.6	1.9	0.25	89	91	73.3	76.1
Other EU15 Transition	1.4	1.5	0.10	78	74	64.4	62.0
All Competitiveness	2.0	2.3	0.25	112	112		
All Convergence	0.9	1.1	0.23	49	54	43.3	48.4
All Transition	1.0	1.2	0.14	57	57	50.4	51.1
All NUTS 2	1.8	2.0	0.24	100	100		

Note: EU4 is Greece, Spain, Italy and Portugal. French DOMs are the French overseas Departments and Territories, all of which received Convergence Objective funding.

Source: Eurostat, Science and technology statistics.

In both Convergence and Transition regions, expenditure was only around half of this. Between 2006 and 2013 R&D expenditure increased by more in both sets of regions, especially the former, narrowing the gap, if only slightly. The same was true for Convergence regions in each broad part of the EU, though not for Transition regions. For these, the gap with Competitiveness regions widened in both the four southern EU15 Member States and the rest of the EU15. Indeed, in both cases, the level of expenditure was less in relation to GDP than in Convergence regions.

There is some sign, therefore, of the disparity in R&D expenditure between the least-developed regions in the EU and others narrowing over the programming period, though the same is not the case for Transition regions with a slightly higher level of GDP per head. Again, it is not possible to say how much of the relative increase in expenditure is attributable to Cohesion policy, though it is likely that at least some is.

1.2.4 Social disparities by Objective over the 2007-2013 period

The data available on the social dimension of regional disparities are more limited than those on the economic dimension. Data from the EU-SILC (Statistics on Income and

Living Conditions), a household survey conducted annually across the EU, are available at the regional level but not for all countries and not for all NUTS 2 regions, except in a few cases. It is not possible, therefore, to examine the variation across regional groups in the same degree of detail as for GDP per head or employment rates. Nevertheless, it is possible to obtain an indication of differences between regions in the prevalence of low incomes and deprivation and how this changed over the programming period.

The proportion of the population in Member States with disposable income of less than 60% of the national median is conventionally used as a measure of being at risk of poverty in the EU – not necessarily being in poverty as such, since 60% of median income is high in some of the higher-income countries when compared with the lower-income ones (60% of median income is around five times larger in Denmark or Austria than in Romania). Nevertheless, it is taken as an indicator of being vulnerable to social exclusion insofar as 60% of the median is regarded as the minimum level of income needed to enjoy a standard of living in the country in question which is compatible with feeling part of society.

In the EU27 as a whole, 16.5% of people had an income which was below this level in 2007 at the beginning of the programming period and, by 2013, this had increased to just over 17% (Table 1.11, which shows the data for EU12 countries and the four EU15 southern Member States). In many of the EU12 Member States, the proportion was smaller than the EU average, reflecting the relatively equal distribution of income in these countries, at least at the bottom end of the income scale. In Bulgaria, Estonia, Lithuania, Poland and Romania, it was larger, especially in the last. In Estonia and Romania the proportion of people at risk of poverty increased further over the period (to over 25% in the latter); in Bulgaria it remained broadly unchanged (the increase is within the margins of error of the figures); while in Lithuania and Poland it declined. Among the rest of the EU12 countries, it declined too in Cyprus and Latvia; but in all other countries it increased, and in each case by more than the EU average.

Accordingly, the proportion of people at risk of poverty increased in seven of the EU12 countries over the period and declined in only four (Cyprus, Latvia, Lithuania and Poland). In Estonia and Romania the disparity relative to the EU average widened, and in Bulgaria it remained much the same.

At the regional level, in the Czech Republic there was a reduction in the proportion of people at risk of poverty in the capital city region but an increase in the rest of the country. In 2013, therefore, more of the people living in Convergence regions were at risk than in Praha, a Competitiveness region, whereas the opposite was the case in 2007. In Hungary, the proportion at risk increased by much the same extent in the capital city region (a Transition one) as in the rest of the country and there remained little difference between the two. In the four southern countries, the relative number of people at risk of poverty was larger than the EU average in all countries in 2007. (In Italy, the number in the table seems much the same as the EU average, but here the figure for those at risk in the different regions is pushed down by missing data for some of the regions – the national proportion is 19% for 2007.) The proportion was also larger in Convergence and Transition regions than in Competitiveness ones in Spain and Italy, and in regions outside Atiki (the Athens region) in Greece compared with those in Atiki. Over the programming period, the proportion at risk increased in all four countries and by more than the increase in the EU average. The disparity in the risk of poverty between these countries and the rest of the EU, therefore, widened over the period.

Moreover, in Italy the increase in the proportion was significantly larger in the Convergence and Transition regions, taken together, than in the Competitiveness ones, so that regional disparities also widened within the country. In Spain, on the

other hand, the reverse was the case. Here the proportion of people at risk of poverty in the Convergence regions remained unchanged while the proportion in Competitiveness regions increased significantly, as it did in the Transition regions to a lesser degree. In 2013, therefore, there was a smaller proportion of people in Spain at risk of poverty in the Competitiveness regions than in other regions, the reverse of the situation in 2007.

Table 1.11 Proportion of population at risk of poverty and subject to material deprivation in regions by Objective, 2007 and 2013/2014 (% population)

	At risk of poverty		Material deprivation		% -point change	
	2007	2013	2007	2013	Poverty	Mat depr
Bulgaria	21.4	21.8	55.0	46.8	0.4	-8.2
Czech Rep. Praha	13.3	9.9	14.1	12.0	-3.4	-2.2
Czech Rep. Other	9.4	12.1	20.5	16.5	2.6	-4.0
Estonia	19.5	21.8	17.7	19.4	2.4	1.7
Cyprus	15.9	14.4	30.7	36.0	-1.5	5.3
Latvia	15.9	14.4	50.3	40.4	-1.5	-10.0
Lithuania	20.0	19.1	41.5	31.7	-0.8	-9.8
Malta	13.5	15.9	13.5	19.4	2.4	5.9
Hungary, Capital*	12.2	14.9	32.4	42.4	2.7	10.1
Hungary, Other	11.1	14.2	39.6	44.9	3.0	5.3
Poland	18.5	17.0	38.2	25.5	-1.5	-12.7
Romania	23.4	25.4	53.3	45.8	2.0	-7.5
Slovenia	12.3	14.5	14.3	17.0	2.2	2.7
Slovakia	10.9	12.6	35.7	23.1	1.8	-12.6
Greece, Athens region	19.3	21.1	20.4	36.8	1.9	16.4
Greece, Other	20.0	21.4	25.3	37.6	1.4	12.3
Spain, Convergence	19.3	19.2	14.7	18.9	-0.2	4.2
Spain, Transition	19.0	20.9	12.4	18.9	1.9	6.5
Spain, Competitiveness	18.1	21.1	7.3	14.0	3.0	6.7
Italy, Convergence+	16.5	19.7	24.1	40.2	3.2	16.0
Italy, Competitiveness	15.5	16.2	8.2	15.1	0.7	6.9
Portugal	18.5	19.5	22.4	25.5	1.0	3.1
EU27	16.5	17.2	18.1	19.4	0.7	1.3

Note: At risk of poverty is defined as having disposable income below 60% of national median. The figures relate to the income year rather than the year of the survey. Material deprivation is defined in relation to three of nine items included in the EU-SILC. The figures relate to the year of the survey. For Bulgaria, the figure under 2007 relates to 2008 and that under 2013 to 2014. Data are included for all EU12 countries and the 4 southern EU15 Member States, Greece, Spain, Italy and Portugal. Data for Convergence regions are not available for the other EU15 countries.

* Capital city region – Közép-Magyarország.

+ Convergence plus Transition regions.

Source: Eurostat, EU-SILC Microdata, December 2015 version

Material deprivation is closer to the concept of poverty as usually understood. The measure conventionally used in the EU is being unable to afford three of nine selected items on which households are surveyed each year in the EU-SILC²⁸. Not being able to

²⁸ The nine items for which households are asked to indicate whether they can afford them or not: a washing machine; a colour TV; a telephone; a car; a one-week holiday each year away from home; a meal with meat, chicken and fish every second day; to keep the house adequately warm; to avoid arrears on mortgage, rent and other essential bills; and to cover unexpected expenses.

afford these items, therefore, is an indicator that their income level is below what is needed to afford the items in question. The indicator should be reasonably comparable across countries.

The proportion of the population in the EU who are identified as being materially deprived amounted to 18% in 2007. In the majority of the EU12 countries it was more than this, most notably in Bulgaria, Romania, Latvia and Hungary, though it was less in the Czech Republic and Malta. Over the period 2007-2013, the proportion that were materially deprived in the EU increased slightly, as it did in Estonia. In Cyprus, Malta, Hungary and Slovenia, however, the proportion rose significantly, even though in the first the proportion at risk of poverty fell²⁹. In the other EU12 countries, the proportion fell, most markedly in Bulgaria, Latvia, Poland, Romania and Slovakia. In the last two, this was combined with an increase in the proportion of people at risk of poverty, implying that the decline in the relative income of those at the bottom end of the income scale was coupled with an increase in the absolute amount.

At the regional level, the proportion of people materially deprived increased in the capital city regions of both the Czech Republic and Hungary, whereas it remained broadly unchanged in the other regions. In both cases, therefore, the disparity between the two parts of the country narrowed over the period, though it remained relatively wide in Hungary.

In the four southern EU15 countries, the proportion who were materially deprived was above the EU average in both Greece and Portugal but below the average in Spain and Italy, especially the former. Over the programming period, the proportion increased in all four countries, markedly in Greece, Spain and Italy and less so in Portugal. In Greece, around 40% of people were materially deprived in 2013, much the same as in Hungary, with the proportion increasing by a similar extent in both the capital city regions to that in the rest of the country. In Spain, there was also a similar increase in the proportion in Convergence and Competitiveness regions, while the increase was larger in Transition ones. The gap in the proportions between the Convergence and Transition regions and the Competitiveness ones, therefore, remained relatively wide.

In Italy, on the other hand, the significant disparity between the two widened further over the period as the relative number of those who were materially deprived in Convergence and Transition regions increased by more than in the other regions, to a level similar to that in Latvia.

In the southern EU15 countries, therefore, there is a common picture of poverty and social exclusion becoming more widespread over the period as income levels declined and regional disparities in Italy, in particular, widened. This contrasts with the more mixed picture in the EU12 countries, of the prevalence of material deprivation diminishing in six countries but increasing in Malta, Cyprus, Hungary and Slovenia: in the last three in line with the fall in GDP per head, and in Malta reflecting perhaps a decline in income per head despite a rise in GDP³⁰.

1.2.5 Concluding remarks

In broad terms, changes in social disparities between regions – in particular in at-risk-of-poverty rates and rates of material deprivation – show a similar picture to those in

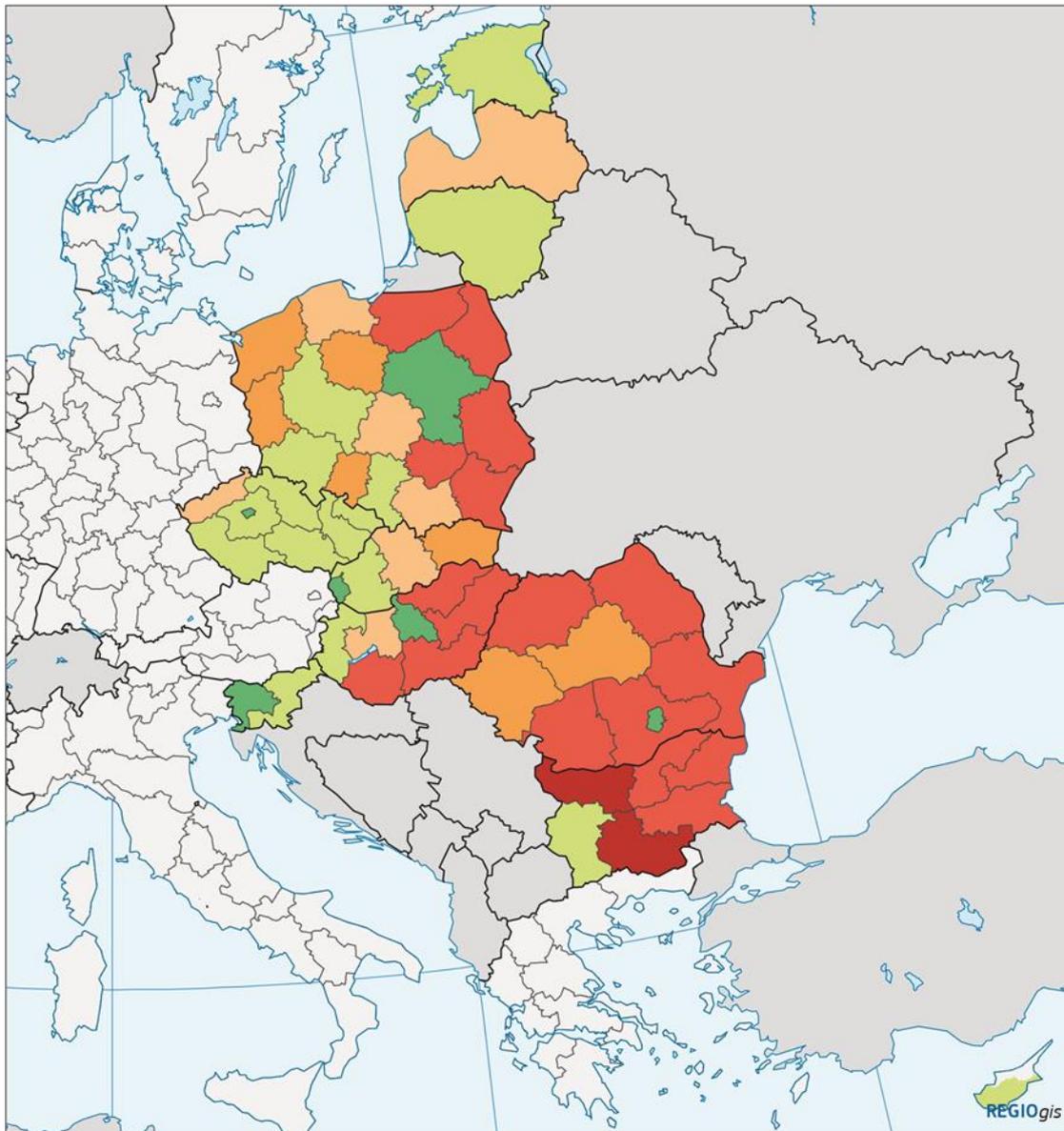
²⁹ There is no necessary relationship between the two indicators. If income levels in a country are relatively low, then the proportion of people materially deprived might well be larger than the proportion at risk of poverty, as in Bulgaria or Romania. In addition, since the risk of poverty is measured in relation to median income, if the median falls then there might be a reduction in the proportion of people at risk of poverty if the income of some of those previously at risk falls by less. These might then become materially deprived and see their income be lifted above the at-risk-of-poverty threshold at the same time.

³⁰ Changes in GDP and household income can frequently diverge because of more or less income going to company profits in particular.

economic disparities, as might be expected. There is a less close relationship, however, between employment rates and GDP per head, reflecting the possible adjustment of employment, and productivity, to the prevailing economic situation. In other words, in circumstances where jobs, and income, are scarce, people are likely to be prepared to work for less, while employers may be willing to take on more workers because of the lower costs of doing so.

As noted above, the general convergence of GDP per head in the less developed regions towards the EU average over the programming period, except in the southern EU Member States, cannot necessarily be attributed to the significant amounts of funding under Cohesion policy that they received over this 2007-2013 period. An attempt to estimate the contribution of funding to their economic performance was made as part of the evaluation and is summarised in the Chapter 4 below. First, however, the scale of funding and its distribution between policy areas is reviewed in the next chapter, followed by an examination of the tangible results of the support provided in these different areas in Chapter 3.

Annex to Chapter 1 – Maps of regional GDP per head in 2014 in the country groups



GDP per head (PPS) of EU-12 regions, 2014

Index, group average = 100

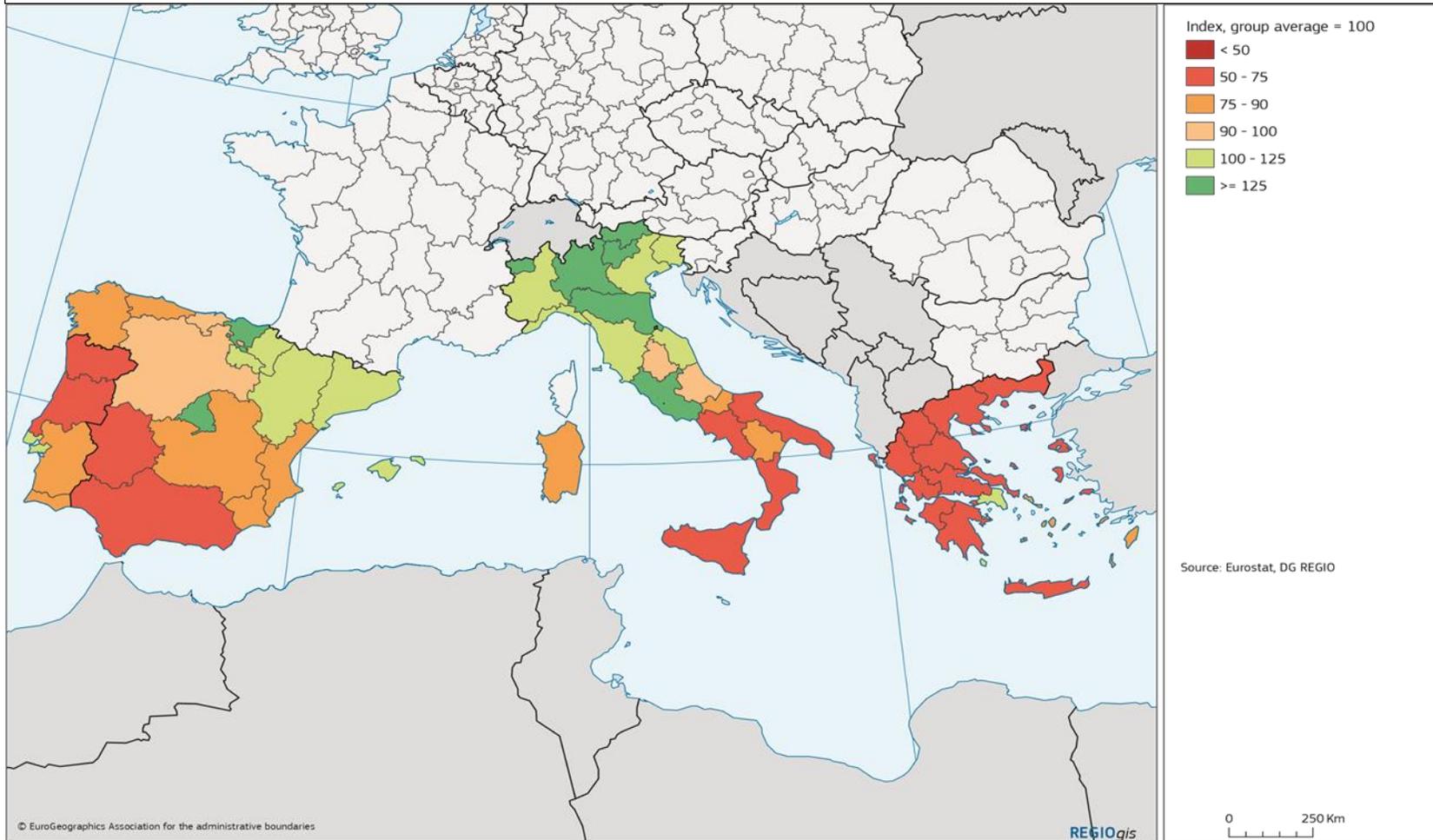
- < 50
- 50 - 75
- 75 - 90
- 90 - 100
- 100 - 125
- >= 125

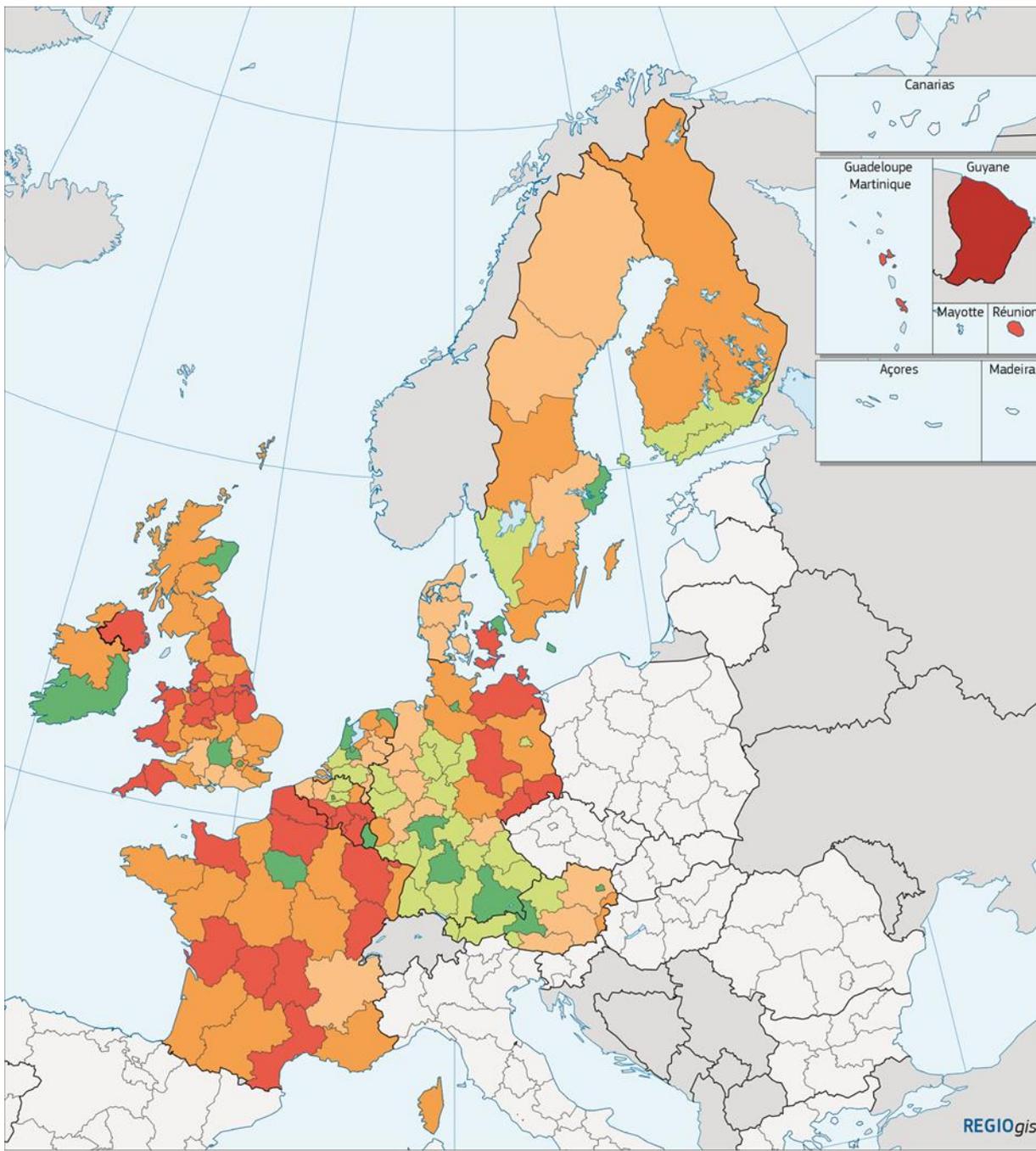
Source: Eurostat, DG REGIO

0 500 Km

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GDP per head (PPS) of EU-4 regions, 2014





GDP per head (PPS) of EU-15* regions, 2014

Index, group average = 100

- < 50
- 50 - 75
- 75 - 90
- 90 - 100
- 100 - 125
- >= 125

* Excluding Southern EU-15 Member States
 Source: Eurostat, DG REGIO

0 500 Km

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Chapter 2 – The implementation of Cohesion policy over the 2007-2013 period

2.1 Introduction

The concern here is to review the financial implementation of Cohesion policy over the 2007-2013 period. Additionally, and more generally, it is to consider the way in which the system for managing and carrying out the policy operated over the period, which underlies the performance with regard to financial implementation, as well as, of course, the effectiveness with which funding available was spent.

The first part examines:

- the division of funding between Objectives and policy areas in the different Member States, which reflects their varying needs to tackle obstacles to development;
- the time profile of expenditure or the pace at which funding was absorbed over the period;
- the increases in EU co-financing rates made so as to take pressure off Member States to find the necessary co-funding and the extent of de-commitments;
- the changes in the division of funding between policy areas over the period and what this indicates about changes in priorities as well as the difficulties of carrying out projects in particular policy areas;
- the division of funding between both regions and types of area, in particular urban as opposed to rural.

The second part summarises the main findings of the WP carried out to evaluate the delivery system for Cohesion policy, including for the ESF, and how effectively it operated in different Member States, as well as areas where it could be improved.

2.2 The division of funding between Objectives and Member States

The overall support provided by the Structural Funds and Cohesion Fund for the 2007-2013 programming period amounted to EUR 346.5 billion. The ERDF and Cohesion Fund accounted for EUR 269.9 billion of this, or 78% of the total, and the ESF accounted for EUR 76.67 billion (Table 2.1)³¹.

Table 2.1 Division of EU funding for Cohesion policy by Funds and Objective, 2007-2013 (EUR billion)

	Convergence	Competitiveness	ETC	Total
Structural Funds+Cohesion Fund	283.7	54.9	8.0	346.5
of which:				
ESF	52.7	23.9		76.6
ERDF	161.1	30.9	8.0	200.0
Cohesion Fund	69.9	0.0		69.9
ERDF+Cohesion Fund	231.0	30.9	8.0	269.9

Source: DG Regional and Urban Policy, Infoview database. Data as at 14 April 2016.

Most of the support went to regions under the Convergence Objective. Just over 80% of the ERDF was allocated to these regions and 69% of the ESF. In addition, the Cohesion Fund, which was allocated on a national, rather than a regional, basis to

³¹ Note the figures relate to decided amounts of funding as at 14 April 2016.

countries with gross national income (GNI) below 90% of the EU average, went predominantly to Convergence regions. The ETC programmes accounted for 4% of the ERDF and for around 2.5% of the overall funding made available.

Overall, EUR 223 billion from the ERDF and Cohesion Fund, 83% of the total, was allocated to OPs under the Convergence Objective, 11% under the Competitiveness Objective and 4% under Multi-Objectives (i.e. to OPs which were funded under both Objectives). The largest part of funding (55% of the total) went to EU12 countries, which received almost two-thirds of the Convergence Objective funding (Table 2.2).

Nearly a third of total funding was concentrated in just two countries, Poland (21%) and Spain (10%), while Italy, the Czech Republic and Hungary each accounted for around 8% of the total.

Table 2.2 Division of ERDF and Cohesion Fund decided amounts for 2007-2013 period between Member States by Objective (EUR million and % total)

	Convergence	Competitiveness	Multi-Objective	Total	% Total
EU15	79 601	27 095	5 856	112 552	41.7
ES	17 963	4 849	3 778	26 590	9.9
IT	17 845	3 144	0	20 989	7.8
DE	11 361	4 739	0	16 100	6.0
EL	13 878	0	1 968	15 846	5.9
PT	13 870	617	71	14 558	5.4
FR	2 279	5 733	39	8 051	3.0
UK	1 830	3 557	0	5 387	2.0
BE	449	537	0	987	0.4
FI	0	977	0	977	0.4
SE	0	935	0	935	0.3
NL	0	830	0	830	0.3
AT	125	521	0	646	0.2
IE	0	375	0	375	0.1
DK	0	255	0	255	0.1
LU	0	25	0	25	0.0
EU12	143 049	1 806	3 810	148 665	55.1
PL	57 178	0	0	57 178	21.2
CZ	20 142	243	1 761	22 146	8.2
HU	19 466	1 467	347	21 281	7.9
RO	15 374	0	0	15 374	5.7
SK	8 694	95	1 209	9 999	3.7
LT	5 747	0	0	5 747	2.1
BG	5 415	0	0	5 415	2.0
LV	3 947	0	0	3 947	1.5
SI	3 345	0	0	3 345	1.2
EE	3 012	0	0	3 012	1.1
MT	728	0	0	728	0.3
CY	0	0	493	493	0.2
ETC	0	0	0	7 956	2.9
HR	706	0	0	706	0.3
Total	223 355	28 900	9 666	269 879	100.0

Note: Decided amounts as at 14 April 2016.

Source: DG Regional and Urban Policy, Infoview database.

2.3 The division of funding between policy areas

The division of funds between policy areas is a reflection of the development strategies pursued across the EU over the period. The broad lines of these can be seen by

aggregating the 86 priority themes, into which expenditure was divided in the period³², into 17 categories³³.

Across the EU as a whole, some 31% of the ERDF and Cohesion Fund combined went to investment in transport (road, rail and other transport), just over half of this to the construction or improvement of roads; another 16% went to environmental infrastructure, and 4% to energy (support for renewables and energy saving) (Table 2.3).

Table 2.3 Division of ERDF+Cohesion Fund decided amounts by policy area and Objective, EU12, EU15 and EU27 (% of total in each case)

	EU12	EU15			EU27		
	Total	Conv.	Comp.	Total	Conv.	Comp.	Total
1.RTD and innovation	12.8	16.7	34.9	23.0	14.0	33.6	17.2
2.Entrepreneurship	1.5	2.3	5.8	3.2	1.8	5.5	2.2
3.Other investment in enterprises	4.4	8.3	9.2	8.4	5.8	9.2	6.1
4.ICT for citizens+business	4.1	3.7	6.3	4.5	3.6	6.1	4.3
5.Environment	17.6	16.2	9.2	13.8	17.2	9.1	16.0
6.Energy	4.5	3.9	7.0	4.4	4.4	6.6	4.5
7.Broadband	0.8	0.8	1.7	1.1	0.8	1.6	0.9
8.Roads	21.1	13.1	1.0	9.9	18.6	1.9	16.3
9.Rail	9.8	9.5	2.7	7.4	10.0	2.5	8.8
10.Other transport	6.5	5.7	5.2	5.3	6.3	5.3	6.0
11.Human capital	0.2	0.0	0.5	0.2	0.1	0.5	0.2
12.Labour market	0.1	0.1	1.0	0.3	0.1	0.9	0.2
13.Culture+social	9.5	10.7	4.1	9.0	9.7	5.2	9.3
14.Social inclusion	0	0.1	0.1	0.1	0.0	0.1	0.0
15.Territorial dimension	4	6.7	8.8	7.0	4.8	8.9	5.3
16.Capacity building	0.2	0.2	0.3	0.2	0.2	0.3	0.2
17.Technical assistance	2.9	2.1	2.3	2.2	2.6	2.4	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: 'Social inclusion' includes measures to assist disadvantaged groups and migrants. 'Territorial dimension' includes support for urban and rural regeneration, tourist services and measures to compensate for climate conditions.

Source: DG Regional and Urban Policy, Infoview database. Data as at 14 April 2016.

Enterprise support and innovation accounted for 26% of the total, most of the funding going to RTD and innovation in line with the Lisbon strategy and later Europe 2020, and ICT for a further 4%. Culture and social infrastructure³⁴ accounted for 9% and the territorial dimension³⁵ for 5%, with just under 3% going to technical assistance. Support for investment in human capital, the labour market and social inclusion³⁶ together amounted to less than 1% of the total, these areas being predominantly funded by the ESF (only capital expenditure is financed by the ERDF).

There was, however, a marked difference in the division of funding between the EU12 and EU15, and within the latter between Convergence and Competitiveness regions, which reflects their differing needs for development investment. It also reflects the scale of funding available, in the sense that large amounts of funding are needed to

³² Commission Regulation n. 1828/20.

³³ It should be noted that the policy areas identified here are not the same as the priority axes defined in the OPs. The 17 are the same as those distinguished in the Strategic Report on programme implementation prepared by the European Commission.

³⁴ Projects aimed at protecting and preserving the cultural heritage and support for education, health and other social infrastructure.

³⁵ Integrated projects for urban and rural regeneration and support for tourism.

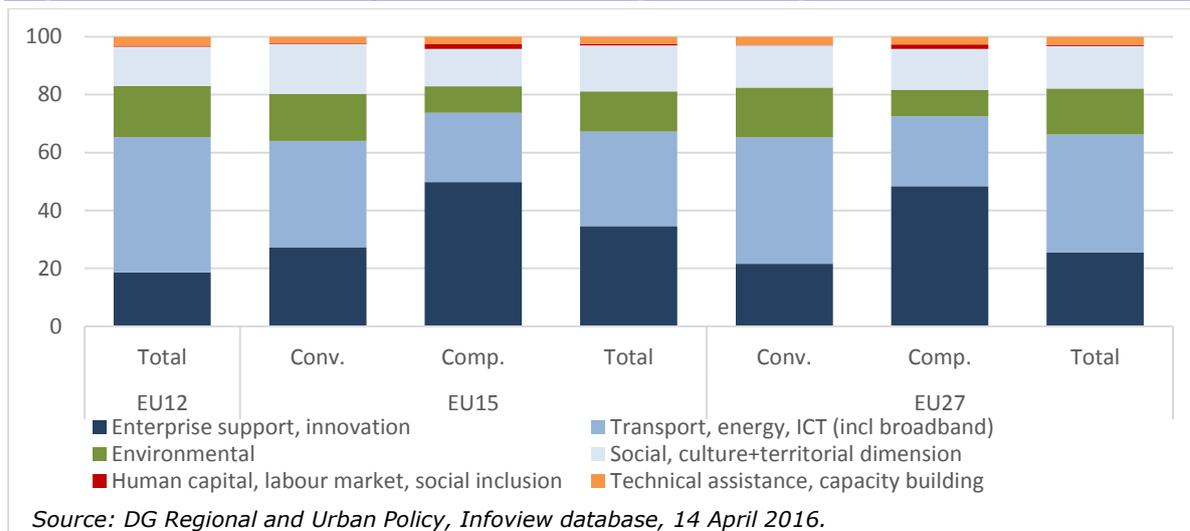
³⁶ Projects to increase migrants' participation in employment and to facilitate the re-entry of disadvantaged groups into employment.

carry out large infrastructure projects. In the EU12, therefore, as well as in Convergence regions in the EU15, which to a large extent are in the four southern Member States, a much bigger share of funding was devoted to transport and other infrastructure, especially environmental, than in Competitiveness regions in the EU15. In the latter, conversely, a larger share of funding went to RTD, innovation and enterprise support (around half of the total). The division of funding for investment in other policy areas was more similar in the different parts of the EU.

The division of funding can be aggregated further to indicate the differing implications for regional development of investment in the different policy areas (Figure 2.1). Support for RTD, innovation and enterprises has the clear economic rationale of directly strengthening the competitiveness of firms located in the region, while investment in transport, ICT and energy has a similar rationale, though typically with a longer-term perspective. Investment in environmental infrastructure, equally, has the long-term aim of trying to ensure the sustainability of development; but in the shorter term, its impact is more on the quality of life in the regions concerned rather than on the regional economy. Indeed, it is questionable whether it has any economic effect at all, except directly from the construction of the facilities concerned and possibly from improving the attractiveness of regions for businesses to locate. Similarly, support for social and cultural infrastructure and the regeneration of urban and rural areas tends to have the same kind of social objective, though it might also increase the attractiveness of regions and therefore economic activity. On the other hand, support for tourism, which is included as part of the territorial dimension, is usually aimed at boosting local economies.

While the share of funding going to social infrastructure, culture and the territorial dimension was similar between regions in the different parts of the EU, the division of funding between the other three broad areas varied significantly, with more funding being devoted to investment with a longer-term impact in the EU12 regions and the Convergence regions in the EU15 than in Competitiveness regions. The share of funding devoted to capacity building and technical assistance was also similar in the different regions at only around 3% or so.

Figure 2.1 Division of funding for 2007-2013 between broad categories of expenditure in the EU12, EU15 and EU27 (% of total)



While there were broad similarities in the way that funding was divided in the countries within each group, there were also differences. In particular, in the EU12, a particularly large share of funding went on transport in Poland (44%), while environmental infrastructure accounted for around 30% of the total in Cyprus and Romania and for 25% or more in Bulgaria, Estonia, Malta and Slovenia, as opposed to

an average of 18%. Nevertheless, with support for investment in energy, cultural and social facilities (hospitals, schools and so on) and ICT (around 15% of the total on average), altogether around 70% or more of total funding went on infrastructure in nearly all EU 12 countries, reflecting the need to modernise and expand the stock of communal capital, much of it in a poor state of repair. Such investment, however, is likely to have an effect on economic development only in the long term; though, through increasing activity in construction, it is also likely to have boosted the economy in the short term.

Within transport, most of the funding went to investment in roads, with investment in rail accounting for more than that in roads only in Slovenia, and with relatively little in most countries going on urban transport.

Funding by policy area in Croatia

In Croatia more than 70% of total funding went to investment in environmental and transport infrastructure, 38% to environmental, to a large extent to wastewater treatment, and 32% to transport (14% to rail and 11% to roads). RTD, innovation and enterprise support accounted for 18% of the total.

In the EU15, a relatively large share of funding in Convergence regions also went in some countries to transport (41% in Greece and Spain) and environmental infrastructure (27% in Spain, 17% in Portugal) as well as social and other kinds of infrastructure (24% going on social infrastructure, mostly on schools, in Portugal), the total amounting to around 60% on average and 70-75% in Greece and Spain. On the other hand a much larger share of funding was devoted to RTD, innovation and enterprise support in these regions than in the EU12, especially outside the southern Member States (80% in Austria, over 60% in Belgium and close to 50% in Germany).

In Competitiveness regions, support for transport and other infrastructure accounted for a relatively small share of funding in all countries (though 22% went on transport in Ireland and 24% on energy in Italy), much of the funding going on RTD, innovation and enterprise support (more than 60% in Austria, Denmark, Finland, Luxembourg, Sweden and the UK).

In ETC programmes, funding was concentrated on the environment (20% of the total), cultural facilities and social infrastructure (around 16%) and RTD and innovation (12%).

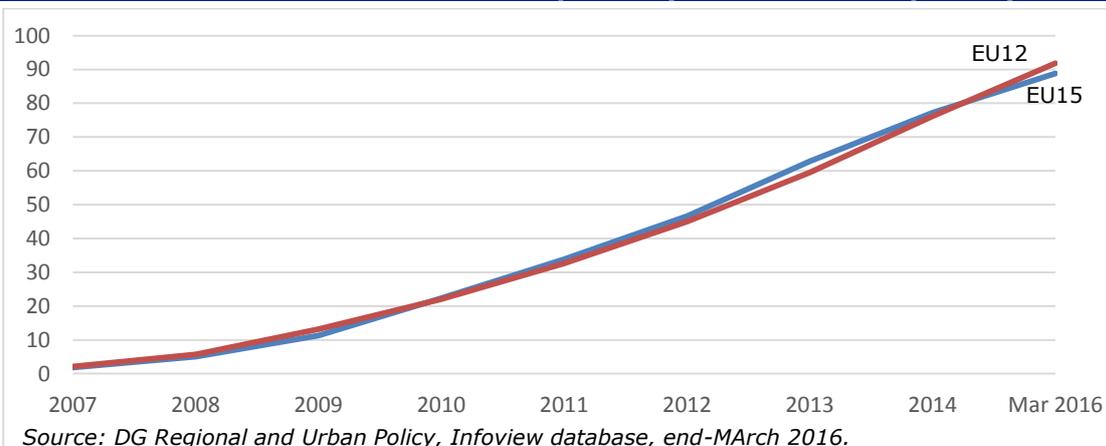
2.4 The time profile of expenditure over the period

The payments made to Member States for the expenditure carried out on programmes is a reasonable measure of the rate at which programmes were implemented over the period. Though there is a lag between the spending on the ground and payments being claimed and made by the Commission, this ought to be reasonably similar over time and across countries. The payments rate, so defined, also gives an indication of how far Member States may have been under pressure to spend funding before the end of the period allowed for expenditure (i.e. by the end of 2015) in order not to lose it. Such pressure may have led them to give priority to absorbing the funds rather than to the effectiveness of the expenditure concerned.

In practice there was a slow build-up in expenditure over the period; and the rate of implementing the programmes, as reflected in the rate at which payments were made by the Commission, did not really pick up until 2012 or so in most countries. By the end of March 2016, just over 90% of the financial resources available from the ERDF and Cohesion Fund for the 2007-2013 period had been paid to Member States, with a slightly larger share being paid to EU12 countries (92%) than to EU15 ones (89%). (Figure 2.2). Note that the proportion cannot normally exceed 95% since 5% of the

payments due are held back until the programmes are formally completed and approved.

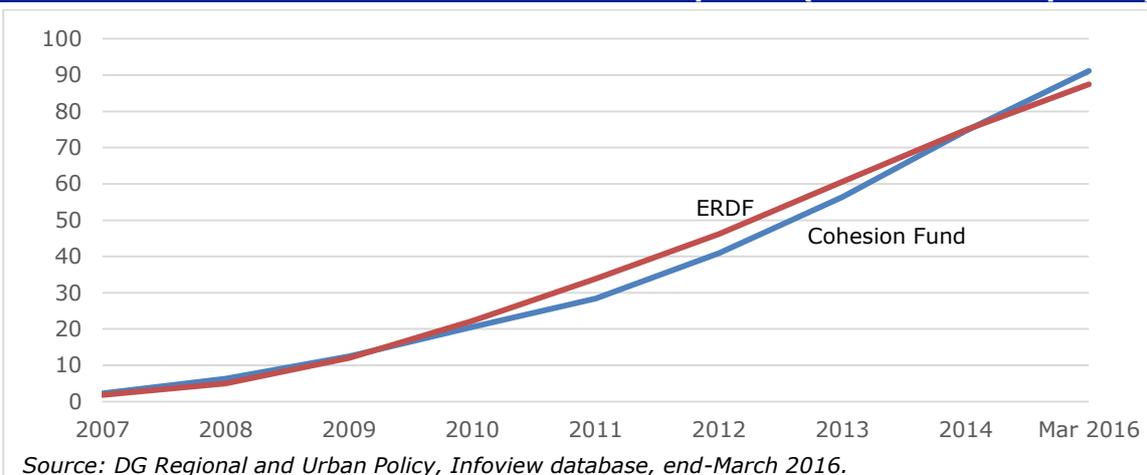
Figure 2.2 Payments from the ERDF and Cohesion Fund relative to the total amount available for the 2007-2013 period (% total for the period)



The rate of payments during the period was very similar in the EU12 and EU15 countries. In both, at the end of 2012, six years into the programming period, less than half of the payments had been claimed and made; and at the end of 2013, two years from the end of the period when expenditure had to be carried out, the proportion was only around 60%. Some 30% of the payments were, therefore, made in the last 27 months of the period, leaving around 5% at the end of March 2016 still to be paid before the formal completion of programmes.

A similar time profile is evident for both the ERDF and Cohesion Fund payments, though the latter built up more slowly, as might be expected given the fact that the infrastructure projects supported tend to take longer to complete, and picked up more in the later years of the period. At the end of 2012, therefore, only just over 40% of the payments for the period had been claimed, but at the end of March 2016 the proportion was larger (91%) than for the ERDF (87%).

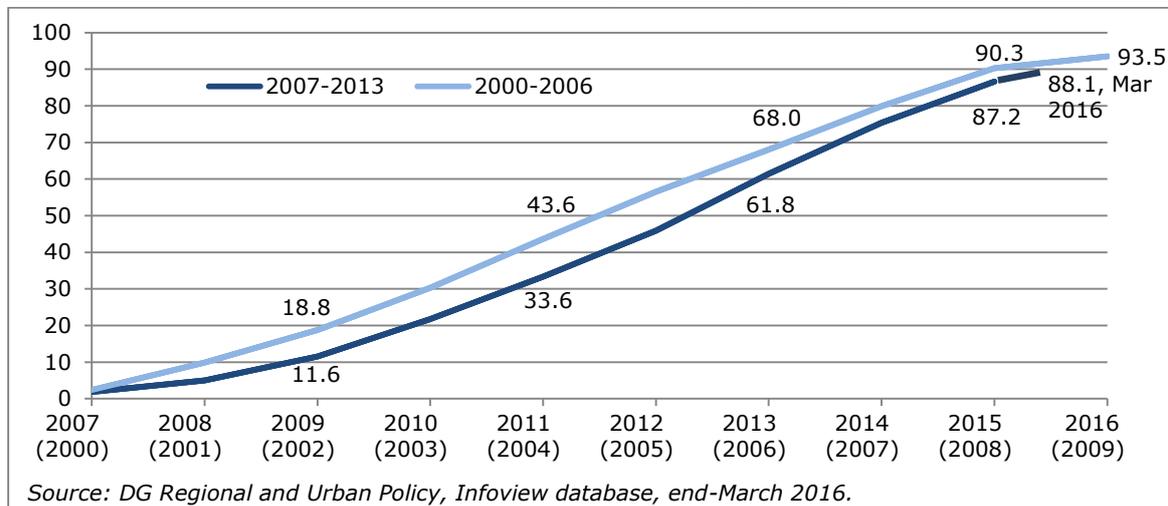
Figure 2.3 Payments from the ERDF and Cohesion Fund separately relative to the total amount available for the 2007-2013 period (% total for the period)



The rate of payment, and by implication the rate at which programmes were implemented, was slower than in the 2000-2006 period, which in turn was slower than in the 1994-1999 period preceding it and which was extended by a year to enable the

funding available to be spent³⁷. At the end of 2011, the fifth year of the period, only a third of the ERDF available had been paid in EU15 countries, 10 percentage points less than in 2000-2006 (Figure 2.4 – it is only possible to compare payments for the ERDF and for these countries).

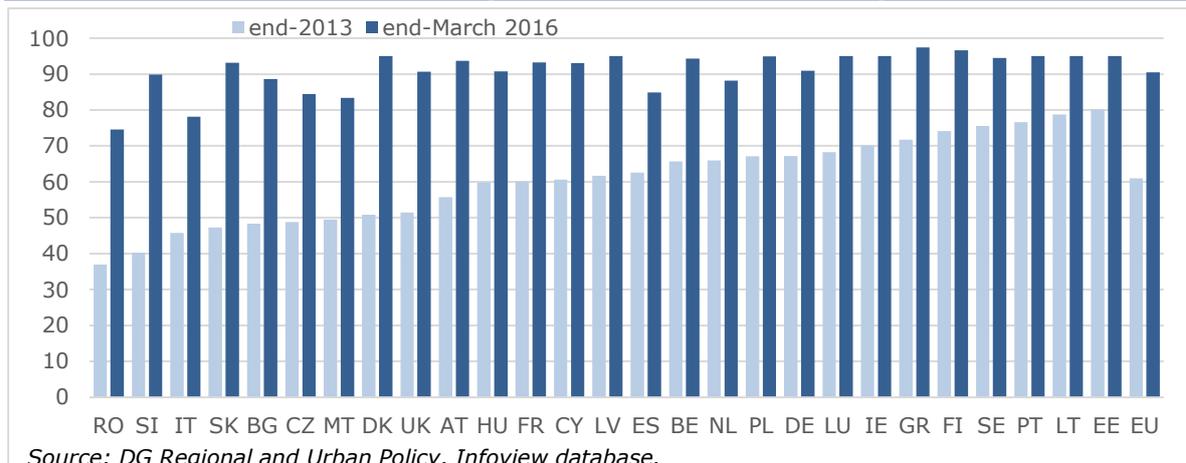
Figure 2.4 Time profile of payments from the ERDF to EU15 countries in 2000-2006 and 2007-2013 (% of total funding for the period)



There was still a gap of over 10 percentage points at the end of the 6th year and it was only from then on that the rate of implementing programmes began to catch up with that in the earlier period. At the end of 2015, however, a gap of almost 4 percentage points remained. The rate of expenditure, therefore, appears to have increased more quickly in the 2007-2013 period as the time allowed for spending became shorter than in the 2000-2006 period, with potential implications for the effectiveness of expenditure, or the quality of projects carried out. In other words, there is a possibility that the priority shifted more towards spending funding quickly from spending it as effectively as possible.

The implied rate of implementation of programmes at the end of 2013, covering those financed by both the ERDF and Cohesion Fund, and, accordingly, the rate of increase over then until March 2016, varied markedly between countries. In Romania only 37% of the funding for the period had been claimed by the end of 2013, and in Slovenia only 40%, while in Italy, Slovakia, Bulgaria, the Czech Republic and Malta the proportion was less than 50% (Figure 2.5). By March 2016, the proportion had increased to 90% in Slovenia and just over 90% in Slovakia, while in Bulgaria it was only just under 90%. In all three countries, over 40% of the funding available for the period as a whole was claimed in these 27 months (almost 50% in the first two). The same was the case in Denmark.

³⁷ See 'Expert evaluation network on the performance of Cohesion policy 2007-2013, Synthesis of National Reports 2013', January 2014.

Figure 2.5 Payments relative to the total amount of ERDF and Cohesion Fund, end-2013 and end-March 2016 (% total amount available)

In Romania and Italy, the payments rate increased by less over this period and remained below 80% of the funding available at the end of March 2016. In Malta and the Czech Republic it was below 85%. In these four countries, there is a serious question over whether there were sufficient payments which had not been declared by the end of March 2016 to absorb all the funding which remained at the end of 2015. Unless there is a very long lag between expenditure being undertaken and payments for it being claimed and made, there might be a problem of spending all the funding that potentially remains available. (The payments rate increased from 76% at the end of 2015 to only 78% three months later.) Note that in Greece the payments rate was just over 97% at the end of March 2016 because of a special agreement made to release the final 5% of funding early as a result of the severe public finance problems in the country.

2.4.1 Expenditure rates in different policy areas

The rate of implementation of programmes also varied between different policy areas, partly reflecting the length of time required to carry out projects and, accordingly, their scale, but also reflecting the difficulties involved. The data on payments are not divided by policy area but data on expenditure divided in this way are available. These were compiled as part of one of the WPs of the evaluation (WP13) and relate to the end of 2014. They are, therefore, not as up to date as the payments data but give an indication of the differences between policy areas one year before the end of the period available for carrying out expenditure³⁸.

Overall in the EU at the end of 2014, expenditure amounted to 77% of the funding available (Table 2.4). Apart from support of human capital and the labour market, which accounted for a very small proportion of total funding, along with social inclusion, the expenditure rate was lowest for investment in broadband, at only around 45% of funding. The rate was relatively low in both the EU12 and EU15, suggesting problems of carrying out the investment intended. The expenditure rate was also well below average for ICT and energy, again in both the EU12 and EU15, as well as for the environment and rail. In the latter case, however, expenditure difficulties seem to be confined to the EU12 (where expenditure was under 60% of the funding decided), whereas in the EU15 the expenditure rate was well above average.

³⁸ It should be noted that the expenditure figures involve some estimation and therefore the figures relative to decided amounts should be regarded as indicative only.

At the other extreme, the expenditure rate was particularly high as regards other investment in enterprises, which perhaps reflects the high demand for financial support from firms during the crisis.

Table 2.4 Expenditure relative to decided amounts of ERDF and Cohesion Fund for the 2007-2013 period by policy area, end-2014 (% of decided amounts)

	EU12	EU15	EU27
1.RTD and innovation	69.9	77.0	74.0
2.Entrepreneurship	64.1	86.4	77.9
3.Other investment in enterprises	90.7	89.8	90.2
4.ICT for citizens+ business	63.7	66.7	65.0
5.Environment	68.3	71.1	69.3
6.Energy	66.9	66.2	66.6
7.Broadband	34.3	54.7	44.6
8.Roads	90.4	95.4	91.8
9.Rail	58.5	88.5	69.4
10.Other transport	71.6	75.3	73.0
11.Human capital	33.1	30.4	32.1
12.Labour market	29.4	41.3	37.5
13.Culture+social infrastructure	81.9	84.6	83.0
14.Social inclusion	11.1	61.2	51.8
15.Territorial dimension	95.8	78.3	85.9
16.Capacity building	70.7	76.9	73.2
17.Technical assistance	72.5	68.6	71.0
Total	75.2	79.4	77.0

Note: Decided amounts as at 14 April 2016. Figures exclude ETC programmes. Expenditure on Cross-border Cooperation programmes amounted to 78.7% of the total decided budget at the end of 2014.

Source: DG Regional and Urban Policy, Infoview database and WP13 for expenditure estimates.

2.5 The increase in EU co-financing rates and changes in overall funding

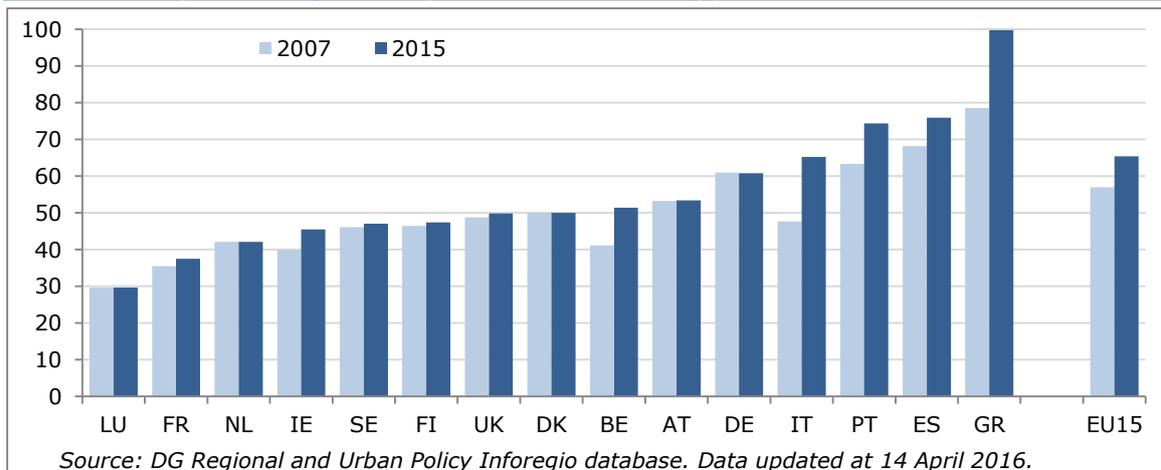
The effect of the crisis in reducing the government funding available to spend on public investment led the EU to increase co-financing rates for Cohesion policy programmes in many of the Member States where problems were most severe. The increase was aimed at helping the countries concerned to meet their part of the funding needed to carry out programmes, so enabling them to take up the EU financial support available.

