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# EU Structural Funds: Do They Generate More Growth?

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## Summary points

- The European Union's budget negotiations are a constant source of disagreement. Spending on the Regional Policy makes up more than one-third of the budget and has the primary aim of fostering convergence between poor and rich regions within the EU.
- To assess the effectiveness of the Regional Policy, a focus on the Convergence Objective is instructive as it provides transfers to disadvantaged regions of member states and these are assigned by a clearly defined rule: NUTS2 regions, whose GDP per capita is less than 75% of the EU average, are eligible.
- The Objective 1 programme, on average, is successful at fostering growth in recipient regions, but there is considerable variation. Regions with low levels of education and poor governance fail to make good use of EU transfers, pointing to the need for a degree of conditionality when earmarking future transfers.
- For EU Structural Funds as a whole, more funds do not mean more growth. A point is reached where returns begin to decline and additional funds do not lead to higher growth. Transfers to regions should therefore not exceed maximum desirable levels if inefficiency and misuse are to be avoided.

## Introduction

European Union budget negotiations have always been subject to rows between member states, and today's wrangling over funding is no different. Indeed, in the ongoing negotiations about the EU's long-term budget for 2014–20, the British Prime Minister, David Cameron, has threatened to veto any deal that would allow Brussels to push through an above-EU inflation increase of 5%.

In times of shrinking national budgets, a number of governments firmly believe that further swelling the EU budget must be resisted. In this context, it is fair to ask to what extent expenditures actually achieve their goal, considering that the EU spends €130 billion per year, equivalent to roughly 1% of the gross national income

(GNI) of its 27 member states. And there are also calls by many, especially in the United Kingdom, to repatriate powers from Brussels, which would bring back budgetary decisions to member states.

One of the EU's primary expenditure items is on Regional (or Cohesion) Policy. The starting point for this regional focus is the fact that there are considerable differences in GDP per capita not only across countries but also across regions within countries. Table 1 shows the disparities among EU25 countries when the euro was introduced.

Expenditures on Structural Funds and the Cohesion Fund, accounting for more than one-third of the EU budget, aim to reduce regional disparities in terms of income, wealth and opportunities. But is this massive

**Table 1: Disparities in the EU25, 1999 (GDP per capita PPP)**

	Country Avg (Euro PPP)	Country Max (Euro PPP)	Country Min (Euro PPP)
Austria	18,855.38	26,546.84	13,446.46
Belgium	18,466.26	43,347.16	14,331.10
Cyprus	14,861.88	14,861.88	14,861.88
Czech Republic	11,411.80	23,708.24	9,554.07
Germany	19,929.09	35,739.29	12,738.76
Denmark	22,634.88	27,954.49	17,869.64
Estonia	6,252.50	10,644.65	4,636.73
Spain	16,005.10	22,823.61	11,146.41
Finland	20,302.39	28,662.20	15,392.66
France	19,790.04	32,908.45	16,100.37
Greece	12,530.61	16,631.15	9,377.14
Hungary	8,598.66	14,861.88	6,192.45
Ireland	21,651.46	24,769.80	16,454.23
Italy	21,184.88	29,900.69	12,915.68
Lithuania	6,243.72	9,153.68	4,171.41
Luxembourg	40,693.25	40,693.25	40,693.25
Latvia	5,296.85	10,829.71	3,191.77
Malta	14,508.03	14,508.03	14,508.03
The Netherlands	22,107.05	29,016.05	16,808.08
Poland	8,382.42	13,092.61	6,015.52
Portugal	13,250.58	21,408.19	12,207.97
Sweden	19,942.22	30,431.47	18,754.28
Slovenia	12,438.66	19,182.09	9,761.78
Slovakia	8,824.24	18,931.21	6,546.31
United Kingdom	19,392.81	49,362.68	12,384.90

Source: Based on Table 2 from Becker et al. (2010).

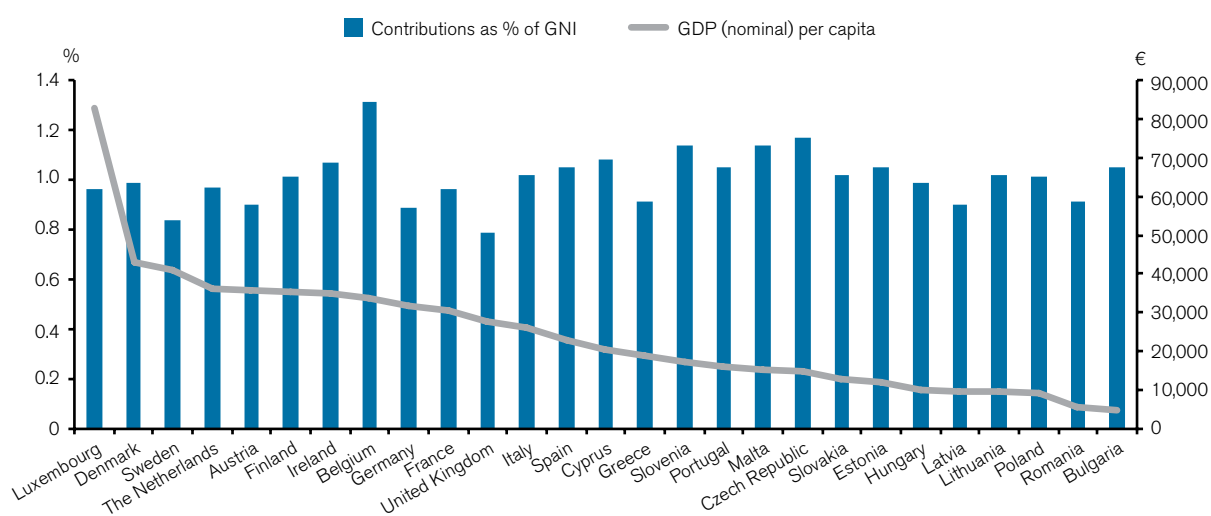
expenditure successful at increasing growth rates in the poorer regions of the EU? Are all recipient regions equally adept in turning transfers into additional economic expansion or does the impact on growth depend on regional conditions, often referred to as a region's absorptive capacity? If they are beneficial in principle, do larger transfers lead to more growth or are there diminishing returns? Answers to these questions

