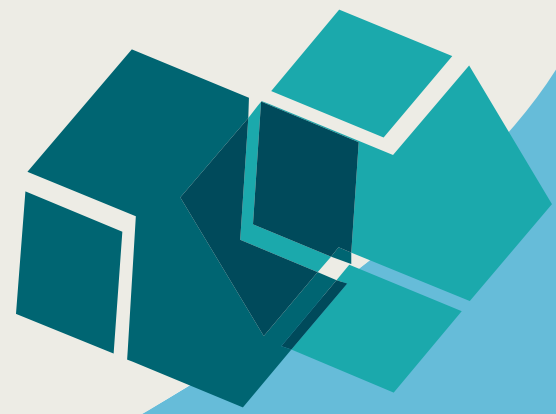


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Cohesion Policy Lessons From Earlier EU/EC Enlargements. Finland Case Study Report

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1. Introduction

The regions of Finland differ markedly in industrial structure and economic development because of geographical and historical influences. Traditionally, the regions in Eastern and Northern Finland have lagged behind the development in the other parts of the country. However, measured with core economic indicators, the country has been performing well compared to the EU average since the mid-1990s.

Finland joined the EU in 1995. This marked a fundamental shift in the country's regional policy as Finland adapted the Community regulations and the organising principles of Cohesion policy. The first Structural Funds period, 1995-1999, represented an important learning experience. However it was only beginning in the period 2000-2006 that Finland was able to fully benefit from the Structural Funds. Throughout the three periods up to 2007-2013, balancing regional disparities has remained the main objective of the Structural Funds, with funding targeted at less developed regions. However, progressively more emphasis has been placed on innovation support, particularly in 2007-2013.

The aim of this report is to describe the impacts of Structural Funds programmes implemented in Finland in 1995-1999, 2000-2006 and 2007-2013. The report aims to shed light on the impacts of the Structural Funds programmes in relation to territorial cohesion and national growth. Moreover, it explores the existing evidence of impact on certain core policy areas, such as innovation and employment, and institutions. First, Section 2 provides a brief overview of the structural economic development in Finland. Section 3 considers the Structural Funds programmes in terms of programme architecture, objectives and funding. Section 4 assesses the impact of the Structural Funds programmes from several different perspectives.

2. Economic Development in Finland

2.1. Macroeconomic Development

On the basis of core economic indicators, Finland has performed well in comparison with EU averages since the mid-1990s. Following the deep recession prior to Finland's EU accession, productivity increased relatively rapidly. Annual GDP growth in Finland exceeded the EU25 average by over 2 percentage points in the period 1995-1999 and consequently employment increased, the public sector balance improved and public sector debt declined. By 2000, macroeconomic conditions in Finland had 'normalised' although unemployment continued to be relatively high, at almost 12 percent. While GDP growth slowed down, it remained well above the EU25 average. Despite the slower GDP growth, employment continued to increase as productivity growth declined to just under 2 percent a year above the EU average. By 2007, unemployment had fallen to under 8 percent, which was below the average in the rest of the EU (Applica *et al.* 2008).

The economic recession, starting in 2008, had a significant impact on Finland and its regions, mainly due to the dramatic collapse in exports (the impact on the financial sector was comparatively minor). GDP declined by 8 percent in 2009, almost double the decline in the EU27 as a whole (4.2 percent). However, during previous years the economic growth rate in Finland had exceeded the EU average, especially in 2006-2007, when export driven industries were booming (Laakso & Kilpeläinen 2010a). Still, at present (2013) from an EU perspective, Finland

shows above-average performance regarding GDP per capita, while disposable household income is slightly lower than the EU average (both in PPS). Finland's low population density is its main distinguishing feature in the wider EU context (Eurostat 2012).

Traditionally, the Finnish economy has relied on the wood and paper industries. Since the early 1990s, the high technology and (especially) ICT sectors have played an important role in driving national economic growth; 'Finland can be regarded as one of the top countries in Europe in terms of innovation and [the] knowledge economy' (Viljamaa & Halme 2006). The electro-technical industry, in particular, has grown remarkably in the past 15 years. The relative role of manufacturing is greater than it is in many other developed countries. Nevertheless, increasing competition from newly industrialised countries with low labour costs is a specific challenge for the Finnish economy. This is especially the case in the more traditional sectors, but more recently has also affected the ICT sector. At the same time, the service sector is somewhat underrepresented in comparison with many other countries (Viljamaa & Halme 2006).

2.2. Structural Economic Regional Development

The regions of Finland differ markedly in industrial structure and economic development, due to different geographical profiles and historical legacies (Laakso & Kilpeläinen 2010a). In the long term, regional development in Finland has been characterised - first - by concentration of production and the population in the Helsinki region and other large urban areas and - second - relatively constant differences in GDP per capita, disposable income and unemployment since the 1990s (Hätälä & Rusanen 2010).

GDP per capita (2010) in Southern Finland and Aland is higher than the national average by 14 percent and 20 percent respectively, though Western Finland is lower by 10 percent, Northern Finland is lower by 14 percent, and Eastern Finland is lower by 24 percent. However, differences between regions are smaller when measured in terms of the disposable income of households. Household disposable income is 7 percent higher than the national average in Southern Finland and 20 percent higher in Aland. In Western Finland it is 6 percent lower than the national average, in Northern Finland it is 9 percent lower and in Eastern Finland it is 10 percent lower. Although regional disparities have decreased between 2008 and 2012, the unemployment rate remains higher in Northern and Eastern Finland than in the other parts of the country (Table 1).

Table 1. Economic Structure of Finnish Macro Regions

	Southern Finland	Western Finland	Eastern Finland	Northern Finland	Aland
GDP per capita 2010 (national average = 100)	114	90	76	86	120
Household disposable income 2010 (national average = 100)	107	94	90	90	120
Unemployment 2012 (from workforce)	9	11	12	12	3
Employment rate 2012 (employed % of population aged 15-74 years)	60	56	53	53	65

Note: Since 2010 Eastern and Northern Finland have formed one statistical area (NUTS 2).

