EU Cohesion Policy Funding in Estonia:
Background, Developments and Challenges

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EU Cohesion Policy Funding in Estonia: Background, Developments and Challenges*

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Abstract: The EU cohesion policy funding aims to enhance economic, social and territorial cohesion across regions and countries in the European Union. This paper discusses the implementation of the policy in Estonia since 2004 using as background information surveys of the theoretical and empirical literature and a thorough description of the institutional framework. Estonia received cohesion policy funding amounting to approximately 2.2 percent of GDP in 2004–2006 and 3.0 percent of GDP in 2007–2013. The funding went mainly to infrastructure projects, enterprise support and human resource development. A key challenge is to ensure that the EU cohesion policy funds are used effectively and in ways that are beneficial in the long term.

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“The Community shall have as its task … to promote throughout the Community a harmonious, balanced and sustainable development of economic activities …”

Article 2 of the Treaty of Rome (1957)

1. Introduction

Estonia joined the European Union on 1 May 2004 and hence became eligible for support from the EU from a number of programmes, including the EU cohesion policy programmes, the common agricultural policy (CAP) and various smaller programmes. The EU cohesion policy programmes provide support to region and countries with the goal of enhancing economic, social and territorial cohesion within the Union.

Estonia has received considerable support from the EU cohesion policy funds to pay for enhanced infrastructure, education and social protection. The total support received by Estonia from the cohesion policy funds for the period from May 2004 to the end of 2006 was equal to 2.2 percent of the GDP of the period. In 2007–2013 the total support was equal to 3.0 percent of the period’s GDP, and support of a similar magnitude is planned for the 2014–2020 period.¹

This paper provides a retrospective account of the EU cohesion policy with a particular focus on the support received by Estonia during the first ten years of EU membership. It discusses key issues of importance for Estonia and seeks to place these in the context of the academic literature on foreign aid and the experiences of EU cohesion policy funding elsewhere. The aim is to provide background information to assess the economic import of EU cohesion policy funding and to inform the broader policy debate on the use of such funding.

The discussion in the following sections addresses several issues. Section 2 gives an overview of the development of EU cohesion policy since the 1950s. Section 3 considers conceptual issues pertaining to foreign aid. Section 4 discusses the outcomes of the EU cohesion policy in a general European context. Section 5 provides key information on cohesion policy funding in Estonia from 2004 to 2013 with a particular focus on the allocation and payment of the funding. Section 6 briefly discusses some early experiences of cohesion policy funding in Estonia. Finally, Section 7 summarises the paper and highlights some policy issues.

2. The development of EU cohesion policy

2.1. Early policy measures

The Treaty of Rome first set the reduction of regional income differences as a goal in 1957 (Treaty of Rome 1957). In pursuit of this goal, the European Social Fund (ESF) was created to support retraining and labour mobility, and the European Investment Bank was set up to aid less developed regions in financing cross-border projects and economic modernisation. The

¹ To ensure compatibility with previous studies and sufficient availability of historical data all national account data used in this paper are based on the ESA 95 methodology.
European Agriculture Guarantee and Guidance Fund (EAGGF), whose Guidance section supported investment in rural areas, was also created at this stage.

Regional development came to the forefront of EU policy with the accession of the United Kingdom, Ireland and Denmark in 1973. The European Regional Development Fund (ERDF) was established in 1975 to counter regional imbalances caused by industrial change and the decline of agriculture. The ERDF provided funds for investments in infrastructure and small businesses (DG for Regional and Urban Policy 2011a).

The regional differences within the European Community widened significantly with the accession of Greece, Portugal and Spain, and in 1986 the Single European Act laid the foundation for a genuine cohesion policy (DG for Regional and Urban Policy 2011a). A reform in 1988 laid out the key principles of cohesion policy, which were support for the poorest and most backward regions, multi-year programming, strategic orientation of investments, and involvement of regional and local partners (DG for Regional and Urban Policy 2011b).

The Maastricht Treaty of 1992 established the Cohesion Fund (CF) as a new instrument to support trans-European transport networks and environmental projects in Member States with a gross national income of less than 90 percent of the Community average (Petzold 2008, p. 14). Unlike the ESF and the ERDF, the CF was to be allocated to countries, not regions.

In 1993, a separate Financial Instrument for Fisheries Guidance (FIFG) was created. In the 1994–1999 financial framework the resources for the cohesion policy funds – now the ESF, ERDF and CF – were increased substantially from the previous framework.

2.2. EU cohesion policy since 2000

The 2000–2006 budget period saw the accession of ten new Member States in May 2004. The countries had earlier benefited from pre-accession assistance to support institution building and public sector development. As accession negotiations progressed, EU funds for large environmental and transport projects became available. The pre-accession funding also familiarised the bureaucracies with the administration of funds.

The cohesion policy for the 2007–2013 programming period focused on boosting economic growth, jobs and innovation. The Rural Development Fund (previously the EAGGF Guidance section) and the Fisheries Fund (previously the FIFG) were no longer considered part of the cohesion policy and were developed in separate operational programmes. The ten new Member States that had joined the EU in 2004 participated in the EU pre-budget negotiations and they – together with Bulgaria and Romania, which joined in 2007 – received funding for the full seven-year programming period.

The cohesion policy for the 2014–2020 programming period continues the policy from the previous period but targets explicitly the goals of Europe 2020, the revised European growth strategy of smart, sustainable and inclusive growth. In the process the formal labelling of the

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2 A factor behind the creation of the ERDF was the particular situation of the United Kingdom with regard to the European budget. The UK was an importer from countries outside Europe and had a small agricultural sector. Its payments to the budget from customs duties were therefore relatively large compared with its receipts from the Common Agricultural Policy (DG for Regional and Urban Policy 2014).
funds was changed to 2014–2020 European Structural and Investment Funds. More emphasis is put on coordination between the different funds and the different priorities. In an effort to attain synergies, all Member States have to plan a partnership agreement, which coordinates the use of cohesion policy, rural development and fisheries funding (European Parliament and Council, 2013, article 22).