The EU co-financing rate was raised to differing extents in 16 Member States over the programming period (Figure 2.6). In the EU15 the biggest increase was for Greece, where the rate was increased from 77% to 100% in response to the severe financial problems being experienced and the substantial reduction in government expenditure, most especially on investment, which occurred as part of budget consolidation measures.

Substantial increases in co-financing rates were also made for Italy, from 48% to 65% on average, and from 50% to 72% in Convergence regions, where co-financing difficulties were particularly severe.

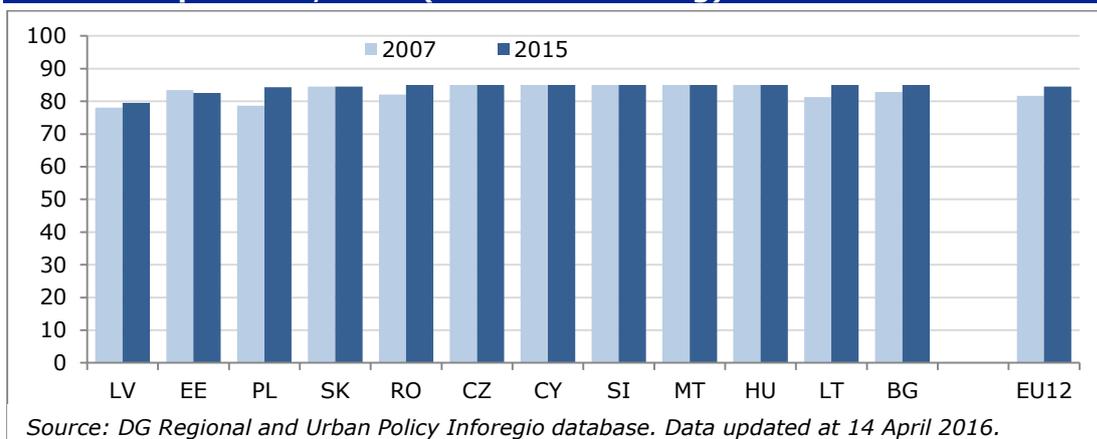
For Portugal, too, the co-financing rate was raised markedly, from 63% to 74% on average, and from 55% to 73% in the Competitiveness regions. There was also a large increase for Belgium (from 41% to 51%), and smaller but still significant increases were made for Spain (from 68% to 76%) and Ireland (from 40% to 46%). In each case the motivation was the same, to reduce the difficulties of finding the co-funding required to carry out programmes.

Figure 2.6 Average EU co-financing rates for Cohesion policy programmes in 2007 and April 2016, EU15 (% of total funding)



In the EU12, the increases were smaller and limited to five countries where rates were below the 85% maximum at the start of the period. Co-financing rates were, therefore, raised by almost 6 percentage points in Poland, just under 4 percentage points in Lithuania, by 3 percentage points in Romania, by just over 2 percentage points in Bulgaria and just over 1 percentage point in Latvia – though, in the last, they remained marginally below 80% (Figure 2.7).

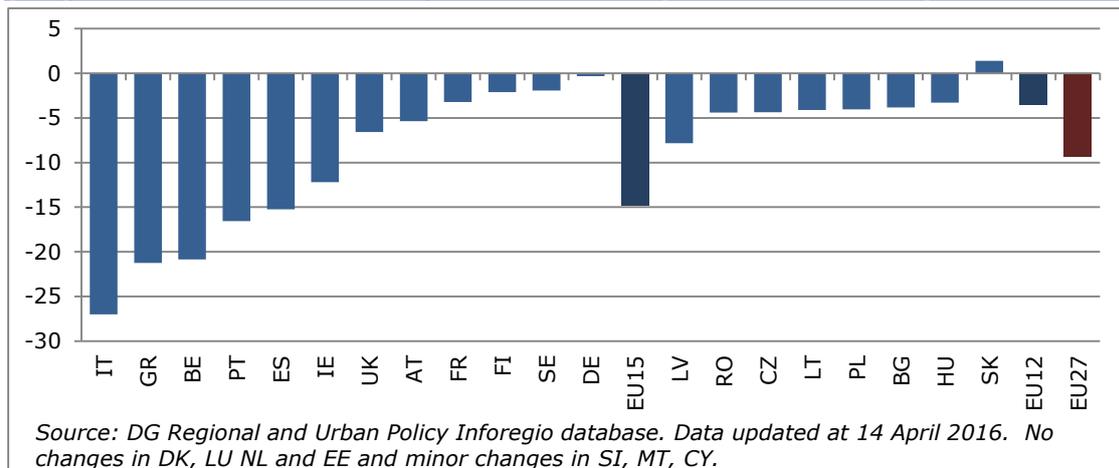
Figure 2.7 Average EU co-financing rates for Cohesion policy programmes in 2007 and April 2016, EU12 (% of total funding)



2.5.1 The reduction in public funding for programmes

The effect of the increase in EU co-financing rates was to reduce, as intended, the amount of national funding which Governments had to find to carry out programmes. Accordingly, since no new EU funding was made available, this reduced the overall amount of funding going into programmes. Consequently, the expenditure which was initially planned to take place was cut back, though it is difficult to identify which parts of the programmes agreed at the beginning of the period were abandoned. However, given the constraints on public finances in many cases, the reduction can be regarded as more ‘virtual’ than ‘real’, since it might well have been impossible to find the necessary co-financing had the EU rate not been increased, given the aim of containing government borrowing.

Across the EU as a whole, the national funding for programmes was reduced by EUR 34.0 billion between 2007 and 2015 – in the last according to the latest data. A small increase in the ERDF going to Slovakia offsetting the reductions elsewhere only slightly and, overall, the total amount of funding going on Cohesion policy programmes was EUR 33.8 billion less than initially planned, a cut of 9% (Figure 2.8 and Table 2.5).

Figure 2.8 Overall reduction in public funding for ERDF and Cohesion Fund programmes for 2007-2013, 2007 to 2015 (% initial amount)**Table 2.5 Public funding (ERDF+Cohesion Fund and national public) and changes from 2007 to 2015 (EUR million)**

	Final (14 April 2016)			Change, Final - Initial		
	ERDF-CF	National Public	Total	ERDF-CF	National Public	Total
IT	20 989	11 195	32 184	-38	-11 871	-11 909
ES	26 590	6 465	33 055	-10	-5 937	-5 947
GR	15 846	40	15 886	0	-4 286	-4 286
PT	14 558	2 022	16 580	-341	-2 949	-3 290
UK	5 387	4 296	9 683	-29	-654	-683
FR	8 051	9 657	17 708	-4	-588	-592
BE	987	851	1 838	-4	-480	-484
IE	375	449	825	0	-114	-114
DE	16 100	7 356	23 457	-8	-67	-75
AT	646	562	1 208	-34	-34	-69
FI	977	1 082	2 059	0	-44	-44
SE	935	1 052	1 987	0	-39	-39
DK	255	157	412	0	0	0
LU	25	43	68	0	0	0
NL	830	963	1 793	0	0	0
EU15	112 552	46 190	158 742	-468	-27 064	-27 532
PL	57 178	7 996	65 174	1 663	-4 399	-2 736
CZ	22 146	3 203	25 349	-382	-773	-1 155
RO	15 374	2 713	18 087	-155	-674	-829
HU	21 281	2 944	24 225	-11	-813	-825
LV	3 947	353	4 301	-32	-334	-366
LT	5 747	573	6 320	0	-272	-272
BG	5 415	956	6 371	-73	-181	-254
SI	3 345	590	3 936	0	0	0
EE	3 012	391	3 403	0	0	0
MT	728	128	857	0	0	0
CY	493	87	580	0	0	0
SK	9 999	1 837	11 836	138	24	162
EU12	148 665	21 772	170 437	1 147	-7 422	-6 275
HR	706	104	809	0	0	0
ETC	7 956	3 045	11 001	44	-49	-5
Total	269 879	71 111	340 989	723	-34 535	-33 812

Note: Within EU 15 and EU12 countries are ordered by changes in the public amount of funding.
Source: DG Regional and Urban Policy, Infoview database.

The reduction in individual countries broadly reflects the increase in the EU co-financing rate. It was largest in Italy, where public funding for programmes was EUR 11.9 billion less than initially planned, a cut of over a quarter, and it amounted to EUR 5.9 billion in Spain, though in proportionate terms the reduction (15%) was smaller than in Belgium or Greece (around 21% in both). In the latter, national funding was reduced from EUR 4.3 billion to just EUR 40 million as the EU effectively took over the

financing of Cohesion policy programmes, though without adding any extra money. In Ireland, too, the reduction was over 12%, while in Austria and the UK it was 5-7%. In the EU12 a reduction in public funding of 8% occurred in Latvia and one of over 4% in Romania, the Czech Republic and Lithuania. In the Czech Republic, which received an additional allocation of EU funding³⁹, de-commitments stemming from a failure to spend the funding available in time (see below) led to a net reduction in EU funding of almost EUR 400 million and a cutback in government funding of just under EUR 800 million added to this. In Poland, an increase in EU funding⁴⁰ was much more than offset by a reduction in national government funding of EUR 4.4 billion, though as indicated below this was partly offset in turn by an increase in private funding. Slovakia was the only country in which public funding increased over the period, and then only slightly.

The reduction in overall public funding was largely concentrated on Convergence programmes, some EUR 27.8 billion less going to these than initially planned, a cut of almost 10%. The biggest reduction in proportionate terms occurred in Italy and Belgium, where it amounted to around 30% in both cases.

The inevitable cost of the increase in EU co-financing rates was, therefore, a cut in overall public funding for Cohesion policy programmes, though this was essentially a consequence of the crisis and the fiscal consolidation measures which it led to. The regions most affected were to a large extent in countries hit most by the crisis.

2.5.2 Private funding

Private funding increased over the period to offset the reduction in public funds, but only a little. Such funding is included as an explicit part of the resources available to finance programmes in many countries but not all, despite private enterprises being required to provide co-financing for the investment supported in every country. The data reported, therefore, are partial and leave out of account amounts which vary in size across countries.

Overall, just under EUR 19 billion of private financing was reported in April 2016 to have been available for funding programmes, amounting to just over 5% of the total (Table 2.6). Of the 16 countries in which it was reported, it was largest in relative terms in Luxembourg and Denmark (19-20%), and among the other EU15 countries it was over 15% of the overall amount only in France and Portugal. In the EU12 it was over 10% only in Latvia (13%), and below 7% in all other countries in which it was reported.

Between 2007 and April 2016, the amount of private funding reported to be available to finance programmes increased by EUR 1.7 billion in the EU12 countries, largely because of funding being included in the Czech Republic and Hungary where none was reported in 2007. In both cases this effectively enabled government co-financing to be reduced by a similar amount, leaving overall national funding much the same (though in the Czech Republic EU funding was reduced, as noted above). In Latvia, an increase in private funding allowed government funding to be reduced by more than implied by the increase in the EU co-financing rate.

³⁹ This was a result of an Inter-institutional Agreement with the European Commission in 2010, which related the funding allocated to the Czech Republic and Slovakia for the period 2011-2013 to their GNI, which turned out to be higher than initially assumed because of an upward revision in the figure.

⁴⁰ This was the result of the national performance reserve (EUR 1 billion) being allocated in 2011 to the most successful programmes (see Art. 50 of Reg. 1083/2016) and a technical adjustment of the financial framework, which added EUR 0.6 billion (see <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0160&from=EN>).

In the EU15, almost EUR 2 billion of private funding was reported in April 2016 for Spain, where none was initially included in the funding for programmes. As in Latvia, this effectively enabled national government funding to be reduced by even more following the increase in the EU co-financing rate. The same occurred in the UK, though to a much smaller extent. In both France and Portugal, the amount of private funding reported was reduced by over EUR 600 million over the period. In these countries, therefore, the increase in the EU co-financing rate was associated with a reduction in both government and private co-funding.

Table 2.6 National private funding reported for ERDF and Cohesion Fund programmes for 2007-2015 initial, final and changes 2007 to 2015 (EUR million and % of total amount)

	Initial, 2007	Final, 14 April 2016	Change	% Final amount
LU	17	17	0	19.9
DK	98	98	0	19.2
FR	4 391	3 777	-613	17.6
PT	3 642	2 985	-658	15.3
DE	2 865	3 006	141	11.4
UK	722	1 122	399	10.4
NL	175	175	0	8.9
ES	0	1 952	1 952	5.6
BE	82	82	0	4.3
EU15	11 992	13 215	1 222	7.7
LV	430	664	234	13.4
EE	209	244	35	6.7
LT	477	441	-35	6.5
PL	2 708	2 627	-81	3.9
HU	0	811	811	3.2
CZ	0	705	705	2.7
EU12	3 822	5 493	1 671	3.1
HR	24	24	0	2.9
ETC	165	215	50	1.9
Total	16 004	18 946	2 943	5.3

Note: For the countries missing private amounts are reported as zero.

Source: DG Regional and Urban Policy, Infoview database

2.5.3 De-commitments

As indicated above, under the regulations governing Cohesion policy Member States have to spend the funding allocated within two years, or three in the case of countries with GNI per head below 85% of the EU average⁴¹, or suffer losing it through 'de-commitments'.

At the end of 2015 de-commitments over the period amounted to just over EUR 1 billion and involved:

- 22 OPs out of 166 in 11 Member States, from which EUR 948 million was de-committed, EUR 744 million from the ERDF and EUR 204 million from the Cohesion Fund;
- 13 ETC OPs out of 73, from which EUR 53 million of the ERDF was de-committed.

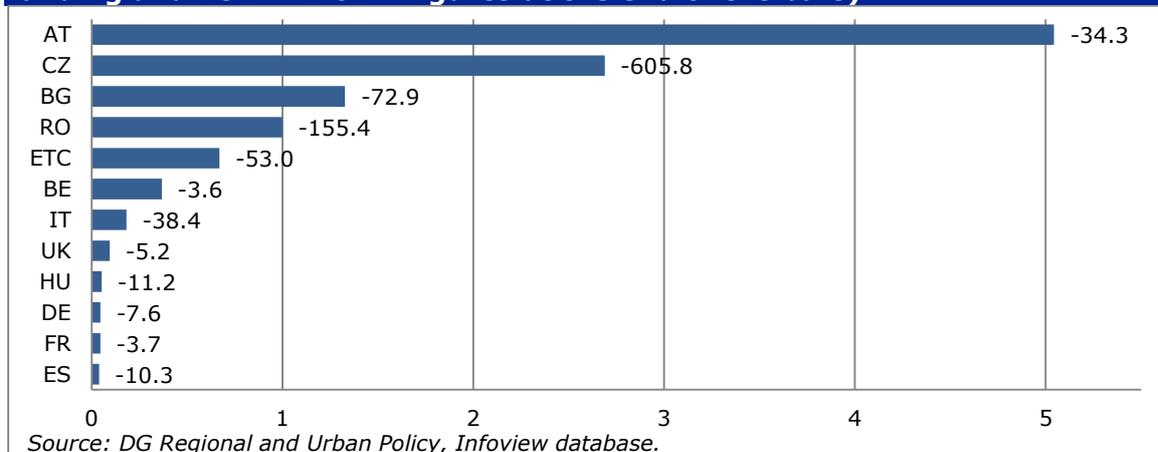
Most of the de-commitments occurred in the three years 2013 to 2015, when, as indicated above, delays in implementation had accumulated and it became difficult to accelerate expenditure sufficiently.

A substantial proportion of the de-commitments related to OPs in the Czech Republic (EUR 605 million in total), which reduced the funding available by 2.5% (Figure 2.9,

⁴¹ The n+3 rule applied to the EU12 countries plus Greece and Portugal.

which relates only to de-commitments for failing to spend funding on time – i.e. within two or three years).

Figure 2.9 De-commitments of ERDF and Cohesion Fund financial resources because of failing to comply with n+2 or n+3, as at April 2016 (% of initial funding and EUR million – figures at the end of the bars)



In proportionate terms, however, this was less than in Austria, where funding was reduced by 5% as a result of EUR 34 million being lost through de-commitments, which amounted to over 10% in the case of the Steiermark regional OP. In the Czech Republic, two programmes also lost over 10% of their funding – R&D for innovation and technical assistance⁴².

In Bulgaria and Romania de-commitments reduced funding available by around 1%, but in the other countries affected by less than 0.5%. In the UK, however, one programme, the South East England ERDF Regional Competitiveness and Employment OP, lost over 10% of its funding.

Predominantly because of the relatively large de-commitments in the Czech Republic, the overall amount of funding lost by Convergence OPs was larger in proportionate terms (0.7%) as well as absolutely (EUR 838 million) than by Competitiveness OPs. The amount lost by ETC programmes was similar in proportionate terms to that in Convergence regions, though relatively small in monetary terms (EUR 53 million). One ETC OP, however, Amazonia (a programme involving French Guyane and the neighbouring countries of Brazil and Suriname), had its funding reduced by over 10% as a result of not spending it in time.

2.6 Shifts in funding between policy areas over the period

Funding for the 2007-2013 period was shifted to varying extents between policy areas as the period went on. This was in response partly to the crisis and the increased priority to stimulate growth and employment that it gave rise to, and partly to the difficulties of spending the funding planned in particular areas. The latter was itself in part a consequence of the crisis, in that it depressed demand for support by making it more difficult to find the co-financing needed and causing enterprises to scale down their investment plans. It was also, however, a response to inordinate delays in spending which had nothing to do with the crisis, arising, for example, from the time taken to obtain planning permission or to formulate and agree suitable projects.

The information available, however, does not provide a complete picture of all the shifts that occurred but only those between the 86 categories of expenditure

⁴² The OP Ziel Regionale Wettbewerbsfähigkeit und Beschäftigung Steiermark in Austria and the OP Výzkum a vývoj pro inovace and OP Technická pomoc in the Czech Republic.

distinguished in the Commission's classification system (those indicated above) that were reported to DG Regional and Urban Policy. These were shifts for which approval was needed because they involved significant modifications to the programmes agreed in that they altered the division of funding between priorities or changed the composition of priorities to an important extent. Shifts within priorities which did not substantially alter what was intended to be achieved and which were within the flexibility allowed to MAs could be made without notification, and in practice many of the shifts were of this type. There is no way of knowing how important these shifts were but it is known from Member States that in some cases they were substantial⁴³.

Despite this limitation, the shifts of funding between the 86 categories of expenditure give an indication of the nature of the changes which were made across Member States, though it should be kept in mind that they were undoubtedly larger than indicated here. Between 2007 and the end of 2015, they amounted to some EUR 42.8 billion, or just over 16% of the total funding available. The shifts were larger on average in the EU15 than in the EU12 (amounting to nearly 22% of the initial total as opposed to 12%), though there are big variations between countries within each of these groups (Figure 2.10).

In Portugal, some 37% of the overall initial funding was shifted between categories; in Malta and Greece, around 32%; and in Ireland and Cyprus, 29-30%. On the other hand, the proportion shifted only around 5-6% in Belgium and the Netherlands, just over 2% in Estonia and Latvia and less than 1% in Finland.

There is limited evidence of a correlation between the funding shifted and the severity of the crisis. Though a number of the countries which were most affected, such as Portugal, Greece, Ireland and Cyprus, made among the largest shifts, so did Malta, which was much less affected than average. Equally, some of the countries in which the shifts were smallest were among the hardest hit, especially Finland, Estonia and Latvia.

In the case of Latvia, however, according to the MA around 30% of the funding was, in fact, reallocated over the period within expenditure categories, mainly to alter the focus and target groups, specifically in order to respond to the crisis. This suggests that the shifts between expenditure categories which were reported give only a very partial indication of the shifts that actually occurred as a result of the flexibility built into the system precisely to enable adjustments to be made to the allocation of funding as circumstances changed and priorities altered.

On the other hand, there is evidence in some countries, such as Germany and Sweden, that MAs saw little need to change the initial allocation of funding since this was designed to tackle long-term structural problems and the crisis had not altered the nature of these⁴⁴. Equally, according to other MAs (in the Czech Republic, Portugal and Austria) the shifts were made mainly as a result of the slow rate of implementation of programmes in some areas. In Portugal this was particularly in relation to infrastructure investment, though the concern was not only to ensure that funding was absorbed within the time period allowed but also to accelerate expenditure in the context of the crisis.

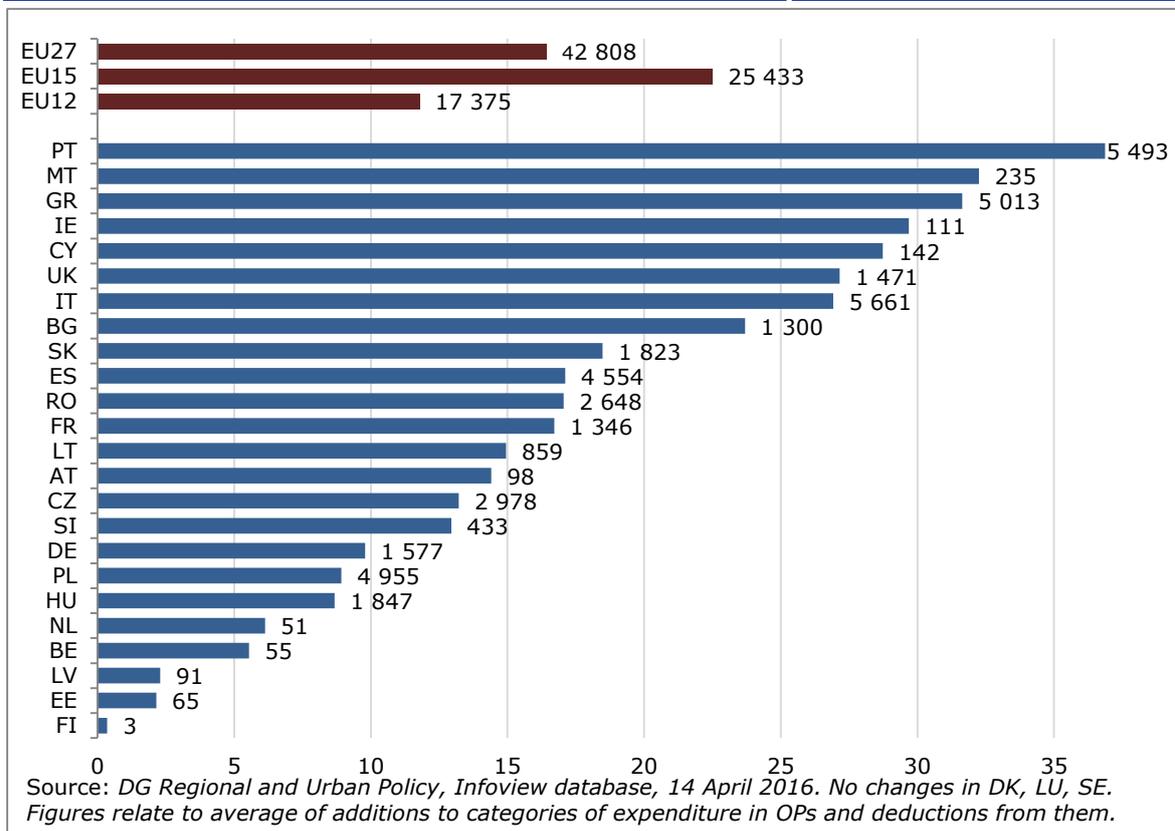
The shifts between the 86 categories of expenditure which were reported, however, give at least an indication of the direction of change even if they might understate the scale. They show that across the EU as a whole the largest net additions to funding, amounting to over EUR 2 billion in each case, were to culture and social infrastructure,

⁴³ This was reported to be the case at the meeting held with Member State representatives in May 2015 to discuss the effects of the crisis on the implementation of Cohesion policy as part of the present evaluation.

⁴⁴ See Expert Evaluation Network country reports for 2013 for Germany and Sweden
http://ec.europa.eu/regional_policy/en/policy/evaluations/ec/2007-2013/#1

other investment in enterprises (i.e. other than that involving RTD and innovation) and roads. There were also significant net additions to investment in energy and broadband, in the former partly as a result of energy-efficiency measures in housing and public buildings becoming eligible for support in EU15 countries in 2009.

Figure 2.10 Decided amounts of the ERDF and Cohesion Fund for the 2007-2013 period shifted between categories of expenditure, 2007-2016 (% of initial amounts and EUR million – at end of the bars)



The biggest reductions in funding were, above all, to environmental infrastructure, which was cut back by EUR 3 billion, and to ICT and 'other transport' (i.e. apart from roads and rail), which amounted to EUR 1.2-1.3 billion in each case. Investment in rail was also reduced significantly (by over EUR 800 million), so there was effectively a shift of funding away from environment-friendly modes of transport to roads. In addition, substantial cuts were made to funding for capacity building which was reduced by EUR 800 million (60% of the amount initially planned), and technical assistance, which was cut by over EUR 700 million (by 10% of the initially planned amount)⁴⁵.

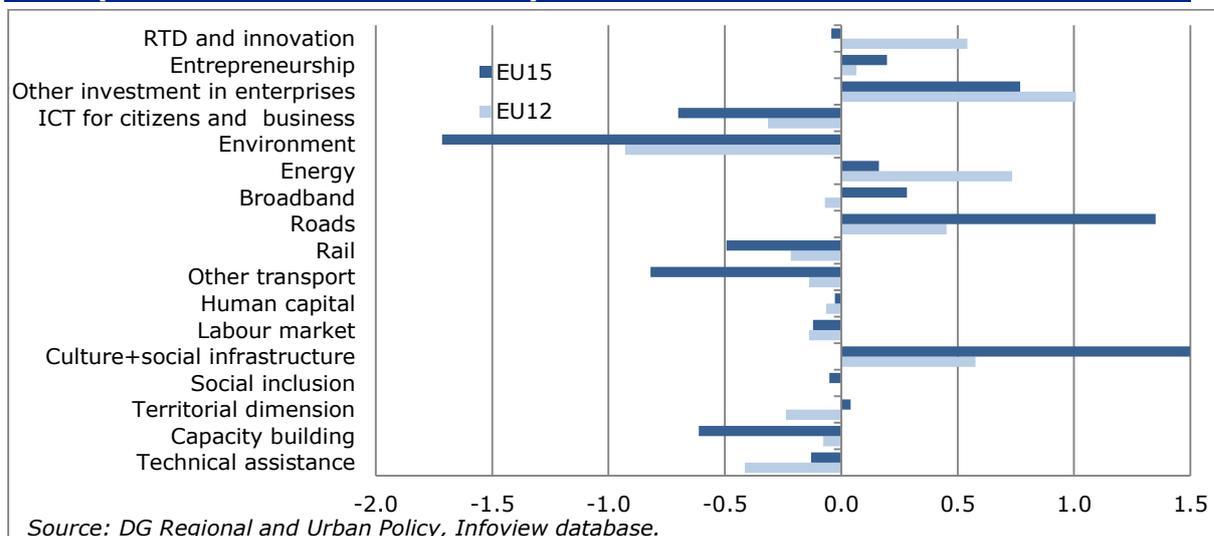
The underlying reason for these shifts seems partly to do with the crisis, such as the increase in general support for investment in firms or the expansion of funding for energy-efficiency measures, which both served to reduce energy use and to give much needed work to the construction industry, which was hit particularly hard by the crisis. Partly, however, it was related to the slow implementation of infrastructure projects in certain areas, the environment and railways in particular.

There is some similarity in the shifts that were made in the EU12 and in the EU15. For the most part, funding was added to the same categories of expenditure and deducted from the same ones. The only two areas in which the shifts went in opposite directions are broadband and the territorial dimension (urban and rural regeneration and

⁴⁵ Note that these percentage reductions differ from those shown in Figure 2.11 which refer to the reductions as a percentage of the total funding available.

tourism), for both of which funding was expanded in the EU15 and reduced in the EU12 (Figure 2.11).

Figure 2.11 Shifts in the decided amounts of the ERDF and Cohesion Fund for the 2007-2013 period between policy areas in the EU12 and EU15, 2007 to 2016 (% of total amount available)



The main difference is that the scale of the shifts made in the EU15 tended to be larger, especially in relation to the amounts added to culture and social infrastructure (which in this case was mainly for modernising and equipping schools in Portugal) and roads (which was predominantly in Greece). Equally, the amounts deducted from the environment (mainly in Spain and Greece) and 'other transport' (mainly in Greece and Italy) were also much larger than in the EU12.

Nevertheless, despite the shifts, the division between policy areas at the end of the period was not so different to that at the beginning. This might imply that the crisis had comparatively little effect on the strategy being pursued. It could also imply, however, that there was sufficient flexibility in the regulations to enable shifts of funding to occur within priorities that did not need to be reported to the Commission, as indicated above.

Shifts of funding in Croatia

In Croatia, there were changes only to funding for transport, for which the amount going to rail was halved and the funds shifted to roads, on which no funding was planned at the beginning of the period, and to other transport.

2.6.1 Shifts in ETC programmes

In ETC programmes, there was also an increase in funding over the period to investment in roads, culture and social infrastructure and RTD and innovation (as in mainstream programmes), as well as a reduction in funding for ICT and, most especially, other transport. On the other hand, unlike in mainstream programmes, funding was increased on the environment. Overall, however, the shifts which occurred were in most cases relatively small and the division of funding between policy areas was much the same at the end of the period as it was planned to be at the beginning.

2.7 The division of funding between regions

2.7.1 The division of funding between regions by Objective

As noted at the outset, while the eligibility of regions for receipt of funding under the different Objectives is determined by the EU centrally, Member States have discretion over how much funding is allocated to each individual region which falls under these Objectives. The evidence, which was compiled by WP13 as part of the evaluation, shows clearly that the way in which funding is so allocated, and the implicit criteria used, varies markedly across countries⁴⁶. In some cases the amount of funding varies inversely with the GDP per head of regions⁴⁷, so that those where the level is lowest receive the largest amount of funding per inhabitant, which is consistent with attempts to reduce regional disparities within countries. In others there is a positive relationship, so that regions with the highest level of GDP per head receive the most funding per inhabitant, which seems likely to reinforce disparities rather than reduce them. In yet others there is no apparent relationship between the two, which suggests that the level of GDP per head in the different regions was not taken into account when the allocation between regions was made.

The countries which appear to fall into the different groups are as follows (see Table A.1 in the Annex for more details):

Funding per head larger in regions with relatively low GDP per head

Austria, Belgium, Germany (Competitiveness regions), Denmark (marginally), Spain (Competitiveness, Convergence and Transition regions), Finland (Competitiveness regions), France (Competitiveness and Convergence regions), Greece (Convergence – slightly – and Transition regions), Italy (Competitiveness and Convergence regions), UK (Competitiveness regions – marginally).

Funding per head larger in regions with relatively high GDP per head

Bulgaria, Czech Republic, Romania, Germany (Convergence regions), Portugal (Convergence regions).

No relationship between funding per head and GDP per head

Hungary, Poland, Netherlands, Sweden.

In most countries, therefore, there was an inverse relationship in Competitiveness regions between the level of funding per inhabitant (here measured by allocations to selected projects) and GDP per head, so that there was a relative concentration of the ERDF in regions with the lowest level of GDP per head. The only exceptions are the Netherlands and Sweden, where no relationship between the funding allocated and GDP per head is evident. In Denmark and the UK, however, the inverse relationship is relatively weak, so that there was only a slight tendency for funding to be concentrated in the least prosperous regions.

For Convergence regions, on the other hand, an inverse relationship between funding and GDP per head is only evident in Spain, France and Italy. In the other countries, either there was no relationship between the level of funding and GDP per head (as in Hungary and Poland) or there was a tendency for funding to be relatively concentrated in the regions with the highest GDP per head.

⁴⁶ It should be emphasised that the division of funding between regions is partly estimated, such as on the basis of population, since not all the information on where funding was allocated was available from MAs.

⁴⁷ The data for GDP per head here relate to 2011 and come from the regional accounts data published by Eurostat. Taking another year would not affect the results significantly because relative levels of GDP per head tend to change only slowly over time (see Chapter 1 above). The figures are expressed in PPS terms, but this does not affect the relative levels across regions since PPS adjustments are confined to the national level.

2.7.2 The division of funding by type of region

It is also possible from the data compiled to examine the allocation of funding between regions of different types, in particular between regions which are predominantly urban, those that are mainly rural, and the intermediate regions in between, the classification being based essentially on the proportion of the population living in areas of high or low population density.

Overall in the EU, a substantially larger amount of funding per head of population was allocated to rural areas (here defined at the NUTS 3 regional level) than urban or intermediate ones (Table 2.7). This, however, reflects the much larger number of rural areas which received support under the Convergence Objective than other types and, conversely, the much larger number of regions supported under the Competitiveness Objective which were urban. Among Convergence regions, therefore, there is no relative concentration of funding on rural areas. Indeed, the amount of allocation per head was similar in urban areas to that in rural ones.

In the EU12, there was a relative concentration of funding on urban areas, which is in line with the finding above that, in most of the countries, regions with relatively high GDP per head tended to receive more funding than those with lower levels.

In the four southern EU15 Member States, in marked contrast, the level of funding per head in Convergence regions was almost twice as large in rural areas as in urban ones. In Transition regions, the funding going to rural areas was also much larger per inhabitant than for urban areas. On the other hand, for Competitiveness regions the reverse was the case, with a relative concentration of funding in urban areas.

Table 2.7 Allocation of the ERDF and Cohesion Fund to regions by type and Objective, 2007-2013 (EUR per head)

	Urban	Intermediate	Rural	Total
EU12	1 962	1 523	1 447	1 584
EU4 (EL,ES,IT,PT)	513	725	1 386	775
Convergence	1 287	1 461	2 199	1 648
Competitiveness	124	90	99	109
Transition	966	777	1 528	1 022
EU15 (excl. EU4)	95	147	181	128
Convergence	978	836	830	869
Competitiveness	59	70	107	71
Transition	412	427	408	415
EU27	400	610	906	593
Convergence	1 618	1 431	1 580	1 527
Competitiveness	97	74	106	91
Transition	927	770	1 057	903

Source: Ex post evaluation, WP13 and Eurostat for population figures. The latter relate to 2010.

In the rest of the EU15, the amount of funding per head, on average, in Convergence regions (which are mostly in Germany, as noted earlier) was also larger in urban areas than in rural or intermediate ones. In Competitiveness regions, on the other hand, there was a clear relative concentration of funding on rural areas, which tend to have relatively low levels of GDP per head. In Transition regions, there was little difference in funding per head across the different types of area.

2.8 The delivery system (WP12)

2.8.1 Introduction

The financial implementation of Cohesion policy over the 2007-2013 period, described above, was conditioned by the delivery system in place, which is specified in detail in the European Council regulations relating to the Structural Funds (see Box). The nature of the system and the way that it was administered over the period are important for ensuring that the funding available was spent in the policy areas and on the items allowed in the regulations and that expenditure happened within the time allowed. Equally, they are important for ensuring that the funding was used not only legally and in line with the regulations but effectively in pursuit of the objectives of policy.

There is a growing body of evidence that the success of Cohesion policy programmes in reducing regional disparities and in helping to achieve the wider priorities of increasing growth and employment across the EU depends critically on both the system in place and the competence of the authorities concerned to manage it. The Sixth Report on Economic, Social and Territorial Cohesion devotes a whole chapter to the importance of good governance and includes 'promoting good governance' as part of its sub-title⁴⁸. It lists four ways in which the effectiveness of policy can be impaired if this does not occur: by reducing expenditure if programmes fail to invest all the funding available; by an insufficiently coherent or appropriate strategy being adopted; by lower-quality projects being selected for funding or the best projects not applying for support at all; and by the private sector being unwilling to co-finance investment.

The main features of the delivery system

The delivery system is a multilevel one with a number of different institutional levels (EC, national, regional and local governments), which share responsibility for programming and implementation. The participants are bound by 'contractual' agreements, ratified by the programming documents (mainly the National Strategic Reference Framework and OPs in the 2007-2013 period), which define the policy objectives, the allocation of funding, the implementation arrangements and the responsibilities of each side. An articulate set of 'checks and balances' is defined in order to ensure: transparency and accountability of the decisions (programming, monitoring and reporting); verification and assessment of expenditure (audit, controls and evaluation); and shared decision-making over modifications during programme implementation (monitoring committee, possibility of reprogramming).

A WP of the *ex post* evaluation (WP12) was aimed at assessing whether the delivery system over the 2007-2013 period was fit for purpose and, equally importantly, at examining the way in which it was administered by the authorities in the Member States responsible. Since the delivery system is the same for the ESF, as this is equally a part of the Structural Funds, the WP also covered the way that this was managed and implemented as well as the ERDF and Cohesion Fund.

To evaluate the operation of the system, it compiled information from a range of stakeholders across the EU through web-based surveys, focus groups and interviews, including from national and regional authorities, recipients of funding and European Commission officials responsible for overseeing the policy. Altogether, information and views were collected from around 3,800 people, 720 of them were interviewed, 234 people participated in focus groups and the rest responded to a survey. All Member States were covered. In addition, eight detailed case studies were conducted (in

⁴⁸ *Investment for jobs and growth: promoting development and good governance in EU regions and cities*, Sixth report on economic, social and territorial cohesion, Brussels, 2014. See also *Investing together*, OECD, Paris, 2013, and Rodriguez-Pose and Garcilazzo. 'Quality of Government and the Returns of Investment: Examining the Impact of Cohesion Expenditure in European Regions', *OECD Regional Development Working Papers*, No. 2013/12, 2015.

Poland, Bulgaria, Italy, Greece, Latvia, the Netherlands, Sweden and Germany) to check the validity of the findings and to investigate the underlying reasons. Moreover, seven case studies (in the same countries apart from Germany) were undertaken to assess the effects of the funding provided for technical assistance on improving the administrative capacity of the authorities concerned.

2.8.2 A first condition of success: ensuring project selection and the absorption of funding

As indicated above, in most countries the 2007-2013 programmes had been almost fully carried out by the end of March 2016. The payments claimed from the EU amounted to around 90% or more of the funding available except in a few cases, which, given that 5% of funding is held back until the expenditure is formally approved, means that they were close to absorbing all of the resources due to them for the period. (This applies equally, it should be noted, to the ESF, for which payments to Member States also exceeded 90% of the funding available.)

In a few countries, however, there is a risk that the full amount of funding will not be absorbed – most notably Croatia (not shown above but where less than 70% of funding had been claimed at the end of March 2016); Romania and Italy (where less than 80% of funding had been claimed); and also Slovenia and Malta (where the figure was less than 80% of the total available), if to a lesser extent. In the case of Croatia and Romania, as well as Slovenia and Malta, the slow rate of implementation might be attributable to the need to become accustomed to a new system that was different from the way in which public funds were administered nationally.

The experience in these two countries contrasted with that in Poland where 95% of the funding available for the period (i.e. the maximum amount) had been claimed by March 2016.

Except in a few countries, therefore, the delivery system seems to have worked well in ensuring that funding was absorbed. In a few countries other than Croatia and Romania, however, such as Bulgaria and the Czech Republic, the same kinds of delay in carrying out projects were found, stemming to a large extent from the lengthy procurement process and the time taken to award contracts.

However, the ability to absorb funding, though important, should not be the main criterion for assessing Member State performance in implementing programmes. As indicated above, the rate of implementation was slow for much of the period, slower even than in the previous period, which itself saw a slower rate of implementation than in the period before. In a number of countries, as indicated above, the apparent rate of implementing programmes increased markedly in the later years of the period in order to achieve the relatively high payment rates by March 2016.

There are a number of reasons for the slow rate of programme implementation, not least the delay in programmes being started at the beginning of the period, which is related to the delays in spending the funding from the previous period. Staff were, therefore, employed in ensuring that the 2000-2006 funds were absorbed – a task which went on up to the end of 2009 because of the extension in the period in which funding could be spent – rather than getting the 2007-2013 programmes off the ground. The crisis also led to delays in some areas in being able to carry out planned expenditure, because of difficulties of obtaining the necessary co-financing or because of investment being postponed in the context of the uncertainty generated by the crisis.

At the same time the crisis, and the need to counteract the economic downturn, also gave the authorities an added reason for increasing the rate of implementing programmes. In practice, the delivery system – and the regulations for the period –

proved flexible enough to allow funds to be shifted to areas where expenditure could be accelerated and/or which had a more immediate impact on economic activity. Accordingly, Cohesion policy funding proved to be an important weapon against the effects of the crisis, especially in countries where it represented a substantial part of the finance available for public investment – in the EU12 Member States, in particular, but also in southern parts of the EU, where the recession was severe and prolonged and public finances were tightly constrained.

The shifting of funding in this way, therefore, speeded up the rate of programme implementation, which would have been even slower had it not occurred. Such an acceleration in programme implementation has potentially important implications. In particular, as noted above, it could imply that priority is given to absorption over the effective use of the funds concerned, and that prospective projects are judged in terms of how quickly they can be undertaken rather than how effectively they can contribute to the achievement of policy objectives.

The findings from the evaluation confirmed the importance given to absorption. According to the MAs interviewed, ensuring the absorption of funds was regarded as a vital aspect of project selection. Some 60% of them, therefore, expressed agreement with the statement that *'the project selection criteria applied enabled smooth absorption'* of the funding available and a large proportion were of the view that an in-depth assessment of the quality of project proposals was less important than ensuring absorption.

2.8.3 The second condition: clear objectives and good-quality projects

As indicated above, the contribution to the pursuit of well-defined objectives through undertaking appropriate projects is the second, and arguably more demanding, condition for a programme to be effective. In 2007-2013, the priorities set out in the Lisbon strategy were supposed to influence policy. The evaluation found that there was much more of an effort to integrate these priorities into the design of the programmes than in earlier periods. It is evident from both inspection of the composition of programmes and from the information obtained from MAs that the requirement to earmark a certain proportion of funds for the pursuit of the Lisbon priorities had a major influence on the way that programmes were formulated at the beginning of the period. Almost 80% of the MAs surveyed agreed that *'European strategies or goals played a significant role in the decision on measures or projects funded by the EDF/ESF or Cohesion Fund in 2007-2013'*.

This, moreover, seems to have happened without imposing any serious constraint on the development strategies being pursued across the EU, so that MAs were able to accommodate the Lisbon priorities in the programmes without it significantly influencing the priorities which they wished to pursue. This was partly because of the general way in which the Lisbon priorities were framed, and partly because of the broad way in which objectives were expressed in OPs. According to MAs in Poland, therefore, such a broad definition of policy objectives was a deliberate means of ensuring flexibility when carrying out the programmes and choosing the kinds of project to support, so widening the scope for responding to changes in circumstances and ensuring that they would be able to absorb funding.

Similarly, in Germany, programmes were primarily aimed at pursuing national, or more often regional, strategies more than European priorities and, according to participants in focus groups, the Cohesion policy objectives were broad enough to encompass national or regional goals as well. To the extent that the two sets of objectives were compatible, this is not a problem in itself, though the difficulty comes when the priorities are defined so widely that virtually any use of funding is consistent with their pursuit.

This difficulty manifests itself in the problems that were evident in many countries of transposing policy objectives into the specific projects selected for funding. The vagueness of the objectives, therefore, was reflected in the vagueness of the selection criteria, which together with the importance attached to absorption worked against funding being used in the most effective way. It should be noted that the evaluation did not find a clear-cut difference between EU12 and EU15 countries in this respect.

2.8.4 The administrative burden imposed by the delivery system

The value of a delivery system can only be assessed by weighing benefits and costs against each other. A majority of those surveyed (55%) were of the view that the overall administrative burden relating to project application and implementation was too high in relation to the amount of funding involved and the benefits which were obtained. This was particularly the case in EU15 countries supported under the Competitiveness Objective, where the amount of funding was much smaller, which raises a question over how far the proportionality principle - that the various aspects involved in implementation should be proportional to the amount of funding allocated to the OP - was applied in practice.

In addition, a significant majority (62%) of those interviewed considered that the complexity of internal administrative rules and procedures caused delays in project selection, especially in the EU13 countries. This, in particular, raises a question over the efficiency of the procurement procedures in place, which were a major area of delay as noted above, and over the capacity of the authorities concerned to manage the process.

Nevertheless, despite the widespread view that the administrative burden was too large, both on MAs and final beneficiaries, there was an even more widely held view that the administrative requirements of the system had given rise to benefits. Some 80% of those interviewed, accordingly, considered that the efforts and resources involved in monitoring were well invested, while most of those surveyed considered that the design of the control system was also appropriate, especially the single audit principle involved and the role given to national audit authorities. The increased focus on controls and audit in the period was considered to be important in assuring the European Commission of the legality and compliance of expenditure, which is reflected in the reduction in error rates as compared with the 2004-2006 period. (The average error rate is estimated at 4.5-7.7% in the years 2009-2013, the years when most expenditure for the period took place.) Audit authorities, were, therefore, an additional source of advice for MAs as well as informing the Commission about the regularity of expenditure and lending more certainty to the interpretation of Commission guidelines (as reported in Bulgaria and Latvia but also Germany and Sweden). Around two-thirds of those surveyed, therefore, considered controls and audit to have been helpful in reducing errors and irregularities.

In practice, the evaluation found that much of the increased administrative burden was a result of implementation problems rather than of the design of the system as such. These problems stemmed from multiple, not always well coordinated, control layers between different programme authorities and bodies, the contradictory interpretation of the regulations, a lack of capacity at management level, the low uptake of simplification measures which were made available⁴⁹ and the limited use of digital technology. The last was a particular issue in some EU 12 Member States where there was accordingly a need to keep voluminous paper records and where administrative capacity to keep control over these was limited. The burden of financial

⁴⁹ The standard cost option was one of these simplification measures. This was adopted more for the ESF, which involves relatively standardised and recurrent measures, than for the ERDF for which it is much more difficult to implement and for which, accordingly, it was little used.

management and controls tended to divert the attention of many authorities away from strategic aspects towards interventions that were simpler to implement and involved less administrative effort.

2.8.5 Monitoring

Monitoring and reporting are vital functions to ensure accountability, transparency and the ability to modify on-going programmes to better pursue strategic objectives or to respond more effectively to changes in the policy context. Monitoring provided more and better information on the implementation of programmes than in past periods. The application of core indicators of output was an improvement over the past. Conceptual and practical problems prevented the development of result indicators designed to give a clear picture of the progress of programmes towards objectives beyond the level of individual projects.

Financial indicators, accordingly, often remained the main measure of programme performance, and the preoccupation with the absorption of funding tended to divert attention away from indicators of programme results. Reporting suffered from similar problems, in the sense that limited and poorly defined data on the outcomes of programmes made it difficult to assess what they had achieved (a point that is repeated on a number of occasions in the next chapter).

2.8.6 Evaluation

In the 2007-2013 period it was no longer compulsory for evaluations of programmes to be carried out at specific times, though they were encouraged in the regulatory framework in order to promote accountability and to improve the effectiveness of programmes.

As compared with the previous programming period, the number of evaluations carried out increased substantially and followed more closely the evolution of OPs⁵⁰. In many cases the evaluations undertaken were concerned with implementation issues or with the progress made in carrying out programmes, so effectively performing a monitoring task. There were relatively few impact evaluations to assess the results of the investment undertaken for the first 4-5 years of the period. These, however, increased in frequency as the period went on, partly in response to the efforts of the Commission to encourage them to be carried out, though also partly perhaps as a result of the pressure to increase the effectiveness of expenditure imposed by the growing scarcity of public finances⁵¹.

Several EU12 countries (Poland, Lithuania and the Czech Republic especially) carried out a large number of evaluations, and in a relatively systematic way, while by contrast Member States with long experience of evaluating national policy (such as Germany and the UK) carried out relatively few. In Poland evaluation is arguably one of the most significant outcomes of the implementation of the Cohesion policy delivery system, which has spread into the wider public administration and has served as a source of evidence for both strategic planning and operational management at both national and regional levels. On the other hand, some Member States that in the

⁵⁰ It is estimated that over 900 evaluations were carried out on ERDF and Cohesion Fund programmes for the 2007-2013 period. The estimate was made as part of pilot study on an Evaluation Helpdesk carried out by Applica and Ismeri Europa for DG Regional and Urban Policy and relates to evaluations produced by Member States up to the end of 2014. It updates an estimate made by the Expert Evaluation Network on the performance of Cohesion policy, published in the Synthesis report of the network for 2013: http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/eval2007/2013_een_task2_synthesis_final.pdf

⁵¹ It is estimated that 229 of the 917 evaluations recorded were impact evaluations.

previous period had expanded evaluation activity (Spain and Greece, in particular) reduced it significantly.

Differences were also evident between policy areas. While enterprise support, RTDI (RTD plus innovation) and ESF co-financed active labour market measures were subject to numerous evaluations, support for environmental infrastructure, energy supply, transport and social inclusion was relatively little covered despite the large amount of funding absorbed by this. Accordingly, major policy areas, especially in Convergence regions, where most funding is concentrated (less than a third of evaluations up to the end of 2013 were carried out in these regions, where around 80% of funding is spent), remained largely unevaluated.

The large number of evaluations carried out in the absence of an obligation is an important outcome. However, the quality and partial nature of many of the evaluations undertaken is a matter of some concern and although impact evaluations were increasingly undertaken over the period, they were often unable to produce reliable evidence on the effects of the measures examined.

As above, the evaluation found no major difference between EU12 countries and others in the use made of monitoring indicators and evaluations and their effectiveness. The commitment and the capacity of individual Member States provided more of an explanation of such differences.

2.9 Policy implications

The regulations for the 2014-2020 period have already addressed many of the weaknesses identified in the evaluation of both the 2007-2013 period and the previous one:

- programming has been more closely oriented towards results and connected more directly to common EU policies, Europe 2020 in particular;
- the need to concentrate funding on a limited number of priorities and thematic objectives should make it easier to track results and to relate them to the more specified policy objectives;
- *ex ante* conditionalities have been introduced to ensure common minimum strategic and operational standards;
- a financial reserve has been made available to OPs according to their performance;
- evaluations and evaluation plans have been made compulsory and more oriented to assessing the results of programmes;
- deficiencies in monitoring systems may result in financial corrections being imposed, leading to a net loss of funds for the programme.

Nevertheless, some findings still need to be taken into account either when implementing programmes in the current period or when designing the regulations for the next period.

The evaluation drew attention to a number of tensions or conflicts affecting the delivery system which stem from the way that multilevel governance operates and which consequently need to be moderated so far as possible. In the first place, the evident need for closer coordination of common EU policies implies a reduction in the autonomy of regional and local authorities to define their own strategies, or at least a need to ensure that they are consistent with such policies. At the same time, the tightening constraints on national public finances has increased the importance of EU funding to Member States and regions and their interest in it. An EU strategy which

takes more explicit account of regional needs in different parts of the Union would help to avoid any potential conflict between these two sets of development objectives.

Secondly, there is tension between, on the one side, the need for controls and financial management procedures to ensure that funding is used for the purposes intended and that expenditure conforms with the regulations and, on the other, the need for simplification to increase the timeliness of spending and to reduce the costs of managing the funds. While there is a real trade-off between the two, in many cases there are overlapping controls at national and EU level, implying duplication of effort and costs. In other cases, however, national regulations and procedures still do not comply with EU standards, are not sufficiently efficient in targeting potential risks and errors or add unnecessarily complicated procedures to protect public funding even more ('gold plating'), giving rise to errors and/or delays without being any less costly to operate. In the former case, it ought to be possible to rationalise procedures leading to a reduction in administrative costs without any reduction in compliance or increase in errors. In the latter case, there remains a need to reform regulations and procedures at national level, which is also likely to lessen administrative costs since it is often a case of streamlining procedures.

Thirdly, putting more emphasis on results has implications for every aspect of the delivery system – for programming, project selection, and monitoring and evaluation, as well as financial control. The focus on results in the current 2014-2020 period, therefore, implies a strengthening of programming, a reinforcement of the partnership principle to ensure the involvement of those concerned with expenditure on the ground, more effective and regular monitoring and more and better evaluations. It also implies a need for the findings of evaluations to feed into the decision-making process so that they lead, where necessary, to the modification of programmes.

Fourthly, the evaluation highlighted the administrative weaknesses of many authorities across the EU. The examination carried out as part of WP12 of the funding going to technical assistance and the way it was used suggests the need for a more conscious effort to build capacity and the setting of measurable efficiency targets to monitor progress in this regard. Institutional efficiency is a priority in the current programming period, but the provision of financial support alone is unlikely to be sufficient on its own to give rise to capacity-building if it is not linked to specific rules on the way the support can be spent as well as to explicit commitments on the part of the public authorities concerned to improve their management of funding.

