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DISCUSSION

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DISCUSSION PAPER

// VALENTIN LANG

The Distributional Effects of Place-Based Policies in the EU

The distributional effects of place-based policies in the EU

Valentin Lang*

Abstract: This chapter examines the distributional effects of place-based policies in the EU. In a first step, it characterizes existing income inequalities in the EU and distinguishes between their interregional and intraregional dimensions. A key result is that inequalities within European regions make an important contribution to overall inequality in the EU. Against this background, the chapter then reviews the economic literature on the effectiveness and distributional effects of place-based policies in general and EU regional policy in particular. The evidence from this literature suggests that while place-based policies can reduce inequalities between regions, they tend to increase inequalities within regions. The chapter concludes with a discussion of policy recommendations for EU regional policy that can be derived from these findings.

Keywords: place-based policies, regional inequality, intraregional inequality, European Union (EU)

JEL codes: D31, E24, H72, R11, R23

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1 Introduction

In recent decades, economic activity within many industrialized countries has become increasingly concentrated in some regions, while other regions have seen only little economic growth. From globalization and technological change to agglomeration effects, a whole series of major economic trends have contributed to this development. The resulting regional inequalities bring with them various economic, social and political challenges and in many places, policymakers are responding with place-based policies. The EU Cohesion Policy is one of the most prominent examples and, with almost 400 billion euros in the current funding period from 2021 to 2027, it is also one of the most extensive regional funding programs in the world.

While economic disparities between the EU's regions are considerable, there are also large income disparities within these regions. Many people at risk of poverty live in the richest regions of the EU. And even in the poorest regions of the EU, many residents are wealthy by European standards. Since funding from the EU Cohesion Policy is allocated based on place, the socio-economic background of supported individuals and households plays no role in eligibility. It is therefore possible that such funding primarily reaches the relatively wealthy within the funded regions while the poorer households living there benefit less from it.

While territorial cohesion and the creation of equal living conditions across regions is considered a central objective of regional structural funding, public donors in general and the EU in particular often emphasize the socio-economic dimension of cohesion as a key objective of their regional policy. Until 2020, "promoting social inclusion and combating poverty" was one of eleven "thematic objectives" of EU Cohesion Policy and since 2021, "a more social and inclusive Europe" has been one of five "policy objectives" of the current funding period. Such objectives imply that EU Cohesion Policy should reach people at risk of poverty, particularly the vulnerable and the unemployed. From this perspective, the European Structural and Investment Funds should succeed not only in improving the average economic strength of funded regions, but also in

ensuring that jobs and wage increases reach the lower end of the income distribution. This paper examines the extent to which place-based policies in general and EU Cohesion Policy in particular achieve this goal. The chapter will therefore pay particular attention to the interpersonal distributional effects of interregional transfers.

To this end, the chapter will first characterize both the interregional and intraregional dimensions of income inequality in the EU. Especially in recent years, research in this area has advanced significantly and is now able to put these two dimensions of inequality in relation to each other. The chapter will build on existing economic literature to examine the current state of research on the effectiveness of place-based policies. It will focus primarily on the extent to which such policy measures succeed in achieving the intended distributional effects. Do these regional structural subsidies boost economic development in the subsidized regions? And *who* in these regions benefits from the subsidies? In addition to studying the effectiveness of place-based policies for interregional redistribution and the promotion of regional economic development in the aggregate, the chapter will also focus on intraregional inequality and the mechanisms of how interpersonal distributional effects materialize.

The focus will be on evidence on EU Cohesion Policy; however, the review will also include findings based on the analysis of other place-based policies if these are comparable to EU Cohesion Policy. In general, the chapter will deal with both the theoretical and empirical literature on the topic. A particular focus will be placed on the most recent econometric literature, which allows for causal analytical conclusions. This evidence base will then be used to draw conclusions on how EU Cohesion Policy can be further developed from 2028 onwards to achieve the desired interregional and interpersonal distributional effects as effectively and efficiently as possible.

2 Regional inequality in Europe

This section describes economic inequality in Europe from a regional perspective. It discusses how economic disparities between regions have developed in recent decades and it looks at inequalities within these regions. Building on this, European inequality

can be broken down into its interregional and intraregional components. This facilitates a better understanding of the challenges facing European regional policy in promoting social cohesion across Europe.

a) Interregional inequality

In general, economic research suggests that a number of major economic trends are currently working towards increasing rather than decreasing regional inequality. One such trend is globalization. In many countries it has helped particular industries and the regions in which they are located to achieve major economic growth (Topalova and Khandelwal 2011, Felbermayr and Gröschl 2013; Lang and Mendes Tavares 2023). At the same time, globalization brings about import competition, which poses major challenges for other regions (Autor, Dorn, and Hanson 2013; Pierce and Schott 2016). Formerly successful industries in advanced economies that are exposed to such import competition are often unable to keep up with competitors from emerging economies that produce at lower costs. Classic examples of this trend are the American Rust Belt or the former industrial strongholds of the United Kingdom. Globalization thus leads to rising average incomes, but also to greater income inequality (Lang and Mendes Tavares 2023). The simultaneity of globalization-driven booms in some regions and "import shocks" in others tends to lead to increasing regional disparities.

The structural change towards a knowledge economy has similar regionally asymmetric effects. Many better-paid professions in modern knowledge economies now require long and intensive training. Driven by technological change, digitization and automation, jobs in the manufacturing sector are declining and new jobs are being created in knowledge-intensive sectors such as high-tech and modern services (Acemoglu and Restrepo 2018; Ehrlich and Overman 2020; Moll, Rachel, and Restrepo 2021). At the same time, well-educated workers are now much more likely to move to urban and metropolitan regions than to the countryside. This is the case in 25 out of 26 OECD countries. And in 19 out of 25 countries, the urban-rural divide in the proportion of those with tertiary education has increased further over the last decade

(Moretti 2012, 2022; OECD 2023; Südekum 2021). Both classic agglomeration effects and the fact that companies in cities often find a more suitable workforce to increase their productivity mean that the economy in cities and metropolitan regions often grows faster than in rural regions (Dauth et al. 2022).