2.3. Allocation of EU cohesion policy funds

The EU cohesion policy has changed considerably since 1957, reflecting economic and structural changes, rounds of enlargement and changing priorities. Since the 1988 reform and the creation of the Cohesion Fund in 1992, the overarching principles have remained unchanged but funding priorities and allocation criteria have been changed repeatedly.

The allocation of funding from the ERDF and ESF to a region depends on the category in which the region placed and a number of criteria reflecting the economic and social development of the region. Most of the funding from the ERDF and ESF has traditionally gone to regions with GDP per capita adjusted for purchasing power (PPS) below 75 per cent of the EU average. The total allocation from the ERDF and ESF to an individual country is the sum of the allocations to the regions in the country. Countries with gross national income (GNI) per capita adjusted for purchasing power below 90 percent of the EU25 average were eligible for funding from the CF.

For the programming period 2007–2013 the new EU countries from Central and Eastern Europe lowered the average GDP per capita PPS in the union and this would leave many regions with less funding than in the previous programming period. The response was to introduce the so-called phasing-in and phasing-out regions, which by and large consist of regions with GDP per capita PPS above 75 percent of the EU25 average but below 75 percent of the EU15 average. The main recipients of funding from the ERDF and the ESF were thus regions with GDP per capita PPS below 75 percent of the EU25 average and the new phasing-out and phasing-in regions.

The allocation criteria for the period 2014–2020 are broadly retained from the 2007–2013 programming period. One difference is that the EU25 averages were replaced by EU28 averages. More importantly, the complex rules for phasing-in and phasing-out regions were dropped and instead the regions in the EU have been divided into three categories of less developed regions with GDP per capita PPS below 75 percent of the EU average, transition regions with GDP per capita between 75 and 90 percent of the EU average and more developed regions with GDP per capita above 90 percent. Countries with GNI per capita below 90 percent of the EU28 average are eligible for funding from the CF.

The allocation to less developed regions depends on GDP per capita PPS relative to the EU average, the income of the country the region is in, and on its unemployment rate compared to the average of all the less developed regions. The allocation to transition regions is also based on GDP per capita and unemployment. The allocation to more developed regions is dependent on the unemployment rate compared to the average rate in other more developed regions, the employment level, the tertiary educational attainment for people aged 30–34, the share of early leavers from education and training aged 18–24, the GDP of the region, and the region’s population density.
As before for countries that are eligible for funding from the Cohesion Fund, i.e. those with GNI per capita at PPS below 90 percent of the EU average, the Cohesion Fund allocation is added, which depends on the population and surface area of the country and its GNI compared to that of other countries eligible for funding from the Cohesion Fund.

Besides the allocation criteria, there are ceilings for the maximum funds a Member State can receive as a percentage of GDP and as a percentage of the funds received the previous period.

3. Conceptual issues

The EU cohesion policy entails a transfer of resources to disadvantaged regions with the goal of enhancing economic, social and territorial cohesion. This section discusses some conceptual issues in foreign aid and other forms of redistributinal policy.

3.1. Arguments for redistribution

The starting point is the first theorem of welfare economics, which posits that the allocation of the market equilibrium is efficient and hence wastes no resources, the argument being that self-interested agents will squeeze out all gains from trade (Hindriks & Myles 2006, Ch. 2). The theorem is taken as an argument in favour of a market economy with little government intervention, but this conclusion is less clear-cut when externalities and distributional objectives are present.

One argument for government intervention derives from externalities, where economic activities in one area affect the well-being elsewhere without corresponding and adequate payment. An example of a negative externality is pollution, which crosses borders and for which the impaired typically do not receive any reimbursement. An example of a positive externality is a transport corridor which benefits transit to and from neighbouring countries. In EU jargon, an externality is often called spillover.

Externalities provide an argument for intervention as actions by an individual or firm may not take effects elsewhere into account, i.e. individual and collective incentives are not aligned (Hindriks & Myles 2006, Ch. 7). The combined societal benefits of a reduction in pollution may outweigh the costs. Likewise, the combined benefits for all the countries benefiting from a transportation corridor may be larger than the costs. Pollution abatement and infrastructure are typical candidates for government intervention in market economies.

It could be argued that there are externalities associated with the overall development level of a region or country. Having prosperous neighbours will facilitate trade, lessen migration pressures, and perhaps reduce cross-border crime. Prosperity may also aid democratic consolidation and political stability with possible repercussions for other countries.

Another argument for government intervention stems from distributional concerns, where the economic well-being in one country directly affects the well-being in others. In this case it may enhance welfare if prosperous countries support less well-off countries (Hindriks & Myles 2006, Ch. 13). In the EU context this motive for government intervention is often called solidarity.
The distributional motive for aid involves complex considerations as the benefit to the donor of giving aid is somewhat indirect. Support based on concerns about the well-being of others may also reflect paternalism where the norms of the donor are imposed on the recipient.

Economic support may also be used to compensate recipients fully or partially for losses they incur due to other policy measures. Although beneficial overall, many policy measures may cause losses for specific countries, regions or sectors. An example may be the liberalisation of trade in a given product, which often leads to welfare gains on aggregate but to losses for countries or sectors specialising in the production of that product.