Annex to Chapter 2 – Relationship between allocations of funding per head and GDP per head by region

Annex Table A.1 Relationship between allocation of funding per head and GDP per head in Convergence, Transition and Competitiveness regions in 2007-2013

	Correlation co-efficient	Region with highest funding per head	Region with lowest funding per head	Comments
Convergence regions				
<i>Funding inversely related to GDP per head</i>				
Spain	-0.50	Extremadura (lowest GDP pc of ES overall)	Castilla-La Mancha (average GDP pc of Convergence regions in ES)	
France	-0.91	Guyane (lowest GDP pc of FR overall)	Guadeloupe (highest GDP in Convergence regions of FR with Martinique)	
Greece	-0.30	Western Greece/Dytiki Ellada (GDP pc below average of Convergence regions in EL)	Northern Greece/Bόρειο Αιγαίο (GDP pc average of Convergence regions in EL)	
Italy	-0.43	Calabria (lowest GDP pc)	Sicilia (av GDP pc in Convergence regions)	
<i>Funding positively related to GDP per head</i>				
Bulgaria	0.54	Yugoiztochen (highest GDP pc after Yugozapaden but just half of it)	Severozapaden (lowest GDP pc)	
Czech Rep.	0.58	Jihozápad (GDP pc average of Convergence regions in CZ)	Severovýchod (2nd lowest GDP pc)	Severozápad lowest GDP pc and 2nd lowest allocation
Germany	0.42	Mecklenburg-Vorpommern (GDP pc average of Convergence regions in DE)	Brandenburg – Nordost (lowest GDP pc)	
Portugal	0.96	Região Autónoma dos Açores (GDP pc just below country average)	Norte (lowest GDP pc)	
Romania	0.70	Vest (GDP pc above country average)	Nord-Est (lowest GDP pc)	București – Ilfov has highest GDP pc and 2nd highest allocation pc
<i>No relationship between funding and GDP per head</i>				
Hungary	0.11	Dél-Alföld (GDP pc below average of Convergence regions in HU)	Dél-Dunántúl (GDP pc below average of Convergence regions in HU)	
Poland	0.07	Warmińsko-Mazurskie (2nd lowest GDP pc)	Opolskie (GDP pc below country average)	
Slovakia	-0.09	Stredné Slovensko	Východné Slovensko (lowest GDP pc half of EU)	

	Correlation co-efficient	Region with highest funding per head	Region with lowest funding per head	
Transition regions				
Funding inversely related to GDP per head				
Germany	-0.68	Leipzig	Lüneburg (lowest GDP per head of transition regions in DE)	
Spain	-0.54	Ciudad Autónoma de Melilla (lowest GDP of transition regions in ES)	Comunidad Valenciana (average GDP pc in group of transition regions)	
Greece	-0.51	West Macedonia/Δυτική Μακεδονία	Attica/Αττική (highest GDP pc overall and lowest allocation pc)	
Funding positively related to GDP per head				
UK	0.57	Merseyside	South Yorkshire	
Competitiveness regions				
Funding inversely related to GDP per head				
Austria	-0.94	Kärnten (2nd lowest GDP pc)	Wien (highest GDP pc)	
Belgium	-0.38	Liège (GDP pc below average)	Prov. Vlaams-Brabant (highest GDP pc after Brussels)	Luxembourg, lowest GDP pc, 2nd largest funding
Germany	-0.27	Berlin (GDP pc below country average)	Oberbayern (2nd highest GDP pc after Hamburg)	
Spain	-0.52	Cantabria (lowest GDP pc of Competitiveness regions in ES)	Illes Balears (GDP pc around EU average)	
Finland	-0.75	Pohjois-Suomi (lowest GDP pc)	Etelä-Suomi (2nd highest GDP pc after Åland)	
France	-0.32	Corse (allocation pc 4 times average of Competitiveness regions R; GDP pc below average)	Île de France (highest GDP pc)	
Italy	-0.65	Molise (lowest GDP pc of Competitiveness regions)	Lombardia (2nd highest GDP pc after Bolzano/Bozen)	
No relationship between funding and GP per head				
Denmark	-0.22	Syddanmark	Hovedstaden (highest GDP pc)	
Netherlands	0.13	Groningen (highest GDP pc)	Noord-Holland (third highest GDP pc)	
Sweden	-0.15	Övre Norrland (2nd highest GDP pc after Stockholm)	Stockholm (highest GDP pc)	
UK	-0.22	Northern Ireland (GDP pc below average of Competitiveness regions)	Berkshire, Buckinghamshire and Oxfordshire and Surrey, East and West Sussex (GDP pc above UK average)	

Note: Allocation of funding relates to allocation to selected projects as at end-2014. GDP per head relates to 2011.

Source: Ex post evaluation of Cohesion policy, Work Package 13.

Chapter 3 – Synthesis of Work Package findings

This chapter summarises the main points to come out of the evaluations of Cohesion policy programmes over the 2007-2013 period undertaken by the various WPs. It begins by examining the findings emerging from the three WPs covering support for enterprises, WP2 on SMEs, WP3 on financial instruments and WP4 on large enterprises. It then considers, in turn, the evaluations of transport (WP5), environmental infrastructure (WP6), energy efficiency in residential and public buildings (WP8), culture and tourism (WP9), urban development and social infrastructure (WP10) and the Interreg programmes funded under the ETC Objective (WP11).

3.1 Enterprise support (WP2, WP3 and WP4)

3.1.1 Introduction

Enterprise support represented a major area of funding for the ERDF in the 2007-2013 programming period. The overall funding going to enterprise support amounted to EUR 51.9 billion, around 20% of the total of the ERDF and Cohesion Fund support available to Member States for the 2007-2013 period, or over a quarter of the ERDF support available⁵². Enterprise support was the subject of three WPs of the *ex post* evaluation:

- WP2, which examined support to SMEs and, in particular, the contribution of funding to increasing research and innovation by them as well as to their general development;
- WP3, which covered the use of financial instruments (FIs) for enterprise support;
- WP4, which focused on support of large enterprises.

The main findings of the evaluations carried out by the WPs are examined in turn below. In practice, WP4 is considered before WP3, which was concerned with the form which the funding going to enterprises took and is, therefore, relevant for both the other WPs, even though FIs went predominantly to SMEs rather than large enterprises. ERDF support to RTD and innovation which went to research centres and organisations other than enterprises is also examined, since although this was not covered by a WP, it represents an important area of financing, especially given the focus of EU policy at the time on the Lisbon strategy.

3.1.2 WP2 – Support to SMEs

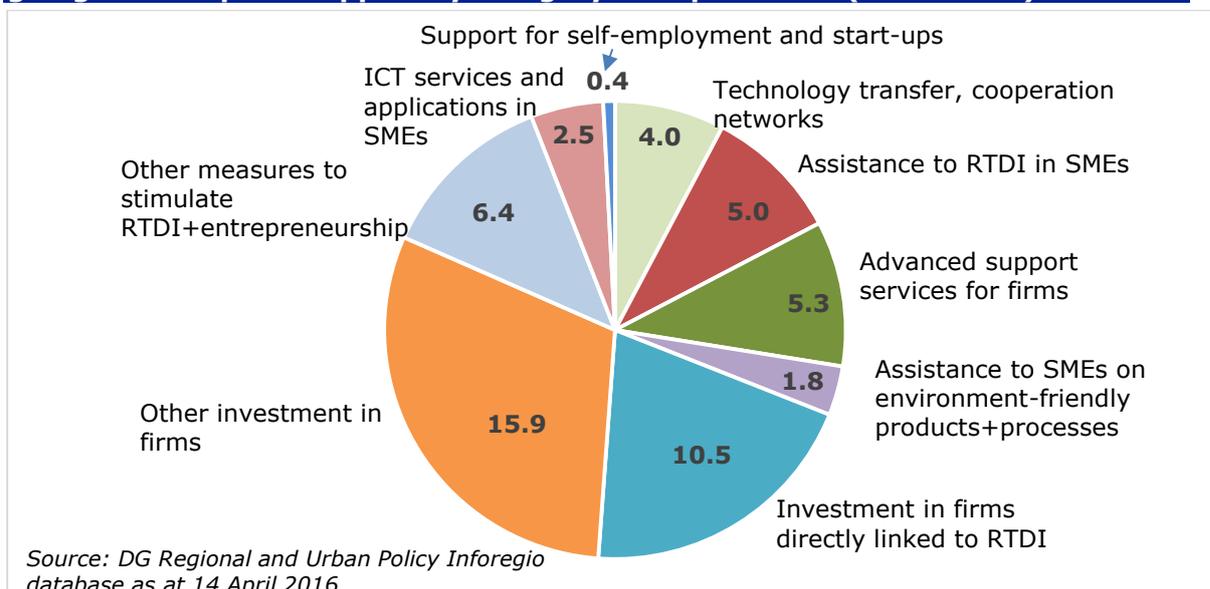
Amount of funding and its division

The ERDF support to SMEs across the EU co-financed a number of different measures, ranging from technology transfer and advice and support services to direct investment in RTDI and new technology and assistance for business start-ups. Much of the funding was directed at stimulating research and innovation, in line with the Lisbon strategy, which conditioned enterprise support over the period. Overall, as noted above, the amount of ERDF support going to enterprises totalled EUR 51.9 billion, of which EUR 30.2 billion was linked in some way to supporting RTDI, either to help them to invest in RTD themselves or to provide support services or to encourage them to cooperate with research centres. Some EUR 15.9 billion, went to support of

⁵² The figure refers to the decided amount of funding as at 14 April 2016. It excludes the amount of support going to SMEs and RTD and innovation under the ETC Objective.

investment in firms other than that relating to RTDI, while the remainder went on other support services or on helping people become self-employed and start-up businesses (Figure 3.1, which shows the different categories of expenditure into which funding is divided according to the DG Regional and Urban Policy classification system)⁵³.

Figure 3.1 Decided amounts of ERDF for the 2007-2013 period in the EU27 going to enterprise support by category of expenditure (EUR billion)



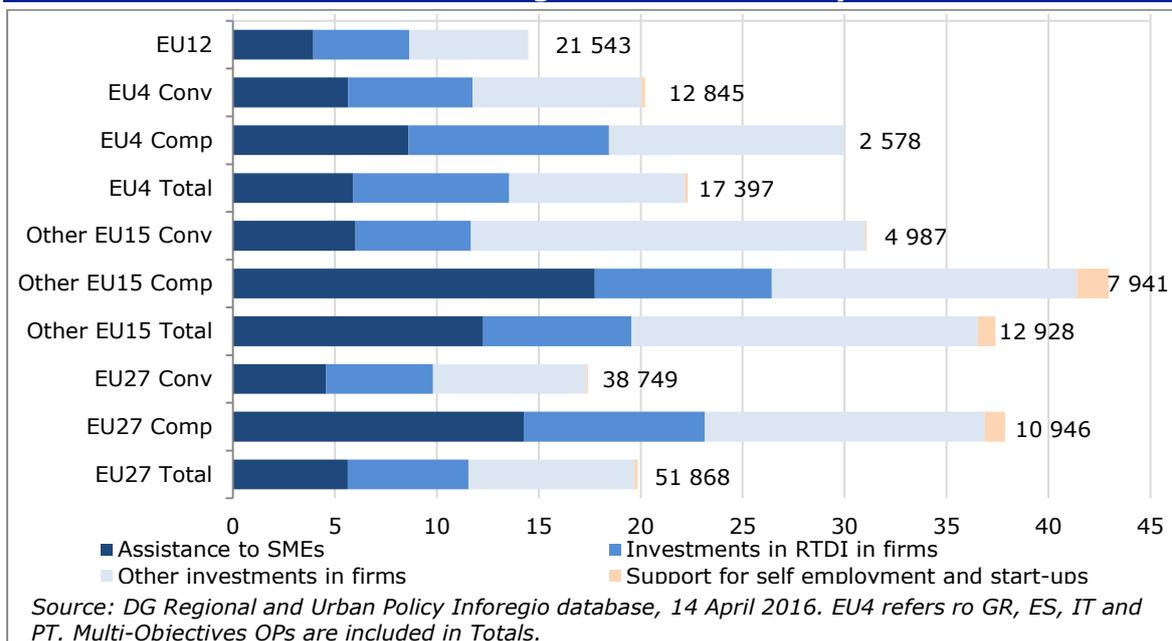
Much of the funding going to enterprise support was accounted for by the EU12 countries (EUR 21.5 billion), and much of the rest by Convergence regions in the EU15 – EUR 12.9 billion in the four southern EU15 countries and EUR 5.0 billion in the remainder of the EU15. (Figure 3.2, in which funding is divided by type of expenditure, distinguishing between direct support of investment in firms for RTD, other capital equipment, aid to support services and support for self-employment and business start-ups⁵⁴.)

In terms of the share of the ERDF and Cohesion Fund support available, however, funding going to enterprise support was significantly larger in the four southern EU15 Member States and, even more so, in the other EU15 countries than in the EU12. It was particularly large in the Competitiveness regions, especially in the other EU15 countries (accounting for around 43% of total funding). Here the focus was on financing support services to firms rather than their investment as such, which was more of a focus in the EU12 and Convergence regions in the four southern EU15 countries. The Competitiveness regions in the other EU15 countries were also the only parts of the Union where support to self-employment and business start-ups accounted for a significant share of funding. The amount involved, however, both for this and other support measures was small relative to that in the EU12 and Convergence regions generally (as shown in Figure 3.2 below).

⁵³ Not all this funding went to SMEs. Some went to large enterprises, as indicated in the next section, and some went to research centres, universities or other organisations, since the categories of expenditure indicated in Figure 3.1 include some support to these as well as to SMEs.

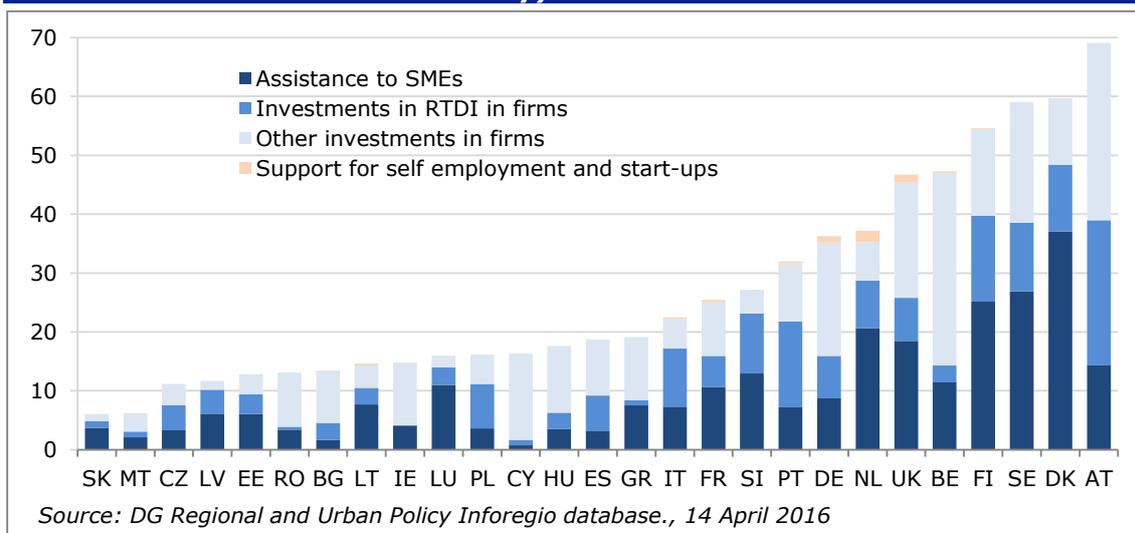
⁵⁴ Assistance to SMEs and support services include: technology transfer and improvement of cooperation networks (3); advanced support services for firms (5); assistance to SMEs on environment-friendly products and processes (6); other measures to stimulate RTDI and entrepreneurship in SMEs (9); services and applications for SMEs (e-commerce, education and training, networking, etc.) (14); other measures for improving access to and efficient use of ICT by SMEs (15). Figures in brackets are the categories of the DG Regional and Urban Policy classification system. Investment in RTDI in firms includes: assistance to RTD, particularly in SMEs (4) and investment in firms directly linked to research and innovation (7). Other investment in firms is what is included in Category 8 of the classification system. Support for self-employment and business start-up is what is included in Category 68.

Figure 3.2 Decided amounts of ERDF for the 2007-2013 period going to enterprise support by broad region and type of measure (% of total ERDF and Cohesion Fund and EUR million – figures at end of bars)



Both the share of funding going to enterprise support and its division between broad types of measure varied markedly between countries, especially in the EU15 (Figure 3.3). The amount going to support of investment in firms, whether in RTDI or other⁵⁵, as opposed to support services, accounted for most of the funding in Austria, Belgium, Germany and Portugal (all countries with Convergence or Phasing-in/Phasing-out regions). In the other countries, the reverse was the case or there was a more even split.

Figure 3.3 Decided amounts of ERDF for the 2007-2013 period going to enterprise support by type of measure in Member States (% of total ERDF and Cohesion Fund in each country)

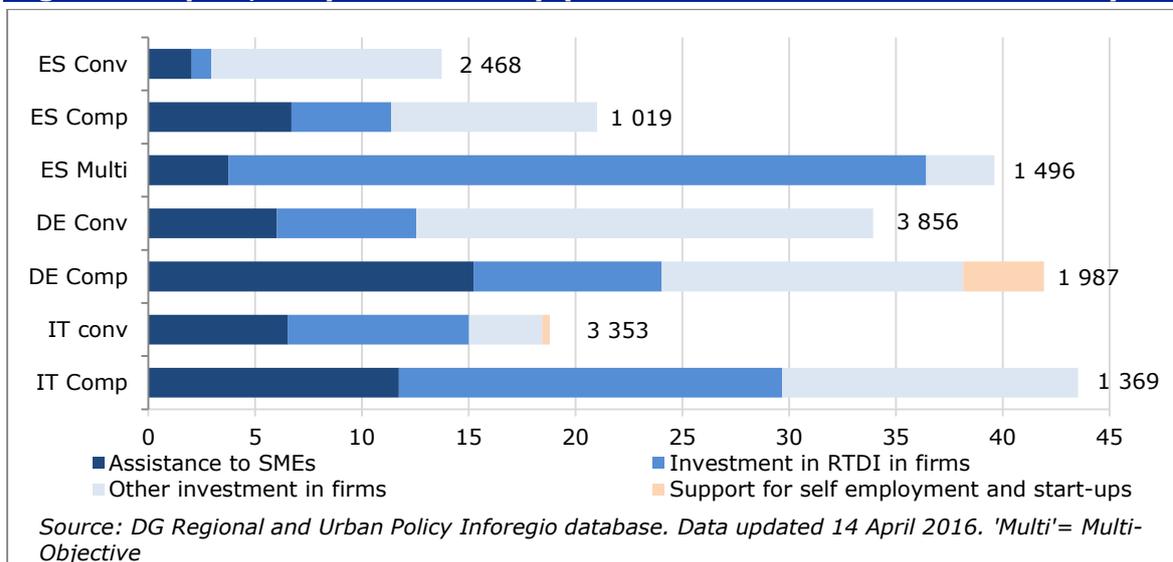


⁵⁵ In practice, there is no neat dividing line between investment in RTDI and other. The emphasis on the former in the Regulations, in line with the Lisbon strategy, led MAs to adopt a very wide definition of RTDI and to include support under this head that, in some cases, was only tenuously linked with research or innovation.

In the EU12 the overall share of funding going to enterprise support was more similar across countries, though there was some variation in the division between types of measure.

The relatively small shares of funding going to enterprise support in Spain and Italy, as well as to a lesser extent in Germany, conceal variations between Convergence and Competitiveness regions, which reflect in turn the much larger allocation of funding to infrastructure projects in the former regions. In Italy, therefore, 42% of funding went to enterprise support in Competitiveness regions, the same as in such regions in Germany, but only 19% in Convergence regions (34% in Germany) (Figure 3.4). In Spain, the difference was less marked (just over 21% as against just over 13%), but here there was a national programme of enterprise support ('Multi' in the Figure), which covered both types of region. This had a significantly larger budget than for Competitiveness regions, most of it going to investment in RTDI in firms.

Figure 3.4 Decided amounts of ERDF for the 2007-2013 period going to enterprise support by type of measure in Convergence and Competitiveness regions in Spain, Italy and Germany (% of total ERDF and Cohesion Fund)



The differences across the EU in the amount of funding allocated to enterprise support can be seen more clearly by relating it to population in the different regions (Table 3.1)⁵⁶. This shows that funding per head of population was larger in most cases in Convergence regions than in 'Phasing-out' or 'Phasing-in' regions (termed 'Transition' in the table) and considerably larger than in Competitiveness regions (except in the EU12, where the two capital city regions of Prague and Bratislava allocated a relatively large amount of funding to enterprise support).

It also shows that the amount allocated to enterprise support was particularly large in the four southern EU15 countries, much larger than in the EU12, reflecting the greater priority in the latter attached to investment in infrastructure. Indeed, the funding per head allocated to enterprises was much the same in the Transition regions in these four countries as in the EU12.

⁵⁶ This is done on the basis of the data for the allocation of funding to selected projects in both NUTS 2 and NUTS 3 regions produced by WP13. These data were collected from MAs and, although they include some estimation for missing figures, they should give a reasonable indication of the amounts going to the different regions. The fact that the data compiled went down to the NUTS 3 level enables the type of region – whether predominantly urban, rural or intermediate – to be distinguished as well as the Objective under Cohesion policy that determined the scale of funding.

Table 3.1 Allocation of funding to SMEs by Objective, 2007-2013 (EUR per head of population)

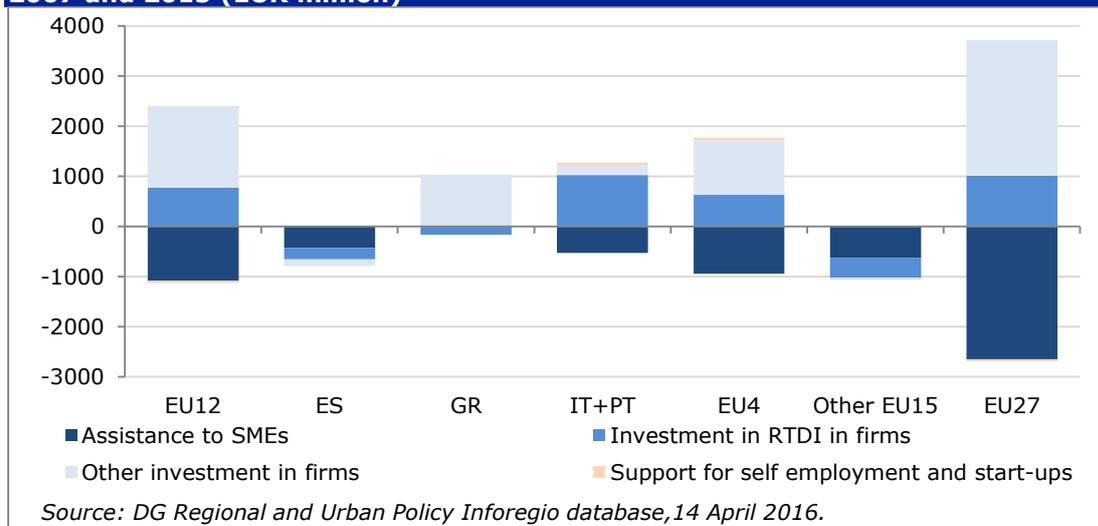
	EU12	EL, ES, IT, PT	Other EU15	EU27
Convergence	235.0	362.4	249.2	271.2
Transition	212.6	230.3	161.8	208.6
Competitiveness	238.7	35.7	29.8	32.3

Note: The figures relate to allocations to selected projects. ETC OPs are excluded. Transition regions are 'Phasing-in' and 'Phasing-out' regions.

Source: WP13 of the ex post evaluation and Eurostat, regional accounts (for population, data relate to 2010).

Changes in funding to SMEs over the period

Significant changes were made to the amounts of funding going to enterprise support over the period and in its division between types of support measure, which reflect to a large extent the effect of the crisis and the squeeze on credit to SMEs which it involved. The changes, however, were far from uniform across the EU. Over the EU as a whole, there was a net addition of EUR 1.1 billion to funding for enterprise support over the period compared with what was initially planned at the beginning (Figure 3.5). This was a result of a big reduction of EUR 2.1 billion in funding going to support services of various kinds (including support for self-employment and start-ups⁵⁷), which was more than offset by an increase of EUR 3.2 billion in direct support to investment in firms, mostly to investment other than in RTDI.

Figure 3.5 Changes in decided amounts of ERDF going to enterprise support between 2007 and 2015 (EUR million)

The shifts which occurred in the EU12 countries were similar, with a reduction in funding for support services of EUR 1 billion being more than offset by additional funding going to support of investment in firms, again most of it for investment other than in RTDI. In Italy and Portugal, the pattern of change was also similar, except that most of the increase in funding for investment in firms was focused on RTDI, especially in Portugal (where investment in RTDI was increased by around EUR 680 million).

In the other two southern EU15 countries, however, and in the rest of the EU15, the pattern of change was different. In Spain, funding was reduced for investment in firms as well as for support services. In Greece, funding for support services was increased along with funding for investment other than in RTDI. In the other EU15 countries, funding for direct investment in firms linked to RDTI was reduced together with

⁵⁷ This was reduced by EUR 40 million in total.

funding for support services. The small increase in funding for other investment in firms was concentrated in a few countries, mainly in the UK.

In the EU15 other than in Greece, Italy and Portugal, therefore, there was not the same addition to funding to help firms invest – or, as indicated below, to remain in business – as in these three countries and the EU12. This was true for all 12 EU15 countries concerned.

Content of the evaluation

The evaluation was carried out between August 2014 and February 2016. Most of the data analysis and fieldwork was carried out in the latter part of 2014 and the first half of 2015. It consisted of:

- Literature review of the rationale for, and evidence for the effectiveness of, public support to SMEs.
- Analysis of the policy instruments used to provide support to SMEs in a sample of 50 OPs, which accounted for around 60% of the overall funding going to such support.
- Analysis of the regional context in which the 50 OPs were implemented.
- Eight case studies of selected OPs: Denmark, Innovation & Knowledge; Germany, Sachsen; France, Ile-de-France; Spain, Castilla y Leon; Lithuania, Economic growth; Poland, Innovative economy; Czech Republic, Business & Innovation; Italy, Puglia.
- Seminar with representatives of MAs and external experts.
- Three theory-based impact evaluations of three policy instruments implemented in different contexts, based on interviews with recipients of support and responses to a questionnaire.

The SMEs supported

Overall, some 246 000 individual SMEs were directly supported in the 50 OPs across the EU covered by the evaluation, which in turn were responsible for around 60% of the overall support provided to SMEs in the Union as a whole. This implies that around 400 000 SMEs in total received direct support across the EU as a whole. Many others were beneficiaries of indirect support from the advisory and support services which were co-financed.

The firms directly supported represent just under 2% of the 15.7 million or so SMEs in the countries and regions covered by the evaluation. This, however, greatly understates the potential importance of the support since in many cases, though by no means all, it was targeted at the more strategic firms in a region, such as those engaged in manufacturing or tradeable services, and accordingly sources of potential growth, rather than those in sectors such as retailing or other basic services in which most SMEs operate (see Box). Some 44% of the firms supported were, therefore, engaged in manufacturing, which implies that around 7% of the total number of SMEs in manufacturing in the regions covered received direct support – and a similar proportion in the EU as a whole, assuming that the support provided in these regions was reasonably representative of that in other regions.

Moreover, although more than half of the support (54%) went to micro-enterprises (those with fewer than ten people employed), these represent around 92% of the total number of SMEs in the EU. Accordingly, a disproportionately large amount of funding was allocated to SMEs with ten or more people employed, which can be expected to be more important for regional growth than micro-firms. In practice, around 8% of small firms in the EU (those with 10-49 people employed) were directly supported by the ERDF and around a quarter of medium-sized firms (those with 50-249 people employed). For manufacturing, the figures are higher, around 15% of small firms in the EU receiving direct support and over a third of medium-sized enterprises.

The average amount of funding going to each SME is estimated at around EUR 115 000, though there was wide variation between different measures of support, from several million euro (up to EUR 5 million in Poland for co-financing the purchase of modern machinery, for example) to a few thousand euro (such as in respect of short-term credit for micro-enterprises).

Regional growth dependent on the competitiveness of firms located there

The growth of a region over the long term ultimately depends on the performance of the producers located there in exporting to other regions and in competing with imports from other regions. Since manufactures still account for most of the goods and services that are traded, the competitive performance of the manufacturing firms in a region is particularly important, though in a few regions tradeable services are equally if not more important. The value-added generated and the jobs created by manufacturers, it should be noted, may not be located in manufacturing but in firms supplying manufacturers, many of which will be in services or in the primary sector, or in those dependent on their output (such as retailers) or on the income they generate (such as the many kinds of service producers). Indeed, the tendency over the long term has been for the size of the manufacturing sector in EU countries to shrink and services to expand, but the competitiveness of the manufacturers located there remains critical for economic growth.

Rationale for support of SMEs

The reasons for supporting SMEs set out in OPs were, generally, to help in the pursuit of regional growth or to increase the rate of innovation, or, in many cases, both. In most cases there was no explicit targeting of the enterprises to support, and those receiving financing were essentially determined by demand. A range of policy instruments, 13 on average per OP, was usually on offer, covering the general provision of credit to specific support of R&D and innovation, reflecting the concern of MAs to provide firms with support to meet their various needs. At the same time, the weight given to the different measures – to support of R&D as opposed to general short-term credit, for example – tended to reflect the relative importance attached to the underlying policy objectives (to encouraging innovation as against helping firms to remain in business). In addition, there were often conditions attached to the receipt of support, particularly that directed at stimulating innovation, which effectively limited the enterprises that were eligible to apply; and which, accordingly, were a form of targeting. Nevertheless, the range of measures on offer and the general way that the rationale for support was expressed obscured both the strategic goal of many programmes and how it was expected to be achieved.

Despite this lack of clarity, two distinct motivations for the support provided are evident from a detailed examination of the policies pursued. In the first place, the ERDF was widely used to complement – or in some cases to replace – national or regional support for SMEs to help them withstand the effects of the crisis. This was especially so in the parts of the EU most severely affected and where shortage of bank finance was particularly acute. The support provided was mostly available to all firms without being targeted at specific ones and with little indication of what it was expected to achieve, except seemingly to help as many firms as possible. Although a substantial amount of funding was allocated to such support, the individual amounts of credit extended were generally small.

Secondly, the ERDF was also used to support more selective strategies aimed at assisting the more dynamic and innovative SMEs to carry out R&D projects or to invest in new technology and more efficient methods of production. This was the case in both the more advanced economies, such as Denmark, Sweden or Finland, and the less advanced ones, such as Castilla y Leon in Spain. The measures used were in many cases tailored to the specific needs of SMEs and linked to a clear view of the changes they were intended to bring about.

Forms of support

Grants, in the sense of non-repayable financial assistance, were the most common form of support to SMEs, accounting for almost half of the policy instruments identified and for most of the monetary amounts provided. FIs, however, or repayable forms of assistance, became increasingly important over the programming period, particularly after the onset of the global recession in 2008 and the economic and financial crisis that followed. Once established, these represented an easy way of providing short-term credit to firms without much need for co-financing (which became difficult to find) and in many countries could be used to finance working capital as well as fixed investment. They, therefore, represented a means of keeping afloat firms that otherwise might have been forced to close down in operation.

Moreover, while grants accounted for most of the support provided, they were often combined with other forms of support, such as loans, consultancy services or technical advice and assistance. Some 22% of all the policy instruments identified were of this type, involving a mix of measures.

Main achievements

The indicators which were in place to monitor the performance of the support provided to SMEs over the period, as in other policy areas, give only a partial view of what was achieved. Not only did they cover only a few of the results which are relevant – jobs directly created and business start-ups supported, but not the change in R&D expenditure or the new products and processes which resulted from it or the gains to productivity or exports – but the latest data available on these extend only to the end of 2014. The last year of the period in which expenditure could be carried out (2015) is therefore not covered, and in many cases the last two (2015 and 2016). Moreover, the coverage of the indicators that were monitored was far from complete. Even though core indicators were defined that were intended to be capable of being aggregated to give an overview of achievements, it was not compulsory to report them and not all MAs systematically collected the data for relevant items of expenditure. They, therefore, understate the results of the support provided to a significant but unknown extent.

They show that up to the end of 2014:

- an estimated 400 000 SMEs across the EU received direct support⁵⁸;
- 33 600 projects were undertaken to support cooperation between SMEs and research centres;

and that the support provided resulted in:

- 121 400 new businesses being helped to start up;
- 322 100 new jobs, in full-time equivalent terms, being directly created in SMEs.

The figure for the number of new jobs created, though significant, is a gross underestimate since while most MAs reported the creation of jobs, they did not relate them specifically to SMEs, even though support of these was the main way in which the ERDF *directly* created jobs over the period. (It, of course, led to a much bigger expansion of jobs overall if the indirect effects on employment are taken into account.) As is pointed out below, in total some 940 000 new jobs were reported by MAs up to the end of 2014, the majority of them almost certainly in SMEs.

⁵⁸ This estimate is based on the finding by WP2, noted above, that 246 000 enterprises received support in the OPs which were covered in the evaluation which represented around 60% of the total funding going to enterprise support over the programming period.

Beyond the indicators, a major outcome of ERDF support over the period was that it helped SMEs withstand the effect of the crisis. It provided a substantial source of funding at a time when other sources of finance from both banks and governments were drying up. It accordingly enabled SMEs to invest in modernising or expanding plant and equipment and to continue their RTD and innovation activities, which otherwise would not have been possible. It also, in a number of cases, provided financing for working capital that enabled firms to remain in business and so maintain employment. (In Puglia, a case study region, for example, some 12% of SMEs receiving support reduced their workforce in the following years, but over 40% either maintained or increased employment.)

It is an open question, however, to what extent the support provided to firms which otherwise might have been forced to close down, with the consequent loss of jobs, impeded structural change, which in the longer term might be desirable. It is not possible to know how many of the firms which were supported were not viable in the long run and how many, on the contrary, were firms with favourable long-term prospects which were experiencing temporary financial difficulties and whose survival was important for growth and employment in the region in the future.

It may be indicative that 56% of the SMEs in manufacturing receiving support over the period were in low-tech sectors and that many of the non-manufacturing firms were in basic service sectors. It is not necessarily the case that being in low-tech sectors means that the firms themselves were low-tech or that structural change means a shift of activity into higher-tech sectors – indeed, the comparative advantage of some regions may lie in low-tech sectors, though in the more advanced parts. Nevertheless, it is undoubtedly the case that funding went to many SMEs during the crisis which were not strategically important for the future growth of the region, even though it prevented job losses being even bigger than they were.

At the same time, the ERDF not only played a role in helping firms survive the crisis, important as this was in many regions. It also provided support for innovation and for the adoption of more technologically advanced methods of production as well as for the development of new products. The evidence from the surveys and case studies carried out as part of the evaluation shows that ERDF support led to investment being maintained, increased and/or accelerated, resulting in increased turnover, profitability and exports. It also led, in a number of cases, to observable behavioural changes (such as a greater tendency to install more advanced equipment) or to SME owners and managers being more willing to take risks and to innovate. This was evident, for example, in respect of the grants for investing in R&D in Castilla y León, which are seen to have resulted in SMEs being more capable of undertaking complex projects, often in collaboration with other firms or research centres.

The evidence shows, in addition, that the process involved in changing behaviour takes time before it produces observable effects on firms' performance and competitiveness. Accordingly, given the lag between support being provided and tangible effects becoming evident in the data, the first indication of the effects concerned being likely to materialise in the longer term is a change in the behaviour and attitudes of those managing SMEs. It is therefore significant that such a change was observable, since many of the measures of support implemented occurred too soon for the effects to show up in the data. There is equally evidence of the positive effects on behaviour spreading to other firms, especially if the firms receiving support were part of a cluster.

Lessons learned and policy implications

A number of lessons can be drawn from the evaluation in respect of both the conditions which need to be met for support measures to be most effective and the form which these measures should take:

- The SMEs which responded best to support were those which already had the necessary managerial capacity to grow and innovate. For example, the Polish case study showed that SMEs which were already exporting took more advantage of the support provided for investment and were more able to increase their competitiveness and exports through innovation.
- The policy measures which were specifically tailored to the underlying circumstances and to the degree of risk involved in the investment concerned tended to be more successful. For example, the use of grants was generally preferable for riskier projects than the use of loans. Equally, measures which were specifically aimed at achieving particular results, such as grants conditional on a certain policy being followed or action being taken (such as the creation of jobs), were more likely to be effective.
- The involvement of intermediaries with specific knowledge of the local situation (such as regional-development agencies) or of the particular support measure being used (such as fund managers or service providers) tended to produce better results – through, for example, more informed selection of the firms to be supported or the advice and guidance given to SMEs.

These, together with other findings of the evaluation, lead in turn to a number of policy implications:

- The evidence suggests that, in future, measures of support should be based on sounder explicit theories of change (i.e. of the process by which the measures are expected to produce results), which *inter alia* would make it easier to track their performance – by, for example, being able to observe changes in behaviour before tangible economic effects are produced.
- Theories of change should take explicit and detailed account of the local context in which the measure is being implemented and the specific *objective* that it is intended to achieve. This means deciding whether the aim is to focus narrowly on innovative SMEs with a good record of performance or on a wider population of firms. It also means recognising that the firms to support cannot necessarily be identified in terms of the sectors in which they operate – by their level of technological advance – but that account needs to be taken of their specific comparative advantage, whether actual or potential, and its links to the local context.
- The support *measures* adopted to achieve the *objective* should then be tailored to both the local context and the change that they are designed to bring about. This may, for example, mean complementing financial aid with support services, such as advice or guidance, in order to increase both the effectiveness of the measures implemented and their take-up. It may also mean the greater use of intermediaries with knowledge of local conditions that can help to implement the measures and to select the firms to receive support.
- Especially in Competitiveness regions in the EU15, ERDF support can potentially play an important role as a test-bed for experimental and innovative policy measures instead of replicating traditional national schemes. This happened to some extent in the 2007-2013 period, with, for example, the focus on research and innovation in Denmark, Sweden and Finland, the 'Living Labs' experiment in Puglia and the *Inno-voucher* scheme in Lithuania. But such

an approach could be more widely followed since it is a way in which ERDF support can give rise to a distinct stream of added-value for the EU that exceeds the relatively small amounts of funding involved, at least in Competitiveness regions.

- The evaluation demonstrated the severe limitations of the monitoring system in place to indicate the results of the support measures implemented. In particular, as noted above, the indicators available to track these give only a very partial view of achievements. They need in future to be more closely aligned with the objectives of the policy measure concerned, to cover, for example, developments in R&D expenditure, productivity or exports. They also need to be more closely linked to the support provided so that their efficiency in terms of results relative to the cost involved can be assessed and compared across different measures.

Some of the lessons that can be drawn from the evaluation have already been taken up in the present programming period and incorporated in the regulations and in the guidance given to MAs, since they were already evident from the evaluation of the 2000-2006 period. This applies, in particular, to the need for the support provided to be more result-oriented: this is enforced in part by the detailed negotiations between the European Commission and MAs over OPs, which need to spell out the specific objectives that it is intended to achieve and how it is expected to do this. It also applies to the adoption of a 'smart specialisation' approach that takes explicit account of the factors of comparative advantage when formulating a regional policy for enterprise support.

It also applies, to some extent, to the improvements made to monitoring systems and to the choice of indicators included in them, as well as to the more systematic deployment of evaluations to assess the effectiveness of the support provided in attaining the objectives set. It remains to be seen, however, how far these developments achieve what is expected of them. It is important to monitor this as the present period progresses.

3.1.3 Support to RTD and innovation other than in enterprises⁵⁹

Just under a -quarter of the ERDF support allocated to the expenditure category RTD, innovation and enterprise support over the programming period - around EUR 17.3 billion, 6% of the overall amount of ERDF support available - went to organisations other than enterprises, such as research centres or universities. Of this, most went to Convergence regions. Overall, funding per head in the EU over the 2007-2013 period was 7-8 times larger in Convergence regions than in Competitiveness ones: this is less than in the case of SMEs, which reflects the slightly lower priority attached to this in the regions concerned, or at least in the EU12 and the southern EU15 countries (Table 3.2). The funding, moreover, was heavily concentrated in urban areas in Convergence regions in all parts of the EU, whereas this was much less the case with regard to Transition regions ('Phasing-in' and 'Phasing-out') and Competitiveness ones. Indeed, apart from in the four southern Member States, more funding per head was allocated to rural areas in Competitiveness regions in the EU15 than to urban areas.

⁵⁹ This issue was not covered by WP2. This section is based on work carried out under WP1.

Table 3.2 Allocation of funding to RTD I other than to enterprises, by Objective and type of region, 2007-2013 (EUR per head of population)

	EU12	EL,ES,IT,PT	Other EU15	EU27
Convergence	79.0	107.5	106.6	89.4
Urban	197.0	160.5	173.0	182.0
Intermediate	78.7	101.3	101.4	87.8
Rural	28.6	72.2	51.8	39.9
Transition	13.2	28.8	57.9	35.7
Urban	3.7	28.4	64.6	35.5
Intermediate	21.2	45.3	58.9	44.5
Rural		3.6	48.8	22.6
Competitiveness	223.9	13.1	10.5	12.3
Urban	223.9	17.0	9.6	13.7
Intermediate		10.5	10.9	10.8
Rural		4.2	12.4	10.9

Note: The figures cover RTD activities in research centres; RTD infrastructure and centres of competence; and developing human potential in research and innovation.

Source: WP13 of the ex post evaluation and Eurostat, regional accounts (for population – the figures relating to 2010).

The amount of ERDF going to this policy area, in addition to that going to support RTD and innovation in enterprises, represented a major source of financing for research in the EU and one that was larger than the funding provided through the 7th Framework Programme (FP7). However, the latter was distributed across the EU in a very different way to ERDF support, reflecting the different objective of the financing provided, which was to support excellence in research and the development of new knowledge. Rather than going to the lagging regions, it was concentrated instead in the more prosperous parts of the EU where R&D expenditure was already relatively high and where the leading research centres are mainly located. Indeed, ERDF support can be seen in some ways as compensating for the regional concentration of FP7 and as evening out the EU support provided to R&D.

Only 4% of total FP7 expenditure over the period 2007-2014, therefore, went to EU12 countries and only 11% went to Convergence regions⁶⁰(Table 3.3). Both proportions are broadly in line with the overall expenditure on R&D carried out. By contrast, around 40% of ERDF support of RTD and innovation went to the EU12 and 78% went to Convergence regions⁶¹. This, accordingly, tended to even up overall EU-financed expenditure on RTD. Indeed, overall EU expenditure per head was higher in the EU12 than in the EU15 and higher in Convergence regions than in Competitiveness ones, but the difference was relatively small. In consequence, EU support for RTD in the lagging regions partially compensated for the wide disparity in total R&D expenditure that exists, but only to a small extent. In Bulgaria and Romania, moreover, the two countries in which total R&D expenditure was among the lowest relative to GDP in the Union, EU support per head was lowest of all, which, of course, reflects the relative priority that the two countries attached to RTD.

⁶⁰ Note that Convergence regions here includes Phasing-out regions (those eligible for Objective 1 support in 1994-1999 but for transitional support in 2000-2006), while Phasing-in regions (those covered by Objective 1 in 2000-2006 but with GDP per head above 75% of the EU-15 average) are included with Competitiveness regions.

⁶¹ Note that these figures relate to actual expenditure over the period rather than the allocation of funding as in Table 3.2. They are, therefore, lower than the latter would be.

Table 3.3 ERDF and FP7 expenditure on RTD and innovation and total expenditure on R&D, 2007-2014

	EUR million per year			% EU totals			EU total funding	
	ERDF	FP7	GERD	ERDF	FP7	GERD	% GERD	EUR per head
AT	23.8	94.2	8 349	0.6	3.1	3.3	1.4	112
BE	23.3	148.4	8 041	0.6	4.8	3.2	2.1	126
DE	465.7	586.6	72 869	11.6	19.0	28.6	1.4	103
DK	14.1	84.7	7 172	0.4	2.7	2.8	1.4	142
ES	463.5	267.7	13 828	11.6	8.7	5.4	5.3	127
FI	41.7	72.8	6 758	1.0	2.4	2.7	1.7	171
FR	169.4	360.5	44 236	4.2	11.7	17.4	1.2	65
EL	94.9	85.6	1 433	2.4	2.8	0.6	12.6	128
IE	11.1	50.1	2 684	0.3	1.6	1.1	2.3	109
IT	485.8	315.3	19 766	12.1	10.2	7.8	4.1	106
LU	1.3	4.9	606	0.0	0.2	0.2	1.0	97
NL	36.5	253.2	11 589	0.9	8.2	4.5	2.5	139
PT	364.3	42.4	2 433	9.1	1.4	1.0	16.7	306
SE	37.9	136.7	12 693	0.9	4.4	5.0	1.4	149
UK	150.9	448.3	33 208	3.8	14.6	13.0	1.8	77
BG	23.7	6.6	223	0.6	0.2	0.1	13.5	32
CY	3.4	6.4	81	0.1	0.2	0.0	12.0	97
CZ	275.9	21.5	2 417	6.9	0.7	0.9	12.3	226
EE	54.0	6.4	274	1.3	0.2	0.1	22.1	360
HU	108.4	18.6	1 192	2.7	0.6	0.5	10.6	102
LT	81.0	4.3	277	2.0	0.1	0.1	30.8	208
LV	75.4	3.7	131	1.9	0.1	0.1	60.2	283
MT	7.4	1.8	47	0.2	0.1	0.0	19.5	178
PL	790.8	28.7	2 778	19.8	0.9	1.1	29.5	172
RO	49.4	11.1	628	1.2	0.4	0.2	9.6	23
SI	75.4	14.5	451	1.9	0.5	0.2	19.9	351
SK	75.0	5.5	771	1.9	0.2	0.3	10.4	118
EU15	2 384.1	2 951.6	245 663	59.5	95.8	96.4	2.2	107
EU12	1 619.6	129.0	9 272	40.5	4.2	3.6	18.9	136
Conv	2 988.3	426.1	23 278	74.6	10.8	9.1	14.3	160
Comp	1 015.4	2 654.5	231 657	25.4	89.2	90.9	1.6	89
EU27	4 003.7	3 080.6	254 936	100.0	100.0	100.0	2.8	14.1

Note: The first three columns show the average expenditure per year on R&D over the 8 years 2007-2014; GERD is gross domestic expenditure on R&D; the figures for EU total funding per head relate to total funding over the 8 years 2007-2014; the split of GERD between Convergence and Competitiveness regions is estimated on the basis of the split for the years 2010-2013. Population relates to the total in 2010. Source: WP13 for ERDF expenditure, eCorda for the FP7 expenditure, Eurostat for GERD and population figures.

3.1.4 WP4 – Support to large enterprises

Amount of support and enterprises supported

Although the main focus of enterprise support under Cohesion policy in the 2007-2013 period was on assisting SMEs, on the grounds that they are often disadvantaged relative to large companies, which in any case typically have sufficient access to finance not to need EU funding, a significant amount of ERDF support went to large enterprises. Overall, it is estimated that the amount involved was just over EUR 6 billion, defining large enterprises to be those where the enterprise as a whole – i.e. including all subsidiaries – employed 250 or more people⁶². Although there is some uncertainty surrounding this estimate, which is based on a detailed examination of OPs in eight countries which accounted for 75% of the total support from the ERDF going to enterprises in the EU over the period, it should give a reasonable indication of

⁶² According to the formal definition used in the EU, large enterprises should also have a turnover of over EUR 50 million and/or net assets of over EUR 43 million.

the scale of funding involved⁶³. Support to large enterprises amounted to around 20% of all ERDF direct support to enterprises over the period. Most of it was in the form of non-repayable grants, though in four of the eight countries examined (Italy, Spain, Portugal and Austria) some of the support took the form of loans.

The scale of support to large enterprises varied between countries. Among those examined, it was particularly large in proportionate terms in Austria (where it represented 47% of total direct support to enterprises) and over a quarter of direct enterprise support in both Portugal and the Czech Republic (Table 3.4). In both Spain and Italy, on the other hand, it was relatively small (only 12% of enterprise support).

Table 3.4 Allocation of ERDF to support of large enterprises, number of projects and number of firms supported

	Direct enterprise support (EUR million)	Large enterprise support (EUR million)	Large enterprise support (% ERDF)	Number of projects	Number of firms supported
Poland	6 591	1 153	17	539	408
Portugal	4 145	1 134	27	407	319
Germany	3 200	704	22	763	632
Czech Republic	1 491	467	31	520	339
Hungary	2 581	453	18	409	273
Spain	2 543	311	12	1 269	398
Italy	2 034	243	12	416	270
Austria	283	133	47	194	148
Total of above	22 868	4 598	20	4 517	2 787
Total EU27 (est)	31 233	6 100	20	6 000	3 700

Source: WP4 of the ex post evaluation, based on data from MAs.

Overall, around 6 000 individual projects were supported over the period, implying an average of just over EUR 1 million per project, covering 3,700 large firms, though the size of projects varied greatly. (In Portugal, for example, three projects in advanced services each received EUR 60 million in support.) Many firms received support for more than one project. On average, 1.6 projects were co-financed in each firm and in some cases four or five.

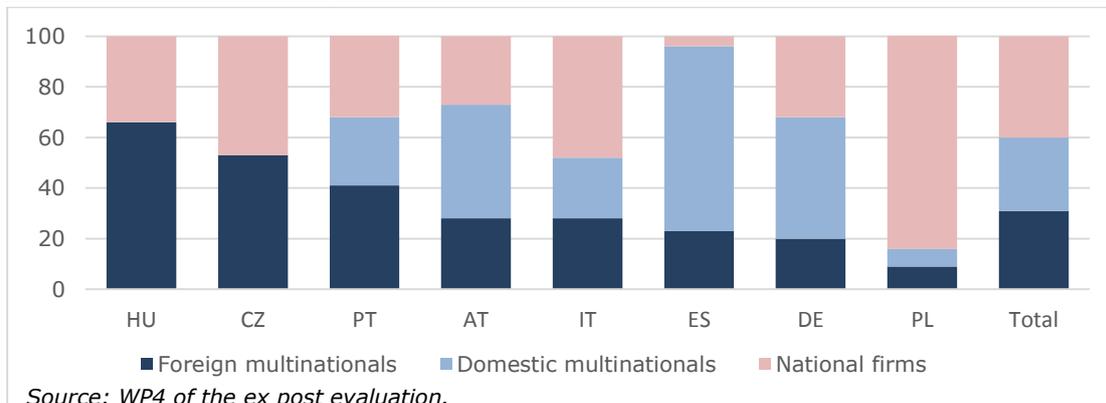
In general, a substantial proportion of the firms supported had fewer than 250 people employed at the location at which support was provided – 43% of the total in the eight countries; the majority in Austria (72%), Germany (59%) and Italy (55%); and 35% in the other countries examined, apart from Spain (15%). If considered separately, therefore, the enterprises concerned would be classed as SMEs. In practice, however, most were subsidiaries of large enterprises, many of them with considerably more than 250 employees. In Austria, for example, 75% of the enterprises receiving support employed 1 000 or more people across the whole of their operations (as against just 2% at the location of the support) and only 4% had fewer than 250 people employed (as against 72% at the location of the support).

This implies that many of the large enterprises receiving support were multinationals. Overall in the eight countries, 31% were foreign-based multinationals, most of them (81%) based in other European countries, and a further 29% were domestic multinationals (i.e. with their headquarters in the country concerned) (Figure 3.6). The remaining 40% were national companies with no subsidiaries abroad, though in some cases with several branches in the country. Foreign multinationals were major recipients of funding in Hungary and accounted for the majority of the support going

⁶³ The detailed examination of the eight countries (Poland, Germany, Portugal, Spain, Hungary, Italy, the Czech Republic and Austria) indicated a figure of EUR 4.6 billion allocated to large enterprises. The overall estimate is based on assuming that the same proportion of the other 25% of direct enterprise support as in the 75% covered went to large firms.

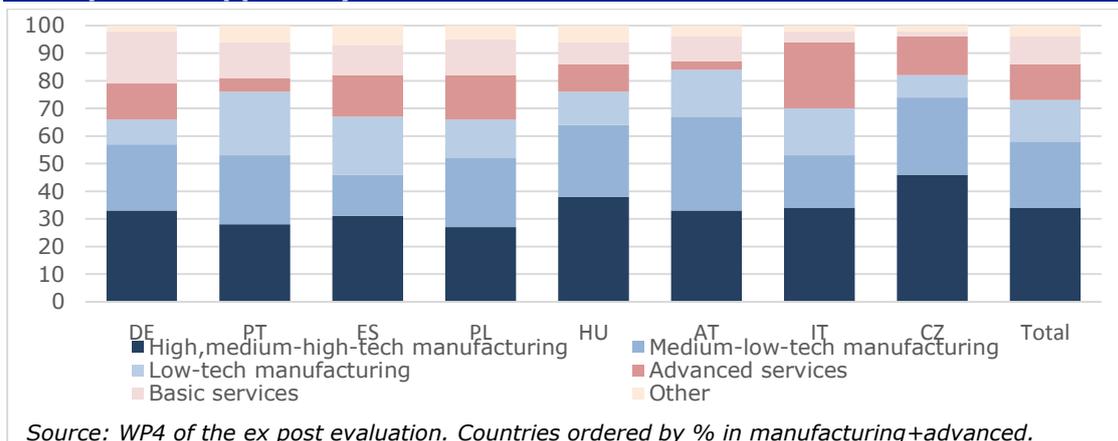
to large firms in the Czech Republic as well. In Spain, on the other hand, domestic multinationals were by far the main recipients (accounting for 73% of the firms receiving support), and in Germany and Austria they made up almost half of the recipients. By contrast, in Poland the great majority of the large firms supported were national ones, while in the Czech Republic and Italy they accounted for nearly half.

Figure 3.6 Division of large enterprises receiving support by type (% of total large enterprises supported)



Most of the large firms supported were engaged in manufacturing, almost three-quarters (73%) in the eight countries, while another 13% were in advanced services (Figure 3.7). They were, therefore, in sectors which tend to be significant underlying sources of economic growth and job creation, though the value-added and jobs concerned tend to be located in other sectors, as indicated above (see Box, p.124). They are, accordingly, likely to have been of strategic importance in the countries or regions concerned. In all of the countries, firms in manufacturing and advanced services represented around 80% or more of the enterprises supported, and in Italy and the Czech Republic over 90%.