In view of these developments, it is not surprising that a trend towards greater regional inequality can be observed in many countries. For example, the OECD (2023) recently published a study showing that 15 out of 27 OECD countries surveyed with sufficient data have recorded an increase in regional inequality over the last two decades. An increase in regional inequality can be observed in Belgium, Denmark, France, Sweden, the UK, Estonia, Italy, Japan, the USA, the Czech Republic, Hungary, Lithuania, Poland, Slovakia, and Slovenia. A decrease can be seen in Finland, Norway, Latvia, Turkey, Greece, Portugal, Austria, Germany, the Netherlands, Korea, New Zealand, and Spain. Bauluz et al. (2023), who focus on wage inequality between labor market regions since the 1970s, find a slight decline in France and increases in Germany, Canada, the United Kingdom, and the USA. This increase in regional inequality is particularly pronounced in the USA, a finding also highlighted by Gaubert et al. (2021). For the EU as a whole, von Ehrlich and Overman (2020), who examine GDP in NUTS3 regions, show a constant trend for the EU-28 and a slight increase for the EU-15 since the 2000s.

It should therefore be noted that trends in regional inequality differ from country to country and that the results depend on the operationalization of key concepts (regional unit, income concept, inequality measure, etc.). All in all, increases in interregional inequality can currently be observed more frequently than decreases.

b) Intraregional inequality

In view of the findings of rising regional inequality in many countries, it might seem obvious to design policies that combat inequality between regions by redistributing from wealthy to less wealthy regions. However, it is first necessary to take a look inside the regions. How much of the overall inequality results from inequality *between*

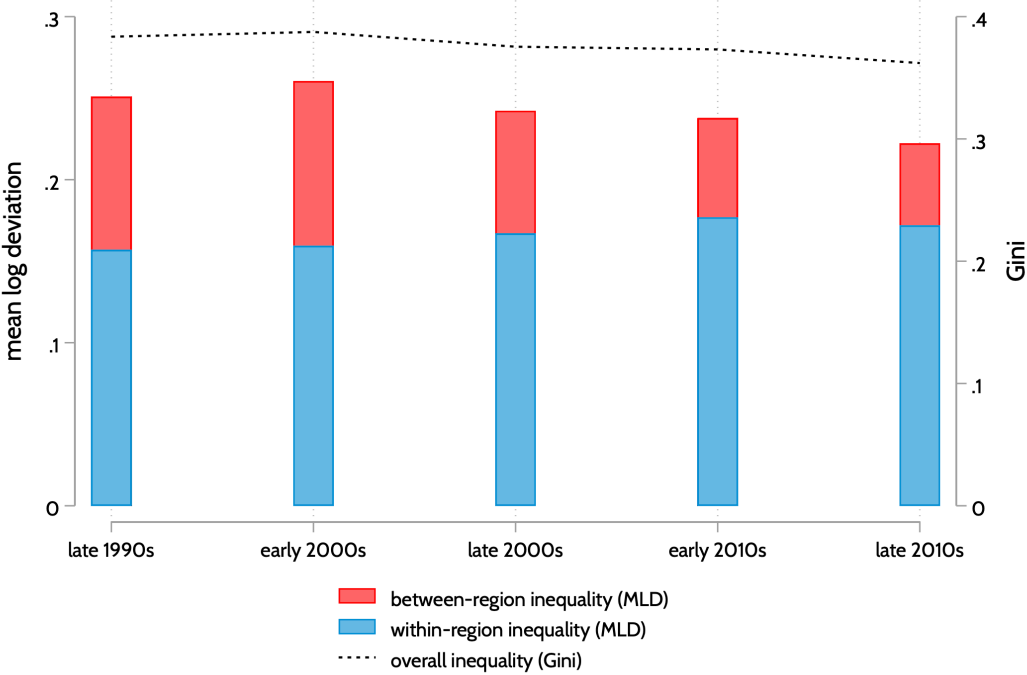
regions? How unequally distributed are incomes *within* regions? Is poverty more concentrated in poorer than in wealthier regions?

Before these questions can be answered, it should be noted that the evidence base on this question is much more limited than the evidence on inequality between regions. The reason is obvious: while interregional inequality can be studied with aggregate regional data, analyzing intraregional inequality requires household-level or individual-level data with a sufficient number of data points for each region to calculate intraregional inequality measures. Until recently, such evidence was only available for a couple of countries: For the United Kingdom, Gibbons et al. (2014) find that inequality between labor market regions explains about 6 percent of British inequality. For Italy, Briskar et al. (2022) state that inequality between Italian provinces accounts for less than four percent of total Italian inequality. For France, Combes et al. (2008) use a slightly different method to find that interregional inequality contributes 13 percent to overall French wage inequality. With such studies on individual countries it is difficult to meaningfully compare across countries because they use different methods, data sources and territorial units.

More recently, a number of studies have examined intraregional inequality across several countries and put it in relation to interregional inequality. All of these studies find that inequality between regions only explains a very small proportion of overall inequality. For example, Bauluz et al. (2023) examine wage data within small labor market regions for five Western democracies and find that inequality between regions contributes between 3 (Canada and Germany) and 7 percent (United Kingdom) of total inequality. France and the USA rank in between with 4 and 5 percent, respectively. Inequality within regions accounts for the remaining share of more than 90 percent. Königs et al. (2023) come to a similar conclusion for Austria, Belgium, Hungary, Italy, and Slovakia: in all these countries, the authors find that inequality between regions contributes less than 5 percent to overall inequality. While these two studies calculate shares of national inequality, Lang et al. (2023) examine intraregional and interregional inequality within the EU as a whole. Using a slightly different method and larger

regional units, this study also confirms that interregional inequality only makes a small contribution to overall European inequality. In addition, a comparison over time shows that the share of interregional inequality has tended to decrease from the 1990s to the present day, and that intraregional inequality is thus making an increasingly large contribution to inequality within the EU (see Figure 1).