Such compensation can rest on distributional ideals where the winners from reform measures share part of their gains with the losers, but may also derive from considerations of political economy if, for instance, the passing of reform measures requires support from all or many of the countries affected. Compensation payments in the form of aid to the losers are a way of ensuring their support for the reform measures.

Studies suggest that the EU cohesion funding has indeed been used as a means of ensuring support for policy changes that may in isolation affect some countries unfavourably. This appears to have been the case when the Common Agricultural Policy (CAP) has been changed, and it might explain the weight of regional development in many schemes of EU cohesion funding (Baldwin & Wyplosz 2012, Ch. 9). It has also been tied to the enlargements of the European Union in 2004 and 2007, when relatively poor countries had to implement measures that could affect certain groups or regions unfavourably. The EU cohesion funding made resources available, which could directly or indirectly be allocated to those unfavourably affected (Allen 2009).

3.2. Conditionality and implementation

Foreign aid will typically be subject to conditionality, where aid is given under the condition that the recipient country executes certain projects, implements given policies or provides co-financing (Temple 2010). The “need” for conditionality depends on the underlying motive or objective of the aid. If the main objective is to address cross-border externalities or spillovers, aid must obviously be conditional on measures being taken to address these issues. If a new transport corridor is deemed beneficial to neighbouring countries, it is vital that the corridor is actually built.

When the main objective is redistribution, the argument for conditionality is more complicated. It may be argued that the recipient would be best placed to decide how to spend aid in order to enhance welfare, in which case aid should be provided without conditionality. The donor may, nevertheless, want to ensure that the aid is spent in ways that are in line with the ultimate objectives of the donor.

The efficiency of aid ultimately hinges on resources being allocated to projects that have large benefits for society and are cost effective. In this context it is of concern that the recipients of aid do not bear much of the cost while the donors receive only little of the benefits. Recipients may not be very concerned about the costs, while the donors might be little concerned about the benefits.
This potential misalignment of incentives represents an argument for additional measures. EU cohesion policy funding is conditional on projects being assessed carefully before any funding is committed, on comprehensive monitoring throughout the duration of the project and on a detailed assessment after its completion (see Section 5). To provide a better alignment of incentives, EU cohesion policy funding always demands co-funding from national sources.

The effect of conditionality may be limited if the aid recipient can substitute funding from internal sources with donor funding. If the funding aims to improve the infrastructure in a region, a transfer may partly be offset by local authorities reducing their infrastructure spending. This substitution or offset effect implies that the net effect in the form of extra spending on a priority area will typically be smaller than the funding provided and this may eventually affect the effectiveness of the aid (Mosely 1980, Svensson 2000). Substitution may lead to unintended allocation of aid resources and may eventually undermine the efficiency of foreign aid. It is also very difficult to devise forms of conditionality that would prevent at least some substitution.

3.3. Additional effects of foreign aid

Foreign aid, including EU cohesion policy funding, may indirectly affect the economic and political context in the recipient country. One such effect is the risk of aid creating aid dependence (Knack 2001). Policy-making and bureaucratic processes might focus on “extracting” and absorbing foreign aid and businesses might prefer to devise projects funded by foreign aid. If these reactions to foreign aid become persistent, the result can be aid dependence, which may annihilate the purpose of foreign aid. The availability of resources from foreign aid may also increase the risk of corruption and misappropriation of funds.

Another challenge in foreign aid stems from the transfer effect, sometimes labelled the Dutch disease (Edwards 1988). The transfer of resources from donor to aid recipient will typically bring about a real appreciation coinciding with a reorientation of the industry structure from tradable to non-tradable production. This scenario may be benign or even intentional as long as aid is flowing into a country, but the real appreciation and, hence, weakened international competitiveness might be problematic if there is a reduction in aid.

Kamps et al. (2009) have emphasised the effects of foreign aid on business cycle developments, with particular reference to EU cohesion funding. Funding may be spent on activities that stimulate domestic demand and have a stabilising effect during downturns. Conversely, funding may lead to additional demand pressure, overheating and an accumulation of financial and economic imbalances during booms. The latter unwarranted effect might in part be counter-acted by ensuring that only projects that enhance long-term productive capacity are funded. The arguments in Kamps et al. (2009) suggest that the effects of EU cohesion funding on the business cycle should be considered carefully.

4. General experiences of EU cohesion policy funding

The goal of EU cohesion policy is to enhance economic, social and territorial cohesion within the EU and the main instrument is the different funding schemes discussed in Section 2. The preceding section highlighted some of the challenges of foreign aid, challenges that might
potentially weaken or nullify its intended effects. This underscores the need for empirical analysis of the effects of EU cohesion policy funding.

This section reviews a number of studies focusing on the macroeconomic effects of EU cohesion funding, in particular whether the funding has been successful in reducing income differences across countries and regions in the EU. The substantial income dispersion across the European Union provides the main impetus for the EU cohesion policy and the effects of the policy may be measured in terms of changes in the dispersion.

4.1. Income dispersion in the European Union

To frame the discussion it is useful to consider how income differences in the EU have evolved over time. Figure 1 shows the GDP per capita adjusted for different purchasing power for a selection of Member States, including some of the countries with the highest GDP per capita and some with the lowest. The GDP per capita in the 15 Member States from Western Europe is set at 100.

Figure 1: GDP per capita in purchasing power standards, index EU15 = 100, selected Member States

The income gap between most of the poorest countries and the EU15 has narrowed substantially since the mid-1990s. The convergence is most pronounced for Estonia, slower for Bulgaria and modest for Portugal. The positive income gap for Denmark has remained stable, the German economy performed strongly towards the end of the sample period, while the boom and bust of the Irish economy are noticeable.