Figure 3.7 Division of large enterprises supported by sector (% of total large enterprises supported)



A significant proportion of the manufacturing companies supported were in high-tech or medium-to-high-tech industries (such as motor vehicles or electrical engineering) – 31% of all enterprises, 46% in the Czech Republic and over a quarter in all the other countries – which, with advanced services, tend to be critical sources of future growth. This contrasts, it should be noted, with the SMEs receiving support, less than half of which were in manufacturing (44%), relatively few of them in high-tech or medium-to-high-tech sectors (29%), and many more of them in basic services⁶⁴.

⁶⁴ See 'Support to SMEs – Increasing Research and Innovation in SMEs and SME Development' Final Report, WP2 of the ex post evaluation, Figure 32, p.69.

The contents of the evaluation

The evaluation was carried out between August 2014 and March 2016. The data analysis and case studies were mostly undertaken in the latter part of 2014 and the first half of 2015. The evaluation consisted of:

- Collection of data from MAs on large enterprise support in eight EU Member States, accounting for a major part of direct support to enterprises.
- Identification of the strategies followed in the eight countries underlying the support provided, based on documents and interviews with MAs.
- Assessment of the effects of support by applying a theory-based approach distinguishing four theories of change according to the type of support measure and the objectives, identifying the main elements involved, collecting data on these and estimating the contribution of ERDF support to outcomes. This was undertaken through eight case studies of OPs in the different countries, involving 45 company case studies and 130 interviews.
- Seminar with representatives of MAs and large enterprises.

Rationale for support of large enterprises

In general, the arguments set out in OPs for supporting large enterprises were couched in very broad terms and were rarely specific about the outcomes expected or aimed for. What emerged from the interviews with MAs was that the aim, to differing extents, was to increase growth and employment, the level of R&D and exports or some combination of these. In a number of the case study OPs, MAs emphasised the importance of large enterprises for the development of the region (such as Thüringen in Germany) or country (such as Hungary) and for the growth of SMEs located there, through various spill-overs (such as know-how and skills) as well as directly through purchases of the goods and services they produce.

Indeed, much of the justification for support rested on the beneficial effect on local SMEs, so that in many ways the support provided in a number of cases was seen as a means of supporting SMEs, especially where the SMEs in question were mainly producing intermediate goods and services for other companies. The fact that a substantial proportion of the large firms supported were in manufacturing, and many of them in high-tech or medium-to-high-tech industries, is in line with this rationale since such firms tend to generate significantly more economic activity and jobs indirectly than those in other sectors. This, however, is only the case if the large firms concerned become embedded in the local economy and source their inputs from there rather than from outside, which cannot be assumed to be the case for multinationals in particular.

In practice the case studies found that generally the support provided was not targeted at particular types of company, in particular domestic rather than foreign ones, but that firms received funding if they met the conditions set down. Nevertheless, funding in many cases was aimed at supporting individual firms that were regarded as being of strategic importance for the development of the local economy.

At the same time, in addition to the focus on a few firms of strategic importance, a significant rationale in many of the case study regions was to support firms that were larger than SMEs but not by much. In Thüringen, for example, enterprises with 250-499 people employed were said to be facing some of the same problems that SMEs

did, in terms of access to finance and the risks involved in undertaking R&D, which is an important justification for public support⁶⁵.

Effect of support on enterprise behaviour

Analysis of the behaviour of the large enterprises examined showed that ERDF support was only one of the factors influencing decisions on investment, and not necessarily the most important. Large firms typically followed a long-term strategy with regard to their development, which, in the case of multinationals in particular, was formulated without much consideration of the public support available. However, the provision of support was capable of influencing the location of investment as well as its scale and timing. Although decisions on location were based on the availability of key requirements – such as an efficient transport network, a workforce with the requisite skills, the existence of local sources of supply and social amenities – the support available along with other incentives, such as tax concessions or the provision of premises, could affect the choice. In other words, if several potential locations for investment were similar in terms of these various factors, the decision of where to locate might be determined by the scale and nature of the support available.

Accordingly, the provision of support was often a precondition for locating in a particular place. By the same token, regions in many cases competed with each other to attract inward investment in terms of the support offered, so that effectively ERDF support was used as part of the inducement, which – in cases where the firm concerned would have invested somewhere in Europe even without support – has negative added-value from an EU perspective. It is more difficult to determine the added-value where the firm concerned is induced to invest in the EU rather than somewhere else in the world, especially since competition between regions or Member States can drive up the financial incentive offered.

In half of the cases examined, ERDF support was not a major causal factor underlying the investment as such, but had a significant effect on the timing and the scale. It therefore led to investment being brought forward and encouraged firms to add to it by, for example, taking on more people or by adopting environment-friendly technology.

In 20% of cases, however, ERDF support was considered to be a major cause of the investment being undertaken, and indeed without that support it would not have been carried out. This was the case very often for enterprises facing financial problems in the aftermath of the crisis with no ready alternative source of funding.

In the remaining 30% of cases, ERDF support was found to have little discernible effect on the behaviour of enterprises, in the sense that the investment supported would have been undertaken anyway. This was the case, in particular, in respect of investment in basic technological upgrades.

The investment decisions that tended to be affected were large-scale projects or those involving R&D or innovation. Indeed, in general, the evidence of a causal link between the support being provided and the behaviour of the company being affected was stronger the larger the amount of funding involved, which could be a consequence of stricter conditions being imposed in these cases because of the size of the support.

⁶⁵ Similar problems were identified in a recent European Commission publication, which reported that 'there is a mid-range of enterprises... that are significant for the European economy and especially for the encouragement of rapid growth, but which suffer from a lack of attention in comparison to both SMEs and the really large enterprises' (European Commission, 'Fact Sheet: The Investment Plan for Europe', Brussels, 2015. Available at: http://europa.eu/rapid/press-release_MEMO-15-5419_en.htm).

Main achievements

Although there is evidence of the investment carried out by large enterprises that was co-financed by the ERDF achieving the results expected of it – in terms of output, R&D expenditure, productivity, employment and exports – it is difficult to attribute the results concerned solely to ERDF support. As indicated above, much of the investment would probably have taken place even without ERDF support, if not in most cases at the same time or on the same scale or even, in some cases, in the same location. In other words, there is clear evidence that the investments undertaken led to the positive results listed above. What is less clear is how far the support provided by the ERDF influenced the investment decisions. It therefore seems that there was a significant amount of 'deadweight' involved, but how much is hard to estimate. This has to be taken into account when assessing the achievements from the investment supported.

Almost all of the projects supported produced positive results. In most cases, both the production capacity (in 41 out of the 45 enterprises examined) and the productivity of the enterprises concerned (in 36 out of 45 cases) increased, often as a consequence of the installation of technologically advanced machinery and equipment, and often considerably. Despite improvements in productivity, employment also increased in many cases, the adoption of more advanced production methods requiring the recruitment of more qualified staff and the growth in output giving rise to a need for more workers.

Accordingly, the large enterprises supported were responsible for a substantial proportion of the jobs created through ERDF enterprise support in the case study areas. In Steiermark in Austria, Thüringen in Germany, Poland, Portugal and Hungary, around half of the jobs directly created up to the end of 2013 were in large enterprises, over 60 000 in all. Moreover, the evidence from the case studies also indicates that a substantial number of jobs were also indirectly created as a consequence of the investment. In Spain, for example, it is estimated that the number of such jobs could be as much as 4-5 times the number of jobs directly created.

Identifiable indirect and wider effects on the local economy were less frequently observed than direct ones, partly because they were less tangible and more difficult to attribute to the investment supported, and partly because they tend to take longer to materialise and so were not yet evident at the time of the evaluation. Nevertheless, they were evident in 71% of the cases where they were specifically planned beforehand. Positive effects on SMEs were, therefore, visible in terms of the spread of modern business practices as a result of them supplying the large enterprises concerned; increased quality standards as a result of these being required; and increased cooperation between them and large enterprises. For example, an Asian multinational, which made a EUR 69 million investment in Poland to produce new models and to increase the capacity of its plant, was responsible for creating around 1 500 new jobs in supplying companies, which were mostly SMEs. In addition, in a number of cases, new firms were attracted to the regions by the investment and the expansion that followed.

For the wider benefits to occur, however, the necessary conditions had to be in place, such as, in particular, the ability on the part of SMEs and their workforces to adapt to new ways of working and to be willing to collaborate with large enterprises.

The case studies generally found that the projects supported were sustainable, in the sense that they delivered beneficial effects for an extended period of time after support from the ERDF had come to an end. This was a reflection of the fact that the projects tended to be part of the long-term development plans of the enterprises concerned rather than being induced simply by the co-financing on offer. How long the

production facilities constructed are likely to remain in operation, and how long multinationals are likely to remain in the region in question before moving somewhere else where costs are lower, depend on a multitude of factors. These include the scale of the investment, the sector concerned, the skills required of the workforce, the strength of ties with local suppliers, and the local endowment of infrastructure of various kinds and of social amenities. They also include the prospect of future public support, though this was not regarded by firms as a major factor of importance. Nevertheless, the multiple granting of support was a common feature of the 2007-2013 period as indicated above and there were fears in some MAs, justified or not, that denying access to future support might lead strategically important firms to relocate.

Lessons learned and policy implications

The findings of the evaluation suggest that support of large enterprises can bring significant benefits to a region but that, at the same time, it needs to be carefully planned if the benefits are to materialise and if deadweight costs are to be avoided or at least minimised. Above all, the focus needs to be more on the indirect effects of support on the local economy and the firms located there than on the direct effects on the enterprises themselves. Large firms typically do not need government subsidies, but in the right circumstances the provision of support can influence a company's behaviour and create an important source of regional growth. There are, therefore, a number of implications for Cohesion policy:

- In the first place, support of large enterprises needs to be selective as regards the firms supported. There needs to be a close match with the structure of the regional economy and its areas of actual or potential specialisation, and a serious prospect of links being established with local SMEs as well as with research centres and universities in the region.
- To increase the chances of the wider beneficial effects materialising, support also needs to be conditional on, in particular, recipient firms becoming embedded in the local economy and using local sources of supply so far as possible.
- At the same time, it is important to take a long-term perspective: to recognise that the beneficial effects of a large enterprise moving into a region may take many years to materialise fully – for SMEs, for example, to become capable of meeting the quality standards required of suppliers. Accordingly, policy needs to evolve over time to provide relevant support as the enterprise develops. In the case of Steiermark in Austria, for example, support moved from attracting foreign direct investment and subsidising large business investment to assisting R&D and helping companies to become embedded in the regional innovation system.
- Equally, there is a need for MAs to avoid becoming captives of the large enterprises in a region and providing support on repeated occasions simply because it has come to be expected and there is a concern that if it is not given then the companies will move somewhere else. In practice, such a concern may be more imagined than real if a company has invested substantial amounts in a region. Even if it is not, it is questionable, from a long-term perspective, whether it is desirable to try to prevent a company from moving out of a region if the main reason for it being located there is the support it receives. To do so may simply slow down structural change that is necessary in the long run.

- Related to this, it is also important to realise that large enterprises are attracted to locate in a region not only by the financial inducements on offer but more fundamentally by local conditions, by the state of transport and communication networks, by the skills of the local workforce, by the social amenities available and so on. A more effective strategy to attract and maintain large enterprise investment may, therefore, be to direct policy at strengthening these elements rather than by giving subsidies.
- In addition, it is important to recognise that support can take other forms apart from financial incentives, such as help in finding local partners or premises or in navigating through local planning regulations.
- There is a need to restrict competition between authorities to attract large enterprise investment and to use EU funding for this purpose. This is especially so in the case of European enterprises which would invest somewhere in the EU anyway. It is less straightforward in the case of multinationals from third countries where there is EU added-value from inducing them to invest in Europe rather than outside. There is a distinct risk, however, that even in these cases competition between regions results in driving up the financial incentives on offer to a level much above what the enterprise concerned would have accepted to locate in the EU. Accordingly, it is very much open to question whether the ERDF should be used for this purpose, though it may be difficult to impose effective restrictions without banning its use to support large enterprises completely.
- Whatever is decided as regards large enterprise support, it is arguable that there is a need to give special consideration to the position of enterprises which are only slightly larger than SMEs, in that they have 250 or more people employed but not too many more. There is evidence that these were also affected by the crisis and experienced much the same difficulties of accessing finance as smaller companies. Indeed, ERDF support was instrumental in preventing a number of them, which were regarded as strategically important for the local economy, from closing. This raises the question of whether in respect of policy, and more particularly eligibility for support, it is desirable to have a strict dividing line between what are defined as SMEs and what are defined as large enterprises.

3.1.5 WP3 – Financial instruments

Scale and type of support

Financial instruments (FIs) were first used by Cohesion policy programmes to provide support for investment in the 1994-1999 programming period, though on a very small scale, and though there was some increase in their use in the 2000-2006 period, the overall amount involved was only just over EUR 1 billion. In the 2007-2013 period, however, their use expanded markedly, going from EUR 1 billion to EUR 10.9 billion of ERDF allocated as at the end of 2014 (with another EUR 0.5 billion coming from the ESF) Indeed, the ERDF was used to support FIs in 25 of the 27 Member States, the only exceptions being Ireland and Luxembourg.

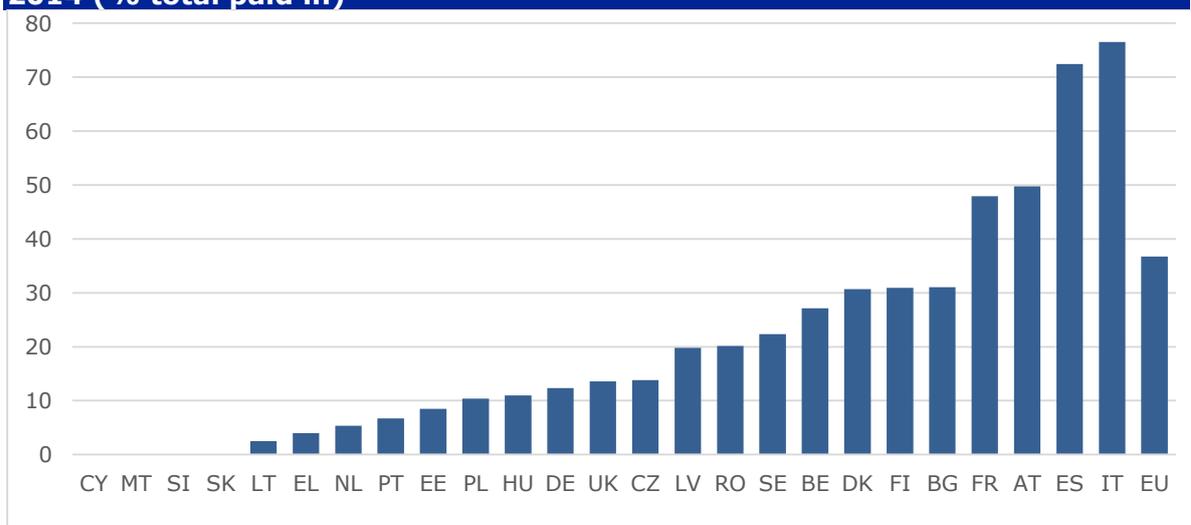
Of the funding allocated, 95% had been paid into FIs at the end of 2014, though only 57%, had reached final recipients⁶⁶. In total, 1 025 FIs were in operation at the end of 2014, 972 of them co-financed by the ERDF. Of these, 90% provided support to

⁶⁶ These figures, which include the relatively small amount of ESF, come from the European Commission's Fourth Progress Report on financing and implementation of FIs, which is based on data collected from 183 of the 189 OPs using FIs, 164 of which were ERDF OPs and 19 were ESF OPs.

enterprises, 6% to urban-development projects and 4% to energy-efficiency and renewable-energy projects (which only became eligible for the use of FIs in 2010).

Of the overall funding paid into FIs, EUR 12.7 billion was for enterprise support, the focus of the evaluation. Of this, EUR 8 billion came from the ERDF and just under EUR 0.5 billion from the ESF. Around EUR 5.1 billion of the amount paid into FIs from the ERDF had reached final recipients by the end of 2014, leaving almost EUR 3 billion, or around 40%, still to be paid out before the end of 2015. In absolute terms, the amount of the Structural Funds (ERDF plus ESF) paid into FIs for enterprise support was largest in Italy (EUR 2.4 billion) and was less than EUR 1 billion in all other Member States. The amount of funding paid in that was still to reach final recipients at the end of 2014 was also largest in Italy (77%), where less than a quarter of funding had been paid out with only one year still to go before the end of the time available to do this (Figure 3.8). In Spain, too, a substantial amount still remained to reach final recipients (72%). Apart from these two countries, together with France and Austria, less than a third of the funds paid into FIs was still to reach final recipients at the end of 2014, and in the majority of Member States less than 15%. (All funding paid into FIs had been paid out to final recipients in Cyprus, Malta, Slovenia and Slovakia, or so it would seem since the data reported indicate a negative amount remaining in the funds, which may be because of the credit advanced being repaid or because of reporting errors.)

Figure 3.8 ERDF+ESF paid into FIs but yet to reach final recipients at end-2014 (% total paid in)



Note: Ireland and Luxemburg did not put ERDF or ESF funding into FIs.

Source: European Commission 'Summary of data on the progress made in financing and implementing financial engineering instruments', September 2015.

The majority of the FIs set up were in the form of loans, which accounted for 53% of the funding paid out to final recipients by the end of 2014, while another 23% were in the form of guarantees. Just 21% of the funds reaching final recipients were in the form of equities or venture capital, though more in general in the EU15 and less in the EU12.

The content of the evaluation

The evaluation was carried between August 2014 and March 2016. The case studies were undertaken during 2015, while the data analysis was based mainly on the European Commission progress report on FIs (see note to Figure 3.8) which reviewed developments up to the end of 2014. The evaluation consisted of:

- An examination of FIs in 12 Member States (Germany, France, the UK, Italy, Spain, Belgium, Portugal, Denmark, Poland, the Czech Republic, Hungary and Lithuania), which accounted for around 92% of ERDF support going to FIs and covered 108 OPs.

- A survey of the literature on FIs to understand the conditions for support of them to be justifiable and effective.
- Case studies of FIs in nine selected OPs in different Member States (in Bayern in Germany, Languedoc-Roussillon in France, North-East England in the UK, Małopolskie in Poland, the Enterprises and Innovation OP in Poland, the Economic Growth OP in Lithuania, the COMPETE OP in Portugal, the Technological Fund in Spain and the Economic Development OP in Hungary).
- A seminar with MAs, fund managers and experts.

The evaluation focused on 12 Member States that were reasonably representative and in which FIs were examined in detail. In these countries, the size of funds varied widely from just over EUR 10 000 in Hungary to around EUR 550 million in Italy, as did their geographical coverage, some regional equity funds seeming to be too small. At the same time, larger funds seem to have been less successful in distributing the funding paid into them. While large funds of over EUR 50 million in the countries covered had invested 55% of the financial resources at their disposal by the end of 2014, funds smaller than this had invested 82%. Moreover, two funds in Italy and one in Spain with combined loanable resources of EUR 486 million had lent out less than 2% of the amount available.

Rationale for the use of FIs

There are a number of reasons why the use of FIs to provide support to enterprises can be regarded as preferable to non-repayable grants. In particular:

- they make more effective use of financial resources, because the fact that they are repayable means that funds can be recycled and, in principle, used multiple times to support investment; this is especially relevant at a time of tight constraints on public finances;
- they have the potential for encouraging better quality projects to be undertaken, both because of the need to repay the funding advanced, which gives an incentive to ensure that it generates a return, and because of the due diligence involved before firms can receive them;
- they also have the potential to attract private capital, because of the prospective returns to investment, so that they can increase the overall availability of funding for investment in Cohesion policy projects;
- they provide an additional source of funding to the private capital market and so help to alleviate market imperfections, or correct market failure, especially by increasing the access of SMEs to funding.

In practice, however, the growth in their use over the period owes much to two factors: firstly, their enthusiastic espousal by the European Commission, in large part because of their recycling potential and the possibility they give of multiplying the financial support available in a context of severe limitations on the availability of public funding; secondly, and more importantly, the effect of the crisis in both increasing the need of businesses for credit and, at the same time, reducing the amount available from the financial market. For MAs, therefore, they represented a means of helping firms whose access to credit had dried up, and of preventing their closure and the job losses that would have resulted – especially because, unlike grants, they could under certain conditions be used to finance working capital. In Portugal, for example, their introduction and expansion during the period was a direct consequence of the crisis; and their development in many other parts of the EU stemmed to a large extent from the same cause.

A further motivation in some places (North-East England, for example) was to help develop a local financial market, particularly for venture capital, with the aim of making it easier over the long term for local businesses to obtain funding for investment.

An additional reason for their growth, however, which was more pragmatic but which is more difficult to confirm, was to avoid de-commitments. Transferring ERDF funding into financial instruments, therefore, was treated as expenditure in the regulations and so was a way of complying with the need to spend the funding available within the time required (i.e. within two or three years). This was found to be an important motivation in both Spain and Italy, and it is perhaps significant that these are the two countries where the amount of funding in FIs still to reach final recipients at the end of 2014 was the largest.

Despite the fact that FIs undoubtedly made an important contribution in a number of countries to keeping firms in business during the crisis, there is limited evidence that there was a genuine shortage of finance for SMEs in some cases, except perhaps for a temporary period. The apparent difficulties many FIs have had in passing on all the funding put into them does not suggest that there is an unmet demand for credit that the ERDF needs to meet.

Nor does it appear that there was a serious attempt on the part of MAs to compare the cost-effectiveness of FIs with that of grants or to take account of their potential effects on the quality of the investment projects co-financed before deciding to introduce them. Moreover, only in two of the nine case study OPs (North-East England and Languedoc-Roussillon) was there evidence of a clear strategy on how to reinvest the funding received back from recipients – though there were also signs that this was changing as the repayment of loans and the purchase of shares by companies came closer.

The experience over the period

The management structure of FIs and the way that they operate vary markedly across the EU. In some cases there is a holding fund that manages smaller funds, each with a different financial product, in others there are single funds operating independently. This in part reflects the non-specific nature of the regulations, which was a deliberate attempt to give flexibility but which also gave rise to uncertainty over the forms that were allowed. Such uncertainty led to delays in setting up FIs, though delays were as much a consequence of the difficulties involved and the lack of know-how and experience among MAs as a lack of clarity in the initial regulations. These delays are a major reason for the substantial amount of funding that still remained to reach final recipients at the end of 2014.

At the same time, the flexibility in the regulations allowed MAs to shift funding quickly from one purpose to another, especially if financial resources were put into a holding fund. In Slovenia, for example, a holding fund was created which was managed in such a way as to cover a wide array of possible uses. When the demand for risk capital declined during the crisis period, the funds were simply shifted towards interest rate subsidies and loan guarantees to meet the demand for these from SMEs⁶⁷.

The lack of know-how in MAs also led them in many cases to use existing domestic financial institutions to set up funds or to have recourse to external expertise, such as in the European Investment Fund in particular. As a consequence, it was often the case that MAs had only indirect influence over the way that funds were set up and how

⁶⁷ This was reported by the Slovenian participant to the meeting on 'The effects of the crisis on Cohesion policy', held as part of the *ex post* evaluation in April 2015.

they operated. Funds were frequently managed, therefore, in much the same way as if they were commercial operations, with the central aim being to maximise the return on investment, with little regard to the policy aims of the OP which co-financed them or to the objectives of Cohesion policy. Accordingly, the added-value of ERDF support in such cases is mainly in the form of the additional funding it provides for SMEs.

In practice, while many of the venture capital funds were aimed at supporting dynamic companies which were often in the higher-tech industries or knowledge-intensive services, almost by definition relatively few of the loan funds set up were targeted at particular sectors, but were instead available to SMEs generally. Moreover, in some cases, as noted in relation to WP2 above, there is evidence of a shift to a more general focus as a result of the crisis. Indeed, this is reflected in the provision of credit to finance working capital, which is estimated to have accounted for around 10% of the loans extended in the case study OPs.

The costs of setting up and operating the funds – which are an important consideration when comparing FIs with grants as a means of providing support to enterprises, and need to be set against the advantages – are difficult to assess and in many cases are not reported to the Commission. The difficulty of assessing them stems partly from the different ways in which the fees for managing the funds are calculated (which, for example, can be as a percentage of the money managed or a flat-rate charge to SMEs requesting funding) and partly from the reluctance of MAs to reveal this information. As a consequence, it is unclear how much the costs of operating the funds are. For funds where management fees were calculated on the basis of the amount of financing they had available, rather than in relation to the funding actually paid out to firms, it could be the case that fees were more than the funding invested. For 18 funds, it was found that management costs may have exceeded 20% of the amount reaching final recipients. Moreover, in only one case study OP (that of North-West England) were management fees linked to the performance of the fund, though in all but one case the MAs maintained that fees were below the maximum stipulated in the regulations. (This issue has been tackled in the regulations for the 2014-2020 programming period, with stricter controls on OP payments for fees and a requirement that there has to be a performance-related component in the fee calculations.)

It is important to recognise, however, that while from a public perspective there is a need to minimise fees, the costs of administering funds have to be covered in some way. Moreover, if funds are managed efficiently, then the returns that they yield may much more than outweigh the fees that are charged. In the case of Sachsen, for example, all of the funding paid into FIs was distributed to final recipients well before the end of 2015 and the finance attracted from the private sector has greatly exceeded the amount charged in fees.

Monitoring and evaluation

Information is very limited on the operation of FIs, on how they use the funding put into them, on their performance and, even more so, on the performance of the enterprises in which they invest. This greatly limits the possibility of making any objective assessment of how effective they have been in achieving the objectives expected of them in terms of attracting private money, recycling funding and supporting enterprises capable of generating growth and employment. Given the increased emphasis in the present programming period on the further extension of FIs as a means of co-financing investment – an emphasis which is understandable in the context of tight constraints on public finances – this is a serious gap in our knowledge.

It is partly a consequence of the fact that specific reporting on FIs was not required at the start of the 2007-2013 period and was introduced only mid-way through in 2011.

Even then, the reporting requirements were limited to describing the FIs concerned and the way they were implemented, identifying those managing them and indicating the amounts paid into them and paid out of them to final recipients. Since reporting information on other aspects of their operations was voluntary and since the information reported was not always reliable, even the basic data available on the amounts paid into FIs and extended to enterprises are not necessarily entirely accurate. Only very patchy information exists on how much FIs cost to run, how much funding has been recycled, which enterprises have received funding, what use they have made of it and what the outcome has been in terms of additional investment, growth and jobs.

Assessing the impact of FIs is particularly problematic. In the case study OPs, what was monitored mainly was their spending and the number of enterprises supported. Indicators of results were very limited. In three of the nine OPs examined (in Spain, Portugal and Lithuania) no result indicators were collected, and in the others they were confined in the main to jobs directly created. Outcome indicators on the growth of the firms supported, their productivity, their R&D and innovation activity, their export performance and so on were generally not monitored, partly in order not to impose an excessive reporting burden on companies.

The one exception was the North-East England OP, which monitored indicators relating to strategic objectives, such as innovation capacity, the density of businesses in different areas (such as in disadvantaged ones), and business survival rates as well as jobs created.

In some cases, however, indicators of the effect on final recipients were collected but were not revealed because of commercial confidentiality considerations and the reluctance of fund managers to share details of their investment portfolios. (In Languedoc-Roussillon, for example, details of the development of each company supported were collected, but a confidentiality clause was included in the funding agreements to prevent disclosure of this information.)

Evaluation evidence too is very limited, partly because delays in the funds becoming operational mean that it has been too early in many cases to carry out evaluations. The relatively few evaluations which have been carried out have tended to focus on the extent to which the firms supported have increased turnover and jobs as a result of support, but hardly any attempt has been made to measure the net effects of FI support and value-for-money aspects or to compare the effects of FI support with those resulting from grants.

In most of the OPs examined, no evaluations of FIs had been undertaken, though there were plans in a few cases to do so. In the Bayern OP, a mid-term evaluation was carried out with a focus on the delivery of FIs, but which also contained a counterfactual analysis of the effects: this concluded that there was evidence of positive results that was statistically significant. The North-East England OP, exceptionally, had commissioned parallel evaluations of all three JEREMIE instruments in England with the aim of comparing the effects.

Main achievements

Because of the very limited amount of data available from monitoring systems and evaluations and the delays in funds being set up, it is difficult to say much about the achievements of FIs in concrete terms or about their effectiveness in pursuing the ultimate of objectives of Cohesion policy as compared with grants.

What is evident is that they increased the amount of funding available to SMEs during the crisis period, at a time when access to credit from the financial market was severely restricted, and, accordingly, contributed significantly to firms being able to

remain in business. The fact that FIs could be used to finance working capital gave them a distinct advantage over grants. In Lithuania, in particular, the MA estimated that around 60% of loans went to support working capital. In the other OPs it was much less, but still significant (around 10% or so in those where it was possible to use FIs for this purpose). However, in three of the nine OPs examined (Germany, the UK and Spain) working capital was not eligible for support. In addition, FIs helped to maintain investment in new technology and in improving production processes more generally.

It is also evident that FIs have assisted in the development of financial markets in a number of regions. In North-East England they created a revolving fund in the region and helped to develop a private investment sector, as well as supporting investment in new technology and innovation. They helped to develop a business market in Bayern, and regional financial intermediaries in Hungary and Małopolskie in Poland.

The extent to which FIs have attracted private capital, on the other hand, is limited. Of the EUR 10.5 billion paid into FIs in the case study OP, only EUR 615 million (less than 6%) is estimated to have come from private sources. Much of this (over 60%) was attracted in the UK, while no private funding at all went into FIs in some cases, in part because it was not allowed. In general, as might be expected, more private capital was attracted by venture capital funds than loans funds, especially where the managers involved were experienced (as in North-East England and Bayern).

The extent to which FIs have succeeded in recycling funding is unclear in a number of cases. In Lithuania and Małopolskie, however, loan funds revolved a significant amount of funding (between 20% and 200% for funds in the former, between 64% and 126% for funds in the latter). In other cases, it is doubtful whether much of the funding had revolved up to the end of 2014 (the last date for which data on other aspects are available), partly because of the late start of the schemes. In the case of equity funds, the duration of involvement was typically around 10 years, so that few exits can be expected to have occurred. For North-East England, for example, the exits reported amounted to under 10% of total investments, though the MA expects the holding fund to generate close to 100% of the public funding put in. But this is the only OP of those examined for which an estimate had been made of the final outcome.

As noted above, few if any evaluations have been carried out comparing the effectiveness of FIs with grants. The case studies, however, attempted to do this, if to a limited extent, by comparing the cost of jobs created by the two. The estimates produced vary markedly, with the average cost per job being significantly higher for FIs than grants in Bayern and Małopolskie, similar in North-East England, and lower in the Czech Republic. For the other OPs there was not enough data available to make a comparison, or the two forms of support were too different to compare. In general terms such comparisons are difficult to interpret, insofar as it is unclear how robust the estimation is and what if any account has been taken of the revolving nature of FIs.

Lessons learned and policy implications

It is evident that FIs are an important means of providing support to investment, whether in business enterprises or in other areas, and that their use will increase over time, especially given the possibility they offer of recycling funding in the context of continuing constraints on public finances. It is also evident that there were teething problems in the 2007-2013 period, which to some extent should not recur in the present programming period since FIs have already been set up and experience has been gained of operating them. Nevertheless, it is evident too that there are a number of issues that need to be tackled which will not necessarily be resolved through experience alone. These include, in particular:

- The insufficient level of detail and the lack of clarity in the legal provisions for FIs: this, along with the inexperience of many implementing bodies, contributed to delays in setting up FIs and in delivering the funding to final recipients put into them.
- The failure of MAs to spell out what the contribution of FIs to the pursuit of programme objectives was expected to be, and to ensure that funds were managed in such way as to help to achieve these. This implies that the objectives concerned need to be specified in binding agreements with fund managers to avoid them focusing exclusively on commercial criteria when selecting projects to support.
- The deficiencies of monitoring systems and the indicators used to assess the performance of FIs. In particular, the focus needs to shift from the financial performance of the funds to the performance, and characteristics, of the enterprises receiving support. This implies a more relevant set of indicators than were typically used in the 2007-2013 period, to include those such as productivity or innovation activity that directly relates to the objectives of funding. Although there is an inevitable cost involved in collecting data, which falls partly on enterprises, without relevant data on the final recipients of funding it is not possible to assess the effectiveness of FIs and to identify aspects of their operation that can be improved.
- The reporting of basic information. While there is a pressing need for the better monitoring of the way that FIs allocate funding, it is also important that basic, reliable, information on the funding that is recycled and the private money attracted is also reported since these are major reasons for the use and spread of FIs.
- The costs of operating FIs. In particular, management fees and other costs involved in operating FIs need to be transparent, not least because they are paid with public money but also so that the effectiveness of FIs in differing circumstances can be assessed and compared with other means of supporting investment.
- The use of the ERDF to finance loan schemes as opposed to equity schemes. In the 2007-2013 period, far more funding went to loans and guarantee schemes than into equity or venture capital ones. Yet, in the longer term, the added-value of the provision of ERDF support for FIs may well be larger in respect of the latter, in both creating a new and more efficient source of finance for certain types of investment in some regions and also helping to develop the local financial market in this direction. The use of the ERDF to support equity finance would, of course, still need to be justified through a market gap analysis on a case-by-case basis, just as in respect of support for FIs generally.
- Linked to this, the analysis of the market gap. An *ex ante* assessment of the market gap to justify using the ERDF to support FIs was not obligatory in the 2007-2013 period but it has become so in the present period. It is important that the assessments carried out are thorough and of high quality – not only to identify whether or not a gap exists but also its scale and nature, so that the type of FI that is lacking can be supported. There is evidence that the funds set up in Spain and Italy were larger than justified and, accordingly, had difficulty in finding enterprises to invest in.

3.2 Support of transport (WP5)

3.2.1 Amount and division of funding

Investment in transport has always been a major focus of support as regards both the ERDF and Cohesion Fund. This continued to be the case in the 2007-2013 period, to a large extent because of the entry into the EU of the 10 Central and Eastern European Member States (along with Cyprus and Malta) in 2004 and 2007 and their important need to improve their transport infrastructure, which had been neglected over several decades of communist rule as well as over the succeeding 10-15 years. Both the road and the rail networks were, therefore, in a bad state of repair and in urgent need of modernisation. Pre-accession funding had helped to begin the process of construction and upgrading, which was taken on further in the latter part of the 2000-2006 period when the eight of the countries became eligible for ERDF and Cohesion Fund support. The 2007-2013 period, however, was the first full one when the countries concerned were recipients of a substantial amount of funding from these two sources.

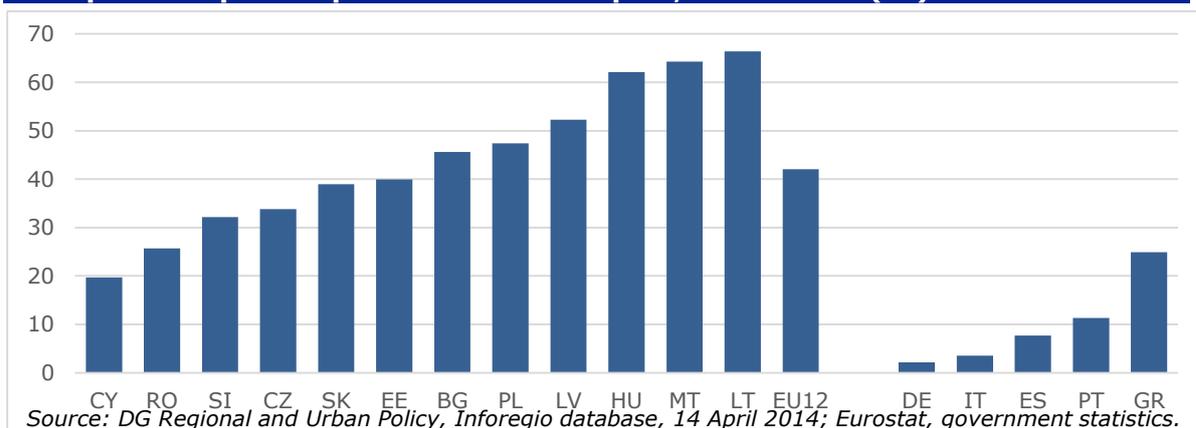
In total across the EU27 as a whole, some EUR 81 billion of the overall amount of ERDF and Cohesion Fund support, or almost a third (31%), was earmarked for investment in transport in the 2007-2013 period⁶⁸. Of this, over two-thirds (69%) was accounted for by the EU12 countries (around EUR 55.6 billion), where 37% of total funding went to investment in transport. In addition, Convergence regions in the four southern EU15 countries, Greece, Spain, Italy and Portugal – where transport networks were also less developed in many cases than in the rest of the EU15 – accounted for another 23% (EUR 18.7 billion), or 29% of the total funding available to spend in these regions. Most of the remaining funding was in the German Länder in the eastern part of the country, where investment in transport represented 27% of the total ERDF support available.

While there are variations in the proportion of overall funding going to transport between the EU12 countries, only in two countries was the proportion less than 25% – Estonia (23%) and Malta (20%) – and it was particularly large in Poland (45%). It was also large in the Convergence regions in Greece and Spain (just over 40% in both cases), though smaller in those in Italy (23%), and smaller still in Portugal (only 12%) where there was a significant shift (of EUR 1.1 billion) away from transport over the period, almost all of it from investment in railways. Although the scale of funding going to transport was smaller in the other Convergence regions in the EU15, it still represented around 20% of the total ERDF support available in France and the UK. Relatively little ERDF support went to transport in non-Convergence regions, the main exception being in Ireland, where 22% of total funding was allocated to transport. Elsewhere the proportion was less than 10%, except in France (12%).

Overall, the ERDF and Cohesion Fund represented a significant source of funding for investment in transport over the period. The amount of the ERDF and Cohesion Fund support for the 2007-2013 period going to transport in the EU12 represented over 40% of total government capital expenditure on transport over these seven years (Figure 3.9)⁶⁹.

⁶⁸ These figures refer to the decided amounts of the total funding available that went to transport according to the data as at 14 April 2106. They exclude ETC programmes and the amount of IPA going to Croatia. Note that the WP5 report on transport includes these two items and, accordingly, indicates a total amount of EUR 82.3 billion going to transport.

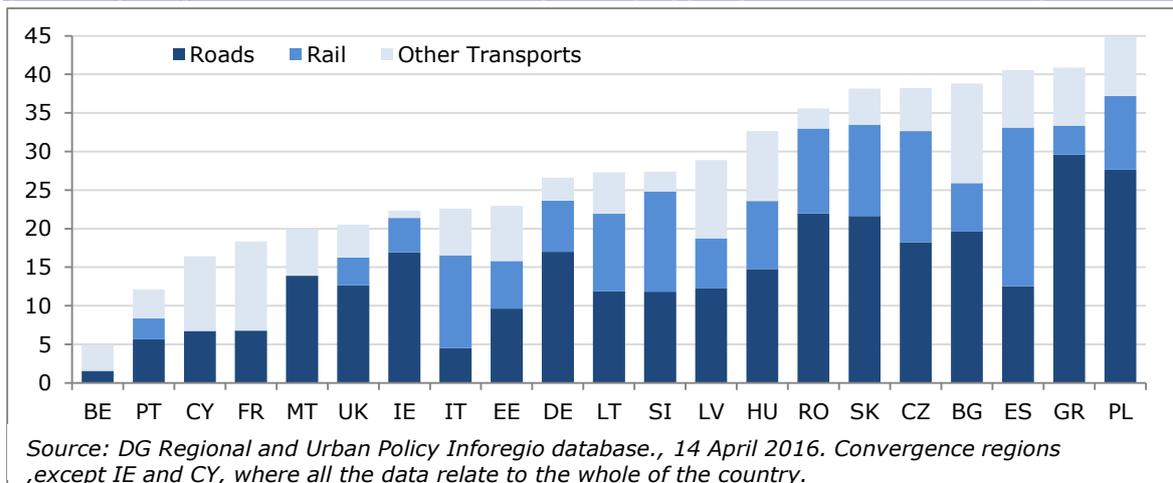
⁶⁹ Government capital expenditure is here defined as the sum of General Government gross fixed capital formation and capital transfers in respect of transport. As noted in Chapter 1, although not all the ERDF and Cohesion Fund support for the 2007-2013 period was spent over the seven years, and some was spent in the years 2014-2016, some of the funding for the 2000-2006 period was also spent in the years 2007-2013. Relating the amount decided for transport for the period to government capital expenditure on transport

Figure 3.9 ERDF and Cohesion Fund decided amounts for transport relative to total public capital expenditure on transport, 2007-2013 (%)

In Hungary, Malta and Lithuania it represented over 60%, and in Latvia over 50%. In Greece it represented 25%, and in Portugal (where transport accounted for a relatively small share of funding) 11%. Though the figures were lower for Spain, Italy and Germany at the national level, in Convergence regions (for which no data on government expenditure on transport are available), they were almost certainly much higher (probably around 25% in Spain, 10-15% in Italy and close to 10% in Germany).

Within transport, a substantial proportion of support went to investment in roads, either on new construction or upgrading existing ones. In the EU12 countries support for roads represented well over half (56%) of all funding going to transport; in Poland and Romania, as well as Malta, it represented over 60%; and in none of the countries was it less than 40% (Figure 3.10, which includes the countries in which funding for transport accounted for over 10% of the total available). Support for investment in rail was less than half of this (26% on average). Only in Slovenia was the proportion of funding going to rail more than that for roads, and then only slightly; and only in two other countries, the Czech Republic and Lithuania, was the proportion much more than half of that going to roads. Support for other transport – for waterways, ports and urban transport – accounted for a minor part of funding in most countries (for 18% of the total on average), though it made up the major part in Cyprus (59%) and around a -third in Bulgaria and Latvia.

Figure 3.10 Decided amounts of the ERDF and Cohesion Fund for 2007-2013 period going to investment in transport by type (% of total amounts)



In Portugal, Greece and the German and UK Convergence regions, as well as in Ireland, the division of funding within transport was similar to that in the EU12 countries; but it was more biased towards roads in the last four, these absorbing over two-thirds of funding in each case, with relatively little going on rail or other transport. In Spain and Italy, on the other hand, just over half of funding for transport went to investment in rail.

Over the programming period an increased amount of funding under initial plans was directed to roads, and a reduced amount to rail and other transport, which seems to conflict with environmental considerations. This follows a similar pattern to that in the 2000-2006 period, with funding for rail in particular being reduced because of difficulties of carrying out the investment planned. However, the countries in which funding for roads was increased in the 2007-2013 period, and those in which funding for rail and other transport was reduced, were for the most part not the same, so only a limited tendency is apparent for funding to be shifted from one to the other.

Indeed, the reduction in funding for rail was concentrated within the EU12 in three countries – Bulgaria, Romania and Slovakia – and there were increases in the Czech Republic and Hungary (there was little change in the others). The reduction in funding for other transport was more widespread but was particularly large in Hungary and Romania, while there were significant increases in Bulgaria and Slovakia. Equally, the increase in funding for roads was not a widespread tendency but was concentrated in just two countries, Poland and Romania. In most of the other EU12 countries, funding for roads was reduced over the period compared with initial plans, most especially in Hungary (by over EUR 300 million).

Romania, therefore, was the only EU12 country in which a shift of funding over the period from rail and other transport to roads was significant, while Romania, Bulgaria and Slovakia are the only counties where a problem of carrying out investment in rail is suggested by the reductions that occurred to what was initially planned.

In the EU15, the reduction in support for investment in rail occurred predominantly in Portugal (by EUR 1 billion), as noted above, and to a lesser extent in Greece (by EUR 278 million), while the latter, along with Italy, was responsible for most of the reduction in other transport support that occurred (cutting the initial plan by almost EUR 500 million). In Italy, however, the reduction in support for other transport (of around EUR 350 million) was accompanied by a similar increase in support for rail and a much smaller increase for roads. In Spain, too, there was a substantial increase in support for rail (of EUR 561 million), which in this case was accompanied by an increase in roads as well, though a much smaller one (of EUR 179 million). The

increase in support for roads was concentrated mainly in Greece (by EUR 932 million), though there was also an increase in the UK (by 194 million) as well as in Italy (by EUR 40 million).

Greece, accordingly, is the only EU15 country where a shift of funding over the period from rail and other transport to roads is apparent, and Greece and Portugal are the only countries in which investment in rail was cut back significantly, perhaps because of the difficulties of implementing the projects. In Portugal, however, although there were delays in carrying out the planned investment in rail, the decision to shift funding from rail to social infrastructure (education especially) was reported to be motivated by a concern to maximise the impact of expenditure on economic activity and jobs and to counter the downturn in the economy.

The content of the evaluation

The evaluation was carried out between January 2015 and April 2016. The data analysis and case studies were undertaken mainly between March and October 2015.

- Quantitative analysis of transport programmes and achievements, supplemented by interviews with stakeholders and informed commentators in 15 Member States where transports programmes were most important.
- Assessment of the quality and accuracy of the *ex ante* financial and demand analysis of 20 major projects in the 15 Member States.
- Case studies of 10 major projects in 8 Member States to verify the assumptions underlying the demand and financial analysis.
- Preparation of a catalogue of challenges summarising the most common issues and problems in relation to the financial analysis of projects and ways of resolving them.
- Case studies of 6 Member States assessing the contribution of cohesion policy to national and EU transport policy.
- Seminar with representatives of MAs and external experts.

3.2.2 Rationale for support of transport

As indicated above, much of the support for investment in transport over the period went to the EU12 countries where the road and rail networks were in urgent need of improvement. Most of the rest went to Convergence regions in the southern EU Member States and in Germany, where networks were also underdeveloped as compared with those in other parts of the EU15, despite two or three decades of substantial investment co-financed under Cohesion policy. The motivation was the same in both cases – to create more efficient links both within and between regions, as well as with the rest of the EU, in order to increase accessibility, which is of major importance for their economic development.

An efficient transport network is also important as a support for the EU internal market. Fast and reliable communications are a key to establishing an area in which goods and services produced in all parts of the EU can be traded freely and where the cost of transport is not a major barrier to firms in one region competing with those elsewhere. Accordingly, much of the support to transport in all Member States went on investment in the trans-European network for transport (TEN-T) – on projects to complete road and rail links between Member States with potential added-value for both the EU and the countries and regions in which routes were located. Just over half of the combined amount of ERDF and Cohesion Fund support for transport, EUR 40.8 billion, went to completing or improving road and rail links on the TEN-T.

The rationale for public support of transport

The rationale for public support of transport lies straightforwardly in its public goods nature, in the fact that its use by one person does not deprive others of benefiting from it, and in the

externalities, or spill-over effects, which mean that there are gains to businesses and people alike from transport links being created between places. Moreover, the large-scale nature of most transport projects and the long timescale involved in planning and constructing them – as well as the importance of taking a network-wide perspective and of ensuring efficient links between the different modes of transport – reinforce the need for government intervention. The fact that the places being connected can be in different countries justifies EU support and hence the planning, and co-financing, of networks at a European level.

EU support was particularly important over the crisis period in maintaining investment in transport at a time when national sources of funding were being cut back. More generally, it meant that Member States could undertake major projects that they might not have been able to carry out without support.

Moreover, the importance of this support can push Member States to develop coherent long-term strategies for transport and to choose modes that are more environmental-friendly and sustainable, i.e. rail or waterways rather than roads. From this perspective, the effective shift towards investment in roads and away from rail and other means of transport over the period is a matter of concern. At the same time, there is a need to recognise the poor state of the road network over much of the EU12 and the obstacle that this creates for efficient communication, as well as the fact that railways and waterways are not a real alternative to roads in many cases. Nevertheless, it is still important for Cohesion policy to encourage investment in modes of transport that minimise the harm to the environment wherever possible.

3.2.3 Main achievements

The outputs of road and rail projects in terms of the kilometres (km) of roads or railway lines constructed or reconstructed – or upgraded – were designated as core indicators in the 2007-2013 period, which means that MAs were asked to collect and report data on them to the Commission so that they could be aggregated to give an indication of programme achievements. Such reporting, however, was not compulsory and a number of MAs preferred instead to use specific indicators to monitor the output of the projects completed. Since these were not necessarily reported, the indicator data available give an incomplete picture of the overall output of road and rail projects over the period, or at least up to the end of 2014, which is the latest date for which data were reported. Moreover, even where the data were reported, there is some variability in the point at which the output of a project was reported. In some cases, this happened when the new or upgraded route started being used; in other cases, when the whole project, or group of projects, of which it formed part was completed; and in yet other cases, only when the project was signed off by the Commission as being completed, which can be a year or more after it began to be used. Accordingly the data set out below underestimate the actual output of road and rail projects over this period, perhaps substantially, though it is hard to know by how much.

Roads

The support provided by the ERDF and Cohesion Fund over the 2007-2013 period resulted in the construction of around 4,875 km of new roads, mostly motorways, in the EU as a whole. Of these 2,400 km, i.e. almost half, were additions to the TEN-T (Table 3.5).

Table 3.5 ERDF and Cohesion Fund co-financed construction and upgrading of roads and railways (core indicators), figures up to end-2014 (km)

	New roads	New TEN roads	Upgraded roads	New railways	Upgraded railways	TEN railways
BG	175.0	173.0	1 040.5	0.0	234.0	234.0
CY	2.9	2.9	3.4			

CZ	311.8	110.8	<u>2 017.9</u>		369.1	294.0
EE	69.7		205.0			
HU	502.0	135.2	2 521.2	20.0	216.0	20.0
LT			<u>1 473.4</u>		0.0	0.0
LV	0.0	0.0	636.6			0.0
MT			13.3			
PL	1 886.3	1 056.0	<u>7 216.2</u>	2.0	482.1	123.7
RO	367.9	313.6	1 892.8		122.3	21.8
SI	<i>60.0</i>	52.4	10.7		89.5	89.5
SK	79.5	40.6	1 625.7		64.3	64.3
EU12	3 455.0	1 884.5	18 656.6	22.0	1577.2	847.2
DE	293.5	100.7	<u>769.9</u>	184.5	248.6	158.8
IE			33.0			
ES	509.8	124.7	2 458.1	(763.3)	1.2	(763.3)
FR	28.0				549.9	57.0
EL	<i>144.4</i>	144.4	<u>2 645.9</u>		60.3	11.4
IT	94.3	0.0	188.1	29.0	1 035.0	733.2
PT	300.4	138.2	2 996.7	47.6	385.5	47.6
SE	36.0		14.0	2.0	81.0	
UK	13.0	7.0	11.0	2.0	2.0	2.0
EU15	1 419.4	515.0	9 116.6	1 028.3	2 363.4	1 773.2
EU27	4874.4	2399.5	27773.3	1 050.3	3940.6	2 620.5
ETC			<u>787.3</u>			

Note: Data in italics for CY, CZ, EL and SI are based on the text of the Annual Implementation Reports, not the structured submission in the data reporting system. Underlined data for upgraded roads include values reported under programme-specific indicators, where the achievement was significant and the indicator definition was close to the core indicator.

No data were reported for railways in Spain, though significant construction and upgrading was undertaken. The figures in brackets indicate the length of line likely to have been constructed by major projects in the country.

TEN-T railways include both new lines and upgraded ones.

Source: DG Regional and Urban Policy, based on indicators reported in AIRs.

Around 70% of the new roads (slightly more than 3 450 km) were constructed in the EU12 countries, and almost 80% of the new TEN-T roads. More than half of both in the EU12 were built in Poland, while Hungary accounted for around 500 km of the other new roads, and Romania and the Czech Republic for over 300 km each. In both Hungary and the Czech Republic, only a minority of the new roads were on the TEN-T – though still over 100 km in each case – while in Poland most were and in Romania almost all were. This was also the case in Bulgaria, where 175 km of new roads were built. In all these countries, the new roads constructed with EU funding over the period almost certainly represented most if not all of the new motorways built over the years 2007-2014. In both Bulgaria and the Czech Republic, for example, they added over 40% of the length of motorway in the two countries in relation to the situation at the beginning of the period; in Hungary 60%; in Estonia over 70%; and in Romania 130%. In the EU15, around 510 km of the new roads were constructed in Spain, with a further 300 km or so built in both Germany and Portugal, and with Greece and Italy accounting for most of the remainder. In each case, apart from Greece, where all the new roads reported to have been built were part of the TEN-T, most of the roads constructed were national or regional roads not on the TEN-T.

In addition to the construction of new roads, almost 28 600 km of roads were reconstructed or upgraded across the EU, though it is difficult to interpret the

significance of this, since reconstruction can range from converting a single-lane road into a dual carriageway to resurfacing. Undoubtedly, improvements were made to the road network and to the speed of travel – and therefore travel time was reduced – but it is not possible to know the extent. Again, most of this improvement occurred in the EU12 countries – around two-thirds – where in general the need for upgrading was most pressing.