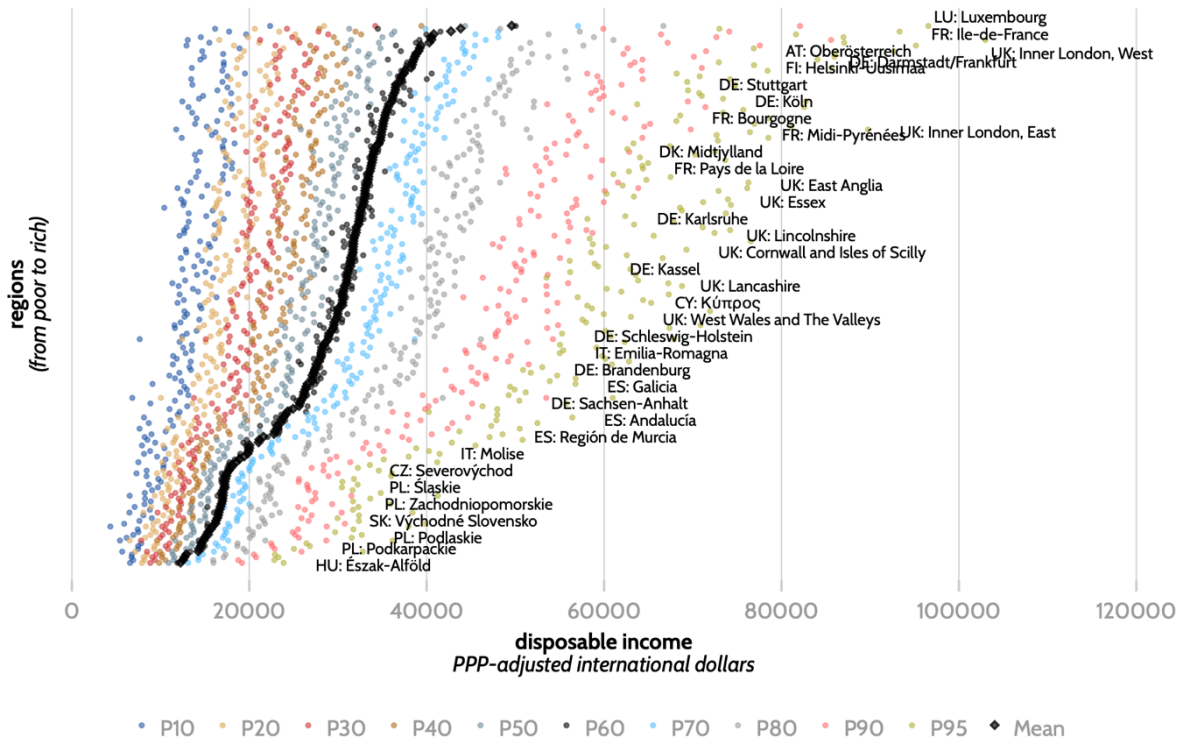
Figure 1 - Inequality within and between EU regions



The figure decomposes European inequality into its interregional and its intraregional component. Source: Lang, Redeker, Bischof (2023).

To visualize this inequality within EU regions, Figure 2 shows the annual equivalized disposable household income for different percentiles of the intraregional income distributions of EU regions based on Lang et al. (2023: 8). The regions are ranked according to average income. Notably, Figure 2 shows that the poorest groups in richer EU regions are poorer than middle segments in poorer EU regions. At the same time, there are many households with relatively high incomes in relatively poor regions. These data underline the consistent finding within the existing body of literature that inequality between regions accounts for only a small proportion of overall inequality.

Figure 2 - Inequality in the EU



The figure shows the annual disposable household equivalent income for different percentiles of the intraregional income distribution within the EU. Source: Lang, Redeker, Bischof (2023: 8).

This result has implications for the distributional effects of regional structural funds. If inequality across the regional units between which financial resources are redistributed only accounts for a small proportion of overall inequality, then the redistributive effects of such policy measures are limited. Whether place-based policies reduce not only interregional but also interpersonal inequality – thereby contributing to the often-desired goal of poverty reduction – is thus not guaranteed. This crucially depends on how structural support affects people with different income levels within the regions. This question is the focus of the following sections.

3 Objectives of place-based policies

Generally speaking, place-based policies are designed to correct certain types of market failure. Based on Duranton and Venables (2018) and Juhasz, Lane and Rodrik (2023), three different types of market failure can be distinguished as justifications for such policy measures:

1. Externalities of regional inequality. Structurally weak regions are often characterized not only by low productivity, low wages, and high unemployment, but often also suffer from the social and political consequences of this. These include crime (Pierce and Schott 2017), an underfunded public sector that has deficiencies in providing public goods (Charles, Hurst, and Schwartz 2018), political extremism (Colantone and Stanig 2018, Autor et al. 2020), and the fact that people who grow up in such regions are less productive throughout their lives than people who grow up in structurally strong regions (Chetty et al. 2016, Chyn and Katz 2020).
2. Coordination failures. Certain economic sectors only establish themselves locally if complementary economic sectors are also present. Under certain circumstances, this can lead to equilibrium results in which neither of the two economic sectors establishes itself locally, although both would have a chance in doing so provided that the other was already present. With regional structural policy, this bad equilibrium can be avoided by using incentives, and the socially optimal equilibrium in which both economic sectors settle locally can be achieved (Juhasz, Lane and Rodrik 2023).
3. Local public goods. Many sectors require input factors that require public funding (Juhasz, Lane and Rodrik 2023). Infrastructure, education, housing, an attractive environment, employment agencies and effective public administration are examples of this. Against this background, regional structural policy can also contribute to local growth by taking care of the

provision of such public input factors and focusing particularly on those that are important for local economic sectors.

The basic idea behind regional structural policy is therefore to solve these different types of market failures. To this end, it either promotes public projects or uses public funds to create incentives for the private sector to become more active in the regions receiving support. If this is successful, local economic growth should pick up. The following section provides an overview of the current state of research on the effectiveness of such policy measures. It focusses on empirical literature and on contributions analyzing EU regional policy.

4 Evidence on the effectiveness of structural policy

Most studies initially look at the direct effect of regional structural support on regional growth. While older literature was often skeptical about such an effect, more recent economic literature contains a large number of studies that identify positive growth effects (for reviews, see: Neumark and Simpson 2014, Duranton and Venables 2018). Kline and Moretti (2014), for example, find positive growth effects of the Tennessee Valley Authority program in the USA. Criscuolo et al. (2019) identify similarly positive effects of the Regional Selective Assistance (RSA) program in the United Kingdom. Von Ehrlich and Seidel (2018) document positive income effects of the place-based support for a special region in Germany. Siegloch et al. (2023) analyze the “Joint Task for the Improvement of Regional Economic Structures (GRW)” in Germany and also document positive local welfare gains. With regard to EU regional policy, several studies identify significant positive growth effects (Becker, Egger, Ehrlich 2010; 2013; 2018; Mohl and Hagen 2010; Pellegrini et al. 2013; Giua 2017; Bachtrögler-Unger et al. 2022, Lang et al. 2023). Other studies show insignificant or very small effects, but they make up the minority of literature in this field (Fagerberg and Verspagen 1996; Dall'Erba and Le Gallo 2008; Dall'Erba and Fang 2017).