are important in determining whether the EU Regional Policy is successful in its current form or whether it might be beneficial to make a few key adjustments.

### How does the EU's Regional Policy work?

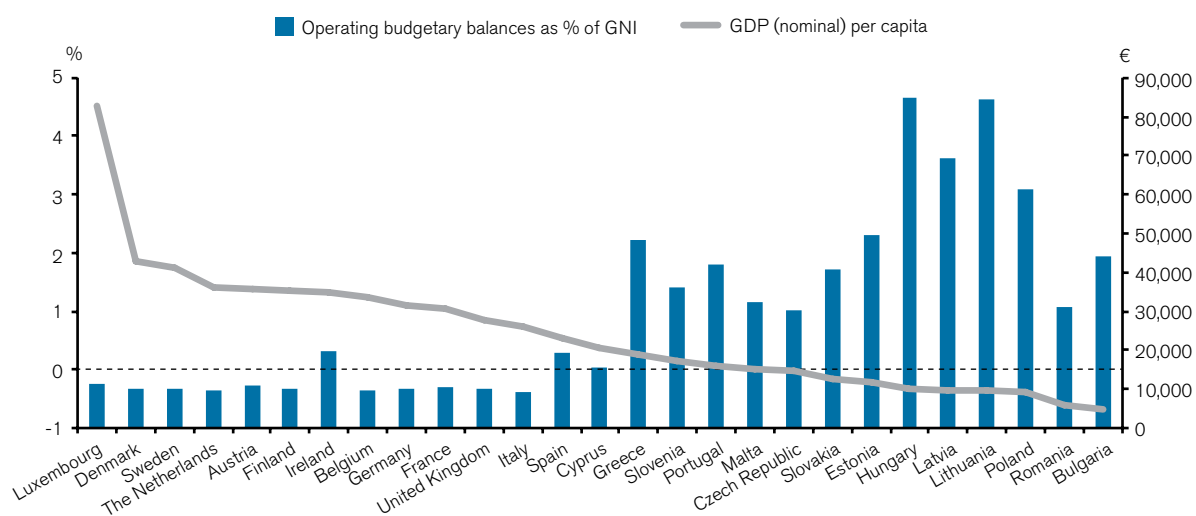
In assessing whether the EU's Regional Policy has worked so far, a look at a few basic facts about the budget is revealing. The EU uses so-called program-

Figure 1: National contribution to EU budget, by member state



Source: Based on European Commission (2012): EU Budget 2011 Financial Report.

Figure 2: Operating budgetary balance, by member state



Source: Based on European Commission (2012): EU Budget 2011 Financial Report.

ming periods to design multi-year budgets. The ongoing programming period stretches from 2007 to 2013. The budget is financed from customs duties on imports from outside the EU, sugar levies from a standard percentage imposed on the harmonized VAT base of each EU country and from a standard percentage taxed on the GNI of each EU country. The latter is used to balance revenue and expenditure because the EU's budget must balance every year; the EU cannot issue debt.

On the revenue side, contributions of the member states are non-progressive, i.e. poorer and richer member states alike contribute roughly 1% of their GNP to the budget, as shown in Figure 1 for the budget year 2011. On the expenditure side, poorer countries overall receive more than richer countries, as Figure 2 shows.

In the budget over the 2007–13 programming period, the EU divides its spending on regional policy into three areas: the Convergence Objective (formerly Objective 1), the Regional Competitiveness and Employment Objective (formerly Objective 2) and the European Territorial Cooperation Objective (formerly Objective 3). Funding for the Regional and Cohesion Policy in 2007–13 amounts to €347 billion (35.7% of the total budget for that period – or just over €49 billion per year).<sup>1</sup> All cohesion policy programmes are co-financed by the member states, bringing total available funding to almost €700 billion. Total resources allocated to the Convergence Objective are €283 billion, equivalent to 81.6% of the total. The resources earmarked for the Regional Competitiveness and Employment Objective are €55 billion, amounting to 15.8%, while those

designated for the European Territorial Cooperation Objective are €9 billion, or 2.6% of the total. The Convergence Objective thus accounts for the lion's share of the Regional Policy.

