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Research Report

The future of EU cohesion

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The Future of EU Cohesion

Final report of the research project: “Ausrichtung der europäischen Strukturpolitik in der nächsten Förderperiode 2028-2034 aus finanzpolitischer Sicht“ commissioned by the German Federal Ministry of Finance

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List of Abbreviations

ARDECO	Annual Regional Database of the European Commission
BICC	Budgetary Instrument for Convergence and Competitiveness
CAP	Common Agricultural Policy
CEF	Connecting Europe Facility
CF	Cohesion Fund
CID	Council Implementing Decision
CLS	Council Legal Service
CONT	Committee on Budgetary Control
CP	Cohesion Policy
CPR	Common Provisions Regulation
CRII	Coronavirus Response Investment Initiative
CRII+	Coronavirus Response Investment Initiative Plus
DiD	Difference-in-Difference
DNSH	Do No Significant Harm
EAFRD	European Agricultural Fund for Rural Development
EAGGF	European Agricultural Guidance and Guarantee Fund
EAP-EVAL	European Advisory Panel on Cohesion Policy Evaluation
EAV	European Added Value
EC	European Commission
ECA	European Court of Auditors
EEC	European Economic Community
EGD	European Green Deal
EISF	European Investment Stabilization Function
EMFAF	European Maritime, Fisheries and Aquaculture Fund

EMU	Economic and Monetary Union
ERC	European Research Council
ERDF	European Regional Development Fund
ERM	Exchange Rate Mechanism
ESF	European Social Fund
ESIF	European Structural and Investment Fund
ETS	Emissions Trading Scheme
EU	European Union
EURI	EU Recovery Instrument
FNLTC	Financing Not Linked To Cost
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GNI	Gross National Income
GVA	Gross Value Added
IFI	International Fund for Ireland
IPCC	Intergovernmental Panel on Climate Change
JTF	Just Transition Fund
LLM	Large Language Model
M&Ts	Milestones and Targets
MFF	Multiannual Financial Framework
MS	Member States
NGEU	Next Generation EU
NRRP	National Recovery and Resilience Plan
OPs	Operational Programmes
ORD	Own Resources Decision
PAP	Pre-Analysis Plan

RDD	Regression Discontinuity Design
RDT	Reform Delivery Tool
REACT-EU	Recovery Assistance for Cohesion and the Territories of Europe
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plan
RSA	Regional Selective Assistance
RSP	Reform Support Programme
S3	Smart Specialization Strategies
SCO	Simplified Cost Options
SDRM	Sovereign Debt Reconstructing Mechanism
SOTA	State-Of-The-Art
SUMP	Sustainable Urban Mobility Plan
TFEU	Treaty on the Functioning of the European Union
TFP	Total Factor Productivity
YEI	Youth Employment Initiative

Editorial

Zareh Asatryan (ZEW Mannheim), **Friedrich Heinemann** (ZEW Mannheim and University of Heidelberg)

Overriding Research Questions in a Changing Environment

This report presents the results of a research project commissioned by the German Ministry of Finance on the future of Cohesion Policy (CP) in the upcoming EU funding period 2028-2034. It reflects the collaborative efforts of a European network of researchers. Ahead of the next seven-year Multiannual Financial Framework (MFF) cycle, Europe has the opportunity to rethink and reform the EU budget and CP in particular. Our insights aim to contribute to these reform reflections. The scholars involved come from different countries and disciplines, and include some of the leaders of the past academic work on CP. Drawing on the accumulated academic knowledge and employing a diverse array of approaches, the report asks the following key questions:

What are the fundamental rationales of CP today and how should the future path of this policy look like in a changing environment? What do we know about the impact and performance of over 30 years of CP in light of its objectives? Which are the crucial constraining and enabling factors for a successful CP? And finally, how can CP become more performance-oriented and its evaluations more reliable?

The starting point is the understanding that the environment of CP is undergoing fundamental changes. In the 1990s, when cohesion emerged as a significant component of the EU budget, many of the substantive challenges the European Union (EU) faces today were not yet on the European agenda. For example, the EU's adoption of the Green Deal signals an ambitious commitment to decarbonization, necessitating a comprehensive energy transformation. The Russian invasion of Ukraine has underscored the inadequacies of the EU's defense architecture, prompting general questions about the need to re-prioritize existing fiscal and other resources in a deteriorating geopolitical environment. Moreover, the EU faces long-term challenges stemming from digital and demographic transformations in its economies, and, externally, from a high migration pressure from politically unstable world regions with a poor economic prospect.

Undoubtedly, these developments pose significant challenges to traditional EU policies, such as the CP and the Common Agricultural Policy (CAP), which together currently absorb approximately 60 percent of the core budget. The emergence of numerous other pressing needs has increased the opportunity costs associated with allocating funds to these traditional policies, that is costs related to the non-realization of potential benefits had the funds been spent on other worthy goals. Each euro assigned to CP, and consequently unavailable for other urgent purposes, now requires an even more compelling justification.

A common response to addressing newly emerging challenges has been to integrate new objectives into the existing instruments. Such policy adoptions have served as easy fixes given that they safeguard budgets and protect traditional recipients of funds, however they should be approached with great caution. While CP, with its focus on public investments, may offer strong opportunities for growth and regional cohesion, a policy that is explicitly designed to target regional develop-

ment will generally not be the most effective instruments to address a more diverse set of objectives. Also on a technical level, there is a significant governance issue related to "goal congestion": an expansion of objectives is likely to blur responsibilities and complicate the evaluation of policy performance. Furthermore, adapting CP to new purposes implies a departure from the European Treaties and their clear definition of CP objectives.

A second reaction to mitigate budgetary conflicts between traditional policies and new necessities has been to advocate for increased funding, potentially sourced through new fiscal instruments, including the issuance of EU debt. However, it is important to recognize that an increasing level of public spending, whether at the national or European level, will further burden European economies. Raising revenue from taxpayers imposes significant welfare costs through higher distortionary taxes, which weaken incentives to work, invest and innovate. Therefore, there must always be compelling evidence that the public money spent delivers a high return. Furthermore, a more relaxed EU budget constraint may disincentivize the scrutiny of effectiveness of EU spending programmes.

For all these reasons, the starting point for this project is the recognition that even a well-established policy like CP requires ongoing justification, especially in a rapidly evolving environment. There must be a continual readiness to reassess both the budget and the design of this policy. A prudent review necessitates acknowledging and accepting the potential limitations of our knowledge. Too often, political documents on CP present an overly optimistic view of its success, which contrasts with the more nuanced and varied findings of academic research on cohesion. It is also crucial not to overlook the fact that many regions, particularly in the South, were not able to catch up within the EU despite receiving substantial CP funding for decades. While this does not necessarily indicate CP failure because of the possibility that these regions would have diverged much further in the hypothetical absence of CP, it does underscore the limited impact of cohesion spending in reaching convergence in these parts of the EU. On the other hand, success stories can also be found, highlighting the importance to better understand the conditioning factors that enable the CP to be successful.

Therefore, an honest and impartial evaluation is imperative, aiming to understand both the strengths and weaknesses of the current system.

This report collects 14 stand-alone but related chapters. It is structured following the sequence of our four overriding questions and deals with (1) the CP system, (2) the impact of cohesion spending, (3) the conditions for success and failure, and (4) governance and evaluation.

Part One – The System

The chapters contained in the first of the four parts of this report share a common approach: they employ comprehensive and systematic analyses from a bird's-eye view. These overarching perspectives delve into the historical transformation of the system and explore potential fundamental reforms that could systematically alter the nature of the policy. While some of these reform proposals may have limited political feasibility, they nonetheless enrich our understanding of the underlying constraints and weaknesses of the status quo.

The first chapter by Clemens Fuest on “Fundamental Considerations for a More Rational EU Cohesion Policy” asks whether the convergence objective is still a top priority for the EU in light of new economic and geopolitical realities. It suggests that the answer is no, and that a reduction in funds could be achieved with stronger concentration of CP on the Member States (MSs) with the lowest level of development. Furthermore, the chapter suggests that reforms should strengthen the principle of subsidiarity and introduce more ownership of the cohesion programmes in the recipient states.

Chapter 1.2 by Michael Thöne on “The Fiscal Architecture of the EU Cohesion Policy” analyses the primary function of the CP as a financial equalisation between the Member States and their regions. In view of the much-criticised over-complexity and inefficiency of European policy – also a major obstacle to enlargement – he recommends a less bureaucratic cohesion policy that focuses more strongly on equalisation transfers from rich to poor Member States. An end to the subsidisation of even the richest regions of the EU and a stronger focus on the principle of subsidiarity could also make it easier for Member States to implement modern place-based policies to achieve (among other things) regional green and digital transformation more easily and efficiently.

Chapter 1.3 by Lars P. Feld and Joshua Hassib titled “On the Role of EU Cohesion Policy for Climate Policy” similarly views CP as a compensation for poorer MSs’ agreement on additional steps of European integration, and considers climate policy a target that could, like support for more integration, be incentivized through such compensating payments. The authors argue that a wide adoption of carbon pricing rules within the framework of the emissions trading system might be preferable to a comprehensive subsidy policy but that it might require funds that help MSs transform their existing carbon intensive capital stock to a more carbon-neutral one. The chapter also highlights potential conflicts between the goals of CP and climate policy from the perspective of a first-best policy approach.

Chapter 1.4 by Päivi Leino-Sandberg on “Cohesion Policy and the Principle of Subsidiarity – a Legal Analysis” provides an analysis of the legal argumentation behind the transformation of CP in the last decade. It describes how CP used to be a defined policy focused on least favoured regions in line with Art. 174 Treaty on the Functioning of the European Union (TFEU) and how these limits have dissolved over time. It shows how, in particular, with Next Generation EU (NGEU) the policy has departed substantially from its original mission and how legal interpretations have been substantially broadened without much public debate. The chapter concludes by considering further arguments for new delimiting principles with the recommendation to use the European Added Value (EAV) criterion as the prominent guide.

Part Two – The Impact

The second part collects evidence on the intended and possibly unintended impacts of CP in the light of the empirical literature.

Chapter 2.1 by Maximilian von Ehrlich on „The Importance of EU Cohesion Policy for Economic Growth and Convergence” provides a thorough discussion of the theoretical case of why CP may or may not be a good idea, and reviews the findings of the recent empirical literature on how the

policy has contributed to economic dynamics of European regions. It suggests that significant market-driven processes have meant prevailing levels of regional disparities in Europe, and that CP has been successful in alleviating these trends but only moderately so. For example, while the effects of cohesion on growth and employment have been robustly documented, a consensus is also emerging on the effects being bound to the short-run and the effect diminishing with the size of funds.

Chapter 2.2 by Valentin Lang on “Redistributive Effects of EU Cohesion Funds” studies these effects on the level of households. Consistent with the past evidence, the analysis suggests that most of the working population benefits from cohesion in income and jobs, and that the high skilled and higher income benefit more. This new and much more granular evidence allows studying the question of whether cohesion also leads to social convergence, in addition to regional convergence. Evidence does not support that hypothesis which rules out cohesion as a tool of an effective inter-personal redistribution scheme.

Chapter 2.3 by Asatryan and Birkholz titled “Beyond Additionality: The Impact of EU Cohesion Policy on Investments by the Member States” studies a long-standing question on whether CP crowds-out public and private investments by MSs. The chapter shows that Cohesion Funds (CFs) crowd out public investments by national governments - a result that serves as *prima facie* evidence for the violation of the additionality principle – and also suggesting that governments shift the freed-up funds towards current expenditures. At the same time, however, the chapter shows that this negative effect is more than outweighed by substantial crowding-in of investments by the private sector. This result seems to be not just of temporary nature and it suggests that the design of convergence-oriented budgetary instruments should focus more on further facilitating its complementarities with the private sector.

Part Three – The Conditions for Success

The third group of contributions extends this impact analysis, focusing specifically on identifying critical factors that either facilitate or hinder the effective utilization of CFs. These insights are particularly valuable for contemplating potential reforms in the re-design of CP.

In Chapter 3.1 on “Constraining and Enabling Factors of a Successful EU Regional Policy in Europe”, Ugo Fratesi argues that the effectiveness of CP has been spatially very heterogeneous, and provides a descriptive statistical analysis to identify the main conditioning factors that determine the effectiveness of the policy. This evidence confirms the existence of the main trade-off between policy effectiveness and convergence objective that the policy faces: the impact tends to be larger in regions less in need of support (agglomerated and growth poles) than in structurally weak regions. One recommendation is to prioritize the build-up of territorial assets, including basic public and human capital as well as good governance systems, in those disadvantaged regions before investing in more advanced interventions.

In Chapter 3.2 on “The Role of Administrative Capacity for an Effective Implementation of EU Cohesion Policy”, Julia Bachtrögl-Unger focuses on a prominent explanation behind the effectiveness of CP that is on the role of regional administrative capacity for the absorption and effective use of CFs. The chapter provides statistics on the issue of absorption, and discusses the relevant

body of literature which highlights that administrative capacity and more specifically human capital of managing authorities may be at the core of the issue. It concludes with a case study on the role of regional capacity, boosted by technical assistance, in implementing programmes related to green and digital technologies with a good match to specific regional preconditions.

Chapter 3.3 by Asatryan, Birkholz and Heinemann on “The Heterogenous Output-Impacts of EU Cohesion Policy - A Review of Recent Literature” takes stock of the literature that assesses the output effects of CP. The chapter suggests that the academic evidence speaks in favour of positive growth and employment effects of CP, which are however often bound to the short-run while the marginal effects of CP seem to be decreasing with the amount of spending. The policy literature presents an overall more optimistic picture, such as when considering the long-run effects of CP, and the chapter asks if the methodological limitations in this research can explain some of the divergence in these findings of the academic and the policy literature. Nevertheless, a consensus emerges when it comes to the conditional impacts of the policy, in terms of the effectiveness of CP being dependent on key local factors such as related to local institutional quality and availability of human capital.

Part Four – Governance and Evaluation

This final part explores the system through the lens of performance budgeting. It presents studies that address governance issues arising from the temporary coexistence of NGEU and the core budget. Additionally, it conducts a thorough examination of the CP evaluation system, covering empirical and conceptual issues such as the conceptualization of the "European Added Value" of CFs.

Chapter 4.1 by Francesco Corti, Matteo Pedralli and Chiara Pancotti on “The Recovery and Resilience Facility: Key Innovations and the Interplay with Cohesion Policy” presents a timely analysis of the Recovery and Resilience Facility (RRF) funds as well as their interplay with the traditional CFs. The chapter compares the governance of the RRF and CP. It highlights the key RRF innovation, namely the conditionality of the funds which ties their allocation to the fulfilment of ex-ante set Milestones and Targets (M&Ts). Whether this works in practice, will depend, among other factors, on the capacities to carry out credible and independent assessments. The paper also identifies the overstretch of the MSs’ absorption capacity as a challenge for the simultaneous implementation of RRF and CP and the coordination problems between CP with its regional and the RRF with its more national perspective.

Chapter 4.2 by Zareh Asatryan, Carlo Birkholz and Friedrich Heinemann titled “Evidence-based Policy or Beauty Contest? A Large Language Model (LLM)-Based Meta-Analysis of Cohesion Policy Evaluations by Member States” presents an empirical analysis of the MSs’ evaluations of EU CPMS. It applies a meta-analytical approach utilizing LLMs in innovative ways, to analyze whether the incentives and institutions governing the evaluation system have deficiencies that lead to biases in the evaluation outcomes. In particular, it shows that the findings of evaluations do not square well with the economic literature on the output impacts of CP, and that such discrepancies can be potentially explained by factors like the oligopolistic nature of evaluation markets within MSs, their very fragmented natures across the EU, and by the often-strong involvement of managing authorities in the work of (formally independent) evaluators.

Chapter 4.3 on “Enhancing Objectivity and Decision Relevance: A Better Framework for Evaluating Cohesion Policies” is co-authored by ten members of this network and focuses on general recommendations for improving the evaluation system. The recommendations aim to fix deficiencies such as related to the role of vested interests of managing authorities and the limited competition in the market for evaluations. They also target more general aspects such as the imprecise objective functions of cohesion programmes as a key challenge for evaluations, as well as the limited evaluation capacities, and they propose ideas how evaluation results could impact more on budgetary decisions.

Finally, Chapter 4.4 by Friedrich Heinemann on “Enhancing Precision in Assessing the European Added Value of Cohesion Policy” considers the EAV as an important criterion in understanding the optimal allocation and design of cohesion programmes, in light of the fact that EAV has become a formal evaluation criterion since the 2021-2027 programming period. The chapter clarifies the conceptual foundations of the EAV terminology, and proposes a checklist comprising essential requirements for a comprehensive EAV examination.

Insights for Reform Reflections

These papers provide a multitude of arguments for reforming the CP in the next MFF. The arguments are summarized by the following key insights:

Merits of a more focused CP

Several studies underscore the political function of CP as a financing instrument to garner support for integration (Ch. 1.2, Ch. 1.3). Contributions with a more systematic perspective advocate for a sharper focus of CP and criticize a vague objective function that blurs responsibilities and hinders evaluation (Ch. 1.1, Ch. 1.3, Ch. 4.3). From a legal standpoint, this strategy to refocus the policy on more limited objectives would align better with the Treaty basis and the subsidiarity principle (Ch. 1.4). With an understanding of optimal policy assignment, several contributions highlight the merits of the “Tinbergen Rule,” which recommends a one-to-one assignment of policy objectives and instruments (Ch. 1.3, Ch. 4.3). Specifically, this implies refocusing cohesion on the convergence objective and relieving the policy of other objectives, for which their corresponding first-best instruments should assume full responsibility (e.g., price mechanisms with comprehensive EU-ETS-CO2 prices for decarbonization, Ch. 1.3). While a rigid one-to-one mapping of policies and objectives would overlook the complex interdependencies between policies (Ch. 3.2), this principle may still offer valuable guidance. Regarding the convergence objective, there are subsidiarity-related arguments in favor of defining eligibility based on national indicators rather than regional indicators (Ch. 1.1).

Addressing CP bottlenecks

Overall, academic research confirms that CP has had some success in stimulating growth and employment, thereby contributing to the traditional objectives of the policy. Reliable empirical studies, employing convincing methods to identify causal channels, consistently affirm positive growth and employment effects (Ch. 1.1, Ch. 2.1, Ch. 3.3). However, evidence suggests that these effects are short-lived and recede after the end of EU support (Ch. 2.1, Ch. 2.2). A consistent finding across the literature is that positive effects are contingent on certain conditioning factors (Ch. 2.1, Ch.

2.2, Ch. 3.1, Ch. 3.2, Ch. 3.3). These factors include strong government capacity, robust institutions (e.g., absence of corruption), and the availability of human capital.

These findings help explain why even intensive cohesion spending over decades has not been more successful in supporting convergence. In regions with poor institutions, cohesion transfers may be squandered in rent-seeking or could even be counterproductive when used to stabilize declining industries instead of promoting new ones (Ch. 2.1). Moreover, current cohesion governance faces challenges due to a lack of national ownership (Ch. 1.1, Ch. 2.1). Coordination problems arising from the simultaneous existence of the RRF and permanent CFs further exacerbate absorption challenges, particularly in the main RRF recipient MSs (Ch. 3.2, Ch. 4.1).

Reform reflections should therefore carefully consider how to promote national ownership, foster administrative capacity crucial for selecting good projects (Ch. 3.2), enhance the quality of institutions, and attract high-skilled workers to backward regions targeted for CP spending. A clear recommendation is to prioritize the development of basic territorial assets before investing in more advanced interventions (Ch. 3.1, Ch. 3.2).

Unintended side-effects for interpersonal distribution

The study results highlight further limitations of CP. CP should not be seen as an effective instrument for fostering interpersonal redistributive objectives, as it tends to benefit wealthier households in beneficiary regions more than poorer households (Ch. 2.2). One reason for this is that CP transfers partially capitalize into real estate and land prices, benefiting property owners as major beneficiaries (Ch. 2.1). This insight is relevant for any fairness-related debate on CP.

Awareness for crowding-out and crowding-in

While CP serves as a significant financing source for European public investment, which contributes to positive effects on employment and growth, it is important to monitor the issue of additionality, as EU funds can and do crowd out national public investments. However, there is positive news that CP appears to crowd in private investment (Ch. 2.3). These interdependencies warrant further attention in the future. The decision to abandon the additionality principle in the current programming period should be reconsidered (Ch. 2.3). Furthermore, programme design should pay attention to further incentivizing the mobilization of private capital in the receiving region in addition to EU-financed investment as this strategy seems to work (Ch. 2.3).

The difficult search for the optimum budget size

There is uncertainty regarding the most appropriate budget size for CP. While the current cohesion spending levels serve as the natural reference point for negotiations, it is unclear whether they are too low, too high or at an optimum. Clearly, the optimal level of CP spending depends on the future focus of the policy, as well as how the funds can be used alternatively and how costly it is to raise them. Our analyses yield several results and considerations that suggest a more cautious approach to setting spending levels.

Firstly, as emphasized earlier, the opportunity costs of CP have significantly increased due to numerous other pressing European spending needs, from energy transition to defense (Ch. 1.1). More urgent alternative spending needs imply a decreasing budget for the established policies. Secondly, a critical unresolved issue is that the regions most in need of the funds often have the worst preconditions for successful use of them (Ch. 1.2, Ch. 2.1, Ch. 3.1). Without improvements

in these critical factors, it is challenging to see why future spending would be more successful for these regions than past spending. Keeping up the spending without high chances of success implies a transformation towards a classical equalization system (Ch. 1.2). Thirdly, empirical evidence from well-identified studies indicates a declining marginal effect of spending on growth and employment (Ch. 2.1). Conceptually, this clarifies that CP can hardly be viewed as a big push type policy and that inefficient overspending is a real possibility. This is especially pertinent when considering the welfare costs of taxation, which, with the exception of taxes on externalities, are always larger than the direct budgetary costs and extend to the distortionary impact of taxes on European growth potential (Ch. 4.4). Lastly, absorption problems are notorious for cohesion and have been exacerbated by the (temporary) parallel existence of CP in the core budget and NGEU (Ch. 3.2). If countries and regions struggle to spend all the EU money allocated to them, this does not support the expectation of a careful selection and execution of projects. Taken together, these reflections and results suggest that the case for maintaining (or even increasing) the CP budget is far from obvious.

Contrast between nuanced academic insights and official documents

Overall, the nuanced findings on the impact of cohesion and the reflections on the appropriate allocation contrast with presentations from European institutions regarding the success of the policy, such as those found in the biannual Cohesion Reports (Ch. 3.3, Ch. 4.2, Ch. 4.3). Those overly positive expositions do not always seem to fully capture the existing state of knowledge from the academic literature. For informed decisions in the future, it is highly desirable that these presentations become more nuanced, impartial, and transparent about the limits of our knowledge.

A proposal to advance the CP evaluation system

Although the CP evaluation system is formally developed with a large number of evaluations, there is scope to enhance the credibility of evaluations commissioned by MSs and regional authorities. Apart from conceptual clarifications, such as how to operationalize the criterion of "European Added Value" (Ch. 4.4), the study recommends more international evaluation teams and the establishment of a European Advisory Panel on CP evaluations (Ch. 4.3). This new institution should promote impartiality and scientific rigor in evaluations. Moreover, for a truly performance-oriented approach to funding, it's crucial to strengthen the decision relevance of evaluations. Ideally, all policy and program-level decisions should be linked to evidence from impartial evaluations.

Undoubtedly, the EU's CP has great potential as an investment policy that promotes the future orientation of European public spending. However, it would be a fundamental mistake to assume that this potential has already been realized. Higher ambitions are needed to transform this policy into one that delivers proven EAV. We hope that this study offers fruitful insights that can inform the upcoming reflections and decisions.

Mannheim, July 2024

Zareh Asatryan and Friedrich Heinemann

1 The System

1.1 Clemens Fuest: Fundamental Considerations for a More Rational EU Cohesion Policy in the Future¹

Clemens Fuest (ifo Munich and LMU Munich)

Abstract

EU CP aims to reduce the economic divergences between the regions in the EU and to promote catch-up processes in the regions with the lowest level of development. The current changes in economic and geopolitical conditions make it necessary to adapt the structure of the EU budget and set new priorities. In the area of EU CP, the starting points would be a reduction in the amount of funds, a concentration on the MSs with the lowest level of development, a strengthening of the principle of subsidiarity and reforms for more ownership of the cohesion programs in the recipient states.

1.1.1 Problem definition: EU Cohesion Policy

Limiting economic disparities between countries and regions in Europe is a declared political objective of the EU. Article 174 of the TFEU describes this objective as follows:

In order to promote its overall harmonious development, the Union shall develop and pursue its actions leading to the strengthening of its economic, social and territorial cohesion.

In particular, the Union shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions.

Among the regions concerned, particular attention shall be paid to rural areas, areas affected by industrial transition, and regions which suffer from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, cross-border and mountain regions.

In order to achieve these goals, the EU has been running extensive regional and structural policy programs for some time. In the 2021-2027 planning period, around a third of the EU budget (EUR 426.7 billion) is earmarked for CP. The resources of the NGEU crisis fund amounting to EUR 806 billion come in addition to this, which also have a strong CP component in the sense that the fund contains a significant redistribution in favor of MSs with below-average economic performance (European Commission, n.d.). However, the NGEU funds are only available once and expire at the end of the planning period.

The EU's CP activities raise the fundamental question of whether, from an economic perspective, there are reasons to change the spatial distribution of economic activity that would have arisen without state intervention. The formulation of EU CP objectives cited above focuses on distributive arguments. It should be noted that, from an economic perspective, distributive policy primarily

¹ This is a translation of the original article which appeared in German.

focuses on economic differences between individuals. CP, however, refers to economic differences between regions.

In addition, distributive policy in the EU is already pursued at the level of MSs, with a variety of instruments, particularly via tax and social policies. In addition, the MSs pursue their own policies to compensate for national regional differences, for example in the form of national regional and structural policies or through fiscal equalization payments. Against this backdrop, it seems obvious to assign the EU level the primary task of addressing economic differences between the MSs, rather than regions. The actual EU CP deviates from this, as will be discussed in more detail below.

Government intervention in the spatial distribution of economic activity can be justified not only on the basis of distributional concerns, but also on the basis of efficiency arguments. This applies insofar as allocative distortions occur in the spatial distribution of economic activity without any corrections and state intervention. This also raises the question of the correct division of tasks between the national and European levels.

The aim of this article is to make proposals for a future reform of EU CP. The rest of the analysis is structured as follows. The next section discusses the development of economic convergence in the EU to date. Section 1.1.3 explains the basic economic justification for CP. Section 1.1.4 looks at the experience to date with the impact of EU CP. Section 1.1.5 discusses reform options. Section 1.1.6 contains the conclusions.

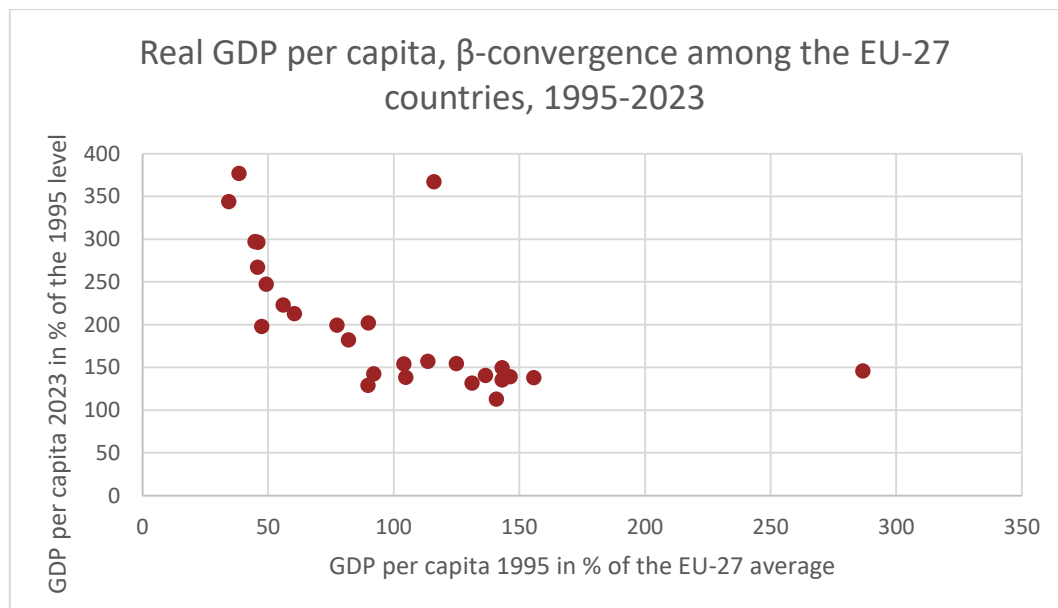
1.1.2 Development of economic convergence and divergence in the EU to date

How have economic differences in the EU developed in the past? The first question that arises here is which indicators should be used to measure these differences. Economic prosperity is often measured by Gross Domestic Product (GDP) in per capita terms. From the perspective of economic welfare theory, GDP is not a measure of economic welfare (see, for example, Jones and Klenow, 2016). However, this indicator does capture aspects that are highly relevant to the level of welfare. As GDP per capita is also of central importance as an indicator in EU CP, it is the primary variable considered below and economic convergence is measured against it. However, it is also shown that the use of other indicators can lead to completely different results. The following section also looks at the level of the MSs, not at the convergence between regions. The fact that EU CP does not only consider the level of the MSs and hence supporting not just the poorer of them, but also regions in wealthy countries, will be critically examined below.

There are different ways to describe and measure economic convergence. Two widely used and recognized concepts are β -convergence and σ -convergence. β -convergence means that there is a negative correlation between a country's growth rate and its initial income level. If poor countries grow faster than rich countries, income differences will decrease over time.

The concept of σ -convergence states that the dispersion of per capita income between countries decreases over time (Sala-i-Martin, 1996). Both concepts are used in the following. If the ultimate goal of convergence policy is to achieve a more uniform level of income, one could argue that σ -convergence is of greater importance. In the case of the EU, however, both indicators arrive at very similar diagnoses, as shown below.

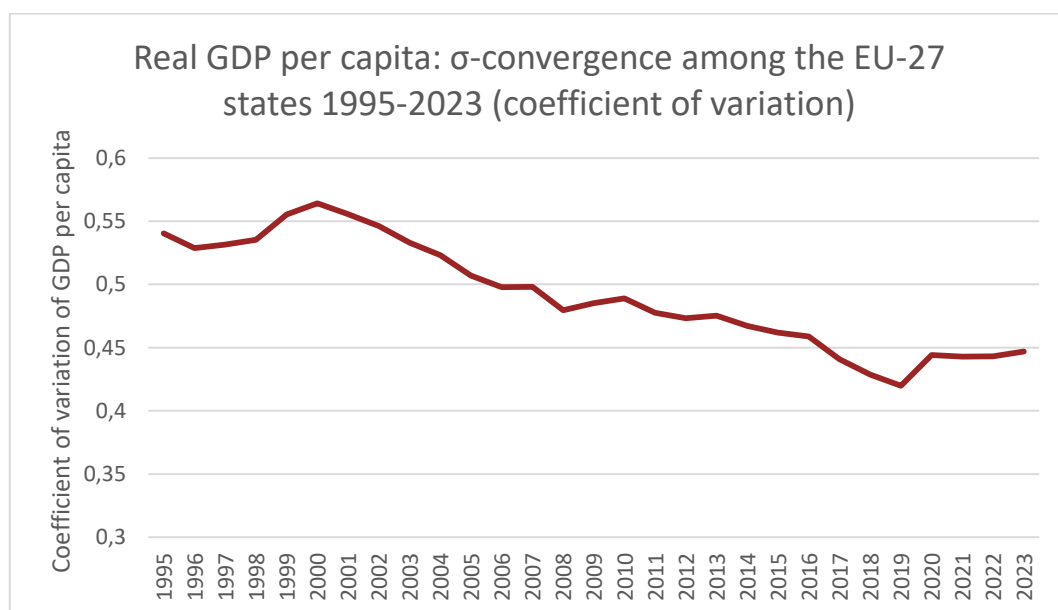
Figure 1.1.1: β -Convergence of GDP per capita for EU-27 1995-2023



Data: IMF World Economic Outlook Database

Figure 1.1.1 illustrates the β -convergence of GDP per capita among the EU-27 MSs for the period 1995-2023. There is a clear negative correlation between the initial level in 1995 and the growth in the period up to 2023. Figure 1.1.2 illustrates the σ -convergence in the same group of states. Here, too, it can be seen that economic output has converged over time.

Figure 1.1.2: σ -convergence EU-27, 1995-2023



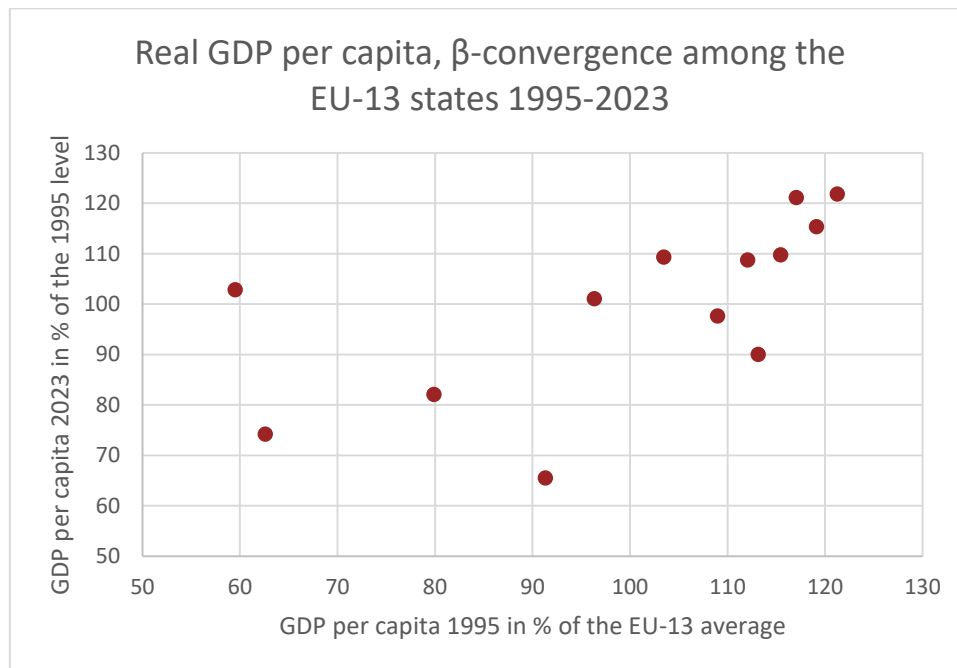
Data: IMF World Economic Outlook Database

From this finding, one could conclude that the economic convergence process is proceeding as desired, that is that economic differences between the MSs are narrowing over time.