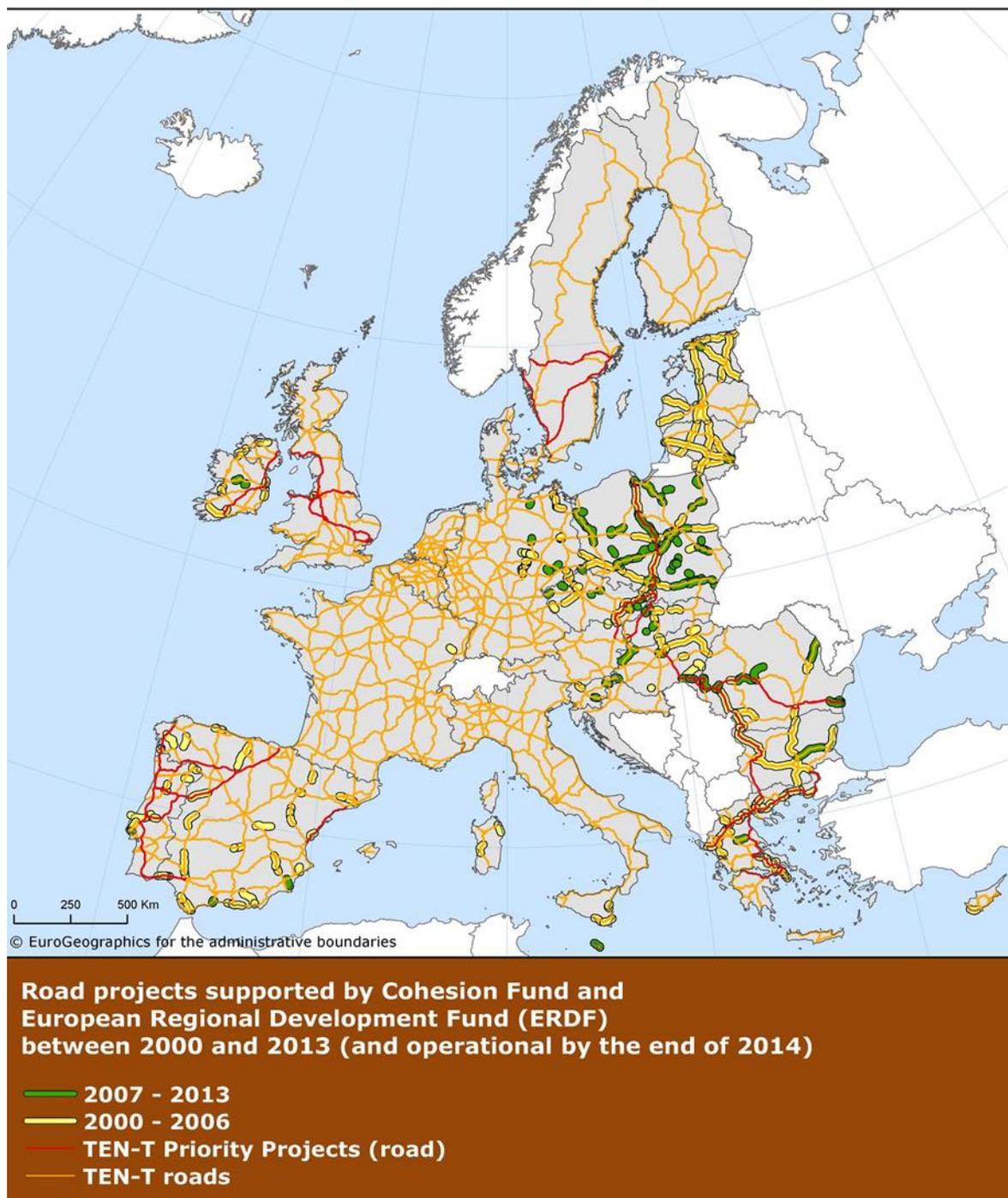
In the EU15, the upgrading of roads was concentrated in Spain, Greece and Portugal, with the length of road upgraded being similar in Spain and Greece (at around 2 500 km) and slightly greater in Portugal (at just under 3 000 km).

While the construction of roads together with upgrading was broadly in line with the amount of funding indicated for this in the various EU12 countries, as described above, this was less the case in the EU15. In particular, in Portugal the funding from the ERDF and Cohesion Fund going to roads was less than 20% of that in Greece (just over EUR 800 million as opposed to EUR 4.6 billion), but over twice the length of new roads was built and more roads were upgraded. Moreover, the funding going to roads in Italy was only slightly less than that in Portugal (just over EUR 700 million), but the new roads built were less than a third of those in the latter, and roads upgraded were only a small fraction.

It should be emphasised that comparing the costs of road construction or upgrading across countries is notoriously difficult. The costs of roads constructed per km can vary substantially because of differences in the terrain – the extent to which bridges and tunnels are needed, in particular – and in the nature of the roads built and upgrading can equally entail very different costs per km according to the type of upgrading involved (from the installation of road lighting to the conversion of a single-lane road into a dual carriageway). Nevertheless, the scale of the difference seems too large to be explained by differences in unit costs alone. It seems likely that at least part is a result of the indicators of output, as noted above, being incomplete and varying in coverage across countries, so giving only a partial picture of the roads constructed or upgraded over the period.

Map 3.1 shows the location of the roads built over the period as part of the TEN-T and their significant concentration in the EU12 countries, especially in Poland. It illustrates the importance of the stretches of road as links between regions and countries across the EU.

Map 3.1 TEN-T road projects



Rail

The length of new railways constructed in the EU as reported was much less than that of roads, only 287 km in total. Unlike in the case of roads only a small proportion of this occurred in the EU12 (only 22 km). Most (almost 65% of the total) was constructed in Germany in the eastern part of the country. The reported figures, however, substantially understate the actual length of railway line that was built over the period. In particular, no new construction is reported in Spain despite the large amount of funding going to investment in rail, as indicated above (EUR 3.6 billion in Convergence regions with another EUR 436 million in the Competitiveness regions). The major projects undertaken over the period indicate that altogether around 765 km of railway line will have been constructed when the projects have been completed. This, therefore, raises the total length of line constructed over the period to 1 050 km.

There were many more railway lines that were upgraded, around 3 940 km altogether, and although the majority of the upgrading occurred in the EU15, most especially in Italy, there were almost 1 580 km upgraded in the EU12. A large proportion of these were in Poland but there were also significant lengths of line upgraded in the Czech Republic, Bulgaria and Hungary.

Just over half (53%) of the railway line built or upgraded in the EU over the period was part of the TEN-T if the major projects in Spain are included, with the proportion being much the same in the EU15 as in the EU12.

Map 3.2 shows the location of the railway projects undertaken as part of the TEN-T over the period. It illustrates the importance of the links in Spain and the eastern part of Germany, in particular.

Examples of projects completed over the period

In addition to the construction or reconstruction of roads and railway lines, there were numerous extensions or improvements made to waterways, ports, airports and urban transport systems, as well as cycle paths, across the EU, and in particular in Convergence regions, as a result of the support from the ERDF and Cohesion Fund. Data on these, however, are only piecemeal and do not convey the scale of the investment that occurred. Nor do such data in general, including the figures for the length of road or rail networks constructed or improved, convey the importance of the investment in terms of time savings and reductions in congestion, pollution and accidents, still less the effect on the development of regions and local areas, as well as on the national and EU economy. In other words, the indicators that were collected over the period relate mainly to output rather than to the results of the investment and its impact on the ultimate objectives of Cohesion policy.

In the absence of such data and an overall assessment of the effects concerned, examples of the projects that were completed over the period give some impression of their contribution to alleviating bottlenecks, reducing travel time and relieving congestion in city centres, so helping to reduce pollution and environmental damage.

Trakia motorway, Bulgaria

The road constructed over the 2007-2013 period runs for 116 km between Stara Zagora and Karnobat in the south-west of Bulgaria and completes the Trakia motorway from Sofia to the Black Sea port of Burgas. Accordingly, it links the capital city, which is the centre of economic activity, with the fourth largest city in the country and the largest port and, therefore, is of vital importance for the development of the Bulgarian economy. The project was implemented in three sections, construction beginning in 2010. Two sections opened in mid-2012, the third one a year later. The motorway was a key part of the country's General Transport Master Plan, which identified the investment needed to construct an efficient transport network in Bulgaria and was based on an assessment of the improvements needed in the existing network, a forecast of future demand for transport and an appraisal of the options for achieving the overall objective. The Trakia motorway was the first priority according to the Plan and forms part of the Orient-East-Med Corridor of the TEN-T, which runs from Greece to the German Baltic coast. In consequence, it makes a major contribution both to improving transport links in Bulgaria and in the wider EU.

Cernavoda-Constanța motorway, Romania

The road is a 51 km-long section of the A2 motorway linking Bucharest and Constanta on the Black Sea coast, the fifth largest city in Romania and the largest port on the Black Sea as well as being one of the largest in Europe. It also forms part of the TEN-T priority axis number 7, which runs from Patra in Greece, through Athens to Sofia and

on to Budapest, and which is part, in turn, of the Orient-East-Med Corridor that the Trakia motorway, described above, is on. Accordingly, it shares the same characteristics of the latter in being strategically important for both the Romanian and the wider EU economy. The section that completed the A2 motorway opened to traffic towards the end of 2012.

Urban transport projects

A number of public transport projects were supported over the period that had the effect of reducing congestion in cities and improving the urban environment as well as reducing travel times. Examples include the development of metro systems in Budapest (see major project case studies prepared as part of WP5), Porto and Sofia (described below), tramlines in Le Havre in France, Szeged in the south of Hungary (described below) and Warsaw in Poland, and the upgrading of urban or suburban railways between Gdynia, Sopot and Gdansk in Poland and between Nantes and Châteaubriant in France (also described below), as well as the city rail tunnel in Leipzig (see major project case studies prepared as part of WP5).

Sofia metro extension

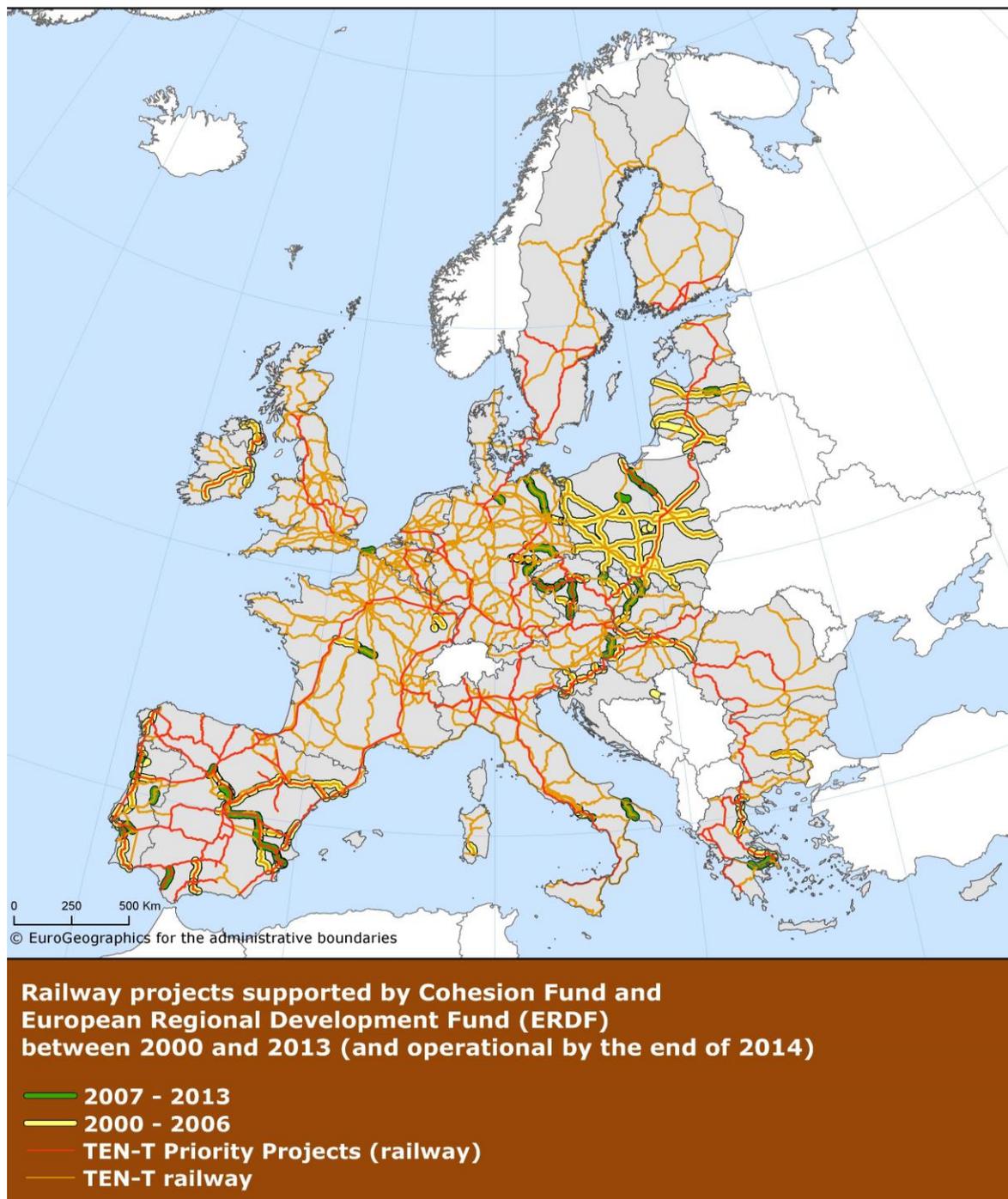
Cohesion policy funding co-financed the extension of the metro network in Sofia from 18 km in 2009 to 39 km in 2015 and the number of stations from 14 to 34. This took the form of the construction of the new metro line number 2, the first central section of which was opened in 2012, and the extension of the existing metro line 1. As a result, the Sofia metro now serves the major residential areas situated in the north and south of the city, as well as the Sofia Business Park, and the airport. This has led to changes in travel patterns, with an increasing proportion of journeys being made by public transport and a reduction in the use of cars, resulting in significantly less congestion in the city and so in toxic emissions.

Development of Szeged electric public transport

Cohesion policy funding was used to upgrade and extend the tram system in Szeged in Hungary to expand the capacity of routes linking residential areas with the city centre and to give added incentive to people to use public transport rather than cars. Tramline 1 and sections of lines 3 and 4 were, therefore, modernised (18.3 km in total) and a new line 2 was constructed (of 4.8 km) along with an extension of the trolleybus network (of 3.7 km). Nine new low-floor trams and 10 new trolleybuses were also purchased and a new passenger information and traffic-management system was installed together with eight bike-and-ride stations next to tram and trolleybus stops. The result has been a reduction in travel time between the main residential areas and the city centre as well as in noise and air pollution because of fewer cars on the roads.

Reopening of railway line Nantes–Châteaubriant

The railway line, covering a distance of 64 km, was reopened in 2014 having been closed for passenger traffic since 1980. The project was co-funded under Cohesion policy and involved the replacement of existing track; the electrification of the line; the installation of safety systems at level crossings and of signalling and telecommunication equipment; and the improvement of access to stations and services at Nantes and other places along the route. The line, which is now used by tram-trains, has made commuting and other journeys to Nantes, a centre of essential services in the area, much easier. It has increased the attractiveness of using public transport instead of cars and so has reduced both congestion and pollution levels.

Map 3.2 TEN-T rail projects

3.2.4 Other findings from the evaluation

The evaluation examined not only the amount of funding that was dedicated to supporting investment in transport, the way that it was used and the outcomes from it, but also the financial analysis that was carried out beforehand to assess the viability of major transport projects, which accounted for the bulk of expenditure, and the elements which went into *ex ante* evaluations. This consisted of a review of 20 selected projects and a more detailed examination of 10 of these, focusing on the projections of demand, or the extent to which the route in question was likely to be used; of costs, including the cost of maintenance as well as of the initial construction; and the relationship between the two.

The broad conclusion reached was that in most cases the analysis carried out of both future demand and the costs arising from the project were reasonably satisfactory and

there were fewer problems than identified in the *ex post* evaluation of both the ERDF and Cohesion Fund in the 2000-2006 period. This is reflected in the fact that projects were in most cases completed to budget, or even below the costs initially forecast, in contrast to the previous period when cost overruns were common. There were more projects which overran in terms of time, though again this seems to have occurred less frequently than in the earlier period.

At the same time, this favourable outcome seems to stem to a significant extent from the crisis and the downward pressure which this exerted on construction costs, both those estimated beforehand and incorporated in the contract and the actual costs. The shortage of work for construction companies led to increased competition in the tendering process and to the prices quoted being cut in attempts to win contracts. Equally, in Poland and Romania, two of the countries allocating among the largest amounts of funding to transport, depreciations of the currency over the period meant that the cost of projects in Euro terms was reduced substantially.

While the intensified competition for contracts led to prices being bid down, it also led to companies in some cases quoting prices which were below costs and, therefore, gave rise to difficulties in carrying out the work. In several cases, companies winning contracts were unable to complete the contract because of financial problems, causing serious delays and the additional costs of repeating the tendering process.

To some extent, this outcome was a symptom of the way in which the procurement process was conducted in some countries, especially in the EU12, with an almost exclusive focus on price when assessing tenders and little if any attention being paid to either the quality of competing bids or the financial health of the bidders. This was argued by MAs (including at the seminar held in Brussels to discuss the findings of the evaluation) as being a result of the difficulty of justifying to auditors the awarding of a contract to a company that was not the lowest bidder and, more generally, of being unable to identify tangible ways of demonstrating quality differences between bids. The possibility that the projects chosen were of low quality has implications not only for the likelihood of delays but also for maintenance costs, which are likely to be higher if the standard of the project constructed is relatively low.

Despite the fact that the financial analysis carried out was on the whole largely satisfactory, there were still some aspects where the evaluation identified scope for improvement. In particular:

- the demand analysis carried out in some cases was too aggregate, covering for example the whole country, and did not focus sufficiently on the area in which the projects was being constructed; in addition, insufficient consideration was sometimes given to the interaction of the project concerned with other routes and modes of transport and the effect of this on demand forecasts;
- while analysis of affordability was usually carried out, this did not always relate to the area concerned and the ability of the people living there to afford the tolls or fares which were likely to be needed to ensure the project's financial viability;
- the extent of project preparation influenced the outturn costs and the schedules for completion; the case studies examined demonstrated a clear link between extensive preparation for the project being undertaken, including detailed planning and early acquisition of land, and a reduction in both the costs and time involved in carrying out the projects. The projects subject to cost and time overruns were typically those for which the preparatory work had been inadequate;

- the costs of maintaining the infrastructure built and how these were going to be met was in some cases neglected, while in others the tolls or charges assumed were not in line with those that were actually imposed in practice, in both cases giving rise to uncertainty about the financial sustainability of the project.

3.2.5 Lessons learned and policy implications

A number of the findings summarised above have implications for future policy at both EU and Member State level. To some extent, these implications have already been taken into account in devising the regulations for the present programming period, since they were evident in the previous period too. The main implications are set out below.

- Although, as indicated above, there is limited evidence of a direct shift in funding from rail and other forms of transport to roads, there was, nevertheless, an overall reduction in support for the former and an increase in the latter over the period, which accentuated the relative concentration of funding on roads. Although this can be justified by the poor state of the road network in the EU12 countries, it conflicts with environmental considerations and the growing emphasis on the importance of development being sustainable. There are signs of change in this respect in the 2014-2020 period. In Poland, for example, the biggest spender on transport in the last period, the Partnership Agreement indicates a similar level of investment in railways as in roads. Nevertheless, it is evident that modernising the road network in the EU13 (including in Croatia) will take some time, and that the EU funds represent in many cases an essential source of finance to carry out the construction required. There is a continuing need, however, to take account of environmental considerations when planning projects. In the EU15, in particular, there is a serious question as to whether Cohesion policy should continue to finance road-building unless it is possible to demonstrate a clear reduction in traffic emissions (such as, for example, in the case of city ring-roads or by-passes)⁷⁰.
- Consideration should be given to whether the ERDF should continue to finance ...the construction of new roads in the EU15, whenever it is not possible to demonstrate a clear reduction in traffic emissions (such as, for example, in the case of urban by-passes) or a clear increase in road safety
- To invest more in railways, however, runs up against the evident difficulties in some countries of carrying out railway projects, which seem to be more complex than building roads. These difficulties contributed to the shift of funding away from rail over the 2007-2013 period in Bulgaria, Romania, Slovakia and Greece, in particular, while in Poland it is reflected in the slow rate of project implementation. The source of these difficulties, which were also manifest in the previous period, is by no means clear and needs investigation.
- The situation may be helped by the inclusion in the regulations for the present programming period of a requirement that support for investment in transport is conditional not only on a coherent national transport strategy but, equally importantly, on there being a pipeline of 'mature' projects ready to be undertaken and on tangible measures having been taken to increase the capacity of intermediary bodies to carry out the projects concerned.

⁷⁰ The same point was made in the Synthesis report on the 2000-2006 ex post evaluation (see p.167: http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/synthesis_eval2000_2006.pdf)

- Related to this, there is a need to ensure that sufficient time and effort are put into preparing projects; that alternative routes and modes of transport are properly assessed; and that the costs of maintaining the infrastructure once the project is built are taken into account, together with how they are planned to be covered. The latter includes paying due regard to the national context when projecting future revenue from tariffs or charges, as well as to the environmental costs of pollution and noise that may result and which may need to be covered. Given the likely sensitivity of the results of such *ex ante* evaluation to the assumptions that are made in these respects and the uncertainty that surrounds them, it is important that they are at least sufficiently transparent and detailed to allow their plausibility to be assessed.
- It is equally important in the procurement process that the choice of contractor to carry out the projects is based as much if not more on the quality of the proposal – the proven experience and competence of the bidder and their financial standing – as on the price quoted for carrying out the work. This depends on MAs being prepared to give due weight to these non-price factors in deciding between proposals and having sufficient confidence in their ability to assess the factors concerned in objective terms to be able to justify their choice to an auditor.
- The concentration of funding on TEN-T projects in some countries gave rise to a concern that regional and local needs were being neglected in favour of EU-wide objectives.⁷¹ It seems that in the two countries in which expenditure was most concentrated on TEN-T projects, Bulgaria and Romania, these were also important for national and regional interests: however, consideration needs to be given to the appropriate weights to attach to the two sets of interests when deciding on the allocation of funding. While EU added-value seems to be most directly generated by projects that go to completing the TEN-T, the ultimate objective of Cohesion policy is to reduce regional disparities across the Union. It is arguable that projects that help to achieve this should be regarded as being as much a source of EU added-value as those that contribute to the TEN-T.

3.3 Support of environmental infrastructure (WP6)

3.3.1 Amount and division of funding

Like transport, the environment has been a focus for support from Cohesion policy since the policy was initiated on a significant scale in 1989. Along with transport, it is one of the policy areas eligible for financing from the Cohesion Fund, on the grounds that it is important to have common environmental standards across the EU for both the health of people and to protect the eco-system. These standards are enforced through a series of Directives on clean drinking water, wastewater treatment and waste management which Member States are required to comply with (see Box). Since lower-income Member States lack the financial resources to invest sufficiently in the infrastructure required to achieve this, it is up to the EU to provide support. In consequence, a large amount of funding from both the ERDF and Cohesion Fund has gone into co-financing investment in environmental infrastructure in these countries over the past 27 years.

⁷¹ This was a concern revealed by a survey of stakeholders in both Hungary and Poland - see 'Ex post evaluation of Cohesion policy programmes, 2007-2013, WP5, Transport, Final Report, p.30.

EU Directives on water and waste

The main EU Directives relating to water supply, wastewater treatment and waste management which are relevant here among an extensive body of legislation on the environment are:

- the Landfills Directive (1999/31/EC), which specifies that all waste should be collected and treated, that all waste going to landfills should first be pre-treated, that landfills not meeting standards should be closed by July 2009 and that the amount of biodegradable municipal waste sent to landfills should be reduced to 50% of its 1995 level;
- the Drinking Water Directive (98/83/EC) which requires Member States to provide high-quality drinking water and sets standards for water quality;
- the Urban Waste Water Treatment Directive (91/271/EEC) which requires the collection and treatment of waste water in all agglomerations of over 2000 people.

The entry of the EU12 countries into the EU in 2004 and 2007 further increased the need for investment considerably, and a substantial proportion of the ERDF and Cohesion Fund amounts allocated to these countries went into support of such investment in the 2007-2013 period. This was the case too in the Convergence regions in the southern EU15 Member States, where the need for investment to bring infrastructure up to the desired standard was equally significant.

In total, the ERDF and Cohesion Fund for the 2007-2013 period set aside by Member States for support of the environment amounted to EUR 40 billion, or just over 15% of the total (Table 3.6)⁷². The EU12 countries accounted for most of this (EUR 25.3 billion, or 17% of their total allocation), while the Convergence regions in the four southern EU15 countries (Greece, Spain, Italy and Portugal) were responsible for most of the rest (EUR 10.7 billion, which is much the same share of their overall allocation as in the EU12).

Table 3.6 Decided amounts of funding going to the Environment by regional groupings, 2007-2013

	EU12	EU4 Conv	EU4 Comp	EU15 Conv excl. EU4	EU15 Comp excl. EU4	EU27
EUR million						
Waste	3 851	1 092	38	186	52	5 250
Water	3 897	2 796	314	157	41	7 264
Wastewater	9 843	3 619	89	443	51	14 104
Other	7 721	3 209	551	846	990	13 375
Total	25 313	10 717	992	1 632	1 134	39 993
% total ERDF-CF						
Waste	2.6	1.7	0.4	1.2	0.3	2.0
Water	2.6	4.4	3.6	1.0	0.2	2.8
Wastewater	6.6	5.7	1.0	2.8	0.3	5.4
Other	5.2	5.0	6.4	5.3	5.4	5.1
Total	17.0	16.9	11.5	10.2	6.1	15.3

Note: EU4 Conv=Convergence regions in GR, ES, IT and PT; EU4 Comp=Competitiveness regions in these countries; EU15 Conv=Convergence regions in the rest of the EU15; EU15 Comp=Competitiveness regions in the rest of the EU15.

Source: DG Regional and Urban Policy, Inforegio database, 14 April 2016.

Most of the funding going to the environment, EUR 26.6 billion, went to support of investment in waste management facilities, clean water supply and wastewater collection and treatment, which were the focus of WP6. Again, EU12 countries were

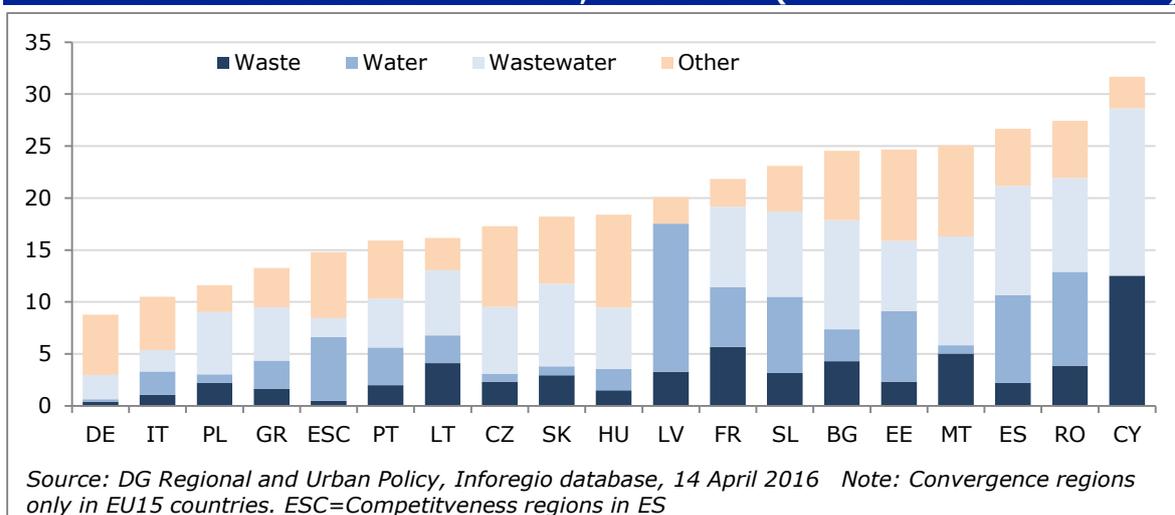
⁷² It should be noted that this figure differs from that in the WP6 final report because it excludes funding going to urban transport, which is included in the figure in the report. It also refers to the decided amounts of funding as at 14 April 2016 whereas the report refers to the figures at the end of 2014, which were slightly different. It should be noted, in addition, that like WP6, the environment is defined here to exclude 'promotion of natural assets' and 'protection and development of the natural heritage' which were covered by WP9 on 'Culture and tourism'.

responsible for most of this funding (EUR 17.6 billion) and Convergence regions in the four southern countries accounted for most of the rest (a further EUR 7.6 billion).

Of the total funding going to investment in these three areas, over half (56%) in the EU12 went to support of the construction or improvement of wastewater collection and treatment, while in Convergence regions in the four southern countries this accounted for just under half (48%), mainly because of more going to investment in clean water supply. In practice, however, water supply and wastewater treatment are often part of the same project and the figures for each tend to include both types of investment⁷³. This means that there are strong grounds for considering these two categories together when assessing the division of funding.

There was some variation between countries in the way that funding was split between the different areas (Figure 3.11).

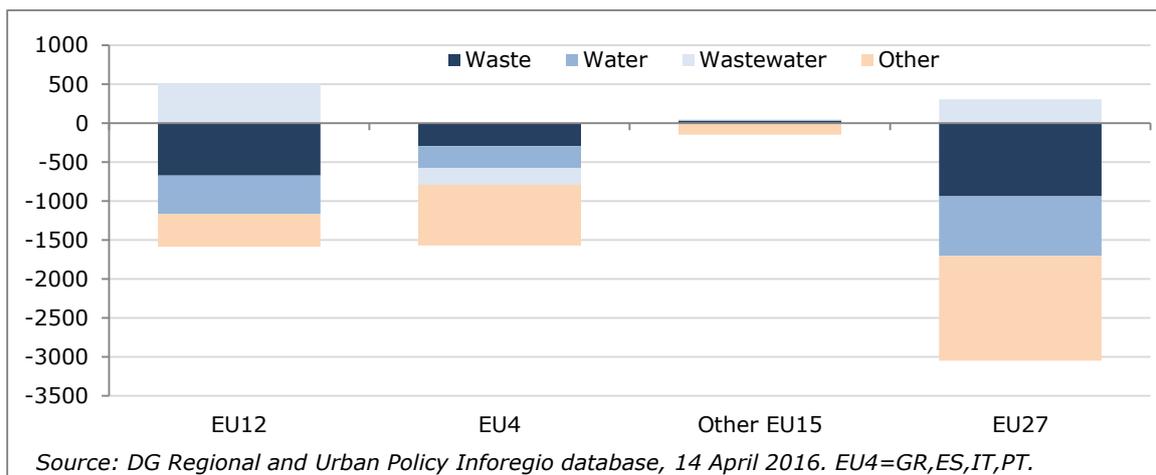
Figure 3.11 Division of funding for the environment by broad policy area in the EU12 and selected EU15 countries, 2007-2013 (% total decided amounts)



Over the period 2007-2015, funding for the environment was cut back significantly in the EU12 and this was even more the case in the Convergence regions in the EU15. In the EU overall the amount of funding was reduced by EUR 2.7 billion as compared with what was initially planned. The reclamation of polluted or contaminated industrial sites and land, in particular, accounted for almost half of the reduction, just over EUR 1.3 billion. Funding for infrastructure projects was also reduced substantially (by EUR 1.4 billion), but there was an increase in funding for wastewater-treatment projects of just over EUR 300 million (Figure 3.12). By contrast, funding for waste management projects was reduced by over EUR 900 million and that for water supply ones by almost EUR 800 million.

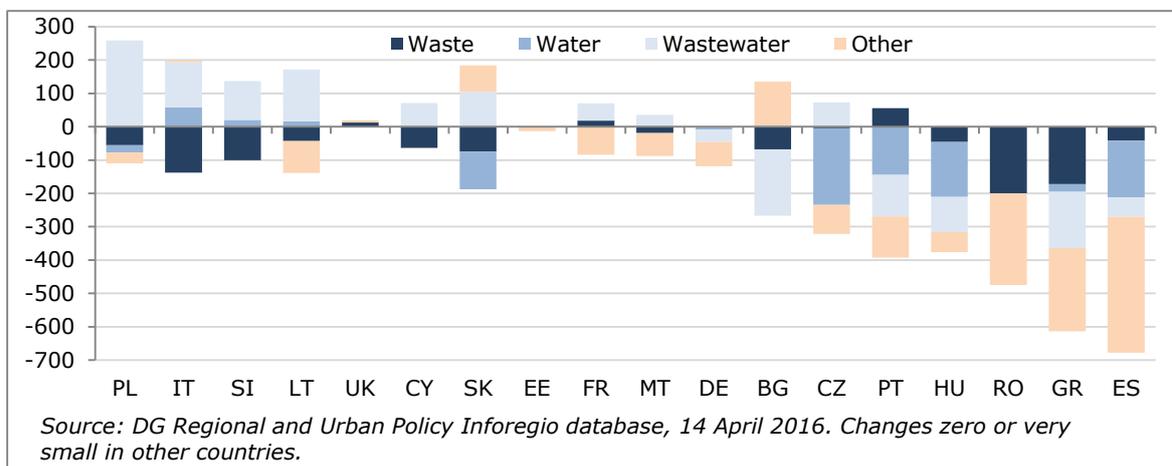
⁷³ See WP6, Final Report (pp.373-34, which indicates that ‘many Member States take an integrated approach to the water sector. This means that they have combined drinking water supply and wastewater treatment needs into single projects, often referred to as ‘integrated water management’ or ‘water cycle’ projects.’

Figure 3.12 Shifts in decided amounts of 2007-2013 funding for the environment between 2007 and 2015 (EUR million)



The increase in funding for wastewater projects was concentrated in the EU12 and occurred in all countries apart from Estonia, Latvia and Romania, where it remained unchanged, and Bulgaria, where it was cut back markedly (Figure 3.13). The increase was especially large in Poland (EUR 260 million). The overall increase for wastewater was accompanied by a reduction in funding for water supply projects (though as noted above, the two cannot always be easily distinguished) of EUR 400 million, concentrated in just three countries, Hungary, Slovakia and the Czech Republic (by EUR 230 million in the last). The reduction in waste management projects was much more widely distributed, with funding being cut in most EU12 countries and remaining unchanged in the others.

Figure 3.13 Shifts in decided amounts of 2007-2013 funding for the environment in Member States between 2007 and 2015 (EUR million)



In the EU15, the reduction in funding for the environment was concentrated in Convergence regions in the four southern Member States, where the amount for infrastructure projects was cut back by almost EUR 800 million, spread across the three kinds. The shifts made in the four countries, however, differed significantly. In Italy, funding for water supply and wastewater treatment was increased while that for waste management was reduced. In Portugal the opposite occurred, and in both Spain and Greece funding was reduced on all three kinds of infrastructure.

In all cases, the reduction in funding reflects a slow rate of implementing projects, which in turn is a reflection of difficulties in carrying them out, coupled with pressure to spend funding more quickly, both to help counter the effects of the crisis and to avoid de-commitments. This was especially the case for waste management projects,

for which funding was reduced in nearly all countries where investment was initially planned to be undertaken.

The slow rate of project implementation is reflected in the rate of expenditure relative to the funding available. In the EU12, less than -half of the funding decided for waste projects had been spent by the end of 2014 (though the figures were much higher in Bulgaria, 64%; Slovakia, 75%; the Czech Republic, 83%; and, above all, Malta, 100%). The average proportion was not much higher in the EU15, primarily because of low rates in Greece and Italy. For water projects, the expenditure rate was higher, at around 75% of funding⁷⁴.

In the EU12 countries, especially, the expenditure co-financed by the ERDF and Cohesion Fund represented a substantial part of the overall investment in water supply, wastewater treatment and waste management. For waste management, it is estimated that around -half or more of the total capital expenditure undertaken over the seven years 2007-2013 in the EU12 countries was co-financed under Cohesion policy; and most of it in Poland, Bulgaria, Estonia, Latvia, the Czech Republic, Romania and Slovenia. This was also the case in Portugal, while in Spain it is estimated that over 10% of expenditure was co-financed by EU funding and in the Convergence regions closer to a third⁷⁵.

In respect of water supply and wastewater treatment, the ERDF and Cohesion Fund are estimated to have co-financed around 35% of total capital expenditure carried out by the public sector over the seven-year period. In Bulgaria, Romania, Hungary and all three Baltic States, along with Portugal, it is estimated that most of expenditure was co-financed, and in Slovakia and Malta around half. In Spain an estimated 20% or so was co-financed, implying that in the Convergence regions the proportion may have been close to -half⁷⁶.

The content of the evaluation

The evaluation was carried out between January 2015 and April 2016. The data analysis and case studies were undertaken mainly between February and August 2015. The evaluation consisted of:

- Analysis of achievements of Cohesion Policy in meeting requirements of the *acquis communautaire* in relation to drinking water supply, wastewater treatment and solid waste management.
- Assessment of *ex ante* financial analysis of the financial analysis of 20 selected major projects.
- Comparison of planned and actual values in relation to the financial analysis of 11 operational projects.
- Case studies of 10 major projects to verify the assumptions underlying the financial analysis.
- Preparation of catalogue of challenges summarising overview of the most common issues and problems in relation to financial analysis and ways of resolving them.
- Seminar with representatives of MAs, intermediate bodies and external experts

⁷⁴ These figures are based on the estimates of expenditure made by WP13 which are then related to the decided amounts of funding as at 14 April 2016. Because of the estimation involved, they should be regarded as indicative only. The data reported at the end of 2015 show a marked increase in the rate of implementation, so it is likely that in most countries, the funding set aside for environmental infrastructure will have been spent within the period allowed.

⁷⁵ See WP6, Final Report, Table 4.2, p.64. These estimates and those for water are based on relating the expenditure carried out with ERDF and Cohesion Fund support over the period 2007-2013 under the three policy areas to the COFOG data for General Government capital expenditure (gross fixed capital formation plus capital transfers) in the same areas. The latter gives only an approximate indication of the expenditure concerned since it excludes expenditure by public corporations and other public bodies that are not part of General Government, though these should be covered at least in part by capital transfers. Nevertheless, the exercise should give a reasonable idea of the relative scale of support from EU funding.

⁷⁶ See WP6, Final Report, Table 5.3, p.89.

A larger amount of funding was allocated to projects in rural areas relative to population than in other types of area in both the EU12 and Convergence regions in the four southern EU15 countries. This was particularly the case in the latter, where the allocation of funding on environmental infrastructure per head of population was over twice as high in rural areas as in intermediate areas and four times higher than in urban areas (Table 3.7). Indeed, funding per head, in terms of Euros, was higher in rural areas in these regions than in the EU12.

Table 3.7 Allocation of funding to environmental infrastructure by Objective and type of region, 2007-2013 (EUR per head of population)

	EU12	EL,ES,IT,PT	Other EU15	EU27
Convergence	194.3	155.1	52.4	170.0
Urban	152.3	65.2	71.6	114.0
Intermediate	185.1	124.1	36.6	149.8
Rural	220.8	271.2	68.0	223.0
Transition	167.2	147.2	4.3	107.7
Urban	74.6	97.1	0.0	68.4
Intermediate	245.8	156.8	4.6	136.2
Rural	0.0	235.0	9.2	140.1
Competitiveness	45.3	11.4	0.4	2.9
Urban	45.3	12.8	0.3	3.5
Intermediate	0.0	12.6	0.4	2.9
Rural	0.0	3.7	0.8	1.3

Note: The figures relate to allocations to selected projects as at the end of 2014. ETC OPs are excluded. Transition regions are 'Phasing-in' and 'Phasing-out' regions. The division of regions into predominantly urban, intermediate and rural is based on population density at the NUTS 3 level. Environmental infrastructure covers water supply, wastewater treatment and waste management. The figures involve some estimation so should be regarded as approximate only. The data used for population relate to 2010. Source: WP13 of the ex post evaluation and Eurostat, regional accounts (for population).

3.3.2 Rationale for support of environmental infrastructure

As indicated above, the provision of EU support for investment in environmental infrastructure in the lower income Member States and in lagging regions is intended to help them bring the infrastructure concerned up to a reasonable standard in order to protect the environment, safeguard human health and improve the quality of life in the areas concerned. More directly, it is to assist Member States to comply with the various EU Directives on drinking water and waste management.

As in the case of transport, there is strong justification for public intervention to ensure the supply of clean drinking water and effective wastewater treatment and solid waste disposal because of the externalities involved and the social costs entailed in not having the infrastructure concerned. The large-scale infrastructure which needs to be built, the long timescales entailed and the network nature of the facilities reinforce the case for public intervention. The objective of reducing disparities in living standards and the quality of life across the EU, as well as minimising the environmental damage that can spread across national border through water courses and air pollution, justifies the provision of EU support. This is reinforced by the fact that many of the Convergence Member States would find it difficult to comply with the EU Directives, which are designed to ensure common minimum standards in the areas concerned, without such support.

At the same time, it is important to recognise that the economic gains from investment in environmental infrastructure, as opposed to investment in transport, are likely to be minimal except possibly in the longer term, as improvements in the quality of life attract more businesses to locate in the regions concerned.

3.3.3 Main achievements

Waste management

Over the programming period, there was a significant shift across the EU, especially in the EU12 countries and Convergence regions in the south of the EU15, in the disposal of waste away from landfill towards recycling in line with EU policy. A substantial number of landfill sites which did not comply with EU standards were, accordingly, closed down, while in the Czech Republic, Hungary, Lithuania, Poland and Slovenia, as well as Croatia, the proportion of waste which was recycled was increased by over 10 percentage points. Much of this shift was co-financed by the ERDF and Cohesion Fund, as reflected in the figures quoted above on the share of co-financed expenditure relative to overall government spending on waste management.

However, indicators on the tangible results of the funding provided that can be aggregated across programmes are scarce. Accordingly, the main evidence available to demonstrate the achievements over the period lies in the projects carried out and their outcomes. The evaluation focused on six OPs (in Bulgaria, Estonia, Poland, Slovenia, Andalusia in Spain and Campania in Italy) that allocated a significant proportion of funding to environmental infrastructure. Old landfill sites were closed down in all the OPs except Campania; the separate collection of biodegradable waste was increased in all OPs, as was that of recyclable waste in Bulgaria, Slovenia, Andalusia and Campania, and facilities for the composting of biodegradable waste were constructed in Bulgaria, Estonia, Poland and Andalusia. In addition, waste management centres, each catering for a number of municipalities and combining several types of facility in order to take advantage of economies of scale and incorporating the use of advanced technologies, were constructed in Bulgaria, Poland, Slovenia and Andalusia.

In Bulgaria, the proportion of waste which was sent to landfill was reduced from 80% to 70% between 2007 and 2013. A mechanical biological treatment facility, co-financed by EU funding, was opened in Varna in 2011; and a similar facility, but including a composting plant, was opened in Sofia in 2015.

In Estonia, 39 landfills and 11 industrial waste sites were closed down between 2007 and 2013, the share of municipal solid waste composted nearly doubled to 6% and the share of biodegradable waste sent to landfill was reduced significantly.

In Poland, the share of municipal waste going to landfill was reduced from 90% to 53%, while the share of waste going to recycling increased from 6% to 16% and the share composted rose from 6% to 13%. A number of regional waste management centres have been constructed to replace smaller and less efficient local ones. For example, a regional centre with a recovery facility to handle various types of waste and a composting facility was constructed in Gdansk, with EUR 48.2 million of the total cost of EUR 83.5 million coming from EU funds.

In Slovenia, EU funds co-financed some 200 waste collection centres and the construction of a number of regional centres for waste management, as well as the building of an one incinerator and the clean-up of old municipal waste landfills. Between 2007 and 2013, recycling nearly doubled to over 40% and composting was also increased, though it remained relatively low (only around 7% of the total in 2013).

Case studies indicated other examples. For instance, in the Centro region of Portugal, EU funding contributed EUR 61.4 million to the total cost of EUR 81.3 million of the upgrading of a waste management system covering several municipalities to comply with EU regulations. As part of the system, two mechanical and biological treatment

units were constructed in Aveiro and Coimbra and a transfer station was built in Figueira da Foz.

While the projects carried out with EU funding made a significant contribution to Member States being able to comply with EU Directives in this area, there is concern that some of the projects involved the construction of waste incineration plants. This was the case, in particular, in Poland and Slovenia. While incineration is preferable to landfill, it can have detrimental environmental effects and tends to limit the extent of recycling, which is the most preferred option. In the 2014-2020 programming period, the intention is to restrict the construction of incinerators to only 'well-justified' cases.

Water supply and wastewater treatment

Data were collected over the period for two indicators: the additional number of people served by projects undertaken to provide a supply of clean drinking water, and connections to wastewater treatment facilities. Unfortunately, as in other areas, the data are incomplete in that not all MAs carrying out such projects reported the results since it was not compulsory to do so (in Bulgaria and Romania, this was partly because relatively few projects had been completed). They also cover the period only up to the end of 2014 and experience indicates that many projects are only completed at the very end of the period. They therefore understate the achievements over the period, perhaps significantly. They show that, as a result of the funding provided:

- an additional 5.9 million people were connected to a new or improved supply of clean drinking water, 1.6 million of whom were in the EU12 and 3.7 million in Convergence regions in the four southern EU15 Member States – most of them in Spain and Greece;
- an additional 6.9 million people were connected to new or upgraded wastewater treatment facilities, of whom 1.7 million were in the EU12 and 4.6 million were in the four southern Member States (Table 3.8).

Accordingly, the projects supported made a significant contribution to helping Member States meet the EU Directives in those areas that are intended to ensure universal access in most parts of the EU – all except the least densely populated areas – to the services concerned.

Table 3.8 Additional people served by water and wastewater projects co-financed by the ERDF and Cohesion Fund up to end-2014

	Additional population ('000) served by:	
	Water projects	Wastewater projects
CZ	371.3	490.3
EE	13.7	15.8
HU		478.1
LT		78.5
LV	672.2	90.1
PL	262.2	537.3
SI	291.6	194.2
SK	33.0	44.2
ES	1 929.0	2 172.3
EL	1 455.5	370.8
IT		825.0
PT	359.8	1 270.0
DE		213.0
FR	514.6	101.4
EU12	1 644.0	1 928.5
EU4	3 744.3	4 638.1
EU15 Other	514.6	314.4

EU27	5 902.9	6 880.9
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Note: EU4=EL, ES, IT and PT.

Source: DG Regional and Urban Policy, derived from AIRs for 2014.

Specific examples of the projects carried out include:

- the renovation of the water supply system in the Kohla-Järve area in Estonia, which has a population of 50 000, with the installation of new water mains, treatment plants and other facilities to increase the quality of drinking water and to reduce leakages and so to comply with the EU Drinking Water Directive (98/83/EC). Some 98% of the system was operational in 2015 and the rest was due to be completed soon after;
- the upgrading of the water supply and sewerage system in Zory in Poland, which has a population of around 60 000, the aim being to increase the connection rate to 98%, improve services and reduce the environmental impact as well as water leakages. The ultimate objective was to comply with the EU Urban Wastewater and Drinking Water Directives;
- the expansion and modernisation of wastewater treatment facilities in three municipalities on the south bank of the Tagus River in Portugal. The facilities collect wastewater from the municipal sewerage systems and treat it before discharging it into the Tagus estuary as 'reclaimed' water; as a result the municipalities are compliant with EU Urban Waste Water Treatment and EU Water Framework Directives;
- the construction of a new sludge treatment facility at the Vilnius wastewater treatment plant in Lithuania. Before the construction, most of the sludge was landfilled, whereas after it is composted and used as fertiliser. The aim was not only to comply with the EU Sludge Directive (86/278/EEB) but also to reduce the smell from untreated sludge, which affected half the population of Vilnius;

3.3.4 Other findings from the evaluation

The evaluation also reviewed 20 major projects to build or upgrade environmental infrastructure, with a particular focus on the financial analysis that had been undertaken as part of the preparations for the projects. In the previous programming period, 2000-2006, this had been found to be unsatisfactory in many cases. This time, however, the financial analysis was considered to be of reasonable quality and therefore was judged to provide a sound basis for ensuring that the projects were financially sustainable. The apparent improvement was confirmed by those attending the seminar held with MAs and by others involved.

Nevertheless, it was also considered that there was still room for further improvement. Particular issues are:

- The calculation of the financing gap in the application for EU funding has the implicit effect that applicants using a lower affordability threshold will obtain a larger EU grant. This gives an incentive to keep tariffs low and so not to charge sufficiently for the service. The risk is that costs arising from the depreciation of the infrastructure and its eventual replacement might not be included and so become difficult to recover, creating a problem of financial sustainability. The issue is addressed in the 2014-2020 programming period by providing the possibility of applying a fixed 75% funding gap on revenue-generating projects.
- While the analyses of demand carried out were typically sound, there were examples of the demand for water- or wastewater treatment facilities being overestimated. This leads to the capacity constructed being too large and revenue turning out to be lower than forecast. To mitigate the possibility of this

happening, the forecasts of population used should be clearly referenced and demand forecasts should take proper account of price elasticities (i.e. the effect of the charges levied on demand).

- The time schedule set when projects were being planned was often overly optimistic, leading to delays in implementation and sometimes to cash-flow problems. In some cases this emanated from MAs, which imposed unrealistically short schedules as a result of pressure on them to demonstrate that they were doing something to counter the crisis as well as taking action to comply with the n+2 rule. In some cases it was considered to arise from the Commission taking longer to approve projects than expected, though in many cases projects were initiated before this approval was obtained. As a result of excessively tight time schedules, the preparatory work needed to plan the project properly was sometimes cut short, leading to problems later on.
- The estimation of the affordability of a service tended to be based on average household income and often at the national level, which was not necessarily a good guide to affordability in the area or region concerned. Income in a particular locality can differ significantly from the national average. Equally importantly, the average does not take account of the distribution of income and the extent to which those using a particular service or facility have income below this.
- In addition, where concerns about affordability limited charges set to below what was needed to recover costs, the assumption was typically made that the government would make good the missing revenue, though it was often the case that no formal arrangements were in place. Moreover, revenue projections in many cases assumed that charges would increase over time, though there was no certainty that this would happen. The assumptions made in this regard, therefore, need to be spelled out and justified.

Other issues that arose related to the procurement process, planning procedures and the capacity of some authorities to prepare and manage environmental infrastructure projects. According to the discussions at the seminar and interviews with MAs, the delays in implementing projects referred to above arose from a number of different factors:

- Public procurement processes were often prolonged, and on occasions the decisions reached were disputed by other tenderers who were prepared to take legal action to contest the decision, leading to further delays; this to a large extent was related to the crisis and the competition for projects that it gave rise to.
- The procedures involved in obtaining planning permission for projects to be constructed were frequently equally prolonged, especially with regard to waste-management projects, where there was often local hostility to facilities being built in an area.
- Many municipalities, especially small ones, lacked the capacity to organise large tenders for projects that were technically complex, as those involving environmental infrastructure often are, and to judge the competing proposals, as well as to manage the construction once the tender had been awarded. Similar problems were identified in the *ex post* evaluation of the previous period.
- Contracts were in many cases awarded, as in respect of transport projects, largely, or even solely, on the basis of the lowest price bid, with little regard to the quality of the proposal or to the track record, experience and financial

standing of the tenderer. This often led to less-competent contractors or those in financial difficulties undertaking the project, giving rise to delays and low-standard work. Moreover, in the competition for projects in the crisis period, prices tended to be bid down, in some cases below costs, leading to financial problems for the contractor (in two of the cases, the contractor went bankrupt) and further delays if they were unable to complete the project.

- Because of the prices being bid down, as well as the depreciation of the national currency in Poland and Romania, the cost of many projects, in stark contrast to the previous programming period, turned out to be lower than forecast. This leads to the funding available exceeding planned expenditure. Many OPs, however, lacked a pipeline of projects at a sufficiently advanced stage of preparation that could be taken up and implemented. The shift in funding away from environmental infrastructure described above was partly a consequence of this lack of viable projects to undertake, at least quickly, and their availability in other policy areas.

3.3.5 Lessons to be drawn and policy implications

The issues indicated above give rise to a number of lessons that can be drawn from the experience of the 2007-2013 period and that have implications for policy. These are listed below.

- There is a need to recognise that environmental projects tend to be complex and require a high level of competence and experience on the part of the authorities concerned, which in the case of the smaller ones may not be present since they undertake major projects only very occasionally. In particular, waste-management projects are often entirely new and use advanced technology, whereas water projects are frequently extensions of existing systems. They also tend to involve more uncertainty as regards consumer behaviour. Since smaller-scale projects in smaller local authority areas are likely to become more important in future years (in line with the Waste Framework Directive), this is an issue deserving attention.
- More generally, a recent study for the European Parliament identified the environment as a policy area where the implementation of Cohesion Policy faced capacity issues in several Member States (most especially in Greece, where there was a problem of coordination between government offices, and Italy, where the competence of some regional and local authorities was limited)⁷⁷.
- The evaluation pointed to the importance of projects being carefully prepared before they are implemented in order to minimise problems when they are carried out and to help to ensure that the construction is of high standard, so reducing maintenance costs once in operation. Accordingly, MAs should be encouraged to allow sufficient time for preparation instead of being under pressure to implement them as quickly as possible.
- Related to this, the procurement process, as in the case of transport infrastructure, needs to give proper weight to the quality of proposals, the expertise of tenderers and their financial standing and to reduce the focus on price as the main consideration. This can be achieved through a two-stage tendering process, where the first stage is solely concerned with selecting a

⁷⁷ See European Parliament, 'Implementation of Cohesion Policy 2014-2020, Preparations and administrative capacity of Member States', DG for Internal Policies, Policy Department B Structural and Cohesion Policies, September 2014.
http://www.europarl.europa.eu/meetdocs/2014_2019/documents/regi/dv/pe_529085_/pe_529085_en.pdf

short list of potential contractors on the basis of their track record and quality of their bid. However, this takes more time. In the past, it has run up against pressure for procedures to be undertaken quickly in order not to delay the implementation of projects. Whether a two-stage or a one-stage procedure is followed, there is a need to be able to assess the quality of proposals objectively, which requires MAs and selection bodies to have the competence to do this.