Source:

Statistics Finland (2013)

In addition to socio-economic disparities between regions, there is substantial geographical and socio-economic variation between NUTS 2 regions (related to urbanisation, industrial structure and population trends). The major urban regions of Helsinki, Turku, Tampere, Jyväskylä, Kuopio

and Oulu continue to attract population and R&D investment. They also have major universities and research centres, and diversified economic structures. On the other hand, many small and medium sized industrial regions, with economic bases strongly affected by globalisation processes and market fluctuations, have faced increasing difficulties. Most large rural and sparsely populated areas have long suffered from population loss. This means that at the same time as Finland’s population has become more concentrated in the largest urban regions and regional growth centres have continued to grow, the relative position of small urban towns and rural areas has weakened (Laakso & Kilpeläinen 2010a).

3. Structural Funds Programmes in Finland

3.1. Structural Funds 1995-1999

Following Finland’s accession to the European Union on January 1 1995, Single Programming documents (SPDs) were approved by the European Commission for regions eligible under Objectives 2, 5b and 6 of the Structural Funds (Table 2).

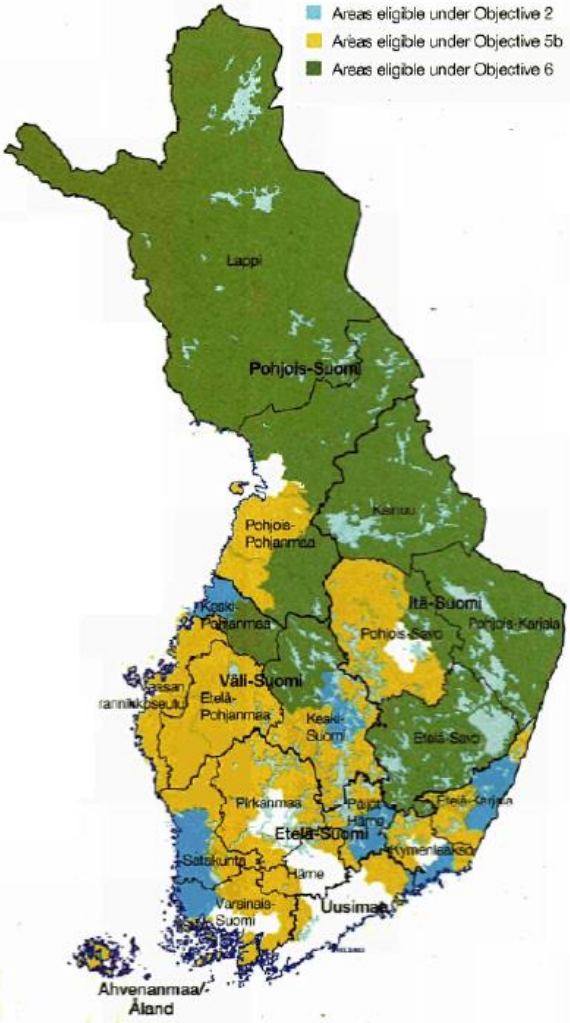
Table 2. Structural Fund Aid in Finland, 1995-1999

Objective	Funding ECU
Objective 2	183.0 million
Objective 5b	191.4 million
Objective 6	459.9 million
Total	834.3 million

Source: Inforegio (1997)

The Finnish Objective 2 area consisted of six separate urban regions which suffered from structural economic weaknesses. For Objective 2, there were two programmes; the first for the period 1995-1996, and the second for 1997-1999. Objective 2 programmes aimed to create and upgrade jobs; to diversify the structure of the economy (particularly by increasing and broadening SME activity); to improve the competitiveness of business and the skills of the labour force; and to increase international cooperation.

Objective 5b covered the rural parts of fourteen of the nineteen Finnish regions of Mainland Finland and Aland. The Mainland Finland programme aimed to broaden the employment and income base and reduce unemployment by improving the business environment and the competitive positions of businesses and farms. Additional important objectives were to expand the use of natural resources, to improve knowledge and to enhance the attraction of the countryside.



The Objective 6 area mainly covered the north and east of Finland. These areas suffered from low education levels, sparse populations, dependency on industries with limited growth potential, and long distances between people, urban areas and businesses. The overriding requirement was to stimulate new economic activity in order to create jobs. To achieve this, the strategy consisted of: developing business activity and improving firm competitiveness; pursuing possibilities in new growth sectors such as tourism and technology; increasing skills and knowledge and creating new business models; and maintaining acceptable living conditions in remote rural areas, taking account of the impact of EU membership and macroeconomic adjustments within the Finnish economy.

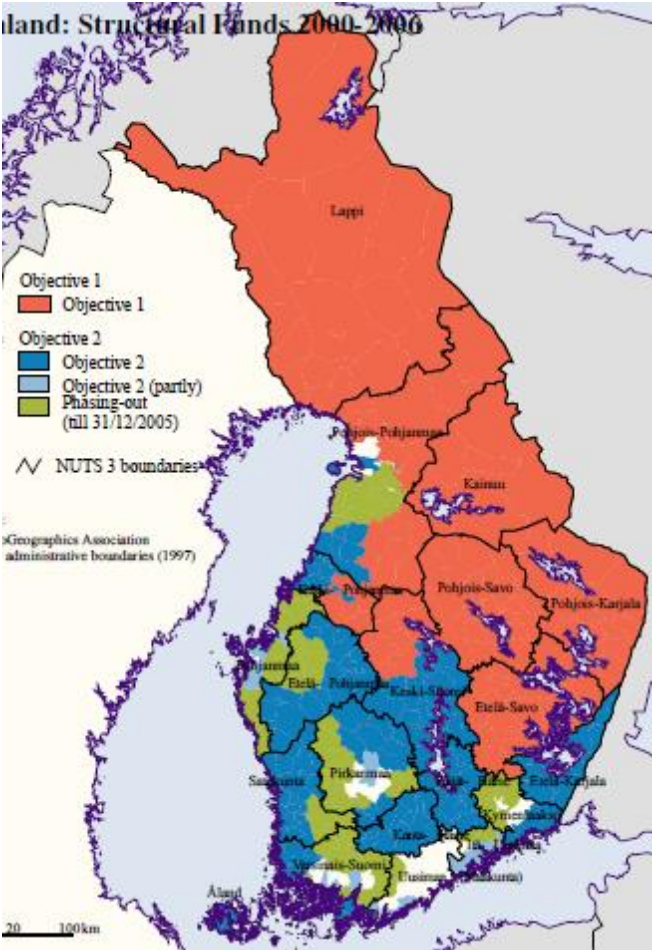
3.2. Structural Funds 2000-2006

In the 2000-2006 period, Finland benefitted from 5 Structural Funds programmes, two under Objective 1 and three under Objective 2. Objective 1 programmes were specifically designated for the development of areas in east and north of Finland with very low population densities. Objective 2 programmes were each targeted at different zones facing structural difficulties (Table 3).