However, these figures actually conceal very different developments among different groups of countries. This becomes clear when looking at the development of convergence among the EU-13

countries, as illustrated in Figure 1.1.3.² The focus here is on the development of the Southern European EU states compared to Northern Europe.

Figure 1.1.3: β -Convergence of GDP per capita for EU-13 1995-2023



Data: IMF World Economic Outlook Database

Figure 1.1.3 shows a positive correlation between the level of GDP per capita in 1995 and its growth up to 2023. According to the criterion of β -convergence, a divergent development has therefore occurred for this subgroup of EU states.³ The less prosperous MSs have fallen further behind economically during this period. This applies in particular to Spain, Italy, Greece and Portugal, which were severely affected by the European sovereign debt crisis of 2010-2015. In 1995, average GDP per capita of these countries was still around 87% of the EU-13 average. In 2023, it was only 78%.

The overall picture of convergence in the EU that emerges from this data is that the Central and Eastern European EU states have successfully caught up economically, while this is the case to a much lesser extent for the Southern European states, which have been part of the EU for a much longer period of time.

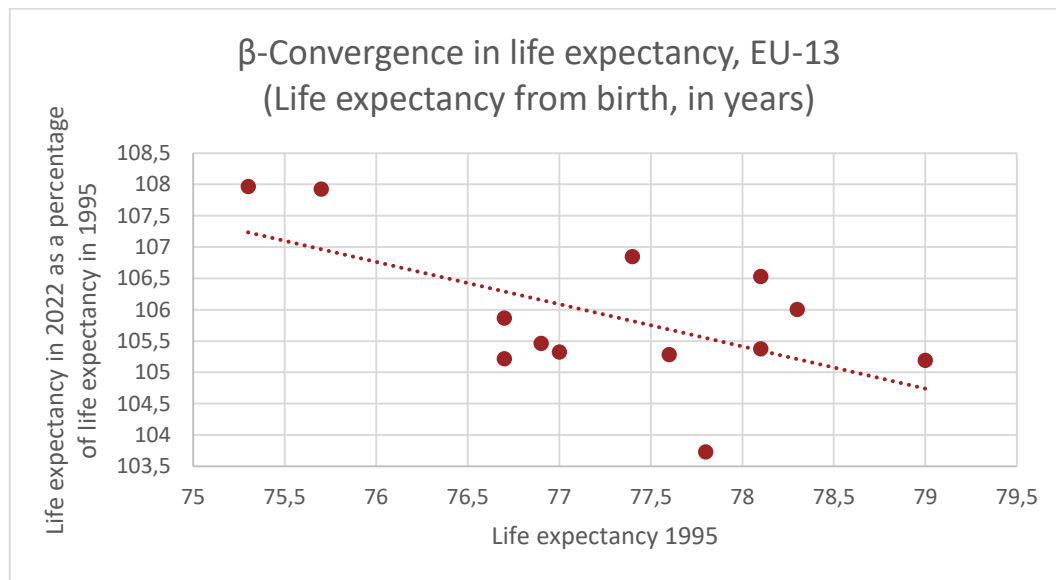
However, this finding only applies to GDP per capita as an indicator of economic development. In fact, economic convergence can be understood much more broadly. If indicators of prosperity other than GDP are used, a different picture can easily emerge. This becomes clear, for example, when we look at the important indicator of life expectancy at birth. The average life expectancy

² These are the 14 countries that were Member States before the 'eastward enlargement' of the EU in 2004, plus Malta, which differs considerably from the Central and Eastern European states that joined in 2004, and minus the statistical 'outliers' Luxembourg and Ireland. The exclusion of Malta would not change the findings.

³ The same findings apply to σ -convergence.

for the total population is considered below. Figure 1.1.4 illustrates the convergence of this indicator in the period between 1995 and 2022, the most recent data point available, for the EU-13 states as in Figure 1.1.3. In terms of GDP per capita, a divergence was observed for this group of states in the period after 1995. The group of Southern European states fell behind the northern EU states (see Figure 1.1.3). The picture is quite different for the development of life expectancy.

Figure 1.1.4: β -convergence in life expectancy



Data: Eurostat

Since 1995, life expectancy has risen from 77.3 to 81.8 years on average in the group of countries under review. The four Southern European MSs mentioned above - Spain, Italy, Greece and Portugal - had a slightly above-average life expectancy of 77.5 years in 1995. In 2022, life expectancy in this group of countries was still slightly above average at 82.2 years. Here, it was Northern European countries that needed to catch up and did so, with Denmark leading the way. Life expectancy there rose by six years in the period under review, from 75.3 years to 81.3 years, i.e. significantly faster than the EU-13 average. Overall, there was a trend towards more convergence here, although in this case it was the North of the EU that had to catch up with the South. It can therefore be seen that statements about existing differences in prosperity as well as convergence processes depend very much on which indicators are used as a basis.

In the convergence debate, a distinction is also made between input and output convergence.⁴ GDP per capita is an indicator of output convergence. Other output indicators would be life expectancy, the unemployment rate or income distribution. Indicators for input convergence would include, for example, the quality of institutions, the structure of taxes and levies or the level of investment in education, research or infrastructure. The question of whether, given the variety of dimensions in which economic convergence can be considered and measured, EU CP should place more emphasis on indicators other than GDP per capita is taken up again in section 1.1.5.

⁴ See EEAG (2018) for more details.

1.1.3 The economic justification of European Cohesion Policy

Reforms of EU CP should be based on clear ideas about what the economic function and justification of this policy is or should be in the future. From the perspective of financial theory (Musgrave, 1959), government activity in a market economy has three functions. The distribution policy, the improvement of allocative efficiency through intervention in cases of market failure and the stabilization of the economy, especially in severe crises, but also the smoothing of normal economic fluctuations. These state functions have different relevance for CP. In an association of states such as the EU, the question also arises as to how tasks and responsibilities are distributed between the various levels of government. The theory of fiscal federalism provides benchmarks and allocation criteria here.

1.1.3.1 Distributive policy concerns

CP is primarily part of the state's distributive policy activities. From a financial perspective, however, the starting point for distributive interventions lies in the interpersonal distribution of income, wealth or other relevant indicators, not in divergences between regions or states. At the same time, it is obvious that policies to support regions or countries with low average incomes also have an impact on the interpersonal distribution. However, conflicts can also arise between the goal of a more equal interpersonal distribution and the goal of increasing the economic strength of a region or an entire country. For example, the most effective way of increasing a country's economic strength may be to promote the most economically developed regions, i.e. the growth poles within a country. This is particularly the case if there are agglomeration advantages. However, this can increase both interpersonal and interregional income inequality within the country (see, for example, Crozet & Koenig, 2008; Martin et al., 2008).

Objectives of distributive policy are not only pursued at European level, but also and primarily at the level of the individual MSs. The EU MSs have more or less well-developed welfare state institutions. Progressive taxation, social insurance and basic social security systems as well as state-provided or state-financed education and healthcare services redistribute income in a variety of ways or ensure that all citizens achieve a certain minimum standard of living. Many MSs also pursue regional redistribution and equalization goals, for example through fiscal equalization systems and their own regional and structural policies. This raises the question of what role the European level can and should play in this context.

From the perspective of the principle of subsidiarity, domestic individual and regional distribution goals should be pursued at national level, while aspects of distribution or economic convergence between MSs and cross-border effects of national policies fall within the remit of the EU. Potential tasks for the European level also arise from the interaction between economic integration in the European Single Market and national redistribution policies. The growing mobility of people and capital in the EU has consequences for the scope of national distribution policies. For example, it is feared that there will be a 'race to the bottom' in the welfare state because citizens with higher incomes will be able to escape the burden of redistributive tax and welfare systems by emigrating or relocating capital. The literature on interstate tax and location competition speaks of cross-border fiscal externalities triggered by national policies (Fuest et al., 2005). As a result, the policies of individual states do not lead to a result that is desirable from the perspective of the Union as a whole.

However, the obvious answer to this challenge would be to coordinate redistribution policies. Such coordination does take place within certain limits, for example in that freedom of establishment in the EU internal market does not automatically mean that every EU citizen who settles in an EU country other than their home country is immediately and comprehensively entitled to all social benefits. At the same time, there is no evidence, at least so far, that the inter-state mobility of people in the EU is leading to a comprehensive erosion of state redistribution. In any case, CP is not primarily geared towards the internalization of such fiscal externalities.

What can be said about the appropriate level of redistribution in the context of CP? In welfare theory, the optimal level of redistribution results from the trade-off between distributional and efficiency objectives. Distributive goals reflect the decisions that emerge from political negotiation processes. For the purposes of economic analyses, these distributive goals are often presented in the form of objective functions or social welfare functions. Such welfare functions can exhibit varying degrees of inequality aversion. The efficiency goal is relevant insofar as increasing redistribution reduces incentives to improve one's own economic situation through one's own performance. This applies both to the recipients of transfers and to those who have to finance these transfers with taxes. Increasing transfers therefore lead to an ever-greater loss of efficiency because individual behavior is increasingly distorted.

This has various implications. If the available budget falls for a given redistribution preference, for example because other financing requirements become more important, then the optimal level of redistribution falls. If inequality between regions increases, for example due to asymmetric economic shocks, then the optimal level of redistribution increases. These considerations are highly relevant for the EU in view of the changed security situation, the urgent tasks in the area of decarbonization and the plans for EU enlargement to include countries in South-Eastern Europe.

In CP, a conflict between distributive and efficiency goals can also arise because, as already mentioned, the promotion of economically weak regions draws resources away from economically strong regions with higher overall potential, with the result that the country's overall economic growth is lower than it would potentially be without regional policy intervention (Martin et al., 2008). It is therefore important to include the option in reform discussions that EU CP should focus more strongly on differences between the MSs.

1.1.3.2 Allocative efficiency

One of the fundamental tasks of the state is to intervene to correct for market failures, provided that the state intervention can eliminate the market failure or at least correct the resulting inefficiencies. The best example of this is the provision of public goods, which, when provided via private markets, tend to be under-supplied due to non-rivalry in consumption and non-excludability from use.

In the case of CP, however, it is not primarily about the provision of Europe-wide public goods, but about the distribution of economic activity in the area. The CP currently being pursued increasingly emphasizes certain public goods such as climate protection. However, CP is not the right framework for this because it focuses on economically less developed regions, while the provision of public goods requires EU-wide action. Climate policy is the best example of this.

The focus of CP is not the provision of public goods, but the distribution of economic activity in space. From the perspective of economic theory, it is anything but trivial to explain the distribution of economic activity in space and to identify inefficiencies that can be corrected by state intervention. However, such a theory is necessary when it comes to investigating whether economic decisions on the location of economic activity in space lead to systematic efficiency problems that can be corrected by state intervention. In particular, agglomeration externalities and imperfect competition play a role here.

A central problem is that there are both positive and negative externalities of agglomeration. The positive externalities include, for example, the fact that a company moving into an agglomeration expands the range of goods available, reduces transportation costs due to greater proximity and the like. However, there are also negative externalities, for example in the form of infrastructure overcrowding. It is unclear whether there will be too much or too little concentration in agglomerations without government intervention (see, for example, Baldwin & Martin, 2004; Fujita & Thisse, 2002; Martin et al., 2008; Salah-i-Martin, 1996). It is therefore difficult to design appropriate state intervention. There is a connection here to the previously discussed conflict between the promotion of structurally weak regions and the promotion of overall economic growth, which primarily takes place in growth poles, i.e. usually developed urban regions (see, for example, Crozet & Koenig, 2008). If it is true that regional policy in this case takes excessive resources away from the economically more dynamic agglomerations, this leads to an inefficiently low utilization of agglomeration advantages. This contradicts the requirement that state intervention should reduce allocation distortions.

Allocative efficiency in the broader sense could include transfers that have the function of side payments between countries that are necessary to enable decisions to be made at European level that put all MSs in a better position, including compensation payments. For example, steps to deepen the European Single Market could entail risks or disadvantages for certain MSs. Agreement on a reform may then require compensation payments. However, this would require a regional policy with considerable flexibility. There may be cases in which such payments flow from poorer to wealthier states. The fact that regions currently also flow to EU MSs with high per capita incomes could be seen as an expression of such flexibility. However, before assigning such a function to these transfers, it should be examined whether there are not more suitable and less cumbersome instruments for compensation payments and offsetting transactions.

1.1.3.3 Economic stabilization

The smoothing of economic fluctuations or stabilization in the event of serious economic crises is not usually seen as a task of CP. There is an important difference here, particularly compared to fiscal equalization policies, which are more strongly geared towards providing a certain degree of stabilization for the regions affected by the shock in the event of asymmetric shocks. There are repeated calls for the establishment of such fiscal stabilization mechanisms in the European Monetary Union. One example is the project for a European unemployment insurance scheme (see, for example, Dolls et al., 2018). So far, however, this has not come about. The problem of macro-economic stabilization is not discussed further below (see also Thöne, 2024).

1.1.4 How effective has Cohesion Policy been so far?

There are divergent views on the effectiveness of CP to date. In its own analyses, the European Commission (EC) argues that CP triggers significant positive growth effects. In one of its evaluations (European Commission, 2016), it comes to the conclusion that for every euro spent on CP, the GDP of the funded regions will be 2.74 euros higher in 2023 than without the funding. A specific feature of this analysis is that it is an ex-ante evaluation using a macroeconomic simulation model. Ex-post evaluations by independent authors come to far less positive results. Becker et al. (2010) compare regions above the EU CP funding threshold of 75 percent of average GDP per capita with funded regions just below this threshold. They come to the conclusion that every euro spent on regional policy increases GDP in the funded region by 1.2 euros.⁵ Other evaluation studies come to the conclusion that CP has no positive effect on growth or is even counterproductive (Breidenbach et al., 2016; Dall’erba & Gallo, 2008; Sala-i-Martin, 1996). Breidenbach et al. (2016) point out that the success of regional policy transfers depends on the institutional framework conditions in the funded countries and regions. Institutional deficits or a lack of complementary policies and efforts for growth cannot be compensated for by regional transfers.

Overall, it can be assumed that CP to date has achieved rather moderate and heterogeneous growth effects in the supported regions. This is consistent with the empirical observation that economic development in parts of the EU has tended to diverge. The reasons for the lack of a convergence effect are difficult to determine empirically. Plausible reasons for the lack of success include a lack of 'ownership' of the programs in the funded regions, a lack of institutional quality, a lack of complementary policies that support economic growth, including the ability to absorb regional funding and, last but not least, the conflict between the great importance of agglomerations and growth poles on the one hand and the focus of regional policy on structurally weak regions on the other.

1.1.5 Starting points for a reform of Cohesion Policy

There is a wide range of possibilities for a reform of CP. Fundamental economic contexts play a role here, as do previous experiences with CP and changes in the economic and geopolitical environment, which could have consequences for the political weighting of the objectives of CP to date. Six starting points for reforms are considered below:

1. Realistic goals and allocation of responsibility for economic convergence
2. Reduced weighting of the convergence objective in view of changed priorities
3. Broadening the range of indicators for the level of economic development
4. Focus on convergence among MSs instead of regions
5. Greater emphasis on environmental and climate protection in the orientation of CP
6. Strengthening national ownership of CP programs

⁵ Ederveen et al., 2002, 2006 also found positive effects.

1.1.5.1 Realistic goals and allocation of responsibility for economic convergence

For a debate on reform perspectives in CP, it is helpful to scrutinize the assessment of economic differences between regions and states. There is no guarantee that economic integration will lead to economic convergence in the sense of a convergence of per capita incomes and other indicators of economic prosperity. At the same time, differences in economic development are not an obstacle to economic integration. Regions with very different levels of economic development can benefit from economic exchange. This applies not only to the wealthy regions, but to all of them. Impressive international evidence of this is the rise of emerging economies such as the BRIC countries. The integration of these countries into global trade has been a decisive factor in the increase in economic prosperity and the process of catching up with the established industrialized nations.

Whether convergence occurs within a group of states or an individual state catches up depends on a variety of circumstances. These include specific characteristics of regions, economic developments in other regions, structural change, institutional development and government action in areas such as economic, social and educational policy. In Europe, responsibility for government action that influences convergence processes lies largely with the MSs, both at national and regional levels (EEAG, 2018). The influence that the European level can exert on convergence processes is therefore limited.

The lack of convergence does not necessarily have to be seen as a grievance. Lack of convergence can also reflect different preferences of regional populations or other divergent characteristics of regions.

These considerations have the following implications for CP reforms. It should be questioned whether all regions should actually follow the path of economic convergence. There is much to be said for allowing diversity, including a decision in favor of strategies other than building economic strength in the sense of increasing GDP per capita. This could go so far as to abandon threshold values for economic strength per capita as a criterion for the distribution of CP resources. In addition, CP should take greater account of the question of which actors can influence the economic development of a region at all. Some of these aspects are further addressed below.

1.1.5.2 Reduced weighting of the convergence objective in view of changed priorities

The EU's economic and geopolitical environment has changed considerably in recent years. These include fundamental developments such as demographic change, the growing importance of environmental protection and climate policy as well as accelerating technological change, in particular digitalization. These changes also include the growing pressure of migration, the shortage of energy supplies in Europe due to the loss of gas imports from Russia as well as growing geopolitical tensions and the associated increasing concern about the EU's dependence on the USA in terms of security policy. For many of the responses to these challenges, action at European level offers considerable advantages, while in some cases action at national level is not at all expedient.

In view of these major and in some cases existential challenges, it is clear that the use of the financial resources available at European level should be prioritized differently. This clearly argues in favor of reducing the budget previously used for CP as well as other areas of reduced priority (e.g. CAP) and allocating the funds to other, more urgent uses, for example in the area of European foreign and security policy. This cannot be addressed appropriately by simply taking into account

new aspects like security policy within existing cohesion policies, even if that may work in exceptional cases like environmental policy. The extent to which the funds should be cut is a question of political assessment. However, it is difficult to justify using a third of the EU budget to promote economic convergence in the future, given the EU's changed priorities.

One way of implementing this prioritization would be to concentrate CP on the regions lagging furthest behind in terms of development, i.e. lowering the funding threshold if the previous focus on GDP per capita is retained.⁶ However, this should be combined with a shift in focus to convergence between the MSs, which will be explained below. Otherwise, there is a risk, as already explained, that the focus on the economically least developed regions will result in a strong conflict with efficiency concerns, which would suggest the promotion of growth poles.

1.1.5.3 Broadening the range of indicators for the level of economic development

To date, EU CP has been based on GDP per capita as an indicator of the level of economic development achieved and therefore also of the need for support. There are two objections to this. Firstly, as already mentioned, it is questionable whether an approximation of GDP per capita to the EU average is a sensible development goal for all regions or states. Secondly, GDP per capita only partially captures economic prosperity.

For some time now, there have been debates about the right indicators for prosperity (see, for example, Jones & Klenow, 2016; and the literature cited here). There is a consensus that GDP per capita can play a role, but that other indicators must be added. These include indicators such as life expectancy, infant mortality, population literacy, income inequality, availability of healthcare, working hours, gender equality and many more. Section 1.1.2 showed that although many of the Southern European EU MSs have a low GDP per capita, life expectancy there is higher than in some wealthier countries.

This has two implications for CP. Firstly, the threshold for aid should be determined by more criteria than GDP per capita alone. Secondly, the objective of CP should not be solely to ensure that the assisted region catches up in terms of GDP per capita. It must be possible to pursue other objectives and development models, for example with regard to contributions to environmental protection, as will be explained in more detail below.

1.1.5.4 Focus on convergence between Member States instead of regions

From the perspective of the principle of subsidiarity, the fact that political decisions affecting regional development are primarily made at national and regional level is not a grievance. Against this background, additional regional policy activities at European level that intervene in regional development within the MSs require justification. It is particularly questionable that MSs with above-average overall economic strength claim regional policy transfers from the EU. These states can pursue and finance regional policy objectives independently.

Against this backdrop, it is recommended that the principle of subsidiarity be strengthened for future CP. This would mean that European CP should consistently focus on MSs with low economic

⁶ This is also the recommendation of the Sapir Report (Sapir et al., 2003).

power rather than on regions. Countries with higher economic development should only be supported to the extent that regional policy developments have cross-border effects that are not sufficiently reflected in national political decision-making calculations. However, cross-border effects of national policies are not the core of CP.

For some time now, there have been calls to switch to the so-called net fund model in CP. This would mean that the wealthier MSs, which are net contributors to CP overall, would only transfer the net balance to Brussels and support the domestic regions that have previously received funding themselves, if they consider this to be appropriate (Busch, 2004). This would be a step towards a more fundamental reform in which EU CP focuses on supporting economically less developed MSs rather than regions. This should be accompanied by greater autonomy for MSs in the use of funds, so that prosperous regions can be supported within the country. This autonomy should go hand in hand with improved incentives and more accountability in terms of the use of funds. Access to cohesion funding should be conditional on the achievement of M&Ts set out in a cohesion plan developed by the MS receiving funding and approved by the EU. The fact that this plan is developed by the MS itself should lead to improved 'ownership' of the measures and projects (see Section 1.1.5.6).

1.1.5.5 Greater emphasis on environmental and climate protection in the orientation of Cohesion Policy

Against the backdrop of growing environmental problems, particularly in the context of global warming and declining biodiversity, the fundamental question arises as to how the goal of uniform regional economic development should be assessed, particularly a development that uses GDP per capita as a key indicator of the level of economic development. It would make sense to focus CP more strongly on the goal of preserving and protecting Europe's biospheres in particular. Regions with disadvantages in conventional economic development opportunities may have comparative advantages in contributing to environmental protection and biodiversity conservation. If EU CP is conceptually focused on economic catch-up processes of the MSs rather than the regions, the designation of nature conservation or afforestation areas, for example, could become a central component of the national cohesion strategy alongside conventional development measures. Environmental quality should also be included as an indicator in the criteria for the level of development achieved.

1.1.5.6 Strengthening national ownership of Cohesion Policy through national cohesion programs

In order to improve the effectiveness and efficiency of CP, it is necessary to strengthen the acceptance of and commitment to regional policy programs in the supported countries and regions (ownership). To this end, the relevant local stakeholders must be more closely involved in the design of funding programs and the formulation of objectives. They should have scope for action in the implementation of the programs, but they should also take responsibility for the success of the programs. The latter would also be fostered by maintaining or even strengthening national co-financing of cohesion measures.

In principle, the problem of involving relevant stakeholders from the recipient countries has long been an issue in CP reforms. In 2013, the EU adopted a 'Code of Conduct' on partnership between

the European institutions and national and regional stakeholders in the MSs within the framework of CP (European Commission, 2014). This stipulates that institutions and organizations from the MSs, including non-governmental organizations such as trade unions or NGOs, are involved in the design of CP. This can be useful and increase ownership, but more should be achieved.

One option for this would be the aforementioned introduction of national cohesion plans, in which the MSs that receive support from CP set out their strategy for economic development, including measures and targets to be taken. A continuation of CP transfers could be linked to the achievement of formulated targets and milestones of the cohesion plan and documented in periodic interim evaluations. The approach of the NGEU crisis fund could provide some pointers. Here, the MSs must submit National Recovery and Resilience Plan (NRRPs) so that they actually receive the transfers and loans allocated to them.

1.1.6 Conclusions

The current changes in economic and geopolitical conditions in Europe pose considerable challenges for the EU. Overcoming these challenges requires, among other things, a willingness to adapt the structure of the EU budget to the new situation and to set new priorities. This also applies to EU CP. This article describes and explains various starting points for reforming EU CP. The focus here is on focusing on MSs instead of regions, broadening the prosperity indicators, providing more autonomy in the use of funds, and combined with clear responsibility and accountability of the national governments of the MSs receiving funding. The latter could be implemented by the MSs themselves submitting cohesion plans with corresponding targets, measures and milestones, which would form the basis of a corresponding agreement with the EU. Combined with maintaining or even strengthening of national co-financing, this would foster the 'ownership' of CP. In addition, a reform of EU CP must take into account new priorities such as the heightened security situation or the need for public investment in decarbonization. This implies a reduction in the funds available for CP, which requires a focus on the MSs with the lowest level of development. In exceptional cases, however, changed priorities can also be integrated in terms of content, for example through a stronger emphasis on environmental and climate protection in the cohesion plans.

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1.2 Michael Thöne: The Fiscal Architecture of the EU Cohesion Policy⁷

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Abstract

In its current setup, the EU is often characterised as slow, decision-impeding, inefficient and therefore not really ready for enlargement. The pandemic, the war in Ukraine, the energy crisis and the increasingly uncertain role in the global economy have further increased the high pressure on the EU to undergo modernisation. In this context, structural and CP is of double interest. With 30 per cent of the regular EU budget, it is one of its most important fields of action – one that has historically grown into a complex and opaque maze of objectives and instruments – and is therefore "part of the problem". At the same time, regional policy is traditionally a "part of the solution" whenever the need arises to pave the way for the enlargement and/or deepening of the EU through financial compensation. The paper sheds light on this dual function of CP by examining its fiscal architecture, which forms the underlying framework for convergence and cohesion policies.

In several steps, CP is examined in its function as a European financial equalisation system. The history of regional policy is reconstructed as a development in which the equalisation motive always came first, before CP justifications were applied to instrumental or financial expansions of this policy field. The "Mezzogiorno test" shows that the function of financial equalisation – albeit hidden – continues to dominate; alongside the promotional CP, the equalising CP plays de facto a very important role. This is also illustrated quantitatively and with an in-depth look at the little-analysed mechanism that ensures the allocation of EU funds across the MSs and their regions. Not least with regard to this fiscal equalisation formula, known as the Berlin method, the paper formulates several recommendations for the modernisation of structural policy, which are based on the premise that the purpose of CP to act as a financial equalisation is openly recognised and used productively for the further development of this policy area. The character of vertical fiscal equalisation with a horizontal effect and a strong investment focus should be retained, but further developed in accordance with the principle of subsidiarity. In the course of this, the "luxury fiscal equalisation" can also be reduced, which is currently carried out by allocating cohesion funds even to the richest regions of the EU and which costs 27 billion euros per year. A stronger focus on the principle of subsidiarity in CP also makes it easier for MSs to implement modern place-based policies, with which climate protection and transformation goals can also be realised more easily and efficiently.

1.2.1 The mounting pressure to modernise the EU and Cohesion Policy

The central cycle for all regular financial measures of the EU is seven years. However, the EU's current MFF for the years 2021 to 2027 clearly shows that many of Europe's political, economic and social challenges cannot be squeezed into this slow rhythm. The most important decisions for the current MFF were made in 2018 and 2019 – years in which the global Covid-19 pandemic that followed shortly afterwards was not yet foreseeable. The current Cohesion Policy, which is essentially implemented via the European Regional Development Fund (ERDF), the CF and the European Social Fund (ESF), therefore still reflects a pre-Covid world in many respects. Also, the fundamental changes in the general environment brought about by the Russian war of aggression against

⁷ This is a version translated by the author. The original chapter is written in German.

Ukraine for energy supply, international trade links and Europe's geopolitical conditions for action cannot, of course, be reflected in the previously fixed medium-term financial framework.

However, this is not necessarily a problem for the EU. The economic and social disparities between MSs and regions, which CP aims to reduce, remain key objectives of European integration, even in the face of the pandemic, war and energy crisis. With the large NGEU fund, Europe has shown that it can make swift and innovative decisions beyond the seven-year cycle. In particular, the RRF has established a second dimension of regionally oriented investment support.

However, this paper does not examine the coexistence of the two regional policy systems in the EU in detail⁸ and only touches on the seven-year cycle of the MFF in passing. Nevertheless, it takes its impetus from the observation of this prominent clash of two European policy modes – the slow-moving standard mode and rapid crisis response – and of the related strengths and limitations for a Europe that is fit for action and fit for the future. The acute crises and challenges that the MSs and their common European institutions have had to face since the beginning of the 2020s have given the EU an unforeseen development boost (Pestel & Süß, 2022). Rather than through calmly balanced reform programmes, the EU changes in response to immediate crises. In the EU's notorious constellation of significant structural obstacles to reform, this tactic of seizing the emerging opportunity to reform by overriding oneself – Jones et al. (2016) speak of "failing forward" from crisis to crisis – is very well understandable from a political economy perspective. In fact, something like the NGEU would hardly have been conceivable politically in less dramatic times than the pandemic.

At the same time, this unique European mobility in face of crisis does not ensure that the EU as a whole will move towards strengthening its functionality. This is because the ability to act in the crisis has arisen from two concessions: Firstly, the responses to the crisis establish an *additional* mechanism, while the traditional, financially and politically carefully balanced system remains untouched. Moreover, this additional mechanism is very expensive in financial terms. NGEU and ARF clearly illustrate these two characteristics. As a result, the flexibility gained in the short term also has an adverse effect on the ability to act in the medium and long term. As a result, the need for modernisation in the EU's established policy areas and for their governance mechanisms is increasing further. And this pressure was certainly not low beforehand.

The most recent proposal in a long string of reform initiatives was presented in autumn 2023 by a twelve-member Franco-German group of experts with proposals for reforming the EU based on two initial propositions that are difficult to dispute: For geopolitical reasons, EU enlargement is "high on the political agenda, but the EU is not ready yet to welcome new members, neither institutionally nor policy wise" (Group of Twelve, 2023, p. 5). The Group makes a series of far-reaching proposals for the further institutional and constitutional development of the EU, which could also serve the German government's reform goals for a "more democratically consolidated, more capable and strategically sovereign EU [...] in accordance with the principles of subsidiarity and proportionality" (Coalition Agreement, 2021, p. 131). The reform perspectives of the governments of many other MSs– not least France– also aim to strengthen the EU by modernising its institutions

⁸ See Corti et al. (2024) in this issue.

with a focus on policy areas with clear EAV, thus rendering it more capable of acting independently.

This paper builds on this motivation for modernisation. With a view to a possible enlargement, but also for the EU-27, it is worth examining all areas of activity and all institutions of the EU, which is, in President Macron's words, "too weak, too slow and too inefficient" in its current state. The aim is to see how a perspective based on EAV and the principle of subsidiarity can contribute to achieving the common European goals more efficiently in structural and also in financial terms. CP currently receives around one third of the regular EU budget and – not only for this reason – lends itself to such an examination from many different angles – as the various articles in this issue show.

1.2.2 Cohesion Policy from a fiscal-federal perspective

The paper analyses the *fiscal architecture* of EU Cohesion Policy. The subsequent sections characterise this fiscal element as the load-bearing construction on which the diverse regional, social and transformative features of past and present CP constitute the interior fittings of the building. From a fiscal federal perspective, CP is analysed in its function as a unique and hidden European fiscal equalisation. The idea is not to *pretend* that structural policy is a financial equalisation or to construct a different "narrative". The fiscal architecture of CP describes facts that are obvious – although they may not always be talked about.

With this, the author uses a decidedly fiscal perspective for the third time to analyse the structures of the EU. The application of the concept of public goods to the tasks of the EU leads to a classic application of the theory of fiscal federalism with conclusions on the "Europeanisation" of the EU, i.e. a stronger focus on *European public goods* (see, for example, Heinemann, 2016; Thöne & Kreuter, 2020).⁹ A closer look at the European multi-level system from a public finance perspective

⁹ Just as the EU financial framework follows a seven-year cycle, the systematic discussions on the federal allocation of tasks to the European level follow a similar cycle. With regard to European public goods, Heinemann (1999, p. 293), for example, stated early on that "(...) much of the traditional financial literature on the EU financial constitution [is] based on false assumptions" if it believes that the EU concentrates its activities on normatively well-justified tasks of a central federal level. A quarter of a century ago, this statement was perhaps more pertinent than today. However, it should also be noted that the *first-generation theory of fiscal federalism*, i.e. the normative theory of fiscal federalism based on welfare theory, was not wrong as such. If responsibility for European public goods were actually concentrated at the EU-level, this would constitute an efficient allocation of tasks. However, it would be wrong (and naïve) to assume that the actual distribution of tasks in a federal entity such as the EU would in reality fulfil the requirements of the normative allocation theory. The *second-generation theory of fiscal federalism* (Weingast, 1995; Oates, 2005; Weingast, 2009), with its focus on political economy and empirical research, has cleared up this potential misconception by explaining how actual federal fiscal constitutions are formed. These empirical findings are important not least in order to better understand the significant political economy hurdles on the way to an efficient allocation of tasks. Since Europe— regardless of the cyclical nature of systemic discussions— is continuing to evolve, it should be added that from today's perspective, the discussion on European public goods has gained in importance. In the immediate aftermath of the biggest pandemic in a century, in the face of rapidly advancing climate change and in a geopolitical constellation in which Europe must bear much more responsibility for

shows that, contrary to an obvious and widespread analogy, this proto-federal structure is in no way comparable to the dual federalism of the United States of America. Rather, the EU functions as a vertical co-operative administrative federalism similar to the German or Austrian model. This includes, above all, the so-called connectivity problems of synchronising the decentralised implementation of European tasks and their adequate 'federal' financing (Thöne & Kreuter, 2021).

This kind of analysis adopts an outsider's perspective that deliberately does not fit in every respect. Precisely fitting studies of the EU view it as the singular institutional and political entity that it is. Such an idiosyncratic view naturally does the EU the most justice. But this insider's view inhibits associations, analogies and comparisons with similar phenomena: the view of the EU as a unique entity hinders thinking in alternatives.

The alternative view of CP as a kind of financial equalisation is not new. It is a well-established term in the European policy discourse. This dual view also underlies the research project of the Federal Ministry of Finance, in the context of which this paper was written: "Regional policy is implemented in cooperation with the MSs. It leads to a horizontal fiscal equalisation between economically strong and weak MS" (BMF, 2022). This does not refer to horizontal fiscal equalisation in the narrower sense, but to vertical fiscal equalisation with a horizontal distribution effect. Theoretically, horizontal fiscal equalisation with direct payments between the Member States— or a structural policy financed horizontally in this way— is also conceivable. However, it could be argued that Article 174 TFEU (ex-Art.158 TEC) explicitly assigns the cohesion objective and the policy geared towards it to the Union, which would rule out horizontal financial equalisation (Emmerling, 2002).