- As in other areas, there is also a need for better and universally collected monitoring data to enable the results of the expenditure undertaken and the projects completed to be assessed. The regulations for the 2014-2020 programming period put some emphasis on having suitable indicators to track outcomes. But in order for the data for the indicators to be meaningfully interpreted, there is equally a need for the underlying data on the situation and developments to be available. At present, however, the relevant data that are available from Eurostat are extremely limited. Although there are data on methods of waste disposal and the population connected to clean water supply and to wastewater-treatment facilities by region, they are far from complete or up-to-date.
- It would be helpful if evaluations of the support to environmental infrastructure provided under Cohesion policy, and the assessments of the implementation of EU Directives on waste disposal and water management, were better aligned. This is especially so since the projects co-financed under the former are primarily aimed at helping Member States comply with the Directives, so they are essentially considering – or ought to be considering – much the same indicators and how far compliance is being achieved.
- There is a need for a pipeline of well-prepared projects to be established in each MA area in case a particular project falls through or additional funding becomes available. Pipelines in respect of waste management need to consider the need for various types of project, not only large ones, in line with the requirements of the European Commission's Circular Economy Package launched in December 2015, which calls on Member States to focus on recycling and to avoid excessive reliance on potentially expensive treatment technologies.

3.4 Energy efficiency in public and residential buildings (WP8)

3.4.1 Amount and division of funding

Heating, cooling and lighting buildings account for a substantial proportion of the energy consumed across the EU. Accordingly, improving the efficiency of energy use in buildings can contribute considerably to reducing overall energy consumption, so saving on the depletion of fossil fuels, reducing import bills and increasing energy security across Europe. These are all major objectives of EU policy, as enshrined in the '20-20-20' targets for energy to be attained by 2020 – a 20% reduction in greenhouse-gas emissions, 20% of energy to come from renewables and a 20% improvement in energy efficiency – which were introduced in 2007 and which were subsequently incorporated in the Europe 2020 strategy.

In the initial regulations governing Cohesion policy for 2007-2013, however, support for improving the energy efficiency of residential buildings was explicitly excluded from the uses to which funding could be put in the EU15 countries. Such support was, therefore, restricted to the EU12 countries and then only up to 2% of the total and only if it formed part of a wider urban-development plan targeted at distressed areas, for apartment blocks (multi-family housing) or for buildings owned by public

authorities or non-profit organisations (i.e. social housing). As such, it was a response to the problem in these countries inherited from the communist era, when much of the housing constructed was built to low standards, in the form to a large extent of apartment blocks, while the renovation of the existing housing stock was largely neglected. Much the same was the case as regards public buildings.

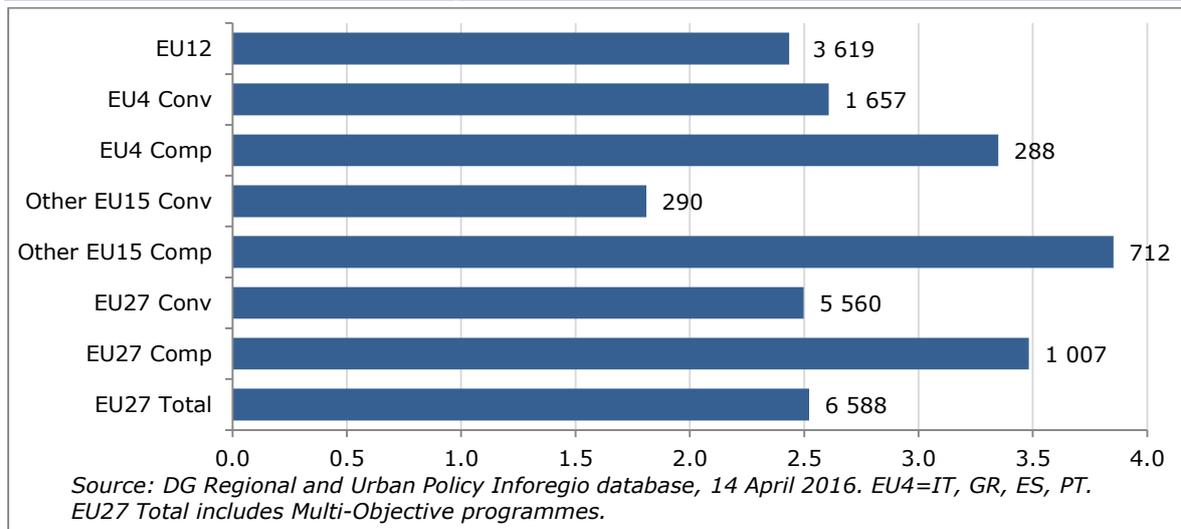
The regulations were relaxed in June 2009 as part of the European Economic Recovery plan, and energy efficiency of housing became eligible for support in all parts of the EU; the maximum proportion of funding for this was raised to 4% of the total ERDF allocation. The express intention was to boost economic activity as well as to further social cohesion by helping to reduce disparities in access to good-quality housing and relieving energy poverty.

The initial exclusion of the energy efficiency of housing from the scope of ERDF support in many countries, however, led to buildings not being separately distinguished as recipients of support in the classification system for expenditure. Instead, they were included as part of the category 'Energy efficiency, co-generation and energy management' (category 43), which includes support for energy saving in enterprises as well as other items of expenditure, though it is possible that they were also included as part of the 'Housing infrastructure' category. Accordingly, it is difficult to identify the amount of Cohesion policy funding going to energy saving in buildings.

Overall, around EUR 6.3 billion of ERDF and Cohesion Fund support was set aside for energy efficiency (broadly defined to cover all the items included in category 43) by OPs across the EU. This represents just under 2.5% of the total amount available for expenditure from these two funds (Figure 3.14). OPs in EU12 countries accounted for just over half of this (EUR 3.3 billion), while Convergence regions in the four southern EU15 countries accounted for the majority of the rest (EUR 1.7 billion). The amount going to this category in Competitiveness regions in the EU15 outside the four southern Member States represented a relatively large share of the overall funding available (almost 4% of the total) but was comparatively small in money terms (EUR 712 million). Nevertheless, it reflects a significant shift of funding towards support of investment in energy efficiency in housing in a number of EU15 countries after the change in regulations in 2009 opened up the possibility.

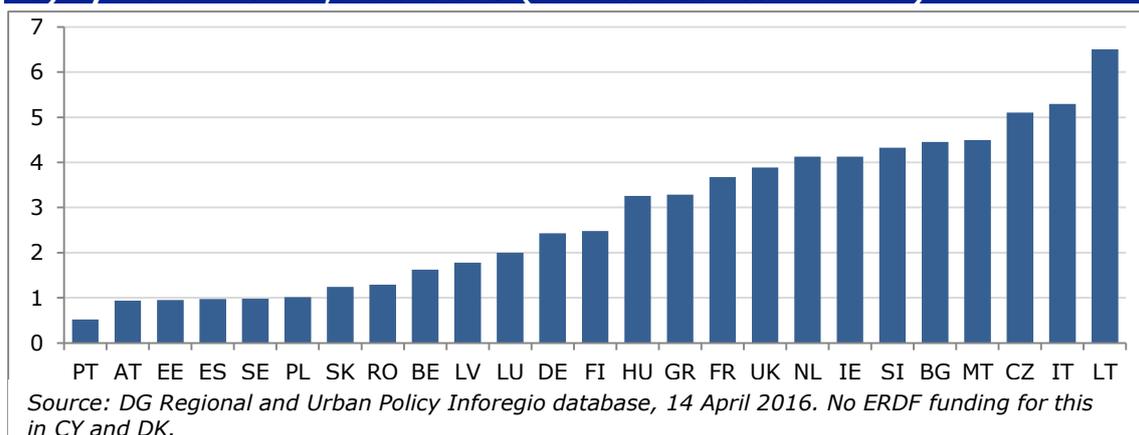
As there are no figures for the amount of funding decided for support of energy efficiency in buildings, WP8 estimated, from a detailed examination of selected OPs, that overall it amounted to around EUR 3.5 billion (of the EUR 6.6 billion for category 43). Assuming that it represents a similar share of overall support for energy efficiency (i.e. as recorded in category 43) in all regions, this (i.e. just over half of the total) gives a rough indication of the scale of funding going to energy efficiency in residential and public buildings in the different parts of the EU.

Figure 3.14 Decided amounts of funding going to energy efficiency by regional groupings, 2007-2013 (EUR million amounts, figures at end bars, and % total decided amounts)



There was a marked variation across countries in the proportion of funding decided for support of energy efficiency (again defined to cover category 43), which should broadly reflect the relative support going to buildings. It was particularly large in Lithuania (6.5% of the total available), over 5% in the Czech Republic and Italy and around 4% or more in the UK, the Netherlands and Ireland as well as in Slovenia, Malta and Bulgaria (Figure 3.15). As noted above, this reflects a shift of funding towards support of energy efficiency in housing from 2009 on in the EU15 countries concerned. On the other hand, the proportion was small, around 1% or less of the total, or zero in a number of other EU15 countries (Portugal, Spain, Austria, Sweden and Denmark) where there was little or no shift in this direction, as well as in some EU12 Member States (Estonia, Poland, Slovakia, Romania and Cyprus).

Figure 3.15 Decided amounts of ERDF going to energy efficiency (category 43) by Member State, 2007-2013 (% total decided amounts)



Undertaking improvements to buildings (such as installing wall and roof insulation, double glazing for windows and upgrading heating and cooling systems) was seen as a means of directly increasing economic activity and employment while at the same time assisting the construction industry, which was hit particularly hard by the crisis. Shifting funding to support of energy efficiency was also a means of absorbing underused funds from other policy areas where it was more difficult to find co-financing (as in the case of the Competitiveness and Entrepreneurship OP in Greece and the London OP in the UK) and of having a more direct and immediate impact on the economy.

In Greece, therefore, two measures were launched in the first part of 2011 to improve energy efficiency with a particular focus on housing, one of which included support for energy inspection as well as for investment in energy saving. In the Czech Republic, the ERDF underpinned a national policy introduced during the period for increasing the energy efficiency of residential buildings, which was aimed both at reducing energy costs and at counteracting the reduction in construction activity. In Lithuania, where the funding going to energy efficiency was the largest in relative terms, the renovation of apartment blocks was one of the cornerstones of the Economic Promotion Plan launched in 2009, when, because of the economic recession, support for investment in energy efficiency of housing was shifted from national sources to being financed largely by the ERDF.

On the other hand, in Romania, the budget for the 'thermal renovation' of buildings was reduced markedly over the period, as was the allocation of funding in Estonia for energy-efficiency measures, in both cases in part because of the relatively slow absorption of funding. In Germany and Austria, housing was explicitly excluded from ERDF support, which was restricted to co-financing energy-saving measures in public buildings, and to SMEs. In Ireland, ERDF support was restricted to social housing, which was also the case in the Flanders region in Belgium⁷⁸.

The different action taken by Member States is reflected in the overall changes to the funding going to energy efficiency (category 43) over the period. In total, EUR 2.2 billion was added to funding for this purpose compared with the initial planned expenditure, an increase of over 50%. This was split more or less evenly between the EU12 and the EU15 countries, with an addition of around EUR 510 million to the initial amount of funding planned in the Czech Republic and one of EUR 450 million in Greece. There were only four countries in which funding for energy efficiency was reduced (Estonia, Ireland, Portugal and Romania), while in all but five of the remaining 23 countries funding was increased.

The content of the evaluation

The evaluation was carried out between November 2014 and January 2016. The data analysis and case studies were undertaken mainly in the first half of 2015.

- Literature review and analysis of national means of financing energy in public and residential buildings to identify rationale for interventions and the types of measures involved
- Review of data available on investment in the measures concerned in OPs and AIRs
- Analysis of 41 OPs which supported energy efficiency investment in public and/or residential buildings through a review of programme documentation and interviews with MAs and intermediate bodies.
- Case studies of 6 OPs
- Seminar with representatives of MAs and external experts

3.4.2 Rationale for supporting energy efficiency in buildings

The justification for public support of energy efficiency in buildings rests on a number of different arguments which essentially relate to energy being a case of market failure, in the sense that the price at which it is sold does not reflect the economic costs of its use. This is especially the case for fossil fuels, for which the price does not reflect their inherent scarcity over the long term in the sense that they will eventually

⁷⁸ These observations are based on 'Renewable energy and energy efficiency of residential housing – Synthesis Report', Expert Evaluation Network, 2011. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/eval2007/expert_innovation/2011_synt_rep_en.pdf

be exhausted. Nor does it reflect the greenhouse-gas emissions from their consumption and the damaging effects of global warming; the harm to human health from the air pollution that they give rise to; the import costs entailed and the need to finance these; and the insecurity of supply involved.

Housing gives rise to particular considerations that justify public intervention. While reducing energy use leads to lower energy costs, generating the savings in costs to cover the investment involved may take too many years for house-owners to take account of them when deciding whether or not to invest in increased energy efficiency. Or they may consider it likely that they will have sold the house and moved somewhere else before sufficient returns are realised, and will be unable to recoup the cost by increasing the price. Or they may rent out the house to tenants and be unable to raise the rent sufficiently to cover the cost. Indeed, if the cost of energy use is paid for by the tenant, owners have no incentive to bear the cost of increasing energy efficiency. Apartment blocks give rise to additional potential problems, particularly in cases where there are common heating and cooling systems, since to take action to reduce energy use requires the agreement of all the occupants to share the cost involved.

However, while such considerations may justify public intervention, this does not necessarily imply that the intervention concerned needs to take the form of public subsidy or direct public investment. The fact that the market price of energy does not reflect the economic cost can be dealt with by imposing taxes to raise prices until they do so. The failure by house-owners to take sufficient account of the cost savings from increasing energy efficiency can be tackled through awareness-raising campaigns and the introduction of certification schemes that document the energy use of houses. The apartment block problem can be resolved through legislation requiring apartment-owners to share the cost of making changes to increase in energy efficiency if the majority of other owners agree. Nevertheless, there are costs from taking such action. Pushing up the price of energy has social consequences by hitting those on low incomes in particular. Awareness-raising campaigns involve costs of their own as does introducing energy-certification schemes, which can be high if they are to be effective. Equally, legislation needs to be policed and enforced.

Despite the strength of the case for public intervention to support the implementation of energy-saving measures, and for the use of EU funding to do so in view of the Union-wide benefits to the environment and human health of reduced consumption of fossil fuels, the rationale put forward in OPs for the provision of support tended to be very general and relatively weak. Although there were references to the importance of making buildings more energy-efficient, little attempt was made to demonstrate how and to what extent the support provided would contribute to EU and national energy targets and how it was integrated into the strategy being followed to achieve these. In practice, as indicated above, much of the rationale for supporting investment in energy efficiency was related to the crisis and the political priority of stimulating economic activity and creating jobs.

3.4.3 Forms of support

Almost all of the funding provided to support investment to increase energy efficiency in buildings, overall around 90% of the total, took the form of non-repayable grants. Only a small amount of funding – around 9%, less than EUR 1 billion – was in the form of loans, interest subsidies and guarantees; and even less was in the form of other types of FI, such as equities in particular. Many of the FIs were organised

through JESSICA funds managed by financial intermediaries, the central purpose of which was to provide funding for urban regeneration⁷⁹.

In a number of the EU12 countries, including Hungary and Slovakia, grants to finance energy savings in public buildings covered 100% of the costs. In Greece, Spain and Poland, grant schemes were set up to encourage house-owners to invest in energy-efficiency measures with very generous co-financing rates, in some cases above 70% (81% in Poland). In Greece and Spain, these were complemented with subsidised loans covering up to 100% of the cost of the investment. Co-financing rates were further increased in these three countries in response to the crisis in order to maintain a high level of investment and to assist the construction industry as well as to ensure that funding was absorbed in good time.

There is, however, a question mark over the use of grants to finance measures which yield a rate of return in the form of savings in energy bills and which are likely to more than cover the costs involved, even if this may take many years to occur. The use of grants tends to be appropriate in situations where either there are no financial returns to investment or the returns are uncertain and difficult to predict. In other cases, such as in respect of investment in energy efficiency, loans or interest subsidies seem more suitable.

At the same time, the circumstances that prevailed over the period and, in particular, the reluctance of house-owners to borrow to finance energy-saving measures (given the economic situation and the uncertainty attached to their ability to repay loans) led MAs to favour grants. This was reinforced by the difficulties involved in setting up loan schemes and their lack of experience with them, allied with the fact that, in EU12 countries especially, house-owners were not used to taking on debt and were reluctant to doing so. Despite the merits of FIs in terms of their recyclability and their theoretical suitability in this case, most MAs therefore continued to provide support for energy-saving schemes through grants.

JESSICA in Lithuania

Under the Promotion of Cohesion OP in Lithuania, grants were initially provided for energy-saving measures at a co-financing rate of 84% for residential buildings and one of 100% for public buildings, the aim being to increase energy security for the country as well as to reduce energy bills. The onset of the economic crisis and the tightening constraints on public finances led the government to set up a JESSICA loan scheme to replace grants. Initially, there was resistance from both building owners and banks alike and take-up was slow, but gradually publicity efforts by the MA led to all the funding being loaned out.

3.4.4 Main achievements

Although the support provided to investment in making buildings more energy-efficient resulted in significant energy savings in particular cases, it is difficult to summarise the overall achievements. This is particularly because indicators were often not used to monitor results; and, when they were, they tended to differ between OPs even in the same country. It is also partly because of the difficulty of aggregating energy savings resulting from the investment co-financed in individual buildings across a region or country, let alone across the EU as a whole. Accordingly, the main evidence of achievements is in the form of examples of the outcome of projects supported rather than aggregate indicators.

⁷⁹ JESSICA stands for Joint European Support for Sustainable Investment in City Areas, which is an initiative introduced by the European Commission in cooperation with the European Investment Bank to support urban regeneration and development through financial instruments.

Nevertheless, for 27 of those OPs reviewed as part of the evaluation, data was collected on the reduction in energy consumption resulting from the projects supported. These show an overall reduction of 2,904 GWh per year up to the end of 2013 and one of 1 438 GWh as a result of the measures to increase energy efficiency in residential and public buildings that were co-financed. To put this into context, the reduction in respect of buildings amounts to an estimated cut of some 0.2% in total yearly energy consumption in the countries and regions concerned, not large but significant given the relatively small amount of funding involved⁸⁰. Moreover, by the end of 2013 only around 55% of the total funding available for energy efficiency had been spent.

In addition, for 20 OPs, data were collected on the reduction in greenhouse-gas emissions resulting from the projects supported. Up to the end of 2013, this amounted to a cut of 826.4 kilotonnes of CO₂-equivalent emissions a year from the projects undertaken to increase energy efficiency in buildings (and one of 1 454 kilotonnes a year from all the energy-efficiency projects supported). This amounts to an estimated reduction of 0.1% a year in annual emissions in the OP areas concerned, again not large but significant⁸¹.

In individual countries where support of investment in increasing energy efficiency in buildings was larger than average, the indicators collected show a slightly larger reduction in energy consumption from such support – one of 0.3% a year in Greece, 0.4% a year in Bulgaria, 0.5% a year in Malta and 0.6% a year in Slovenia.

In Lithuania, the result of the projects carried out was much more impressive, which is in line with the much larger share of funding going to increasing energy efficiency in buildings. By the end of 2014 (i.e. one year later than the figures quoted above), energy use in the 864 public buildings which had been renovated had been reduced by 236 GWh a year, which implies a cut of just under 3% in overall annual energy consumption in the country.

Other less quantifiable achievements came in the form of technological advances as a result of innovative projects undertaken (such as in London – see Box); awareness raising of the benefits of investing in energy saving; and policy learning, in the sense of acquiring a better understanding of the policy measures available and how they can best be implemented and assessed (as in Greece – see Box).

Innovative energy efficiency investment in the Tate Modern in London

One project co-financed in the London OP with loans from the London Energy Efficiency Fund (LEEF) was undertaken to save energy in the Tate Modern art gallery. It involved the installation of innovative low-energy lighting; the use of waste-heat recovery from an electricity sub-station to provide heating; and the use of the River Thames through bore-holes to provide cooling. The technical understanding gained from the project has considerable potential for application in similar cultural venues around the world.

The use of energy audits in the Greek OP

One of the most important developments in recent years to encourage more increased energy efficiency in buildings in Greece was the Energy Performance of Buildings Regulation [KENAK] introduced in 2010. It stipulates that energy-performance certificates are required for all applications for funding from households, documenting energy consumption before and after the measures undertaken to verify the savings made, which need to be a reduction in consumption of at least 30%.

⁸⁰ This figure is based on aggregating energy consumption, as published by Eurostat, in each of the regions and countries covered by the 27 OPs. Since there are no regional data for energy consumption, but only annual ones, GVA in the regions has been taken as a proxy for energy consumption.

⁸¹ This estimate is based on the same method of calculating annual greenhouse-gas emissions in the countries and regions covered by the 20 OPs as for the reduction in energy consumption.

Although measuring the reduction in energy resulting from a project seems to be the minimum that is required to assess its effects and whether it was successful or not, only in a minority of the case study OPs examined were energy audits a prerequisite for funding. These include all the Polish OPs, the London OP, the Veneto OP in Italy, the Lithuanian OP and the Greek OP.

3.4.5 Lessons learned and policy implications

A number of lessons can be drawn from the evaluation that have implications for future policy. The main ones are listed below.

- OPs need to spell out clearly the rationale for the use of EU funding to support investment in energy efficiency in buildings and to show how it relates to national energy policy and to the support available from national and regional schemes, as well as to the objectives that have been set, so as to demonstrate the coherence of the policy and its justification. Under the regulations for the 2014-2020 period, this should have already happened to a large extent.
- Related to this, the means of the support provided need to be carefully considered and justified especially in relation to investment in energy efficiency in housing, where there could well be a significant return in the form of cost savings. This suggests that loans or other kinds of financial instrument are likely to be preferable to grants; and that if grants are given, because of the uncertainty involved or the reluctance of investors to take up loans, then co-financing rates should be kept down to avoid house-owners making unjustifiable financial gains.
- The recyclable nature of loans means that they represent a more cost-effective means of supporting investment in energy efficiency. If there is unwillingness to take them up, then awareness-raising schemes to demonstrate the gains from such investment should be undertaken to overcome this. This is particularly the case in the EU12 (now 13) countries, where a widespread reluctance to take on debt was evident in the 2007-2013 period.
- The criteria applied to project selection should be carefully chosen to ensure that the funding available is used most effectively. Such criteria are likely to include the reduction in energy consumption that it is aimed to achieve, which implies the need for using energy audits to measure and verify that the reduction concerned has been achieved. In the 2007-2013 period, they were used only in 17 of the 41 OPs that were examined in detail, which greatly restricted the extent to which the results of the support provided could be assessed and limited the effective application of suitable criteria for selecting the projects to be funded.
- The financial support extended should be complemented by a range of non-financial measures to ensure its effectiveness. In addition to energy audits and awareness-raising campaigns, these include advice and guidance on energy-saving measures. They also include regulations on new building and renovation, as well as on the sale of housing, to ensure that energy consumption is properly notified and widely publicised so that it becomes a significant element of property prices. It is important, however, that energy audits and certification schemes are properly policed if they are to be effective and not subject to abuse, which in turn implies a willingness to bear the costs of this.
- Indicators need to be more widely, and uniformly, applied to monitor the results of support for energy saving, in order not only to document achievements but also to enable the effectiveness of different measures to be

assessed and compared. This should be relatively straightforward, though it requires the application of an effective energy-audit scheme and the adoption of common standards of data collection and reporting, as well as the implementation of suitable means of checking the information reported. The common indicators agreed for the 2014-2020 programming period in this area should lead to more standardised collection of data, though there is almost certainly a need for more guidance to MAs over the data to be collected and the way in which this can best be done.

- As in the case of support for environmental infrastructure, there is a need not only for more and better indicators of the results of the support provided but also for better data on the context concerned and developments in this, so that the indicators can be meaningfully interpreted. In this case, it means the availability of regional data on energy consumption and greenhouse-gas emissions, which at present do not exist at EU level (i.e. they are not collected and published by Eurostat), as well as data on the sources of energy use – on the amount consumed by buildings as opposed to other things.

3.5 Culture and tourism (WP9)

3.5.1 Amount and division of funding

Culture and tourism accounted for only around 5% of ERDF support over the 2007-2013 period but this still represented a significant amount of funding –EUR 10.8 billion, if funding going to closely related areas is considered⁸². Since the information available on the projects supported by the ERDF across the EU was both limited and piecemeal, a major objective of the evaluation was to assemble evidence on the nature of the projects supported in different regions, the rationale for support and the results of its provision.

A preliminary task was to define the scope of the evaluation, in the sense of what activities should be included in culture and tourism, which is not so easy since there is no agreed definition of cultural activities and tourism is not distinguished as a separate sector in standard systems of classification. The definition adopted for culture using the 'NACE' system of classification (Statistical Classification of Economic Activities in the European Community) was that used by the ESSNet-Culture (European Statistical System Network on Culture) report produced by Eurostat in 2012, which covers a range of sectors, some of which include non-cultural activities (such as books and publishing or advertising) as well as cultural ones (see Box). Similarly, for tourism, the sectors covered include activities associated with tourism but also with, for example, business travel or eating out.

Definition of culture and tourism used and categories of expenditure used

Culture was defined in the evaluation to include the following sectors:

- Heritage, Archives, Libraries, Books and publishing, Visual arts (including design), Performing arts, Audiovisual and multimedia material, Architecture, Advertising, and Arts and crafts.

Tourism was defined to cover:

⁸² The WP9 report includes a figure of EUR 14.4 billion. This differs from that quoted here by including support for hotels and restaurants included under other categories of expenditure – enterprise support in particular – and by relating to allocations to selected projects as at the end of 2014 instead of decided amounts of funding as at the 14 April 2016. The focus here is on the categories of expenditure included in the text box.

- Hotels and restaurants, Activities of travel agencies and tour operators, Tourist assistance activities, together with certain recreational, cultural and sporting activities designed to attract visitors.

The categories covered from the system used to classify expenditure or the allocation of funding by DG Regional and Urban Policy were, for culture:

58: Protection and preservation of the cultural heritage

59: Development of cultural infrastructure

60: Other assistance to improve cultural services

And for tourism:

55: Promotion of natural assets

56: Protection and development of natural heritage

57: Other assistance to improve tourist services

As noted above, the overall amount of ERDF support going to culture and tourism over the period amounted to almost EUR 11 billion, or just over 4% of the ERDF and Cohesion Fund support available. This understates the real amount of support going to the two area since it excludes funding going to other categories of expenditure which benefit culture or tourism or both in the country or region concerned. These include, in particular, support for SMEs in the two sectors⁸³; investment in transport that makes it easier for people to travel to cultural activities or tourist destinations; and investment in environmental infrastructure which increases the attractiveness of a place and the sustainability of the tourist industry there. Of the overall amount budgeted, slightly more went to culture (EUR 5.7 billion) than to tourism (EUR 5.1 billion). This was also the case in both the EU12 and the four southern EU15 Member States, while in the rest of the EU15 more went to tourism than to culture (Figure 3.16).

The content of the evaluation

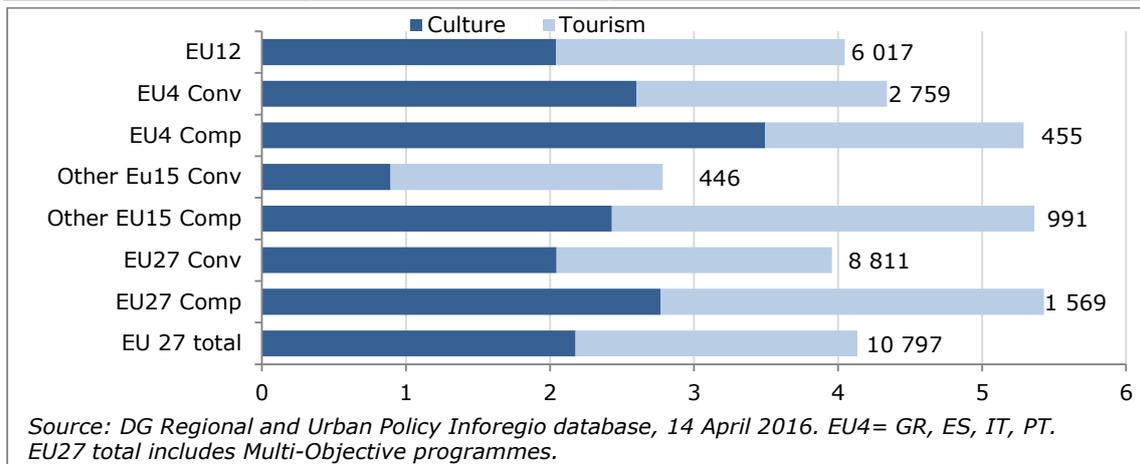
The evaluation was carried out between August 2014 and January 2016. The data analysis and cases studies were undertaken mainly in the latter part of 2014 and the first half of 2015. The evaluation consisted of:

- Literature review of public investment in culture and tourism sectors to identify types of investment strategies, challenges and opportunities at regional level and rationale for intervention
- Analysis of DG Regional and Urban Policy financial data and indicators of outcomes.
- On-line survey of MAs on strategies and types of measure.
- Case studies of 6 regional OPs.
- Twelve 'mini' case studies of projects undertaken in 6 OPs.
- Seminar with representatives of MA and external experts

The share of the overall ERDF available going to the two policy areas was larger in the Competitiveness regions than in the Convergence ones in both the four southern countries and in the rest of the EU15, at over 5% of the overall funding available in each case. The amounts involved totalled around EUR 450 million in Competitiveness regions in the four southern Member States and close to EUR 1 billion in these regions in the rest of the EU15.

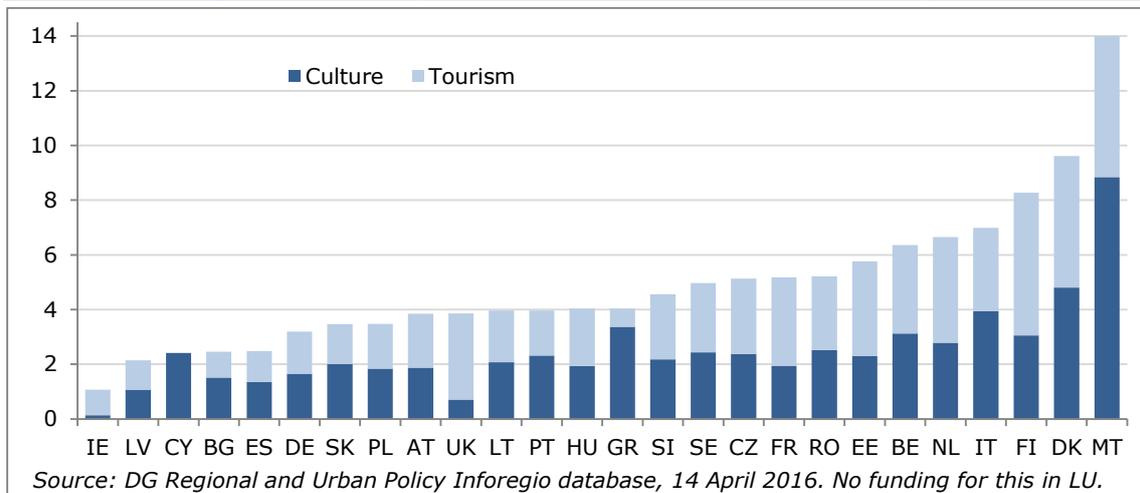
⁸³ These are implicitly covered by the section on support to SMEs above.

Figure 3.16 Decided amounts of funding going to culture and tourism by regional groupings, 2007-2013 (% total ERDF and Cohesion Fund available and EUR million – figures at end of bars)



Within both broad regions, there was a marked variation in the priority given to culture and tourism between countries, as there was in the EU12. In the latter, the share ranged from 14% in Malta to only around 2% in Cyprus and Latvia (Figure 3.17). Equally, in the four southern countries it varied from close to 8% in Italy to just over 2% in Spain, and in the other EU15 countries from nearly 10% in Denmark to only around 1% in Ireland.

Figure 3.17 Decided amounts of funding going to culture and tourism by Member State, 2007-2013 (% total ERDF and Cohesion Fund)



Almost all of the support (over 90% overall) took the form of non-repayable grants. This was the case for support to hotels and restaurants in the private sector, which have the capacity to generate revenue, as much as for support for the natural or cultural environment, where this capacity is likely to be limited. Except for hotel and restaurants, however, most of the support went to public bodies – to local or regional authorities or government agencies – as opposed to private businesses.

3.5.2 Rationale for supporting culture and tourism

The general case for public intervention in culture and tourism rests on market failure arguments. Both tend to be heavily reliant on public goods in the form of the historical heritage, the national resources and cultural traditions of a place, which it is important to preserve and manage for future generations. Governments, therefore, have a clear role to play in this regard. In addition, tourism, in particular, is significantly dependent on public infrastructure, on transport systems especially,

but also on environmental infrastructure – on water supply, wastewater treatment and waste disposal – and on social amenities.

Tourism, moreover, can give rise to significant negative externalities in the form of damage to the environment that it is important to control. Conversely, culture is argued to have important social spill-over effects that strengthen social cohesion and a sense of belonging and improve the quality of life, which give grounds for ensuring that it is accessible to everyone living in a particular locality.

The fact that there are grounds for public intervention, however, does not necessarily imply a need for financial support. In the case of tourism, in particular, there is a case for government control over excessive expansion or over the form that development of the sector takes, which can be exercised through regulations rather than through financial incentives. There are stronger grounds for subsidising cultural activities, which can be justified by the social returns that they generate not only to individuals but in terms of 'place-branding', which can benefit other sectors and give rise to new activities.

There are also practical grounds for support of both, especially in regions where there is a lack of alternative forms of economic activity, where culture and tourism can be important sources of regional development. Both have shown a long-term tendency to grow and to create employment and they are likely to continue to do so in future years, though, of course, the extent to which this is the case in any particular region depends on its attributes – its cultural and natural heritage and so on. It is estimated that cultural activities account for around 2.5% of employment in the EU and about the same share of total value-added; and tourism-related activities account for around 6.5% of employment and 5.5% of value-added⁸⁴, though as indicated above not all the jobs or value-added in the latter kinds of activity (such as hotels and restaurants) are generated by tourism as such. In certain regions, such as holiday destinations or cultural centres, the figures are substantially higher.

There are, however, challenges to their development. Cultural activities are often excessively dependent on public subsidies and in a climate of fiscal restraint are particularly vulnerable to cutback, since they tend to be considered to be less 'essential' than other parts of public spending such as social protection or education. They are also vulnerable to political change and changes in consumer tastes. Similarly, tourism is dependent on the maintenance of the cultural, historical and natural heritage, and on cultural activities that attract visitors continuing to go ahead, which in turn tends to depend on continuing public support and investment.

The importance of preserving the natural and cultural assets concerned extends in many cases beyond regional and national borders, especially since the diversity of such assets is a significant factor of EU competitiveness, as is 'place-branding', which is a major selling-point for many products. The provision of ERDF support can, therefore, be justified in these terms – i.e. on the basis of the EU added-value it generates.

It is more difficult to justify direct support of tourist activities as opposed to cultural ones. While there is a case for the ERDF being used to support such activities in lagging regions to help them to develop, this does not necessarily extend to more-developed regions.

In practice, the rationale for the support of the two sectors as expressed in OPs fell into four broad kinds: to assist economic diversification; to contribute to the regeneration of particular places and to strengthen social cohesion; to help increase

⁸⁴ These are the equivalent figures for the share of total employment and value-added in the EU to those for the share of the non-financial business sector quoted in the WP9 report.

innovation and competitiveness; and to contribute to the sustainability of economic development. In many cases, a combination of these was referred to. In some cases, the ERDF was used as an additional, and often minor, source of funding to support national or regional strategies already in place; in others, as the primary source of finance, though again mainly to support national or regional strategies.

At the same time, the strategies being followed were often vague and not targeted at achieving particular objectives or meeting specific needs. Accordingly, the link between the provision of support and the general aim of furthering regional development tended not to be spelled out, in some case deliberately so in order to allow significant flexibility to adjust the allocation of funding as the period went on.

Examination of the strategies followed and the projects supported suggests a focus on economic diversification in many cases as regards both culture and tourism. This was especially the case in the EU15, where in some cases – in the UK and Ireland especially – support for culture extended to support for creative industries, which have significant potential as a source of growth and job creation. In a number of cases, especially in the EU12, the focus of support for culture, however, was more on urban regeneration and social cohesion than directly on economic development.

Although culture and tourism were considered separately in some OPs (in 15% of them allocations were made to tourism but not culture, while in 6% the reverse was the case), they were more often regarded together as part of a joint strategy. In particular, support for culture was seen as a way of attracting more tourists. In some cases, however, support for culture was seen in isolation rather than as part of a coherent strategy for regional development, and was aimed largely at furthering social cohesion. Such an aim in itself is unexceptional but in many cases it was vaguely expressed with little indication of what was meant in tangible terms and how it was intended to be achieved. Moreover, it left the potential of such support to promote further economic development unexploited.

3.5.3 Main achievements

As in other policy areas, it is difficult to obtain an overall picture of the results of the support given to culture and tourism across the EU. Although there was a core indicator for the number of tourist jobs directly created, data on this were collected only for some OPs and in only 12 of the 27 Member States⁸⁵. The indicator, moreover, was relevant for only part of the projects supported and, in most cases, for only a minor part. In particular, even with regard to employment, it leaves out of account the number of jobs indirectly created in the sector through, for example, the increased attractiveness of visiting, or holidaying in, a particular place. More generally, no data were collected, except on a piecemeal basis, for the number of visitors attracted as a result of the various projects undertaken in the different regions or for the number of overnight stays by tourists.

The monitoring data that do exist show that, up to the end of 2014, around 16 160 jobs were directly created in the tourist industry as result of the projects co-financed in the 12 countries for which data are available, around half of them in the EU12 countries. In addition, in Austria, Cyprus, the Czech Republic, France, Greece, Poland and Slovenia, OPs reported additional accommodation for around 80 670 people being created or upgraded. Such a figure, however, is difficult to interpret or assess. The same is true of other indicators which exist but are specific to particular programmes.

⁸⁵ There was also a core indicator for the number of tourism projects, and a total of 13 000 was reported for this, though in itself the number is difficult to interpret. There was no core indicator for support of culture.

Based on the case studies of selected OPs undertaken, the evaluation found that, with regard to culture, the targets set at the beginning of the period for indicators of visitor numbers or cultural events held were generally achieved: but since there is no way of knowing how meaningful the targets were, it is impossible to assess the results of support, or its effectiveness, on this basis.

The only evidence that can be brought to bear on this are the examples of particular projects carried out and their apparent effects, along with the information obtained from interviews during the evaluation, though since these were largely with officials working in MAs, some of the information may not be wholly objective.

According to many of those interviewed, the main added-value of the support provided by the ERDF was to co-finance infrastructure projects (many of them large ones) and the upgrading of services which were important to the regions concerned but which would not have been carried out without the ERDF. The projects in question increased in number over the period as a result of the reduction in national and regional government finance available.

According to the case studies carried out, ERDF support led to an increase in participation in cultural activities/events and in visitor numbers in places where cultural sites or historical monuments had been upgraded. It also led to the creation of additional tourist destinations, as well as more companies being set up in the areas to which support was given. Increased participation in cultural activities was reported, for example, in Puglia; increased numbers of visitors to upgraded cultural sites in Malta; and increased employment from the support given to tourism in Podlaskie in Poland and Rhône-Alpes in France.

The case study of Puglia highlighted the importance of a well-defined strategy for the two sectors and coordinated action to develop tourism through support to natural and cultural assets. As a result, the region succeeded in attracting more visitors from outside Italy, its traditional market, the number of tourists from abroad increasing from just over 14% of the total in 2008 to 18% in 2012, only four years later.

The case studies also found evidence that managing ERDF support had generated additional added-value in the form of an improvement in the capacity of the authorities to implement policy measures in these two areas. The support, therefore, seems to have triggered a modernisation of procedures in regional and local authorities in Member States by encouraging the spread of standards of 'good governance' in the form of practices such as partnership building, multi-annual programming and place-based policies, as well as the implementation of better monitoring and evaluation systems.

Nevertheless, the case studies confirmed as well that while in the case of tourism support went to a wide range of activities, such as territorial marketing and sports and recreational facilities of various kinds, as well as to infrastructure, support to culture went predominantly to infrastructure, largely in the form of the preservation and upgrading of the cultural and historical heritage. This was especially the case in the EU12, where only limited investment had been carried out in the past, and in Convergence regions in the four southern countries. Only in a few cases was there evidence of other types of 'softer' support, such as advisory services, support to innovation or the organisation of cultural events and programmes.

Only in a few cases too (in the UK and Ireland, especially) was culture seen as having economic potential in itself, apart from its contribution to the development of tourism, in the form of the creative industries (such as digital media, films, music and performing arts) that have significant growth potential.

3.5.4 Lessons learned and policy implications

There are a number lessons to be drawn from the evaluation that have implications for future Cohesion policy as regards support to culture and tourism.

- Perhaps the main one is that ERDF support to the two sectors could be more effective if it was focused on small well-targeted projects to exploit their potential to contribute to regional development. This requires them to be seen by national and regional authorities as an integral part of a development strategy rather than being considered in isolation.
- Related to this, there is a need to give serious consideration to supporting the development of creative industries as a potential source of growth and employment in particular regions, which implies shifting the focus of support for culture away from infrastructure and more towards 'softer' forms of intervention.
- It is equally important for regions to develop new forms of sustainable tourism in order to remain competitive in the context of a changing market and in order to avoid the excessive exploitation of the natural assets that they possess.
- A prominent finding of the evaluation is the dependence of culture in particular on public funding and the very limited involvement of private businesses and third-sector organisations. International experience, however, demonstrates the possibility of creating effective public-private partnerships and of making use of other forms of financing for infrastructure apart from government grants and subsidies – loans and venture capital in particular, but also donations and fundraising from the general public.
- Financial sustainability has in many cases not featured prominently in the way that project proposals have been assessed and selected, which has led to their permanent dependence on continuing public support. Given the constraints on public finances, which are likely to persist in the future, there is a need to give more weight to financial sustainability when selecting projects to finance, in addition to ensuring that their expected results are in line with programme objectives.
- Monitoring of the output of the projects supported and, most especially, of their results needs to be improved significantly. This implies the adoption of more relevant indicators of the outcomes of expenditure so that the performance of the policy being followed can be tracked and the effectiveness in attaining objectives can be assessed. Ideally, the indicators need to be harmonised across OPs so that a clearer and fuller overview of achievements can be obtained. It also implies a need for clearer advice and guidance on the indicators concerned and how they should be measured and their reliability checked.
- More evaluations need to be undertaken to assess the impact of the support provided and of the projects co-financed in order to make good the deficiency of information that at present exists about the effectiveness of the different measures of support provided. These need to cover not only the results of the measures concerned but their wider effect on the development of regions in which the target of support is located.

The regulations for Cohesion policy for the present 2014-2020 programming period in principle go a long way towards putting these policy lessons into practice, in that they require the link between the support provided and the development objectives to be spelled out, a greater focus on results and the adoption of more relevant indicators as well as systematic evaluation of policy areas. It is important, however, to verify that this happens in reality.

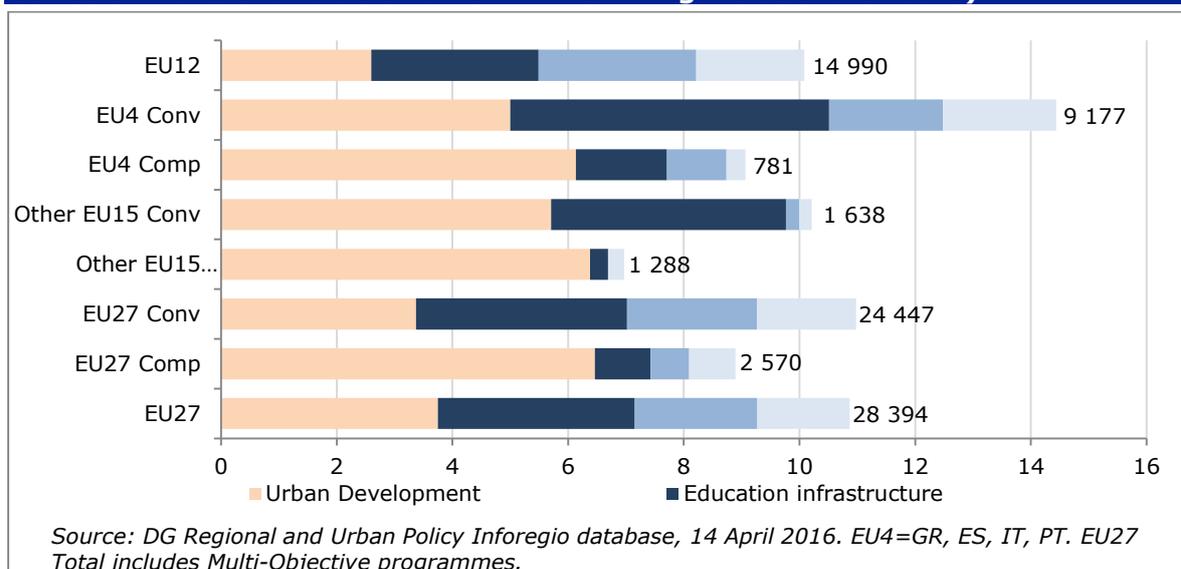
3.6 Urban development and social infrastructure (WP10)

3.6.1 Amount and division of funding

A significant amount of support from the ERDF and Cohesion Fund went to investment in both urban development and social infrastructure over the period. Much of that going to the former, however, was spread over a number of policy areas, such as transport, the environment, cultural activities and tourism. The support concerned was examined as part of the evaluations of these areas. The present evaluation adopted a narrower scope, limiting itself so far as urban development was concerned to support which went specifically to integrated projects of urban regeneration, or at least support which was classified in this way. At the same time it covered the range of social infrastructure encompassing education, healthcare, childcare, housing and other facilities such as community centres. The evaluation was to some extent a pioneering exercise to examine the kinds of project supported over the period and, in the case of urban regeneration ones, to assess their integrated nature and their contribution to the overall development of the region in which the areas concerned were situated.

From the data available, it is not possible to distinguish urban-regeneration projects separately from rural ones since they are classified in the same category of the expenditure-classification system (category 61, 'integrated projects for urban and rural regeneration'). The latter is, therefore, included with the former in the figures presented here under the term 'urban development'. In total across the EU, the ERDF support for the 2007-2013 period going to urban development (including rural) and social infrastructure amounted to EUR 28.4 billion, of which just over a third, some EUR 9.8 billion, went to urban development and EUR 18.6 billion went to social infrastructure (Figure 3.18). Most of the funding within the social infrastructure category went to education infrastructure (EUR 8.9 billion, almost as much as to urban development) and most of the rest to health infrastructure (EUR 5.5 billion), while a diverse range of social facilities – childcare, housing, community centres and so on – accounted for a relatively small share of the total, though the funding involved still amounted to around EUR 4.2 billion overall.

Figure 3.18 Decided amounts of funding going to urban development and social infrastructure by regional groupings, 2007-2013 (% total ERDF and Cohesion Fund available and EUR million – figure at end of bars)



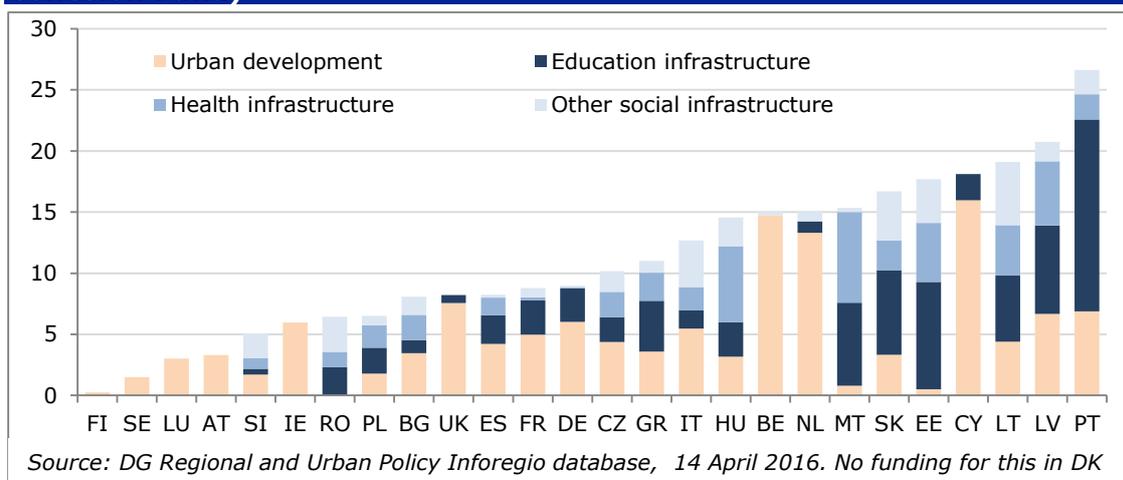
More than half of the funding going to urban development and social infrastructure (EUR 15 billion) was accounted for by the EU12 countries, though as a share of the overall funding available from the ERDF and Cohesion Fund it was significantly less

than in respect of the Convergence regions of the four southern EU15 Member States, where EUR 9.2 billion went to these two categories, or over 14% of the total available. In the latter, a particularly large share of funding went to education infrastructure, mainly because of the significant amount allocated to this in Portugal, EUR 2.3 billion, well over half of the total amount going to this category in the four southern countries and around a quarter of the amount in the EU as a whole.

In the other regions in the four southern countries and in the rest of the EU15, most of the funding classified to these two categories went to urban-development projects, especially in the Competitiveness regions of the other EU15 countries, where very little was allocated to social infrastructure.

The share of overall funding available going to urban development and social infrastructure varied markedly across the EU, as did the division between the two. Except in Cyprus, most of the funding (or all in the case of Romania) went to social infrastructure in all the EU12 countries (Figure 3.19). This was also the case in Convergence regions in the four southern EU countries (including in Spain, where overall the share was similar for both). In all the other EU15 countries, by contrast, all or most of the funding went to urban-development projects, the amount varying from 15% in Belgium and 13% in the Netherlands to less than 2% in Sweden and zero, or virtually zero, in Denmark and Finland.

Figure 3.19 Decided amounts of funding going to urban development and social infrastructure by Member State, 2007-2013 (% total ERDF and Cohesion Fund)



Over the period 2007-2013, there was a small shift of funding away from urban development (of just under EUR 200 million) and a relatively large shift to social infrastructure (EUR 2.1 billion), predominantly to education (EUR 1.8 billion). These shifts are accounted for primarily by two countries. In Romania funding for urban development was cut back by around EUR 900 million (accompanied by an increase in funding for social infrastructure of over EUR 400 million), while in Portugal funding for education was increased by EUR 1.3 billion (and funding for urban development by EUR 550 million). In most other countries, the changes in funding for both categories were relatively small.

There was a tendency in the EU12 countries for the allocation of funding per head of population to both urban-development and social-infrastructure projects to have been larger in rural areas than in either urban or intermediate ones, though this was not very pronounced (Table 3.9). It was much more pronounced for both categories in the four southern EU15 countries in both Convergence and Transition regions.

In other EU15 countries, there was no tendency for the allocation of funding per head to urban development to have been larger in rural areas than in the other two types.

In Convergence regions it was much the same, and in both Transition and Competitiveness regions it was smaller than in urban areas. For social infrastructure, a much larger amount of funding per head was allocated to urban areas than rural ones in Convergence regions, and similar amounts in Transition and Competitiveness regions (though in Competitiveness regions, the amounts involved were very small).

The content of the evaluation

The evaluation was carried out between November 2014 and November 2015. The data analysis and web survey were undertaken in the first half of 2015. The evaluation consisted of:

- Analysis of financial data and core indicators
- Detailed analysis of 115 OPs with largest ERDF allocations to urban development and social infrastructure, analysis of AIRs concerned and survey of MAs of the OPs, including telephone interviews.
- Web survey of project implementation bodies.
- Seminar with representatives of MAs and external experts.

In sum, therefore, in the four southern EU Member States the urban (and rural) development projects funded were predominantly in rural areas, which suggests that the areas involved were mainly in small and medium-sized towns rather than in large cities. This relative concentration, however, might be seen as offsetting to some extent the concentration in urban areas of funding for other categories of expenditure, such as for RTD in particular.

Table 3.9 Allocation of funding to urban development and social infrastructure by Objective and type of region, 2007-2013 (EUR per head of population)

	Urban development				Social infrastructure			
	EU12	EL,ES,IT,PT	Other EU15	EU27	EU12	EL,ES,IT, PT	Other EU15	EU27
Convergence	41.0	90.5	51.9	55.6	116.1	158.2	39.9	120.3
Urban	33.2	91.6	51.8	55.0	94.5	124.8	76.6	102.8
Intermediate	40.7	66.2	51.6	49.2	118.7	138.5	30.4	113.6
Rural	44.7	122.5	52.6	62.8	123.0	212.3	24.2	137.3
Transition	97.1	44.8	24.5	44.2	107.6	58.7	8.6	49.2
Urban	89.7	41.5	26.2	42.6	142.5	69.5	8.9	61.0
Intermediate	103.3	21.5	33.9	37.6	77.9	25.2	6.4	29.4
Rural	0.0	88.4	14.5	57.4	0.0	90.0	9.9	56.4
Competitiveness	20.3	5.4	5.2	5.3	30.7	1.1	0.7	0.9
Urban	20.3	5.1	6.2	6.1	30.7	1.9	0.6	1.2
Intermediate	0.0	4.8	3.9	4.1	0.0	0.3	0.6	0.5
Rural	0.0	7.6	4.7	5.2	0.0	0.1	1.1	0.9

Note: The figures relate to allocations to selected projects as at the end of 2014. ETC OPs are excluded. Transition regions are 'Phasing-in' and 'Phasing-out' regions. The division of regions into predominantly urban, intermediate and rural is based on population density at the NUTS 3 level.

Source: WP13 of the ex post evaluation and Eurostat, regional accounts (for population – data relating to 2010).