Figure 2 shows two measures of dispersion in GDP per capita. (Luxembourg with its peculiar economic structure that results in an extremely large GDP per capita has been omitted when the summary statistics have been calculated.) The variable $\max 3 - \min 3$ is a simple summary measure that denotes the difference between the averages of incomes in the three richest
countries and the three poorest countries. According to this measure, the cross-country income distribution was relatively stable until 2000 and then fell gradually afterwards. A similar picture emerges when the standard deviation is used as the dispersion measure. The income dispersion was stable until 2000, but declined rapidly in 2001–2008 when the low-income countries in the geographical periphery experienced rapid economic growth. The standard deviation continued to decline after the outbreak of the crisis, but at a lower rate.

Figure 2: Measures of dispersion of GDP per capita in purchasing power standards, index EU15 = 100, 27 Member States

![Graph showing dispersion measures](chart.png)

*Note: Luxembourg is not included. The variable max3−min3 is the difference between the average for the three countries with the highest income and the average for the three countries with the lowest income.*

*Source: Eurostat (2015, code: nama_aux_gph), authors’ calculations.*

The conclusion from Figures 1 and 2 is that the dispersion of GDP per capita appears to have narrowed within the 28 countries that constituted the EU in 2014. This process of income convergence has mainly been driven by the low-income countries growing faster than the EU15 average. The process appears most pronounced from the turn of the century, but studies show that the pattern of convergence occurring due to the poorer countries or regions catching up was also present in the 1980s and 1990s (Leonardi 2005, Marzinotto 2012).

4.2. Some economic effects of EU cohesion policy funding

The question is then the extent to which EU cohesion policy funding has helped reduce the cross-country dispersion of income in the Member States. To narrow the income gap, a low-income country must grow faster than the EU average so the question is whether cohesion policy funding has contributed to higher rates of economic growth. It is notoriously challenging to assess the effectiveness of foreign aid and this also applies to the EU cohesion policy funding as it has several partly overlapping objectives and has been changing continuously (Allen 2009).
Numerous factors, independent of or affected by cohesion policy funding, may affect the growth performance of a country. Economic theory often assumes a diminishing marginal return to capital and this would suggest that low-income countries with their comparatively small capital stock would tend to grow faster than high-income countries, and this is generally confirmed empirically (Sala-i-Martin 1996). The upshot is that only detailed empirical analyses will be able to identify or pinpoint the effects of EU cohesion policy funding.

It is outside the scope of this paper to provide a detailed summary of the voluminous literature examining the effects of cohesion policy funding. The discussion will instead be based on selected studies, surveys and meta-studies.

4.2.1 Substitution and additionality

An important question concerns the size of the substitution effect, i.e. the extent to which funding from cohesion policy funds leads to reduced funding from national or regional sources. This can also be phrased as the degree of additionality, the extent to which cohesion policy funding overall leads to additional spending on the chosen priority. The issue is at the core of the EU cohesion policy as the funding is meant to lead to additional resources being spent on the chosen priorities. Additionality is frequently seen as a precondition for the effectiveness of cohesion policy funding (Wostner & Slander 2009).

Ederveen et al. (2003) assemble a large dataset for regions across the European Union and find that funding from national sources is reduced by 0.17 euro for each euro received in cohesion policy funding. The result is an average estimate but there is very substantial variation across the regions in the sample.

Wostner & Slander (2009) use annual data from 15 Member States over the period 1990–2006 and compare the spending on infrastructure, education and the environment with the cohesion policy funding received. The result is that there is little or no substitution in countries where the cohesion policy funding is less than 1.7 percent of GDP, a moderate degree of substitution when funding is between 1.7 and 2.3 percent of GDP and extensive substitution for countries that receive funding of more than 2.3 percent of GDP.

Del Bo & Sirtori (2013) use data from Italian regions from 1996 to 2010 to analyse the extent of substitution in Italy. The conclusion is that EU cohesion policy funding leads to reduced funding from national sources and, to a lesser degree, from sectoral and regional funding sources. It is also found that there is substantial variability in the degree of substitution across different regions and sectors.

The degree of substitution following EU cohesion policy funding is a somewhat neglected issue and very few empirical studies address the issue. The overall conclusion of the studies currently available is that cohesion policy funding typically entails a degree of substitution substantially below one-to-one, meaning that a degree of additionality is indeed ensured. The degree of substitution differs markedly from case to case and it is to be hoped that future research will shed light on the factors that determine the extent of substitution.

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3 Dardanelli (1999) argues that the requirement of additionality is in conflict with the EU principle of subsidiarity because the requirement of additionality limits the decision-making of countries and regions. This may mean that additionality cannot effectively be enforced and this may facilitate substitution.
4.2.2 Economic growth

The main issue addressed in the empirical literature is whether EU cohesion policy funding enhances growth in recipient regions. The literature employs two different methodologies.

The model approach uses smaller or larger structural models with equations estimated or calibrated. The effect of funding can then be found by simulating various scenarios with or without this funding. Given the limited understanding of economic growth and the impact of different forms of investment, the specification of the model is subject to substantial discretion.

The estimation approach uses data on economic growth or other measures of economic performance in different regions and seeks to explain the growth rate by the extent of cohesion policy funding received and various control variables. The specification of the lag structure and the choice of control variables are evidently of importance.

Most studies of the effects of cohesion policy funding are carried out using data from Western European Member States. The time sample sometimes extends back to the 1970s or early 1980s, but most studies use data from the 1990s or later. The overall conclusion from surveys and meta analyses is that studies using the estimation method find the effect of cohesion policy funding to be small and statistically insignificant, while studies using the model approach find larger and typically positive effects (Ederveen et al. 2003, Esposti 2008, Marzinotto 2012, Bachtler et al. 2013, Ch. 8).