Under the Convergence Objective, the EU provides transfers to disadvantaged regions of member states to allow them to catch up with the EU average. These are so-called NUTS2 (territorial units for statistics) regions, Eurostat's nomenclature for regions that have roughly 1–3 million inhabitants. In the UK context, NUTS2 regions are counties or groups of counties.<sup>2</sup>

In order to analyse the success of the Regional Policy so far, it is instructive to look at data from earlier programming periods, notably 1989–93, 1994–99 and 2000–06. Table 2 gives an overview of the number of regions receiving Objective 1 transfers in the last three completed programming periods<sup>3</sup> and reveals they received yearly transfers ranging from 1.1% to 1.8% of their GDP. This amounted to €125 per inhabitant per year in 1989–93 and then €229 by 2000–06.

## Has the EU's Regional Policy been successful?

Evaluating the success of EU transfers in achieving convergence is no trivial matter. For example, poor regions that are going through a catch-up phase might grow faster than rich regions, quite independently from the receipt of transfers. Hence a simple comparison of the growth rates of regions that receive transfers and those that do not is insufficient to draw any accurate conclusions.

The European Commission tries to allay any concerns that money is being spent in an inappropriate manner by

1 European Commission (2012), 'EU Cohesion Funding – Key Statistics', [http://ec.europa.eu/regional\\_policy/thefunds/funding/index\\_en.cfm](http://ec.europa.eu/regional_policy/thefunds/funding/index_en.cfm).

2 NUTS2 regions are less aggregated than NUTS1 regions, and NUTS3 regions are even more disaggregated.

3 Note that owing to several expansions of the EU, the total number of regions has increased over time. Data on Structural Funds stem from European Commission (1997). To obtain average yearly funds period-specific figures are divided by the number of years the respective programming period lasted. The funds in PPP terms are calculated by weighting the funds each single country received in the respective programming period with the country's PPP Index of the programming period's initial year. Funds per GDP and funds per inhabitant are calculated as the average yearly funds divided by regional GDP and regional population respectively, before the programming period. This is 1988 and 1989 for the EU12 and the German 'New Länder' respectively in the first period; 1993 for the EU12 regions in the second period; 1994 for the countries joining in 1995 (Austria, Finland and Sweden); 1999 for the EU15 in the third period; and 2003 for the accession countries of 2004. The number of years during which the respective countries actually received funds are adjusted: five and four years for the EU12 and the German New Länder respectively in the first period; six and five years for the EU12 and the new members of 1995 respectively in the second period; and seven years for the EU15; but three years for the new accession countries of 2004. Information is lacking on the four French overseas *départements* (a fifth *département*, Mayotte, only joined in 2011) and the two autonomous Portuguese regions of Madeira and Azores for all three periods. For the Dutch region, Flevoland, information is missing for the first period only. Regarding the East German NUTS2 and NUTS3 regions, GDP per capita growth for 1989 and 1990 is calculated using information from East Germany's statistical yearbook.

Table 2: Objective 1 regions and transfers

	1989–1993	1994–1999	2000–2006
<b>NUTS2</b>			
Total number of NUTS2 regions	193	215	285
Number of Obj.1 NUTS2 regions	58	64	129
<b>NUTS3</b>			
Total number of NUTS3 regions	1,015	1,091	1,213
Number of Obj.1 NUTS3 regions	286	309	417
Overall yearly funds (mn. Euro)	8,764	15,662	15,306
Overall yearly funds (mn. Euro PPP)	10,279	17,479	17,086
Yearly Obj. 1 funds as fraction of NUTS2 region GDP	0.014	0.018	0.011
Yearly Obj. 1 funds per inhabitant of NUTS2 region (Euro PPP)	125	193	229

Source: Becker et al. (2010), Table 1, based on European Commission 1997 and 2007.

reducing the issue to one of proper accounting for projects that have been approved to receive funding (see European Commission, 2011). However, the crucial issue from an economic perspective is whether Structural Funds yield a return in terms of additional growth that justifies the amount spent on the Regional Policy.

Past research has examined this matter in a number of ways. Sala-i-Martin (1996) compared the regional growth and convergence pattern in the EU with that of other federations that lack a similarly extensive cohesion programme and concluded that the EU's structural policy was a failure. Such a conclusion requires comparability of federations and their regions in all other respects, which is empirically challenging. Boldrin and Canova (2001) came to similar conclusions when comparing EU regional growth in recipient and non-recipient regions.

Midelfart-Knarvik and Overman (2002) took a more favourable view on the basis of their finding that the Structural Funds Programme made a positive impact on industry location and agglomeration at the national level. Beugelsdijk and Eijffinger (2005) and Ederveen et al. (2006) analysed national data and found a propitious relationship between Structural Funds Programme spending and GDP/capita growth (at least in countries with favourable institutions). On the basis of regional data at the NUTS1 or NUTS2 level, Cappelen et al. (2003)

and Ederveen et al. (2002) detected a significant positive impact of structural funds on regional growth.