Whether this EU competency actually prohibits a conceivable horizontal transfer technique— e.g. as netting with own resources— can be left open. What seems more important here is that other fiscal equalisation schemes are also typically organised on a vertical basis for good reason and thus only indirectly generate their horizontally redistributive effect. For example, all 13 municipal fiscal equalisation schemes of the German Länder are structured on a primarily vertical basis.¹⁰ The horizontal financial equalisation *among* the Länder in Germany, which had been in place for decades, was also converted into a vertical fiscal equalisation between the federal government and the

its own security, there are good reasons to take European public goods seriously not just as a theoretical, appealing concept, but as an existential, urgent, realpolitik postulate for Europe.

¹⁰ The distinction as to whether a fiscal equalisation system is horizontal or vertical with a horizontal redistribution effect cannot be made with regard to legislative powers, as horizontal systems must generally also be enacted vertically by the higher federal level. Horizontal financial equalisation systems have explicit recipients and payers; the central level primarily assumes the function of a clearing house to simplify payments. In vertical systems, on the other hand, there are only lower-level authorities that receive allocations of different sizes from the central level according to their financial or economic strength. This bigger central budget can, but does not necessarily have to, go hand in hand with greater power of disposal. Naturally, a central level in such systems must have higher initial funding in order to be able to finance the system. However, constitutions can make very clear stipulations as to the equal treatment or possibly even prioritisation of lower-level local authorities in such vertical systems. In Germany, for example, the constitutions in the Länder Brandenburg, Saxony-Anhalt and Schleswig-Holstein give the municipalities equal or even better financial protection than the respective Land level.

Länder with effect from 2020 – at the insistence of the financially strong contributor Länder (Bullerjahn & Thöne, 2018).

The preference for vertical systems can be explained in political or political-economic terms. From a rational point of view, the direction of payment – whether horizontal or vertical – should make no difference in a transfer system. In a horizontal system, there is a clear distinction between payers and recipients, i.e. between "rich" and "poor" countries or local authorities. The resulting transparency is to be welcomed in principle. At the same time, however, it is also argued that such a "brotherly approach" must be based on very strong solidarity (Zimmermann & Döring, 2019, p. 257). Furthermore, in political practice it can be observed that the absence of horizontal equalisation elements has the effect that the political representatives of legally and democratically equal regional authorities also treat each other as equals. In this sense, it helps if the parties involved do not have a precise picture of who is subsidising whom or who is being subsidised to what extent. In contrast, the decades-long dominance of the horizontal element in the German federal-state fiscal equalisation system has fuelled the polarisation between contributor and recipient states. As a result, federal reform debates always concentrate on either financial issues or on more substantive issues such as the federal allocation of government tasks. These two dimensions of federal reform, which actually belong together, could never be negotiated at the same time because the complexity involved was too high for the political powers to find agreements. Even within the EU, the so-called *juste retour* thinking, i.e. the fixation of the MSs on their own net contributor or net recipient position, is seen as a central obstacle to overcoming the common challenges that Europe must face. In other areas of European integration, too, less obvious transfer relationships often prove to be the politico-economically acceptable solutions because they are easier to adopt, especially for the (indirect) payers, as shown by Heinemann (2021) using the example of the lack of a transparent Sovereign Debt Reconstructing Mechanism (SDRM).

Knowing the reasons for non-transparent transfer mechanisms does not mean approving of them. However, to the extent that vertical financial equalisation is also a means of dealing with limited decision-making capacities and irrational loss aversion, the theoretical merits of transparent horizontal equalisation systems become questionable. In the following, this paper will place particular emphasis on increasing the transparency of European CP insofar as its character as a fiscal equalisation mechanism is discussed explicitly and is the subject of recommendations for further development. However, it will not go so far as to recommend a transformation of CP into a genuine horizontal fiscal equalisation between the MSs. Given the vulnerability of the European decision-making system to blockades due to high consensus requirements and diverging interests of the MSs, which has now been analysed in detail in political science research (Holz, 2022, with further references), opening up an additional sphere for intergovernmental dissent would be too great a step. This would thwart the potential benefits of a fiscal federal perspective on CP.

1.2.3 Highlights from the evolution of structural policy as an equalisation mechanism

When we speak of the development of structural and CP as a policy of financial equalisation, we are not referring– from a historical perspective– directly to fiscal equalisation between economically different MSs. The focus is on the development of structural policy itself as compensation for impending financial losses or as *side payments* in the event of major changes, in particular the enlargements of the European Community(ies) and later of the EU.

Throughout its history, in almost every major change, European structural and CP has served as a bargaining chip for the realisation of other objectives. New structural funds were used to buy the agreement of individual MSs to important Community decisions. Without the enlargements, structural policy would not exist in its scope and organisation (Emmerling, 2002; Freise & Garbert, 2013; Holz 2022):

- When the European Economic Community (EEC) was founded in 1957, the ESF was created in order to win Italy's approval and enable the poorer regions of Southern Italy to catch up economically.
- The European Regional Fund was set up in 1975 to prevent the last-minute failure of the accession of the United Kingdom, Ireland and Denmark to the EC. Originally, the British government itself had called for such a fund during the accession negotiations in order to receive more payments from the EC and to counter domestic political resistance. At first, the six founding members were rather critical. When the demand for a regional fund was dropped after a change of government in London, Italy and Ireland took the initiative and threatened to block the crucial summit meeting at the end of 1974. To avoid this, the ERDF was set up in 1975. Its original limitation to three years would not last long.
- After the death of the dictator Franco in 1975, Spain's first post-war democratic government applied for membership of the European Community. Like Portugal, Spain became a full member at the beginning of 1986. This was accompanied by a doubling of structural funds as of 1988.
- The reform of fund governance, also implemented in 1988, is regarded as the birth of structural policy as an independent Community policy area. In a long, cumulative policy process, it was separated from European budgetary policy (Heinelt et al. 2005). Since taking office in 1985, the Delors Commission in particular had endeavoured to counter the financial issues dominated by the MSs in structural policy with the Commission's own claim to shape them: "The Commission aims to reverse the trend towards treating these funds as mere redistributive mechanisms" (COM, 1985, cited in Holz, 2022, p. 60). The instrument used to overcome the character of structural policy as primarily financial equalisation was the introduction of the four procedural principles of CP in 1988: (1) concentration, (2) programming, (3) additionality and (4) partnership. The partnership principle in particular— even if its importance is often overlooked in economic analyses— proved to be a very effective instrument for consolidating Europe's claim to control. As the Commission now cooperated directly with public and non-governmental actors at regional level, the previously bilateral relationship with the individual MSs was transformed into a multi-stakeholder constellation in which the MSs now faced the need to negotiate with "above and below". As a result of the 1988 reform of structural policy, the MSs continued to dominate the financial dimension, while the Commission extended its strategic competencies over the management of the Structural Funds (Sutcliffe, 2000).
- The character of structural policy as a channel for *side payments* and compensation for far-reaching changes in the Community remained unaffected by this reform. At best, it now became strategically more interesting for the Commission to expand structural policy in this way. As early as 1992, there was a further significant increase in structural funds, which was linked to the completion of the European single market. The perception in the Community – on all

sides – was that the central regions would initially benefit most from deeper economic integration, while the increased competition would be disadvantageous or at least risky for the peripheral regions in the short and medium term.

- The agreement of the economically weaker MSs to the Maastricht Treaty for the realisation of monetary union was bought with the establishment of the CF in 1994. At the end of 1991, Spain, Portugal, Greece and Ireland had rejected the Maastricht Treaty unless they were promised additional structural funds and the objective of economic and social cohesion was included in the Treaty. The CF, which was subsequently set up at the turn of the year 1993/1994, was given the new task of promoting environmental issues and the trans-European transport networks. In contrast to the other structural funds, the resources of the CF were distributed on a national basis. This ensured that the new subsidies from the CF only benefited Spain, Greece, Portugal and Ireland. (Holz, 2022, p. 52).
- The same period saw the accession of Austria, Sweden and Finland to the EU on 1 January 1995. The doubling of Structural Fund resources with the Delors II package for the 1994 to 1999 funding period can also be seen as a response to Spain's threat to block the accession of the three countries and Norway.¹¹
- In summary, it can be said that the decision on monetary union and the EU enlargement in 1995 meant a qualitative leap for structural policy: "Even if Cohesion Policy already knew donor and recipient states beforehand, it was only with the Maastricht Treaty that the financial framework of Cohesion Policy was expanded to such an extent that it is fair to speak of a transfer union" (Freise & Garbert, 2013, p. 36; original in German).
- Between 2004 and 2007, the EU was enlarged in two stages to include ten Central and Eastern European states as well as Cyprus and Malta. In two respects, the eastward enlargement represents an exception to the historical development of structural policy as compensation and as a price for agreeing to enlargement. Among the MSs of the EU-15, the eastward enlargement was seen as a strategic and historical opportunity, which – also with regard to the European security – was unanimously supported by and large. None of the old members regarded itself as a serious veto player. At the same time, the net contributors in particular were for the first time very reluctant to take on the financial burden of a potentially massively expanded structural policy, as eastward enlargement was already very expensive as it was. Indeed, without the means for universal compensation on all sides, eastward enlargement has led to a significant deterioration in the net position of a number of MSs. This was most clearly the case for Italy, which went from being a net recipient to one of the largest net contributors (in absolute terms). At the same time, average GDP fell with the eastward enlargement. As a result, 16 regions in Southern Europe and Eastern Germany lost their Objective 1 status as maximum recipient regions – while their economic situation remained unchanged (Braun & Marek, 2014). As there was no room for major changes or increases in structural policy over and above the endogenous effects of enlargement, the compromise that was eventually reached was

¹¹ In a referendum in 1994, the voters of the Kingdom of Norway rejected their country's accession to the EU by a narrow majority – as they had once before in 1972.

primarily aimed at limiting the financial damage to the affected old members. As far as the EU-15 was concerned, the funding objective for the transition regions was central, and the losses of the former Objective 1 regions were mitigated by transitional funding. More developed regions were also able to qualify for new funding objectives, meaning that all EU regions were eligible for structural policy funding for the first time in the 2007-2013 period.

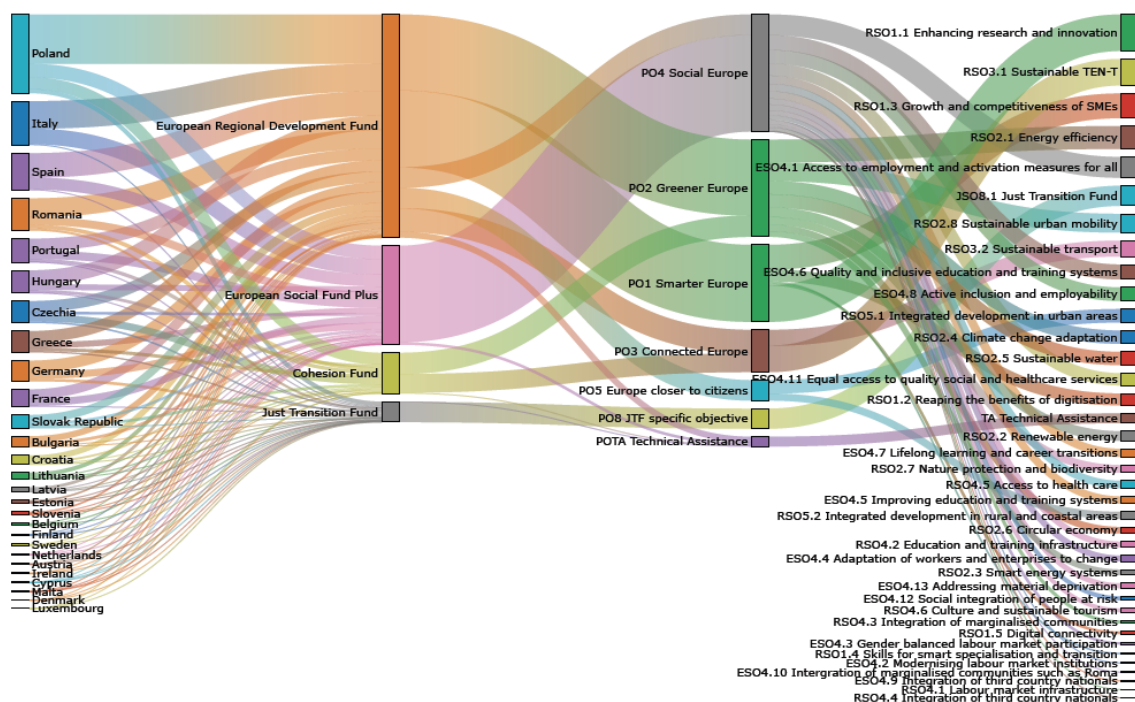
During the reform stagnation of the 2000s and 2010s, comparatively little progress was made due to intensified distribution conflicts following the eastward expansion, increasing criticism of the effectiveness of these programmes and the financial crisis from 2008 onwards (Holz, 2002, p. 32). In the 2014-2020 funding period, a stronger focus was placed on growth and employment in order to meet the challenges of the economic and financial crisis. In addition to promoting innovation, competitiveness and employment, a stronger thematic focus was adopted in order to emphasise key areas such as research and innovation, environmental protection and education alongside employment. The changes resulting from the parallel operation of CP and the RRF cannot yet be validly assessed at the time of completion of this paper.

This overview of the evolution of structural and CP is incomplete in many respects. Neither was CP appraised in terms of its actual performance in creating economic convergence and social cohesion, nor were the macroeconomic and ex-ante conditionalities enforced since the Lisbon Strategy considered, with which structural policy is also increasingly used to enforce the common economic policy coordination procedures and as a sanction instrument for the Stability and Growth Pact.

There have been successes and setbacks in all of these dimensions. This is true regardless of the fact that most of these policy areas were not primarily established at European level because there was a compelling technical need to do so. This observation can be distilled from the short history of CP: CP has always emerged "the other way round". The normal case would be that political actors form around an emerging or long-standing problem and formulate political objectives and instruments to solve it. This sequence was easy to observe with the COVID pandemic and the "NextGenerationEU" (NGEU) recovery plan adopted in its response. Not so with the many stages of CP: "The sequence is always the same: First, a compensation demand is put on the table. If this is generally accepted, then a normative disguise for the payments is sought [...]" (Heinemann, 1999, p. 294; original in German). Or, as Hooghe (1996, p. 7) put it early on, but still aptly: "The budget came first, then came the policy".

The number of such *policies that* have been added to structural policy over the years is clearly illustrated by a current chart in which the EC attempts to bring together all the objectives, funds and recipients of structural funds in one picture (Figure 1.2.1).

Figure 1.2.1: Cohesion Policy planned EU financing by themes (2021-2027)



Data: COM (2024); Cohesion Open Data Platform. https://cohesiondata.ec.europa.eu/cohesion_overview/21-27

In view of this closely intertwined – and, from an evaluation perspective, dauntingly complex – web of many objectives, numerous sub-objectives and the associated financing plans, it seems far-fetched to associate the multi-layered CP with something as (supposedly) simple as financial equalisation.

However, there is no contradiction with the image of fiscal architecture: anchored in the load-bearing framework of fiscal equalisation, the interior fittings of CP have become increasingly complex, colourful and complicated over the decades. So at the end of our historical review of structural policy, it becomes clear that the question is not whether CP can be compared with financial equalisation. The question is rather how well this policy, primarily founded for equalisation and compensation, still functions as this financial equalisation system that it was created to be, despite – or in spite of – the many different forms it has taken. The question is rather how well this policy, which was primarily founded as an equalisation and compensation, still functions as the financial equalisation system as which it was created, considering – or in spite of – the many different policy purposes it has been assigned to.

1.2.4 On the relationship between regional structural policy and fiscal equalisation: empirical similarities and differences

Regional policy and financial equalisation are not the same. When considering the question posed in this paper, one repeatedly comes across contributions in the literature in which the fundamental differences between the two concepts are worked out on the basis of their ideal-typical characteristics. Moisiu and Vidal-Bover (2023) currently offer a good overview; the older literature on European financial equalisation also uses such classifications (Mackenstein, 1997; Püttler, 2014; Thomas, 1997; Walther, 1996). Working out the differences and similarities of regional aid policies

and fiscal equalisation on a conceptual and instrumental level has great merit if one is interested in ideal types. Moisiso and Vidal Bover (2023) characterise the ideal financial equalisation, compare it with an ideal and also *successful* (!) regional aid policy, work out the differences between the two models and identify potential synergies between the two fields. We will return to any synergies in our conclusions. However, we are not starting from the ideal, but from the reality of European CP– equipped with the empirical knowledge that in reality, financial equalisation also sometimes strays far from the ideal.

1.2.4.1 Promotional policy or fiscal equalisation? The Mezzogiorno test

How much financial equalisation is there in the EU's regional structural policy? The answer to a simple question can help: *Would the EU stop supporting poorer regions via structural policy measures if or where this support ultimately fails?*

This paper is based on the assumption that the answer to this question is *"no"*. Figure 1.2.2 outlines what this consideration, here called the "Mezzogiorno test" in reference to the founding of the ESF in 1957, means for the distinction between regional aid policy – characterised as “promotional policy” – and financial equalisation.

Figure 1.2.2: The "Mezzogiorno test" on the continuation of unsuccessful regional promotional policy

Premise: Convergence remains the focus of EU regional policy (= "strengthening economic, social and territorial cohesion" = "correcting imbalances between countries and regions" = "catching up").		
What if, catching up...	Promotional policy	Fiscal equalisation
...is achieved?	Allocations are discontinued.	Allocations are discontinued.
... is not yet successful, but there is reasonable hope?	Allocations are continued.	Allocations are continued.
... has not been achieved and there is no prospect of it?	Allocations are discontinued.	Allocations are continued.
Mezzogiorno test: If the allocations continue, Cohesion Policy is...	...failed promotional policy.	...regular fiscal equalisation.

Source: Own illustration.

As is clear, promotional policy for economic development and fiscal equalisation run in parallel in the majority of cases when regional economic strength and fiscal strength correlate (which is the rule). The observation of the Mezzogiorno test that a regional promotional policy aimed at economic development that has not led to success after several decades but is nevertheless continued is pointedly characterised as a failed promotional policy in Figure 1.2.2. From an evaluator's point of view, this is certainly true: Subsidies that consistently do not achieve their objectives have failed and should be abolished. But in the political reality, subsidy policy often reacts to findings of this kind by formulating new objectives and continuing the grants. The continued redefinition of the objectives of the Structural Funds through the European programming process also sometimes has to face this criticism (see Feld & Hassib, 2024 in this issue). However, reprogramming that

turns out to be purely opportunistic will do little to change the evaluators' judgement if the original objectives are not met.¹²

From the point of view of fiscal federalism, this polarisation is exaggerated anyway. In the absence of economic progress, allocations continue as normal. This is a perfectly conventional constellation that fiscal equalisations are designed to address as a standard. Fiscal equalisations are regularly designed to take appropriate account of different levels of prosperity as well as their changes—convergences and divergences. Leaving aside the fact that the fiscal distributive function of Cohesion Policy is historically the older one anyway, the financial dimension of structural policy can certainly be described as complementary to the cohesion objective: Convergence-oriented structural policy is intended to deepen economic and social cohesion by steering support measures to help weaker regions catch up. It is still the case that cohesion through greater convergence of prosperity and economic performance – i.e. cohesion through convergence – is the ideal path for structural policy. However, decades of experience have shown that a *promotional* CP does not succeed everywhere. The economic and social convergence of all European regions remains an unattainable goal.

The legislative development of EU CP already echoes this understanding. The political objectives of the ERDF, the ESF+ and the CF have been formulated in such a multifaceted way, for the current funding period at the latest, that the convergence perspective is only one of several dimensions (see Figure 1.2.1 above). This systematically legitimises what has long been a reality of European policy: *stabilising* CP. This side of CP concerns the economic, social and territorial cohesion of an EU where the regions do not (or cannot) converge as desired. It reflects the fact that regions that do not catch up in the long term (must) remain a target of CP. The coexistence of *promoting* and *stabilising* CP is a central feature of what is described here as the actual fiscal architecture of CP.

To further clarify the effect of structural policy as a de facto fiscal equalisation, two aspects will now be examined in more detail: the fiscal equalisation formula and the actual redistributive effect between economically stronger and weaker MSs.

1.2.4.2 The equalisation formula of Cohesion Policy

Any regular active fiscal equalisation¹³ between regional authorities is essentially based on a formula that determines which regional authorities receive what level of funding and under what conditions. In the case of purely vertical fiscal equalisation with a horizontal effect, the formula is limited to the recipient side— if necessary, the formula also determines the conditions under which

¹² Reprogramming as learning from past failures is naturally evaluated differently.

¹³ Active fiscal equalisation is preceded by so-called *passive* fiscal equalisation, which uses, among other criteria, the principle of subsidiarity to clarify which regional authority is responsible for which government tasks. The debate on European public goods mentioned above takes place in this area. The subsequent *primary active fiscal equalisation allocates* certain taxes or tax shares to the local authorities for their tasks. Finally, in *secondary active* fiscal equalisation, the primary distribution is corrected (where necessary) by reconciling the burden of tasks, the resulting financial requirements and the tax capacity through allocations. This final stage – fiscal equalisation in the narrower sense – ultimately determines how well the local authorities can perform their tasks.

certain local authorities no longer have insufficient financial needs and therefore do not receive any transfers.¹⁴

If we want to identify the implicit formula in European Cohesion Policy that determines the distribution of funds to the beneficiary regions and their structural policy projects, we need to look at a multi-stage system at the end of which the decisive, but somewhat hidden, formula emerges. For the sake of simplicity, we will only look at the financially most important area of structural and CP, the allocations under the "Investment for jobs and growth" objective. According to Art. 110 para. 1 of the Common Provisions Regulation (CPR) for the MFF 2021-2027, this accounts for 97.6%— i.e. EUR 329.7 billion— of the total structural policy funds. The focus is on the well-known tripartite breakdown of NUTS 2 regions into:

- *Less developed regions* with a GDP per capita below 75% of the EU average (61.3% = 202.2 billion euros).
- *Transition regions* with a GDP per capita of between 75% and 100% of the EU average (14.5% = EUR 47.8 billion). In the previous funding period 2014-2020, the upper limit for transition regions was still 90% of the EU average GDP per capita. The increase to 100% in the period 2021-2027 has led to a significant relative increase in the applicable funding rates.
- *More developed regions* with a GDP per capita that is above 100% of the EU average (8.3% = EUR 27.2 billion).¹⁵ In the previous funding period 2014-2020, regions with a GDP per capita of 90% of the average were already considered "more developed".

All three types of region are eligible for funding under EU regional policy, including the last and richest. This was not always the case; funding for operations in the more developed regions only became eligible from the 2007-2013 period. The three types of regions differ in two respects. First, for each type of region there is a separate constraint on the minimum or maximum share of total regional funding that can be allocated to which sub-objectives. Secondly— and this is the better known part— different national or regional contributions are required in the different types of regions. According to Art. 112 (3) of the CPR, the EU co-financing rate for the "Investment in jobs and growth" objective is a maximum of:

- a) 85% for less developed regions and outermost regions;
- b) 70% for transition regions defined as less developed regions for the 2014-2020 period;
- c) 60% for transition regions;
- d) 50% for more developed regions that were defined as transition regions for the 2014-2020 period or whose GDP per capita was below 100%;

¹⁴ In the case of horizontal fiscal equalisation, the part of the formula geared towards the financially strong local authorities also determines how much these local authorities have to pay (cf. Section 1.2.2 above).

¹⁵ The 100% missing shares in this rendition from the CPR of 2021 are largely concentrated in the Member States supported by the CF (12.9%) and in small parts for other purposes (JTF, inter-regional innovation investments, and outermost locations).

e) 40% for more developed regions.

At first sight, the regional co-financing rates guarantee that more funds are invested in regional structural policy projects than foreseen in the MFF and the CPR. Whether these funds from MSs are also additional in an economic sense is another, ultimately empirical question (see Asatryan & Birkholz, 2024 in this issue).

So far, these preliminary stages of the formula largely resemble the specifications of a simple, regionally differentiated support programme with co-financing rates designed to ensure local commitment. However, this does not yet answer the question of how much European regional funding will flow to each region. It should be emphasised that this question would not even need to be answered if this were a normal subsidy programme. The above-mentioned (and many other, not mentioned) framework conditions are intended to ensure that investments which are equivalent in terms of their regional economic justification and the specific objectives they pursue can also be subsidised in the same way, provided that they are carried out in the same of the three types of region. Provided that these conditions are met, an EU aid policy that makes efficient use of scarce financial resources should ensure that its funds are used where they have the highest added value in terms of the objective of "investing in jobs and growth". Any additional restriction on the use of funds, in the sense that, for example, EU funds are reserved for less developed regions in MS A, even though less developed regions in MS B could implement more effective employment measures in the same way if they could draw on the unused funds from regional programmes, is a potential source of inefficiency, hinders EU-wide comparability and evaluability and, above all, contradicts the principle of a rational and fair promotional policy.

As explained in Section 1.2.3, such a rational and fair funding policy has not historically been the primary purpose of EU structural policy. It was never designed to support the best projects in the least economically developed regions, regardless of the MS in which these regions are located. The primary aim of structural policy was and is to provide MSs with specific funds for regional development, which they can then use as efficiently as possible according to different local conditions. It is a system of equalisation which was originally directed at the MSs and in which the regional focus was not the only motivation, but also served as a pretext for differently motivated equalisation transfers and side payments.

Today, this is no longer so obvious. Since 2000, the so-called Berlin method has been used to distribute funds to the regions. The European Court of Auditors (2019) found the procedures for determining the funds available to MSs to be "relatively complicated", prompting it to review these distribution methods in a 55-page Rapid Case Review in preparation for the current funding period 2021-2027. As the final step in the distribution of funds continues to take place outside the Berlin method as a political negotiation between the EU and the MSs, the final quantitative parameters for the allocations still have significantly different values compared to the Rapid Case Review. However, the basic structure of the Berlin Method has remained unchanged in the current funding period. At least, after more than twenty years of application, the method has now been included in the CPR for the first time (ECA, 2019, p. 13), where it can be found as the last of 26 annexes. An end to this lack of transparency was long overdue.

The observation that the EU's structural and CP is probably the most evaluated European policy area (Darvas et al., 2019) applies to the MSs and the policies they and their regions implement.

This is by no means the case for the EU itself. Only now can more analytical light be shed on the central financial equalisation component of structural policy.

In this respect, the European fiscal equalisation established in CP differs significantly from the equalisation systems that are common in Europe's federal and proto-federal states. The fiscal equalisation systems in Austria, Switzerland, Spain and Germany are the subject of intensive economic and, in some cases, legal research. In contrast, the financial equalisation character of CP has not been studied and has never been evaluated.

Beyond this external feature, however, the technical similarities between the distribution of funds according to the Berlin procedure and conventional financial equalisation are striking. To ensure that it does not go beyond the confines of this article, only the first of the three parts, the allocation formula for the less developed regions, is presented in Figure 1.2.3.

Figure 1.2.3: Equalisation formula for less developed regions according to the Berlin method

Methodology on the allocation of global resources per Member State – Article 109(2)	
ANNEX XXVI of the CPR – Common Provisions Regulation (L 231/692)	
Allocation method for the less developed regions eligible under the Investment for jobs and growth goal – point (a) of Article 108(2)	
1. each Member State's allocation shall be the sum of the allocations for its individual eligible regions, calculated in accordance with the following steps:	
a)	determination of an absolute amount per year (in EUR) obtained by multiplying the population of the region concerned by the difference between that region's GDP per capita, measured in PPS, and the EU-27 average GDP per capita (in PPS);
b)	application of a percentage to the above absolute amount in order to determine that region's financial envelope; this percentage shall be graduated to reflect the relative prosperity, measured in PPS, as compared to the EU-27 average, of the Member State in which the eligible region is situated, i.e.:
i)	for regions in Member States whose level of Gross National Income (GNI) per capita is below 82 % of the EU-27 average: 2.85 %;
ii)	for regions in Member States whose level of GNI per capita is between 82 % and 99 % of the EU-27 average: 1.25 %;
iii)	for regions in Member States whose level of GNI per capita is over 99 % of the EU-27 average: 0.75 %;
c)	to the amount obtained in accordance with point (b) is added, if applicable, an amount resulting from the allocation of a premium of EUR 570 per unemployed person per year, applied to the number of persons unemployed in that region exceeding the number that would be unemployed if the average unemployment rate of all the less developed regions applied;
d)	to the amount obtained in accordance with point (c) is added, if applicable, an amount resulting from the allocation of a premium of EUR 570 per young unemployed person (age group 15-24) per year, applied to the number of young persons unemployed in that region exceeding the number that would be unemployed if the average youth unemployment rate of all less developed regions applied;
e)	to the amount obtained in accordance with point (d) is added, if applicable, an amount resulting from the allocation of a premium of EUR 270 per person (age group 25-64) per year, applied to the number of persons in that region that would need to be subtracted in order to reach the average level of low education rate (less than primary, primary and lower secondary education) of all less developed regions;;
f)	to the amount obtained in accordance with point (e) is added, if applicable, an amount of EUR 1 per tonne of CO2 equivalent per year applied to the population share of the region of the number of tonnes of CO2 equivalent by which the Member State exceeds the target of greenhouse gas emissions outside the Emissions Trading Scheme (ETS) set for 2030 as proposed by the Commission in 2016;

Methodology on the allocation of global resources per Member State – Article 109(2)

ANNEX XXVI of the CPR – Common Provisions Regulation (L 231/692)

- g) to the amount obtained in accordance with point (f) is added, an amount resulting from the allocation of a premium of EUR 405 per person per year, applied to the population share of the regions of net migration from outside the Union to the Member State since 1 January 2014.

Allocation method for transition regions eligible under the Investment for jobs and growth goal – point (b) of Article 108(2)

(....)

Allocation method for the more developed regions eligible under the Investment for jobs and growth goal – point (c) of Article 108(2)

(...)

As this is a regional policy, whose funds are allocated to the Member States, the funding of a country is composed of the separate funds calculated for the three types of region. Separate rates apply for each type of region. The formula for the less developed regions, which is by far the most important in fiscal terms, is particularly interesting in view of its fiscal equalisation function:

- At the centre stands the relative economic power of the region per capita, i.e. the difference between the GDP per capita of the region and the average GDP per capita of the EU. This calculation of a gap to an overall average corresponds to the main approach of traditional fiscal equalisation, in which a region's own standardised fiscal strength is compared to an average fiscal strength. This gap is the primary basis for the allocation amount. By (always only) partially closing the gap, interregional differences in fiscal and economic strength are reduced without leading to levelling or overcompensation.
- Finally, five different factors can give rise to additional allocations: relative backlogs or additional burdens in terms of regional unemployment, youth unemployment, education levels, greenhouse gas emissions and immigration from outside the EU. Comparable, but usually independent ancillary approaches are also used in conventional financial equalisation schemes to take into account additional needs for intervention and the associated financial requirements on a generalised basis.¹⁶

¹⁶ However, as these additional factors are taken into account *within* a region type defined on the basis of GDP, they do not create an independent regional framework, e.g. geared towards climate protection, for this specific target. The premium for higher GHG emissions in the less developed regions and in the transition regions is formulated identically in Annex XXVI. However, due to the different funding quotas, also different marginal transfers per tonne of CO₂ equivalent are provided in the different regional types. The ancillary objectives are subordinated to the regional categories related to economic strength. This is consistent in terms of traditional regional policy, but inefficient with regard to the other transformation goals. For example, Südekum & Rademacher (2024) use the German example to show that a spatial framework related to climate protection would deviate significantly from the conventional spatial framework of regional policy. This reveals tensions and trade-offs that can hardly be avoided if modern, multidimensional place-based policies are to be implemented in a one-dimensional spatial framework. In a fiscal equalisation logic, such problems could be mitigated with independent, overarching ancillary approaches.

- A distinction is made between the main approach and the five ancillary approaches with the three-stage scale (i) to (iii) of point (b), which is applied to the main approach. Poor regions in rich MSs receive significantly less funding than economically comparable regions in poorer MSs. The percentages used here show considerable discontinuities at the transitions from (i) to (ii) and (iii) – which would be a design flaw in any well-constructed fiscal equalisation system. The percentages applied in the three steps do not show a differentiation that can be understood on the basis of objective criteria. They are obviously used for political fine-tuning to ensure that the different MSs ultimately receive the regional funding intended for them. However, the three-tier system is also interesting for another reason: it conceals a "financial equalisation within the financial equalisation", since the relative fiscal strength of the MSs concerned is again taken into account in this formula, i.e. the principle of subsidiarity is applied in an unexpected place. It is also worth noting that the usual reference to GDP has been abandoned in favour of GNI. GNI is the more appropriate reference when it comes to fiscal capacity and fair fiscal equalisation, as in the case of the EU's own resources.

Of the two other allocation formulas for transition regions and more developed regions, which are not specifically shown here, the first still roughly corresponds to the model of the formula for less developed regions. For the transition regions, too, a main approach based on the gap in economic strength is combined, albeit not identically, with the five ancillary rates mentioned above. The ancillary rates formulated are partly identical to the rates for the less developed regions and partly deviate from them. Once again, there is no discernible justification for such discretionary arrangements. Obviously, they are used as political levers.

The allocation formula for the more developed regions differs markedly from the previous two. Since a main approach based on economic disadvantage is clearly unsuitable in the above-average regions, these regions instead are all assigned a per capita amount for the regional population, without any recognisable justification linked to the cohesion objective. For every region in the EU, no matter how rich and free of all economic, social or other worries, its MS is entitled to a certain amount of regional funding from the Union. However, this basic entitlement is small and is only weighted at 20%. Most of the allocations (70%) are determined using indicators that take into account any relative backwardness of the more developed region concerned compared to the average of all these rich regions. This financial equalisation between the rich regions alone relates to indicators such as unemployment, youth unemployment, higher education and early school leavers. Greenhouse gas emissions do not play a role here, but sparsely populated regions are taken into account (2.5%).