The results in studies using the estimation method typically vary substantially across different specifications of the sample and the econometric analysis, and the overall conclusion is therefore that it is impossible to identify a clear positive effect of cohesion policy funding. This might in part be because it is difficult to pin down factors of economic growth and cohesion policy funding is only one possible factor of growth. The econometric analyses are, in effect, looking for a needle in a haystack. Moreover, many projects financed by cohesion policy funding may only affect economic growth in the long term and such long-term effects are difficult to pick up using the data available.

Marzinotto (2012) concludes, perhaps unsurprisingly, that cohesion policy funding has a more positive effect on economic growth when the funding is spent on investment projects with high returns, allocated diligently across different projects and carefully managed. Some studies using the estimation method find that funding which supports institution building and knowledge accumulation is more likely to enhance growth than other forms of funding. Other studies find that funding is more effective when it is allocated to regions or countries that meet certain preconditions. Ederveen et al. (2006), for instance, conclude that cohesion policy funding has a positive effect on growth when the economy is open and institutions are strong. Overall, the empirical evidence linking the effectiveness of cohesion policy funding with preconditions or specific funding priorities is very tentative.4

The strength of the model approach is that it is better at incorporating effects across regions and countries, while such spillover effects are typically neglected in studies that use the

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4 Other recent studies of effects of EU cohesion policy funding on economic growth and other variables include Becker et al. (2010), Beugelsdijk & Eijffinger (2005), Farole et al. (2011), Mohla & Hagenc (2010) and Puga (2002).
estimation method, with Dall’erba (2009) a notable exception. The different treatment of spillover effects may be a factor behind the strong effects of cohesion policy funding obtained in studies using the model approach. These strong effects might, however, also be due to other factors. The growth effects are typically found by imposing an exogenous increase in investment equal to a hypothesised increase in cohesion policy funding. The assumption is then that there is no substitution and typically also that the funding is allocated to investment with high returns. In this context the model simulations might be seen to produce the results of the best case scenario and not the actual results of cohesion policy funding.

The inconclusive results in the empirical literature investigating the growth effects of cohesion policy funding may raise some questions about the expediency of the funding programmes. It is arguably a difficult exercise from the outset to link relatively small amounts of cohesion policy funding with long-term economic growth in a region or country.

It is important to recall that the EU cohesion policy funding also has objectives other than income convergence, cf. also Section 2. Some of these objectives might enhance welfare even if reported GDP per capita is not affected. This may apply to some environmental and social policy projects. Finally, if the transfer of resources from abroad is not fully allocated to investment, it will make additional resources available for private or public consumption and this will have an immediate positive impact on welfare. Thus, cohesion policy funding may have positive welfare effects even if no effects on economic growth or convergence can be observed.

5. Cohesion Policy funding in Estonia

Before joining the EU in 2004, Estonia and the other accession countries were able to use different pre-accession funds. One of these was the Phare programme, which helped countries prepare for accession by supporting institution building and capacity enhancement. Other programmes were ISPA (Instrument for Structural policies for Pre-accession), which was basically a predecessor for the use of the Cohesion Fund, and SAPARD (Special Accession Programme for Agriculture and Rural Development), which preceded financing from the common agricultural policy funds. The Phare, ISPA and SAPARD programmes helped countries implement the Acquis Communautaire required for EU membership.

5.1. The period 2004–2006

When Estonia and nine other countries joined the EU in May 2004, they gained access to funding for the period from May 2004 to the end of 2006, when the budget period of the time ended. In Estonia, 302 million euros in current prices from the ERDF and the ESF were programmed for that period under the Estonian National Development Plan together with smaller amounts from the EAGGF Guidance Section and the FIFG. The Cohesion Fund with its 431 million euros was programmed separately, as at the time each project demanded separate approval from the European Commission.

The Estonian National Development Plan for 2004-2006 allocated funds for four large priority areas: the development of human resources; the competitiveness of businesses; agriculture, fisheries and rural development; and infrastructure and local development (Ministry of Finance 2004, p. 13).
The development of human resources sought to support life-long learning, re-training of the unemployed and businesses investment in human capital formation. The competitiveness of businesses was targeted through support for research and development and for cooperation between companies and research institutions. In agriculture, rural development and fisheries, the central aim was to increase the competitiveness of the whole food production chain from producer to processor through support for different forms of investment.

The main emphasis of the investment in infrastructure was on developing regional vocational education centres, modernising the hospital network and expanding the development and use of ICT. Transport and environment infrastructure was funded from the Cohesion Fund. The main emphasis in transport was on Trans-European Network connections and within environmental protection it was on fulfilling the demands of the many EU directives on drinking water, sewage, waste management and air quality (Government of Estonia 2004).

5.2. The budget for 2007–2013

Following the short budget period from May 2004 to 2006, a full seven-year budget programme followed for 2007–2013 for which funds of 3.4 billion euros at current prices were allocated to Estonia. The work of planning and programming for this period had already started in 2005. In planning the funds, each Member State prepared a national strategic reference framework based on guidelines proposed by the Commission and approved by the Council.

In Estonia, all EU funds were programmed as part of the plan for the state budget. Although the state budget strategy is set for four years and is a rolling plan renewed each year, the strategy for the EU funds covered all seven years. Three separate operational programmes were written for the use of cohesion policy funds. It was no longer possible to plan all the funds in one operational programme, since the council regulation stipulated that there had to be a separate operational programme for the ESF (Council 2006, article 34).

The priorities for 2007–2013 were largely similar to those of the previous period and infrastructure investments continued to have high priority (CDP & RAKE 2011, p. 9). The ESF, which pays for human resource development, provided 11 percent of total cohesion policy funds in Estonia but an average of 15 percent in all CEE Member States (DG for Employment, Social Affairs and Inclusion, 2014; DG for Budget, 2013a; authors’ calculations). When the funds were programmed in 2005–2006, the unemployment rate in Estonia was declining, so employment and retraining measures were not prioritised.