Recent research by Becker et al. (2010, 2012a and 2012b) analysed important aspects relating to EU Regional Policy that are of interest to policy-makers. Becker et al. (2010) focused specifically on the Objective 1 programme for several reasons. First, this funding is most explicitly targeted at convergence between poor and rich regions in the EU (European Commission 2001). Second, Objective 1 expenditures have been the largest budget post within the Structural Funds Programme budget, accounting for more than two-thirds of the total: between 68% and 72% in the past three programming periods (see European Commission, 1997 and 2007). Third, it is important to draw on the largest possible sample, and the Objective 1 scheme has been largely unchanged over all three programming periods of its existence so far.

The EU follows a clear rule to determine eligibility for transfers under the Objective 1 programme: it applies to regions with a per capita GDP level below 75% of the EU average. This somewhat arbitrary rule, if strictly applied, gives rise to a (quasi-) experimental situation and to potential anomalies. For example, a NUTS2 region with a GDP per capita of 74.99% of the EU average is eligible for Objective 1 transfers, while one with a GDP per capita of 75.01% of the EU average is not. Although they are nearly

identical in terms of their GDP per capita and – all other things being equal – would probably have nearly identical growth prospects in the absence of EU transfers, only one of these regions can benefit from billions of euros in Convergence Objective transfers.

Whether a region is just marginally above or below the eligibility threshold is largely a matter of good or bad luck, and the assignment of Convergence Objective transfers on this basis amounts to a quite arbitrary approach. In reality, some regions that are not eligible do receive transfers and vice versa. Indeed, there can be purely statistical reasons for both kinds of deviations from the rule. At the time the decision about eligibility is taken, GDP data may be preliminary and *ex post*, so that the status of a region might have been different had it been based on final GDP data. But in some cases, deviations from the rule may also be the result of special negotiations in which a government achieves eligibility status for a region in its country despite the fact that GDP per capita is above the 75% threshold.<sup>4</sup>

Exploiting the variation in status around the 75% threshold, Becker et al. (2010) identify positive causal effects of Objective 1 treatment on the growth of per capita income over the course of a programming period.<sup>5</sup> A simple calculation of the net benefits of Objective 1 transfers suggests that, according to the authors' benchmark estimates, every euro spent on these transfers leads to about €1.20 of additional GDP. The latter is probably linked to a stimulus on the volume and structure of investment (e.g. infrastructure) and ultimately to productivity gains, but much less so with regard to the creation of new jobs within the same programming period. As a result, the authors conclude that, on average, Objective 1 transfers may well be effective and – at least overall – are not wasteful.

This is of course good news for the overall usefulness of the scheme, but it disregards the vast differences across recipient regions. Indeed, regions vary enormously in

their capacity to turn transfers into additional growth. The role of this absorptive capacity has been highlighted in research to assess the effectiveness of aid programmes to developing countries. Starting with the work of Burnside and Dollar (2000, 2004), it has been hotly debated whether (and under what conditions) foreign aid actually leads to more growth. Dalgaard et al. (2004) argue in favour of the link, while Easterly (2003) questions its effectiveness.

The aid literature in general seems to concur that the key factors that undermine the goal of aid transfers are low levels of education and poorly performing institutions (such as corrupt politicians or bad administrations). In the EU context, such institutions are also mentioned as one reason why regional transfers are not as effective as they could be. Pisani-Ferry et al. (2011) argue that poorly performing institutions in Greece are responsible for the country's repeated failure to use up the funding that had already been assigned. Human capital is important through capital-skill complementarity: a lack of skilled workers in some recipient regions should be considered an important source of lower returns on investment (Duffy et al. 2004). In broad terms, improving human capital and the quality of institutions may be viewed as two dimensions of enhancing absorptive capacity.

Becker et al. (2012a) analyse how the growth and investment response of Objective 1 recipient regions varies with their absorptive capacity. To put the concept of absorptive capacity in an operational context, they use two measures: a region's endowment with human capital and regional quality of government. Human capital endowment is measured by the share of the workforce enjoying at least secondary education. Information on education of the workforce comes from the EU Labour Force Survey.<sup>6</sup> The second measure of absorptive capacity captures quality of local government. It is based on an EU-wide survey

<sup>4</sup> Exceptions to the rule are limited to 7% of the cases (see Becker et al. 2010).

<sup>5</sup> An important caveat for such an interpretation is that results refer to medium-term growth effects, i.e. within the programming period being analysed. Potentially, growth due to EU transfers only picks up after a greater number of years, so it is useful to look at investment rates to see how regions split transfers received into consumption and investment use.

<sup>6</sup> Eurostat delivered NUTS2-level data on education of the workforce for 1999 through to 2008. Education is measured in three categories, based on UNESCO's International Standard Classification of Education (ISCED): low education refers to ISCED categories 0–2; medium education refers to categories 3 and 4, and high education to categories 5 and 6. Our measure of (at least) upper-secondary education includes ISCED categories 3–6. In our sample of NUTS2 EU regions, the correlation coefficient between the share of the workforce with at least upper-secondary education in 1999 and in 2008 is 0.91, which shows the stability of human capital endowment over time and thus makes it a useful measure of the absorptive capacity of a region.



on perceptions (Charron et al. 2011) of 34,000 citizens, to date the largest survey ever undertaken to measure quality of government at the sub-national level. The index is based on 16 separate survey questions concerning three key public services: education, healthcare and law enforcement. The respondents were asked to rate the quality, impartiality and level of corruption of those services – the assumption being that governments achieving high scores on the quality of government along these lines are also likely to be better at attracting and administering EU funds.