There is also some evidence that job gains go hand in hand with these growth gains. The previously cited studies by Criscuolo et al. (2019), Kline and Moretti (2014) and

Siegloch et al. (2023) all find positive effects on local employment rates. With regard to EU Cohesion Policy, Becker, Egger, Ehrlich (2010), Giua (2014; 2018) and Lang et al. (2023) provide empirical evidence of job creation in the supported regions. At firm-level, Bachtrögler-Unger et al. (2020) and Cerqua and Pellgrini (2022) also find such effects of EU Cohesion Policy.

Conversely, evidence on whether regional policy not only creates jobs but also increases productivity is less clear. Criscuolo et al. (2019), for example, find no effect of the British RSA on total factor productivity (TFP). Brachert et al. (2019) also see no productivity gains from the German GRW. Both Albanese et al. (2020) and Bachtrögler et al. (2020) analyze EU Cohesion Policy in this context and find relatively small effects on TFP in certain local contexts. In contrast, Kline and Moretti (2014) and Garin and Rothbaum (2024) report positive effects on productivity.

The two latter studies also confirm long-term positive and persistent economic effects of regional funding. However, the two regional policy measures considered in these analyses are quite large in scale. In the context of EU regional policy, where funding amounts are often significantly lower in relation to local economic output, the evidence tends to indicate that positive effects can only be observed for the period of funding: When regions lose access to EU funding (such as Abruzzo in Italy or South Yorkshire in the UK), it is found that higher growth rates can only be observed for the period of active funding (Barone, David, de Blasio 2016; Di Cataldo 2017). Becker et al. (2018) and Lang et al. (2023) also look at regions that lose EU structural funds and do not find persistently higher growth rates in the longer term, but rather a decline after the funding ends. Cerqua and Pellegrini (2021), on the other hand, find positive long-term effects only in subsamples and not on average.

In sum, positive economic effects are found for a whole range of regional structural policies. Growth rates in supported regions are increasing and jobs are created in many cases. Some particularly extensive regional measures also appear to have a longer-term impact on local productivity. For many other regional policy measures, however,

such long-term and productivity-enhancing effects have hardly been identified to date.

5 Heterogeneous effects of place-based policies

While such average effects indicate that regional support programs can reduce interregional inequality, this leaves open the question of who benefits from them under which circumstances and whether they can also reduce interpersonal inequality and poverty. Studies that look at the heterogeneous effects of regional structural policy can provide an initial indication of this.

The average level of education in a region appears to play an important role. Becker et al. (2013), for example, find that positive growth effects can only be found in regions with a high level of human capital. Other authors find stronger positive effects in regions with a higher population density (Albanese et al. 2020) or in suburban areas near metropolitan areas (Gagliardi and Percoco 2017); in Europe, these areas are usually those with a higher level of education. These findings could indicate that regional structural support is particularly beneficial to workers with a certain level of education.

The role of local institutions is also considered in the literature. Ederveen et al. (2006) argue that EU regional policy requires a functioning institutional framework and that without this it remains largely ineffective. Since regional administrations play an important role in the allocation and administration of regional funding such as EU Cohesion Policy, an efficient and well-trained public administration is a key prerequisite for effective regional funding. Inefficient and poorly managed institutions in particular are likely to select more ineffective projects and are more likely to suffer from corruption and rent-seeking and therefore make poorer allocation decisions (Accetturo, de Blasio, and Ricci 2014; de Angelis, de Blasio, and, Rizzica 2018). Some studies do indeed find stronger positive effects in regions with higher quality local institutions (Albanese et al. 2020, Becker et al. 2013). The empirical result of Crescenzi and Giua (2020) also supports this finding, as the authors find that the positive

economic effects of EU Cohesion Policy are largely driven by German and British regions. From the perspective of development economics, such results are not surprising. In this literature, it has long been argued that development cooperation is more effective under better institutional and political conditions (Burnside and Dollar 2000, Svensson 2002).

What does this imply for the interpersonal distributional effects of regional structural policy? In most countries and within the EU, a strong correlation can be observed between the quality of public administration and economic strength. Taken together, this would mean that regional structural policy faces the greatest institutional challenges and has the least chance of success in the economically weakest regions, where most poor and unemployed people live.

The connection between local economic conditions and the effectiveness of regional structural policy has also been studied directly, albeit much less frequently. In this context, the research results are somewhat more optimistic with regard to the possibility of reaching structurally weaker regions. Di Cataldo and Monastiriotis (2020) and Bachtrögler et al. (2020) even find stronger effects of EU Cohesion Policy in low-income regions in some cases. Austin et al. (2018) and Bartik (2020) also argue that structural support should focus on the regions with the highest unemployment rates because it can be more effective there. This argument is in line with the Keynesian idea that public spending is particularly effective when labor is not fully utilized as a production factor. Under these conditions, as this line of argument goes, public funding – for example as part of a place-based policy – is more likely to provide an incentive to use this locally underutilized factor of production, thereby reducing local unemployment (Chodorow-Reich 2019).

Overall, research on the heterogeneous effects of regional structural support does not allow us to draw a clear conclusion as to what interpersonal distributional effects can be expected from it. Although structural policy could be more effective in the context of low incomes and high unemployment rates, the same regions often also suffer from

lower levels of education and inefficient administrations, which are expected to undermine the effectiveness of structural policy.

6 Intraregional effects

Up to this point, regions supported by place-based policies have been considered as aggregates. This allows conclusions to be drawn about the question in what regions structural policies are most likely to be effective. However, what findings emerge when we look into the regions and disaggregate economic units within them? Which distributional effects can be identified?

The intraregional distributional effects of regional structural policies depend on which segments of the local economy benefit from them. These economic segments can be analytically differentiated in different ways.

Firstly, a distinction can be made between the production factors of labor and capital. Since capital owners have, on average, higher incomes than workers, differential effects in this context would have clear distributional consequences. Do the gains in local economic output promoted by structural policy primarily go to workers or to owners of capital? The partly positive effects on the number of local jobs indicate at least some gains for the labor factor. However, the factor capital could record even greater gains. According to a prominent argument, in the case of an inelastic supply of local real estate, a large part of the gains for workers will benefit property and capital owners due to increasing rents and real-estate prices (Bartik 2020). Freedman (2013) provides evidence of this effect in the context of “enterprise zones” in Texas. Similarly, it is unclear how financial subsidies for companies that create jobs are distributed within the companies. Do management compensation and the volume spent on share buybacks, dividends and profits increase within the company at the same time? If companies have (local) market power, they can keep wages low and generate higher profits (Azar et al. 2017, Autor et al. 2020). This would tend to benefit the owners of capital. Empirical evidence shows, for example, that capital-intensive sectors benefit more from special economic zones than labor-intensive sectors (Lu et al. 2019). At the

company level, however, Benkovskis et al. (2019) find the opposite result for funding from the EU's European Regional Development Fund (ERDF): EU regional policy tends to increase productivity in companies that are less capital-intensive.