Table 3. Structural Aid in Finland, 2000-2006 (EUR)

Objective	Funding (EUR)
Objective 1	1,049 million
Objective 2	564 million
Objective 3	460.16 million
EU structural aid	2387.86 million

Note: In March 2004 the European Commission allocated Finland an additional amount of almost EUR 83.56 million (total for Objectives 1, 2, 3 and the Fisheries programme) in the framework of the performance reserve for the most successful programmes. This additional funding is included in the total allocations in the table above.



Two Objective 1 regional programmes were aimed at the socio-economic development of sparsely populated areas in north and east Finland. The North and East Finland Programmes concentrated mainly on business creation and development, knowledge and employment, and rural development and fisheries. The programmes generally supported improvement in living conditions in these regions. Both EU and national funding in these regions was allocated mainly to the development of the enterprise environment (44 percent of the total) and to investing in human resources (27 percent).

The three Objective 2 programmes were each targeted at different zones facing specific structural difficulties. Western Finland, Southern Finland and Åland Islands programmes were

essentially aimed at the development of SMEs and ensuring the diversification of activities, achieving a higher level of skills among the workforce (with particular emphasis on new technology) and improving local living conditions. In the case of Objective 1 regions, main policy areas in receipt of funding were the business environment (44 percent, two thirds of which went towards assisting SMEs) and human resources (22 percent, focusing mainly on education and training).

In non-Objective 1 regions, Finland benefitted from Objective 3 measures for education, training and employment, as well as specific support measures for restructuring in the fisheries sector. Given the specific status of the Åland Islands, Objective 3 was broken down into two programmes: ‘Continental Finland’ and ‘Åland’.

**3.3. Structural Funds
2007-2013**

In the current (2007–2013) programme period, Finland has been covered under the Regional Competitiveness and Employment objective, and European Territorial Cooperation. Four regional ERDF programmes and a national ESF programme have been (and continue to be) implemented under the Competitiveness and Employment objective (Table 4). In 2007-2013, Eastern Finland has ‘phasing-in’ status, reflecting its significantly diminishing financing profile over the



years 2007-2013. In addition, due to permanent disadvantages caused by sparse population and remoteness, the Northern and Eastern Finland regions benefit from a special allocation for sparsely populated areas of EUR 35 per inhabitant per year from the ERDF.

Table 4. Structural Aid in Finland, 2007-2013 (EUR)

Regional competitiveness and Employment (EUR)		
ERDF	Southern Finland	138.1 million
	Western Finland	159.4 million
	Eastern Finland	365.6 million
	Northern Finland	311.3 million
	Åland Islands	3.125 million
ESF		615 million
Total		1.6 billion
European Territorial Cooperation		
Total		0.1 billion
European structural Aid		
Total		1.7 billion

The operational programmes under the Regional Competitiveness and Employment objective are designed to strengthen Finland's national and regional competitiveness, taking account of regional characteristics. Areas of strategic focus include improving the operating environment for competitive and innovative businesses; supporting businesses entering international markets; supporting networking; promoting balanced regional development; and advocating regional drivers in order to enhance the attractiveness of the areas involved.

The four regional programmes in Mainland Finland have basically similar structures with some differences in priorities. The three main priorities in all these programmes are: 1) support to enterprises; 2) promoting innovation, networking and strengthening knowledge structures; and 3) regional accessibility and the environment. In all ERDF programmes, equality and environmental sustainability are horizontal themes covering all priorities. The main difference between regions is that Eastern and Northern Finland allocate more weight to improving accessibility via infrastructure investment than other regions, for the evident reason that their locations are remote and transport connections are a critical factor in development (Laakso & Kilpeläinen 2010a).

The ESF Operational Programme encompasses four priorities, implemented both under the national and the regional sections. These priorities are; 1) development of work organisations, the workforce and enterprises, and promoting entrepreneurship; 2) promoting access to employment and sustainable inclusion in the labour market and preventing social exclusion; 3) development of skills, innovation and services systems that promote the functioning of the labour market; and 4) transnational and inter-regional ESF actions.

3.4. Changing Priorities and Focus

The launch of Cohesion policy in Finland took place at a time when it was uncertain how and when the country would recover from the severe recession which occurred during the early 1990s. Against this background, special emphasis was placed on reducing disparities in income and unemployment. The other pressing concern at that time was agriculture, the future of which was seen as uncertain in the common market (Hirvonen *et al.* 2013). Compared to other Nordic EU countries, the emphasis of the Structural Funds in 1995-1999 in Finland was more on agriculture (Objective 5b) and sparsely populated areas (Objective 6). This is in marked contrast, for example, to Sweden, which focused on Objectives 3 and 4 (Mawson 1997). In sparsely populated areas, Objective 6 involved a combination of support for business development and competitiveness, the development of human resources and expertise, and various measures targeting agriculture and rural development. Due to the very limited geographical coverage, the role of the Objective 5b programme was relatively small. With regard to its strategic priorities, and compared to the Objective 6 programme, more emphasis was placed on rural development, especially for supporting the diversification of primary production (Hirvonen *et al.* 2013).

During 2000-2006, the national context and agenda had changed significantly, and the strategy increasingly focused on developing and utilising regional strengths and competence structures in the spirit of a knowledge-based society (Hirvonen *et al.* 2013). Nevertheless, funding continued to favour sparsely populated areas in the east and north of Finland. The North and East Finland programmes concentrated mainly on business creation and development, skills and employment, rural development and fisheries. Almost 67 percent of total funds were allocated to the productive sector. New technologies and the strengthening of the information society in

local communities played a key role in remote regions with low population densities. Western Finland, Southern Finland and the Åland Islands programmes were essentially aimed at the development of SMEs, ensuring the diversification of activities and achieving a higher level of skills among the workforce with particular emphasis on the new technologies (European Commission 2006).