The analysis again covers the three programming periods (1989–93, 1994–99 and 2000–06) and reveals considerable differences in the growth and investment response to transfers for different types of regions. Objective 1 recipient regions whose workforce had education levels well below the EU average did not gain additional growth from receiving transfers, while those with a much better-educated workforce grew faster than the average recipient region. Calculations in Becker et al. (2012a) suggest that a region whose human capital endowment is raised by one standard deviation relative to the average could gain an additional 0.63 percentage points of annual growth.

Similar results are found with respect to regions whose quality of government deviates from the EU average: unsurprisingly, poor-quality governance makes for inefficient use of transfers, whereas good governance turns these into additional growth. The estimates in Becker et al. (2012a) suggest that a region whose quality of government is raised by one standard deviation relative to the average gains an additional 0.41 percentage points of per capita growth per year.

The regions that notably under-perform in making good use of Objective 1 funds are located in Greece, Italy, Portugal and Spain, but also in Malta and France.<sup>7</sup> Such findings strongly suggest that unless a region's absorptive capacity has reached an appropriate threshold, structural

funds have had no medium-term growth effect. This kind of econometric evaluation goes well beyond the EU's auditing of appropriate use of funds and underscores important ways in which improvements could be made to its Regional Policy.

Another key way to assess the success of the Structural Funds programme is to examine the relationship between the amount of funds received and the corresponding impact on growth. Becker et al. (2012b) have looked at the total amount of transfers received under Objectives 1, 2 and 3 combined, relative to regional GDP, i.e. the transfer intensity, and its effect on regional growth. Data on the amount of transfers received are only available for the last two programming periods (1994–99 and 2000–06), but at the more disaggregated NUTS3 level.

Table 3 summarizes the amounts of funding received across EU regions. It is striking that about 90% of all regions received transfers under the auspices of the Regional Policy. On average, NUTS3 regions receiving transfers from either the Structural Funds or Cohesion Funds budget got €23 million per year from these funds.<sup>8</sup> In some cases, the amounts received were tiny: for example, in the period 2000–06, the Swedish region of Halland län received transfers of just €5,345, equivalent to a mere 0.00009% of its GDP. At the other end of the spectrum, the Greek region of Grevena displayed a transfer intensity of 29.1% in the 1994–99 programming period. It is precisely this vast variation across recipient regions that brings up the question of whether more funds automatically translate into additional growth.

As discussed earlier, Convergence Objective funds are the largest part of the Regional Policy budget. Regions receiving funds under the heading of this Objective get an average of €52 million per year.

Figure 3 offers an overview of the geographic distribution of EU regional transfers, with light grey highlighting denoting regions in the lowest quartile of transfer intensity

<sup>7</sup> It should be noted, however, that very few regions in France receive Convergence Objective funding at all.

<sup>8</sup> The pooled sample consists of 1,091 EU15 NUTS3 regions in the 1994–99 programming period and 1,213 EU25 NUTS3 regions in the 2000–06 programming period. Information is lacking on the French overseas *départements* and on Madeira and Azores for both periods. In the second period, there are 12 regions that cannot be assigned to the 1994–99 data owing to a territorial reform in Saxony-Anhalt. Hence there are in total 2,280 treated and untreated observations. As detailed in note 3 above, in order to obtain annual transfers per GDP, annual transfers are divided by GDP prior to the start of the respective programming period.

Table 3: EU regional transfers and GDP per capita growth in NUTS3 regions

	Mean	Std. dev.	Min.	Max.	Treated obs.
<b>Annual transfers per treated region</b>					
Sample: all regions receiving EU transfers from either Structural Funds or Cohesion Funds budget					
Total EU transfers (mn. Euros)	23.141	49.744	0.00500	778.531	2078
Total EU transfers/GDP (%)	0.759	1.512	0.00009	29.057	2078
Sample: regions receiving EU transfers from the Structural Funds budget under the Objective 1 heading					
Objective 1 transfers (mn. Euros)	52.131	68.869	0.60300	778.531	702
Objective transfers/GDP (%)	1.991	2.103	0.07600	29.057	702
Sample: regions receiving EU transfers from the Cohesion Funds budget					
Cohesion Fund transfers (mn. Euros)	21.479	36.090	0.01800	334.935	363
Cohesion Fund transfers/GDP (%)	0.659	0.950	0.00200	6.338	363
Annual GDP per capita growth	0.042	0.017	-0.03900	0.138	2078

Source: Becker et al. (2012b), Table 1.

and dark grey representing regions in the highest quartile. The maps indicate that in both 1994–99 and 2000–06 the transfer intensity was very large in Southern Europe. While in 1994–99 other peripheral areas of Western Europe (e.g. Ireland and parts of Scotland) also fell in the upper quartile of transfers, the expansion of the EU to