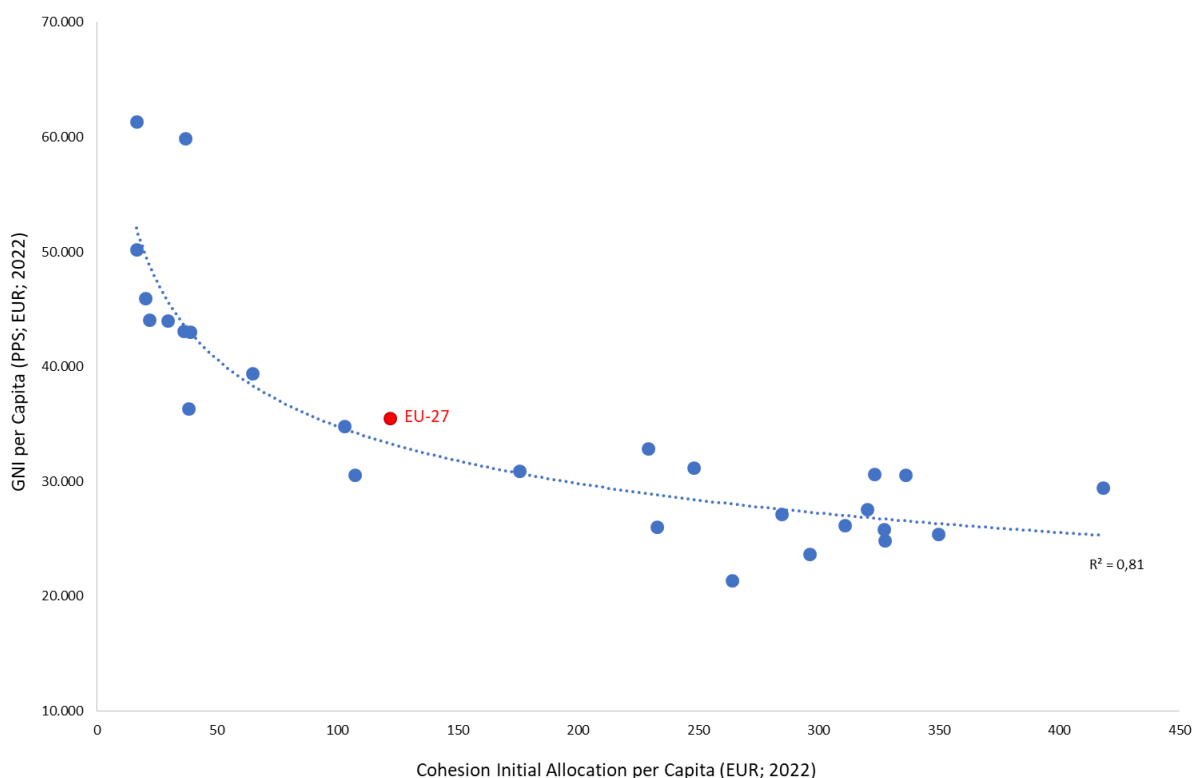
Finally, with a weighting of 7.5%, a small equalisation element based on relative economic strength is included in this formula: An economically strong region receives more allocations the further it is below the per capita GDP of the *richest* NUTS 2 region in the EU. This means that structural policy not only includes many fiscal equalisation elements, but also a small "luxury equalisation". Not only this particularly absurd element reveals the fundamental problem of promoting rich regions for activities for which they do not need financial support and, according to the principle of subsidiarity, should not receive it.

1.2.4.3 The redistributive effects

The preceding discussion has identified many characteristics and elements of fiscal equalisation in European structural policy. This is not to say that structural policy is "in truth" exclusively a fiscal equalisation. And certainly it does not mean that it is a *good* fiscal equalisation. Before we draw some conclusions from these observations in Section 1.2.5, we will take a brief look at the actual redistributive effect of CP. In doing so, we depart from the regional focus of structural policy and look at the redistributive effect between the MSs. This is in line with the approach taken in the previous Section 1.2.4.2, where Annex XXVI of the CPR also deals with the composition of the allocations to the MSs. Moreover, in a subsidiary fiscal constitution, it would be the MSs that would have to be in a financial position to address the objectives of CP– which generally coincide with their own development and regional objectives– themselves.

Redistribution via EU finances takes place– if at all– via the expenditure side of the EU budget. On the revenue side, the GNI-based own resources dominate with around 60 to 70% of revenue. With GNI, own resources are linked to the best internationally comparable indicator of the MSs' tax collection potential. The great weight of the GNI-based own resource ensures that the revenue is automatically collected according to an implicitly proportional rate. This means that there is no explicit redistribution between richer and poorer MSs; but the Union is also immune to an unintentionally regressive tariff (Thöne, 2017).

Figure 1.2.4: The implicit equalisation formula of Cohesion Policy in the EU-27



Data: Own illustration.

Figure 1.2.4 shows the CFs allocated to the MSs for the year 2022 compared with the GNI of the MSs in per capita terms. The power function shown is the best simple substitute for what would

be a three-part, section-by-section function if the implicit fiscal equalisation formula from the previous Section 1.2.4.2 were directly reflected in the large fiscal aggregates. This cannot be observed in its pure form – nor is it to be expected.

A simple regression such as that shown in Figure 1.2.4 can only be used to illustrate and formulate hypotheses for further discussion and research. For several reasons, this regression is in fact imprecise from the outset: The "mix" of the three types of region in each MS has a noticeable influence on its share of CFs. This cannot be captured here. In addition, not all cohesion funds are distributed according to economic strength or region. The formula outlined above with five "ancillary approaches" would also require a multiple regression calculation. If these and other valid reservations¹⁷ were taken into account in a detailed and in-depth study on the fiscal equalisation character of European structural policy, presumably better regression qualities would emerge. Still, this would not reflect the impact of discretionary political fine-tuning.

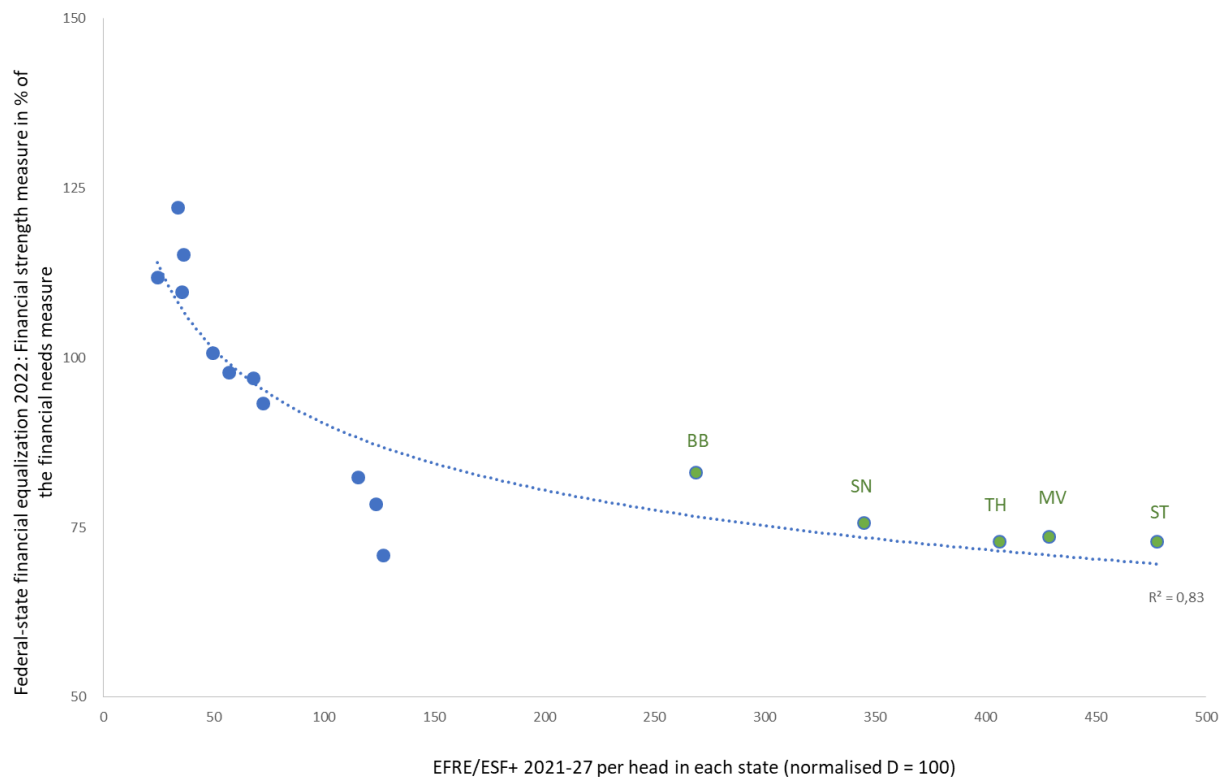
Against the backdrop of all these reservations about the simple regression presented, it nevertheless exhibits a remarkably high quality with an $R^2 = 0.81$. In other words, the methodologically very elaborate econometric studies on the empirical parameters for German municipal fiscal equalisation – probably the most studied fiscal equalisation systems in the world – only achieve similar regression qualities with the best and most innovative methods; in most cases, one has to settle noticeably lower qualities.¹⁸ Thus, the comparison in Figure 1.2.4 actually provides a surprisingly good illustration of the fiscal equalisation effect of European structural policy.

The financial equalisation effect of the Structural Funds could also be traced further downwards. Naturally, the best representation would look directly at the regional level; here, however, the regression would primarily show that the rates defined in the CPR actually work as intended. Instead, Figure 1.2.5 briefly illustrates how the regional funds establish a second, hidden financial equalisation between the German Länder in addition to the official federal-state financial equalisation. Similar restrictions apply to this calculation as to the previous one. Here too, the simple regression already shows a similarly high explanatory power. Also, a section-by-section regression would come closer to the actual state of affairs. Figure 1.2.5 shows clearly how great the difference is between the western Länder and Berlin (all on the left in the diagram) and the Eastern Länder (on the right in the diagram). The aim of compensating for the loss of Objective 1 status in the 2007-2013 funding period with transitional solutions for the Eastern Länder has clearly been achieved.

¹⁷ A further caveat: the funding allocations are determined in advance for an entire MFF; in this respect, the GNI for 2018/19 would have been more appropriate than that for 2022. This caveat was taken into account; the regression quality of the again best power function is almost identical with $R^2 = 0.80$.

¹⁸ In fact, today only data-intensive, task-specific multiple regression analyses achieve values $R^2 \geq 0.80$ (Gerhards et al., 2020).

Figure 1.2.5: Implicit equalisation formula for ERDF/ESF+ funds between the German Länder



Abbreviations: BB: Brandenburg; SN: Saxony; TH: Thuringia; MV: Mecklenburg Western Pomerania; ST: Saxony-Anhalt.

Data: Own illustration

1.2.5 European structural policy seen as financial equalisation: Prospects and opportunities in a modernising Union

This paper retraces the financial equalisation character of European structural policy. This often amounted to stating the obvious, since Cohesion Policy as not only has the character of an aid policy, but can also be understood as fiscal equalisation system. It has also become clear time and again that promotion and fiscal equalisation are not opposites, but rather two sides of the same European coin. We use the terms *promotional CP* and *stabilising CP*. This pair of terms also makes it easier to reconcile the features of structural policy that are decidedly atypical of standard financial equalisation systems:

- Structural policy is investment-oriented, while conventional fiscal equalisation usually focuses on current tasks and expenditure.
- Structural policy is fixed for seven years in the medium-term financial framework, while conventional fiscal equalisation offers protection against short-term (asymmetric) shocks because it reacts to annual changes.

Both objections are important, but they are not sufficient to refute the argument. Obviously, structural policy involves a unique and impure form of fiscal equalisation. Heinemann (1999) already established a long time ago that this is a tied investment-orientated equalisation system. The interesting question is not actually whether or not a fiscal equalisation limited to state investments

and investment aid deserves its name. Rather, the interesting question is whether such an investment-based fiscal equalisation can also be an attractive option. Many conventional untied fiscal equalisation systems in the MSs and elsewhere exhibit particular shortcomings when it comes to public investment. They are unable to counteract the widespread political economy incentives to favour short-term current expenditure at the expense of future investment. When a regular fiscal equalisation system aims to strengthen investment, this is also implemented by earmarking funds.¹⁹ Against this backdrop, a European fiscal equalisation system limited to investments, which is in any case partial and never meant to cover the full fiscal needs of the local / regional authorities, might even offer a better complement than normal fiscal equalisation system. The orientation towards seven-year periods would also not be unsuitable for investment-based fiscal equalisation in view of the longer planning horizons to be covered.

However, this is only one of the possible conclusions from the above observations. It has also become clear that structural policy would also benefit if it had an *honest* answer for those regions which, for various reasons, are not developing in the direction of cohesion and convergence and where more subsidies cannot be expected to bring about any significant improvement. Such regions have been and will continue to be part of the European reality. Good and adequate fiscal equalisation between the MSs and— where necessary— with the support of European regional policy are suitable instruments for long-term assistance. In many cases, this equalisation-oriented support can be more targeted and use fewer resources if the regions concerned were no longer forced to acquire the funds via the costly and often lengthy structural policy support programmes. The low absorption rates of regional funding, particularly by structurally weak regions, show above all their problems in finding suitable projects (Ciffolilli & Pompili, 2023; Kafsack, 2024). The "competition" from the Reconstruction Fund further exacerbates this problem (ECA, 2023).

Structural policy would also benefit if it made a more honest distinction between redistributive transfers in the sense of general cohesion goals on the one hand and political transfers to compensate for reform-related losses and to achieve European policy compromises on the other. Both types of transfer are part of European structural policy; there can be little controversy about this fact. However, by hiding the second transfer type for political fine-tuning in the completely different first transfer type, both tasks become inefficient and potentially more expensive. This has become clear through the example of the numerous systematically inexplicable nuts and bolts in the Berlin method.

Undoubtedly, specific and transparent "transfers for compromise" are politically more difficult to maintain. This should be a good guarantee that transitional solutions actually remain limited in time. In this context, consideration should also be given to lowering the upper limit for transitional regions back to well below 100% of the GDP average. The increase from 90% to 100% was made as a compromise and as a *temporary* transitory arrangement. A more transparent system would deal with necessary (and certainly legitimate) transitional solutions separately.

¹⁹ And the problems of preventing substitution with other financial resources and ensuring additivity for earmarked transfers are the same here as they are there.

Structural policy would benefit from greater respect for the principle of subsidiarity. The EAV of structural policy can be better and more efficiently realised if unrelated and unnecessarily complicated elements are removed. The analysis from the perspective of fiscal equalisation provides important clues in this regard. In particular, regional policy support for more developed regions through European cohesion funds should be reconsidered very critically. From a subsidiarity point of view, it is questionable anyway. The mechanisms outlined for allocating funds solely within the group of more developed regions, including the "luxury fiscal equalisation", highlight this conclusion. The exclusion of these regions from structural policy would have led to savings amounting to 27 billion euros in the current funding period.

In line with the principle of subsidiarity and the fiscal equalisation perspective adopted here, it also seems advisable to thoroughly review the structural policy processes to determine whether the programmatic responsibility for achieving the cohesion goals should be devolved more significantly to the MSs. The Commission already relies heavily on regional and local stakeholders for the operational implementation of structural policy measures. The ubiquitous complaint of the regions that support programmes are often no longer utilised due to their complexity and programmatic overload could be countered if the European level limited itself to those areas of structural policy in which it can generate EAV. In addition to fiscal equalisation support, this primarily involves monitoring, steering and evaluation based on statistics and common general objectives. The investment focus of regional policy fiscal equalisation can also be easily tracked using suitable performance and impact indicators without having to review and approve all regional programmes.

In this context, it should also be considered how many of the European targets for the regions can actually generate added value for the recipients and how many are made more for the benefit of the payers. In the economic literature, the phenomenon of imposing conditions on the recipient of a transfer because it brings additional benefits for the payer has long been known as specific altruism (Tobin, 1970). However, what is an accepted behavioural peculiarity in individuals must, in case of doubt, be regarded as irrational and a source of avoidable inefficiencies when it comes to public actors (Calsamiglia et al., 2013). In other words, the implicit basic attitude, which often resonates in the very specific requirements of regional policy, that local actors alone "cannot handle the money" may be true in individual cases, but in the majority of cases it is inappropriate, elitist and in turn a source of money wasted through bureaucracy and central impediment of local innovation potentials.

A stronger consideration of the principle of subsidiarity in CP also makes it easier for MSs to implement modern *place-based policies*, which can also be used to implement climate protection and transformation goals more smoothly and effectively. The high degree of differentiation of such policies and their demanding *governance* (Green 2023; Südekum 2023) almost automatically reduce the role of meaningful uniform EU CP to a financially equalising function.

For the specific implementation of the proposed modernisation impulses, countless variations and specific designs are conceivable. This also applies to all approaches to smooth the fiscal equalisation-like rates of structural policy in order to make them appear less non-transparent and less arbitrary. As with all fiscal equalisation reforms, a basic agreement should be reached between the parties concerned before the first tentative calculations are made. The famous Rawlsian "veil

of ignorance" proves its worth time and again in practical fiscal equalisation reforms. Because as soon as those affected know whether or not they will financially benefit from a reform that they have agreed to in principle, their previous opinion in favour of reform idea proposals can suddenly change again. This experience is shared by all practitioners of fiscal equalisation reforms.

In conclusion, therefore, only one proposal for procedural reform: The further changes proposed here in the direction of a modernised structural policy, which (also) openly acknowledges its fiscal equalisation character, will meet with approval and rejection. In order to avoid having to work towards a single (and all too rarely achievable) consensus, choice models should also be considered. For example, instead of "classical cohesion"—the full, traditional model of promotional structural policy—MSs could also opt for a leaner "stable cohesion" model, more focussed on fiscal equalisation and EAV. This model would involve fewer procedural requirements, clearer result targets and, for example, only 75 per cent of the standard cohesion allocation, which would, however, be paid promptly and regularly. Such a choice model would endogenously determine which features of structural policy are more important to its addressees and it would provide a fully independent answer to the question "Promotional policy or fiscal equalisation?"

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1.3 Lars Feld and Joshua Hassib: On the Role of EU Cohesion Policy for Climate Policy

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Abstract

Cohesion policy in the EU has been widely accepted as a tool to advance the catch-up process, i.e., helping member countries with lower GDP per capita to grow faster economically in order to arrive at similarly high-income levels as member countries with higher GDP per capita. However, empirical studies provide contradicting evidence as to the success of structural funds in this regard. From a political economics perspective, EU structural funds and their instruments of CP, but also EU agricultural policy, are interpreted as providing for a compensation for poorer member countries' agreement on additional steps of European integration. In recent times, climate policy has entered the cohesion strategy of the EU as higher energy costs due to carbon pricing may require programs for transformation of the existing carbon intensive capital stock to a carbon-neutral capital stock. Structural funds should thus help countries in the transformation process to carbon neutrality such that they do not fall behind. An example is NGEU that is aiming at member countries' transition to carbon neutrality. In this paper, the goals of EU CP are contrasted with the necessities of climate policy in order to fight climate change. Potential conflicts between the goals of CP and climate policy are highlighted.

1.3.1 Introduction

In the Treaty on the EU, the EU commits to promoting “economic and social progress for their peoples, [...] within the context [...] of reinforced cohesion and environmental protection.” (European Commission, 2012). In addition, with regard to the European Green Deal (EGD), the EU's overarching climate strategy, it aims at achieving net zero Carbon emissions by 2050, a decoupling of economic growth from resource use, and, interestingly, to leave no place nor person behind (European Commission, 2023e). This implies that cohesion among EU MSs is desired to be deeply entrenched within the EU's climate policy.

Among several other challenges, the EU sets ambitious goals in both its cohesion and climate policies. The CP in the EU has been a widely accepted tool to foster the catch-up process, i.e., helping member countries with lower GDP per capita to grow faster economically in order to arrive at similarly high-income levels as member countries with higher GDP per capita. Climate policy reforms are incorporated as conditions within the EU's structural funds. Access to the funds is conditioned to progress regarding climate policy goals.

Basically, both EU ambitions, cohesion and climate, are thus pursued within the same approach. How does this fit together? Are the cohesion funds successful, i.e., is no MS or region left behind within the transition towards a climate neutral EU? Are climate policies achieving their goals? How does the political economics of structural funds look like and what does this mean for climate policy? What are possible investments that foster both EU's cohesion and climate policy? This paper aims at finding answers to these questions.

The remainder of the paper is organized as follows: In Sections 1.3.2 and 1.3.3, EU CP and climate policy are covered, respectively. This includes a short overview of the major EU structural funds. In terms of climate policy, the EGD resembles the core component of the climate side, since it

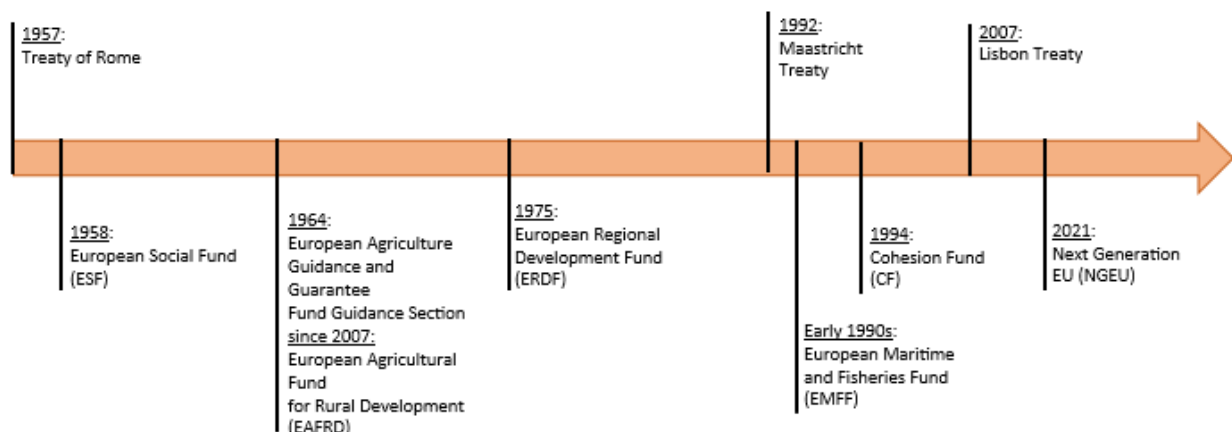
defines the current set of climate policies. Section 1.3.4 provides for the political economics background. Its application to EU structural funds as well as potential mechanisms with regard to climate policy may help to understand the role of EU CP for climate policy. In Section 1.3.5, potential conflicts between cohesion and climate policies are discussed and evaluated using the political economics approach. Section 1.3.6 hints at synergies between both policies. The final Section 1.3.7 concludes the analysis by summarizing the results and alluding to potential perspectives on future developments of EU cohesion and climate policy.

1.3.2 EU Cohesion Policy across time

1.3.2.1 Overview of the EU's major structural funds

Since the start of the EEC founded by the Treaty of Rome in 1957, the EU created several types of structural funds following the objective of cohesion among its member countries (see Figure 1.3.1). Across time, specific instruments and targets have been modified manifold. The primary goal of structural funds that is to promote economic and social cohesion across the EU has however only gradually changed. Structural funds aim at reducing disparities in income, employment, and living standards among the MSs and their regions.

Figure 1.3.1: EU Cohesion Policy across time



Data: Forte-Campos & Rojas (2021).

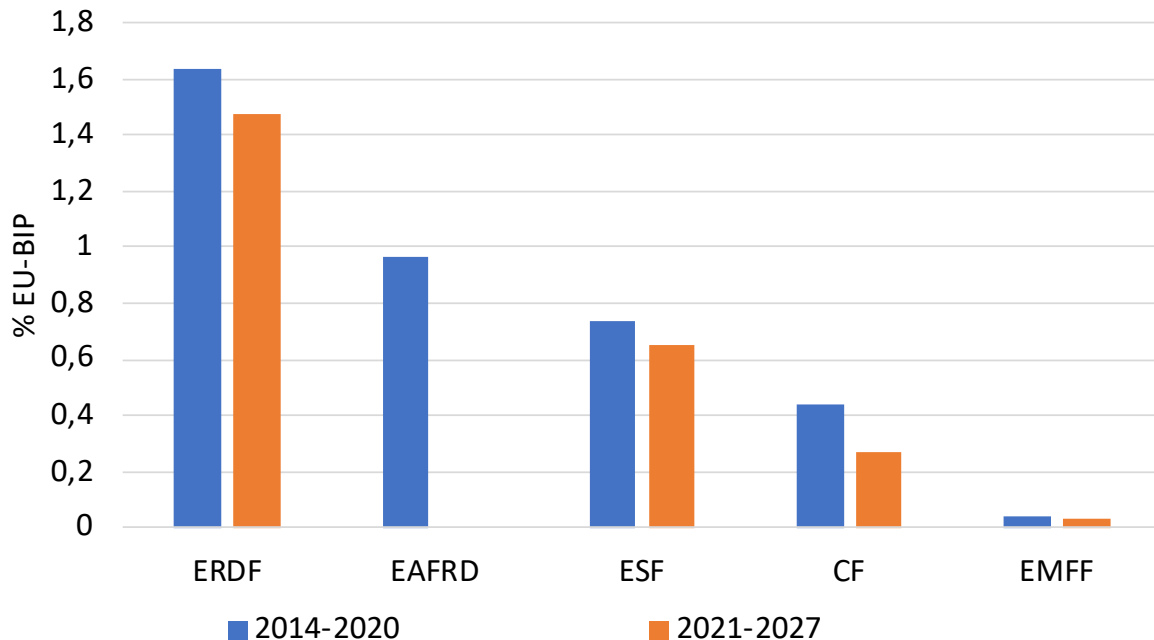
The current MFF resembles the EU's medium-term budget including spending plans which prioritize EU policies within a seven-year range. A significant share of the MFF consists of the European Structural and Investment Fund (ESIF) comprising a set of five structural funds (see Figure 1.3.2).

Upon the founding of the EEC in 1957, the ESF was created under the Treaty of Rome. It resembles the EU's main tool for investing in human capital, workers' skills and the creation of jobs. The amount of transfers a region receives depends on the regional GDP performance, yet all EU regions are eligible. The MFF 2021-2027 allocates a total of €88 billion (Forte-Campos & Rojas, 2021). Right from the outset, the first steps towards a common European market were thus accompanied by regional transfers.

The ERDF is a second structural fund supporting various projects that today aims at strengthening regional competitiveness, innovation, and environmental sustainability. It has been created in

1975 to countervail regional disparities in development. Within the 2021-2027 MFF, €200 Billion are allocated towards the ERDF (European Commission, 2023c). The ERDF accompanied the enlargement of the core EEC, consisting of the six countries Belgium, France, Germany, Italy, Luxembourg and the Netherlands, by Denmark, Ireland and the United Kingdom.

Figure 1.3.2: Structural funds in percent of EU GDP



Notes: ERDF = European Regional Development Fund
 EAFRD = European Agricultural Fund for Rural Development
 ESF = European Social Fund
 CF = Cohesion Fund
 EMFF = European Maritime and Fisheries Fund

Source: EuroStat and European Commission (2023a).

The CF, created in 1994, is specifically dedicated to supporting MSs with a GNI per capita below a level of 90% of EU average. It has been created as a consequence of the Maastricht Treaty in 1992 and precedes another round of enlargement by Austria, Finland and Sweden in 1995. The CF today aims at strengthening low-performing regions in the environmental and communication sector, i.e., it finances projects that contribute to environmental protection and sustainable transport infrastructure. A total of €43 billion are directed from the MFF to the CF (European Commission, 2023a).

The European Maritime, Fisheries and Aquaculture Fund (EMFAF) focuses on climate policy as well as economic and social sustainability within the aquaculture and fisheries sector. It covers a sensitive topic among (former) EU MSs with significant and traditional fishing industries, e.g., France and the UK. The EMFAF has been created in the early 1990s and totals a current budget for 2021-2027 of €6.11 billion. With respect to climate policy, it facilitates the transformation to a sustainable and low-carbon fishing industry as well as the environmental protection of marine ecosystems and biodiversity, for instance (European Commission, 2023b).

Actually, the EU's CAP is a heavyweight among the structural funds although it only counts partially as a structural fund. While there was no further round of enlargement immediately after the six founding members signed the Treaty of Rome, the original MSs created the CAP in order to facilitate the ratification of the Treaty by the French National Assembly. With around 40% of the EU's total budget today, its design and goals significantly determine EU actions. The creation of the Guarantee Section of the European Agricultural Guidance and Guarantee Fund (EAGGF) from 1962 to 1964 provided for a market regime for the agricultural sector with tariffs and subsidies for farmers. From 1964 to 2007, the Guidance Section of the EAGGF aimed at structural development of rural areas and was thus counted to the structural funds in the narrow sense. In 2007, it has been renamed and redesigned as the European Agricultural Fund for Rural Development (EAFRD). In 2017, the EC initiated a public consultation round, with the aim to strengthen the focus on climate policy more distinctively. The demand for climate action in the heavily emitting agricultural sector was clear, as the EU had committed to the Paris Agreement and the UN Sustainable Development Goals (Matthews, 2018).

Most recently, the EU established the NGEU program in order to cope with asymmetric effects of the COVID-shock on less advanced regions (see Table 1.3.1). Under NGEU, two new financial instruments were created in 2020. First, the RFF focuses on six core areas: green transition; sustainable growth; employment; digital transformation; social and territorial cohesion; health and resilience; and education. Thus, RFF directs a significant share of attention towards both climate and cohesion policies. A total of €723 billion is issued to investment of which are €385 billion of funds in loans and €338 billion of funds in grants (European Commission, 2023f).

The second financial instrument created by the NGEU program is the Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU). Its transfers amount to €50.6 billion and primarily focus on crisis response and repair measures. By this, the REACT-EU aims at the transition towards a green recovery of the EU's economy (European Commission, 2023d).

Table 1.3.1: Next Generation EU (NGEU) and climate policy, in prices of 2018

NGEU Supported Programmes	Share NGEU (2018, in Billion)	Climate Contribution NGEU (2018, in Billion)	Climate Contribution NGEU (in %)
Horizon Europe	5.0	1.75	35
InvestEU Programme	5.6	1.68	30
RRF	672.5	248.82	37
JTM	10.0	10.00	100
React EU	47.5	11.87	25
ERDF	7.5	2.70	36
RescEU (disaster relief and emergency reserves)	1.9	0.00	0
Total	750	276.83	37%

Data: European Commission (2023b).

By this, the EU breaks new ground. The NGEU may be the first ever, though controversial, step towards a debt union. Many argue that there are several other fields of deepening of European integration that should come first, for instance a joint EU foreign policy or EU military. Despite continuing battles on the fiscal and legal dimensions, the NGEU could mark a ‘Hamiltonian moment’, potentially becoming a permanent fiscal instrument (de la Porte & Jensen, 2021). However, NGEU nonetheless has the potential of applying the jointly borrowed means to direct the transfers into CP and structural projects from which also the EU’s climate agenda is profiting (Thöne, 2021).

Thöne (2021) highlights NGEU’s role in terms of strengthening EU cohesion. The program was initiated as a consequence of the early COVID-19 pandemic, a time during which each MS suddenly focused on its own agenda and intra-EU borders had been closed. Based on this anti-integration throwback, the NGEU sends a remarkable signal of cohesion by issuing low-interest loans to MSs whose low credit worthiness would lead to far worse credit borrowing conditions on the capital market (Thöne, 2021). This implies that debt-financed funds are backed by guarantees from EU MSs (Fuest & Dorn, 2021).

1.3.2.2 Empirical evidence on the success of the EU’s structural funds

Given this long-term history of EU CP, the question emerges to what extent the structural funds have actually achieved the goal of catching-up of less advanced regions in Europe. As mentioned above, empirical studies provide however contradicting evidence as to the success of structural funds regarding the promotion of this catch-up process in the EU.

Mohl and Hagen (2010) analyze the role of EU structural funds in terms of promoting regional growth. By employing a structural funds dataset on a total of 126 NUTS-1/-2 regions, they are able to distinguish between Objective 1, 2, and 3 regions. A region is classified as Objective 1 if the ratio

of the regional GDP/capita and the total EU-wide GDP is below 75%. Mohl and Hagen (2010) use a GMM estimator, which accounts for the problem of endogeneity in a panel context, and a spatial econometric panel estimator, which accounts for spatial spillover effects of regional growth. Mohl and Hagen (2010) find strong evidence for a positive impact of EU structural funds on regional growth of Objective 1 regions. However, this does not apply to the total amount of Objective 1, 2, and 3 regions altogether (Mohl & Hagen, 2010). In other words, only regions, which need the stimulus of EU structural funds the most, are able to unleash regional growth based on the EU assistance (and the respective EU MSs providing the finances). This finding is similar to Becker et al. (2010, 2018) who find a positive GDP growth effect with regard to Objective 1 transfers, yet no positive growth effects on unemployment.

Von Ehrlich and Overman (2020) look at spatial disparities across European metropolitan regions with a focus on income levels and unemployment. A metropolitan region is defined along the so-called NUTS3 regions with between 150,000 to 800,000 inhabitants. They provide evidence that disparities in GDP across EU-15 metropolitan regions have been diverging since the mid-2000s, stabilized in the 1990s and converged in the 1980s.

Motivated by this result, von Ehrlich and Overman (2020) ask whether place-based policies for structural funds are justified. Providing clear evidence in favor of structural funds, the authors also find that the effects vary considerably across areas, mostly driven by areas with a high-quality local government and high levels of human capital. These results are similar to those of Breitenbach et al. (2019) who report even negative effects of EU structural funds depending on regional institutional quality. Moreover, decreasing returns from transfers are reported by von Ehrlich and Overman (2020). Overall, Ehrlich and Overman (2020) conclude that place-based policies have not prevented rising income disparities yet may have mitigated the increase (von Ehrlich & Overman, 2020).

Also covering disparities in the EU, Cerqua and Pellegrini (2017) look at the relationship between the ‘treatment’ intensity of the EU Structural and CF and regional GDP growth rates. They find an overall positive effect of the fund-related transfers on regional growth rates, however with a strong heterogeneity across the regions. Most interestingly, their results reveal that the intensity-growth function is concave and thus a maximum value of €305–€340 per capita can be calculated. After this value, the marginal effect of the transfer becomes negative (Cerqua & Pellegrini, 2017).

Another potential effect of structural funds could be to stimulate public investment overall. Staehr and Urke (2022) analyze the effect of the ESIF on public investments within the EU and find heterogeneous evidence of an overall ESIF-related positive association with public investments. In particular, for the CF they report an almost one-to-one effect on public investment, in both the short and long term. However, with regard to the ERDF no clear evidence is found (Staehr & Urke, 2022).