Over the 2007-2013 period, the overall strategy has evolved to strengthen its focus on supporting entrepreneurial activity and innovation systems supporting competitiveness. Finland has also made a particularly strong commitment to Lisbon-related activities designed to create new businesses and jobs, to increase productivity and competitiveness, to enhance research and innovation, and to develop regional economies (Hirvonen *et al.* 2013). As in the earlier periods, the funding favours the disadvantaged and sparsely populated areas in the north and east of Finland. The common feature in programmes is the substantial emphasis placed on support to enterprise and innovation. Enterprise support comprises 36-43 percent of all the ERDF funding in all regions. Promoting innovation and networking has a share of 37-40 percent in all regions. The proportion allocated to accessibility and the environment varies from 17-23 percent. In Southern and Western Finland 4-5 percent of ERDF resources are allocated to the development of large urban regions (Laakso & Kilpeläinen 2010a).

In Southern and Western Finland relatively more weight is given to environmental protection, cultural activities and, especially in the Southern region, rural-urban relations. In Eastern and Northern Finland, the emphasis is on transport infrastructure, energy infrastructure, information society and tourism. In the ERDF programmes the main principle is not to finance investment in 'ordinary' transport infrastructure, such as highways, main roads, main rail network and so on. Instead, support is intended to be limited to projects tackling bottlenecks in the transport network, or to investment which creates preconditions for the growth, or restructuring of key industries, or a particular enterprise which is important for a certain region. For this reason, infrastructure has a significantly smaller role in the ERDF in Finland than in some other countries (The Ministry of Employment and the Economy 2012).

Table 5. Priorities of the Structural Funds Programmes Implemented in Finland in 1995-1999, 2000-2006 and 2007-2013

	1995-1999			2000-2006		2007-2013
Axis	Objective 2	Objective 5b	Objective 6	Objective 1	Objective 2	Objective 1
1	Increasing, developing and internationalising business activity	Enterprise promotion	Business development and company competitiveness	North: Business development	South: Business competitiveness and attractiveness of the business environment	North: Promotion of business activity
						East: Promotion of business activity
				East: Business development	West: Business development and economic restructuring	South: Promotion of business activity
						West: Promotion of business activity
2	Raising the level of skills and technology supporting economic activity	Diversification of the primary sector	Development of human resources and expertise	North: Rural development and fisheries	South: Development of know-how and human resources	North: Promotion of innovation activity and networking, and reinforcing knowledge structures
						East: Promotion of innovation activity and networking, and reinforcing knowledge structures
				East: Knowledge and employment	West: Development of skills and new technologies	South: Promotion of innovation activity and networking, and reinforcing knowledge structures
						West: Promotion of innovation activity and networking, and reinforcing knowledge structures
3	Infrastructure, Environment and culture	Raising the know-how level	Agriculture, forestry, fisheries, rural development and environment	North: Skills and employment	South: Development of sub-regions, urban areas, and attractiveness of the local communities	North: Improving regional accessibility and operational environments
						East: Improving regional accessibility and operational environments
				East: Rural development	West: Infrastructure modernisation and improvement of the living environment	South: Improving regional accessibility and operational environments
						West: Improving regional accessibility and operational environments

4		Development of rural communities	Technical assistance	North: Technical assistance	South: Technical Assistance	North: Technical assistance
						East: Technical assistance
				East: Infrastructure	West: Technical Assistance	South: Development of larger urban areas
						West: Development of larger urban areas
5		Technical assistance		East: Technical assistance		South: Thematic development at regional level
						West: Technical assistance
6						South: Technical assistance

4. Impacts

In addition to the growth and cohesion, many evaluations have aimed to assess Structural Funds programme achievements in specific policy fields. In Finland, the majority of thematic evaluations have focused on RTDI support. Others have assessed Structural Funds impact on sustainability, learning and accessibility. Structural Funds have had an impact not only on economic performance, but also on institutional structures. This chapter sheds light on the evidence of the impact on economic growth and territorial cohesion as well as achievements in specific policy fields and policy delivery.

4.1. Cohesion

Reducing regional disparities has remained the main aim of the Structural Funds programmes in all three programme periods. However, there is little reliable evidence on the extent to which this goal has been attained. To date, all evaluations have concluded that it is not possible to isolate the effects of programmes on regional development, for a number of reasons. In particular, studies emphasise the long time lags involved in impacts becoming apparent, and the difficulties in separating out the effects of policy from other influences such as national and global factors, as well as the interactions of various types of intervention (Applica *et al.* 2008). Furthermore, the objectives of programmes have been broad and sometimes unrealistic, and indicators used have not measured the achievement of goals beyond the basic generation of projects (Ministry of Employment and the Economy 2008). As Laakso and Kilpeläinen (2010a) note, 'so far there has been no evaluation study in Finland connected with ERDF programmes with realistic possibilities to assess on scientific bases the real effects of the programmes on regional development'. Thus, the Structural Funds' contribution to reducing regional disparities described in this chapter is only a rough estimation.

4.1.1. 1995-1999

In the 1995-1999, Structural Funds programmes aimed to balance regional development and support lagging regions in 'catching up' with the rest of the country. This goal was later deemed overly ambitious. At best, the programmes were able to make the negative development effects of economic restructuring less drastic. For example, the ex-post evaluation of the Objective 6 programme (Vainio & Laurila 2002) concludes that the programme was not able to reverse the trend of decreasing population and increase the pace of economic restructuring; it was not able to create substituting jobs fast enough. Nonetheless, the measures were well directed and the programme helped to train the workforce and diversify the economy. It is estimated that the programme contributed to creating 12,500 jobs. Indeed, the results cannot be deemed as a failure.

The ex-post evaluation of the 5b programme (Vihinen & Kuusisto 2001), targeting rural areas, similarly shows that the objectives were so broad (employment, competitiveness of farms and business, attractiveness of the rural areas, nature preservation, etc.) that the visibility of results remained limited. Yet it is estimated that the programme eased rural restructuring, created new working methods, enhanced cooperation and social capital, and increased the attractiveness of the rural regions.