Funded measures from all operational programmes were grouped into six main areas: educated and active people; an increase in R&D capacity and in the innovativeness and productivity of businesses; better connections through transport infrastructure and the spread and use of internet and e-services; sustainable use of the environment; integral and balanced development of regions; and improved administrative capacity (Ministry of Finance 2007, pp. 63–64).

5 The agricultural funds (the Rural Development Fund, previously the EAGGF, and the Fisheries Fund, previously the FIFG) were no longer considered part of the cohesion policy funds and were programmed separately, although in close coordination with the cohesion policy funds.
5.3. Procedures for distribution of funds

The procedures for distribution of EU cohesion policy funding to individual programmes and projects is complex. Operational programmes stipulate the priorities for which funding is provided. Within the parameters agreed in the Council regulations, ministries devise plans that define the activities to be funded, the activities that are eligible for support, the requirements for those receiving the funds, and the application procedure. There are three different implementation schemes. *Investment plans* are used mainly for infrastructure projects such as building or renovating infrastructure. *Programmes* are implemented for several years to support retraining to help improve the quality of education. *Open calls* invite companies, local municipalities or non-governmental organisations, depending on the measure, to apply for funds for projects that help to achieve the objective of the plans.

Applicants in open calls must provide details about what the applicant wants to do, why they want to do it, how they plan to carry the project out, and what results are planned. The application for funding has to be presented to a specific implementing agency depending on the measure. Most investment projects require a cost-benefit analysis. First, projects are evaluated to assess whether they fulfil the technical requirements, which cover whether the applicant is solvent and capable of carrying out the project, whether the project is sustainable, and whether the project would be carried out without support. Second, the quality of the project is evaluated by an appraisal committee or a panel of independent experts using pre-defined criteria. Projects cannot be financed entirely by EU funds, but must be co-financed by the beneficiary (Ministry of Finance 2012).

5.4. Allocation of funds

Figure 3 provides a breakdown of the cohesion policy funding allocated to Estonia for different time periods. The amount allocated for the period from May 2004 to the end of 2006 was 733 million euros at current prices or approximately 2.2 percent of GDP, while 3.4 billion euros at current prices was allocated for 2007–2013, or 3.0 percent of GDP. A total of 3.6 billion EUR in current prices has been allocated for 2014–2020, which represents a slight increase in nominal terms, while the funding as a share of GDP will depend on the state of the economy during those years.

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6 For the 2007-2013 period, there were twelve implementing agencies that intermediated cohesion policy funds: Foundation Innove, Enterprise Estonia, the Environmental Investment Centre, Kredex, the Archimedes Foundation, the Estonian Technical Surveillance Authority, the Estonian Information System’s Authority, the Ministry of Finance, Tallinn Airport, the Estonian Road Administration, the Estonian Maritime Administration, and the Ministry of Social Affairs. For the 2014-2020 period, the first eight of these will continue as implementing agencies.
All EU Member States receive some form of cohesion policy funding, but the amounts differ substantially across the Member States depending on their income level and other indicators of socio-economic development, cf. Section 2. The allocations of cohesion policy funding for 2007–2013 ranged from 0.05 percent of GDP in the Netherlands to 3.69 percent of GDP in Hungary. Figure 4 shows the allocation in percent of GDP for the 10 Member States from Central and Eastern Europe.
5.5. Payment of funds

The allocation indicates the resources made available from EU cohesion policy funding, but the timing of the actual payment or payout to beneficiaries may also be important. Figure 5 shows the payments of cohesion policy funding paid out to beneficiaries in Estonia. The payments of funds from the programming period that ended in 2006 reached their maximum levels in 2007–2008 and then declined. The payments for a period can be made up to two or three years after the period has ended, which explains why payments for the 2004-2006 period were still being made after 2006. The payments from the 2007–2013 programming period were similarly modest in the beginning but increased markedly in the crisis year 2009.
The major increase in payments to beneficiaries in Estonia in 2009 would not have been so pronounced without the initiatives taken by the European Commission and the Estonian government in reaction to the financial and economic crisis that unfolded in the autumn of 2008.

In November 2008 the European Commission put forward its European Economic Recovery Plan, with proposals to speed up the use of cohesion policy funds in order to alleviate the crisis (European Commission 2008). The Council agreed to several amendments to the regulations for the cohesion policy for 2000–2006 and 2007–2013. The deadline for payments from the 2000–2006 structural funds was extended by six months until end of June 2009, thereby reducing the risk that Member States would lose funds at the end of the period.

For 2007–2013, more flexibility was introduced in various rules concerning major projects, notably large transport projects with costs exceeding 50 million euros and environmental projects with costs exceeding 25 million, revenue-generating projects, financial engineering like loans and guarantees, and investment in energy efficiency improvements in housing (Smail 2010, pp. 30–32).

Advance payments of structural funds were increased to help ease the liquidity position of Member States. For the Member States that joined the EU in 2004 or 2007 the advance payments for 2009 were increased from 2 percent to 4 percent of their cohesion policy allocation. Other Member States were initially not supposed to have any advance payments in 2009, but this was changed to 2.5 percent of their cohesion policy allocation (Council 2009, article 1). The total amount for cohesion policy and the national allocations remained unchanged.

The Commission also encouraged the individual Member States to review their operational programmes to find ways to alleviate the crisis and get funds paid out faster. There were no additional funds available for cohesion policy, but the Member States could reduce funding in
some areas in order to increase it in others. On top of this, some funds that were initially planned for projects to be carried out in the end of the period were brought forward, including a range of active labour market measures.