1.3.3 Climate policy within the EU’s structural funds

The EU aims at integrating climate policy and structural funds mainly in two ways. First, by climate mainstreaming, i.e., funds are required to be used in ways that align with climate goals, promoting sustainability, reducing greenhouse gas emissions, and adapting to the impacts of climate change. The second option is to direct investment into sustainable projects. This implies that structural

funds directly support projects related to, e.g., renewable energy, energy efficiency, public transportation, and the overall transition to a carbon-neutral economy.

In terms of environmental sustainability, the funds aim at promoting green growth and a circular economy, which involves reducing waste, enhancing resource efficiency, and minimizing the environmental impact of economic activities. In addition, structural funds also support projects that protect and restore natural ecosystems, preserve biodiversity, and promote sustainable land use.

A significant concern of the EU's structural funds is the integration of climate objectives as defined within the EGD as the EU's overarching strategy for achieving climate neutrality by 2050. The Next Generation EU program is closely aligned with the EGD. NGEU reinforces the EGD's objectives by providing financial resources for green and sustainable initiatives across the EU. The climate contribution of NGEU amounts to almost 280 billion Euro in 2018 prices and thus a share of a bit more than a third of the NGEU total (see Table 1.3.1).

A substantial portion of the funds allocated under the NGEU program is earmarked for the RRF. MSs are required to develop NRRPs that allocate a significant share of their funding to climate-related projects and reforms. These projects aim at supporting the EU's transition to a greener and more sustainable economy. In particular, a climate mainstreaming target of 30% for the NGEU and the MFR has been committed by the European Council (Inguscio, 2022).

The disbursement of funds under the NGEU program is subject to conditions, including the fulfillment of climate and environmental objectives on a national level. MSs are expected to invest in projects and reforms that contribute to the EU's climate goals, such as reducing greenhouse emissions and promoting renewable energy.

In order to account for the EU's goal not to leave anyone behind during climate transition, the Just Transition Fund (JTF) has been created as a new instrument of CP covering the current MFF period of 2021-2027 (European Commission, 2023g). The JTF is part of the broader EGP and aims at supporting regions most affected by the transition to a low-carbon economy. It focuses on investing in green projects, such as renewable energy, energy efficiency, and retraining workers for new, sustainable employment opportunities.

Moesker and Pesch (2022) undertake three case studies on the EU's Initiative for Coal Regions in Transition. They find that the JTF's design in fact highlighted several caveats from earlier transition experiences. Remaining problems were mostly of distributive and procedural nature, potentially caused by a lack of stakeholder participation and scarce funding (Moesker & Pesch, 2022).

1.3.4 The political economics of the EU budget

The political economics approach is useful whenever one applies the utility-maximizing assumption on governments as political actors. Loosening a central assumption of traditional economic theory, this implies that governments do not necessarily follow the implications of a certain normative economic perspective (e.g., economic theory of federalism, see Biehl, 1988; Genser, 1997; Spahn, 1993), but instead follow their own self-interests (Feld, 2005).

There is a substantial body of literature on the political economics of the EU, jointly attributed to both political scientists and economists (e.g. Dür et al., 2020). Out of this, the following two strands are relevant for an analysis of structural funds: first, the relationship between funds and approval

within the EU and, second, the determinants of decision-making processes within the EU's main institutions.

EU structural funds and their instruments of CP, but also EU agricultural policy, are interpreted as providing for a compensation for poorer member countries' agreement on additional steps of European integration (Begg, 2000). Although it is rather difficult to establish causal evidence, there is at least illustrative anecdotal evidence in support of this hypothesis. As described above, EU agricultural policy was established in the beginning of the 1960s to facilitate a ratification of the Treaty of Rome by the French National Assembly. In addition, the ESF should help poorer regions to catch up. The ERDF followed the enlargement of the EEC by Denmark, Ireland and the UK. The CF was established after the Maastricht Treaty established a deepening of European integration with the Economic and Monetary Union (EMU) and occurred just before another enlargement by Austria, Finland and Sweden. NGEU was applauded as another step of deepening integration after the demands of several member countries to establish a fiscal capacity at the EU level in response to the European debt crisis. Before another debt crisis could occur due to the economic and fiscal effects of the COVID-pandemic, MSs decided to establish NGEU.

The rationale of these responses to further steps of economic integration is reminiscent of a general pattern of reactions to globalization. As is well-known from international economics, opening economies to free trade is overall welfare enhancing, but also creates groups of winners and losers within a country depending on comparative advantages and factor endowments. Rodrik (1998) argues and presents evidence that more open economies have bigger governments in order to compensate the potential losers of abolishing protectionist measures and thus increase the support for free trade agreements. European integration and the history of EU structural funds offers additional evidence in this regard.

Applying the political economics approach to EU structural funds, we argue that EU MSs maximize their own self-interest, i.e., financial transfers. Accordingly, the establishment of such transfers programs at the EU level provides particular incentives to MSs: Each country is ultimately striving to become a net recipient of the EU budget. Interest groups aim at receiving EU transfers such that a common pool problem emerges (Osterloh et al., 2009).

Rodden (2002) analyzes the EU's relationship between votes and the allocation of funds. According to his results, small EU MSs are systematically overrepresented. This goes along with a substantial loss of relative vote shares among the larger EU members, like Germany for instance. It is a common pattern of federal integration that the comparably smaller states fear negative effects of economic integration the most. Thus, they negotiate favorable voting schemes and above average transfers of funds (Rodden, 2004). Moreover, Rodden (2002) reveals a pattern of systematic sacrifice of voting power in turn for an increased commitment of integration by smaller states. Moreover, Rodden (2002) as well as Aksoy and Rodden (2009) report evidence for a significant relationship between voting power in the European Parliament or the Council and directed funds. This applies to total funds for the years of 1977 to 1999 and is particularly meaningful for regional and agricultural development (Rodden, 2002).

Apart from an above-average allocation of funds being directed towards smaller MSs, participatory benefits are often the product of compromises in negotiations on EU policies. This may result in legislative overrepresentation of small EU states (Rodden, 2004). This is seconded by Groot and

Zooneveld (2013), who find that the EU accession round of smaller East European countries in 2004 and 2007 delivered more electoral power to countries with smaller and poorer population. Similarly, EU member countries with larger economies are most likely to violate EU law, whereas the smaller states are more likely to comply with regulations (Börzel et al., 2010). The best compliers are small states with efficient bureaucracies (Börzel et al., 2010). However, compromises at the EU level may also sanction Euroscepticism in national parliament such that the funds received by a country decline (Sadeh et al., 2022).

To increase the small states negotiation power, they often form coalitions to jointly foster their interests, for example, as the ‘cohesion bloc’ including Greece, Ireland, Portugal, and Spain; Finland, Denmark, and Sweden as the ‘Nordic bloc’ and the Franco-German coalition at the core of the EU Council of Ministers decisions (Hix & Hoyland, 2022).

Aside coalition formation, conflicts naturally persist in EU legislative decision-making. Analysing the dimension of conflict in the EU Council of Ministers, Bailer et al. (2015) show that conflictive interactions are considerably shaped by country-level redistributive interests and less by ideological factors like left-right positioning of MSs’ governments. In connection with this, Hagemann et al. (2019) bring in an additional factor on EU decision-making: Governments being under attack at home do not solely consider their policy preferences and negotiation techniques but also, quite importantly, use EU decision-making to send signals to their domestic audience. This may be particularly true for climate policy, as this is considered to be a particularly contested issue.

Overall, drawing on the political economics literature of legislative EU decision-making, several mechanisms in the formation of EU policies may be explained. Therefore, it provides a useful framework to assess the compatibility of EU cohesion and climate policy.

1.3.5 Conflicts between EU Cohesion and climate policies

The EU's cohesion and climate policies have several potential conflicts and challenges when it comes to aligning their goals and objectives. First, these conflicts are a result of balancing economic development and social cohesion objectives with the imperative to combat climate change. Indeed, even a conflict between both policy objectives or between the instruments that are used may emerge. There are two major difficulties which may arise. First, less performing regions within the EU may be left behind on the pursuit to transition to climate neutrality such that climate policy leads to a conflict regarding the catch-up process of CP. Second, cohesion policies may countervail climate policy by, for instance, directing cohesion funds towards EU regions which heavily depend on fossil fuels. By this, CP contradicts the phasing out of fossil fuels and transition to renewable energy sources.

CP traditionally aims at reducing economic disparities between EU regions by promoting economic growth and job creation. Some of the respective development projects may not be aligned with climate objectives, potentially leading to increased greenhouse gas emissions. For example, large infrastructure projects funded by CP, such as transportation and energy, do not necessarily prioritize sustainability and climate resilience, such that they result in increased greenhouse gas emissions and vulnerability to climate change impacts. CP often emphasizes short-term economic growth without sufficient consideration of long-term sustainability and climate resilience leading to investments that are not in line with the EU's Green Deal.

Moreover, different EU regions may have varying levels of commitment to climate action and sustainability, leading to uneven implementation of climate policies. Some regions may be more receptive to green development while others resist such changes. Such regional inconsistencies potentially result in conflict between the benefiting regions and those that suffer from net benefit losses.

There may be conflicts in allocating the EU budget between CP and climate policy. Therefore, balancing the funding needs for reducing regional disparities and addressing climate change can be challenging.

Climate policies may sometimes result in economic disruptions, particularly in regions heavily reliant on high-emission industries. CP aims at mitigating these social and economic disruptions, potentially slowing down the transition to a low-carbon economy.

Thus, coordinating and integrating the efforts of various EU institutions, MSs, and regional authorities to ensure that CP and climate policy are mutually reinforcing can be a challenge. Therefore, a close monitoring is needed to prevent dual institutional structures with an overlap of competences and ultimate loss in efficiency from a political economics perspective.

This points to a second, more fundamental problem for the alignment of cohesion and climate policies. According to the Tinbergen rule, each policy goal should be targeted by one particular, independent instrument. Although EU structural funds comprise several different instruments, the overall ambition of their compatibility with climate policy objectives is probably mistaken. A violation of the Tinbergen rule often results in failure to meet each of the formulated policy goals, and the number of potential conflicts between cohesion and climate policies mentioned above characterizes as to how such failures might emerge.

Climate policy will only be successful if there is a broad international coordination for the reduction of Carbon emissions. The necessity for such coordination originates from the nature of climate change mitigation as a global public good. Public good provision entails free rider behavior. Each individual contribution to public good provision by a country reduces the incentives to contribute for other countries. If coordination between a group of countries, like the EU, is successful because of the coordination technology the EU decision-making process offers, the incentives to contribute for other countries in the world are further diminished.

This fundamental public good mechanism is the basis for the creation of climate clubs that should provide incentives to participate in the effort to contain climate change (Nordhaus, 2015). The idea of climate clubs emphasizes the necessity to use the price mechanism and, indeed, the EU ETS constitutes such a mechanism. If it were possible to internationally coordinate mitigation efforts via a minimum price of carbon, a provision of this global public good could be possible. Such a policy induces structural change, but ensures that less carbon leakage occurs because of relocation of emission intensive industries to other countries. Attenuating the necessary structural changes by subsidizing carbon-intensive industries would only be counter-productive.

Third, political economics considerations should play a role. In order to ensure that transfers from the structural funds continue to flow, MSs have incentives to use any new political argument that emerges. For instance, whereas the ERDF started as a policy instrument to reduce regional disparities, it meanwhile aims at innovation and environmental sustainability such that the criteria for

access may have changed, but MSs' motivation to receive funds has not. Similarly, climate policy goals may inform the criteria for eligibility of structural funds without changing MSs' considerations at all. This may end up in a struggle between the Commission and individual MSs about the compatibility of individual measures undertaken with transfers from the structural funds.

1.3.6 Possible synergies between climate and Cohesion Policy

We describe the possible trade-off between EU CP, which aims at equalizing the different levels of economic development of the regions, and the promotion of effective climate protection under the umbrella of CP. However, there are also several strands of potential synergies between EU cohesion and climate policy.

First, further harmonization of economic competition within the EU is crucial. Governments around the world are using subsidies to support the transition towards a carbon-neutral economy. In some cases of market failure, green subsidies can be useful (Kammer, 2023). This may be the case, for example, when the price of carbon emissions is too low compared to their actual cost to society. Green subsidies also exist in the EU. However, the use of subsidies should be carefully targeted to correct market failures and not discriminate against an arbitrary group of firms. The risk of engaging in a global arms race with green subsidies is too great, which would lead to a deterioration of the conditions in competition in global trade and ultimately to geopolitical fragmentation (Kammer, 2023). The EU is discussing a 'Green Deal Industrial Plan for the Net-Zero Age' (European Commission, 2023). This implies a further (temporary) relaxation of EU competition law (Kammer, 2023). EU policymakers should therefore ensure that the corresponding green subsidies do not discriminate against particular firms and/or regions, as climate policy would thereby deteriorate the cohesion goals.

The EU is responsible for the allocation of extensive funds (Farole et al., 2011). A second important pillar is therefore characterized by the conditioning of funding with regard to the consideration of climate protection measures. Within the EU, climate targets are consistently taken into account in various sectors and activities supported by cohesion funds. This so-called climate mainstreaming could perhaps combine both EU climate and CP.

In addition, CP plays an important role in strengthening the resilience of regions to the effects of climate change (Nekvasil & Moldan, 2016). This does not only apply to preparing for natural disasters, but also to industrial change. For example, as a result of climate change, several regions in the EU that have relied on coal mining for their prosperity are now facing structural change. These now structurally weak regions are heavily dependent on the allocation of EU funds. If cohesion funds are linked to climate targets, the region in question will experience a shift towards a green economy. In this example, cohesion and climate policy can go hand in hand.

Finally, when economic convergence is achieved and there is an appropriately high carbon price in place, unleashing economic competition within the EU (through the removal of trade barriers) will incentivize companies to invest exclusively in carbon-neutral goods and services. Ultimately, this enables a combination of effective cohesion and climate policy within the EU.

1.3.7 Conclusion

While the EU has several challenges to tackle, choosing effective cohesion and climate policies are crucial for two reasons: first, to successfully cope with the climate crisis, and second, to prevent losing cohesion among EU MSs along the transition to a climate friendly economy. How do the EU's cohesion and climate policy affect each other? Are they pulling into the same direction? Is the EU's approach of combining both policies, i.e., conditioning structural funds on climate restrictions, successful?

We use a political economics point of view to answer these questions. We find that cohesion and climate policies both attract a significant share of attention within all of EU's structural funds. In addition, both climate mainstreaming and allocating funds directly towards climate projects are aligned with the EU's goals on cohesion and climate. However, from a political economics perspective, net benefit maximization among EU member countries is to be expected. Moreover, the numerous stakeholders on local, national, and supranational levels may distort the solution-finding process within the political arena of EU institutions. This may deteriorate the projected credibility on climate ambitions among EU MSs. Therefore, a critical assessment of future actions by the EU and its MSs regarding their efforts on cohesion and climate policy are recommended and a uniform and stringent solution, like an adequately high CO₂ price, might be preferable to comprehensive subsidy policy under the umbrella of the structural funds.

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1.4 Päivi Leino-Sandberg: Cohesion Policy and the Principle of Subsidiarity – A Legal Analysis²⁰

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Abstract

This report addresses the legal aspects of how the EU's Cohesion Policy has changed over the past decade, exploring the legal argumentation behind its transformation. CP used to be understood as a policy with distinct features and clear limits, characterised by its focus on reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions (Article 174 TFEU), but with Treaty-based linkages to environmental aims and trans-European networks. CP has relied on national co-funding and engaging local and regional actors.

The 2021-2027 MFF, and in particular the NGEU, took CP in a completely different direction. The first section of the Report demonstrates how this change has (in practical terms, without a formal Treaty amendment) affected the division of competence between the EU and its MSs and the application of the principle of subsidiarity. CP now stretches to nearly anything that the EU funds, irrespective of any pre-existing competence limitations. The Report explains in detail how the interpretation of the EU's competence in CP was gradually broadened in the institutions without public debate. This examination is based on previously undisclosed internal legal advice and Court pleadings used by the Commission and Council, to which the institutions have granted public access for the purposes of this Report.

The Report then analyses the scope and uses of RRF funding, its design as “money for reforms”, the effect of this funding on subsidiarity and finally questions whether any legal constraints remain or are relevant after the transformation of CP through the NGEU. In the ongoing mid-term review of the MFF the Commission draws attention to numerous pressing funding needs of a European dimension. At the same time, the largest EU funding vehicle to a large extent ignores these broader European priorities, both in law and in practice. Finally, the Report looks at the future of EU funding and argues for the introduction of new delimiting principle for how EU funding should be used in the future, involving in particular a more fundamental consideration of the EAV of measures to be funded.

1.4.1 Introduction

Cohesion policies have deep roots in European integration. From the very beginning of the European integration process, large territorial and demographic disparities have been considered a potential obstacle to integration and development. The Treaty of Rome (1957) established solidarity mechanisms in the form of two funds: the ESF to mitigate the social consequences of abolishing internal barriers in the Articles 123-128 and the EAGGF in Article 40. CP has been a politically somewhat undefined but factually constrained EU policy. Until recently, its main purpose has been – in line with Article 174 TFEU - to reduce regional disparities and support underdeveloped regions by financing national projects. Its implementation has been tied to two key principles: additionality of MS funding and covering direct costs of projects. These principles are not anchored into the

²⁰ *Acknowledgement:* I thank Richard Crowe, Friedrich Heinemann, Peter Lindseth, Matthias Ruffert, Tuomas Saarenheimo and Ruth Weber for various discussions and helpful suggestions and Pielpa Ollikainen for assisting in the finalization of the Report.

Treaties, but have been established through secondary legislation to secure that EU financing is spent well.

CP has gradually developed into one of the EU's major spending objectives. It has been the subject of much criticism since its very establishment. Its task, purpose, and significance have been questioned, as has been its less advertised but nevertheless well-known use as a way to buy national support for contested integration initiatives. Evidence about the effectiveness of the policy remains unclear (Becker, 2019). While the need to reconsider EU spending has been frequently recognised, in particular to pursue genuine European public goods, the path dependency of budgetary discussions has been strong and kept any innovations marginal.

A significant, albeit temporary, restructuring of EU spending took place in response to the pandemic crisis. The NGEU changed the pattern of EU spending for 2021-2027 radically, though not in terms of breaking any glass ceilings for the funding of European public goods. The main spending vehicle of the NGEU, the RRF, relies for its legal basis on CP, helping cohesion policies overtake agriculture as the largest EU policy area by a comfortable margin in the present MFF period. The way the NGEU recast the content of cohesion policies was radical.

The transformation has fairly little to do with the original objectives of CP - reducing regional disparities and supporting underdeveloped regions. Instead, the transformation, which took place in several successive stages, is closely related to the asymmetric construction of the EMU. First, the Eurocrisis gave birth to the European Semester, aimed to strengthen the EU's role in shaping MSs' policies in areas that fall under their national competence. Second, the growing frustration with its perceived ineffectiveness led to increasingly determined efforts to leverage EU funds to steer MSs towards better economic policies, in particular as regards structural policies. The first manifestation of this approach was the macroeconomic conditionality of structural and investment funds introduced in the CPR (Center for European Policy Studies, 2020). A few years later, the idea was developed further, in the form of a dedicated euro area budget line within the EU budget, devoted to improving euro area MSs' economic policies (Juncker, 2017). The proposal entailed two CP instruments of a completely new kind. The first instrument was the Reform Delivery Tool (RDT) (COM(2018) 391 final), which was to provide MSs pure grants as reward for implementing structural reforms identified in the country-specific recommendations and deemed desirable by the Commission. The second instrument was the European Investment Stabilization Function (EISF) (COM(2018) 387 final), which sought to introduce an element of cyclical stabilisation by providing loans to euro area and ERM2 MSs from a modest financial envelope (€30 billion). In 2019, both were superseded by a new Commission proposal for a Budgetary Instrument for Convergence and Competitiveness (BICC) that essentially merged the two instruments into one (COM(2019) 354 final). The BICC was to draw on the EU budget, and envisaged a process where MSs would submit proposals for packages of reforms and investments, linked to National Reform Programmes (COM(2020) 408 final, pp. 1-2). While none of these instruments were approved, they introduced a new understanding of the legal scope of EU CP, with significant consequences for how EU funding is spent. They all sought to rely – alone or to a large extent – on the flexibility clause for CP (Article 175, 3rd paragraph, TFEU) for their legal basis. Despite the fundamental effects on how CP is understood, these new readings provoked no discussion at the time (Leino & Saarenheimo, 2017).

In early 2020, the pandemic rearranged political imperatives and presented an opportunity for a far more ambitious plan in the form of the NGEU package and its RRF. The RRF is a funding programme with nearly no substantive limits. It is now difficult to see what government task could not be construed as being within the reach of cohesion policies. From a competence perspective, the new understanding of CP has clear implications on policy fields where EU competence is constrained under the EU Treaties.

The EU can act only if it can identify a legal basis for its action, allocating it competence to approve measures in relation to the question at hand. Such allocation can be explicit (a Treaty Article addressing the issue specifically) or implicit (see Article 3(2) TFEU on competence to conclude external agreements). Often EU acts also based on broad competence clauses (such as Article 114 TFEU relating to approximation of MSs' legislation in the area of the internal market). The legal basis is, under established Court jurisprudence, chosen on the basis of the objective and the substance of the measure, aiming at one legal basis representing the centre of gravity of the act.²¹ What often influences this choice in practice is the fact that EU competence falls under three main categories: exclusive (such as monetary or commercial policy), shared with the MSs (in areas such as the Internal Market, Environment, CP, Trans-European Networks and selected areas of Social Policy) and supportive competence. In the latter areas EU role is limited and cannot be used to harmonise national legislation, which often makes the EU Institutions seek competence justifications elsewhere (Leino-Sandberg, 2017).

CP falls under the competences that are shared between the Union and the MSs (Article 4(2)(c) TFEU). In these areas,

the Union and the Member States may legislate and adopt legally binding acts in that area. The Member States shall exercise their competence to the extent that the Union has not exercised its competence. The Member States shall again exercise their competence to the extent that the Union has decided to cease exercising its competence.

In addition, in the areas of economic, employment and most aspects of social policy the role of the EU is limited to coordinating MS policies (Article 5 TFEU). EU action in areas that do not fall under its exclusive competence are subject to a subsidiarity test: it should act only if EU action provides value added to MSs acting on their own.

In recent years, financing has become the EU's key tool for promoting its institutional agenda. While the Union does not formally legislate in areas of MS competence, it uses its money actively to steer MSs' choices in those areas. While often explained as 'integration through funding', it is questionable whether this represents integration at all: the MSs are not steered towards a uniform model, as each of them adopts national policies that the EU funds. These developments have blurred – and intentionally so - the distinction between CP, on the one hand, and the coordination of fiscal and economic policy coordination, on the other hand. They also introduced a new reading of the principle of subsidiarity (Article 5(3) TEU), which generally relates to the exercise of *Union* competence. Subsidiarity argumentation has now been introduced to matters clearly falling under

²¹ See C-620/18 *Hungary v European Parliament*, ECLI:EU:C:2020:1001, para 38.

national competence, to justify Union intervention. This not innocent from a competence perspective. It is also highly problematic for the functioning of national democratic processes; for ensuring audit and accountability of how the funds are spent.

The following section will provide the legal background: it will explain the legal framework of CP in the EU Treaties and how the limits of this framework have been traditionally understood and applied, and how the interpretation of the EU's competence in CP was gradually broadened in the EU Institutions without public debate. This examination is based on legal advice used by the Commission and Council, to which I have requested public access for the purposes of this examination. In its reply, the Commission identified a small number of documents involving minor technical amendments to draft proposals from the final stages preceding their formal approval,²² but refused to hand out any actual legal analyses concerning the legislative proposals and their legal justification;²³ in fact claims that no such analyses exist.²⁴ This argument is implausible, given the amount of legal rethinking that has gone into enabling the transformation of CP and EU spending that has been led by the Commission services – and that members of its Legal Service have in their academic writings described as a process where the Institutions have “turned repeatedly to the CP chapter of the Treaty (Articles 175 to 178 TFEU) when considering such measures. It has done so, in large part, because the economic policy chapter of the TFEU allows for coordination measures but is relatively restrictive when it comes to the adoption of acts of a more ‘binding’ character.” (Flynn, 2019). The Council Legal Service (CLS) identified four legal opinions that analyse Commission proposals²⁵ and following a confirmatory application, provided access to them (Leino-Sandberg & Lindseth 2023). In addition, I have requested and received public access to the Court pleadings of all three institutions (Commission, European Parliament and Council) in Case C-166/07, *Parliament v. Council*, which is so far the only case dealing with the scope of CP and the legal basis in Article 175, 3rd paragraph, TFEU. These documents are used in the report to make the institutional legal argumentation visible and enable its critical analysis.

²² Decision by the Director General of the Commission Legal Service, Ref. Ares(2023)3614045 - 24/05/2023.

²³ Commission decision C(2023) 5806 final, Brussels, 22.08.2023.

²⁴ Decision by the Director General of the Commission Legal Service, Ref. Ares(2023)6974568 - 13/10/2023.

²⁵ Decision taken by the Council Secretariat, Ref. 23/0861-em/ns identifies the following opinions: 5347/19 – Opinion of the Legal service on the Proposal for a Regulation of the European Parliament and of the Council on the establishment of a European Investment Stabilisation Function; 6582/19 – Opinion of the Legal service on the Proposal for a Regulation of the European Parliament and of the Council on the establishment of the Reform Support Programme; 5483/20 – Opinion of the Legal service on the Proposal for a Regulation of the European Parliament and of the Council on the establishment of the Reform Support Programme; 13116/19 + REV1 – Contribution of the Legal Service on the Proposal for a Regulation of the European Parliament and of the Council on a governance framework for the BICC for the euro area.

The third section describes the “new CP” introduced by NGEU and its practical implications, including instruments that have been approved until the summer of 2023. The final section is dedicated to a discussion of the future of EU funding. In the ongoing mid-term review of the MFF the Commission draws attention to numerous pressing funding needs of a European dimension (COM (2023) 336 final). This Report highlights that at the same time, the largest EU funding vehicle to a large extent ignores these broader European priorities, both in law and in practice.

1.4.2 Development of EU Cohesion Policy

1.4.2.1 Cohesion Policy in the EU Treaties and budget

The core EU budget is small, relative to the federal budgets of mature federations, just slightly over 1% of the EU GNI. From its very beginning, it has evolved primarily as a tool for facilitating trade and economic integration. The benefits of free trade are not always shared equally, and free movement of capital and labour can lead to the agglomeration of economic activity in some geographic areas at the expense of impoverishing others. The EU budget has been a tool to deal with such tendencies, partly by supporting vulnerable regions, partly by compensating those MSs that feel threatened by free trade. As such, it has been instrumental in securing political support for integration.

In the early days, this task was performed mainly through the CAPs. The CAP served to facilitate agreement on the removal of internal tariffs on agricultural products, but also provided a mechanism to rebalance the perceived asymmetric benefits of trade in manufactured goods. In 1975, the ERDF was created (to complement the ESF and EAGGF created already in 1957), justified with reference to how “an effective policy on regional structures is an essential prerequisite to the realization of EMU” while recognising that allocation of funds should take into account both the regional and the Community perspective.²⁶ The ERDF introduced programming by objectives, geographical prioritisation and additionality to national investments, all intended to foster good governance in the beneficiary regions (Cipriani, 2018). Beyond the Treaty provisions on structural funds, there are neither general nor specific Treaty provisions that could be used to establish a large-scale transfer system between the MSs.

From the 1980’s onward, parallel with the creation of the ambitious single market agenda and the successive accession of relatively less developed new MSs, the role of redistribution has been increasingly taken over by the Union’s CP. It saw a massive increase in its size and started to approach CAP as the largest Union policy. In 1994, the CF was also created to provide a financial contribution to projects in the fields of the environment and trans-European networks.²⁷ With the Single European Act (1986) economic and social cohesion became an explicit competence of the European Community, defined in particular through the aim of “reducing disparities between the

²⁶ Regulation (EEC) No 724/75 of the Council of 18 March 1975 establishing a European Regional Development Fund, OJ L 73, 21.3.1975, s. 1—7, Preamble.

²⁷ Council Regulation (EC) No 1164/94 of 16 May 1994 establishing a Cohesion Fund.

various regions and the backwardness of the least-favoured regions”.²⁸ The importance of these funds further increased with the enlargement of 2004 to countries facing regional and industrial challenges (Cipriani, 2018).

In 2008, the Treaty of Lisbon introduced a third dimension of EU cohesion in the form of territorial cohesion, and defined strengthening the EU’s economic, social and territorial cohesion as an EU objective.²⁹ Dirk Ahnert, Director General of DG REGIO at the EC, explained in 2009 that the *territorial approach* is what characterises this policy area: “The selection of regions as the basis on which CP is implemented not only responds to the mandate given to CP by the Treaty to promote regional development.” (Ahnert, 2019, p. 4). He goes on to spell out the reasoning why cohesion policies focus on regions rather than on MSs: “To reflect the specificities of the local context, the policy should target territories featuring sufficient homogeneity. EU countries rarely correspond to such territories.” (Ahnert, 2019, p.4). This encapsulates the traditional thinking of EU cohesion policies.

1.4.2.2 Competence and the EU budget

The EU budget is not just about money but a “litmus test of the European integration process”; the arrangements “reflect the balance of powers and the share of competences between the EU as territorial collectivity and its Member States” (Cipriani, 2018, p. 142). Traditionally EU funding has indeed followed EU competence. When the EU has wished to fund something, this has required not only adding the relevant entry in the budget but also approving a legal act on the matter, which requires a legal basis in the EU Treaties. For the Court, “[t]he requirement that a basic act must be adopted before an appropriation is implemented derives directly from the scheme of the Treaty, in accordance with which the conditions governing the exercise of legislative powers and budgetary powers are not the same.”³⁰ The EU Financial Regulation repeats the same principle: “Appropriations entered in the budget for any Union action shall only be used if a basic act has been adopted.”³¹ Under Article 2 of the same Regulation,

‘basic act’ means a legal act, other than a recommendation or an opinion, which provides a legal basis for an action and for the implementation of the corresponding expenditure entered

²⁸ Article 130a: “In order to promote its overall harmonious development, the Community shall develop and pursue its actions leading to the strengthening of its economic and social cohesion . In particular the Community shall aim at reducing disparities between the various regions and the backwardness of the least-favoured regions.”

²⁹ Article 3(2) TEU: “It shall promote economic, social and territorial cohesion, and solidarity among Member States.”

³⁰ Case C-106/96, *UK v Commission*, para 28. See also Case 242/87 *Commission v Council*, para 16-18.

³¹ Regulation (EU, Euratom) 2018/1046 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012, Article 58(1).

in the budget or of the budgetary guarantee or financial assistance backed by the budget, and which may take any of the following forms [...]

The Article then refers specifically to legal acts approved under the TFEU, the Euratom Treaty or specific articles in the EU Treaty. In practice this has meant that the EU has been able to fund matters only to the extent they fall under EU competence, the matter has been regulated in EU legislation and to the extent it has been possible to identify an explicit or more general legal basis for the act. The Treaties include various legal bases that refer explicitly to the possibility to direct EU funds to promote a cause, (such as Article 40(3) TFEU on agricultural guidance and guarantee funds, or Article 162 TFEU on the ESF), or where the idea of funding is implicit but clearly a part of the envisaged EU toolkit (such as development cooperation, economic, financial and technical co-operation or humanitarian aid).

Competence considerations are somewhat less straightforward in policy areas where the EU primarily works through funding rather than legislative action. Unlike in areas such as the internal market, agriculture or environment, where regulation is about creating substantive EU legislation that applies in the whole EU, cohesion policies are primarily about setting a legislative framework for directing funds and creating conditions for allocating Union funding to certain national projects. In other words, while CP has a number of Treaty-based objectives relating to ‘reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions’, these objectives are reached by funding measures at national or regional levels, not by exercising a substantive legislative and regulatory competence aiming at bringing national legislation in line with a uniform EU model. The *modus operandi* of CP is somewhat similar to that in development policy (Article 208 TFEU) or humanitarian aid (Article 212 TFEU) where the Treaty defines various EU objectives to be conducted in third states. However, in these areas the Treaty specifies that “the Union shall have competence to carry out activities and conduct a common policy; however, the exercise of that competence shall not result in MSs being prevented from exercising theirs” (Article 4(4) TFEU). No such clause clarifying the relationship of EU funding action on national policy competence exists for CP; therefore, one would assume that it follows the competence division in the policy field that is relevant for the measures that are to be funded. After all, ‘each provision of EU law must be interpreted in such a way as to guarantee that there is no conflict between it and the general scheme of which it is part’ (Lenaerts & Gutiérrez-Fons, 2013).

1.4.2.3 The legal framework of Cohesion Policy

The system of structural funds has an explicit legal basis in the Treaties,³² which recognise a connection between economic and cohesion policies.³³ Article 174 TFEU establishes the objectives of CP: “reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions”, and further defines that [a]mong the regions concerned,

³² Art. 162-164, Art. 170-172, Art. 174-178 TFEU.

³³ Article 175 TFEU establishes an obligation for the Member States to “conduct their economic policies and shall coordinate them in such a way as, in addition, to attain “the Cohesion Policy objectives (Article 174 TFEU).

particular attention shall be paid to rural areas, areas affected by industrial transition, and regions which suffer from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, cross-border and mountain regions.” Article 175 TFEU establishes connections with other fields of Union policy. It first requires the MSs to conduct their economic policies and “coordinate them in such a way as, in addition, to attain the objectives set out in Article 174”. In addition to the Treaty provisions, there is also a specific protocol (No. 28) on economic, social and territorial cohesion annexed to the Treaties and with the same legal status (European Committee of the Regions, 2023).

The Treaties establish that the formulation and implementation its internal market policies and actions are to take into account and contribute to the objectives of CP. In this way, its aims have a similar characteristic to environmental protection requirements, which “must be integrated into the definition and implementation of the Union's policies and activities” in a horizontal manner (Article 11 TFEU). In planning action in other policy areas, the effect of the envisaged action on CP objectives must be considered. But as the Committee of Regions has pointed out, there are currently no mechanisms in place for ensuring this principle is indeed observed (European Committee of the Regions, 2023). The Union is also to support the achievement of these objectives by the action it takes through the Structural Funds,³⁴ the European Investment Bank and the other existing Financial Instruments. Article 176 TFEU specifies that the “European Regional Development Fund is intended to help to redress the main regional imbalances in the Union through participation in the development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions”. Article 177 TFEU includes a legal basis for the definition of “the tasks, priority objectives and the organisation of the Structural Funds” and the “general rules applicable to them and the provisions necessary to ensure their effectiveness and the coordination of the Funds” in the ordinary legislative procedure, which is also to be used for setting up a CF to provide “a financial contribution to projects in the fields of environment and trans-European networks in the area of transport infrastructure”. Environmental policy and trans-European networks thus enjoy a prime place in CP as they are specifically integrated into the action to be taken under the CF.