In 1995-1999, Objective 2 regions in Finland were characterised by high unemployment. The aim of the programme was to reduce unemployment by creating jobs. The evaluations indicated that this programme logic did not work - the jobs which were safeguarded did not match the profile of the unemployed. Consequently the unemployment rate did not fall, although the measures were effective. The most important effects of ERDF support included developing the business environment, support for existing firms, creating networks and (only then) creating new jobs (Itkonen *et al.* 1999).

4.1.2. 2000-2006

In 2000-2006, both the Objective 1 and the 2 programmes succeeded in achieving their aims, contributing to employment growth (Applica *et al.* 2008). It is evident that relatively positive macro-economic developments over the programme period made it easier for the projects to create new jobs and maintain old ones. While the projects helped to create new companies, the rate of new firm creation in assisted regions remained lower than the national average. Moreover:

'continuing structural changes in agriculture and heavy manufacturing especially in the wood, paper, pulp forest industry together with a declining and ageing population has made it difficult to close the gap in both employment rates and GDP per capita between Objective 1 regions (Eastern and Northern Finland) and other parts of the country. This is especially the case with remote rural areas, while the few medium sized urban areas seem to have succeeded better. In Objective 2 regions, the major urban centres with universities and other institutes with higher education were best able to benefit from the allocations to R&D and other innovation activities. Consequently the major urban areas as well as several medium-sized regional centres increase in growth, assisted by regional development programmes' (Applica *et al.* 2008).

Thus major urban centres were able to increase population and employment during the programme period, assisted by the Structural Funds programmes. Nevertheless, even in the rural Objective 1 regions, the Structural Funds succeeded in improving the competitiveness of SMEs and in increasing cooperation between them (Applica *et al.* 2008).

4.1.3. 2007-2013

In 2007-2013, the Structural Funds programmes provide the main source of support to disadvantaged regions. Northern and Eastern Finland as a whole is classified as disadvantaged region, but in Southern and Western Finland as well at least two thirds of the budget is allocated to defined disadvantaged areas.

Up to the end of 2009, the implementation of ERDF programmes progressed well according to the core indicators. However, Laakso & Kilpeläinen (2010a) state that:

'the successful implementation of programmes is a necessary but not sufficient condition for long-lasting regional effects. The general view of experts is that ERDF programmes, as part of regional policy, have made a positive contribution to some sectors but they have not been capable of

changing the powerful trend for population and economic activity to concentrate in the main centres nor counteracting the strong effects of global economic fluctuations on Finnish regions. However, ERDF programmes have improved the relative position of regional universities which are large enough to have critical mass for significant innovation activities and for diversifying the industrial structure. At the same time the relative position of remote rural areas has worsened. Nevertheless, ERDF programmes have contributed to the development of rural SMEs and the improvement of living conditions of the people living there.'

Accordingly, the management of the Finnish Structural Funds programmes views that programmes have improved the relative position of regional universities and business competitiveness, not only in urban but also in rural areas. Without the programmes, the disparities between the Finnish regions would be even greater than they are now.

In the current (2007-2013) period, all Finnish regional programmes have included reserves for unexpected structural changes. The size of these reserves is decided annually and has been set at around 5 percent of the total allocation. The reserve is used for creating compensating economic activity, retraining workers who have lost their jobs, and for other labour market activation measures in areas undergoing sudden change. In general, these measures are deemed successful (Hytönen *et al.* 2011).

4.2. Growth

As stated in Section 4.1, measuring the impacts of Structural Funds programmes on national and regional growth is not a simple task. Programme evaluations measuring impacts on growth have focused mainly on contribution to business creation, and the productivity and output of companies.

4.2.1. 1995-1999

It is estimated that Structural Funds programmes contributed to the establishment of approximately 4,500 new firms in the 1995-1999 period, although many of these would have been established without Structural Funds support, and the rate of firm creation in supported areas was lower than the national average. Programmes helped to develop new production methods, to increase the competitiveness of existing companies, and in few cases to improve industrial structure (Palmberg *et al.* 1998; Laakso *et al.* 2005a).

In general, programmes were criticised for supporting traditional industries rather than renewing economic structure and supporting innovative projects (Palmberg *et al.* 1998; Vihinen & Kuusisto 2001). With regard to economic growth in rural areas, it was assessed that it would have been more important to concentrate on supporting existing firms than creating new ones, as one enterprise going out of business has a negative impact which exceeds the benefits of a new firm being created, in the short term at least (Vihinen & Kuusisto 2001).

4.2.2. 2000-2006

In 2000-2006, the number of new enterprises created exceeded the target by 22 percent in Objective 1 (6,800 enterprises by 2007) but fell short by 48 percent in Objective 2 regions (7,800 new enterprises by 2007). In practice, the funding strengthened and modernised the existing industrial structure rather than helping to diversify it (Applica *et al.* 2008). However, the programmes impacted on the investment and R&D activities of strategically important sectors in Objective 1 and 2 (Laakso *et al.* 2005a). The evidence suggests that over 80 percent of firms receiving investment grants were growth oriented and new jobs were generated in about half of them. The projects led to significant improvements in production technology and the quality of products and services. The combination of support for investment and related R&D activities was found to strengthen the competitiveness of firms. Measures to develop and strengthen clusters and networks of firms in metal, machinery and wood processing industries, in particular, helped to improve the competitiveness of these sectors and enabled them to benefit from the global boom in the industries. However, the deadweight effects were also remarkable (Applica *et al.* 2008).

The productivity gap between firms in advantaged and disadvantaged regions continued to widen over the 2000-2006 period (Ottavino *et al.* 2009). It is important to note that in 2000-2006, it was acknowledged that the programmes were not able to control economic restructuring and thus aimed instead to safeguard existing structures in lagging areas. Again as in 1995-1999, the programmes did not support economic restructuring although this was seen as crucial to increasing regional competitiveness. There is, however, some evidence that firms in disadvantaged regions receiving non-innovation support benefitted in comparison with non-supported firms. This support did not lead to faster productivity growth, but to greater turnover and employment (Ottavino *et al.* 2009). Rather, the support had a negative impact on industry productivity in disadvantaged regions and a positive impact in advantaged regions. This occurred because in advantaged regions innovation support fosters the reallocation of employment towards more efficient firms, whereas in disadvantaged regions it fosters the reallocation of employment towards less efficient firms (*Ibid.*).

