Extended abstract

EXTENDED ABSTRACT

Title: The within-country spillovers of the European Cohesion policy

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Abstract: The EU allocates considerable financial means to Cohesion policy. Today, it is the second largest item in the budget, after the common agricultural policy, corresponding to around one third of the multiannual financial framework. The objective of the policy is to strengthen economic, social and territorial cohesion. To this end, Cohesion policy supports interventions enhancing the structure of the regional economies, fosters social inclusion and promotes sustainable development, with the aim to reduce disparities in the levels of development between regions.

Cohesion policy is likely to produce important spatial spillovers, with the programmes implemented in a given region having an impact in the rest of the EU. For instance, the economic activity generated by the interventions in the net beneficiaries may lead to an increase in disposable income and, therefore, in imports, some of which could originate from the net contributors. Interventions also increase the competitiveness of the recipients, thereby affecting the spatial distribution of business and factors of production (capital and workers) throughout EU territories. Support to R&D in a particular place enhances innovation whose benefits are known to spread in space, as new knowledge cannot be completely appropriated and to some extent has the properties of public goods.

There are several reasons why we should look at the spillovers generated by Cohesion policy interventions more closely. First, this type of mechanism can have a considerable impact on the cost–benefit balance of the policy. As a result, its impact on the economies of the Member States and their regions cannot be properly assessed without taking spillovers into account. According to recent analysis (e.g. Monfort and Salotti,

2021), more than 15% of the 2007-2013 Cohesion policy impact on EU GDP stemmed from international spillovers. This means that adding up the impact of interventions to specific regions (or countries) would significantly underestimate the effects of the policy at the national (or EU) level.

Second, even if the direct impact of the interventions may be weak in certain types of regions, they may generate important spillovers to the rest of the country or the EU, and at the same time those same regions may benefit from spillover effects originated elsewhere. When identifying the places were the policy investments are the most productive, it is therefore not sufficient to assess their local impact but also consider the spillovers they produce on the rest of the territory.

In this paper, we analyse the impact of the investments related to the European Cohesion policy in the European Union over the most recent programming period, that is 2014-2020 (the 2021-2027 programmes are under discussion at the moment of writing this abstract). We use a spatial dynamic general equilibrium model to identify the direct and indirect effects stemming from a variety of spending categories and economic channels activated by the Cohesion policy funds.

The model that we use is calibrated with data for 267 NUTS 2 regions belonging to the EU 27 plus the United Kingdom. The data are organised as a set of fully integrated EU regional Social Accounting Matrices (SAMs) according to which the model regional economies are disaggregated into ten economic sectors. Firms are assumed to maximise profits and produce goods and services according to a constant elasticity of substitution production function. Transport costs enter the model in iceberg form.

The Cohesion policy investments during the 2014-2020 programming period amounted to more than €355 billion when considering the three main funds of the policy: (i) the European Regional and Development Fund (ERDF), (ii) the European Social Fund (ESF) plus the Youth Employment Initiative (YEI), and (iii) the Cohesion Fund (CF).

Six fields of intervention of the European Cohesion policy are analysed: transport infrastructure, other infrastructure, human capital, research and development, aid to private sector, and technical assistance. The policy interventions are modelled with both demand and supply side shocks exerting short and long run effects, the latter being related to changes in labour productivity, transport costs, and total factor productivity.

The model structure allows conduciveness to different sources of spatial spillovers. The first has to do with interregional and international trade effects. Cohesion policy interventions trigger an increase in activity in the region where they are implemented. This translates into an increase in import demand, both in final goods and services and in intermediate inputs addressed to the other regions. This type of spillover effect will be particularly important for export-intensive regions/countries with intense trade relationships with the policy main beneficiaries. At the same time, a large share of the policy investments are likely to boost the competitiveness of the region where they take place, allowing it to gain market shares at the expense of the other regions.

The second source of spillover relates the fact that the model heavily borrows from economic geography as it incorporates a notion of spatial equilibrium where the

distribution of firms in space is the result of a balance between agglomeration forces (specifically the size of the local markets) and dispersion forces (the extent of competition on the local markets). Cohesion policy interventions in a given place can affect the spatial equilibrium and lead to a change in the location of firms across the entire national or EU space.

Our results show that, besides the short-term impact driven by the demand-side shocks, additional benefits in terms of GDP and employment will continue to materialise after the end of the monetary injections. An important part of the analysis deals with the spillovers which spread the effects of the policy outside the borders of the region in which the investments take place.

Preliminary results show that the existence and the magnitude of the spillover effects generated by the Cohesion policy interventions are different across countries and regions. Region-specific economic characteristics and the nature of the investments are key drivers of the magnitude of the direct effects of the policy. For instance, regions with proportionally higher high skilled labour-capital ratios used in production appear to benefit particularly from investments in human capital and research and development.

Moreover, depending on the amount of spillovers generated, it may be better for a country not to concentrate certain investments in specific regions even if characterised by high returns in the regions themselves. Investing in regions generating large spillovers in the rest of the country may lead to larger country-wide impacts even in the presence of relatively lower region-specific effects.

Our modelling simulations suggest that in the case of Bulgaria, only investments in human capital and in transport infrastructures would generate the largest country-wide impact when targeting the capital city region, while the country-wide impact of all the rest of the Cohesion policy investments would be maximised by investing in the peripheral regions. This finding is driven by the large spillovers generated by investments in the latter regions compared to the smaller ones generated by the European Funds targeting the capital city region. On the other hand, in a country like Romania the impact of Cohesion investments in the capital city region is so large that despite its small spillovers to the rest of the regions, the country-wide impact is the largest when investments take place there. Portugal is another interesting case, as the latter finding is replicated for some types of investments (transport infrastructures, human capital, and research and development), but not for others.

We investigate the determinants of these findings, for instance by uncovering the role played by trade flows in determining the direction and strength of the economic spillovers generated by the EU regional funds, and the role played by the initial economic conditions of the regions in shaping the economic impact of the different types of investments.

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