In these areas, different EU competences and legal bases seem partially overlapping. Traditionally a great part of environmental funding has been channelled through funds in other policy areas, in particular agriculture and cohesion, while policy funds specifically dedicated to environmental policy have remained scarce.³⁵ The possibility of using the CF to finance “specific projects in MSs in the area of transport infrastructure” is also explicitly mentioned in Article 171(1) TFEU on trans-European networks. In addition, trans-European networks is also defined as self-standing shared competence in the Treaties and refers to such networks in the areas of transport, telecommunications and energy infrastructures, with explicit Treaty provisions in Title XVI of the TFEU. The legal

³⁴ European Agricultural Guidance and Guarantee Fund, Guidance Section; ESF; European Regional Development Fund.

³⁵ See however Regulation (EU) 2021/783 establishing a Programme for the Environment and Climate Action (LIFE), and repealing Regulation (EU) No 1293/2013, which is based on Article 192(1) TFEU.

basis in Article 172 TFEU has been used to approve various legal acts and funding measures in these areas.³⁶ A topical example of this is the Rail Baltica project, which is financed by the three Baltic States and co-funded by the EU up to 85% of the total eligible costs under the Connecting Europe Facility (CEF) funding instrument on development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services.³⁷ CEF is not a CP instrument but is based on Articles 172 TFEU and Article 194 TFEU.

The Treaty provisions have been further developed into an integrated legislative framework through secondary legislation. Traditionally the legal basis in Article 177 TFEU has been used to regulate the structural funds.³⁸ These regulations establish the main policy objectives and the rules of (shared) management³⁹ but also define what kind of regions are entitled to support.⁴⁰ Regulation (EU) 2021/1058 further defines action taken by the ERDF and the CF. The former is specifically aimed to

reducing disparities between the levels of development of the various regions within the Union, and to reducing the backwardness of the least favoured regions through participation in the

³⁶ See e.g. Regulation (EU) 2022/869 on guidelines for trans-European energy infrastructure; Directive (EU) 2021/1187 on streamlining measures for advancing the realisation of the trans-European network; Regulation (EU) 2021/1153 establishing the CEF; Regulation (EU) 2021/694 establishing the Digital Europe Programme.

³⁷ Regulation (EU) 2021/1153 establishing the CEF and repealing Regulations (EU) No 1316/2013 and (EU) No 283/2014

³⁸ Regulation (EU) 2021/1060 laying down common provisions on the European Regional Development Fund, the ESF Plus, the CF, the JTF and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy; Regulation (EU) 2021/1058 of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund; Regulation (EU) No 1303/2013 laying down common provisions on the European Regional Development Fund, the ESF, the Cohesion Fund, the EAFRD and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the ESF, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006; Regulation (EU) No 1300/2013 on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006; Regulation (EU) 2018/1719 amending Regulation (EU) No 1303/2013 as regards the resources for economic, social and territorial cohesion and the resources for the Investment for growth and jobs goal; Regulation (EU, Euratom) 2018/1046 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012; Regulation (EU) 2017/2305 amending Regulation (EU) No 1303/2013 as regards the changes to the resources for economic, social and territorial cohesion and to the resources for the Investment for growth and jobs goal and for the European territorial cooperation goal.

³⁹ See e.g. Regulation (EU) 2021/1060 laying down common provisions, Ibid.

⁴⁰ See e.g. Regulation (EU) 2021/1058 on the European Regional Development Fund and on the Cohesion Fund, Article 4.

structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions, including by promoting sustainable development and addressing environmental challenges (Article 2(2)).

The CF is to “contribute to projects in the field of environment and trans-European networks in the area of transport infrastructure (TEN-T)”. Article 4 defines the specific (and broad) objectives of the two funds, and elaborates further that programmes to be supported “in each MS shall be concentrated at national level or at the level of category of region” that is specified in the Regulation in a way where MSs are to be classified, in terms of their GNI ratio to three groups while regions are divided into more developed, transition and less developed regions (Article 4).

There is surprisingly little case law on CP and its scope. In its 1999 judgment on a case where Portugal claimed a Council Regulation violated the principle of economic and social cohesion, the Court simply stressed that while

the strengthening of economic and social cohesion is one of the objectives of the Community and, consequently, constitutes an important factor, in particular for the interpretation of Community law in the economic and social sphere, the provisions in question merely lay down a programme, so that the implementation of the objective of economic and social cohesion must be the result of the policies and actions of the Community and also of the Member States.⁴¹

As an area of shared competence, CP remains subject to the principle of subsidiarity, which is about justifying why the EU in a given case not falling under its exclusive competence (i.e. matters in relation to which only the EU is competent to act) should act instead of the MSs.⁴² As the Court noted in Case C-508/13,

Article 5(3) TEU refers to the principle of subsidiarity which provides that the EU, in areas which do not fall within its exclusive competence, is to take action only if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the European Union.⁴³

The application of the principle of subsidiarity presumes the existence of EU competence under the Treaties. The principle requires “that the proposed action can, by reason of its scale or effects, be better achieved at EU level, given its objectives listed in Article 3 TEU and provisions specific to various areas”.⁴⁴ It neither limits or extends EU competence as compared to what is laid down in the Treaties, it merely requires a justification for its use. Therefore, the EU

is to legislate only to the extent necessary and that Community measures should leave as much scope for national decision as possible, consistent however with securing the aim of the measure and observing the requirements of the Treaty [...] the principle of subsidiarity does not call

⁴¹ Case C-149/96 *Portugal v Council* [1999] ECR I-8395, para 86.

⁴² See also Protocol (No 2) on the application of the principles of subsidiarity and proportionality.

⁴³ Case C-508/13, *Estonia v EP and Council*, para 44.

⁴⁴ *Ibid*, para 53.

*into question the powers conferred on the European Community by the Treaty, as interpreted by the Court of Justice.*⁴⁵

Therefore, while in public debates the principle of subsidiarity is often invoked to challenge existence of EU competence, according to the Treaties the principle only comes to play when the EU is competent to act, and its competence is of another nature than exclusive. Considerations of subsidiarity are also important for EU spending, which should equally depend on

an assessment of the added value compared to action taken by national governments only. This requires establishing to what extent different policy options at EU level would meet their objectives, with what benefits, at what cost, with what implications for different stakeholders, and at what risk of unintended consequences. (Cipriani, 2018, p. 142)

During the recent years these kinds of considerations have received far too little attention when considering the new purposes for which CP funding is used.

1.4.2.4 Article 175, 3rd paragraph, TFEU

The recent transformation – or perhaps more accurately, revolution – of CP has been enabled by Article 175, 3rd paragraph, TFEU – an obscure, historically little-used clause within the title on economic, social and territorial cohesion. Under this provision,

If specific actions prove necessary outside the Funds and without prejudice to the measures decided upon within the framework of the other Union policies, such actions may be adopted by the European Parliament and the Council acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions.

The paragraph has an ambiguous wording, and views diverge on whether this is a broad or a narrow enabling clause. De Witte (2023) argues that this legal basis “partakes in the broadly defined aims of cohesion” and thus “allows for a broad range of measures, namely any ‘action’ that would ‘prove necessary’”. Read this way, one wonders if any other legal bases in the EU Treaties would ever be needed for any purpose, as de Witte’s reading could plausibly be used to cover any desired action between heaven and earth.

The placement and formulation of the clause would make another reading more convincing. The provision is formulated as a flexibility clause, which means its function would normally be rather limited. “Specific action” conjures up images of something rather narrow in scope and tied to supplementing EU action under the structural funds, which rely on their own explicit legal basis. This is also the interpretation the Court took in the single case that deals specifically with using Article 175, 3rd paragraph, TFEU as a legal basis. The case concerned the Community financial contributions to the International Fund for Ireland (IFI) (2009), which was set up to promote economic and social advance and to encourage contact, dialogue and reconciliation between nationalists and

⁴⁵ Case C-176/09, Luxembourg v EP and the Council, para 77-78.

unionists throughout Ireland.⁴⁶ The Council had adopted the Regulation, as proposed by the Commission (COM (2006) 564 final), on the basis of the general flexibility clause (Article 308 TEC; now Article 352 TFEU), which the Parliament challenged, arguing for the CP legal basis that would have offered it a much stronger role in the approval process. The case is interesting as it sheds light on how the three institutions thought about the scope of CP in general and the legal basis in Article 175, 3rd paragraph, TFEU, in particular, in 2007-2009.

The Council defended the chosen legal basis with reference to how the concept of ‘specific actions’ within the meaning of Article 175, 3rd paragraph, TFEU must be understood as forming part of the CP objectives; therefore, specific action outside the Structural Funds was to be used for strengthening the economic and social cohesion of the Community in order to promote its overall harmonious development.⁴⁷ Contributing financially to an international organisation working mainly for Irish intra-community reconciliation was clearly not a CP objective. Before the Court, the Council argued

*La structure et l'économie générale des articles 158 et 159 CE sont telles que la notion d'action spécifique doit être entendue comme faisant partie des objectifs visés à l'article 158 CE. Il s'en suit que l'adoption d' "une action spécifique en dehors des fonds" constitue un moyen à utiliser, au même titre que la participation de la Communauté au travers des fonds, pour renforcer la cohésion économique et sociale de la Communauté, et ce afin de promouvoir son développement harmonieux global.*⁴⁸

The Council thus clearly saw the “a specific action outside the Funds” as a means to be used to promote *CP objectives*. What was deemed necessary for verifying the appropriateness of the legal basis was to consider whether the act and its content could be aligned with “l'esprit de l'article 158 CE et figurer donc en tant qu'action spécifique au termes du troisième alinéa de l'article 159 CE”.⁴⁹

The Commission had not provided any justification for using Article 308 TEC as legal basis in its proposal. Before the Court, its argumentation followed a different line from that of the Council, focusing on the ‘general purpose’ of CP, which could not be reconciled with specific intervention in favour of a single region.⁵⁰ The use of the legal basis required general intervention promoting the harmonious development of the whole Union, as indicated in Article 174 TFEU. “Specific actions” was not to be understood as ad hoc or one-off interventions.⁵¹ The general nature of CP measures did not exclude taking into consideration difficulties or challenges which do not arise in

⁴⁶ Case C-166/07, *Parliament v. Council*, EU:C:2009:213.

⁴⁷ Para 30 of the ruling.

⁴⁸ Mémoire en défense déposé par le Conseil de l'Union européenne, conformément à l'article 40, paragraphe 1, du règlement de procédure dans l'affaire C-166/07, Bruxelles, le 11 juin 2007, received through access to documents request (in file with the author).

⁴⁹ Ibid., para 22.

⁵⁰ Mémoire en intervention déposé conformément à l'article 40 du Protocole sur le Statut de la Cour de justice, par la Commission des Communautés européennes, para 27.

⁵¹ Ibid., para 28.

a uniform manner throughout the EU territory. After all, under the Structural Funds, the rules of intervention and the nature of EU assistance made available to MSs and regions are modulated according to local and regional conditions.⁵² Therefore, adaptation to the circumstances was not in contradiction with the generalized nature of CP. While legislation in this area had never followed an indistinctly uniform approach, it was necessary to design the policy measures on the basis of an approach which applies to the whole of the EU territory. While there was a need to secure EU-wide effort to promote cohesion, there was no need to remain blind to specific needs. However, such differentiations are qualitatively different from an intervention limited from the outset to a single region in an ad hoc manner.⁵³

In his opinion, the Advocate General was willing to see CP as a broad and undefined policy field. He emphasized how

*[t]he general wording of that task permits a degree of flexibility as well as adaptability in the aims pursued by the Community legislature when it wishes to provide for common actions. Consequently, the priority areas of action change regularly in accordance with the economic and social needs which manifest themselves in the various Member States. The protean nature of economic and social cohesion and the general nature of the tasks given to that policy mean that it is difficult to define it exactly. It thus proves difficult to lay down the limits of the area covered by the policy because economic and social cohesion emerges as a broad overall concept with imprecise contours. The Court's case-law offers no decisive guidance in that connection.*⁵⁴

The Court did not follow the Advocate General's lead but found instead that CP did indeed have a specific substance; not every measure with economic effects could be defined as CP. The Court acknowledged that the "objectives of CP are to be taken into account by the MSs and the Community when formulating and implementing Community policies. The Community is also required to support the realisation of those objectives, in particular by the action which it takes through the Structural Funds" (para 45). As regards the "specific action outside those Funds" mentioned in the final paragraph of Article 175 TFEU, the Court noted,

*It is, admittedly, true that the latter provision does not set out the form which such specific actions can take. However, [...] the Community, through all of its actions, implements an independent Community policy, with the result that Title XVII of the EC Treaty provides adequate legal bases allowing for the adoption of means of action which are specific to the Community, administered in accordance with the Community regulatory framework and the content of which **does not extend beyond the scope of the Community's policy on economic and social cohesion**. (para 46, emphasis added)*

Contrary to what the Parliament had argued, it could not be *guaranteed* that all of the interventions of the Fund which are financed by the Community would "in fact address the *objectives that are specific to the Community's policy on economic and social cohesion*"; therefore, the Council was entitled to conclude that the range of activities financed by the contested regulation would

⁵² Ibid., para 31.

⁵³ Para 32.

⁵⁴ Opinion of AG Bot in Case C-166/07, *Parliament v. Council*, EU:C:2009:213, para 81-82.

extend beyond the scope of the Community's policy on economic and social cohesion" (emphasis added). This is because Article 175 TFEU "covers only independent action by the Community carried out in accordance with the Community regulatory framework and whose content does not extend beyond the scope of the Community's policy on economic and social cohesion" (paras 62-64). While broad in scope, CP was clearly not without any contours; and the elements falling outside under CP required another legal basis (Article 308 TEC). In other words, measures adopted on the basis of this provision must indeed "address the objectives that are specific to the [EU]'s policy on economic and social cohesion."⁵⁵ The ambiguity of the wording of the flexibility clause did not extend its scope beyond the aims of CP. Leo Flynn, a legal adviser working for the Commission, argues that this ruling "makes clear that while the material scope of the CP legal basis is broad, it is not infinitely elastic". However, he notes that, in the institutions, "the message taken from the IFI ruling focuses more on the opportunities provided by the third paragraph of Article 175 TFEU and less on its constraints" (Flynn, 2019).

Before the pandemic, the provision had indeed seen relatively little use. In addition to acting as a legal basis for limited external action, it had been used to set up the European Solidarity Fund in 2002 intended to offer rapid financial support to MSs facing major natural disasters,⁵⁶ to regulate actions around EU funds⁵⁷ and, more recently, to create a Fund for European Aid to the Most Deprived⁵⁸ and the Structural RSP in 2017.⁵⁹ The general objective of the latter is, under Article 4,

to contribute to institutional, administrative and growth-sustaining structural reforms in the Member States by providing support to national authorities for measures aimed at reforming and strengthening institutions, governance, public administration, and economic and social sec-

⁵⁵ Case C-149/96, *Portugal v. Council*, EU:C:1999:92, at para. 62.

⁵⁶ Council Regulation 2012/2002 of 11 November 2002 establishing the European Solidarity Fund, [2002] OJ, L 311/3, later amended by Regulation 661/2014 of the European Parliament and of the Council of 15 May 2014, [2014] OJ, L 189/143.

⁵⁷ Regulation (EU) 2019/1796 amending Regulation (EU) No 1309/2013 on the European Globalisation Adjustment Fund (2014-2020), OJ L 279I, 31.10.2019, p. 4–6; Regulation (EU) 2018/1671 amending Regulation (EU) 2017/825 to increase the financial envelope of the Structural Reform Support Programme and adapt its general objective, OJ L 284, 12.11.2018, p. 3–5; Regulation (EU) 2017/2396 amending Regulations (EU) No 1316/2013 and (EU) 2015/1017 as regards the extension of the duration of the European Fund for Strategic Investments as well as the introduction of technical enhancements for that Fund and the European Investment Advisory Hub, OJ L 345, 27.12.2017, p. 34–52; Regulation (EU) 2017/825 on the establishment of the Structural Reform Support Programme for the period 2017 to 2020 and amending Regulations (EU) No 1303/2013 and (EU) No 1305/2013, OJ L 129, 19.5.2017, p. 1–16; Regulation (EU) 2015/1017 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal and amending Regulations (EU) No 1291/2013 and (EU) No 1316/2013 — the European Fund for Strategic Investments, OJ L 169, 1.7.2015, p. 1–38.

⁵⁸ Regulation (EU) No 223/2014 on the Fund for European Aid to the Most Deprived.

⁵⁹ Regulation (EU) 2017/825 on the establishment of the Structural Reform Support Programme for the period 2017 to 2020 and amending Regulations (EU) No 1303/2013 and (EU) No 1305/2013, OJ L 129, 19.5.2017, p. 1–16.

tors in response to economic and social challenges, with a view to enhancing cohesion, competitiveness, productivity, sustainable growth, job creation, and investment, in particular in the context of economic governance processes, including through assistance for the efficient, effective and transparent use of the Union funds.

This regulation is interesting not only because it places the word “structural reforms” on the CP agenda, but also because it includes one of the first attempts to move beyond the purely transactional role of cohesion policies by introducing the concept of EAV in the Structural reform programme regulation.⁶⁰ Finally, it creates a link between CP and administrative support. In addition to the Cohesion flexibility clause Article 175, 3rd paragraph TFEU, the regulation setting up the Structural RSP relied also on a second legal basis, Article 197(2) TFEU. According to this rather obscure and technical provision added by the Treaty of Lisbon and never previously used in any other context:

The Union may support the efforts of Member States to improve their administrative capacity to implement Union law. Such action may include facilitating the exchange of information and of civil servants as well as supporting training schemes. No Member State shall be obliged to avail itself of such support.

According to the Council register of documents, its Legal Service never provided legal advice on this proposal. However, the Commission argued in its proposal that the combination of these two legal bases

allows for a comprehensive approach in devising a Union programme supporting the capacity and endeavours of the national authorities of Member States to carry out and implement growth-enhancing reforms (institutional – including governance aspects – structural and/or administrative reforms) to foster sustainable development and innovation and, in this context, to make more efficient and effective use of Union funds (COM(2015) 701 final).

From the perspective of legal basis, the Commission defined a three-fold objective:

*i) strengthening the administrative capacity of MSs in respect of the effective implementation of Union law through administrative cooperation among national authorities of the MSs, and
ii) strengthening economic, social and territorial cohesion within the Union, outside of the actions undertaken with the ESI funds; this coordinated action would ultimately contribute to iii) the attainment of a better coordination of economic policies of MSs.*

The emphasis of the programme was on providing expertise: it was defined as “the most suitable means of supporting on the ground those MSs that implement growth-enhancing reforms, since the Union is in a better position than MSs to identify, mobilise and coordinate the best available expertise and to provide a coordinated approach to technical support in MSs requesting assistance”. While the substantive aims of the regulation were largely in line with those defined in Article 197(2) TFEU, it aimed to build MSs’ administrative capacity not just to implement Union law as defined in Article 197(2) TFEU but in fact any structural reform that usually fall substantively

⁶⁰ Ibid., Article 3.

outside EU competence. This is likely the reason why the Commission saw it necessary to use Article 175, 3rd paragraph, TFEU as an additional legal basis. Since this proposal, Article 197(2) TFEU has served as a joint legal basis for three large-scale CP instruments,⁶¹ providing the formal justification for directing funding to large projects involving the operation of national administrations and their traditional tasks, and reaching far beyond the examples of technical support mentioned in Article 197(2) TFEU.

During and after the polycrisis, Article 175, 3rd paragraph, TFEU has become the basis of a major part of the EU's total spending, either alone or in conjunction with Article 197(2) TFEU or the Article 122 TFEU emergency provision. In the absence of other quickly available EU funding there has been increasing pressure to also use cohesion funding to address the implications of various acute crises: first the financial crisis,⁶² then natural disasters,⁶³ the immediate effects of the Covid crisis⁶⁴ and most recently the effects of Russia's war in Ukraine (see further below).⁶⁵ The ease at which this opening has been done is partly due to the nearly complete lack of jurisprudence on any of these provisions but also the fact that many states have in practice struggled to find use for their share of cohesion funds. However, as the European Court of Auditors (ECA) has pointed out,

⁶¹ Ibid.; Regulation (EU) 2018/1671 amending Regulation (EU) 2017/825 to increase the financial envelope of the Structural Reform Support Programme and adapt its general objective; Regulation (EU) 2021/240 establishing a Technical Support Instrument.

⁶² See Regulation (EU) 2016/2135 amending Regulation (EU) No 1303/2013 as regards certain provisions relating to financial management for certain Member States experiencing or threatened with serious difficulties with respect to their financial stability; Regulation (EU) 2015/1839 amending Regulation (EU) No 1303/2013 as regards specific measures for Greece.

⁶³ Regulation (EU) 2017/1199 amending Regulation (EU) No 1303/2013 as regards specific measures to provide additional assistance to Member States affected by natural disasters.

⁶⁴ Regulation (EU) 2020/558 amending Regulations (EU) No 1301/2013 and (EU) No 1303/2013 as regards specific measures to provide exceptional flexibility for the use of the European Structural and Investments Funds in response to the COVID-19 outbreak; Regulation (EU) 2020/2221 amending Regulation (EU) No 1303/2013 as regards additional resources and implementing arrangements to provide assistance for fostering crisis repair in the context of the COVID-19 pandemic and its social consequences and for preparing a green, digital and resilient recovery of the economy (REACT-EU); Regulation (EU) 2020/460 amending Regulations (EU) No 1301/2013, (EU) No 1303/2013 and (EU) No 508/2014 as regards specific measures to mobilise investments in the healthcare systems of Member States and in other sectors of their economies in response to the COVID-19 outbreak (CRII).

⁶⁵ Regulation (EU) 2023/435 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC; Regulation (EU) 2022/2039 amending Regulations (EU) No 1303/2013 and (EU) 2021/1060 as regards additional flexibility to address the consequences of the military aggression of the Russian Federation FAST (Flexible Assistance for Territories) – CARE; Regulation (EU) 2022/613 amending Regulations (EU) No 1303/2013 and (EU) No 223/2014 as regards increased pre-financing from REACT-EU resources and the establishment of a unit cost; Regulation (EU) 2022/562 amending Regulations (EU) No 1303/2013 and (EU) No 223/2014 as regards Cohesion's Action for Refugees in Europe (CARE).

repeatedly using CP to address crises may divert the EU from its primary strategic goal of reducing disparities in development between regions (European Court of Auditors, 2023a).

1.4.2.5 Towards new EU spending priorities

CP counts today as the EU's main investment policy. In line with Article 194 TFEU, over the years, the EU has dedicated a significant proportion of its activities and budget to reducing the disparities among regions, with particular emphasis on rural areas, areas affected by industrial transition, and regions which suffer from severe and permanent natural or demographic handicaps. But its scope has not been unlimited. The classic cohesion policies financed through the CF, the ERDF and the ESF finance investments in a large variety of areas such as transportation, energy, environment and digitalisation, but also including non-physical investments in education and culture. Nonetheless, while seemingly broad in scope, investments under the rubric of cohesion always retained certain key features, most importantly co-financing by MSs (Vita, 2017), multilevel governance (empowerment of sub-national, regional, and local actors), as well as use of funding only to cover the actual costs of investments. As described by one observer,

Cohesion Policy is more than a 'side-payment' to buy support for other EU programmes and agendas. In public finance terms, CP has an 'allocative' rationale. The aim is to raise the welfare and well-being of the territories and people of the EU through growth-enhancing investment strategies and projects. Accordingly, its means and methods differ from unconditional transfer payments that lie within the policy toolkit of national social policies or, in the case of the EU, income support to farmers under the CAP. Indeed, there are many strings attached to the use of CP resources to ensure that it is used effectively towards meeting its developmental objectives, even if the effects are disputed. [...] In short, CP is anything but a 'blank cheque'. (Bachtler & Mendez, 2013, pp. 12-13)

These policies have generated tangible benefits for the recipient countries but, beyond the redistributive function, there is no obvious value added to financing those policies through the European budget instead of the national one. In this sense, it is somewhat unclear how the principle of subsidiarity has ever been applied in CP, also given its nature as more a funding than legislative competence. Funding these measures at the EU level is purely a political choice, deemed necessary for ensuring the acceptability and attractiveness of the integration project in all parts of the Union. The principle of subsidiarity would, however, seem to point in the direction of some kind of EAV when projects to be funded are selected. Yet, the concept has been largely absent from the design and the practical application of the legal framework.

One would think that, however sound the initial reasoning behind agricultural and cohesion policies, after many decades and with all the new common challenges facing the Union, the justification for their dominance might now be diminishing. Yet, any serious discussion on a fundamental refocusing of the EU budget remains very difficult (Becker, 2012; High Level Group on Own Resources, 2016). MSs continue to measure their success in MFF negotiations by a single figure: the difference between what each of them gets from the EU budget and what it pays in. And since in the absence of agreement the status quo will prevail, the power of inertia is immense (Becker, 2012). Funding for programmes that bring EAV but do not create calculable payouts to individual MSs tend to be the first to be squeezed. They get "treated as 'other programmes' and are allocated whatever is left under some artificial overall limit (the infamous 1%)." (Lehner, 2020, pp. 22-23).

Yet, in 2018, a little-noticed but fundamental change took place in the Financial Regulation.⁶⁶ A new sub-item was added to Article 125, first paragraph, on ‘Forms of Union contribution’ (emphasis added):

Union contributions under direct, shared and indirect management shall help achieve a Union policy objective and the results specified and may take any of the following forms:

... (ii) the achievement of results measured by reference to previously set milestones or through performance indicators;

The Commission proposal explains this as follows:

More emphasis should be put on performance and results. It is thus appropriate to define an additional form of financing not linked to costs of the relevant operations in addition to the forms of Union contribution already well established (reimbursement of the eligible costs actually incurred, unit cost, lump sums and flat-rate financing). This form of financing should be either based on the fulfilment of certain conditions ex ante or the achievement of results measured by reference to the previously set milestones or through performance indicators.

It thus became possible to provide EU financing as a pure incentive, irrespective of the actual cost of the underlying measures. This change attracted little attention and no doubt appeared technical and inconsequential to those few policy makers that paid attention. Yet it created a whole new way for the EU to project its power irrespective of competence limitations and laid the foundation for a revolution in the use EU funds (Leino-Sandberg, 2023), which the Commission developed in a series of legislative proposals preceding the RRF and is now making full use of in the context of the RRF (Leino-Sandberg & Lindseth, 2023). By 2018, CP had been firmly identified by the EU institutions as a way to fill the ‘gaps’ in the ‘incomplete policy side of EMU’, as a Commission legal adviser Leo Flynn explains, ‘to overcome the limitations associated with Article 121 TFEU. It is perfectly proper for them to adopt such measures on another legal base if the measures in question come with the ambit of the Treaty provision used’ (Flynn, 2019). In the Commission it led to a row of proposals that were the result of strategic planning on how the ‘open-ended’ provisions of CP could be invoked to strengthen and broaden Union action in the area of the EMU, relying on a reinterpretation of what ‘CP’ can be.

1.4.3 EMU asymmetry and cohesion

The euro crisis served as a launching pad for several strands of debate on how to make use of EU common funds to improve MSs’ policies and prop up the euro area. Macroeconomic conditionality had already existed since 2006, but it was substantially widened in the aftermath of the euro crisis and extended to all ESI funds (Centre for European Policy Studies, 2020). Another strand of the EMU-deepening debate revolved around various forms of common borrowing, typically in an intergovernmental setting. Usually, such proposals came with access conditions intended to serve the secondary goal of incentivising better fiscal and economic policies at the national level (Leino & Saarenheimo, 2017). Furthermore, a number of proposals envisaged the creation of an additional EU (or, more often, Euro area) vehicle, a “fiscal capacity”, that would interact with MSs

⁶⁶ I thank Richard Crowe for pointing this out to me.

through a system of fiscal cross-subsidies (Juncker et al, 2015). Progress took a long time to come, but things started finally to accelerate when the decision was taken to pursue EMU deepening within the framework of the EU budget, largely based on the EU competence under CP. In this process, the institutions effectively reversed the Treaty-defined link between economic policies and cohesion policies. CP became an instrument in the service of the Institutions' economic and related fiscal policy aims, with little or no connection to the actual cohesion objectives.

1.4.3.1 RDT and the EISF – merging cohesion policies and economic policies

In his 2017 State of the Union address, President Juncker (2017) announced the Commissions intent to pursue a dedicated euro area budget line within the EU budget. Following this, in May 2018 the Commission proposed two new instruments. The first proposal involved a RSP, the core part of it was the RDT (COM(2018) 391 final), based on Article 175, 3rd paragraph, TFEU and Article 197(2) TFEU. It was to provide MSs pure grants, from the EU budget, as reward for implementing structural reforms identified in the country-specific recommendations and deemed desirable by the Commission. As such, it represented a fundamental departure from the principles governing the use of EU funds and took full use of the 2018 amendment of the Financial Regulation described above. Up to that point, grants from the EU budget to MSs only financed actual costs of the underlying measures. Under the RDT, the amount of the grant was to be determined by the significance of the reform, not by its costs. Simply put, it was about using EU funds to buy influence in MSs' structural policies, which were under national competence. The second instrument was the EISF (COM(2018) 387 final), which was to provide loans to euro-area or ERM2 MS in financial difficulties so as to allow them to maintain adequate level public investment. Like the RDT, the EISF was legally framed as a CP instrument, even if its primary aim was in cyclical stabilisation. It would, according to the Commission, entail no permanent transfers, and eligibility would be conditional on "strict compliance with decisions and recommendations under the Union's fiscal and economic surveillance framework". While its proposed financial structure was modest, with a maximum revolving loan capacity of €30 billion, it was explicitly presented as a harbinger of greater things to come.

To my knowledge, the only MS to react explicitly to the competence implications of the two proposals was Finland, which found the first proposal highly problematic from the perspective of its legal basis. The government argued that the aims of the proposal had little to do with the aims of CP; instead, it seemed to be aimed at deepening the EMU and promoting structural reforms that are part of economic and social policies. Any effect on Cohesion Policies was at most subsidiary to economic policy aims. The Parliament's Constitutional Law Committee shared this analysis and stressed that economic and social policies fall under national competence, which emphasized the need to clarify the competence structure of the proposal, keeping in mind also its potential negative effects on democratic legitimacy (PeVL 37/2018 vp). It also saw that the proposals would lead to an increase of the powers of the Commission, which would evaluate the need to receive support, settle its amount and conditions, and recover the sum if necessary. The proposal was of a principled nature: if its legal logic were accepted, the size of the programme could later be increased to ensure steering effect (PeVL 37/2018 vp). When settling the Finnish position the Parliament's Grand Committee underlined that the support counted as direct budgetary support

without connection to the general goals of CP or the actual costs of reforms, and it would be allocated to States irrespective of their financial status or level of development. Overall, this turned CP into an instrument for gaining economic policy objectives, which fall under national competence (SuVL 8/2018 vp; SuVL 3/2019 vp).

This was the exact objective of the EU institutions, which saw things differently. The measures were planned in the Commission, which continues to refuse to grant public access to its legal preparatory work. The legal scrutiny of its proposals took place in the Council, in particular by its Legal Service (CLS), which in a set of four legal opinions approved the new reading of CP. In the first of these opinions, on the EISF proposal (Council Legal Service, 2019a), the CLS quoted language from the *IFI* Court ruling (quoted above) and acknowledged that, per the existing case law, ‘cohesion cannot be used as an instrument to achieve the Union aims in other policy areas, such as economic policy’ (para 28 of the opinion). However, the CLS then moved to stress that the ‘notion of CP is particularly broad and inclusive’, quoting the Advocate General’s opinion in the case (para 35). Instead of considering the actual wording of Article 174 TFEU, the CLS argued that the ‘scope of Article 174 TFEU is not limited to specific sectors and is defined functionally - on the basis of its objectives -, rather than organically’. From this the CLS concluded that the Treaty ‘leaves a large margin of discretion to the legislator as to how the cohesion aims should be achieved’ (para 35). What the CLS strategically did not quote as regards the *IFI* case is the clear obligation of the EU institutions to ‘guarantee’ that cohesion funds would ‘in fact address the objectives that are specific to the Community’s policy on economic and social cohesion’ and thus direct these funds to purposes ‘the content of which does not extend beyond the scope of the Community’s policy on economic and social cohesion’ as required by the Court (Council Legal Service, 2019a, paras. 46, 59, 62).

Instead, the CLS argued, a legal analysis should consider whether cohesion is ‘be[ing] used with the preponderant aim’ either ‘to enhance the economic coordination between MSs’ or ‘of ensuring the stability of the euro area’ (paras 29 and 31). Over a series of rather elliptical paragraphs (paras 12, 40-41, and 54-57), it found in effect that the constitutional design of the EMU along with derivative risks of ‘*asymmetric shocks*’ across the MSs which that structural and economic asymmetry created (paras 3, 11-13, 38-41, 44, 54-56), gave rise to ‘vulnerabilities’ that the Union legislator was empowered to address as a matter of cohesion under in Article 175, 3rd paragraph, TFEU (paras 39 and 48). The CLS further underlined that the EISF financial support is to be used exclusively for purposes defined ‘in the future common provision regulation for the CP, or social investment into education and training’ (para 43). The outcome was that the CLS found that the Union had the tools to address the constitutional design of the EMU, but without the difficult process of a Treaty change. Instead, this could be achieved through a back-door process of legally re-engineering the concept of cohesion and extend it to cover economic ‘vulnerabilities’.

A month later, the CLS (2019b) issued its opinion on the RSP upholding Article 175, 3rd paragraph, TFEU as its appropriate legal basis. In the Commission proposal, the justification for cohesion payments for structural reforms identified in the European Semester depended on whether or not the action ‘promot[ed] resilient economic and social structures in the MSs’ (para 8). While approving the legal basis, the CLS made its use “subject to a number of adaptations of provisions relating to i) the eligibility of reforms, ii) the assessment and allocation criteria for funding, iii) the governance and decision making, so that they constitute a genuine instrument of cohesion” understood,

now, in terms of resilience (para 64). This time, the aim was to ‘to underpin the economic resilience of MSs’ and hence was an exercise of CP as now expansively reinterpreted (para 48). This attempted distinction, of course, borders on the absurd. These two aims are really one and the same and trying to differentiate between them is rather nonsensical. The opinion went so far as to claim that, if the moneys spent under the RSP advanced any of these aims, it should ‘[i]n principle’ be seen as ‘earmarked for policies which are identified as cohesion’ (para 28). Neither of the two opinions make any mention of MS competence in economic policy or the fact that, substantively, the structural reforms to be promoted fall under MS competence and form a core area of their democratic policies.