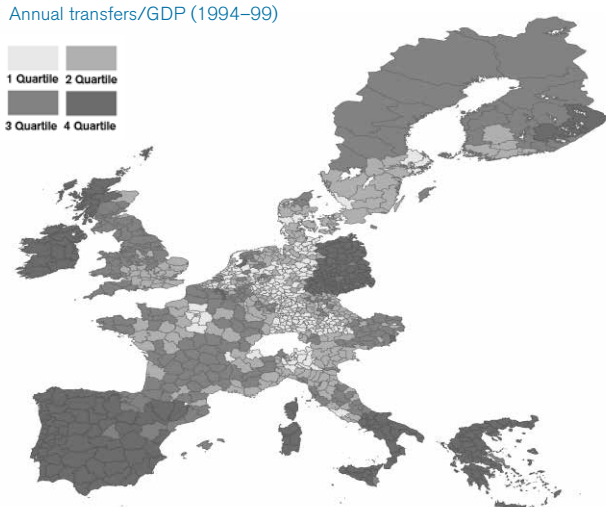
Central and Eastern Europe brought about a shift towards this part of Europe in 2000–06.

In theory, more EU transfers might be expected to generate greater additional growth, but in reality it appears there may well be decreasing returns from investment and investment-stimulating transfers. One argument backing

Figure 3: Geographic distribution of EU regional transfers

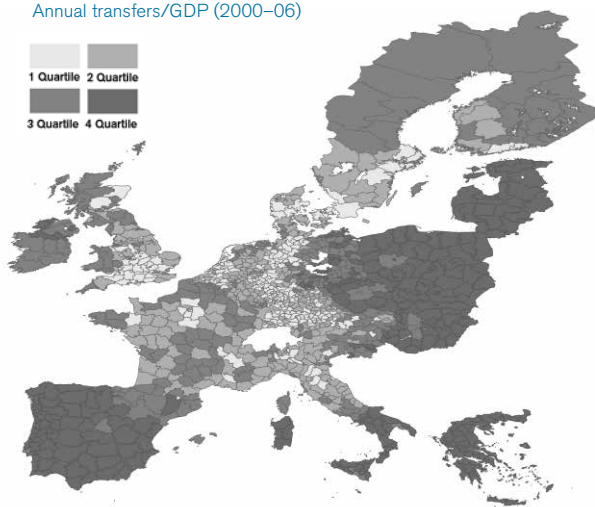
Annual transfers/GDP (1994–99)

1 Quartile 2 Quartile  
3 Quartile 4 Quartile



Annual transfers/GDP (2000–06)

1 Quartile 2 Quartile  
3 Quartile 4 Quartile



Source: Becker et al. (2012b), Figure 1.

Note: The maps indicate the annual transfer intensity (total EU transfers per GDP, by quartile) for the 1994–99 and 2000–06 programming periods.



up this view – and, ultimately, the conclusion that there exists a maximum desirable level of regional transfers – comes naturally from neoclassical production theory and the assumption of diminishing returns (Hirshleifer 1958). Supposing that investment projects are financed and undertaken in the order of their expected returns on investment, then a larger number of investment projects would be associated with a lower return on investments or transfers. If diminishing returns from transfers were relevant, a *maximum desirable level of the treatment intensity* of EU transfers could be identified. Above that level, no additional (or even lower) per capita income growth effects would be generated than at or below that threshold.

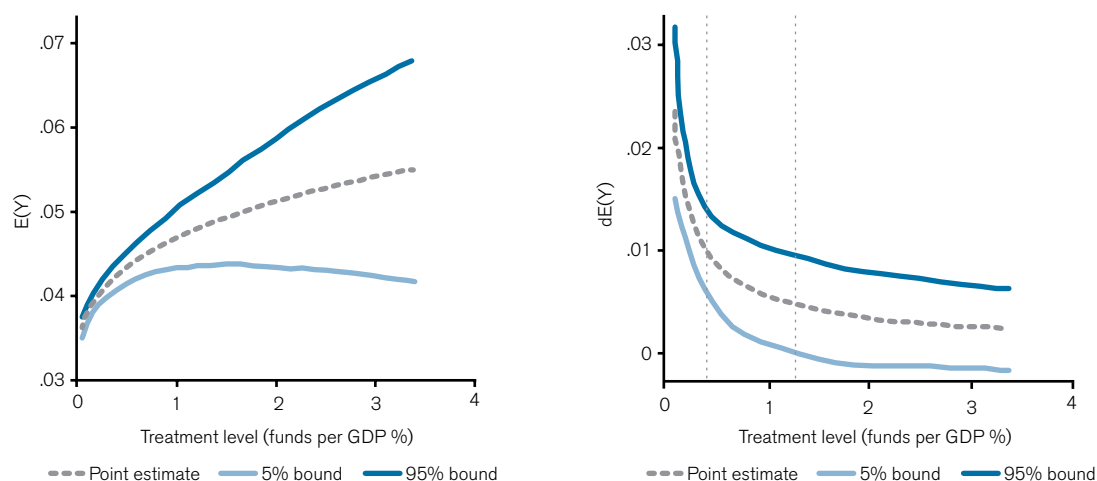
There is a similar argument for a *minimum necessary* level of regional transfers. It is based on the big-push or poverty-trap theory of development, which states that transfers (or aid) have to exceed a certain threshold in order to become effective. There are two primary reasons for such minimum thresholds. First, the marginal product of capital might be extremely low and at levels of infrastructure or human capital that are too small (Sachs et al. 2004). Second, regions lagging behind might be isolated

from other developed regions (Murphy et al. 1989).