3.6.2 Rationale for supporting urban development and social infrastructure

There is ample justification for public support of both urban development and social infrastructure, given the public goods nature of the first, the significant externalities generated by both and the social equity considerations surrounding the second. Nor is it difficult to justify the use of EU funding to support social infrastructure insofar as it reduces disparities in access to education, healthcare and housing across the Union and furthers social cohesion. Support for urban-regeneration projects is justifiable largely in social terms, in reducing disparities in the quality of life across the EU. There is also an economic justification in some cases where they are an integral part of

regional-development strategies that increase the attractiveness of investing or locating in lagging regions or to attract tourists. Indeed, they can sometimes be the central point of a regional growth policy given the tendency for economic activity to be concentrated in cities. The extent to which this is so, however, varies across the EU and needs to be demonstrated on a case-by-case basis.

The large number of OPs examined as part of the evaluation (115 overall) included only in a few cases a specific reference to how support for either urban development or social infrastructure fitted in to a wider regional-development strategy. In most cases, both were part of a broader set of policies, though the links and interaction with these were not usually explained. Only 30% of the OPs examined referred to the context in which the projects that formed part of an urban-development policy were to be carried out. In the same vein, the specific objectives of the support provided to urban regeneration that were identified were typically vague and unhelpful, such as to improve the urban areas concerned or to contribute to sustainable development.

In practice, there was evidence of an integrated strategy being pursued, but only at a local level in relation to a particular town or city: but again the relationship with, and its effects on, the development of the wider region concerned tended not to be set out.

In the case of social infrastructure, support for education and health tended to be considered in isolation and justified in its own terms, in relation to the need for better or more modern schools or more up-to-date educational equipment or the need for more hospital beds or improved healthcare facilities. On the other hand, support for investment in housing, childcare and other social infrastructure was more often presented as part of wider strategy, though again more local than regional in its dimension.

3.6.3 Main achievements

It is difficult, if not impossible, to assess the overall results of the projects carried out in these two policy areas. The indicators used for monitoring purposes varied between OPs and related predominantly to the output produced, such as the number of projects undertaken or the number of new schools constructed or modernised, rather than to the effect of that output on the achievement of policy objectives. As in other areas, therefore, evidence of achievements mainly takes the form of specific examples at the project level of areas regenerated or infrastructure built.

Three-quarters (73%) of project-implementation bodies surveyed reported that the projects undertaken had contributed to growth and jobs (and for a quarter of projects, a large contribution was reported) (Table 3.10).

Table 3.10 Outcomes of ERDF support for urban development and social infrastructure reported by a survey of project implementation bodies, 2007-2013

	% reporting
Improved skills or qualifications	39
Improved performance or expansion of local businesses	32
Improved health outcomes	25
Creation of new businesses	24
Higher rate of female and/or youth labour market participation	17
Other	26
Total reporting some contribution	73

Source: Ex post evaluation of Cohesion policy, WP10.

Improved skills and expansion of local businesses were the most common outcomes, but there were also effects on a variety of other factors, ranging from health to business creation and increased labour market participation (from childcare facilities, in particular).

In the EU12, the outcome of the investment co-financed consisted of improvements in urban water and sewerage systems, the construction of schools, hospitals, housing and cultural centres and the renovation of buildings of various kinds as part of urban (or rural) regeneration programmes as well as the formulation of such programmes.

In Latvia, for example, the funding set aside for integrated urban regeneration was used to improve infrastructure in a number of urban and rural areas, while in the Czech Republic the focus was on developing integrated plans for urban development, based on the active participation of local communities to identify the major needs in relation to education, healthcare, the reclamation of 'brownfield' sites and so on.

In the EU15, funding was used in the UK largely to establish business centres to provide advice and support to local SMEs, while in Rotterdam, as well as in a number of cities in other countries, such as Bordeaux and Cologne, the ERDF was deployed to attract private investment to regenerate particular rundown and abandoned inner-city areas. In Lorraine in France, 22 projects were undertaken to tackle social exclusion and environmental problems. In several cases, ERDF support for investment in infrastructure was combined with ESF financing for current expenditure to better address social issues.

A wide range of projects were undertaken to improve social infrastructure in the EU12 in particular, but also in Convergence regions in the four southern EU15 Member States. Buildings and equipment were modernised, and the quality and efficiency of services were increased, so helping to reduce disparities with the more prosperous EU15 regions. Examples are:

- the modernisation of schools and colleges and their re-equipment in Portugal, benefiting over 300 000 children and young people;
- improvements in the availability of continuing training (or lifelong learning) facilities in Spain, Poland, the Czech Republic and Lithuania, combined with the upgrading of employment services to better equip the workforce to meet the demands of local business;
- improvements in the healthcare system in Hungary, in particular, with the construction of care facilities and the purchase of ambulances with the aim of both increasing access to healthcare and the improving the service provided;
- the construction and upgrading of schools and healthcare facilities in Poland for some 1.9 million people;
- the establishment of welcome centres for migrants in Murcia, Asturias, Extremadura and Galicia in Spain and southern regions of Italy.

Nevertheless, the evaluation also identified some negative aspects of the way that projects were planned and carried out. In particular, there was in some cases a lack of coordination between urban-development projects and those aimed at expanding social infrastructure, as well as some fragmentation of funding when municipalities or local authorities decided to undertake projects which were not part of an overall national or regional development strategy. There was, in addition, a question mark over the financial sustainability of a significant number of the projects that relied on continued public support in situations where there were severe constraints on government finances.

3.6.4 Lessons learned and policy implications

A number of lessons for future policy can be drawn from the results of the evaluation, especially in relation to urban-development projects: but they apply also to the social infrastructure ones.

- Urban (and rural) integrated regeneration projects, as well as social infrastructure ones to a large extent, have a major role in strengthening the growth potential of regions and improving territorial cohesion. They are, however, demanding to design and implement effectively. In particular, they need to be embedded in a coherent strategy for development of the region in which the city or town in question is located. Many of the projects implemented in the 2007-2013 period, therefore, were carried out without much regard for the wider context and their interaction with other projects being undertaken. As a result, funding was fragmented and its potential for enhancing regional growth was not fully exploited.
- The strategy concerned also needs the authorities in the area to have the capacity for implementing the policy, which cannot be taken for granted but needs careful planning and design of the procedures to be adopted for implementing the policy and the identification of the technical support that can be drawn on.
- It needs, in addition, to involve the local community – local businesses in particular, but also social enterprises and the voluntary sector – in order to identify the most appropriate form of regeneration to bring about and the most promising development path to pursue and, most importantly, to ensure that all of the parties concerned feel part of the policy and a degree of ownership of it.
- Given the many aspects involved in an integrated strategy, it is important that the various sources of finance, both EU and national, are properly coordinated. The closer integration of the ERDF with the ESF and EAFRD in the present programming period is an important step in this direction, which should increase their joint effectiveness. Moreover, the next EU Urban Agenda that is due to be published is intended to provide an updated strategic framework to help design an integrated policy.
- More relevant indicators are needed to monitor the implementation of urban-development policies: ones that not only track the output from the funding provided, such as in particular the number of projects undertaken, but also the results. These are difficult to define but they need to relate to the objectives of the policy, such as, for example, the number of new businesses locating in the area or growth in economic activity. The same applies to social infrastructure, where data on results – such as the number of people treated or educated in more modern buildings with more advanced equipment or the number of additional children cared for – are also needed.
- More evaluations need to be undertaken of integrated development programmes in order to assess the achievements and to identify areas for improvements in the policies followed. This is especially important not only because very few evaluations have been carried out in the past but also because any quantitative indicators of results are inevitably limited in what they can reveal (and, of course, say nothing about the underlying processes at work).

3.7 European transnational cooperation (WP11)

3.7.1 Amount and division of funding

The Interreg programmes that were funded under the ETC Objective over the 2007-2013 period were the fourth generation of a series that began in 1989 to support cooperation between regions across national borders. Their primary purpose is to help overcome the obstacle to economic and social development that such borders often represent. In the 2007-2013 period, Interreg IV was divided into three strands:

- cross-border cooperation, consisting of 56 programmes bringing together neighbouring regions in different countries, aimed at strengthening cross-border cooperation through joint local and regional action (Strand A);
- transnational cooperation, consisting of 13 programmes to support cooperation between countries in the same broad geographic area, such as those around the Baltic Sea, the aim being to strengthen transnational cooperation through action for integrated territorial development linked to EU priorities (Strand B);
- inter-regional cooperation, consisting of one general programme to support cooperation between regions in the EU wherever they are located, and three programmes to support networking and the exchange of information and experience (URBACT, INTERACT and ESPON) (Strand C).

In addition, like the ERDF generally, the Interreg programmes were also intended to be used in the period to pursue the main priorities of the renewed Lisbon strategy.

The overall amount of ERDF going to the programmes for the period was EUR 7.7 billion (Table 3.11)⁸⁶.

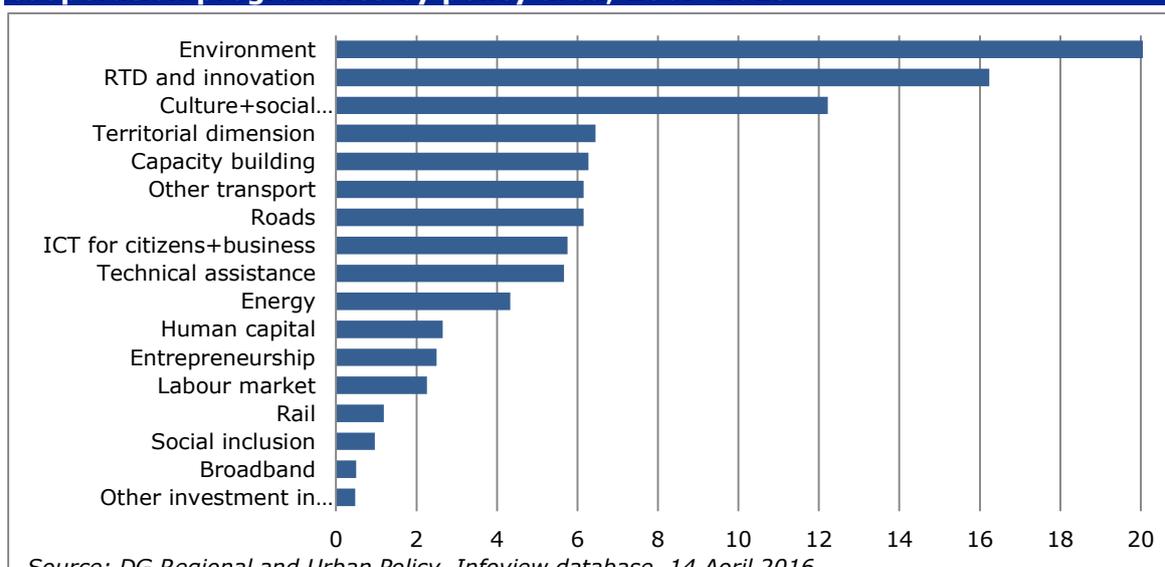
Table 3.11 ETC programmes and decided amounts from ERDF, 2007-2013

	Number of OPs	EUR million	% Total
Cross-border cooperation	56	5 479	70.9
Transnational cooperation	13	1 814	23.5
Inter-regional cooperation	1	321	4.2
ESPON	1	34	0.4
INTERACT	1	30	0.4
URBACT	1	53	0.7
Total	73	7 732	100.0

Source: DG Regional and Urban Policy, Inforegio database, 14 April 2016.

In the case of the cross-border cooperation (CBC) programmes, which accounted for over 70% of the total funding for Interreg over the period, the three main policy areas in which funding was concentrated were the environment, RTD and innovation, and cultural and social infrastructure, which together accounted for almost half of the total funding available (Figure 3.20). As compared with the mainstream ERDF, less went to investment in infrastructure and more to capacity-building and technical assistance (around 12% of the total as opposed to only 3%). This essentially reflects the considerably smaller budgets made available for these programmes, which were, accordingly, intended to complement, or reinforce, the mainstream programmes by supporting cooperation and joint action on specific issues.

⁸⁶ The PEACE III programme, aimed at supporting peace and reconciliation in Northern Ireland and the border area of Ireland, was also funded under the ETC Objective. It had a budget of EUR 225 million for 2007-2013.

Figure 3.20 Division of decided amounts of funding for Cross-border cooperation programmes by policy area, 2007-2013

The division of funding in transnational cooperation programmes was slightly different, with more going in particular to the environment, including climate change (35%), and RTD and innovation (23%) – these two broad areas together accounting for almost 60% of the total budget.

Over the programming period, there were only relatively small shifts of funding between policy areas (amounting to less than 10% of total funding), the main ones being a reduction in funding for 'other' transport (i.e. other than for road and rail) and an increase for culture and social infrastructure and the environment (unlike for mainstream programmes in the case of the latter).

On average, therefore, ERDF support for each CBC programme amounted to around EUR 100 million, which, to put it into perspective, represented only some EUR 20 per head of population in the regions covered, less than a quarter of the average mainstream funding provided in Competitiveness regions and only a small fraction of the average in Convergence regions. The funding provided also varied markedly between programmes, ranging from EUR 58 per head in the Greece-Bulgaria and Hungary-Romania OPs to only EUR 4 per head in the South Baltic and Italy-Switzerland OPs. It was, therefore, larger in Convergence regions (i.e. regions covered by the Convergence Objective under the mainstream funding for Cohesion policy) than Competitiveness ones and slightly larger again in Transition regions (Table 3.12).

Table 3.12 Allocation of funding for CBC programmes, per inhabitant in all regions covered, by Objective of regions and type, 2007-2013 (EUR)

	Convergence	Transition	Competitiveness	
	CBC	CBC	CBC	ERDF main
Urban	10	19	11	97
Intermediate	31	33	16	74
Rural	35	40	24	106
Total	27	30	15	91

Note; Allocations of funding to selected projects as at end-2014

Source: WP13, which covered only Cross-border Cooperation programmes, and Eurostat for population data (2010).

In most parts of the EU, funding for CBC programmes tended to go more to rural and intermediate areas than to urban ones, which to a large extent reflects the nature of border regions.

It is important to bear in mind the relatively small amount of funding going to ETC programmes when assessing what they achieved over the period as well as what their objectives were. It is equally important to bear in mind that for the regions and countries in the EU15 receiving support under the ETC Objective that, as indicated above, the programmes in the 2007-2013 period were the fourth-generation ones; and that in many cases there were 17 years of cooperation programmes that preceded those carried out in the period. They need to be judged from this perspective, just as the programmes in the EU12 countries that were initiated in 2007 need to be judged as new ventures that attempted to encourage cooperation where, for the most part, there was very little before.

The evaluation carried out under WP11 covered all ETC programmes apart from the three CBC ones involving Croatia, and apart from UBACT, INTERACT and ESPON.

The content of the evaluation

The evaluation was carried out between January 2015 and June 2016. The data analysis was mainly undertaken in the first half of 2015 and the cases studies in the second half of 2015 and the first part of 2016. The evaluation consisted of:

- Overview of 67 Interreg programmes to assess the setting of objectives and the extent of achievements.
- Case studies of 12 Interreg programmes, covering all three Strands, to deepen the initial analysis.
- Seminar with representatives of MAs and external experts.

3.7.2 Rationale for support of ETC

There is a clear and compelling case for supporting cooperation across national borders in the EU. Such borders tend to form a natural barrier to economic integration even after the borders themselves have effectively been removed by establishing free movement of goods and services, as well as people, across them. This is not only because of language differences but also because of cultural and institutional ones, reinforced in some cases by historical events. Borders can, therefore, obstruct the economic development of the regions located along them by impeding flows of trade and movements of people as well as the establishment of commercial relations between firms on either side; and can, accordingly, prevent a natural functional area, or region, from being formed⁸⁷. It can also prevent common problems that span borders – such as environmental ones or, in some cases, the relations between urban and rural areas or between centres of economic activity and the surrounding areas where people live – from being tackled in a common and effective way.

The same applies to transnational cooperation between countries that are not necessarily neighbouring ones but which also share common problems that can most effectively be tackled jointly rather than separately.

There is ample evidence – and more became apparent during the evaluation – that cooperation between the authorities, firms and other organisations on either side of a national border does not necessarily happen spontaneously, even where there are potential economic returns involved, still less where there are potential social benefits (such as in the case of joint action to tackle environmental problems). Public intervention is often required to initiate and support the process. However, in many cases, it is difficult for national governments to come together to agree on pursuing

⁸⁷ A functional region is one in which the places it contains are linked by the interactions between them, which functions as a unit and can be planned as such.

joint actions and to find the financial resources to fund them, and still more difficult for regional or local authorities to do so.

There are, therefore, strong grounds for the EU to provide support, particularly since the increased economic and social development of border regions is of common benefit to everyone in the Union because of the increased income, and spending, that it is likely to generate and the strengthening of social cohesion – and the lessening of tensions and potential conflict – that it is likely to lead to. There are equally strong grounds for EU support for transnational cooperation to search for common solutions to problems that affect a number of countries on which joint action is likely to be more effective, and more efficient in terms of the cost and effort involved, than each country acting independently.

Accordingly, the ETC programmes are perhaps the most prominent example of EU added-value from Cohesion policy. This is not to say, however, that there are comparable gains to be achieved from providing support to cooperation across all borders, whether internal or external. In some cases, cooperation may be occurring without support; in other cases, there may be little benefit in economic, social or territorial terms from cooperation – where, for example, the two sides of a border do not form a potential functional area and can develop separately in an effective way. The provision of support, therefore, needs to be selective and to take explicit account of the potential for joint development and the possible gains to be achieved: by considering, in particular, whether or not the regions concerned could develop into a coherent functional area.

3.7.3 Main achievements

It is clear that the achievements of Interreg programmes cannot be judged in the same way as mainstream programmes. Although they had the same objectives of reducing regional disparities across the EU and pursuing the Lisbon priorities, their primary goal was to stimulate cooperation and joint action across national borders. They need, therefore, to be assessed in these terms. This, however, is not so easy since, although it is possible to identify and record the instances of cooperation that occurred and the joint projects that were undertaken, it is much more difficult to quantify the outcome of these in terms of strengthening the relations between the areas on the different sides of the border. A possible indicator is whether or not there is evidence of a functional area being formed, which can be judged perhaps by whether or not there are instances of spontaneous cooperation that have occurred and/or of joint ventures that have been undertaken or, possibly, of increased commuting across the border.

The monitoring systems set up in the different regions to track the outcome of programmes did not include specific indicators to try to record the results of the projects supported in these terms. Instead, in addition to recording the number of meetings held or joint projects co-financed, they tended to report the same kinds of indicator as the mainstream programmes (the number of jobs created, the length of road constructed and so on), which are of some relevance but do not relate to the central aim of the programmes. Moreover, as in the case of mainstream programmes, the data collected on these indicators were incomplete and in many cases not capable of being aggregated across programmes.

The evaluation, therefore, had to rely on more piecemeal, and qualitative, evidence to form a judgement about how far the programmes over the period had achieved their main objective. In doing so, it had to take explicit account of the different stages of 'maturity' of the programmes: to differentiate, in particular, between those in the EU15 which had been running for three or four programming periods by the end of

2007-2013 and those in the EU12 which been running only since 2007 (since, as indicated above, the objectives of the two differed – or should have done).

In practice, in the case of CBC programmes, the objectives in most cases were set out in a relatively general and vague way. Even if the most important issues for cooperation were identified in many cases, there was a lack of clarity about the results expected from the programmes formulated, which makes it difficult to assess how far they achieved what they set out to do. Often, the projects supported were those which entailed cooperation or joint action, and which were in the policy areas identified as being relevant but were not part of an overall strategy for the development of the cross-border regions concerned. This applies in particular to the many projects involving cooperation between local authorities on either side of a border that achieved tangible outcomes, but not necessarily ones which contributed significantly to the development of the region as a whole.

Tangible achievements

Up to the end of 2013, the CBC programmes funded over 6 800 projects in policy areas at the core of the Lisbon, and later, Europe 2020 strategy – i.e. RTD and innovation, the environment and ICT, as well as culture and social infrastructure – that were potentially important for both social cohesion and economic development. The actions supported involved the creation and expansion of economic clusters; the establishment of centres of excellence, and higher education and training centres; cooperation networks between research centres; and cross-border advisory services for enterprises and business start-ups. The 1 300 or so environmental projects involved the joint management of natural resources, including sea and river basins; cooperative action to combat natural risks, to respond to climate change and to preserve biodiversity; and pilot initiatives to develop renewable energy.

Specific examples under RTD include the joint development of support for SMEs as regards image analysis and optical measurement process control in the mining industry; and cross-border research and business cooperation in the development of new propulsion systems, liquefied natural gas technology and a new generation of wind-assisted motor boats.

As regards the environment, examples include joint research into marine ecosystems in order to improve marine management and planning in the English Channel, and the PURE project in the Baltic Sea region to develop a cost-effective system for tackling eutrophication and removing phosphorus in municipal wastewater-treatment plants.

Although the indicators available are limited and incomplete, they show that around 3,500 jobs were directly created as a result of the projects undertaken, 487 km of roads were reconstructed and over 500 000 people participated in joint education or training activities.

In the case of the transnational cooperation (TNC) programmes, the indicators show that 2,207 jobs were created and 260 transnational projects in RTD and innovation, accessibility, risk prevention and water management were implemented. Most of the projects involved tackling common problems through collaboration, joint research or exchange of experience. The most frequent outcomes were the establishment of networks or partnerships of SMEs and research centres, the joint management of natural resources and joint action for environmental protection. A major aspect has been the creation of a critical mass, i.e. a sufficient scale, for tackling territorial and environmental problems, for setting up RTD networks and for creating common services (such as in the case of transport in the North-West Region).

In the case of Interreg IV Strand C, the aim of which was to improve the effectiveness of regional policies through cooperation and exchanges between regions, the

programme succeeded in setting up a framework in which local and regional authorities from across the EU could share experiences and examples of good practice in relation to the problems they faced. However, the evaluation found little evidence of knowledge or experience being disseminated outside the regions involved in the projects and outside Interreg more generally. Nevertheless, the regional authorities surveyed had a positive view of the technical assistance that the programme provided.

Less tangible achievements

Although there is limited evidence of the depth of cross-border or transnational cooperation actually achieved over the period, the case studies point towards improvements in both the scale of cooperation and attitudes towards it. In an attempt to quantify this, the evaluation defined four criteria for judging the extent of cooperation with regard to programmes – joint development, joint implementation, joint staffing and joint financing. In practice, in at least 10 programmes, over 75% of the projects met all four criteria. The case studies carried out on the Northern Ireland-Ireland-Western Scotland and Germany-Netherlands CBC programmes were particular examples in which most of the projects satisfied all of the criteria.

In programmes involving EU12 countries and less-developed regions in the EU15, cooperation to a large extent entailed increasing the capacity of the authorities involved to implement cross-border projects and to manage programmes in the future. The implementation of programmes led to those involved gaining experience, the gradual adoption of more focused approaches to the projects supported, the establishment of networks across borders and the improvement of management capabilities, especially at local level (the Hungary-Slovakia OP provides a good example of this).

An additional outcome of many CBC programmes was the creation, or consolidation of, a regional identity, in the sense of an increased recognition of the value of cooperating across borders, the increased visibility of the regions covered as a coherent area of economic activity (of potential importance for attracting inward investment) and a greater understanding of the regions' development potential. To this extent, the programmes helped to lift a few of the barriers to closer economic integration, in particular cultural differences. It was less successful, however, in lifting administrative and institutional barriers, partly because of the lack of involvement in programmes of central governments.

3.7.4 Lessons learned and policy implications

Although the evaluation demonstrated the significant achievements of the Interreg programmes over the 2007-2013 period, it also drew attention to a number of limitations and weaknesses. These are important to tackle since the evaluation also showed that Interreg is a vital source of funding for transnational cooperation, that most of the projects supported would not have occurred without the support it provided and that there is no alternative source of funding available if the programmes were to be terminated.

The main limitations and weaknesses are as follows:

- Cooperation was often regarded by programmes as an end in itself rather than a means to an end, which is ultimately to assist the development of the regions and countries concerned and thereby to reduce economic and social disparities across the EU. This is defensible in the programmes involving EU12 countries, where cooperation was being initiated for the first time. It is less defensible in programmes which had been running for almost two decades at the start of the programming period. It is important that the ultimate objectives are kept in

mind and that programmes have a clear strategic focus which extends beyond cooperation or joint action, which of course have to remain central elements in the way they operate.

- Limited attention seems to have been paid to the notion of a functional region or area when identifying the border regions to support. Yet this is essential to considering the potential benefits of cross-border cooperation and the extent to which this is important for the economic and social development of the regions concerned. There are obvious difficulties in defining functional areas in practice, especially those that do not at present exist but which could potentially do so in the future to the benefit of the regions in question. But attempting the exercise would at least focus attention on the aspects which are relevant for the prospective development of the cross-border area concerned.
- Most programmes seem to have adopted a bottom-up approach when deciding the projects to support, which made for difficulty in prioritising objectives or pursuing a coherent overall strategy designed to further the development of the regions concerned and to achieve a closer degree of economic integration between them. While, therefore, individual projects were in most cases successful in their own right, they remained isolated from other activities, so diminishing their potential for contributing to the overall development of the region.
- The results of the projects supported were often difficult to identify and many projects were too small to produce discernible effects on the development of regions or their closer integration. This stems from the way in which projects supported were selected, from the distribution of the limited funding available over a large number of them and from the lack of a strategic focus.
- There was very limited coordination between Interreg programmes and mainstream ones. The potential for complementing one with the other and reinforcing the effects on development was therefore lost.
- There was equally not much sharing of experience in undertaking projects or of the results achieved between those responsible for the transnational programmes and the regional and central authorities managing the mainstream ones. Indeed, the latter seem to have shown little interest in the transnational programmes, which in some degree led them to being isolated from the overall strategy being pursued in the wider region or country. This is particularly important given the small scale of the Interreg programmes, which means that what they can achieve on their own is limited. It is especially important for TNC programmes, where the disproportion between the funding provided and the objectives is enormous and where its effectiveness depends on its links with national or Cohesion policy mainstream programmes.
- The evaluation also highlighted the limitations of the monitoring system and the lack of indicators that reflect the central objective of the programmes of stimulating cooperation in order to further economic and social development. There is a need to rectify this and to develop indicators that relate to what the programmes are attempting to achieve, which goes beyond the immediate purpose of the projects supported.

It is important to note that a number of these weaknesses have already been addressed in the regulations for the 2014-2020 programming period with the aim of increasing the effectiveness of the Interreg programmes. In particular, the orientation on results should ensure a greater concentration of funds on a limited number of policy aims, while the emphasis on defining a well-articulated intervention logic at the outset should lead to a more strategic approach.

3.8 Summary of achievements as shown by the core indicators

The aggregate values of the core indicators give an overview of the achievements of Cohesion policy programmes over the 2007-2013 period. However, as emphasised at various points above, the coverage of programmes is incomplete because the reporting of the indicators was not compulsory and a number of MAs did not report some or all of them, even though their programmes gave rise to relevant outcomes. The figures, therefore, understate the actual achievements resulting from the expenditure co-financed by the ERDF and Cohesion Fund, though by how much is impossible to say.

As indicated above, around 940 000 jobs were reported to have been directly created by the spending co-financed up to the end of 2014, some 41 600 of them in research (Table 3.13).

The indicators not covered by the WPs include the additional number of people given access to broadband as a result of the projects supported under Cohesion policy (8.4 million), the increase in the capacity to generate renewable energy (3 900 megawatts) and the contaminated area (polluted, in particular, by industry) that was rehabilitated (1 100 square km).

Of course, as emphasised in the various sections above, the achievements of the support provided by the ERDF and Cohesion Fund are only partially captured by the core indicators. This is not only because of the incomplete nature of the data reported but more generally because of the difficulty of encompassing all the many and various outcomes of the programmes co-financed through what are, in many cases, indicators of output rather than of the results or, still less, of the impact on the ultimate objectives of Cohesion policy.

Table 3.13 Values of core indicators reported for programmes co-financed by the ERDF and Cohesion Fund up to end-2014

	Value at end-2014
Aggregated Jobs (no.)	940 000
RTD projects (no.)	95 000
Cooperation projects between enterprises and research institutions (no.)	33 600
Research jobs created (no.)	41 600
SMEs directly supported (no.)*	400 000
Start-ups supported (no.)	121 400
Jobs created in SMEs (gross, full-time equivalent, no.)	322 100
Additional population covered by broadband (thousand)	8 400
Km of new roads (no.)	4 900
Km of new TEN roads (no.)	2 400
Km of reconstructed roads (no.)	28 600
Km of new railway (no.)	1 100
Km of TEN railway (no.)	2 600
Km of reconstructed railway (no.)	3 900
Additional capacity of renewable energy production (megawatts)	3 900
Additional population served by water projects (thousand)	5 900
Additional population served by waste-water projects (thousand)	6 900
Area rehabilitated (square km)	1 100
Jobs created in tourism (no.)	16 200

Note: The figures reported by the MAs have been rounded to the nearest 100. They therefore differ from those shown in the above sections. The figure for aggregated jobs is based on an examination by the Commission of all gross job creation reported for each priority axis and is regarded as the most accurate figure for the total number of gross jobs directly created as a result of funding. It is higher

than the sum of the figures reported by MAs for the core indicators relating to jobs created because in many cases MAs fail to report anything for these indicators. The figures for new railways and TEN railways include an estimate for Spain which did not report the railways constructed as a core indicator.

** Estimated number of SMEs directly supported by the ERDF across the EU, based on the figure reported by WP2 of the SMEs supported in the OPs examined.*

Source: DG Regional and Urban Policy, derived from 2014 AIRs.

The examples of the projects supported, outlined in the above sections, give some indication of the results which programmes achieved over the period, in terms, for example, of improving accessibility and reducing congestion and journey times in the case of transport projects, complying with EU Directives and improving the quality of life, as well as the sustainability of economic development in the case of environmental infrastructure ones, or preserving the natural heritage in the case of cultural ones. All of these generated distinct EU added-value and many would not have been undertaken without EU funding. This was particularly so as regards the Interreg programmes financed under the ETC Objective, which led to closer cooperation across national borders and opened up the possibility of stronger and more rational economic development in the regions concerned, which would not have occurred in the absence of Cohesion policy.

The next chapter examines the effect of the policy on ultimate objectives which cannot be captured by indicators. It focuses on one objective in particular, the economic growth of the Convergence regions on which most funding was concentrated. This is equally partial in that it leaves out of account the effect on other policy objectives, such as furthering social inclusion or improving the quality of life or the sustainability of development, though economic growth is of major importance, especially in less developed regions.

Chapter 4 – The effect of Cohesion policy on regional growth and development

4.1 Introduction

The review of regional developments over the programming period in Chapter 1 above has shown that the economic performance of Convergence regions, in terms of the growth of GDP per head, was superior, on average, to that of other regions in both the EU12 and in the EU15 outside the southern EU15 countries. Of course, this performance cannot necessarily be attributed to the Cohesion policy programmes implemented in these regions both over the 2007-2013 period and the previous one (or the previous two or three periods in the case of the Convergence regions in the EU15). Other factors at work could well have been primarily responsible. Similarly, the relatively poor performance of the Convergence regions in the four southern countries does not necessarily mean that Cohesion policy was ineffective during this period. It is possible that GDP per head in these regions would have declined even more without the support provided by the ERDF and Cohesion Fund. In both cases, there is a need to isolate the effects of Cohesion policy from other factors at work before it is possible to make a judgement about its contribution to the developments that occurred over the period.

The present chapter attempts to do this. It summarises four pieces of analysis that have been carried out as part of the evaluation.⁸⁸ In the first part, the findings of two econometric studies are presented, both of which are aimed at distinguishing the

⁸⁸ The four studies are published as WP14a to WP14d at: http://ec.europa.eu/regional_policy/en/policy/evaluations/ec/2007-2013/#1.

impact on the growth of GDP per head of the expenditure financed under Cohesion policy.

The second part summarises the results of estimating the effects of the expenditure concerned on economic developments across the EU on the basis of two general equilibrium macroeconomic models. The first, Quest III, assesses the impact on individual Member States, including countries that were net contributors to financing the expenditure⁸⁹. The second, Rhomolo, is a regional model that takes explicit account of the trade and other flows between regions: accordingly, it is designed to distinguish the differential impact of Cohesion policy on regions within countries – on those, for example, in Italy or Spain – supported under the Convergence Objective, and so in receipt of much larger amounts of funding than those supported under the Competitiveness Objective.

Both means of estimating the effects of Cohesion policy have their merits as well as their limitations. The use of the two together gives a fuller perspective on the impact of policy than either of them used separately. The macroeconomic models, which are a representation of the workings of the economy, can incorporate the potential effects of the policy in more detail, taking account of the composition of expenditure financed as well as the overall amount, and can explicitly examine the impact on various aspects of the economy, such as wages and prices as well as GDP. They can also examine the impact on net-contributor countries of the taxes levied to finance the expenditure concerned, as well as the feedback from the increased spending in recipient countries, part of which goes on buying goods, equipment and services from the countries effectively financing Cohesion policy.

The limitation is that they are inevitably based on assumptions about how the economy works and the effects of the expenditure in various policy areas on this. These assumptions are based partly on economic theory, and partly on empirical research into the effects in question. The econometric analysis, which is based on a counterfactual impact-evaluation approach, is limited because it cannot easily take explicit account of all the various interactions which are incorporated in the macroeconomic models. Nevertheless, it has the merit of estimating the effects of policy directly and is less reliant on the validity of the assumptions about how the economy works, though inevitably it has to make some assumptions, in particular (in the more limited models that are constructed) about which factors to include that potentially affect regional growth.

Both approaches find that the expenditure carried out under Cohesion policy had a significant effect in boosting economic activity and growth over the programming period.

4.2 The estimated effects of Cohesion policy on regional growth using counterfactual evaluation methods

The two pieces of econometric analysis were both based on counterfactual methods, which essentially involve trying to take account of the other factors apart from Cohesion policy that could potentially affect the growth of regions receiving support, or, more precisely, receiving support under the Convergence Objective⁹⁰. This they do by setting up a control group that so far as possible has all the characteristics of the regions receiving support except for not receiving it, and then comparing the growth

⁸⁹ It should be noted that Quest III takes account of payments from the EAFRD as well as the ERDF, ESF and Cohesion Fund.

⁹⁰ The two studies on 'Measuring the impact of Structural and Cohesion Funds using the Regression Discontinuity Design (RDD) and Propensity Score Matching (PSM) in the EU27 in the period 1994-2011' were by Guido Pellegrini and Daniele Bondonio.

of the regions supported with the growth achieved by the regions in the control group. Any difference in growth rates between the two groups is then attributed to the effects of policy. Since the two groups are constructed to have the same characteristics apart from this one factor, they can be assumed to perform the same if the support had not been given. In other words, the assumption is that the group supported would have grown at the same rate as the control group in the absence of receiving the support, hence the term 'counterfactual'.

Two specific techniques of counterfactual analysis were used in the two pieces of analysis. One, termed 'propensity score matching' (PSM), attempts to match regions receiving support with those not receiving it in terms of their relevant characteristics (i.e. those that potentially affect their growth performance). The other, termed 'regression discontinuity design' (RDD), essentially attempts to estimate the effect of support by comparing the performance of regions supported with those that are as similar as possible in terms of the criterion used for entitlement to support but that just failed to qualify for support. In the case of Convergence regions, therefore, the comparison is between those regions with GDP per head just below the threshold of 75% of the EU average used to determine eligibility for Convergence Objective funding, and those with GDP per head just above the threshold. Again the assumption is that developments in regions that fall into the latter category give a good indication of how the regions that barely qualified for Convergence Objective funding would have performed without this funding. In practice, it is assumed that the growth potential of regions with GDP per head of, say, 76-80% the EU average at the time eligibility for funding was determined was much the same as the potential of the regions with GDP per head of, say, 70-74% of the average.

The latter approach works well when there are large numbers of regions that are close to the threshold and that can be compared, since in this situation it can be assumed that other factors and other characteristics of the regions have a random effect on the performance of the two groups. In this particular case, however, the number of regions is limited and those that are close to the threshold, on either side, even more so. This means that the boundary on the two sides of the threshold within which the comparison of regions is made has to be stretched, so that initial levels of GDP per head – and potentially other characteristics – become more dissimilar.

In response to the potential bias in the results that this might lead to, multiple PSM and RDD models were constructed and the results compared in order to ensure that the estimates produced were as robust as possible. In addition, unlike most previous attempts to estimate the effects of Cohesion policy, explicit account was taken of the varying intensity of support provided to different regions.

Moreover, to have a comprehensive measure of the overall funding going to regions from the EU, the analysis was based on a new set of data for Cohesion policy payments to regions, which includes the ERDF and the Cohesion Fund, the ESF, the EAGGF – and for the 2007-13 period, its successor, the EAFRD, and the Financial Instrument for Fisheries Guidance. The dataset was specially constructed by DG Regional and Urban Policy officials for the purpose. This covered the period from 1994 to 2011 (the last year for which reasonably consistent data on regional growth rates were available at the time of the analysis⁹¹), which enabled the impact of funding to be estimated over three programming periods. Accordingly, it enabled the lagged response of growth to the support provided to be explicitly taken into account, along

⁹¹ The analysis was carried out at the end of 2015/beginning of 2016, when the only reasonably consistent set of data on regional growth, specifically for gross value-added at constant prices, was based on ESA 95 and went up only to 2011. Data for the years up to 2014 have subsequently become available (in April 2016) but are incomplete.

with the fact that payments for a particular programming period extend to significant extent into the next period.

The main result of the analysis is that a positive and statistically significant impact of EU funding on the growth of the regions supported was found. For the period 1994-2006, it was estimated from the RDD model that, in the EU15 regions, the effect of receiving Objective 1 support (the precursor of the Convergence Objective) was to increase the annual rate of growth of GDP per head by just under 1 percentage point a year. The results from the PSM models constructed were similar.

When the analysis is extended to the EU27 regions, and the 2007-2013 programming period is added – though unfortunately, only up to 2011 because of the lack of data for later years – the PSM models estimate the effect of receiving Objective 1 or Convergence Objective funding was to raise the growth rate of regions, on average, by 0.5 to 0.7 of a percentage point. The RDD model produced similar results, though including the 2007-2011 period, which was severely affected by the crisis, reduced the effect on growth to just under 0.5 of a percentage point. This suggests that the EU funds were less effective in increasing the growth of regions during the crisis period.

Such a finding, however, needs to be treated with caution since the crisis is likely to have affected regions differentially, so perhaps having a greater impact on the regions supported than those used as the control group. A parallel finding was that there was much more variation in the growth performance of regions over the period, so that there were wide differences around the average. Moreover, the period covered is relatively short and the authors emphasise that the results of the analysis will need to be checked once a complete set of data for the period becomes available.

Two further points came out of the analysis. Firstly, it is potentially important to take account of differences across regions in the composition, as well as the overall scale, of the expenditure that is financed, since spending on investment on infrastructure is likely to have a different effect on growth from, say, spending on enterprise support.

Secondly, it is equally important to take account of the multiple objectives of Cohesion policy, which to some extent are reflected in the composition of the expenditure carried out. The focus on estimating the effects of funding on growth of GDP implicitly assumes that this is the only indicator of the performance of the funds that matters, or at least that this is the main indicator. While growth of GDP is undoubtedly important, there is a need to recognise that other aspects are also relevant, such as the standard of living of the people in a region and their quality of life, as well as the sustainability of the growth that is brought about, which, as increasingly emphasised by economists, is not necessarily reflected in GDP.

4.3 The estimated effects of Cohesion policy on growth from macroeconomic models

Macroeconomic models enable the composition of the expenditure financed under Cohesion policy to be explicitly taken into account as well as its overall scale. As in the case of the econometric analysis described above, the two models, Quest III⁹² and Rhomolo⁹³, used to estimate the effects of the expenditure concerned incorporated the

⁹² A new-Keynesian dynamic general equilibrium model of the type widely used in economic policy research, developed by DG Economic and Financial Affairs to assess the effects of policies. The specific version used was the R&D version of Quest III (see Varga J. and J. in 't Veld, 'A model-based analysis of the impact of Cohesion Policy expenditure 2000-06: Simulations with the Quest III endogenous R&D model,' Economic Modelling 28: 647-663, 2011.

⁹³ A dynamic spatial general equilibrium model developed specifically for DG Regional and Urban Policy to assess the impact of Cohesion policy. See Brandsma A., Kancs, D., Monfort P. and A. Rillaers, REGIO Working Paper 01/2013.

payments to regions from the ESF as well as the ERDF and Cohesion Fund (EUR 337 billion in total over the period) and in the case of Quest payments also from the EAFRD (the Rhomolo simulations did not include this).

Both models differentiate between the short-term effects on demand of the expenditure carried out in the regions and the longer-term effects on supply, or on the productive potential of the economy, which increase the growth rate that it is capable of sustaining. The short-term demand effects come, for example, from constructing a road or providing training to people, which boost output and employment directly and give rise to increases in income and spending, which in turn lead to more output and employment (the Keynesian multiplier effects). The long-term effects come in the form of the higher levels of GDP that the economy can sustain from the investment supported, such as, for example, in R&D, the use of new technology by firms, improved transport networks or more highly educated workers. These typically take some time to show up but can last long after the initial expenditure has been completed.

The expenditure financed can also have indirect effects, such as pushing up wages and prices because of the increased demand for labour, which might have a depressing effect on demand and GDP. It can additionally have important spill-over effects on other parts of the EU as the increased spending in the regions receiving support goes on the goods and services produced outside the regions as well as inside them. Accordingly, even the countries that are net contributors to the EU Budget from which the funding comes can benefit significantly from the expenditure it generates.

The models, therefore, attempt to replicate the main features of the 27 EU Member State economies and their trade links between each other and with countries in the rest of the world. Accordingly, developments in one country affect others both inside and outside the EU through trade in the internal market and through international trade with third countries – though mainly inside given the close integration of the Member State economies and the substantial amount of trade between them. Growth in one part of the EU, therefore, benefits other Member States through these trade links.

The models also explicitly incorporate transnational spill-overs in RTD and innovation, so capturing the fact that new technology developed in one country tends to spread to others through the activities of multinationals as well as through imitation. Increased expenditure in R&D in one region, insofar as it leads to advances in technology and innovation, consequently will have positive effects on other regions both inside and outside the country in question as the new developments are taken up elsewhere. Support for RTD in Convergence regions, therefore, will tend to benefit the EU as a whole in this way, just as other Cohesion policy programmes will tend to increase output and employment generally through trade linkages.

The investment financed by Cohesion policy programmes is broken down into the 86 categories of expenditure described in Chapter 2 above. These are then grouped into five categories – infrastructure, human capital, RTD, aid to the private sector and technical assistance, and other – in order to take explicit account of their differential impact. The same applies to the investment supported by the EAFRD, which is classified into 46 categories, but which for modelling purposes is split into the same five broad groups.

In a similar way to the econometric analysis described above, the macroeconomic models estimate the effects of the expenditure concerned by simulating a counterfactual scenario in which Cohesion policy does not exist and the expenditure it financed did not occur. The difference between this scenario – the baseline – and one in which Cohesion policy does exist and the expenditure it financed did take place,

which for the past is the actual situation, gives the estimates of the effects of the policy.

As indicated above, these estimates are dependent on the features built into the model as regards the consequences of the investment financed in the different policy areas, which are based on both economic and empirical research. Whether they materialise in practice in particular cases depends on a number of factors, not least the effectiveness with which the projects or measures concerned are implemented, which has been a focus of the present evaluation.

It is important to note, however, that these effects, like those of the econometric analysis, are confined to the economic impact and do not take account of the other effects of Cohesion policy on social aspects or the sustainability of the development path, which are equally important objectives.

4.3.1 The economic effects of different types of expenditure

In broad terms, the investment in infrastructure supported – in transport, energy, broadband and so on – is assumed for the most part to increase income and spending in the short term and the productivity of the economy in the longer term. The latter effect lasts long after the investment has been completed, though it gradually declines as the infrastructure ages and eventually has to be replaced or reconstructed. There is a risk in the short term that the public investment undertaken has the effect of ‘crowding out’ investment in the private sector, by pushing up costs or creating supply shortages: but in the crisis, when most economies were depressed, this was unlikely to have been significant⁹⁴.

Investment in human capital, in education and training, which is largely financed by the ESF – though the ERDF supports investment in educational equipment and infrastructure, which is an essential element – is assumed to increase the skills of the workforce and, therefore, labour productivity. This in turn tends to raise real wages and so spending, while stimulating investment. It also increases the capacity for research and innovation, which pushes up total factor productivity. These effects take time to build up, but have potentially significant and persistent effects in the long term since they increase the productive potential of the economy.

Support to RTD and innovation, including the establishment of networks and cooperation between businesses and research centres, is assumed to give rise to technological advances and increases in total factor productivity. However, the model also assumes that such increases in RTD activity lead to high-skilled workers shifting from production, so adversely affecting growth in the short term. In practice, this effect is likely to have been modest at most over the crisis period when labour shortages were far from being a problem⁹⁵. Over time, the positive effects on productivity predominate, which can lead to a virtuous cycle of growth being established as productivity gains give rise to increases in output, which in turn leads to increased investment, which leads to further gains in productivity and so more growth. The effects, therefore, are assumed to strengthen over time and continue to increase long after the initial expenditure has finished.

Support to SMEs, tourism and cultural and other private sector activities are assumed for the most part to increase economic activity and growth in the short term but to have relatively limited effects in the longer term. To the extent that such support leads to an increase in the competitiveness of firms or, for example, to a rise in the

⁹⁴ In the model simulations some crowding-out of this kind is assumed, but it is questionable in practice whether any was likely to have resulted in many countries during the crisis period. To this extent, the model may underestimate the short-term effects of the expenditure financed under Cohesion policy.

⁹⁵ This assumption is an additional reason why the short-term effects may be underestimated by the model.

number of tourists, this may underestimate the potential effect on productive potential and growth over the long term.

Similarly, support for technical assistance and capacity-building is assumed to have a short-term effect in raising income and spending but not to have significant effects in the longer term on the productive potential of the economy. In practice, such support may be crucial to improving the capacity of the authorities to manage Cohesion policy programmes and to increasing the effectiveness with which the funding is spent and, accordingly, improving the results of the projects carried out. This aspect, however, is not incorporated in the models, programmes being implicitly assumed to be carried out with 'average' effectiveness.

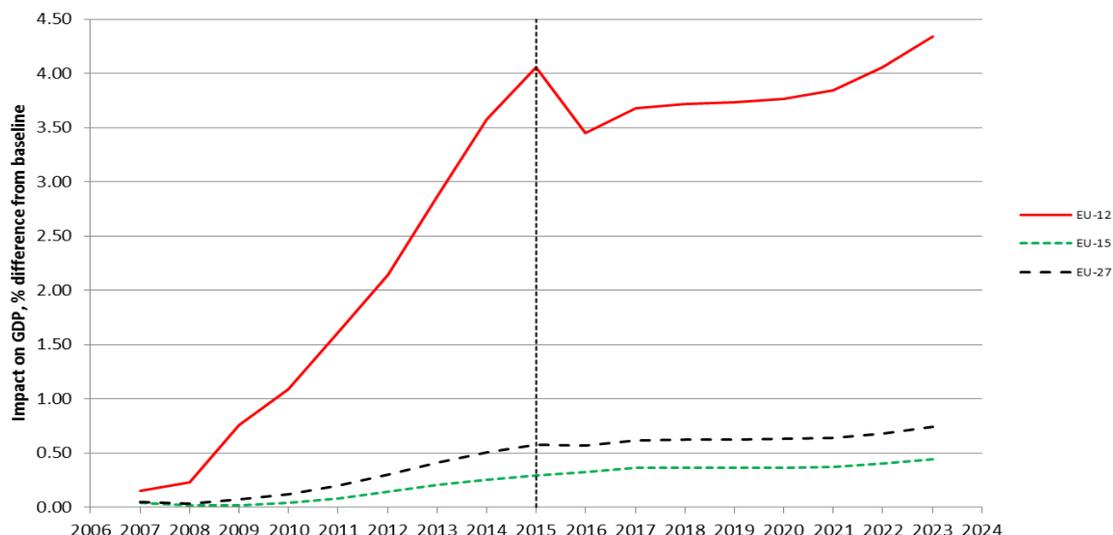
As indicated in Chapter 2, the division of the expenditure financed under Cohesion policy – and the same is the case for the EAFRD – varies between Member States and regions, with a relatively large share going on infrastructure in the EU12 countries and Convergence regions and on support of enterprises in the EU15 Member States.

The model also takes explicit account of the fact that Cohesion policy and the EAFRD needs to be financed. In practice, the finance comes from the EU Budget, so that effectively the expenditure carried out under Cohesion and rural development policies is paid for by contributions to the Budget. In the model, the finance involved is assumed to come from VAT, which tends to reduce GDP in the countries concerned, and which therefore offsets the positive effects of expenditure, the more so the larger the size of the contributions to the Budget. In the case of the EU12 Member States and the EU15 Cohesion countries, the contributions concerned only partly offset the payments received, while in the higher-income EU15 Member States, they much more than offset them.

4.3.2 The impact on GDP according to the Quest III model

The estimated effect of the investment supported by Cohesion policy and the EAFRD on GDP in the EU12 countries over the period is significant both in the short and longer term. In the EU12 as a whole, the expenditure supported is estimated to have increased GDP in 2015, at the end of the programming period, by around 4% above the level it would have been in the absence of the funding provided (Figure 4.1). The effect declines slightly as the expenditure comes to an end but then begins to increase as the long-term strengthening of productive potential kicks in and boosts growth again. By 2023, GDP is estimated to be once more around 4% higher than it otherwise would be and it continues to increase relative to the baseline in subsequent years.

Figure 4.1 The impact of Cohesion and rural development policy on GDP 2007-2023 (% difference relative to baseline without policy)



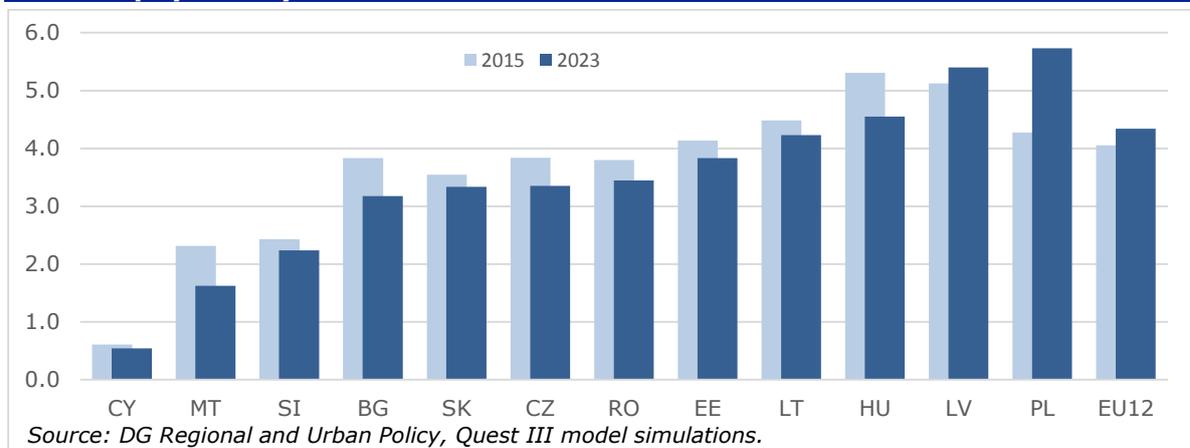
Source: QUEST III simulations.

In Hungary, where the amount of funding under Cohesion policy was largest relative to GDP, at around 3% (see Chapter 1), the effect is to increase GDP in 2015 by 5% as compared with the level it would have been without the funding (Figure 4.2). In 2023, eight years later, GDP is still estimated to be 4.6% above what it otherwise would have been without Cohesion (and rural development) policy.

In Poland, on the other hand, where the amount of funding was slightly smaller relative to GDP but where a larger share of expenditure went on RTD, the effect is estimated to increase over time. While in 2015 the expenditure supported is estimated to have pushed up GDP by 4.3% above what it would have been without the support, by 2023 it is estimated to increase it by 5.7% in relation to the baseline.

In the EU15, the effect on average is much smaller, as would be expected given the smaller amount of funding relative to GDP. It increases over time, however, as the productive potential of the economies is strengthened, and by 2023 it is estimated to push up GDP on average by around 0.5% as compared with what otherwise would be.

Figure 4.2 Estimated effect on GDP of payments under Cohesion policy and the EAFRD in EU12 Member States, 2015 and 2023 (% of baseline projection without payments)

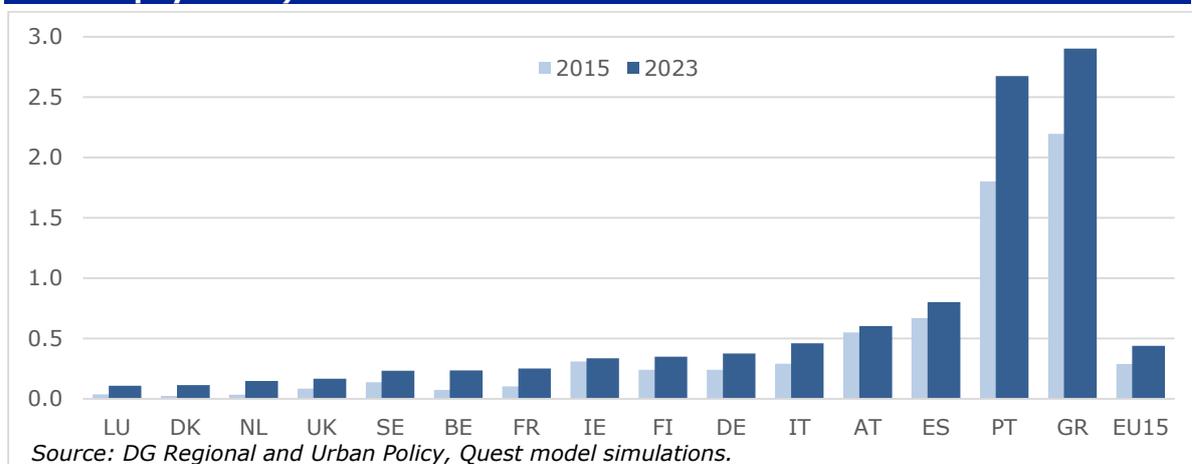


Source: DG Regional and Urban Policy, Quest III model simulations.