1.4.3.2 The BICC – from the EU to the Euro Area

In the subsequent political discussions, the two proposals faced plenty of resistance and, after several round of negotiations in the Eurogroup, they were both superseded in 2019 by a new Commission proposal for a BICC (COM(2019) 354 final). The BICC inherited some features from each of its parent proposals, but it bore much greater resemblance with the RDT than the EISF (COM(2019) 354 final). Crucially, the BICC was only available to euro area MSs. The model envisaged a process where projects for reforms and investments supported by the BICC would build on the European Semester timeline. Euro area MSs would submit proposals for packages of reforms and investments, linked to National Reform Programmes (Eurogroup, 2019). The contours of what would soon become the RRF were already clearly visible.

The Commission did not adopt a new proposal on the substantive elements of the BICC; instead, the substantive content of the Eurogroup agreement was to be translated into legislative text by the relevant Council working group by modifying the existing RSP proposal and, in particular, its section on the RDT. The Commission only adopted a narrow new proposal on the ‘governance framework’ of the BICC (European Commission, 2019), the essential content of which was to limit the Council decision-making process to the euro-area MSs. The legal basis for this latter proposal was found in the area of economic governance: Article 136(1)(b) TFEU authorizing legislative actions for the euro area, in combination with 121(6) TFEU (Eurogroup, 2019). This further strengthens the impression that the primary aims of the instrument were not in the field of cohesion policies but rather in the field of economic and fiscal policies and, in particular, the coordination of economic policies within the monetary union.

The CLS opinion (2020) does not discuss the legal basis proposed by the Commission at all, but the “compatibility of the proposed allocation method with the cohesion legal basis (article 175, 3rd paragraph, TFEU).” The issue of why an instrument of cohesion policies should be put in the hands of the euro area MSs only is not raised. In its analysis, the CLS argues that “as the CP is formulated by the Treaties in broad and programmatic terms, the EU legislator has a large margin of discretion as to how those aims should be achieved, including the establishment of the allocation criteria of the particular cohesion instrument.” The case law reference included in the opinion is to specific paragraphs in the above mentioned case concerning the IFI, which actually do not address the issue at all.⁶⁷ From this, the CLS (2020, para 20) moves on to argue that the matter needs to be

⁶⁷ See paragraphs 45, 52 and 53 of the ruling.

assessed based on the “overall cohesion effects of the different allocation criteria taken as a whole, i.e. on the basis of their global interplay and final outcome, and not by examining each of those criteria in an individual or isolated manner”. Then it goes on to argue that while “population may constitute a possible parameter for the distribution of cohesion funds”, it needs to be “accompanied by other factors linked to the relative degree of prosperity of MSs”. The special convergence needs of MSs in severe difficulties, which could “clearly be regarded as a cohesion relevant approach”. Overall, therefore, the proposal was “ultimately, compatible with the cohesion objectives laid down in the Treaties. In addition, the selection of those criteria fall within the large margin of discretion available to the EU legislator in the field of cohesion.”

At this point, the eclipsing of the traditional regional-developmental focus of CP in favour of the pursuit of more general economic policy goals like ‘*convergence and competitiveness*’ across the Euro area or the EU as a whole—which the Council legal opinions for the EISF and RDT had suggested—was now essentially complete. This is clearly evidenced by how the legal bases of cohesion and economic governance were used interchangeably by the Commission, with the blessing of the CLS, for more or less the same legislative proposal. At the same time, the focus of CP shifted from regions to states or indeed the EU as a whole.

1.4.3.3 Re-interpreting subsidiarity

The transformation of cohesion policies that these proposals entailed also necessitated a new reading of the principle of subsidiarity. As noted above, until now, the principle has only been invoked in matters that substantively fall under EU competence. How this argumentation would apply to CP, which as indicated above, is more about funding national measures than exercising a legislative competence, is somewhat unclear. However, in the context of the three proposed legislative instruments the justification for why the EU should act had nothing to do with the aims of CP as such. Instead, the justification related entirely to the ambitions of the EU Institutions in the area of economic and fiscal policies: because the MSs had failed to exercise their *national* competence in line with the (formally non binding) guidance of the institutions, more effective measures were needed. In the context of the RDT, the Commission argued,

[A]ddressing reforms challenges of structural nature, which will help strengthen the resilience of the economics concerned, of the Union and the euro area..., cannot be achieved to a sufficient degree by the Member States acting alone, while the Union's intervention can bring an additional value by establishing a Programme that can incentivise financially and support technically the design and implementation of structural reforms in the Union. (COM(2018) 391 final)

Two observations should be made regarding this justification. First, with this, subsidiarity argumentation was extended from areas of shared competence into areas of national competence. But second, and even more interestingly, subsidiarity assumed a completely new meaning. While there is a plausible case for the (small) technical-support element of the proposal fulfilling the traditional subsidiarity criteria, the same cannot be said about its main part, the provision of financial incentives for structural reforms. For the latter, the issue was clearly no more about the measures in question being such that they could not, due to their ‘scale or effects’, be sufficiently achieved at the national level. There was no true European action involved at all; whether or not incentivised by the EU, these remained reforms with purely national scope and implemented at

the national level. The real issue was that Member-State governments had been unwilling to implement the desired reforms, presumably due to their unpopularity among the electorate. To rectify this situation, the EU considered it necessary to put its thumb on the scale in the form of financial incentives, thereby silencing the critics.

As to the EISF, the subsidiarity justification only mentioned cohesion objectives in passing, arguing that it “should be avoided that economic shocks and significant economic downturns result into deeper and broader situations of stress negatively impacting economic and social cohesion”. In every other aspect, the justification relied on the need to correct the claimed deficiencies of EMU: “There is a need to reinforce the availability of tools when the EMU is confronted with critical problems whenever large economic disruptions arise in individual MSs.” Therefore,

These observations point to the necessity to establish a common instrument at Union level to absorb such shocks with a view to avoid widening differences in macro-economic performance between euro area MSs and also non-euro area MSs participating in the Exchange Rate Mechanism (ERM II) imperilling economic and social cohesion.

The objective of this proposed Regulation cannot be sufficiently achieved by the MSs individually and can therefore, by reason of the scale of the action, be better achieved at Union level in accordance with Article 5(3) TEU (COM(2018) 387 final).

Finally, as regards the BICC proposal, the Commission argued that it “respects the principle of subsidiarity, as it only takes actions whose objectives cannot be sufficiently achieved by the MSs alone (‘national insufficiency test’), and where the Union intervention can better achieve those objectives compared to actions of MSs alone (‘comparative efficiency test’)”. For the Commission,

policy guidance, such as strategic orientations for the euro area as a whole and setting targeted individual objectives for reforms and investment, which can also foster the overall convergence and competitiveness of the euro area, are indeed actions that can better be formulated and implemented at the Union level than at Member State level. The Commission is best placed to take the initiative and the Council to decide on such matters in line with their economic policy coordination role enshrined in the Treaties.

The Commission further stressed national competence in deciding “what action is necessary or opportune to be undertaken at national, regional or local level” (COM(2019) 354). This seems more than a little misleading. Even though the MS was indeed allowed to propose the reforms and investments to be included in its plan, the decision on which measures would be accepted under the BICC and thereby ‘incentivised’ with European money remained entirely for the EU and strengthened the Commission’s own institutional position considerably.

Subsidiarity principle bears a close relation to the concept of European value added, and for its part, the EISF proposal did give a nod to the latter:

European value added is at the heart of the debate on European public finances. EU resources should be used to finance European public goods. Such goods benefit the EU as a whole and cannot be ensured efficiently by any single Member State alone. In line with the principles of subsidiarity and proportionality, the EU should take action when it offers better value for every taxpayer's euro compared to action taken at national, regional or local level alone.

It is not unreasonable to argue that a European facility that provides loans to MSs in times when their access to the financial markets is hampered indeed provides value added beyond what MSs alone could achieve; though one might ask whether, by insulating MSs from market signals, such a facility might also have the unfortunate side effect of reducing incentives for fiscal discipline.

Be that as it may, it is clearly far more difficult to understand how incentivising MSs' policy choice on national matters, as the RDT and the BICC were to do, could be seen as serving any European public good. Presumably, the logic has to rely on the rather trivial observation that national decisions tend to have consequences beyond the borders, and that particularly in a monetary union, bad macroeconomic policies can have costly consequences to others. Hence, European value added gets to be defined not by any inherent benefits of taking a decision jointly at the European level, but by the assumption that Europe has the will and ability to incentivise national decisions towards a better direction. Underlying this, there seem to be an assumption that MSs, due to their incompetence, short-sightedness, or cynical brinkmanship, care less about their own resilience and creditworthiness than the Union does. If this is so, then the EU has a problem of democratic decision making bigger than what EU budget can remedy.

1.4.4 The “new” Cohesion Policy: NGEU in action

The preceding sections attempted to lay down the key elements of CP as they were traditionally understood to flow from the Treaties and how this understanding has changed due to ‘legal engineering’ taking place in the EU institutions. First of all, from a legal and substantive point of view, CP used to be understood as a policy with distinct features and clear limits, characterised by its focus on reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions (article 174 TFEU). Examples of policy aims that are specifically named in the Treaties to be funded and integrated through CP are environmental aims and trans-European networks. Finally, as regards financing and procedural aspects, CP has relied on national co-funding and relied on procedures engaging local and regional actors.

After Covid-19 none of this remains the same. The Commission website still describes the EU's CP in the traditional terms as aiming “to strengthen the cohesion among EU MSs. In this way, they reduce disparities in EU regions, within and across MSs, and promote sustainable territorial development” (European Commission, n.d.). This is clearly misleading, as the 2021-2027 MFF, and in particular the NGEU, took CP in a completely different direction. This section analyses the scope and uses of RRF funding, its design as “money for reforms”, the effect of this funding on subsidiarity and finally questions whether any legal constraints remain or are relevant after the transformation of CP through the NGEU.

When the Covid-19 crisis hit the Union, CP instruments were adapted to emergencies through three legislative acts amending the rules of the 2014-2020 programme period: In March 2020, the Commission launched the Coronavirus Response Investment Initiative (CRII), which introduced simplifications, liquidity and flexibility measures.⁶⁸

⁶⁸ Regulation (EU) 2020/460 amending Regulations (EU) No 1301/2013, (EU) No 1303/2013 and (EU) No 508/2014 as regards specific measures to mobilise investments in the healthcare systems

A month later the Coronavirus Response Investment Initiative Plus (CRII+) strengthened the flexibilities further and also provided for the possibility of 100 % EU co-financing for one year.⁶⁹ In December 2020, the REACT-EU provided €50.4 billion to MSs as a top up to the 2014-2020 CP funding.⁷⁰ It was specifically designed to serve as a short and medium term instrument for crisis repair and recovery actions. As opposed to regular CP funds, MSs received a high degree of discretion in allocating the additional funds between Funds, regions and types of eligible investments, reducing the usual focus of CP on regional disparities. The resources were distributed to MSs based on a methodology that differs from that used for regular CP funds. While the latter largely reflects regional disparities, REACT-EU captures only national-level data on the pre-pandemic situation and on the economic impact of the crisis on MSs (European Court of Auditors, 2023a). CP was also used to set up the JTF, to enable "regions and people to address the social, employment, economic and environmental impacts of the transition towards the Union's 2030 targets for energy and climate and a climate-neutral economy of the Union by 2050".⁷¹

The BICC, as part of the revised RSP, was heading towards its final legislative approval. The global pandemic rearranged political imperatives, leading to the opportunity to come forward with something far more ambitious, in the form of the NGEU package and its RRF. The BICC proposal was withdrawn in May 2020, but its legacy lived on in the RRF, which took "as a basis the latest text discussed by the co-legislators on the proposal establishing a RSP [...] and makes appropriate changes to it to reflect the revised objectives, and the adjusted delivery mode of the new instrument (COM(2020) 408 final). If the substantive content remained largely the same. What changed was the scale and, crucially, the way the facility was financed. Until 2020, there was universal agreement in the institutions that any deeper fiscal integration, particularly if it involved issuance of EU debt, would require Treaty amendment (Leino-Sandberg, 2021; Leino-Sandberg & Ruffert, 2022). This understanding was to change nearly overnight. NGEU is financed by Union borrowing rather than through own resources, which made the amount of "cohesion" funding multiple compared to any previous MFF. NGEU has been created outside the normal Union budget as an "extra-

of Member States and in other sectors of their economies in response to the COVID-19 outbreak (CRII);

⁶⁹ Regulation (EU) 2020/559 of amending Regulation (EU) No 223/2014 as regards the introduction of specific measures for addressing the outbreak of COVID-19.

⁷⁰ Regulation (EU) 2020/2221 amending Regulation (EU) No 1303/2013 as regards additional resources and implementing arrangements to provide assistance for fostering crisis repair in the context of the COVID-19 pandemic and its social consequences and for preparing a green, digital and resilient recovery of the economy (REACT-EU).

⁷¹ Regulation (EU) 2021/1229 of 14 July 2021 on the public sector loan facility under the JTM, OJ L 274, 30.7.2021, p. 1–19, Regulation (EU) 2021/1057 establishing the European Social Fund Plus (ESF+) and repealing Regulation (EU) No 1296/2013, OJ L 231, 30.6.2021, p. 21–59; Regulation (EU) 2021/1056 establishing the JTF, OJ L 231, 30.6.2021, p. 1–20, Regulation (EU) 2021/691 of 28 April 2021 on the European Globalisation Adjustment Fund for Displaced Workers (EGF) and repealing Regulation (EU) No 1309/2013, OJ L 153, 3.5.2021, p. 48–70; Regulation (EU) 2021/523 of establishing the InvestEU Programme and amending Regulation (EU) 2015/1017, OJ L 107, 26.3.2021, p. 30–89.

budgetary” fund, and the 750 billion it raises from the markets is channelled to the EU budget as external assigned revenues (Leino-Sandberg & Raunio, 2023).

1.4.4.1 What is funded under the RRF?

From the perspective of its legal structure, NGEU is established through a creative two-tier approach. The EU Recovery Instrument (EURI) is based on Article 122 TFEU.⁷² This regulation enumerates the purposes for which the funds shall be used on a general level but does not indicate how financial assistance is distributed to MSs. The distributive work is done by the RRF Regulation,⁷³ which is based on Article 175 (3) TFEU;⁷⁴ the suitability of which for the purpose was no longer discussed. The Commission proposal argues,

In line with Article 175 (third paragraph) TFEU, the Recovery and Resilience Facility under the regulation is aimed to contribute to enhancing cohesion, through measures that allow the Member States concerned to recover faster and in a more sustainable way from the COVID-19 crisis, and become (more) resilient (COM(2020) 408 final).

These justifications are far from fulfilling any legal basis test. Under the Court’s established case law the choice of legal basis for an EU measure must rest on objective factors that are amenable to judicial review; these include the aim and the content of the measure. Moreover, “in order to determine the appropriate legal basis, the legal framework within which new rules are situated may be taken into account, in particular in so far as that framework is capable of shedding light on the objective pursued by those rules”.⁷⁵ A lot could have been said about the objectives of the facility. Yet the opinion of the CLS does not engage with the issue of using Article 175, 3rd paragraph, TFEU as the legal basis of the proposal at all. Though substantively not addressing the pandemic crisis, the NGEU is justified as a part of the EU emergency response to it, while the CP element enables handing out the funding without the same kind of conditions that have been seen as an inseparable part of Article 122 (2) TFEU (Leino-Sandberg & Ruffert, 2022). While the RRF objectives certainly reach far beyond those of CP as defined in the Treaties, in legal terms it is a CP instrument, because it derives its competence from Article 175 TFEU in the absence of other suitable legal bases. The flexibility clause (Article 352 TFEU) would have required unanimity in the Council, but is also unavailable to circumvent explicit limitations in other, more specific Treaty articles (including those limiting EU competence in economic and fiscal policy to coordinating action).

⁷² Council Regulation (EU) 2020/2094 establishing a EU Recovery Instrument to support the recovery in the aftermath of the COVID-19 crisis, O.J. 2021, L 4331/23.

⁷³ Regulation (EU) 2021/241 establishing the Recovery and Resilience Facility, OJ L 57, 18.2.2021, p. 17–75; Regulation (EU) 2021/240 establishing a Technical Support Instrument, OJ L 57, 18.2.2021, p. 1–16; Regulation (EU) 2023/435 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC, OJ L 63, 28.2.2023, p. 1–27.

⁷⁴ Regulation (EU) 2021/241.

⁷⁵ Czech Republic v Parliament and Council, C-482/17, para 32.

The NGEU, through its debt funding that multiplied the means of the normal EU budget, provided the means to turn CP into an instrument for various broad policy objectives, only some of which fall inside established EU competence. Gone is the earlier focus of cohesion policies, flowing from Article 174 TFEU, on reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions. The RRF objectives have been defined at two different levels. The RRF has a 'general objective', which addresses

the resilience, crisis preparedness, adjustment capacity and growth potential of the Member States, by mitigating the social and economic impact of that crisis, in particular on women, by contributing to the implementation of the European Pillar of Social Rights, by supporting the green transition, by contributing to the achievement of the Union's 2030 climate targets ... and by complying with the objective of EU climate neutrality by 2050 and of the digital transition, thereby contributing to the upward economic and social convergence, restoring and promoting sustainable growth and the integration of the economies of the Union, fostering high quality employment creation, and contributing to the strategic autonomy of the Union alongside an open economy and generating European added value (Article 4(1)).

While no doubt laudable, these objectives seem extremely wide and rather distant from those mentioned in Article 174 TFEU. Instead of making sure that EU and national policy objectives contribute to the objectives of Article 174 TFEU, as the Treaty stipulates, they reverse the hierarchy and turn CP into an instrument for promoting a broad spectrum of other policy objectives that have fairly little to do with Article 174 TFEU. Cohesion only serves as an accessory role in the logic of the Facility (Dermine, 2023). In addition, the RRF provides a 'specific objective', which is to provide members states with financial support to achieve the M&Ts in their Recovery and Resilience Plans (RRPs) (Article 4(2)).

In reality, the 'policy areas of European relevance' (Article 3) mentioned in the RRF are so wide as to encompass almost any public policy field, some of which fall under EU competence while others belong to the national competence. RRF is not about creating common European policies beyond identifying certain broad priorities for EU funding. The general obligations of the RRF are tailored individually for each MS in their individual RRs that include the M&Ts of reforms and investments. The substantive content of the plans is proposed by the MS and refined in confidential negotiations with the Commission, prior to the formal submission of the NRRPs. Once the Commission and the MS have reached a common agreement, the remaining process is mostly a formality. There is virtually no role for the European Parliament, beyond the discharge procedure (Article 319 TFEU) and a rather mysterious "recovery and resilience dialogue".⁷⁶ The extent to which national parliaments have a say in the plans depends on national solutions, but the opaque and bilateral nature of the negotiations makes it difficult for national parliaments to fulfil their normal budgetary role (Leino-Sandberg & Raunio, 2023). The usual CP multi-layer governance structure with local and regional actors is notably absent and replaced by executive dominance at

⁷⁶ See (RRF-)Regulation (EU) 2021/241, Art. 26. The dialogue is basically led by the competent committee of the European Parliament but leads to nothing more than an obligation of the Commission to "take into account any elements arising from the views expressed through the recovery and resilience dialogue, including the resolutions from the European Parliament if provided."

EU and national level: the relevant decisions are taken in confidential negotiations between the Commission and national capitals, and blessed by the Economic and Financial Committee.

Even if the funding would be justified with broad policy objectives such as 'green transition', in selecting them there is no process of directing funding to projects that would be most useful from the perspective of the EU's energy, environmental or climate aims. It is about allocating a predetermined share of funds to each MS; the Commission reports on the implementation of the facility illustrate the traditional pattern where "spending" is an "objective in itself, independently from the results achieved" (Cipriani, 2018, p. 152). RFF funds are pre-allocated to states on the basis of criteria that, for the most part, have little relevance for fighting COVID-19.⁷⁷ 70% of the funds are allocated on the basis of cohesion criteria (population, the inverse GDP per capita and the relative unemployment rate) while only 30% depend on factors that can in principle be affected by the pandemic (aggregated change in real GDP for 2020 (Article 11). The requirement of additionality of national spending has disappeared, and there is no requirement to target the funds to deprived areas. The RFF allocation criteria do not reflect the traditional allocation criteria applied in CP, but constitute a political deal where each MS is promised a certain share of the funds that the MS itself can allocate to its own political pet projects under a certain degree of Commission supervision. While RFF funding cannot, as the main rule, be spent to "substitute recurring national budgetary expenditure" (Article 5(1)), it can be spent on one-off measures that would normally be funded from national budgets. Examples mentioned by the Commission include increasing healthcare capacity in hospitals, clinics, outpatient care centres and specialised health centres, and the support given to 413 000 enterprises by the end of 2022 (European Commission, Directorate-General for Budget, 2023, p. 68).

A cursory look into the national recovery plans confirms their wide reach. They cover traditional investments, in infrastructure and energy; IT projects in a variety of different fields; reforms of budgetary planning, judicial systems, insolvency systems, taxation, pension systems, labour markets; measures in the field of education, social policies and housing, to name a few. The plans do not cover projects in the field of security and defence, nor financial market policies, but almost everything else seems to be fair game.⁷⁸ Projects are planned and approved for each State individually.

The RRF entails no obligation to pursue cross-border projects, but under Article 15(3)(cc) of the RRF regulation the national plan must include "an indication of whether the measures included in the plan comprise cross-border, or multi-country projects". Under Commission guidance,

Member States can decide for example to include investments on cross-border projects in the digital, transport, energy or waste sectors (i.e. infrastructure projects implementing the Trans-European Transport and Energy Networks, fast-tracking long distance recharging/refueling infrastructure for zero- and low-emissions propulsion, Single European Sky and European Rail

⁷⁷ The maximum contribution per Member State still partly refers to the unemployment in 2015-2019. The July 2020 European Council reduced that reference but did not fully abolish it. Art. 11 241/2021 with Annex II., A16 July, Annex I COM (2020) 408 final.

⁷⁸ The national plans can be found at www.ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#national-recovery-and-resilience-plans.

Traffic Management System, energy interconnections in the context of the Energy Union (including cross-border renewable projects), 5G corridors on roads and railways in the context of EU's Digital Strategy). If so, Member States should indicate it clearly in their RRP, and coordinate the preparation of their plans with the Member States that would be affected by the cross-border or multi-country project.⁷⁹

Green and digital transformation are the two particular policy areas of emphasis of the RRF. Both in the legislation and in implementation, the two areas are handled quite symmetrically. Both are assigned a minimum share of total spending, 37 % for green measures and 20% for digital measures. Yet, in terms of EU competence, these two objectives are quite different. Environmental and climate objectives enjoy a strong anchoring in the EU Treaties in general, and benefit from a broad and explicit legal competence both under environment policy, Union's horizontal objectives and under the CF. The environmental effects of measures can be more local, national or transnational, but the EU does have competence to regulate and finance them. Many measures could also be framed as environmental or climate. For example, the closing down of a coal plant or mine in a MS could very well be justified with reference to the EU's climate objectives, while the effects of such closure could turn the area into one affected by industrial transition and thus subject to CP. Therefore, the matter is less about competence and more about what kind of projects the EU should fund to promote the EU (or global) public goods, where transnational effects and global climate goals would seem to be decisive. This also involves questions of framing: what kind of projects can be described as promoting as a green investment?

Digitalization is fundamentally different: it is a broad and cross-cutting phenomenon which affects MS administration and practices – traditionally considered to fall largely outside EU competence. A recent Commission Communication explains how funding has been spent on reforms to digitalise public administration in various countries, reforms of civil and criminal justice systems to make them more efficient by reducing the length of proceedings and by improving the organisation of courts (Italy, Spain), reforms improving the quality of the legislative process (Bulgaria), the purchase of 600 000 new laptops to lend to teachers and pupils and the selection of Digital Innovation Hubs to support companies in their digitisation efforts (Portugal, EUR 600 million) (COM(2023) 99 final). In the Netherlands, the EU is paying for a 'Groundbreaking IT' investment measure, which refers to an 'overhaul of the Ministry of Defence's internal computer systems'.⁸⁰ The German plan includes 'various measures to modernise the public administration and to support disadvantaged groups, to cap social security contributions, and to strengthen education and skills, in particular by supporting the digitalisation of education'.⁸¹ These are no doubt useful public expenditure, but

⁷⁹ Commission staff working document. Guidance to Member States recovery and resilience plans. Brussels, 22.1.2021 SWD(2021) 12 final PART ½.

⁸⁰ Council implementing decision on the approval of the assessment of the recovery and resilience plan for the Netherlands, Brussels, 27 September 2022, doc nr 12275/22, available at <https://data.consilium.europa.eu/doc/document/ST-12275-2022-INIT/en/pdf>.

⁸¹ Council implementing decision on the approval of the assessment of the recovery and resilience plan for Germany, Brussels, 6 July 2021, doc nr 10158/21, available at <https://data.consilium.europa.eu/doc/document/ST-10158-2021-INIT/en/pdf>.

they are normal costs deriving from the operation of public sector in a MS – it is not clear what the EU’s interest is in any of these and why would it fund these types of measures in rich EU MSs. There is no evidence that, under this priority area, the EU is even attempting to provide any useful contribution beyond money, such as technical advice to MSs on matters related to digitalisation of public administration.

Since its initial adoption in the aftermath of Covid-19, the scope of RRF has been widened further. In the area of energy, the Commission’s RePowerEU Communication (2022; COM(2022) 108 final) proposed to rechannel unspent COVID-19 funds to freeing Europe from its dependence on Russian oil and gas. In 2023 the RRF Regulation was amended to allow for the inclusion of REPowerEU chapters in RRP’s contributing to various RePower the objectives such as improving energy infrastructure and facilities, boosting energy efficiency in buildings and critical energy infrastructure, decarbonising industry, addressing energy poverty and incentivising reduction of energy demand.⁸² In June 2023 the little that remained of the RRF funds was again proposed to be recycled in the Strategic Technologies for Europe Platform (‘STEP’), aiming to help preserve a European edge on critical and emerging technologies relevant to the green and digital transitions (COM(2023) 335 final). In this search for flexibility, CP becomes once again an instrument for “providing flexibility in existing instruments to better support relevant investments” (COM(2023) 335 final, pp. 4-5). Unlike the original RRF Regulation, the STEP proposal relies on a broad and exceptional combination of eight legal bases, which the Commission justifies briefly with them being “relevant”.⁸³ According to the established jurisprudence of the ECJ, the EU legislature should primarily base its actions on a single legal basis that corresponds its main objective. The high number of legal bases indicates difficulties in identifying any main objective or explicit legal basis for the act.⁸⁴

1.4.4.2 From reimbursing costs to rewarding performance

Apart from its large size, nearly unlimited scope, and deep tailoring for each MS, the main innovations of the RRF are the absence of co-financing requirement and, notably, its “performance-based” disbursement policy, which makes use of the possibility included in the Financial Regulation in 2018 described above. While in the preparation phase there needs to be a reasonable link between the financial envelope available to a MS and the total cost of its National Resilience and Recovery Plan, once the plan has been approved, this link disappears and European money is disbursed solely on the basis of the significance, as assessed by the Commission, of the targets and milestones achieved, with no reference to the actual cost and no requirement to demonstrate that any costs have actually been incurred. In the words of the Commission,

⁸² Regulation (EU) 2023/435 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC, Article 21c.

⁸³ (Article 164, Article 173, Article 175, 3rd paragraph, TFEU, Article 176, Article 177, Article 178, Article 182(1) and Article 192(1) TFEU.

⁸⁴ See for example the Whistleblower directive for which it was long thought that there was no legal basis: and also the EU-LISA has an impressive list of legal bases.

The Facility is an innovative, performance-based instrument, where payments are made to Member States, as beneficiaries, upon delivering reforms and investments pre-agreed in national recovery and resilience plans. The funds are therefore disbursed solely on the basis of the progress in the achievement of the reforms and investments that Member States committed to. Focused on the timely and efficient implementation of Member States' plans, the performance logic of the RRF makes payments conditional on concrete outcomes. Disbursements thus depend on the delivery of the pre-agreed investments and reforms rather than the final costs incurred. (COM(2023) 99 final, p. 1)

In other words, EU money is paid not to *fund* measures taken by MSs, but rather to *reward them* for taking those measures. A look at the Commission's implementing decision on the second disbursement under the Italian RRP illustrates this well (European Commission, n.d.a). It authorises the payment of EUR 10 bn to Italy by means of payment to the bank account indicated in the Financing Agreement as a reward for various legislative reforms. Legislative work is not free – there is an administrative cost involved – but the preparation of these laws could not have cost more than a small fraction of the money received from the EU as reward. While the Commission has less to do with the substance of the reform (which often is purely national competence), the MS is then expected to refrain from changing the legislation until all RRF money has been paid out (Article 24(3)). Many M&Ts involve targets of a much fluffier kind, such as a National Strategy (for mental health, as in the case of Bulgaria); a National Programme (for oncology, as in the case of Czechia), a report (of the assessment of stocks of critical drugs by the Danish Medicines Agency) or funding guidelines (for establishing new primary health care units in Austria). In those cases, EU funding does not seem to require concrete legislative measures but merely a certain degree of political commitment (COM(2023) 545 final) in matters that fall under EU legislative competence.

Many MSs seem to like the model that provides them direct budgetary support. Once the milestone or target is considered by the Commission to be completed, the money that is disbursed can be freely allocated to anything at national level. In terms of bureaucracy, although administering the plan is a heavy effort particularly for those MSs that benefit the most, at least they save the effort of providing the proofs of payment that has traditionally been part of all EU funding. With this, the Union has done away with one of the key safeguards (alongside with national co-financing, which also has disappeared in the RRF), that once ensured prudent spending of EU money.

In addition to reaching deep into areas of national competence, the move from cost-based to performance-based disbursement has created substantial complications for the audit and control of Union funds. Neither the RRF Regulation nor the Commission Delegated Regulation on the Scoreboard explain what “performance” actually means.⁸⁵ In its first audit of the RFF, the ECA examined how the Commission had assessed the plans of six MSs and identified a number of weaknesses and risks. It pointed out that the Commission's assessment was based on comprehensive internal guidelines and checklists that were not systematically used and were often difficult

⁸⁵ Commission delegated regulation (EU) 2021/2106 of 28 September 2021 on supplementing Regulation (EU) 2021/241 of the European Parliament and of the Council establishing the Recovery and Resilience Facility by setting out the common indicators and the detailed elements of the recovery and resilience scoreboard.

to trace. While the Commission assessment had improved the quality of MSs' M&Ts, some of them lacked clarity or did not cover all key stages of implementation of a measure. The same deficiencies and others identified by ECA will also make it more difficult for the EP to hold the Commission to account on how the MSs have spent the funds – a matter raised repeatedly by the EP Committee on Budgetary Control (CONT), since the Committee cannot trace the expenditure invoices like they can for traditional implementation under shared management. In its recent Special Report on the RRF's performance monitoring framework the ECA points out to how also 'common indicators' defined in the Commission delegated regulation⁸⁶

do not comprehensively cover all important investments and reforms included in the RRFs. The measures that could not be linked to any common indicator mostly related to major structural reforms (economic, labour market and judicial reforms), the market for mobile telecommunications, investments in infrastructure and public transport, nature conservation and protection, and waste management and circular economy (European Court of Auditors, 2023b).

As a result, ECA (2023b) argues, 'the common indicators do not cover adequately the RRF's general objective'. This would indeed be difficult given that this general objective (Article 4(1)) covers nearly every possible policy field and does so on a very general level.

When large amounts of public funds are used, as is the case with the RRF, their control is important both for democracy and public perception and trust. There is no sign that these complaints have caused a rethink in the Commission: the Social Climate Fund follows a similar model⁸⁷ and the proposed Ukraine Facility will also apply a similar model to Ukraine's reconstruction plan (COM(2023) 338 final).

1.4.4.3 The RRF and subsidiarity

The subsidiarity section of the Commission's RRF proposal claims that RRF funding "respects the principles of European added-value and subsidiarity. Funding from the Union budget concentrates on activities whose objectives cannot be sufficiently achieved by the MSs alone ("necessity test"), and where the Union intervention can bring additional value compared to action of Member States alone". Enhancing cohesion is achieved "through measures that allow improving the resilience of the Member States"; therefore, the RRF "should provide support to reforms and investments that address challenges of a structural nature of the Member States". The Commission underlines that the RRF

support is provided in response to a request from the Member State concerned made on a voluntary basis. As a result, each Member State decides whether action at Union level is necessary, in light of the possibilities available at national, regional or local level. The implementation of measures linked to economic recovery and resilience is a matter of common interest for the Union.

⁸⁶ Ibid.

⁸⁷ See Regulation (EU) 2023/955 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060, Article 7(2).

Further, according to the Commission, the RRF is needed

to coordinate a powerful response to the outbreak of the COVID-19 pandemic and for the mitigation of the huge economic fallout. Action at the Union level is thus necessary to achieve a fast and robust economic recovery in the Union. This goal cannot be achieved to a sufficient degree by the Member States acting alone, while the Union's intervention can bring an additional value by establishing a regulation that sets out an instrument targeted at supporting Member States financially as regards the design and implementation of much needed reforms and investments. Such support would contribute to also mitigate the societal impact caused by the present COVID-19 crisis.

These claims are only partially convincing, at best. Of the various areas financed by the RRF, the one that stands out is the green transition which is clearly in the common European interest. More generally, perhaps one could argue that, at the beginning of the pandemic, there was no other way to credibly announce a substantial ramping up of public investment spending than through a Union-financed program, but even that argument is undermined by the fact that, in reality, the bulk of the RRF investment spending will only take place several years after the end of the pandemic. But when it comes to the rest of the investment projects and most of the reforms financed under the RRF, it is difficult to see how they would meet the necessity test.