In the context of EU Structural Funds, it would be greatly beneficial to pinpoint both a maximum desirable level of treatment intensity and a minimum necessary level of regional transfer intensity. This would lead to significant efficiency gains by cutting transfers above the maximum desirable level and redistributing funds to regions whose transfer intensity is below the optimum level.

The relationship between the transfer intensity (the ‘dose’) and the growth effect can be analysed by way of estimating dose-response functions.<sup>9</sup> Figure 4 shows that, on average, a higher treatment intensity is associated with a faster growth rate. However, the confidence bands plotted around the average response indicate that, beyond a treatment intensity of 1.3%, per capita income growth no longer necessarily leads to additional economic expansion. In other words, beyond this maximum desirable treatment intensity, the null hypothesis of zero (or even negative) growth effects induced by additional transfers can no longer be rejected. This is plotted in the right-hand-side graph in Figure 4, where the *additional* growth effect is plotted against the treatment intensity.

Figure 4: Dose-response function and treatment effect function



Source: Becker et al. (2012b), Figure 4.

<sup>9</sup> Dose-response functions are based on generalized propensity score estimations, which enable comparison of the growth rates of regions that are *ex ante* very similar but receive different amounts of EU transfers. For details of the econometric approach, see Becker et al. (2012b).

About 18% of NUTS3 recipient regions received transfers above the maximum desirable treatment intensity in the programming periods 1994–99 and 2000–06. A reallocation of transfers from those regions, most of them in the periphery of the EU, would therefore not be detrimental, and could well be of benefit to other regions. By contrast, at the lower end of treatment intensity levels, there is no evidence for a big-push theory. Even for low levels of treatment intensity, additional transfers generate a significant amount of additional growth.

## How can the EU's Regional Policy be improved?

The above analysis points to a number of potential policy options within the existing structure of the EU's Regional Policy.<sup>10</sup> First, evidence of a maximum desirable treatment intensity suggests explicitly imposing an upper limit on the transfer intensity to avoid a further waste of resources. The overall Structural Funds budget could then be either reduced or, if the budgeted money is to be spent, given to those recipient regions that are still below the maximum desirable treatment intensity.

Second, in the context of Objective 1 funds, results show that not all recipient regions profit from EU transfers to the same degree. Regions with a poorly educated workforce and those with low levels of government fail to convert transfers into additional growth. In so far as transfers to such regions generate no additional medium-term growth, they could be withheld in full or given to recipient regions with a higher absorptive capacity. The downside, however, is that this might leave regions with a low absorptive capacity in a poverty trap.

Alternatively, the Structural Programme could stipulate that funds be used in a more discretionary fashion than at present to target human capital formation and the development of political as well as administrative institutions (quality of government) in regions that are eligible for transfers. This would help strengthen and broaden the Regional

Competitiveness and Employment Objective (formerly Objective 2) rather than the Convergence Objective. To the extent that both the formation of human capital and institutional change take time – most likely about one generation rather than merely a few years – such a policy shift would not produce any short-term or even medium-term miracles, but it might well make a positive impact by building up absorptive capacity in the longer run.

## Conclusion

Regional policy features high on the agenda of the EU, which tries to achieve convergence of poorer regions of member states to the EU average and backs this goal with substantial transfers to disadvantaged regions. Convergence Objective transfers have, on average, been effective in bringing about additional growth in recipient regions, which is commendable, but there are a number of ways in which the transfer system could be improved.

First, not all regions are equally good at converting Objective 1 transfers into additional growth. Giving untied transfers to regions where the education level of the workforce is below average, or government is of poor quality, is ineffective and a poor use of limited funds.

Withholding transfers from such regions altogether would of course run counter to the aim of achieving convergence, but an alternative would be to tie transfers to investments in education and quality of government in order to build up additional absorptive capacity. This would not only be beneficial to those regions in their own right, but would also enable them to make better use of future transfers.

Second, it is clear that when the transfer intensity exceeds the maximum desirable level, no additional growth is generated by additional transfers. Transfers under the EU's Regional Policy should thus be limited to the maximum desirable level, around 1.3% of a recipient region's GDP.

<sup>10</sup> For a more radical proposal that would return most of the EU's Regional Policy to national control, see Open Europe (2012).