A second important analytical differentiation is to compare different economic sectors and look at how the positive effect of place-based policies varies between them. There are good reasons to focus regional structural policy on export-oriented industries and high-tech sectors. In these sectors, one can hope for stronger productivity gains and larger job multipliers (Bartik 2020). Particularly in sectors that rely on local suppliers, the expansion of production in one company can also create jobs in downstream suppliers via spillover effects (Bartik 2020). However, if job and wage growth is primarily concentrated in such particularly productive sectors, it is less likely that the economic stimulus will also reach the lower end of the local income distribution to the same extent. This would only be the case if spillover effects also have an impact on other sectors. Siegloch et al. (2023) document such spillover effects, at least for the case of the German GRW. Here, one job in the manufacturing sector leads to around 0.5 jobs in the retail and construction sectors.¹ This effect size corresponds closely to the estimates of Bartik and Sotheland (2019), who find average "local job multipliers" of jobs in export-oriented firms between 1.3 and 1.7 (i.e., 0.3 to 0.7 additional jobs in other sectors per job). From this perspective, place-based policies that create jobs in productive sectors also reach lower income classes via a spillover effect; however, for multipliers smaller than 2 as in this case, the relatively larger increase in income is nevertheless to be expected at the upper end of the local income distribution. Furthermore, it is unclear who will take on newly created jobs. If employees move from non-subsidized regions or commute from these regions to the subsidized region for newly created local jobs, local job gains are not necessarily synonymous with a decline in the absolute number of unemployed in subsidized regions.

¹ However, Falck et al. (2019) do not find any such spillover effects for another German regional policy, "Innovative regional growth cores".

Another analytical distinction concerns the type and size of companies that benefit from regional structural support. Public donors often aim to support small and medium-sized enterprises. The EU also emphasizes this goal. However, empirical analyses of EU Cohesion Policy show that on average larger companies receive more EU structural aid than smaller ones (Bachtrögler-Unger et al. 2020, Benkovskis et al. 2019). As larger companies are often more productive, more export-oriented, pay higher wages and are more likely to have market power, it is natural to expect that these companies might use the funding in different ways than smaller and medium-sized companies. Evidence for this is provided by Criscuolo et al. (2019). They find, for example, that the RSA regional policy in the UK only led to more jobs for smaller companies. Larger firms accepted the subsidy without measurably changing their economic activities. La Point and Sakabe (2021) also find a difference between smaller and larger companies with multiple production sites. The structural subsidy that these authors analyze led to more jobs, but the number of jobs created was six times greater in locations of the same firms that were not located in the subsidized region. These results indicate that large companies may not use the subsidies solely for the intended purposes.

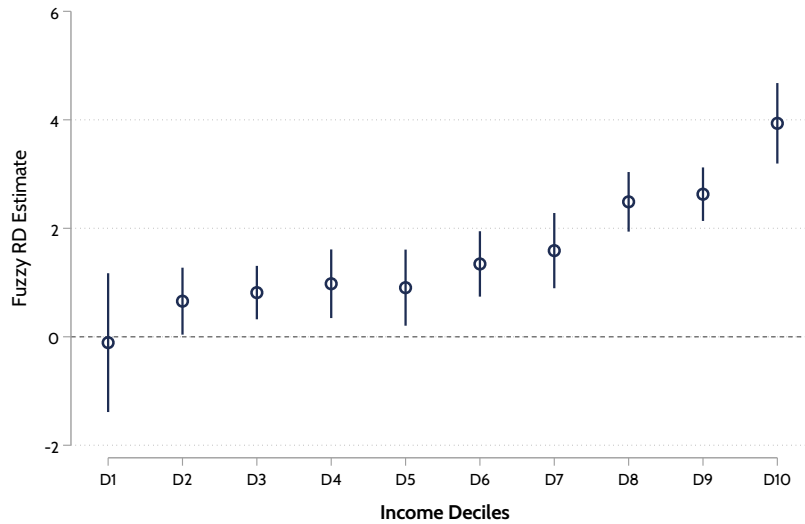
Taken together, there are both theoretical reasons and empirical evidence that regional structural promotion does not have the strongest effects on the lowest-income segments of the supported regions. The discussed differences in distributional effects between production factors (labor vs. capital), between sectors (export-oriented industry vs. local economic sectors) and between companies (large vs. small) even point in the opposite direction: place-based policies may well bring greater income gains for the wealthier groups of the supported regions.

To date, little research has explicitly investigated the question of intraregional distributional effects. There are four notable studies: Reynolds and Rohlin (2015) find that a US regional policy (the "federal empowerment zones") did not bring about any economic improvement for impoverished households. Instead, higher-income households have benefited significantly from it. Picarelli (2016) analyzes "export

processing zones" in Nicaragua and also confirms stronger effects at the upper end of the income distribution. In addition, there are two studies on EU regional policy. Albanese et al. (2023) study the reduction of EU structural funds in an Italian region and observe a decrease in inequality in this region after the funds were cut. Lang et al. (2023) analyze the overall income distribution in funded regions of the EU and find that income increases for richer households are significantly larger than income increases for poorer households. As a result, intra-regional inequality increases in these regions. Figure 3 illustrates the estimated effects of the study and shows that the incomes of the richer deciles of the intraregional income distribution benefit significantly more from the place-based policy than lower income classes. The analysis of channels in Lang et al. (2023) suggests that better-educated people in particular benefit more from the EU structural funds. As far as long-term effects are concerned, there is no empirical evidence in these studies to suggest that any second-round effects would counteract these distributional effects.

It should be noted that to date there is overall little evidence on the intraregional distributional effects of regional structural support. However, the existing research results suggest that income increases through regional structural support are somewhat stronger at the upper end of the local income distribution. Poorer households do not suffer any measurable economic damage from the place-based support, but do not benefit as much as richer households.

Figure 3 - Effects of EU Cohesion Policy for different income groups



The figure shows the estimated effects of EU Cohesion Policy for different income groups of the intraregional income distribution in assisted regions. Source: Lang et al. (2023: 23).