The Estonian cohesion policy programmes were largely prepared in 2005–2006, when economic growth was high and unemployment low, and the plans consequently did not reflect the needs occasioned by the crisis. Estonia revised all three operational programmes during the first half of 2010, though the revision had already started in the beginning of 2009. Funds were increased for active labour market measures, career counselling, entrepreneurship and transport infrastructure of regional importance. Meanwhile funding for the energy sector was reduced since the sector benefited from the sale of CO₂ Assigned Amount Units under the Kyoto Protocol (Ministry of Finance 2010).

At the height of the crisis, it was not only the difficulties of planning large projects and programmes that hindered the payments. The co-financing obligation had to be respected if the cohesion policy funds were to be used, and this became increasingly difficult. To meet the need for funds, Estonia decided in 2009 to take a loan of 550 million euros from the European Investment Bank to co-finance cohesion policy investments (Seeman 2009).

Taken together, these steps contributed to the large payments in 2009 and 2010. In later years, payments increased further as more projects reached maturity. Only in 2013 did payments decline, reflecting the approaching end of the programming period.

The pace of cohesion policy payments differs substantially across the EU members from Central and Eastern Europe. The European Commission transfers cohesion policy funds to the Member States when it has received requests documenting the eligibility of the payments. Figure 6 shows the payments from the Commission to the Member States for payments from 2007 to the end of 2012.

Figure 6: Payments of cohesion policy funding by the end of 2012 compared to the national allocation 2007–2013, 10 CEE countries

![Figure 6](chart.png)

The execution of programmes has been fast in the Baltic States, countries for which the funds distributed are small in absolute numbers and which all experienced very deep downturns after the global financial crisis. It is, however, notable that Poland, with by far the largest sums for cohesion policy, has also been fast in getting funds paid out. A rapid pace of payments may help ensure that all payment are paid out by the end of the period and are therefore not lost.

6. Experiences and challenges in Estonia

This section brings together the results of a number of studies that have evaluated the experiences of cohesion policy funding in Estonia. The focus is generally on areas where challenges remain. The most important question is whether the cohesion policy funds have been spent on projects that facilitate economic development or otherwise exhibit high socio-economic returns, while another important issue is the risk of aid dependence.

6.1. Programming and efficiency

A mid-term review of the use of the 2007–2013 cohesion policy funds found that one of the main weaknesses in Estonia was a lack of strategic vision at the national level (CDP and RAKE 2011, p. 6). The review also argued that there was a lack of explicitly defined regional and sectoral priorities. Although each of the funded projects may be relevant for the objectives in isolation, the coordination and the synergies between the projects were often inadequate. The problem of fragmented planning and of actions being repeated was already mentioned in the evaluation carried out before the operational programmes changed because of the economic crisis (Ernst & Young et al. 2009, p. 34).

As with several other government programmes, the National Audit Office has similarly called for a more integrated approach to the funding priorities as resources might otherwise be wasted. Cohesion policy funds are, for instance, used for improving schools, kindergartens, cultural centres and youth centres without any accurate consideration of their locations and without an assessment of which facilities will continue to be viable as the number of children declines (National Audit Office 2012, pp. 1–2).

Another audit dealing with the training and retraining of adults found that the initiatives were not well organised and did not help adults gain qualifications, as there was a lack of central management of adult education at the national level (National Audit Office 2010, pp. 1–2).

The efficiency of some individual projects has also been questioned. The mid-term review of the cohesion policy funds for 2007–2013 argued that the socio-economic returns to new infrastructure investments in roads, research centres, hospitals and schools may be small when there are few users and if there are no funds for operation and maintenance after the end of the project (CDP and RAKE 2011, p. 51). There are examples of swimming pools being built in small municipalities close to each other where they struggle to meet their aims and where funds for maintenance are hard to find (Jõesaar 2011).
6.2. Administration and resource use

The programming and administration of structural funds may raise challenges. The European Commission is ultimately responsible for the use of the EU budget, but the cohesion policy funds, like many other funds in the EU budget, are managed jointly by the Commission and Member States under shared management. Controls and audits seek to ensure the proper use of funds and Member States are responsible for protecting the financial interests of the European Union.

There are detailed rules for financial management, control and audit procedures. There are sometimes complaints from beneficiaries about the amount of bureaucracy involved in using funds, but the bureaucracy may be unavoidable given the substantial sums involved.

There are controls in place at different levels for the distribution of funds, including those distributed by the Member States themselves, which should ensure that funds are paid out correctly. If irregularities are found, the beneficiaries have to pay back the support received. In 2011 an audit revealed that Enterprise Estonia, which allocates cohesion policy funds to businesses, had given support to projects that might have violated rules on state aid. After additional investigation by Enterprise Estonia, it was found that in 61 cases with 10.5 million euros in funds, companies had already started work, by buying new equipment for example, before they applied for the cohesion policy funds (Koch 2012). After additional checks at least nine companies had to pay back the support (Traks 2013).

In addition to audits of the beneficiaries, audits are carried out to evaluate how well the system of controls works. In October 2011, the European Commission suspended the payments of cohesion policy funds to Estonia following an audit of the Financial Control Department in the Ministry of Finance. The audit stated that the certifying authority, which is responsible for the accuracy and probity of payment claims to the Commission, did not have detailed knowledge of the controls carried out by the ministries managing the funds (Hankewitz 2011). This kind of suspension is not unusual; cohesion policy payments in the EU were suspended in total 101 times in 14 countries between the beginning of 2010 and October 2011 (Rumm 2011).