4.2.3. 2007-2013

In the 2007-2013 period, the aim has been to support 900-2,000 new enterprises per programme. There are some concerns that the programmes will not achieve these targets, mainly because of the economic downturn. Programme coordinators are concerned about whether the ambitious objectives of structural change via innovation and growth clusters can be achieved in the less developed areas of Eastern and Northern Finland. During the current programme period, the focus has shifted from away from growth and towards supporting SMEs in overcoming the recession (Laakso & Kilpeläinen 2010a).

In 2007-2013, evaluations have found some evidence that Structural Fund programmes have influenced firm growth and competitiveness. Karjalainen *et al.* (2011) found that business support has increased growth and the competitiveness of companies, though it has not succeeded in supporting their internationalisation (Karjalainen *et al.* 2011). Furthermore, the impact on companies' turnover and profit margins has been positive and support has led to

a higher rate of business formation and improved business skills (Pekkala et al. 2012). The support has reached expanding companies, including those moving into international markets (*ibid.*). A recent study (TEM 2011) showed that approximately half of national and EU business support is (very) effective and 15 percent ineffective.

4.3. Achievements in RTDI, the Knowledge Economy and Networking

Innovation and R&D support has been prominent in Finnish national policy since the early 1990s and is also an important objective of the Structural Funds programmes. The relative weight of innovation activities has increased over time, especially in 2007-2013 (Laakso & Kilpeläinen 2010b). Although their contribution is marginal in comparison with domestic funding, the Structural Funds are important in the policy mix since they are typically integrated into regional policies of domestic origin (Viljamaa & Halme 2006). In general, there is a wide consensus on the importance of public support to innovation and R&D as there is strong evidence (outside of the ERDF) that public support for R&D to firms increases business R&D performance and has a positive effect on firm productivity (Laakso & Kilpeläinen 2010b).

The evaluation results of the Structural Fund programmes' impact on innovation are mixed and contradictory, although Structural Funds RTDI support is deemed to play important role in supporting economic growth.

4.3.1. 1994-1999

The most important achievement of the Structural Funds in Finland in 1994-99 was the strategic and systematic approach to supporting innovation adopted by the regions. The regions started to develop their own innovation strategies and form partnerships in relation to RTDI activities (Kuitunen 2000).

Despite relative success, the deadweight costs of the projects were high and the public sector was overrepresented in projects. The programmes were criticised for focusing too heavily on supporting the R&D activities of universities rather than focusing on firm innovation processes and networking. Lastly, although the RTDI activities aimed to balance regional disparities, most projects were implemented in the developed regions (Kuitunen 2000).

4.3.2. 2000-2006

In 2000-2006, programmes complemented existing national policy measures in specific fields (e.g. support for collaborative R&D) and provided a financial instrument for those regions which had fewer capabilities to make use of the national funding (Viljamaa & Halme 2006). Indeed, Structural Funds RTDI funding was an important additional source of funding for Objective 1 & 2 programme areas (Laakso *et al.* 2005b; Viljamaa & Halme 2006). For example, in 2000-2003, RTDI funding grew faster in Objective 2 areas than the national average (Laakso *et al.* 2005b).

In 2000-2006, the most effective measures to improve RTDI appeared to be those which aimed to enable enterprises and R&D institutions to cooperate and combine resources (Viljamaa & Halme 2006), to create clusters, and to commercialise innovations (Ponnikas *et*

al. 2005). The projects were important means of facilitating knowledge transfer and networking between universities and business: 'It can be even said that in some regions knowledge transfer is too dependent on the Structural Funds projects' (Ponnikas *et al.* 2005). Indeed, the creation of joint efforts in regions with low critical mass facilitated increases in the rate of innovation (Viljamaa & Halme 2006).

Networking and competency development has been important in supporting innovation. There is evidence that support for lifelong learning and business services helped to improve managerial skills in SMEs, educational levels, the skills of the workforce, and innovative capacity (also in rural areas) (Laakso & Kilpeläinen 2010b).

Controversially, most projects were public sector led and many were not based on the real needs and demands of firms. A pressing need for cooperation between SMEs and research institutes in R&D was noted because many firms, especially in disadvantaged regions, lacked the expertise and resources needed for independent R&D (Laakso *et al.* 2005a). Additionally, the major urban centres were generally best placed to benefit from R&D support and other innovation activities (Laakso & Kilpeläinen 2010b).

4.3.3. 2007-2013

In the 2007-2013 period, ERDF-funded investments have been important to regional innovation activity (Ahvenharju *et al.* 2011). Direct support to firms has targeted product development, production technology, internationalisation, exports and networking with other firms and research organisations. Projects have been most successful in improving the competitiveness and productivity of firms, and least successful in internationalisation, networking and developing environmentally friendly processes (Ahvenharju *et al.* 2011; Karjalainen *et al.* 2011; Ramboll 2012). Projects have also been successful in developing education and research institutes, which is perceived to be crucial in supporting R&D activities and co-operative approaches (Ahvenharju *et al.* 2011). According to Terava *et al.* (2011) interactive and cross-disciplinary networks have provided opportunities to build new forms of cooperation.

Over the course of 2007-2013, some experts have voiced concerns about the real impact of the projects in the innovation support priority (Laakso & Kilpeläinen 2010a) as the deadweight effect of these activities is significant (Karjalainen *et al.* 2011). More importantly, the effectiveness of the whole Finnish innovation support system has been questioned (Ottavino *et al.* 2009). This criticism conflicts with the evidence from 2000-2006 (e.g. Laakso *et al.* 2005b), which shows that R&D support has fostered growth and competitiveness in supported firms (Laakso & Kilpeläinen 2010a). Additionally, there were few innovation projects implemented in cooperation between universities and businesses and the projects were mostly public sector led. Where firms have become involved, this has often only happened at a very late planning stage.