7 Conclusions and policy recommendations

A number of conclusions can be drawn from the current state of research on the distributional effects of place-based policies. Under certain conditions, place-based policies succeed in stimulating economic growth in the regions receiving support. Among other things, this promotes local investments and creates jobs. The average income level of the funded regions increases. At the same time, however, there is little evidence to suggest that supported regions record long-term productivity gains. Nevertheless, these income gains can reduce inequality between regions. Importantly, this is not synonymous with a reduction in overall inequality, because income inequality within the regions contribute more to overall inequality than inequality across regions. Regional structural funding has been shown to have a regressive rather than a progressive effect on such intraregional inequality, as people at the upper end of the income distribution in the funded regions usually benefit more from the funding than those at the lower end.

How can European regional policy be reformed to address the interpersonal dimension of inequality and thus promote social cohesion in addition to territorial cohesion? Firstly, the support provided should be more targeted. If the political goal is to particularly support vulnerable households, the current allocation based on the European NUTS2 level is clearly too coarse. The size of NUTS2 regions means that even relatively affluent areas within these regions receive funding. An allocation at the NUTS3 level or at an even smaller scale would make the funds more targeted. This could also enhance the efficiency of the funds, as structural policy can be more effective in the context of lower wages and higher unemployment. With this more targeted approach, European structural funding could concentrate on a smaller number of low-income regions and in these regions provide larger per capita amounts, which would be a more effective way of improving the situation of vulnerable households.

Secondly, if the political goal is to maximize the economic efficiency of the funds used, care should be taken to ensure that the subsidies actually create jobs. This is most likely to succeed if the policy supports industries from which large job multipliers can be expected, for example in export-oriented sectors. At the same time, smaller companies should be given preference over larger companies because evidence suggests that larger companies tend to use the subsidies for purposes other than creating local jobs.

Thirdly, the potential of place-based policies to reduce interpersonal inequality is limited. This is partly because inequality within regions contributes more to overall income inequality than inequality between regions. And it is partly because it is difficult to provide targeted support to low-income groups within the funded regions as long as eligibility is defined exclusively on a regional basis. Place-based policies alone will therefore hardly achieve the goal of social cohesion in the EU. A stronger focus on investments in public social infrastructure can help to create more equal living conditions regionally. However, if the political goal is to reduce interpersonal income inequality in the EU, European regional policy would have to be combined with a *"people-based policy"* that defines eligibility based on socio-economic characteristics of individuals.

8 References

- Accetturo, Antonio, Guido de Blasio, and Lorenzo Ricci. 2014. "A Tale of an Unwanted Outcome: Transfers and Local Endowments of Trust and Cooperation." *Journal of Economic Behavior & Organization* 102: 74–89. <https://doi.org/10.1016/j.jebo.2014.03.015>.
- Acemoglu, Daron, and Pascual Restrepo. 2018. "The Race Between Man and Machine: Implications of Technology for Growth, Factor Shares, and Employment." *American Economic Review* 108 (6): 1488–1542. <https://doi.org/10.1257/aer.20160696>.
- Albanese, Giuseppe, Guglielmo Barone, and Guido de Blasio. 2023. "The Impact of Place-based Policies on Interpersonal Income Inequality." *Economica* 90 (358): 508–30. <https://doi.org/10.1111/ecca.12465>.
- Albanese, Giuseppe, Guido de Blasio, and Andrea Locatelli. 2020. "Does EU Regional Policy Promote Local TFP Growth? Evidence from the Italian Mezzogiorno." *Papers in Regional Science* 100 (2): 327–49. <https://doi.org/10.1111/pirs.12574>.
- Angelis, Ilaria de, Guido de Blasio, and Lucia Rizzica. 2018. "On the Unintended Effects of Public Transfers: Evidence from EU Funding to Southern Italy." Bank of Italy Temi di Discussione (Working Paper) 1180.
- Austin, Benjamin, Edward Glaeser, and Lawrence Summers. 2018. "Jobs for the Heartland: Place-Based Policies in 21st Century America." *Brookings Papers on Economic Activity*, no. 1: 151–255. <https://doi.org/10.1353/eca.2018.0002>.
- Autor, David, David Dorn, Gordon Hanson, and Kaveh Majlesi. 2020. "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure." *American Economic Review* 110 (10): 3139–83. <https://doi.org/10.1257/aer.20170011>.
- Autor, David H., David Dorn, and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review* 103 (6): 2121–68. <https://doi.org/10.1257/aer.103.6.2121>.
- Azar, José, Ioana Marinescu, and Marshall I. Steinbaum. 2017. "Labor Market Concentration." NBER Working Paper 24147. <https://doi.org/10.3386/w24147>.
- Bachtrögler-Unger, Julia, Ugo Fratesi, and Giovanni Perucca. 2020. "The Influence of the Local Context on the Implementation and Impact of EU Cohesion Policy." *Regional Studies* 54 (1): 21–34. <https://doi.org/10.1080/00343404.2018.1551615>.
- Bachtrögler-Unger, J., Dolls, M., Krolage, C., Schüle, P., Taubenböck, H., & Weigand, M. 2023. EU cohesion policy on the ground: Analyzing small-scale effects using satellite data. *Regional Science and Urban Economics*, 103, 103954.
- Barone, Guglielmo, Francesco David, and Guido de Blasio. 2016. "Boulevard of Broken Dreams. The End of EU Funding (1997: Abruzzi, Italy)." *Regional Science and Urban Economics* 60:31–38. <https://doi.org/10.1016/j.regsciurbeco.2016.06.001>.
- Bartik, Timothy J. 2020. "Using Place-Based Jobs Policies to Help Distressed Communities." *Journal of Economic Perspectives* 34 (3): 99–127. <https://doi.org/10.1257/jep.34.3.99>.