Implementing and administering the EU cohesion policy funding has at times been a challenge for Estonia, as it has for most other EU Member States. However, the extensive requirements for the planning, assessment and evaluation of EU funded projects have arguably led to increased awareness of the efficiency of domestically financed activities. The practices from the EU cohesion policy funding may thus spread to other parts of government spending and help improve efficiency and governance.

6.3. Aid dependence

As with other forms of foreign aid, the issue of dependence on EU funds may also be of concern. EU cohesion policy funds have become an important contribution to public and private investment and the government budget. In the 2007–2013 programming period the funding was equal to 11.1 percent of total private and public fixed investment (Eurostat 2015, code: gov_a_main). The cohesion policy funding was equal to 62.5 percent of general government fixed investment or 9.2 percent of the total tax revenue (Eurostat 2015, code: gov_a_tax_ag).
As discussed in Section 5, Estonia took many steps in the crisis to accelerate and redirect the use of funds. The National Audit Office emphasised in its annual report to the Parliament for 2013 that since EU cohesion funding became available, these funds have become practically the only funds for public investment in Estonia (National Audit Office 2013, p. 27). As a result, areas that have benefited most from EU funds may see a reduced investment if EU cohesion policy funding is reduced.

The funding for the 2014–2020 programming period is fixed, but the prospects beyond 2021 are less certain. The funds available depend on the future allocation rules and on changes in the economies of Estonia and the rest of the EU. Assuming that the cohesion policy funding continues to be an important part of the EU budget and the allocation methodology does not change fundamentally, the size of the funds for Estonia in the future will depend mostly on the Estonian GDP per capita compared to the EU average. The funding from the ESF and the ERDF will be reduced when the Estonian GDP per capita will exceed 75 percent of the EU average and again when the Estonian GDP per capita will exceed 90 percent of the EU average. Funding from the CF will be cut when the Estonian GNI per capita will exceed 90 percent of the EU average. The upshot is that the EU cohesion policy funding will only be reduced gradually in future decades provided that the allocation rules do not change fundamentally and the convergence of income levels remain sluggish.

7. Discussion

This paper has discussed the EU cohesion policy and its implementation in Estonia in the decade since the country became a member of the European Union in May 2004. This section summarises the discussion and identifies some challenges for the use of EU cohesion policy funds in the future.

Like most forms of foreign aid, the EU cohesion policy funding can be seen as a means for addressing spillovers or solidarity objectives. The survey of the empirical literature showed that it is difficult to ascertain any growth effects from EU cohesion policy funding. Tentative evidence suggests that the funding is most effective when institutional preconditions are fulfilled and the funding is distributed under a well-defined strategy to projects with substantial growth-enhancing potential. Studies, however, also show that EU funding tends to be partly off-set by reduced funding from national and regional sources.

The EU cohesion policy funding for Estonia amounted to approximately 3.4 billion euros or 3 percent of GDP during the period 2007–2013 and will increase to 3.6 billion euros during the 2014–2020 programming period. The bulk of the funding has been allocated from the European Regional Development Fund, which provides funding for innovation, research, infrastructure, and support for small and medium-sized enterprises. Funding from the European Social Fund has been comparatively smaller for Estonia than for other Member States from Central and Eastern Europe. Funding from the Cohesion Fund has gone to cross-border transportation and environmental projects.

It is too early to assess the broader societal effects of the EU cohesion policy funding received by Estonia. The EU cohesion policy funding of around 3 percent of GDP is substantial, but should be seen in the context of an Estonian economy that was growing by 5.0 percent
annually in 1995–2013, although only by 1.1 percent annually in the 2007–2013 period (Eurostat 2015, code: nama_gdp_k).

The importance of the EU cohesion policy funding might be larger than its share of GDP would suggest. In the period 2007–2013 the funding amounted to a large share of total private and public fixed investment. These numbers have led to concerns that Estonia has been developing a degree of dependence on EU funding which might lead to problems at later stages. Given that the funding for the programming period 2014–2020 has already been agreed upon, possible problems will occur some time further into the future.

Another related issue is substitution, i.e. the extent to which cohesion policy funding for various projects is followed by reduced funding from national or local sources. Such substitution is against the requirement of additionality and it might reduce the growth effects of the cohesion policy funding if the resources released are spent on purposes with limited growth prospects. It remains a challenge to limit the extent of substitution in order to ensure that Estonia directs substantial resources to developing its economy and stimulating medium and long-term growth.

The EU cohesion policy funding is managed by political and administrative systems at the EU, national and regional levels, which in many ways are parallel to other schemes for project funding. It is, evidently, a challenge to ensure that these systems remain lean and efficient, and that the substantial sums channelled to various projects do not lead to abuse of power or corruption. Although Estonia has a relatively good record in these respects, experience shows that there is a need for constant vigilance.

The macroeconomic effect of the cohesion policy funding should not be over-looked. Section 5 discussed the acceleration of cohesion payments after the global financial crisis. These payments helped soften the fallout of the crisis and contributed to the remarkable fiscal consolidation in Estonia in 2009 (Staehr 2013). At the same time, the funding might have induced additional demand pressures that contributed to the overheating of the Estonian economy in 2005–2007. Given the magnitude of the cohesion policy funding in Estonia, its macroeconomic effects cannot be ignored.

Arguably the most important challenge is to ensure that the resources made available from the EU cohesion policy funds are allocated so as to attain a high return for society. This requires that the funds be allocated to the individual projects with the highest societal benefits, and also that the mix of projects be well managed. The selection of projects and the mix of projects with the highest possible return to society is not a question of projects passing formal selection criteria, but must rest on substantial and genuine analysis. Various evaluations and assessments suggest that this remains a recurrent challenge.
Literature


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