4.4. Achievements in Increasing Employment

The impact of the Structural Funds on employment and job creation in Finland has been particularly difficult to assess. Actual jobs created have been much lower than estimated in the evaluations (e.g. Itkonen *et al.* 1998). This was particularly the case in the first

programme period.

4.4.1. 1994-1999

It is estimated that in 1994-99, Objective 2 programmes increased employment in Finland by creating 8000-10,000 jobs and Objective 6 by around 12,500 new jobs (Itkonen *et al.* 1999; Vainio & Laurila 2002). The training and development of the workforce increased skills and diversified the economic structure in Objective 6 territory (Vainio & Laurila 2002). The Objective 5b programme created 11,975 jobs and safeguarded 38,166 by the end of 1998 (Vihinen & Kuusisto 2001).

However, Cohesion policy programmes were not able to compensate for the overall loss of jobs in Finland and it is noted that most new jobs would have been created even without Structural Funds support as the country was recovering from the 1990-1993 depression (Vihinen & Kuusisto 2001). In addition, a large part of the programmes focused on maintaining the current agricultural structure and supporting existing industries rather than creating new ones (e.g. Vainio & Laurila 2002).

4.4.2. 2000-2006

It is estimated that in 2000-06, in Objective 1 regions, some 6,500 net additional jobs were created. The projects led to a gross increase of around 30,700 new jobs and safeguarded around 42,700. In the Objective 2 region, the net growth in the number employed was estimated at some 44,000. The projects supported led to a gross increase of around 41,000 new jobs and safeguarded around 47,900. In both programme areas, most of the jobs created were in manufacturing, agriculture and tourism (Applica *et al.* 2008).

Although Objective 1 and Objective 2 programmes made a significant positive contribution to employment in assisted regions, they were unable to compensate for the overall loss of jobs in agriculture and manufacturing. At the same time, it is evident that the relatively positive macroeconomic trend during the programming period made it easier for projects to create new jobs and to maintain old ones (Applica *et al.* 2008). The programmes were also criticised for having only a temporary employment effect. On the other hand, they were successful in supporting social inclusion. In particular, projects supporting youth employment were important (Ponnikas *et al.* 2005).

4.4.3. 2007-2013

In 2007-2013, the targets for new job creation have varied from 4,200 in Southern Finland to 13,200 in Eastern Finland. At the same time, the estimated number of people employed in Eastern Finland declined by 3,000 per year in net terms from 2006 to 2009. This means that the target is challenging and that, if realised, jobs created through ERDF support will be crucial to the region. The programmes have however progressed relatively well. The rate of job creation by the end of 2009 was: 69 percent in Southern Finland, 41 percent in Western Finland, 63 percent in Eastern Finland and 47 percent in Northern Finland (Laakso & Kilpeläinen 2010a). Investments projects have been particularly successful in creating new employment opportunities (Karjalainen *et al.* 2011).

4.5. Environmental Impacts and Sustainable Development

The impact of Finland's Structural Funds programmes on the environment and sustainable development has only been evaluated for the 2007-2013 period (Laakso & Lahdelma 2011; Vaahtera *et al.* 2011). In 2007-2013, most projects were assessed as being environmentally 'neutral'. Current ERDF practices are effective in filtering out projects that could have significant negative environmental impacts. However, the programme does not actively encourage the implementation of projects with positive environmental impacts. The research indicates that the development of ecological business within the framework of the ERDF programme is considered important and that there is demand for new approaches in this field (Vaahtera *et al.* 2011).

4.6. Community Added Value

The implementation of the Structural Funds programmes and the adoption of Community principles has resulted in new institutional structures and practices in Finland. Given that (among others) policy implementation in partnership, programme-based development, monitoring and evaluation were new practices, community added value has been significant. The new way to 'do regional development' has been evaluated as one of the most important impacts of Cohesion policy.

4.6.1. 1994-1999

New institutional structures were set up in order to deliver Structural Funds in Finland. Regional level reforms began in 1993, during the preparatory stage for EU accession, in which responsibility for regional development was transferred from the state-led provincial governments to 20 local government-based regional councils (*maakuntaliitto*).

A basic component of the regional councils is the regional assembly, in which decisions are made by representatives of the municipalities and regional interest groups. The nomination of the municipal members is decided by municipal assemblies, not by popular vote. A 1994 Regional Development Act amendment introduced a programme-based approach; regional councils were obliged to prepare a number of regional plans and discuss these with other regional actors. In addition to having a coordinating role in the preparation of regional development programmes, the regional councils have responsibility for drawing up ERDF programmes (Kettunen & Kungla 2005).

The traditional provincial (*lääni*) structure was reorganised in 1997; the number of provinces was cut from twelve to five. This reform also necessitated reorganisation at the sub-regional level. Hence, the regional offices of the various ministries were also reformed, resulting in a new Employment and Business Centre (*TE-keskus*). This had an important role in implementing ERDF, bringing together the regional offices of the Ministries of Employment, Trade and Industry and Agriculture. Only the Ministry of the Environment, with its regional units, and the Ministry of Education, working through the provincial governments, maintained a separate administration (Kettunen & Kungla 2005).

The adoption of these new administrative structures and the implementation of policy in line with the partnership principle was not easy either at regional or national level (Applica *et al.* 2008). Because cooperation between different sectors and administrative levels was

new to all actors, there were problems with receiving guidance from the ministries, regional planning and cooperation between different sectors. However, cooperation improved during the first period and the organisational structure offered new possibilities for regional development. Many administrative difficulties in the first period were simply due to lack of experience and sufficient resources (Vainio & Laurila 2002).

The first period (1995-1999) also represented an important learning process in other ways. Although the adoption of a new programme-based approach increased the openness and efficiency of regional policy design and delivery, there were clear coordination problems between EU and domestic regional policy programmes. For example, the alteration of the previous system of direct support for SMEs in problem regions in order to incorporate them into EU programmes proved to be particularly challenging (Ministry of Employment and the Economy 2008). Some mistakes were also made in strategic programming, mainly in setting objectives and allocating resources. Subsequently, the goals of all programmes (Objectives 2, 5b and 6) were assessed as being overambitious and too broad. However, the new programme-based and long-term framework for regional development was deemed to be one of the most important results of the first programme period (e.g. Vihinen & Kuusisto 2001).