- Bartik, Timothy J., and Nathan Sotherland. 2019. "Local Job Multipliers in the United States: Variation with Local Characteristics and with High-Tech Shocks." Upjohn Institute Working Paper 19-301. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3379722.
- Bauluz, Luis, Pawel Bukowski, Mark Fransham, Annie Seong Lee, Margarita López Forero, Filip Novokmet, Sébastien Breau et al. 2023. "Spatial Wage Inequality in North America and Western Europe: Changes Between and Within Local Labour Markets 1975-2019." *CEP Discussion Papers* (CEPDP1941). <https://eprints.lse.ac.uk/121290/>.
- Becker, Sascha O., Peter H. Egger, and Maximilian von Ehrlich. 2010. "Going NUTS: The Effect of EU Structural Funds on Regional Performance." *Journal of Public Economics* 94 (9-10): 578–90. <https://doi.org/10.1016/j.jpubeco.2010.06.006>.
- Becker, S. O., Egger, P. H., & von Ehrlich, M. 2013. Absorptive Capacity and the Growth Effects of Regional Transfers: A Regression Discontinuity Design with Heterogeneous Treatment Effects. *American Economic Journal: Economic Policy*, 5(4), 29–77.
- Becker, Sascha O., Peter H. Egger, and Maximilian von Ehrlich. 2018. "Effects of EU Regional Policy: 1989-2013." *Regional Science and Urban Economics* 69:143–52. <https://doi.org/10.1016/j.regsciurbeco.2017.12.001>.
- Beņkovskis, Konstantīns, Oļegs Tkačevs, and Naomitsu Yashiro. 2019. "Importance of EU Regional Support Programmes for Firm Performance." *Economic Policy* 34 (98): 267–313. <https://doi.org/10.1093/epolic/eiz003>.
- Brachert, Matthias, Eva Dettmann, and Mirko Titze. 2019. "The Regional Effects of a Place-Based Policy – Causal Evidence from Germany." *Regional Science and Urban Economics* 79:103483. <https://doi.org/10.1016/j.regsciurbeco.2019.103483>.
- Burnside, Craig, and David Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90 (4): 847–68. <https://doi.org/10.1257/aer.90.4.847>.
- Cerqua, A., & Pellegrini, G. 2023. "I will survive! The impact of place-based policies when public transfers fade out." *Regional Studies*, 57(8), 1605–1618. <https://doi.org/10.1080/00343404.2022.2136370>
- Charles, Kerwin Kofi, Erik Hurst, and Mariel Schwartz. 2019. "The Transformation of Manufacturing and the Decline in US Employment." *NBER Macroeconomics Annual* 33:307–72. <https://doi.org/10.1086/700896>.
- Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review*, 106 (4): 855-902.
- Chodorow-Reich, Gabriel. 2019. "Geographic Cross-Sectional Fiscal Spending Multipliers: What Have We Learned?" *American Economic Journal: Economic Policy* 11 (2): 1–34. <https://doi.org/10.1257/pol.20160465>.
- Chyn, Eric, and Lawrence F. Katz. 2021. "Neighborhoods Matter: Assessing the Evidence for Place Effects." *Journal of Economic Perspectives*, 35 (4): 197-222.

- Colantone, Italo, and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science* 62 (4): 936–53. <https://doi.org/10.1111/ajps.12358>.
- Combes, Pierre-Philippe, Gilles Duranton, and Laurent Gobillon. 2008. "Spatial Wage Disparities: Sorting Matters!". *Journal of Urban Economics* 63 (2): 723–42. <https://doi.org/10.1016/j.jue.2007.04.004>.
- Crescenzi, Riccardo, and Mara Giua. 2020. "One or Many Cohesion Policies of the European Union? On the Differential Economic Impacts of Cohesion Policy Across Member States." *Regional Studies* 54 (1): 10–20. <https://doi.org/10.1080/00343404.2019.1665174>.
- Criscuolo, Chiara, Ralf Martin, Henry G. Overman, and John van Reenen. 2019. "Some Causal Effects of an Industrial Policy." *American Economic Review* 109 (1): 48–85. <https://doi.org/10.1257/aer.20160034>.
- Dall'erba, Sandy, and Fang Fang. 2017. "Meta-Analysis of the Impact of European Union Structural Funds on Regional Growth." *Regional Studies* 51 (6): 822–32. <https://doi.org/10.1080/00343404.2015.1100285>.
- Dall'erba, Sandy, and Julie Le Gallo. 2008. "Regional Convergence and the Impact of European Structural Funds over 1989–1999: A Spatial Econometric Analysis." *Papers in Regional Science* 87 (2): 219–45. <https://doi.org/10.1111/j.1435-5957.2008.00184.x>.
- Di Cataldo, Marco. 2017. "The Impact of EU Objective 1 Funds on Regional Development: Evidence from the U.K. And the Prospect of Brexit." *Journal of Regional Science* 57 (5): 814–39. <https://doi.org/10.1111/jors.12337>.
- Di Cataldo, Marco, and Vassilis Monastiriotis. 2020. "Regional Needs, Regional Targeting and Regional Growth: An Assessment of EU Cohesion Policy in UK Regions." *Regional Studies* 54 (1): 35–47. <https://doi.org/10.1080/00343404.2018.1498073>.
- Duranton, Gilles, and Anthony Venables. 2018. "Place-Based Policies for Development." NBER Working Paper 24562. <https://doi.org/10.3386/w24562>.
- Ederveen, Sjef, Henri L.F. de Groot, and Richard Nahujs. 2006. "Fertile Soil for Structural Funds? A Panel Data Analysis of the Conditional Effectiveness of European Cohesion Policy." *Kyklos* 59 (1): 17–42. <https://doi.org/10.1111/j.1467-6435.2006.00318.x>.
- Ehrlich, Maximilian von, and Tobias Seidel. 2018. "The Persistent Effects of Place-Based Policy: Evidence from the West-German Zonenrandgebiet." *American Economic Journal: Economic Policy* 10 (4): 344–74. <https://doi.org/10.1257/pol.20160395>.
- Ehrlich, Maximilian von, and Henry G. Overman. 2020. "Place-Based Policies and Spatial Disparities Across European Cities." *Journal of Economic Perspectives* 34 (3): 128–49. <https://doi.org/10.1257/jep.34.3.128>.
- Ehrlich, Maximilian von, and Tobias Seidel. 2018. "The Persistent Effects of Place-Based Policy: Evidence from the West-German Zonenrandgebiet." *American Economic Journal: Economic Policy* 10 (4): 344–74. <https://doi.org/10.1257/pol.20160395>.