## References

- Becker, S. O., Egger, P. and von Ehrlich, M. (2010), 'Going NUTS: The Effect of EU Structural Funds on Regional Performance', *Journal of Public Economics* 94 (9–10): 578–90.
- Becker, S. O., Egger, P. and von Ehrlich, M. (2012a), 'Absorptive Capacity and the Growth Effects of Regional Transfers: a Regression Discontinuity Design with Heterogeneous Treatment Effects', University of Warwick CAGE Working Paper No. 89.
- Becker, S. O., Egger, P. and von Ehrlich, M. (2012b), 'Too Much of a Good Thing? On the Growth Effects of the EU's Regional Policy', *European Economic Review* 56 (4): 648–68.
- Beugelsdijk, M. and Eijffinger, S. (2005), 'The Effectiveness of Structural Policy in the European Union: an Empirical Analysis for the EU-15 in 1995–2001', *Journal of Common Market Studies* 43: 37–51.
- Boldrin, M. and Canova, F. (2001), 'Europe's Regions – Income Disparities and Regional Policies', *Economic Policy* 32: 207–53.
- Burnside, C. and Dollar, D. (2000), 'Aid, Policies, and Growth', *American Economic Review* 90: 847–68.
- Burnside, C. and Dollar, D. (2004), 'Aid, Policies, and Growth: Revisiting the Evidence', World Bank Policy Research Working Paper No. 3251.
- Cappelen, A., Castellacci, F., Fagerberg, J. and Verspagen, B. (2003), 'The Impact of EU Regional Support on Growth and Convergence in the European Union', *Journal of Common Market Studies* 41: 621–44.
- Charron, N., Lapuente, V. and Dykstra L. (2012), 'Regional Governance Matters: A Study on Regional Variation in Quality of Government within the EU', Working Paper of the EU Commission Directorate-General for Regional Policy, No. 01/2012, [http://ec.europa.eu/regional\\_policy/sources/docgener/work/2012\\_02\\_governance.pdf](http://ec.europa.eu/regional_policy/sources/docgener/work/2012_02_governance.pdf)
- Crafts, N. (2012), *Saving the Eurozone: Is a "Real" Marshall Plan the Answer?*, The CAGE–Chatham House Series, No. 1, June.
- Dalgaard, C.-J., Hansen, H. and Tarp, F. (2004), 'On the Empirics of Foreign Aid and Growth', *Economic Journal* 114: 191–216.
- Duffy, J., Papageorgiou, C. and Perez-Sebastian, F. (2004), 'Capital-skill Complementarity? Evidence from a Panel of Countries', *Review of Economics and Statistics* 86: 327–44.
- Easterly, W. (2003), 'Can Foreign Aid Buy Growth?', *Journal of Economic Perspectives* 17: 23–48.
- Ederveen, S., Gorter, J., de Mooij, R. and Nahuis, R. (2002), 'Funds and Games: The Economics of European Cohesion Policy', CPB & Koninklijke De Swart, Amsterdam.
- Ederveen, S., de Groot, H. and Nahuis, R. (2006), 'Fertile Soil for Structural Funds? A Panel Data Analysis of the Conditional Effectiveness of European Cohesion Policy', *Kyklos* 59: 17–42.
- European Commission (1997), 'Regional Development Studies – The Impact of Structural Policies on Economic and Social Cohesion in the Union 1989–99', Office for Official Publications of the European Commission, Luxembourg.
- European Commission (2001), 'Unity, Solidarity, Diversity for Europe, its People and its Territory – Second Report on Economic and Social Cohesion', Office for Official Publications of the European Commission, Luxembourg.
- European Commission (2007), 'Annex to the 18th Annual Report on Implementation of the Structural Funds (2006)', Commission of the European Communities, Brussels.
- European Commission (2011), 'EU Spending. A Myth-Buster', [http://ec.europa.eu/budget/explained/myths/myths\\_en.cfm](http://ec.europa.eu/budget/explained/myths/myths_en.cfm).
- European Commission (2012a), 'EU Budget 2011 Financial Report', [http://ec.europa.eu/budget/library/biblio/publications/2011/fin\\_report/fin\\_report\\_11\\_en.pdf](http://ec.europa.eu/budget/library/biblio/publications/2011/fin_report/fin_report_11_en.pdf).
- European Commission (2012b), 'EU Cohesion Funding – Key Statistics', [http://ec.europa.eu/regional\\_policy/thefunds/funding/index\\_en.cfm](http://ec.europa.eu/regional_policy/thefunds/funding/index_en.cfm)
- Hirshleifer, J. (1958), 'On the Theory of Optimal Investment Decision', *Journal of Political Economy* 66: 329–52.
- Midelfart-Knarvik, K. and Overman, H. (2002), 'Delocation and European Integration – Is Structural Spending Justified?', *Economic Policy* 17: 323–59.
- Murphy, K.M., Shleifer, A. and Vishny, R.M. (1989), 'Industrialization and the Big Push', *Quarterly Journal of Economics*, 106: 503–30.
- Open Europe (2012), 'Off Target: The Case for Bringing Regional Policy Back Home', Open Europe (10 January).
- Pisani-Ferry, J., Marzinotto, B. and Wolff, G. B. (2011), 'How European Funds can Help Greece Grow', *Financial Times*, 28 July.
- Sachs, J.D., McArthur, J.W., Schmidt-Traub, G., Kruk, M., Bahadur, C., Faye, M. and McCord, G. (2004), 'Ending Africa's Poverty Trap', *Brookings Papers on Economic Activity* 2004: 117–21.
- Sala-i-Martin, X. (1996), 'Regional Cohesion: Evidence and Theories of Regional Growth and Convergence', *European Economic Review*, 40: 1325–52.

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