There were also some problems related to the operational management of the programmes. For example, the budget regulations and procedures were judged to be complex, project application procedures too complicated and selection procedures too time-consuming (e.g. Kuitunen 2000; Palmberg *et al.* 1998; Vihinen & Kuusisto 2001). The procedures for invoicing the costs of a project, for reporting results and for collecting project monitoring data were completely new. Overall, the lack of a reliable, accurate and up-to-date monitoring system was identified as one of the main problems (e.g. Vihinen & Kuusisto 2001).

4.6.2. 2000-2006

Over the course of the 2000-2006 period, the policy framework was substantially revised and clarified and the Cohesion policy programmes became an integrated part of Finnish regional development strategy (Applica *et al.* 2008). In many ways, the strategic programme planning and operational implementation became professionalised in the 2000-2006 period.

The administrative system, however, remained complicated in 2000-2006, particularly at the national level at which many ministries were involved. At the regional level, coordination between the coordinating authorities, regional councils and other regional organisations worked reasonably well. The administration of the programmes also became more professional in 2000-2006, although some problems remained, including administrative burdens and time consuming project selection processes (Applica *et al.* 2008).

Serious efforts to improve the monitoring system were made during the programme period. Numerous indicators were in use. Qualitative indicators were the most prevalent, though were regarded as inadequate for projects affecting regional development. On the other hand, the evaluations of the 2000-2006 programmes produced a great deal of information about all aspects of the programmes and results were used for improving the implementation of the programmes and in planning for the 2007-2013 period (Applica *et al.* 2008).

4.6.3. 2007-13

Further changes in institutional structures followed in the 2007-2013 period. As of 2010, the provinces were abolished altogether, and the state regional administration has been organised in terms of State Regional Administrative Agencies (six in number, plus the autonomous region of Åland). Centres for Economic Development, Transport and Environment (15) replaced the former Employment and Business Centres. At the start of 2012, the existing NUTS II regional borders changed, as the existing NUTS II regions of east and north were merged and the current southern region was divided to form a metropolitan NUTS II region around Helsinki.

As a response to complex national level administration, the former Ministries of the Interior, Employment and Trade and Industry were amalgamated in 2008, forming a new Ministry of Employment and the Economy. To further improve coordination and co-operation and to create synergies between different ministries, an advisory board responsible for reconciling Structural Funds operations at the national governmental level was established in 2007. In general, the 2007-2013 ERDF implementation system has become simpler and clearer than in the previous period (Ryynänen 2012). The management of the Structural Funds highlights the role of Cohesion policy programmes in facilitating cooperation between administrative levels and sectors.

If the Cohesion policy programmes became an integrated part of the Finnish regional development strategy in the 2000-2006 period (Applica *et al.* 2008), integration was further strengthened in 2007-2013. In general, the Structural Funds programmes implemented at the regional level have afforded regions useful tools for furthering development efforts. At a time in which funding for domestic regional development measures has been subject to severe cuts, the Structural Funds play an important role in the regions. Nevertheless, there have been some signs that project based development is becoming less effective and new tools for development would be welcomed.

Although programme structure has been much more flexible in 2007-2013, the main problem has persisted: strict resource allocation limits between regions and priorities (Laakso & Kilpeläinen 2010a). Criticism over the monitoring system has also persisted. For instance, the usability of the system and the variable quality of project reports has been criticised (Ramboll 2012).

Despite this, operational programme management has improved since 2000 and project applicants have voiced satisfaction with different levels of the administration. In particular, project beneficiaries appreciate the proximity of the administration to beneficiaries, and the provision of guidance in application and payment processes. From the perspective of the beneficiaries, the areas for improvement relate to the coherence and consistency of guidance. The payment system remains slow (Ryynanen 2012).

In comparison with the previous programming period, the Regional Competitiveness and Employment objective for the 2007-2013 period sets out a more flexible approach to evaluation (e.g. in 2000-2006 all five operational programmes were evaluated separately). Nevertheless, there is call for a comprehensive, scientifically-based evaluation of all regional development measures, including domestic and EU-funded interventions (Laakso &

Kilpeläinen 2010a).

5. Conclusions

Finland joined the EU in 1995 and has implemented Structural Funds programmes since its accession. In line with general European level developments, the focus of programmes has shifted away from strictly reducing the disparities in GDP and unemployment and towards new policy areas such as knowledge and innovation. Yet, balancing regional disparities has remained an important objective of Cohesion policy, with funding channelled to disadvantaged regions.

Measured in terms of macro-economic indicators, it seems that the Structural Funds have only had a minor impact on growth and cohesion. They have made a positive contribution to some sectors but have not been capable of altering powerful trends in population change and economic activity (i.e. concentration in main urban centres), nor of counteracting the influence of global economic fluctuations on Finnish regions. ERDF programmes have improved the relative position of regional universities which have enough critical mass for significant innovation activity. ERDF programmes have also contributed to the development of rural SMEs and improved living conditions of the people living there. There is a strong belief that without ERDF programmes, regional disparities in Finland would be much greater than they are today.

In general, Structural Funds programme implementation has been successful and there is evidence that programmes have helped to increase the competitiveness of companies (turnover and profitability). However, the programmes implemented in 1994-1999 and 2000-2006 were criticised for concentrating on supporting existing industry rather than focusing on necessary economic restructuring and diversification. Additionally, projects have been largely public sector led in all periods. Recently, the effectiveness of the whole Finnish innovation support system has been questioned. Yet, there is evidence that Structural Funds RTDI support has had impacts and has at least increased RTDI spending and made innovation support more systematic.

In Finland, adapting to EU principles meant adopting strategic programme-based development, evaluation/monitoring systems, partnerships and new administrative practices. It has been stated that 'the new way of doing' in regional development has been one of the most important impacts of EU Cohesion policy. In particular, programme implementation in partnership and programme-based strategic development has been appreciated. However, the system created to administer and channel Structural Funds is complex and and there is still a significant administrative burden.

Lastly, although the evaluation results are mixed and partly controversial, the importance of the Structural Funds programmes has not been questioned. They have resulted in a substantial increase in regional development funding and are an important complement to domestic policy measures.

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