- Fagerberg, Jan, and Bart Verspagen. 1996. "Heading for Divergence? Regional Growth in Europe Reconsidered." *Journal of Common Market Studies* 34 (3): 431–48.
<https://doi.org/10.1111/j.1468-5965.1996.tb00580.x>.
- Felbermayr, Gabriel, and Jasmin Gröschl. 2013. "Natural Disasters and the Effect of Trade on Income: A New Panel IV Approach." *European Economic Review* 58:18–30.
<https://doi.org/10.1016/j.euroecorev.2012.11.008>.
- Freedman, Matthew. 2013. "Targeted Business Incentives and Local Labor Markets." *J. Human Resources* 48 (2): 311–44. <https://doi.org/10.3368/jhr.48.2.311>.
- Gagliardi, Luisa, and Marco Percoco. 2017. "The Impact of European Cohesion Policy in Urban and Rural Regions." *Regional Studies* 51 (6): 857–68.
<https://doi.org/10.1080/00343404.2016.1179384>.
- Garin, Andrew, and Jonathan L. Rothbaum. 2024. "The Long-Run Impacts of Public Industrial Investment on Local Development and Economic Mobility: Evidence from World War II." NBER Working Paper 32265.
- Gaubert, Cecile, Patrick Kline, Damián Vergara, and Danny Yagan. 2021. "Trends in US Spatial Inequality: Concentrating Affluence and a Democratization of Poverty." *AEA Papers and Proceedings*, 111: 520-25.
- Gibbons, Stephen, Henry G. Overman, and Panu Pelkonen. 2014. "Area Disparities in Britain: Understanding the Contribution of People Vs. Place Through Variance Decompositions." *Oxford Bulletin of Economics and Statistics* 76 (5): 745–63.
<https://doi.org/10.1111/obes.12043>.
- Giua, Mara. 2017. "Spatial Discontinuity for the Impact Assessment of the EU Regional Policy: The Case of Italian Objective 1 Regions." *Journal of Regional Science* 57 (1): 109–31.
<https://doi.org/10.1111/jors.12300>.
- Glaeser, Edward L., and David C. Maré. 2001. "Cities and Skills." *Journal of Labor Economics* 19 (2): 316–42. <https://doi.org/10.1086/319563>.
- Juhász, Réka, Nathan Lane, and Dani Rodrik. 2023. "The New Economics of Industrial Policy." NBER Working Paper 31538. <https://doi.org/10.3386/w31538>.
- Juraj Briskar, Edoardo Di Porto, José V. Rodríguez Mora, and Cristina Tealdi. 2022. "Decomposition of Italian Inequality." *Working Paper*.
<https://www.research.ed.ac.uk/en/publications/decomposition-of-italian-inequality>.
- Kline, Patrick, and Enrico Moretti. 2014. "Local Economic Development, Agglomeration Economies, and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority." *The Quarterly Journal of Economics* 129 (1): 275–331.
<https://doi.org/10.1093/qje/qjt034>.
- Königs, Sebastian, Anna Vindics, Marcos Diaz Ramirez, and Paolo Veneri. 2023. "The Geography of Income Inequalities in OECD Countries: Evidence from National Register Data." https://www.lisdatacenter.org/wp-content/uploads/files/4B_Koenigs.pdf.

- Lang, Valentin, and Marina Mendes Tavares. 2023. "The Global Distribution of Gains from Globalization." *Journal of Economic Inequality*, 1–25. <https://doi.org/10.1007/s10888-023-09593-7>.
- Lang, Valentin, Nils Redeker, and Daniel Bischof. 2023. "Place-Based Policies and Inequality Within Regions." OSF Preprints.
- LaPoint, Cameron, and Shogo Sakabe. 2021. "Place-Based Policies and the Geography of Corporate Investment." SSRN Working Paper. <http://dx.doi.org/10.2139/ssrn.3950548>.
- Lu, Yi, Jin Wang, and Lianming Zhu. 2019. "Place-Based Policies, Creation, and Agglomeration Economies: Evidence from China's Economic Zone Program." *American Economic Journal: Economic Policy* 11 (3): 325–60. <https://doi.org/10.1257/pol.20160272>.
- Mohl, Philipp, and Tobias Hagen. 2010. "Do EU Structural Funds Promote Regional Growth? New Evidence from Various Panel Data Approaches." *Regional Science and Urban Economics* 40 (5): 353–65. <https://doi.org/10.1016/j.regsciurbeco.2010.03.005>.
- Moll, Benjamin, Lukasz Rachel, and Pascual Restrepo. 2021. "Uneven Growth: Automation's Impact on Income and Wealth Inequality." Bank of England Working Paper 913. <http://dx.doi.org/10.2139/ssrn.3801089>.
- Moretti, Enrico. 2012. *The New Geography of Jobs*. First Mariner Books edition. Boston, New York: Houghton Mifflin Harcourt.
- Moretti, Enrico. 2022. "Place-Based Policies and Geographical Inequalities." *IFS Deaton Review of Inequalities*. <https://ifs.org.uk/inequality/wp-content/uploads/2022/02/place-based-policies-and-geographical-inequalites-ifs-deaton-review-of-inequalities.pdf>.
- Neumark, David, and Helen Simpson. 2014. "Place-Based Policies." NBER Working Paper 20049. <https://doi.org/10.3386/w20049>.
- OECD. 2023. "Regional Economic Outlook."
- Pellegrini, Guido, Flavia Terribile, Ornella Tarola, Teo Muccigrosso, and Federica Busillo. 2013. "Measuring the Effects of European Regional Policy on Economic Growth: A Regression Discontinuity Approach." *Papers in Regional Science* 92 (1): 217–34. <https://doi.org/10.1111/j.1435-5957.2012.00459.x>.
- Picarelli, Nathalie. 2016. "Who Really Benefits from Export Processing Zones? Evidence from Nicaraguan Municipalities." *Labour Economics* 41:318–32. <https://doi.org/10.1016/j.labeco.2016.05.016>.
- Pierce, Justin R., and Peter K. Schott. 2017. "Investment Responses to Trade Liberalization: Evidence from U.S. Industries and Plants." NBER Working Paper 24071. <https://doi.org/10.3386/w24071>.
- Pierce, Justin R., and Peter K. Schott. 2016. "The Surprisingly Swift Decline of US Manufacturing Employment." *American Economic Review* 106 (7): 1632–62. <https://doi.org/10.1257/aer.20131578>.
- Reynolds, C. Lockwood, and Shawn M. Rohlin. 2015. "The Effects of Location-Based Tax Policies on the Distribution of Household Income: Evidence from the Federal

- Empowerment Zone Program." *Journal of Urban Economics* 88:1–15.
<https://doi.org/10.1016/j.jue.2015.04.003>.
- Siegloch, S., Wehrhöfer, N., & Etzel, T. (forthcoming). Spillover, efficiency and equity effects of regional firm subsidies. *American Economic Journal: Economic Policy*.
- Südekum, Jens. 2021. "Place-Based Policies - How to Do Them and Why." *CEPR Discussion Paper*. <https://www.econstor.eu/bitstream/10419/237051/1/1767077793.pdf>.
- Svensson, J. 1999. "Aid, growth and democracy." *Economics & politics*, 11(3), 275-297.
- Topalova, Petia, and Amit Khandelwal. 2011. "Trade Liberalization and Firm Productivity: The Case of India." *The Review of Economics and Statistics* 93 (3): 995–1009.
https://doi.org/10.1162/REST_a_00095.



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