In the Cohesion countries in the EU15, the effect is larger. In Portugal, GDP is estimated to have been increased by 1.8% in 2015 as a result of the expenditure carried out with the funding provided, and by 2023 it will be 2.6% higher than it would be without the expenditure, according to the model (Figure 4.3). In Greece, GDP is

estimated to have been increased by slightly more, 2.2%, in 2015, and by 2.9% by 2023 as the strengthening of the supply-side takes effect.

Figure 4.3 Estimated effect on GDP of payments under Cohesion policy and the EAFRD in EU15 Member States, 2015 and 2023 (% of baseline projection without payments)



The effect on GDP in the longer term, therefore, depends not only on the scale of expenditure supported but on its composition and, in particular, how much goes to support of RTD, human capital and other policy areas that strengthen the productive potential of the economy and enable a higher rate of growth to be sustained in future years.

Impact per euro spent

As noted above, the effect of Cohesion policy in different Member States is related to the scale of the financial support it receives as well as to the way that support is allocated to different policy areas and types of measure. This raises the question of how effective the support provided is in terms of the return it generates relative to the amount that is invested. An estimate can be made of this by calculating a cumulative multiplier of the impact of policy on GDP for each euro invested (and paid for by the Member States contributing to the EU Budget in net terms). For any country, the cumulative multiplier is calculated as the ratio of the cumulative change in GDP relative to the baseline – i.e. relative to what it would be in the absence of the investment – up to a given year and the cumulative amounts spent over the same period of time.

In the EU27 as a whole, a euro invested over the 2007-2013 period is estimated to generate a return of 78 cents by 2015 (Table 4.1). By 2023, however, the return is increased substantially to 2.74 euros for each euro invested as a result of the significant long-term effects on the growth potential of the economies in which the investment is made. In the EU12, the return in the short term is larger (90 cents) because the investment is concentrated on infrastructure in these countries and less goes to RTD. But by 2023, the difference between the return in the EU12 and that in the EU15 narrows as the effects on GDP from the strengthening of productive potential and from trade build up.

Table 4.1 Cumulative multipliers, EU15, EU12 and EU27, 2015 and 2023

	2015	2023
EU12	0.90	2.80
EU15	0.67	2.73
EU27	0.78	2.74

Source: QUEST III simulations.

The results, therefore, indicate that both parts of the EU gain considerably from Cohesion and rural-development policies; and that the net return to investment is substantial, even though it takes a few years to materialise, which is only to be expected given the kinds of investment that are involved.

Equally importantly, the results also indicate that all Member States gain from the policies. This is the case even for those that are net contributors to the EU Budget and that effectively bear the cost of the investment carried out in the less-developed parts of the EU. The reason lies in the integrated nature of the EU economy, in which gains made in one part benefit other parts through the close trade links that exist, which means that increased spending in one area spills over through trade to other areas.

4.3.3 The impact on regions according to the Rhomolo model

The other macroeconomic model used to assess the effects of Cohesion policy, Rhomolo, is a regional model that distinguishes NUTS 2 regions across the EU and enables the variations in aid intensity between these, which was indicated in Chapter 2, to be taken explicitly into account when estimating the effects on GDP. It, therefore, captures the variation in the scale of support between regions receiving funding under the different Objectives in the same country, such as in Italy, Spain or Germany, though also between the capital city region and others in the Czech Republic, Slovakia and Hungary.

The model also incorporates interregional trade linkages as well as the spatial dissemination of new technologies and innovation and, as such, captures the spill-over effects of investment made in one region on others both in the country where it is located and outside.

In addition, it distinguishes investment in transport infrastructure from other kinds since this can have a particularly important effect on the regions where the new or upgraded roads or railway lines are constructed. It potentially increases their access to markets in the rest of the EU and so can boost their exports. Equally, however, it can make their markets more accessible to producers outside, so increasing competition from imports into the regions, though perhaps in the process reducing prices to households and costs to resident firms, so increasing the real income of both. Such investment in improving transport links is assumed in the model to reduce transport costs, which accordingly feeds through in the form of increased trade between the regions affected.

According to the simulations of the model, the impact of Cohesion policy over the 2007-2013 period was positive and significant in all regions, even those in Member States which were net contributors to the EU Budget. The effect, as would be expected, was particularly large in regions receiving the most funding. In Hungary, for example, which as noted above was the largest recipient of support over the period, GDP in 2015 is estimated in a number of regions (in Dél-Alföld, Észak-Alföld and Dél-Dunántúl) to have been 8-9% higher than it would have been without the expenditure which was funded. In the capital city region of Közép-Magyarország, however, the estimated increase in GDP above the level it would have been without the expenditure concerned was only 2.4%, still significant but well below the increase in other regions. This implies that the policy may have been successful over the period in achieving its main objective of reducing regional disparities – at least in Hungary – or, more accurately, in reducing them to less than they otherwise would have been, since it is possible that disparities would have widened much further in the absence of Cohesion policy support.

In regions in more developed Member States, the impact on GDP is of course estimated to have been much smaller, but it was still positive despite the Member

States concerned being net contributors to the funding. This is especially the case in the longer term in 2023, when the smallest effect according to the model was in several regions in Denmark, where GDP was increased by 0.2% above what it otherwise would have been.

In the case of investment in transport, the impact on GDP at the end of the programming period in 2015 was particularly large, as would be expected, in regions where the construction of new or upgraded transport links was concentrated. In the longer term, however, there is a positive effect for all regions. The improvements in the transport network, therefore, benefit all regions throughout the EU. The largest impact on GDP in 2023 is estimated to be in Podkarpackie and Warmińsko-Mazurskie in Poland and Vest in Romania, the regions in which investment in transport was largest, where the estimated increase in GDP from this investment alone is 0.2-0.3%.

The variation between regions in the scale of the effect on GDP results, firstly, from the difference in the size of the investment, since this has a direct effect on incomes and spending in the regions where it takes places. Secondly, it results from differences in regions which benefit from the specific transport links which are improved, which depends on their proximity to the regions where the investment occurs. Thirdly, it results from the effect of reducing transport costs on trade flows, which depends on the scale of these flows, or the importance of trade in goods to the regions involved.

4.4 Concluding remarks

Both the econometric analysis and the economic models, therefore, show that Cohesion policy has the effect of increasing GDP above what it otherwise would be and that, according to the models, this effect persists in the long term because of the effect of policy in strengthening the productive potential of the economies concerned. The models also show that, because of the closely integrated nature of the EU economies, all countries and regions benefit from the investment funded under Cohesion policy irrespective of where the investment is carried out. Although it is not explicitly considered by the models, the strengthening of productive potential in the less-developed economies tends also to increase the rate of growth that the EU economy as a whole can sustain, because of the more balanced distribution of economic activity that it brings about and the reduced risk of bottlenecks and upward pressure on prices that this implies.

Chapter 5 – Conclusions and implications for policy in the future

5.1 Introduction

This final chapter has two aims that were at the centre of the evaluation throughout:

- to assess the extent to which Cohesion policy over the 2007-2013 period achieved its objectives;
- to draw out the implications of the results of the analysis for the way in which the design and conduct of policy might be improved in the future.

The first part, therefore, picks out the main findings from the evaluation that have been summarised above and that help to judge the achievements of Cohesion policy over the period in relation to its objectives. In doing so, it also considers the extent to which the policy conformed with the criteria laid down by the EU to assess the performance of its policies: namely, whether they are relevant, effective, efficient, give rise to EU added-value and are coherent with other policies.

When the 2007-2013 programmes were drawn up, the objectives of Cohesion policy for the period consisted not only of its primary goal of reducing regional disparities across the EU but also of contributing to the achievement of the Lisbon priorities of investing in human capital, research and innovation and a greener economy.

From 2010 on, after the Europe 2020 strategy was launched, Cohesion policy was called upon to make a major contribution to its pursuit. In practice, this did not entail a major shift of emphasis in the conduct of the policy since to a large extent the Lisbon priorities and the central goal of Europe 2020 – of bringing about smart, sustainable and inclusive growth – are very similar. The main difference is the emphasis on social inclusion to go along with growth, jobs and environmental sustainability, though jobs, which became an increasing priority over the period, are in any case a major means of furthering inclusion.

The second part, in drawing out the implications of the evaluation findings for future policy, distinguishes those that were identified in the *ex post* evaluation of 2000-2006 and that have already been taken up in the regulations for the 2014-2020 period.

5.2 The achievements of Cohesion policy over the 2007-2013 period

5.2.1 The challenges to the evaluation

The concern here is to set out the findings from the evaluation that are relevant for assessing the extent to which Cohesion policy achieved its objectives over the period. Such an assessment is complicated by a number of factors.

First, it is important to bear in mind that the objectives were multiple ones, encompassing social and environmental as well as economic goals, even if the focus tends to be on the last when judging the performance of policy. In some sense, this is understandable given that the achievement of economic objectives tends often to represent the path to the achievement of the others, though this is not always the case, as the many economists who have drawn attention to the limitations of GDP as a measure of well-being have emphasised. It is the case, however, that indicators of economic performance tend to be easier to measure. It is also the case that the emphasis over the period was increasingly on stimulating growth and creating jobs as the crisis persisted.

Secondly, there is the usual difficulty encountered by any evaluation of policy of distinguishing its effects from other factors that were at work at the time. This difficulty, as in the *ex post* evaluation of the 2000-2006 period, was compounded by the very general and non-specific way in which the policy objectives of many programmes were expressed, causing obvious problems of assessing how far they had been achieved in practice. In particular, it was often unclear whether the objective (such as in the case of support for cultural activities) was to further economic development or to improve the quality of life.

Thirdly, in the case of Cohesion policy, this difficulty is compounded by the long time-lags that are often involved between the expenditure undertaken and the effects becoming apparent. This applies in particular to infrastructure projects, which on average accounted for around 70% of the expenditure financed in Convergence regions across the EU. Not only do these often take many years to complete but it takes time for them to have their full effect on the economic and social development of the region or country in which they are located. It, therefore, follows that this evaluation occurs several years too soon, the more so since many of the projects supported were still in the process of being completed when the evaluation was carried out.

Fourthly, these inevitable difficulties were reinforced by the crisis. This changed the economic context in which programmes were carried out and had differential effects on regions that are hard to identify and take account of.

Equally importantly, it also led to a shift in the emphasis of programmes away from tackling long-term structural problems to counteracting the effects of the crisis. Funding was, therefore, shifted to measures that had a more immediate impact on economic activity and a more direct effect on growth and jobs. Indeed, there was encouragement from the EU as the crisis developed to use Cohesion policy funding in this way and a number of steps were taken to make it easier to do so. In particular, the regulations were changed to make it possible to use the ERDF to support energy-efficiency and renewable-energy investment in housing right across the EU, and rules on state aid were adjusted so as to allow SMEs access to cheaper credit and to reduce their co-financing rate.

This shift in emphasis needs to be taken into account when assessing the effects of Cohesion policy over the period. Account also need to be taken of the fact that public investment was cut back in many countries over the period, in the four southern EU15 ones substantially, along with transfers by central governments to the regions. This meant that the ERDF and Cohesion Fund were an even more important source of funding than before. But it also meant that these cutbacks changed the context in which Cohesion policy was carried out, depressing economic activity in the regions in which the aim of Cohesion policy was to help to develop it. It also meant that there was more limited access to funding to co-finance projects, which led to planned expenditure in many cases being curtailed.

5.2.2 The funding spent on Cohesion policy over the period

In total over the 2007-2013 period, EUR 269.9 billion from the ERDF and Cohesion Fund was devoted to Cohesion Policy, while an additional EUR 76.6 billion came from the ESF. Of the ERDF and Cohesion Fund amounts, EUR 231 billion, 83% of the total, was allocated to OPs under the Convergence Objective. The largest part of funding (55% of the total) went to EU12 countries, which received almost two-thirds of the amount set aside for the Convergence Objective.

The concentration of funding can be more clearly seen by relating the allocation of funding to population. The overall allocation in the regions supported by the Convergence Objective on this measure amounted to EUR 1 527 per head over the period, while in the Phasing-in and Phasing-out regions, taken together, it amounted to EUR 903 per head. By contrast, in the Competitiveness regions, it amounted, on average, to just EUR 91 per head, though of course funding was not necessarily spread across all these regions but was concentrated in particular parts.

In practice, there was a fairly even spread of funding across different types of region under each Objective, much the same amount going to urban areas as to rural ones or ones intermediate between the two, in Convergence regions as well as in Competitiveness and Phasing-in or Phasing-out ones.

Almost all of the funds made available had been spent by the end of 2015, around 90% on average. There were, however, a few countries where the proportion was significantly lower, in particular Romania and Italy, where it was less than 80%, and the Czech Republic and Malta, where it was less than 85%.

The major share of funding in the EU12 went to infrastructure, with transport accounting for 37% and the environment for 18%, while a significant share also went to social infrastructure. This was also the case in Convergence regions in the four southern Member States. In the Competitiveness regions in the EU15, around half of funding went to support of RTD, innovation and enterprises. While there were some

shifts in funding over the period, partly in response to the crisis and partly in response to difficulties in spending the amount allocated, the broad division of funding between policy areas remained much the same.

How far this division was in line with the Lisbon priorities is hard to say given their general nature, though the focus on them – except in the very broad sense of pursuing growth and jobs – seems to have dissipated as the period went on, and little attempt appears to have been made to verify that the earmarking was effective in practice.

5.2.3 Growth and employment

The main points from the evaluation that relate to the effect of Cohesion policy on growth and jobs are set out below.

- The funding provided to Convergence regions over the 2007-2013 period was substantial, representing in many cases 2-3% of their GDP and, more relevantly, a substantial proportion of public investment (of a quarter or more in all EU12 countries apart from Cyprus as well as in Portugal, and around 35% or more in nine of them). Cohesion funding was therefore the major source of finance for development expenditure in all these countries, as well as almost certainly in the Convergence regions in Greece, Spain and Italy.
- The evidence from the review of regional developments set out in Chapter 1 is that GDP per head in Convergence regions in the EU12 grew at faster rates on average over the 2007-2013 period than in regions in the rest of the EU (and, indeed, faster than in the capital city regions in these countries that were not in receipt of Convergence funding). GDP per head in Convergence regions in the EU15, apart from in the four southern countries, also increased by more than in other regions.
- Disparities in R&D expenditure between Convergence regions and others also narrowed over the period, in this case in all parts of the EU – most notably in the EU12 countries, though the gap in expenditure with other regions remained wide.
- The fact that disparities between Convergence regions in the EU12 and others narrowed over the period does not necessarily imply that the support provided by Cohesion policy was responsible. Nor does the widening of regional disparities in terms of GDP per head in Spain, Greece and Italy imply that the policy failed in these countries over this period. As noted above, there were severe cutbacks in nationally financed investment in Convergence regions in these countries, which Cohesion policy did much to offset. In practice, therefore, the investment financed under Cohesion policy may well have served to moderate the widening of disparities.
- The results of the econometric analysis undertaken as part of the evaluation suggest that Cohesion policy funding added around 0.7% a year to growth in the Convergence regions over the period 1994-2006. While it is estimated that the effect almost halved in the 2007-2011 period, it was still positive, though the onset of the crisis and the relatively short time span involved mean that the results are highly uncertain.
- Macroeconomic models are the only way of assessing the full impact of Cohesion policy on growth. The simulations carried out covered the whole programming period and took explicit account of the composition of the expenditure funded under Cohesion policy and its differing effects on the economy. They indicate that, in the EU12 countries, the expenditure concerned

had the effect of increasing GDP in 2015 by 4% above what it otherwise would have been in the absence of funding, largely because of the boost to demand – to incomes and spending – that it gave. In Hungary, the largest recipient of funding relative to GDP, it is estimated to have increased GDP in 2015 by over 5%.

- Moreover, the model simulations also indicate that the investment carried out has a continuing effect long after the expenditure has come to an end, as it strengthens the productive potential of the economies concerned and pushes up the growth rate that they can sustain over the long term. In Poland, for example, GDP is increased by almost 6% by 2023 in relation to what it would be without Cohesion policy (and EAFRD) funding.
- The simulations show too that the policy is not only effective but also efficient, in the sense that the additional growth that it generates is worth much more than the cost of the investment. By 2023, for each 1 EUR of cost, GDP is increased by over EUR 2.70 in the EU as a whole. All countries, moreover, are shown to gain, even those that are net contributors to the funding, as the additional income generated by the investment leads to increased imports into the countries supported. This reflects the closely integrated nature of the EU economies, in which spending in one part benefits all, not necessarily immediately but over time.

Cohesion policy, therefore, represented good value for money as well as helping to reduce regional disparities in economic development, which by creating a more balanced EU economy enables higher rates of growth to be sustained not only in the lagging regions but throughout.

This finding, is, of course, dependent on the assumptions built into the models. They are, however, the best attempts to estimate the overall effect of Cohesion policy on the EU economy given the present state of knowledge. The results, moreover, are supported by the evaluations carried out on the ground by the various WPs. Although their findings do not relate directly to the assumptions incorporated in the macroeconomic models, they do demonstrate that the investments concerned produced tangible results that are consistent with them having the kinds of effect assumed.

The main findings of the WPs as they relate to growth and jobs are set out below.

Support to SMEs and innovation

Support to SMEs over the period was very much concentrated on RTD and innovation in line with the Lisbon strategy as well as with Europe 2020. Some 400 000 or so SMEs across the EU received direct support from the ERDF over the period, which represents only just under 2% of the total in the EU but around 7% of those engaged in manufacturing, which is a key sector for many regions because it is a major source of net exports to other regions, on which their growth in the long term depends. Moreover, some 15% of small firms in manufacturing in the EU (those with 10-49 persons employed) received direct support and over a third of medium-sized enterprises.

Support, again according to core indicator data, resulted in:

- 121 400 new businesses being helped to start up;
- 322 100 new jobs, in full-time equivalent terms, being directly created in SMEs, though this is a gross underestimate of the actual number given the many relevant support measures for which data were not reported.

A major feature of ERDF support over the period was that it helped SMEs withstand the effect of the crisis, by providing a substantial source of funding at a time when other sources of finance had dried up. This was especially so in parts of the EU most severely affected by the crisis, where shortage of bank finance was particularly acute. It accordingly enabled SMEs to invest in modernising or expanding plant and equipment and to continue R&D and innovation activities that otherwise would not have been possible.

It also in a number of cases provided financing for working capital that enabled firms to remain in business and to maintain employment. How far this represented a shift in the focus of policy away from supporting structural change is unclear since the firms supported were considered to be viable in the long run and potentially important for the long-term growth of the region, though it is almost inevitable that some of the firms kept in business had a limited long-term future.

In addition, the evaluation found clear signs that the support provided changed the behaviour of many SMEs in that, for example, the owners or managers concerned were more willing to take risks and to innovate or to try to develop export markets.

Support to large enterprises

Support to large enterprises (those employing 250 people or more at the location supported) amounted to around EUR 6 billion over the period, or an estimated 20% of total direct support to firms. The evaluation found that most of the projects examined led to increases in productivity, in many cases on a significant scale, as a consequence of the installation of technologically advanced machinery and equipment. They also led the employment of more workers because of the growth in output generated. However, the investment concerned in many cases would have gone ahead even without the support provided, if not necessarily on the same scale, at the same time or in the same place. There was, in other words, a significant element of deadweight involved.

At the same time, the evaluation also found there were substantial indirect and wider effects of the investment on the local economy in a number of cases (by no means all, but 71% of the cases where such effects were specifically planned for beforehand). The investment in these cases, therefore, had positive effects on SMEs in the area, in terms not only of increased sales but also of the spread of modern business practices, increased quality standards and increased cooperation with the large enterprises concerned.

The main conclusion from the evaluation was, therefore, that support to large enterprises could be an effective means of helping regions to develop, but only if selectively targeted and managed to ensure that the potential benefits were actually realised.

Support for transport

Support to transport from the ERDF and Cohesion Fund in the 2007-2013 period resulted in:

- the construction of around 4 900 km of new roads, mostly motorways, in the EU, of which almost 2 400, or nearly half, were additions to the TEN-T;
- the construction of just over 3 450 km of the new roads concerned in the EU12 countries, 1 900 km of these on the TEN-T;
- the upgrading of almost 28 600 km of roads, nearly 18 700 km of them in the EU12 countries;
- the construction of 1 100 km of new railways, most of them in Spain;

- the upgrading of 3 900 km of existing railway lines, almost 1 600 km in the EU12 countries;
- the improvement or extension of around 2 620 km of railway lines on the TEN-T as a result of the new construction and upgrading.

Accordingly, the investment supported led to a strengthening of transport links in the EU, most notably in the EU12 countries (where the transport system was in a bad state of repair after decades of neglect and where important links were missing) and the southern EU15 Convergence regions. It therefore increased the accessibility of the countries and regions concerned and opened up the possibility of increased trade with the rest of the EU, which is vital to their economic development.

In addition, there were numerous extensions or improvements across the EU made to waterways, ports, airports and urban transport systems, the latter in particular – though also waterways – bringing important environmental benefits as well as economic ones in the form of reduced congestion and travel times.

The major share of funding over the period, however, went on roads in most countries, especially in the EU12 Member States, which is the opposite of what environmental considerations would suggest. It reflects the fact, however, that the road network in these countries was in serious need of improvement and, despite the substantial investment undertaken during the period, it remains so.

Support to other policy areas

Support for investment in other policy areas that were examined as part of the evaluation also contributed to growth and employment in the short term through the effect on demand of the expenditure carried out, but also in the form of longer-term effects through strengthening the productive potential of the economy. This is notably the case with regard to support for investment in energy-efficiency in housing and public buildings: this represented a significant boost to the construction industry and economic activity more generally during the crisis, but also led to reductions in energy consumption, particularly of imported fossil fuels, so contributing to sustainability in two ways.

It is also the case with regard to culture and tourism, where investment in the former was undertaken in large measure to boost the latter and to increase its competitiveness in order to strengthen the basis for growth and development over the long term. At the same time, much of the support of culture was for social reasons, especially in the EU12, though in many cases the objective was not clearly specified, the broad aim being expressed as strengthening social cohesion. As such, the interventions tended to be piecemeal and not integrated into an overall regional-development strategy.

The same applies to some extent with regard to investment in urban development and social infrastructure, which was undertaken to improve the attractiveness of the urban environment or to provide essential services to local communities. In some cases the investment had, in addition, an economic purpose to make areas more attractive to visitors or business to locate. Moreover, the expenditure on education infrastructure had a clear economic rationale in a number of cases, to complement investment in human resources, which the evidence indicates is a major factor of economic competitiveness. At the same, as in the case of support for culture, the intervention was often isolated and separate from other expenditure rather than being part of an integrated development strategy. Accordingly, the potential benefits for regional development were not fully exploited.

The support for Interreg under the ETC Objective was intended to combat the potential disadvantages of border regions and to help overcome the obstacles to

economic development that borders often represent. In this case too, however, there were social and environmental gains in the form of closer social relations and joint action to tackle common environmental issues.

The support for the environment, finally, had the clear motive of increasing the sustainability of development as well as attempting to achieve a more even balance of living standards and quality of life across regions. This is considered below.

5.2.4 Support for sustainable development

Support for the environment

Cohesion policy support for the environment over the period was substantial. In total, some EUR 42.1 billion of ERDF and Cohesion Fund support, or 16% of the total, went to investment in environmental infrastructure and measures to protect or preserve the environment. The evaluation focused on investment in waste management facilities, clean water supply and wastewater collection and treatment where most of the funding went. Most of this investment in turn took place in the EU12 countries (EUR 17.8 billion), and the four southern countries accounted for most of the rest.

The results of the funding provided were that:

- an additional 5.9 million people were connected to a new or improved supply of clean drinking water, 1.6 million of whom were in the EU12 and 3.7 million in Convergence regions in the four southern EU15 Member States (most of them in Spain and Greece);
- an additional 6.9 million people were connected to new or upgraded wastewater treatment facilities, of whom 1.7 million were in the EU12 and 4.6 million were in the four southern Member States.

In addition, a substantial number of landfill sites which did not comply with EU standards were closed down, while in the Czech Republic, Hungary, Lithuania, Poland and Slovenia, as well as Croatia, the proportion of waste which was recycled was increased by over 10 percentage points.

Accordingly, Cohesion policy made a substantial contribution to protecting the environment through support for such investment as well as for the rehabilitation of old industrial sites and other polluted areas. In so doing, they helped Member States comply with EU water and waste management Directives, which are a response to the need for a greener development path as well as serving to reduce disparities in the quality of life across the Union.

Support for energy-efficiency

The evaluation carried out on support for energy-efficiency in housing and public buildings found that in the 27 OPs where data were available, energy use was reduced by 1 438 GWh a year as a result of the measures taken, which amounts to an estimated cut of some 0.2% in total yearly energy consumption in the countries and regions concerned. This is not large, but significant given the relatively small amount of funding involved (only around EUR 5 billion across the EU and only 2% or so of total funding).

In addition, for 20 OPs, it was found that up to the end of 2013 greenhouse gas emissions were reduced by 826.4 kilotonnes a year as result of the projects supported, or an estimated annual reduction of 0.1%; again, not large but significant.

In Lithuania, where funding for energy-efficiency measures was the largest as a share of the total ERDF, energy use in the 864 public buildings that had been renovated was reduced by the end of 2014 by 236 GWh a year, a cut of just under 3% in overall annual energy consumption in the country, which is substantial.

5.2.5 Social inclusion

Support for social inclusion

Although the support provided by the ERDF and Cohesion Fund did not tend to focus on social inclusion as such over the period, many programmes across the EU were aimed at achieving social objectives as well as economic and environmental ones. This is the case with regard to social infrastructure, in particular, where the evaluation identified the following outcomes of the investment supported:

- the modernisation of schools and colleges and their re-equipment in Portugal, benefiting over 30 000 children and young people;
- improvements in the healthcare system in Hungary, in particular, with the construction of care facilities and the purchase of ambulances with the aim of both increasing access to healthcare and improving the service provided;
- the construction and upgrading of schools and healthcare facilities in Poland for some 1.9 million people;
- the establishment of welcome centres for migrants in Murcia, Asturias, Extremadura and Galicia in Spain and southern regions of Italy.

As noted above, a number of projects were also carried out to regenerate urban areas – as well as to support the cultural heritage and cultural activities in regions – which had positive social effects, even though, as noted, more could have been done to exploit their potential to support economic development.

Creating jobs

As also noted above, creating jobs is a major means of ensuring social inclusion, and the programmes co-financed by the ERDF and Cohesion Fund were responsible for creating a minimum of just over 940 000 jobs (gross) by the end of 2014, according to the data on core indicators reported by MAs. (This is a minimum estimate since not all MAs reported jobs created in respect of interventions where this was a major goal.)

These new jobs contributed to the reduction in disparities in employment rates in Convergence regions relative to others that, as indicated in Chapter 1, occurred over the period. They may also have contributed to the reduction in regional disparities in at-risk-of-poverty rates and material deprivation which also occurred over the period in a number of EU12 countries, including Poland, Lithuania and Latvia, and in a slight narrowing of regional disparities in these in Spain.

5.2.6 The EU added-value of Cohesion policy

It should be clear from the above that Cohesion policy made an important contribution over the period to jobs and growth, to the pursuit of the Lisbon priorities and, after 2010, to the Europe 2020 strategy that succeeded it. The results of the macroeconomic model simulations point to this, while demonstrating the effectiveness and efficiency of the policy in terms of the gains to GDP estimated to be achieved in relation to the cost of the measures concerned. The evaluations carried out in different policy areas, which cover around 75% of the expenditure supported, have, in addition, produced concrete evidence of achievements, which are documented in the WP reports and examples of which are indicated in Chapter 3 above.

They also demonstrated the importance of the EU funding provided under Cohesion policy in a number of policy areas, not least in the case of the Interreg programmes financed under the ETC Objective, which in virtually all cases would not have taken place without EU funding being available and which generated clear EU added-value.

The same is true of the support to transport, and to investment in the TEN-T in particular, which helped to improve transport links between Member States as well as between regions within them, especially in the EU12, where improvement was badly needed.

Equally, support for investment in environmental infrastructure in the countries and regions where it took place over the period would not have occurred without EU funding. As well as helping to the Member States concerned to comply with EU Directives with regard to clean drinking water supply and wastewater treatment, this contributed to reducing regional disparities in living standards and the quality of life and helped to create the conditions for sustainable development. Similarly, it funded shifts in the disposal of waste away from landfill towards recycling.

It is also the case that support for SMEs during the crisis, when there was an acute shortage of alternative sources of credit, was vital to keeping firms in business and preserving jobs in many parts of the EU, especially in the EU12 and the less developed regions in the southern EU15 Member States. The support provided to SMEs enabled many of them not only to survive but to maintain levels of investment and expenditure on R&D which was vital to their competitiveness.

Although it may be the case in some instances that there was some shift of funding during the crisis to measures which had an immediate impact on economic activity and away from those intended to tackle long-term structural problems, it is also the case that many of the areas into which funding was shifted contributed to tackling these long-term problems too.

An example is the support for investment in improving the energy-efficiency of buildings, in particular in Lithuania. Another is the shift of substantial funding in Portugal to the modernisation and equipping of schools, which directly assisted the construction industry and boosted economic activity but which also tackled the long-term need to improve education in a country which has the largest proportion of people with no education beyond basic schooling in the EU.

5.3 The implications for future policy

A number of the findings of the evaluation have implications for Cohesion policy and the way that it is designed and conducted in the future. These include both general ones and those specific to particular policy areas. Many of them, as noted above, have already been taken into account in the regulations for the 2014-2020 period since they also arose from the 2000-2006 *ex post* evaluation. These are, in particular:

- **The vague or general way with which the objectives of programmes were expressed**, which makes it difficult to evaluate the programmes but even more importantly makes it difficult to define the projects and measures that need to be implemented to achieve the objectives or to relate the results produced to them. This has been tackled in the regulations by requiring a more strategic approach, to specify clear objectives and how they are to be achieved as well as the steps, or landmarks, to achieving them.
- The often **wide distribution of funding over a large number of policy areas**, or objectives. This led to insufficient amounts being spent in particular areas and hampered the achievement of tangible results, which made a significant difference to the issue being tackled. It also made it difficult to identify the effect of the intervention. This has been tackled by requiring programmes to concentrate on a limited number of thematic objectives.
- **The lack of relevant indicators to monitor outcomes** as the programme was carried out and to evaluate the results after the programme has been

completed. Even though the indicators available for the 2007-2013 period were better than in the previous period, and though there was an attempt to establish core indicators which could be aggregated across programmes, it was still the case that the indicators which could be used to assess performance were scarce. Moreover, those which did exist were incomplete and in some cases defined in different ways. This has been tackled in the 2014-2020 period by requiring indicators to be linked specifically to policy objectives and proximate targets.

However, there still remains the **difficulty of aggregating across programmes** to obtain an overview of the output or results of the expenditure co-financed. While many indicators are programme-specific, because of differing objectives, the common indicators that have been identified as being capable of being aggregated across OPs need to be measured in the same way. There is, therefore, a need for a common set of definitions and a clearly specified methodology for collecting the data and calculating the indicators concerned that are uniformly applied across the EU.

- **The lack of evaluations carried out in Member States** on programmes that could be used for the present evaluation exercise. Although a great many evaluations were carried out in the 2007-2013 period – in fact, far more than in the previous period, when evaluations were compulsory – they were, nevertheless, concentrated in a minority of countries (around half were carried out in Poland alone). They were also unevenly spread across policy areas, so that many of these remained unevaluated. Moreover, most of the evaluations carried out were on the procedures or implementation of the programmes rather than on their impact, although the number of impact evaluations increased markedly in the later years of the programming period. This has been tackled in the 2014-2020 period by requiring evaluations to be undertaken on each priority at least once during the period.

It remains to be seen, however, how this works out in practice and how seriously the requirement will be taken in Member States. It also remains to be seen whether there is an improvement in the overall standard of impact evaluations, which is important if the evaluations are to produce reliable results. This requires an improvement, in turn, in the capabilities of the authorities commissioning evaluations, so that they are able both to set effective terms of reference and to judge what is produced.

Related to this, **the capacity of the authorities** responsible for the programmes in Member States **to manage and implement** them is of paramount importance. The Sixth Cohesion report drew attention to the detrimental effect on the effectiveness of programmes of poor governance, while the evaluation of the delivery system found evidence of a lack of capacity in MAs in a number of countries. This was attributed partly to the inexperience in several EU12 Member States in managing Cohesion policy programmes, but it was also attributed to more fundamental reasons, to high staff turnover, due partly to the low level of salaries, and institutional inefficiencies. In the present period, there is a specific focus on the capacity of MAs to manage programmes, and receipt of funding is conditional on it being managed efficiently. In addition, technical assistance has been made a specific priority in programmes, so requiring MAs to give more attention to this.

- **The administrative burden imposed on MAs**, which in many cases the evaluation found to be disproportionate. This was especially the case in EU15 Member States, where the scale of programmes, and the funding provided, was relatively small, but it was also the case in many EU12 Member States. The

regulations for the present period tackle this in a number of ways, in particular by increased proportionality, which takes account of the amount of funding involved; clearer guidance and rules on eligibility; lighter reporting requirements; and simplified cost options. However, there is also a need to consider how to make auditing more efficient and to try to establish the concentration of control and verification of expenditure at a single point in the programme-implementation process.

- **The lack of focus on results or the effectiveness of programmes**, which is related both to the general way in which objectives are couched but also to **the lack of reliable data on indicators**. This reflects the focus on the absorption of funding, which came out of the evaluation of the delivery system, and the tendency in many cases to give much more attention to this than the effectiveness with which funding is being spent. This has been tackled by the emphasis on results in the 2014-2020 period.

It raises a potential issue, however, over the **possible conflict** between ensuring the effectiveness of interventions, which may require time, and the n+3 rule (as it now is for all OPs in the 2014-2020 period). This rule was a primary reason in many cases for the focus on absorption. In 2007-2013, the slow rate of implementing programmes was partly a result of the crisis, but it was perhaps more a result of programmes getting underway with a lengthy delay due to a concentration of effort and staff on completing the expenditure of funding for the 2000-2006 period.

The differences between Member States in achieving a smooth absorption of Funds, and more importantly, to follow clear objectives in doing so, raise the question as to whether the set-up and requirements of the delivery system should be differentiated too, taking into account past performance, administrative capacity and, above all, the size of programmes in Member States to ensure that the requirements are proportional to this.

The evaluation of the 2007-2013 period confirmed the importance of the above points and reaffirmed the need for them to be explicitly taken into account in the regulations. Indeed, one of the main findings of the evaluation was that the conclusions reached in the 2000-2006 evaluation remained valid in the subsequent period, in which the regulations were in many respects the same as for the previous one. It, therefore, added further justification for the changes that were made to the regulations for 2014-2020. It is important now to ensure that they are effectively implemented in practice.

A number of other issues, to some extent related to those that have already been acted on, also came out of the evaluation. In particular:

- **The procurement process** emerged as a **major source of delays in the implementation** of Cohesion policy, especially in the EU 12 countries, which in part arises because of a lack of experience with an open call-for-tender process, but also a lack of capacity to manage procedures. It also emerged from the evaluations of both transport and environmental infrastructure that there was a widespread practice of judging tenders solely on the basis of price and of neglecting both the quality of the bid and the expertise of the tenderer as well as their financial viability. This is not only a potential source of delay in the implementation of programmes but also a potential cause of low-standard projects being carried out and investment being less effective than it should be. The practice stems in large measure from a lack of ability, and confidence, to use objective criteria to assess quality.
- There is a need not only for **better indicators** of the performance of policy but also for **better data on the context** in which policy is being implemented, so

that outcomes can be more meaningfully interpreted. Although regional data available from Eurostat have improved markedly over recent years, there is still an acute lack of data on a number of policy areas, including the environment and social aspects. There is also a lack of data in most countries on government expenditure at regional level that can be compared with the expenditure financed by Cohesion policy. This makes it impossible to judge the overall scale of support to development and how it is changing over time.

- There remains a **need for meta-evaluations** to synthesise the findings of evaluations carried out, which could encourage an EU debate on the results of policies as well as an increase in the quality of evaluations. The European Commission has put effort into building up a repository of the better evaluations carried out on Cohesion policy, but it would be very useful if authorities around Europe could access an expert summary of the findings of evaluations in particular policy areas or on particular measures.

There are equally findings from the evaluation that have implications for policy in particular areas or for particular types of measure.

Financial instruments

The evaluation showed that **FIs have potentially important advantages** over non-repayable grants. They should therefore be considered as the means of supporting investment in all policy areas where revenue is generated, especially in a context where public finances are limited. Experience of implementing them in many parts of the EU, however, is limited and the evaluation drew attention to several aspects of the way they worked over the 2007-2013 period that deserve careful consideration, in particular:

- the **legal provisions** for FIs, which were **not detailed and clear enough** in 2007-2013 and which, along with the inexperience of many implementing bodies, led to delays in setting up FIs and in delivering the funding to final recipients put into them;
- the failure of MAs to spell out the **contribution to the pursuit of programme objectives** that they expect from FIs. The objectives concerned need to be specified in binding agreements with (private) fund managers to avoid them focusing exclusively on commercial criteria when selecting projects to support;
- the **deficiencies of monitoring systems and the indicators used** to assess the performance of FIs. In particular, the focus needs to shift from the financial performance of the funds to their performance in contributing to the pursuit of programme objectives and to that of the enterprises receiving support;
- the **costs of operating FIs**. In particular, management fees and other costs involved in operating FIs **need to be transparent**, not only because they are paid with public money but also so that the effectiveness of FIs in differing circumstances can be assessed and compared with other means of supporting investment;
- **ex ante assessment of the market gap**. Unlike in 2007-2013, this is obligatory in the 2014-2020 period to justify the use of the ERDF to support FIs. It is important that the assessments carried out are thorough and of high quality, not only to identify whether or not a gap exists but also to establish its scale and nature, so that the type of FI that is lacking can potentially be supported;
- the **reporting of basic information**. It is important that basic, and reliable, information on the funding that is recycled and the private money attracted is

reported, since these are major reasons for the use and spread of FIs. This should already have been improved in the 2014-2020 period.

The implications for policy in specific areas are set out below:

Support for SMEs

- The **support measures** adopted **should be tailored** to both the local context and what they are intended to achieve or the change that it is aimed to bring about. This may, for example, mean complementing financial aid with support services, such as advice or guidance, in order to increase both the effectiveness of the measures implemented and their take-up. The evaluation demonstrated that the greater use of intermediaries with knowledge of local conditions can help to implement the measure and to select the firms to receive support.
- Especially in Competitiveness regions in the EU15, ERDF support can play an important role as **a test-bed for experimental and innovative policy measures** instead of replicating traditional national schemes. This happened to some extent in the 2007-2013 period, but such an approach could be more widely followed since it is a way in which the ERDF can give rise to a distinct stream of added-value for the EU that exceeds the relatively small amounts of funding involved, at least in Competitiveness regions.
- There is a need to consider the regional distribution of the EU Framework Programme funding along with ways in which Convergence regions, especially those in the EU13, can compete more effectively for funding with more-developed regions in the EU15.

Support for large enterprises

- Large firms typically do not need government subsidies, but in the right circumstances the provision of support can influence a company's behaviour and create an important source of regional growth. Decisions to allocate support need to be based on the scale of indirect benefits to the local economy and the firms located there. Accordingly, **support of large enterprises needs to be highly selective** and well targeted as regards the firms assisted. There needs to be a close match with the structure of the regional economy and its areas of actual or potential specialisation, and a serious prospect of links being established with local SMEs as well as with research centres and universities in the region.
- To increase the chances of these wider benefits materialising, **support needs to be conditional** on the enterprises concerned using local suppliers and becoming embedded in the local economy. At the same time, it is important to recognise that the beneficial effects of a large enterprise moving into a region may take many years to materialise fully. Accordingly, policy needs to evolve over time to provide relevant support as the enterprise develops.
- There is a **need for MAs to avoid becoming captives of the large enterprises** in a region and providing support on repeated occasions simply because it has come to be expected and there is a concern that if it is not given then the companies will move somewhere else. It is questionable, from a long-term perspective, whether it is desirable to try to prevent a company from moving out of a region if the main reason for it being located there is the support it receives. To do so may simply slow down structural change that is necessary in the long run.
- Related to this, it is also important to recognise that large enterprises are attracted to locate in a region not only by the financial inducements on offer

but more fundamentally by local conditions, by **the state of transport and communication networks**, by **the skills of the local workforce**, by **the social amenities available** and so on. A more effective strategy to attract and maintain large enterprise investment may, therefore, be to direct policy at **strengthening these elements rather than at giving subsidies**. In addition, it is important to recognise that support can take other forms apart from financial incentives, such as help in finding local partners or premises or in navigating through local planning regulations.

- There is a need to give **special consideration** to the position of **enterprises** that **are only slightly larger than SMEs**, in that they have 250 or more people employed but not too many more. There is evidence that these experienced much the same difficulties of accessing finance in the crisis as smaller companies, and that ERDF support was instrumental in preventing a number of those that were strategically important for the local economy from closing. This raises the question of whether, for policy purposes, it is desirable to have a strict dividing line between what are defined as SMEs and what are defined as large enterprises.

Support for transport

- There was a relative **concentration of support on roads** over the last period. Although this can be justified by the poor state of the road network in the EU12 countries, it conflicts with environmental considerations. It is evident that to modernise the road network in the EU12, as well as in Croatia, will take some time and that the EU funds represent in many cases an essential source of finance to carry out the construction required. But outside the EU13 there is a serious question as to whether Cohesion policy should continue to finance road-building, especially given the substantial investment in roads that has been funded in the EU15 Cohesion countries over the past 25 years.
- To invest more in railways, however, runs up against the evident difficulties in some countries of carrying out **railway projects, which seem to be more complex** than building roads. These difficulties contributed to the shift of funding away from rail over the 2007-2013 period in Bulgaria, Romania, Slovakia and Greece, in particular, while in Poland it is reflected in the slow rate of project implementation. The source of these difficulties, which were also manifest in the previous period, is by no means clear and needs attention. (The situation may be helped by the inclusion in the regulations for the present programming period of a stipulation that support for investment in transport is conditional on there being a pipeline of 'mature' projects ready to be undertaken and on tangible measures having been taken to increase the capacity of intermediary bodies to carry out the projects concerned.)
- There is a need to ensure that **sufficient time and effort are put into preparing projects**, that alternative routes and modes of transport are properly assessed and that the costs of maintaining the infrastructure once the project is built are fully taken into account, together with how they are planned to be covered. The latter includes paying due regard to the national context when projecting future revenue from tariffs or charges as well as to the environmental costs of pollution and noise that may result and that may need to be covered. It is important that assumptions in this regard are transparent and set out in sufficient detail to allow their plausibility to be assessed.
- The **concentration of funding on TEN-T projects** in some countries gave rise to a concern that **regional and local needs were being neglected** in favour of EU-wide objectives. Although in the two countries in which

expenditure was most concentrated on TEN-T projects, Bulgaria and Romania, it seems that these projects were also important for national and regional interests, consideration needs to be given to the appropriate weights to attach to the two sets of interests when deciding on the allocation of funding. While EU added-value seems to be most directly generated by projects that go to completing the TEN-T, projects that help to reduce regional disparities, the central objective of Cohesion policy, should be regarded as much a source of EU added-value as those that contribute to the TEN-T.

Support for environmental infrastructure

- It is important to recognise that **environmental projects tend to be complex** and require a high level of competence and experience on the part of the authorities concerned, which in the case of the smaller ones may not be present since they undertake major projects only very occasionally. This is especially true of waste management projects. Since smaller-scale projects in smaller local authority areas are likely to become more important in future years (in line with the Waste Framework Directive), this is an issue deserving attention.
- More generally, a recent study for the European Parliament⁹⁶ identified the environment as a policy area where the implementation of Cohesion Policy faced **capacity issues in several Member States** (most especially in Greece, where there was a problem of coordination between government offices, and Italy, where the competence of some regional and local authorities was limited).
- The evaluation pointed to the importance of projects being carefully prepared before they are implemented in order to minimise problems when they are carried out and to help to ensure that the construction is of high standard, so reducing maintenance costs once in operation. Accordingly, MAs should be encouraged to allow **sufficient time for preparation** instead of being under pressure to implement them as quickly as possible.
- It would be helpful if **evaluations** of the results of the support provided under Cohesion policy to investment in environmental infrastructure, and the assessments of the extent of **implementation of EU Directives** on waste disposal and water management, were **better aligned**. This is especially so since the projects co-financed under the former are primarily aimed at helping Member States comply with the Directives, so the focus is, or should be, on much the same indicators and on how far compliance is being achieved.
- There is a need for a **pipeline of well-prepared projects** to be established in each MA area so that they can be taken up should a particular project fall through or should additional funding become available.

Support for energy-efficiency in residential and public buildings

- The means of the support provided need to be carefully considered and justified, especially in relation to investment in energy-efficiency in housing, where there could well be a significant return in the form of cost savings. This suggests that **loans or other kinds of financial instrument are likely to be preferable to grants** and that if grants are given, because of the uncertainty involved or the reluctance of investors to take up loans, then co-financing rates

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http://www.europarl.europa.eu/meetdocs/2014_2019/documents/regi/dv/pe_529085_/pe_529085_en.pdf

should be kept down to avoid house-owners making unjustifiable financial gains.

- The recyclable nature of loans means that they represent a more cost-effective means of supporting investment in energy-efficiency; if there is an unwillingness to take them up, which was evident in EU12 countries in 2007-2013 because of a reluctance to get into debt, then **awareness-raising schemes** to demonstrate the gains from such investment should be undertaken to overcome this.
- There is a **need for the widespread use of energy audits** in project selection and verification of outcomes to ensure that the funding available is used most effectively. (In the 2007-2013 period, they were used only in 17 of the 41 OPs that were examined.)
- The **financial support** extended should be **complemented by a range of non-financial measures** to ensure its effectiveness. In addition to energy audits and awareness-raising campaigns, these include advice and guidance on energy-saving measures. They also include regulations on new building and renovation as well as on the sale of housing, to ensure that energy consumption is properly notified and widely publicised so that it becomes an important element of property prices. It is important, however, that energy audits and certification schemes are properly policed if they are to be effective and not subject to abuse, which in turn implies a willingness to bear the costs of this.

Culture and tourism

- ERDF support to the two sectors could be **more effectively targeted** to exploit their potential to contribute to regional development. This requires them to be seen by national and regional authorities as an integral part of a development strategy rather than being considered in isolation.
- Related to this, there is a need to give serious consideration to supporting the **development of creative industries** as a potential source of growth and employment in particular regions, which implies shifting the focus of support for culture away from infrastructure and more towards 'softer' forms of intervention.
- It is equally important for regions to develop **new forms of sustainable tourism** in order to remain competitive in the context of a changing market and in order to avoid the excessive exploitation of the natural assets that they possess.
- A prominent finding of the evaluation is the **dependence of culture** in particular **on public funding**, and the very limited involvement of private businesses and third-sector organisations. International experience demonstrates the possibility of creating effective public-private partnerships and of making use of other forms of financing for infrastructure apart from government grants and subsidies, such as loans and venture capital in particular.
- Related to this, **financial sustainability** has in many cases not featured prominently in the way that project proposals have been assessed and selected, which has led to their permanent dependence on continuing public support. Given the constraints on public finances, which are likely to persist in the future, there is a need to give more weight to financial sustainability when selecting projects to finance.

Urban development and social infrastructure

- Urban integrated regeneration projects, as well as social infrastructure ones to a large extent, can play a major role in strengthening the growth potential of regions and improving territorial cohesion. Accordingly, they need to be **embedded in a coherent strategy for the development of the region** in which the city or town in question is located.
- The strategy also needs the authorities in the area to have the **capacity for implementing the policy**, which cannot be taken for granted but needs careful planning and design of the procedures to be adopted for implementing the policy and the identification of the technical support that can be drawn on.
- It needs, in addition, to **involve the local community** – local businesses in particular, but also social enterprises and the voluntary sector – in order to identify the most appropriate form of regeneration to bring about and the most promising development path to pursue; and, most importantly, to ensure that all of the parties concerned feel part of the policy and a degree of ownership of it.

European Territorial Cooperation

- **Cooperation** was often regarded by programmes as **an end in itself rather than a means to an end**, which is ultimately to assist the development of the regions and countries concerned and thereby to reduce economic and social disparities across the EU. It is important that the ultimate objectives are kept in mind and that programmes have a clear strategic focus that extends beyond cooperation or joint action, which of course have to remain central elements in the way they operate.
- Limited attention seems to have paid to the notion of **a functional region** or area when identifying the border regions to support. Yet this is essential to considering the potential benefits of cross-border cooperation and the extent to which this is important for the economic and social development of the regions concerned. There are obvious difficulties in defining functional areas in practice, especially those that do not at present exist but which could potentially do so in the future to the benefit of the regions in question. But attempting the exercise would at least focus attention on the aspects that are relevant for the prospective development of the cross-border area concerned.
- There was very **limited coordination** between Interreg programmes and mainstream ones. The potential for complementing one with the other and reinforcing the effects on development was therefore lost and this needs to change in the future.
- There was equally **not much sharing of experience** in undertaking projects or of the results achieved between those responsible for the transnational programmes and the regional and central authorities managing the mainstream ones. Indeed, the latter seem to have shown little interest in the transnational programmes, which in some degree led them to being isolated from the overall strategy being pursued in the wider region or country. This is particularly important given the small scale of the Interreg programmes, which means that what they can achieve on their own is limited. It is especially important for TNC programmes where the disproportion between the funding provided and the objectives is substantial and where their effectiveness depends on their links with national or Cohesion policy mainstream programmes.
- The evaluation also highlighted the **limitations of the monitoring system** and the lack of indicators that reflect the central objective of the programmes

of stimulating cooperation in order to further economic and social development. There is a need to rectify this and to develop indicators that relate to what the programmes are attempting to achieve, which goes beyond the immediate purpose of the projects supported.

- The evaluation found as well that most programmes adopted a **bottom-up approach** when deciding the projects to support, which made for **difficulty** in prioritising objectives or **pursuing a coherent overall strategy** designed to further the development of the regions concerned and to achieve a closer degree of economic integration between them. While, therefore, individual projects were in most cases successful in their own right, they remained isolated from other activities, so diminishing their potential for contributing to the overall development of the region. This, however, ought to be rectified to a large extent in the present programming period with the increased emphasis on defining a well-articulated intervention logic at the outset together with a greater concentration of funds on a limited number of priorities

5.4 Concluding remarks

The context in which Cohesion policy for the 2007-2013 programming period was implemented was one of severe difficulties. The financial and economic crisis gave increasing urgency to the need for governments across most of the EU, and in particular in the Convergence countries, to stimulate economic activity and job creation while at the same time reducing their capacity to do so. In this context, the EU funds became an even more important source of finance than previously for both the EU 12 Member States and the four southern EU15 countries.

As the present evaluation has demonstrated, they helped to maintain investment in SMEs and provided vital support for expanding and improving public infrastructure to underpin the development of the countries concerned. Though public investment declined markedly in some of the countries, in the four southern ones especially, it would have fallen by even more without the funding provided.

The monitoring data reported by MAs indicate that just under 1 million jobs were directly created as a result of the programmes funded, and in all probability many more because of under-reporting, while the macroeconomic models demonstrate that all parts of the EU enjoy higher GDP because of Cohesion policy. This is most notably the case for the EU12 countries, whose GDP is increased by around 4% by the investment financed. But it is also true of the net contributor countries that finance the policy which gain much less but still are better off with the policy than without it. Such are the benefits of economic integration and the gains generated by the increased trade resulting from the stronger Member States assisting the weaker ones to overcome the obstacles to their development.

Nevertheless, the evaluation pointed to a number of aspects of the policy where there is room for improvement. Many of these were also identified by the *ex post* evaluation of the previous programming period, 2000-2006, and have already been taken into account in the regulations for the present 2014-2020 period. They include a need to focus on results and less on absorption and to concentrate funding on a limited number of policy objectives, which should be defined more precisely to enable progress towards attaining them to be assessed. They also include improvements in the monitoring system to link indicators more closely to policy objectives so that progress can be tracked more readily and the need for more evaluations to judge the effectiveness of the measures and projects implemented in achieving objectives. The latter in particular would have made the present report much easier to produce.

The present evaluation, in confirming the findings of the previous one, has affirmed the importance of reforming the regulations in these regards in order to make the policy even more effective. It also indicated a number of aspects in particular policy areas where the way in which funding was allocated and the kinds of project carried out could be improved. These are spelled out in the previous section.

A more general aspect concerns the use of financial instruments (FIs), which were concentrated predominantly on enterprise support in 2007-2013 and for which it is evident that extending their use to other policy areas more widely – which the 2014-2020 regulations have made possible – should increase the efficiency of the funds by enabling them to be recycled.

It is important, however, that extending the use of FIs is accompanied by improvements in the way in which they are operated to safeguard the effectiveness of Cohesion policy. In particular, as emphasised above, there is a need for MAs to spell out and monitor the effect of the support FIs provide on the pursuit of programme objectives to avoid an excessive focus on commercial returns and to ensure that the monitoring indicators used are suitable for this purpose. There is equally a need for the costs of operating FIs to be transparent, so that they can properly be taken into account when assessing the net gains from their use, and for the extent to which funds are revolved and attract private finance to be reliably reported for the same reason.

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