As discussed in the context of the RDT and the BICC, the RRF measures financed are characteristically national and seem to have little or nothing to do with EAV. Take, for example, the digitalisation and streamlining of the Italian justice system, which is one of the flagship projects financed under the RRF (European Commission, 2023). There is little doubt that, if properly executed, this can be a project of substantial societal value. Yet, a functioning and effective justice system seems first and foremost to benefit Italy itself, and any broader European interest is likely to be incidental and secondary. It should also be noted that justice reform is not a new endeavour in Italy; the country has, in fact, over years embarked on several such reforms. (Esposito et al., 2014) The reason it has not done more is that it has, through its democratic processes, prioritised other uses for its public funds. The EU has now stepped in, put its finger on the scale in the form of European funding, and thereby changed the political priorities of Italy.

Apart from green investments, where the common European interest seems rather clear, it is difficult to find elements in the RRFs that would have true European value added. The RRF is, by and large, not used to finance European public goods but rather national policy measures that primarily benefit the individual countries themselves (Corti et al., 2022). The measures focus on the MS level. For example the European Parliament

criticises the lack of a territorial dimension within the RRF and reiterates the importance of the partnership principle within the territorial policies of the EU; regrets that the deployment of the RRF has been highly centralised and has lacked consultation with regions and municipalities and stresses that the formulation and implementation of the Union's policies and actions must take into account the objectives set out in Article 174 TFEU and contribute to their achievement. (2022, para 5)

In particular, it would seem that NGEU could have provided an opportunity for a vigorous step forward on Trans-European networks, which rely on specific EU competence but are also mentioned in the CP title. These are in the heart of what the EU is about and, in an obvious way, could

not be achieved by the States acting individually. Yet, it is very difficult to find even a trace of Trans-European networks in the RRFs. The plans, being prepared and owned nationally, are overwhelmingly about national projects. Transnational considerations do not really come into play when the projects are selected for financing, beyond perhaps the part of green investments that contribute to decarbonization. Even the latter are fundamentally incidental; there seems to be no genuine effort to steer national plans towards transnational projects. As projects are assessed individually for each MS and on the basis of the plan proposed by the national government, there is no competition between different projects that would aim at guaranteeing that the projects that e.g. promote global climate goals most efficiently get selected. This is not directly an implementation problem, but a result of the legal design of the RRF Regulation, which derives from the wish to emphasise MSs' national ownership, which is deemed particularly important when the EU funds policy measures that fall substantively under national competence. However, the more fundamental question is why the EU should fund them in the first place.

As discussed before, the main argument for EAV of the RRF eventually relies on the general and rather trivial notion that what is good for a MS tends also to be good for the EU. This is essentially what the Commission argues in saying that “the implementation of measures linked to economic recovery and resilience is a matter of common interest for the Union”. This argument is problematic for various reasons, one of which is that as a criterion it is essentially limitless. Virtually any part of public spending can be argued to contribute to economic recovery and resilience. This raises the question of how deeply the EU should get involved in incentivising national governments in their democratic decision making without an explicit Treaty authorisation. Finally, from the viewpoint of EU budget, the value of public spending should always be assessed against alternative uses of public funds. By channelling EU funds in this way to overwhelmingly country-specific purposes, the RRF may be likely to have come at the expense of more serious efforts to identify and fund genuine European public goods. Over the longer term it may make it difficult for the EU to fund European public goods on a broader scale, particularly in view of the debt load flowing from NGEU.

1.4.5 Legal constraints – are there any?

A key overriding objective of this analysis was searching legal limits for EU spending in general, and EU CP, in particular. Many questions involving spending are, however, not primarily legal in nature but rather questions that involve ‘value for money’ or questions of accountability.

Among legal constraints, the rules that derive from the EU Treaties have a special status. Treaty provisions are intended to set constraints on the legislative institutions when approving secondary legislation. Amending them would involve a complicated process requiring broad consensus, which is often understood as making them in practice unamendable. While key decisions on the revenue side of the EU budget require unanimity of MSs (MFF and Own Resources Decision (ORD)), the decisions on how money is spent are based on secondary legislation, which is usually approved in the ordinary legislative procedure, by qualified majority in the Council. This setting is behind the increasing tensions between the Treaty framework and the realities of EU spending today. The NGEU is the pinnacle of this development. If there ever were any limits – or “contours” – for the use of cohesion policies, they seem to have been dissolved, to an extent that it has grown difficult

to see what government task could not be construed as being within the reach of cohesion policies. Both politically and legally, the ship has already sailed, and the ‘new CP’ forms a part of the EU *acquis*. This evolution has implications beyond CP. It reaches to the broader, and foundational, discussion about the relevance of the Treaties in defining the EU constitutional arrangements, and even beyond that, to the proper functioning of democratic processes, scrutiny and accountability.

The legal framework for CP involves both Treaty provisions and established practice as laid down in many generations of secondary legislation. The latter category includes for example the demands to respect strategic evidence-based programming, and the practice of partnership and multi-level governance that the Committee of Regions has been calling for (European Committee of the Regions, 2023). These are questions where lessons learned from the attempts to secure sound use of EU financial resources have been turned into secondary legislation, which can be amended through the same procedure through which it was initially approved. For example, the introduction of ‘money for reforms’ is certainly ‘legal’ in the sense that it is anchored into an amendment of the Financial Regulation that the ECJ has not found illegal. Yet that does not answer the question whether it really is a solid way to ensure that EU funding is spent to useful objectives in a well-justified way. Nor does it resolve the fundamental tension of the unbounded reach of such measures with the Treaty-based division of competences.

It is obvious that CP has in recent years moved far from its traditional purpose as defined in Article 174 TFEU. Still for five years ago it would have been difficult to envisage a CP that can be used to finance nearly anything and everywhere; a policy that, rather than targeting underdeveloped regions, primarily operates at the state level. The new use of CP is justified with language that connects CP with the resilience of the MS and places a special emphasis on realising structural reforms – the most obvious overreach in terms of EU competence, and with significant effects on democratic decision-making procedures in the MSs.

When these fundamental reinterpretations of the Treaty took place, there were very few to take a stand in defence of the established reading of the EU Treaties. While it seems apparent that many of the new funding objectives would not meet the criteria set in the Court’s 2009 ruling on the *IFI* discussed above, this seems to be of little consequence. In the unlikely case the issue ever finds its way before the Court, the Court would almost certainly not question the right of the legislators to expand the powers of the Union (Leino-Sandberg & Ruffert, 2022).

The constitutional validity of the “new” CP competence has not been subject to legal challenge,⁸⁸ and hence the ECJ has never ruled on it. Outside of the ECJ, so far the main judicial challenge relating to the overall arrangement was brought before the German FCC. Even there, the main focus was on the ORD, and the RRF was only mentioned in passing.⁸⁹ As a result, the FCC did not pay much attention to CP and its scope, beyond stressing that the EU’s competence to engage in

⁸⁸ There are currently five cases pending involving the allocation of RFF money to Poland before the EU Courts, but based on public information they do not seem to concern the legal basis of the instrument.

⁸⁹ Judgment of 6 December 2022, 2 BvR 547/21, 2 BvR 798/21, para 119 of the ruling.

borrowing remained unclear and was also closely tied to what the money is spent on, and whether the purposes for spending fall under Union competence. For the FCC,

*Authorising the European Union to borrow on capital markets as ‘other revenue’ does not amount to a manifest violation of Art. 311(2) and (3) TFEU **when the funds are used for the exercise of competences conferred upon the European Union and, to that end, are from the outset strictly assigned to such specific purposes.** The requirement that other revenue within the meaning of Art. 311(2) TFEU be assigned to specific purposes ensures that the funds are **used within the limits of the European integration agenda as defined in the Treaties and prevents the European Union from borrowing funds for tasks for which it lacks competence under the principle of conferral** in Art. 5(1) first sentence, Art. 5(2) TEU (see (1) below). While there is still doubt as to whether this is truly the case for the 2020 EU ORD, ultimately it can not be said that Arts. 4 and 5 of the Decision manifestly exceed the competence conferred in Art. 122(1) and (2) TFEU. (para 171).*

While the FCC seems not to have been overly convinced that the RRF truly fell within the Union’s CP competence, it did not task itself to try and pin down the vague contours of CP, and how CP objectives should be understood in light of the MSs’ legislative competence. Yet, the logic that it presents follows the argumentation of the ECJ in its earlier case law that upholds an idea of parallelism between legislative competence and EU funding discussed above. This type of integration through planning and funding would benefit from a thorough constitutional debate where also the implications for democratic decision making and accountability for and transparency of funding would be properly examined.

The broader question of parallelism between legislative and budgetary powers has also surfaced in other contexts post-NGEU, and in at least two different ways that are both relevant for the future of EU spending. In these discussions, the EU’s strong environmental competence has acted for a spearhead for new openings.

First, in recent years there has been a broadening use of environmental measures funded from the EU budget to also address questions of social policy. The prime example is the Social Climate Fund, which enables the use of EU funds to cover MSs’ social policy costs such as direct income support.⁹⁰ Even though it is justified as a measure under the environmental and climate policies, as a class of public expenditure it looks very much like social policies – something that so far has been considered falling under national competence (Article 153 TFEU), regulated through national legislation, and funded from national budgets. The justification for the model is the same as the subsidiarity argumentation invoked in the case of the RRF model and its predecessors: when funding is formally directed based on national plans, it is the MS itself that ultimately decides whether it proposes such measures to be funded or not (“The Plan may include national measures providing temporary direct income support”). There is also a growing interest in the EU institutions to steer the allocation of funding in national budgets. Social security is a core element in the Com-

⁹⁰ Regulation (EU) 2023/955 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060, Article 4(3)

mission's September 2022 proposal for a Council regulation on an emergency intervention to address high energy prices (COM(2022) 473 final), approved by the Council three weeks later.⁹¹ Relying on the emergency legal basis Article 122(1) TFEU, it provides for a 'temporary solidarity contribution', which looks very much like a tax but is carefully framed as something different, as a tax would require unanimous decision making in the Council. The regulation further instructs the MSs to use the proceeds to 'provide support to households and companies and to mitigate the effects of high energy prices' (Article 17).⁹²

Second, outside the question of social security, the Commission much-debated proposal on nature restoration (COM(2022) 304 final) is also interesting from the perspective of parallelism. The legal basis of the proposal is Article 192(1) TFEU and its objectives are closely tied to the Union's environmental policy: they are cross-border in character, involve the fulfilment of the Union's international climate obligations and existing EU legislation relating to for example habitat, birds and water quality. While the EU legislative competence in the matter is not in doubt, the measures would come with a potentially very sizeable cost, and the Commission proposal is nearly silent on where the money should come. The preamble to the proposed Regulation indicates that "**Member States should integrate expenditure for biodiversity objectives [...] in their national budgets** and reflect how Union funding is used". To the extent EU legislation is approved and justified with reference to EU policy aims, should its costs not be primarily a part of EU spending?

EU competence in the Treaties is specifically focused on questions that have a transnational or cross border effect and where acting at the EU level provides value added. There is no reason why the EU budget could not be constructed in a way that would reflect better the actual competence that is being exercised, instead of agriculture or CP functioning as universal classes of expenditure that cover a very broad range of policy measures which, particularly in the latter case, often fall altogether outside EU legislative competence.

Even when a measure is within EU competence, the RFF experience makes it explicit that there is a difference whether it is legislated as part of a wide, programmatic umbrella under CP, or whether it relies on a specific legal basis, such as environment, climate, or transnational networks. In contrast to the diverse and, by and large, uncoordinated, and nationally motivated plans that are the basis of the RRF, placing funding measures formally within a specific substantive policy field such as environment would come with a very different set of criteria relating to the environmental aims of the measures and procedural aspects that would force to consider more carefully the EAV in

⁹¹ Council Regulation (EU) 2022/1854 on an emergency intervention to address high energy prices.

⁹² See also the discussion on the Commission proposal on energy efficiency of buildings (COM (2021) 802 final) goes still one step further, as the European Parliament now wishes to place the Member States under an obligation to '*support compliance with minimum energy performance standards by all the following measures: (a) **providing appropriate financial measures, including grants, in particular those targeting vulnerable households, middle-income households and people living in social housing**, in line with Article 22 of Directive (EU) .../... [recast EED]; (Article 9(3))*'. In addition to financing national social security costs, the EU would also take a role in regulating its level in the Member States at least indirectly.

the use of EU funding. While EAV is, or has been turned into, a political concept, it is an important element of subsidiarity and it should, properly defined, be incorporated in the European legislative frameworks both through funding criteria and procedural requirements that emphasise transparency, participation, evidentiary basis and reason-giving. The aim should be to ensure proper consideration of transnational aspects and the best possible value for money in fulfilling EU objectives.

The principle of subsidiarity has a strong status in the Treaties and should be applied in the policy areas that are relevant for the RFF automatically. The RFF experience however makes explicit that without clear provisions in secondary law incorporating the objectives of the principle, subsidiarity will remain a dead letter. Operationalising and enforcing the principle of subsidiarity would seem to require legislative provisions establishing procedures that make the consideration of cross border implications compulsory, forcing the relevant institutions to consider and justify how and in which way the 'objectives of the proposed action cannot be sufficiently achieved by the MSs and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the EU'. The funding criteria would also need to pay attention to what specific *EU level* benefits would be achieved at what cost. Overall, the 'money-for-reforms' funding model would seem particularly difficult to reconcile with the principle of subsidiarity, since EU funding is used specifically for national reforms with little concrete and measurable outcome and with little guarantees that European tax payers' money is actually well spent.

1.4.6 Future of EU spending

In institutional argumentation, CP is often described as an undefined policy field, "a broad overall concept with imprecise contours", in the words of the Advocate General. Even though, back in 2009, the ECJ took a different view, the AG's view seems to have eventually carried the day. Cohesion policies have been profoundly transformed and evolved into a general-purpose tool, essentially an informal pillar of the EMU. However, the traditional objectives of CP were not unclear. They had a strong political dimension and focused on countering, through EU funding, fears by successive generations of new members to the Union that the internal market would lead to concentration of economic activity towards more advanced regions and to the detriment of less advantaged ones. This objective has been reflected in the vague funding objectives and the procedural requirements of decision making.

Whether the promotion of less advantaged regions is still justified and how big a budget share this requires would require political discussion; it is not a legal question, and will in any case require new consideration in light of possible EU enlargement. This Report has instead focused on the transformation of CP in recent years through a fundamental reinterpretation taken in the EU institutions. As a result, CP has lost its connection to Article 174 TFEU objectives and become a general legal basis for financing. Instead of serving as a general objective of all EU policies, as the Treaty stipulates, CP has become the servant of the topical institutional agenda in the field of economic and fiscal policy, reaching deep into areas of national competence. The most far-reaching example of this is the 'money-for-reforms' model, promotion of structural reforms in MSs in exchange of monetary rewards. While the reinterpretation reached its culmination in RRF, it is relevant beyond the specific context of the facility. The broad new reading of CP and its objectives that the RRF relies on changes the character of the policy in a fundamental manner, and has now

become *acquis*. Therefore, the question of the legal scope of CP and the scope of EU spending more generally remains central even outside the scope of the RRF.

What seems to have been lost in this quest for giving the EU more leverage in the formulation of MSS' national policies, is a vision of how to properly anchor the use of common European funds in genuine European interest. While this question seemed, in the not-so-distant past, to involve a legal aspect, that bridge has by now been properly crossed. The legal boundaries for the use of European funds have largely dissolved, and the matter is unlikely to be settled in courts. Rather, it will be settled as a political matter as part of future political debates on EU spending. Many of the claimed political objectives of the RRF could be more usefully legislated as environmental, climate, transport, energy or transnational network objectives, if the EU indeed is seriously promoting them. This would have consequences for the allocation criteria. However, the 'money-for-reforms' objectives would stand in clear tension with EU competence irrespective of what legal basis in the Treaties is used.

In the ongoing mid-term review of the MFF, the Commission draws attention to numerous pressing funding needs of a European dimension (COM(2023) 336 final). Yet, at the same time, the EU's largest funding vehicle, the RRF, is disbursing funds for purposes that mostly ignore these questions, or only touch them on a very superficial or indirect level. This is the result of deliberate choices, made in the Commission and based on the RRF Regulation, both through its objectives and the procedural provisions that have been carefully drafted to counter arguments about the limits of EU competence and the relevance of subsidiarity. As a result, much of EU funding is allocated to national projects with limited transnational value and, particularly when it comes to the 'money-for-reforms' model, in a manner that makes the usefulness of EU funding difficult to measure.

When considering the future of EU spending, subsidiarity and EAV should be given a much greater role. The objectives of the principle of subsidiarity should be fully incorporated and reflected in the relevant legislative frameworks both as regards procedure and funding objectives. EAV supports investment in public goods where the primary benefit accrues to Europe as a whole, in line with the principle of subsidiarity, which requires the EU to focus on measures that are most efficiently tackled at Union level. Such measures would certainly include infrastructure and other trans-European networks, while also allowing the EU to respond to crises with complex, trans-boundary effects. It might also include traditional cohesion funding as classically conceived, addressing developmental disparities among regions. However, when the measure entails merely a domestic public good whose primary benefit accrues nationally, subnationally, or even locally, with cross-border externalities that only accrue (at best) indirectly, greater caution is warranted. There is a need, therefore, to develop an analytical framework to distinguish genuinely European from merely domestic public goods. In addition, future regulation on EU spending should include clear procedural rules and funding criteria that make the use of EU funds dependent on the usefulness of the spending at EU level and steer it to clearly defined and Treaty-based EU policy objectives.

1.4.7 References

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2 The Impact

2.1 Maximilian von Ehrlich: The Importance of EU Cohesion Policy for Economic Growth and Convergence

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Abstract

This chapter discusses factors that contributed to different economic dynamics across European regions and the prevailing disparities. The impact of EU CP in reducing disparities is studied based on the empirical evidence on the effects of EU regional policy. With more than thirty years of experience, several important conclusions can be drawn about the effectiveness and efficiency of place-based transfers in Europe. While EU regional policy has not completely countered market-driven processes that lead to regional disparities, it appears to have modestly alleviated them. To enhance the effectiveness of EU CP, this chapter advocates for an improved policy design and a shift in emphasis towards local institutions and governments in recipient regions, emphasizing that merely increasing the volume of transfers cannot compensate for these improvements.

2.1.1 Introduction

Reducing regional disparities in economic development is a long-standing objective of the European Union, one that the EU is willing to support with a substantial part of its budget. Regional policy aimed at reducing disparities, or so-called CP, amounts to around a third of the total EU budget or the equivalent of 112 Euro per person and year in the period 2014-20 and up to 400 Euro in some of the cohesion countries (EU Commission, 2022 Cohesion Report).⁹³ Overall, the potential impact of the policy is more significant than the budgetary calculation would suggest because EU rules on state aid also impact policy in individual MSs. Since 1988, the EU Structural Funds have been integrated into an overarching CP that focuses on supporting ‘less developed’ or ‘lagging’ regions. The largest share of the budget goes towards these regions. Despite 35 years of CP, regional disparities in the EU are still sizable and seem, in many cases such as parts of Southern Europe, rather persistent. But does this mean that the policy has failed to achieve the desired results? This paper discusses the drivers of regional disparities according to economic theory and evaluates the role of the EU’s regional policy in supporting economic growth in lagging regions. To understand the effects of regional transfers on local growth and convergence, it is essential to analyze the economic drivers of disparities in the first place.

The first part of this paper presents a framework to discuss the factors that contributed to different economic dynamics and prevailing disparities across European regions. Important factors include the sorting of the high-skilled labor force towards productive agglomerations, the employment shift to knowledge-intensive services and high-tech manufacturing, adverse economic shocks that have affected some regions more than others, or labor market characteristics and rigidities that prevent spatial equilibrium adjustment. The second part of the paper provides a

⁹³ “Cohesion countries” are less developed countries of the EU that qualify for funding from the Cohesion Fund. The composition changed across budgeting periods.

discussion of the equity and efficiency rationales for EU cohesion policies. The third part summarizes the empirical evidence on the effects of EU regional policy. Drawing from more than thirty years of experience and data, a substantial body of academic literature has developed. Insights from this literature can be clustered into several important questions about the average effectiveness of EU regional transfers and the factors determining differences in effectiveness across recipient regions. In summary, the literature suggests that EU regional policy did not overcome market processes leading to regional disparities but may have modestly mitigated disparities. There are success stories where lagging regions grew out of EU cohesion support (e.g., regions in Ireland, Poland, or the Baltic states), whereas other regions continue for decades to qualify for the highest intensity of cohesion funding, due to zero growth or even shrinking local economies (e.g., the Italian Mezzogiorno or some regions in Greece). Some of these cases are analyzed to understand the challenges of regional transfers and the factors and types of investments that may contribute to a more effective CP. The fourth part of the paper discusses the general equilibrium effects of different types of transfers: how much displacement of economic activity versus additional value added is generated? Which indirect effects beyond the direct effects in the recipient regions must be considered for assessing the aggregated effects of investments in transport infrastructure or local production amenities? The paper concludes with some thoughts about how the design of cohesion policies and the framework conditions in recipient regions can be improved to make transfers more effective.

2.1.2 Regional disparities in Europe: causes and dynamics

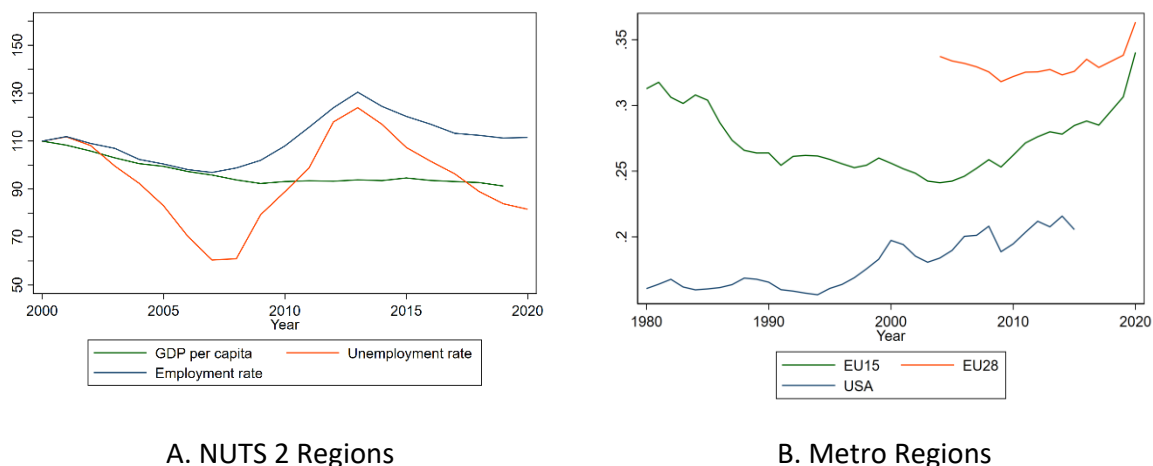
2.1.2.1 Measurement, levels and evolution of regional disparities

The first step to studying the contribution of EU regional policy to the evolution of disparities is to find a reasonable way to measure them. The EU usually measures disparities on the NUTS2 level⁹⁴ as this level corresponds largely to the target unit for the allocation of regional policy transfers. The EU Cohesion Report (EU Commission, 2022) adjusts this approach somewhat and looks at population-weighted variations of outcomes per NUTS2 region. It shows that in the last decade, the degree of disparities as measured by the coefficient of variation of per capita GDP (often referred to as sigma convergence) remained largely unchanged. This is also illustrated in Figure 2.1.1. At the same time, the variation in the employment rate went up somewhat.⁹⁵

⁹⁴ NUTS2 level is defined as sub-regional entities in comparison to NUTS1 which is defined according to state borders.

⁹⁵ Note that the variation in employment rates is more meaningful than the one in the unemployment rate as it captures participation rates. The EU Cohesion Report discusses another important concept, namely labor market slack, which also shows persistently high disparities (Map 5.5 p.140.)

Figure 2.1.1: Evolution of disparities



Data: Panel A: Regional disparities in per capita GDP (coefficient of variation), employment (mean absolute deviation), and unemployment (mean absolute deviation) for EU27 countries based on Figure 2.4 in EU Commission (2022), values in panel A are normalized to 100 in 2000; Panel B: Disparities in per capita GDP (coefficient of variation) across Metro Areas based on Ehrlich and Overmann (2022) based on Eurostat data, OECD metro definitions and BEA data for US metro regions.

However, from the perspective of economic processes, focusing on NUTS2 regions may not be a good approach as it compares units that are very different. The administrative definition of regions following the NUTS classification is often quite arbitrarily defined and pretty broad such that they vary a lot across European countries. The Cohesion Report admits this issue but addresses it only slightly by combining some units of NUTS2 regions that belong to the same metropolitan area. Additionally, this classification includes urban as well as rural regions which follow very different economic dynamics. With regard to the evaluation of policies, this would in principle suggest also discussing the CAP of the EU that may have some effect on local growth and convergence.

Ehrlich and Overman (2022) propose a different approach to explain disparities and their evolution by using an economic definition of regions where areas are tied together by labor and goods markets. The paper uses Eurostat data to compute economic outcomes for all European metro regions from 1980 onwards. Using the definitions of Ehrlich and Overman (2022) the overall message is that in the last decade, disparities have not been decreasing, neither in terms of per capita GDP nor in employment rates. This is documented in the right panel of Figure 2.1.1. Interestingly, when we keep the definition of the EU fixed at the EU15 and analyze a longer time horizon, we observe quite a pronounced decrease in disparities until early 2000 while this trend seems to have stopped or even reversed across EU15 metro regions afterward. It also becomes evident that this changing trend in terms of regional disparities is not only limited to the EU but also observed in the US (where it started somewhat earlier). An alternative way to look at the evolution of disparities is the so-called beta convergence defined as the relationship between GDP per capita growth and initial GDP per capita. A more negative beta coefficient implies a higher speed of catching up of poorer regions. And again, as documented in Ehrlich and Overman (2022) in the 80ies and 90ies there was a significant, negative beta convergence coefficient, but for the level of European metro regions, this catching-up process slowed down from 2000 onwards.

From these observations, we cannot draw conclusions about the role of regional policy in reducing disparities across regions per se, without first understanding the market factors that may have led to these results.

2.1.2.2 Drivers of geographical economic disparities

What is behind these disparities? The theory of regional and urban economics highlights the concept of spatial equilibrium as in Roback (1982): Firms and workers trade off the productivity advantages of different regions against the costs of locating there. Accordingly, we should see increases in per-capita incomes with the sizes of metro areas but also increases in living costs. As shown by Ehrlich and Overman (2022), there is very clear evidence for both correlations and, more importantly, an explanation for why market processes may have led to increasing disparities. The study shows that agglomeration elasticities – which measure the percentage increase in productivity or wages that result from a one percent increase in population – have increased over the last decades. Compared to 1980, the per capita income gain that is caused by higher population density either due to agglomeration economies or due to sorting of high-skilled labor has almost doubled. The agglomeration elasticity, as estimated in Ehrlich and Overman (2022), went up from 4.3 in 1980 to 7.8 in 2015. Adding to this picture, the EU Cohesion Report documents an increased employment share in metro regions (and particularly in metro regions of capitals) relative to non-metro regions between 2000 and 2020.

Overall, economic activity tended to be concentrated in places that showed already relatively high employment to start with, which was enhanced by a stronger increase in productivity in these regions. What is behind the positive correlation between initial employment and per capita income growth? The economic literature highlights two main effects: First, both static and dynamic agglomeration economies may have increased over the last decades. This seems to be driven by two main factors: structural changes and a general employment shift towards knowledge-intensive services and high-tech manufacturing. Services and high-tech manufacturing tend to be both highly clustered in space. Second, the sorting of high-wage individuals to productive metro areas may have contributed to this process.

Bigger cities experienced an inflow of a high-skilled labor force. Data from the EU Statistics on Income and Living Conditions shows that high-skilled workers are 9.5 percent more likely to live in a city than low-skilled workers, and the effect increased over time. Why is that the case? The so-called college wage premium is about 7 percent higher in cities. Accordingly, there seem to be geographical differences in the relative demand for skills. The theoretical mechanisms behind this could be related to skill-biased agglomeration economies (Moretti, 2013), or that high-productivity firms benefit disproportionately from agglomeration as in Gaubert (2019). Even if the distribution of skill groups had not changed, the fact that the wage premium of high-skilled increased, as documented in Dustmann et al. (2009), would partly explain the rising disparities. In addition to the changes in demand for skill groups, there may also be geographical differences in the supply of high-skilled labor. This could be for instance due to different preferences for amenities. The endogenous provision of such amenities may also be a driver of sorting (Diamond, 2016; Gaubert & Diamond, 2022). Surging housing prices in productive metro areas may have also contributed to the sorting process. The cost of living increased proportionally in those cities that were already relatively more productive, which could further enhance sorting. With housing supply becoming

more inelastic and assuming non-homothetic preferences, highly productive metro areas become less affordable for low-wage workers, hence reinforcing spatial disparities (Aguiar & Bils, 2015; Basten et al., 2017).

Many countries in Europe experienced these general trends but they led to different outcomes in terms of the degree of increasing disparities. These different dynamics given similar economic trends are certainly related to institutions and local policies. A recent paper by Gagliardi et al. (2023) shows that the employment losses caused by structural change could be compensated much faster in regions that had a higher share of college graduates in the labor force in the year of their country's manufacturing peak. Higher levels of human capital allowed for faster growth in human capital-intensive services which could compensate for losses in declining sectors. Labor market institutions are another crucial factor determining the evolution of regional disparities. Boeri et al. (2021) analyze the spatial disparities between the South and the North of Italy and compare the evolution to the disparities between the East and West of Germany. The Italian labor market is characterized by wages set according to nationwide contracts which allow only for limited spatial adjustment. Accordingly, the link between local productivity and local nominal wages is broken, and the Italian South has higher non-employment rates than in a system with collective bargaining that is combined with flexibility to respond to local productivity differences as in the case of East and West Germany. Note that a similar mechanism applies when nationwide, uniform minimum wages that do not account for differences in the costs of living are implemented. The degree of labor mobility within countries is crucial for the adjustment of the spatial equilibrium. With low labor mobility, disparities are more persistent. Policies that reduce mobility, for instance by contributing to an inelastic housing supply in productive centers, are important factors that contribute to regional disparities. Further dimensions that affect regional employment and investment include local tax policies (Duranton et al., 2011), access to investment capital (Samila & Sorenson, 2011), and product and labor market regulations in combination with the efficiency of public administration (Ardagna & Lusardi, 2010; Amoroso et al., 2023). Note that these factors may interact with the sorting dynamics as well as with the effectiveness of the place-based policy. The link between the incentive effects of local taxes and place-based policies will be discussed in more detail below.

Given the still significant level of economic disparities in Europe, cohesion transfers are an important instrument that aims at reducing regional income disparities. The question is how much EU cohesion funds can mitigate the economic trends towards disparities. According to the spatial equilibrium model, the effects of cohesion transfers to specific regions -- compared to direct transfers to individuals -- may be complicated by the mobility of individuals and firms. On the one hand, cohesion transfers may reduce mobility and thereby slow down the adjustment process (Egger et al., 2014; Jofre-Monseny, 2014), and on the other hand, mobility may imply that transfers capitalize in land prices such that regional policy is not necessarily benefiting the groups it intended to target.

2.1.3 The theoretical rationale for place-based transfers

The TFEU states the importance of "reducing disparities between the levels of development of the various regions and the backwardness of the least favoured region" where particular attention shall be paid, among others, to regions affected by industrial transition and structural adjustment

(Articles 174, 176 TFEU). Yet, the theoretical rationale for regional transfers often goes beyond geographical equity considerations and includes aggregate efficiency motives. This highlights the question of whether or not there is an equity-efficiency trade-off for regional transfers, and whether the balance between *equity* and *efficiency effects* is different for different types of transfer interventions.

The equity considerations mean that the EU cohesion policies work like a fiscal equalization scheme that tries to ensure that EU citizens have similar levels of public goods and services. Using transfers to mitigate the economic decline in regions with structural change might also spare its inhabitants the costly move to more productive places. These costs of deviations from location preferences include non-monetary aspects that are not part of a criterion that aims at maximizing output or productivity.

Due to geographic equity considerations, transfers may shift, to a certain extent, economic activity from richer to poorer regions. This contributes to narrowing disparities but may have efficiency costs. Hence, the displacement of economic activity must enter the evaluation of aggregate effects of regional policy as well as the analysis of the overall effect and whether the gains in targeted areas outweigh potential losses in non-targeted areas. Efficiency arguments for place-based transfers relate to non-linearities in economic development which could lead to employment or income gains in the target regions that compensate for the displacement. Place-based transfers could kick off endogenous agglomeration processes which offset the initial costs (Kline, 2010). Similarly, it is often referred to poverty or development traps (see European Commission 2021, Chapter 2.3) that can be overcome by sufficient investment or big push policies. Another efficiency argument builds on the fact that cohesion transfers finance public goods which may exert cross-regional externalities such that centralized and coordinated provision enhances efficiency (e.g. transport infrastructure investments). It becomes obvious that different types of cohesion measures may highlight different aspects of the equity-efficiency tradeoff. To evaluate the aggregate effects of EU CP, a general equilibrium analysis taking into account effects in recipient regions as well as displacement and spillover effects is required.

2.1.4 Contributions of EU Cohesion Policy to growth and convergence: A summary of the evidence

About thirty years of data on regional policy in Europe allowed for a large body of literature that studies the effects of transfers in recipient regions, whereas the literature on general equilibrium effects which will be discussed in Section 2.1.5 is still much scarcer. In this section, we focus on the literature that studies the net economic effect of transfers rather than the specific outcomes targeted by the individual instruments. There are comprehensive evaluation studies analyzing specific outcomes such as kilometers built, the number of public or commercial buildings built, or the capacity of supported childcare which are of interest when studying the channels of policy intervention, whereas this section will focus on the macro level effects.

The main challenge in evaluating place-based transfers is selection into treatment, as regions qualify for transfers precisely because they are less developed, lagging, or at a very peripheral location. The naive comparison of recipient and non-recipient regions is thus likely to provide biased results regarding the policy effectiveness in recipient regions. Microeconomic methods such as regression discontinuity design, event study analysis or propensity score matching have been applied to

address the endogenous nature of transfer recipients and helped to identify the causal effects of transfers. This section tries to focus on the summary of research papers that fulfill the methodological quality requirements of a good econometric strategy for obtaining causal effects. Based on these papers, good evidence exists at least for seven important questions.

1. Do EU regional transfers cause additional growth in the recipient regions, on average?
2. Do EU regional transfers cause additional growth for all recipient regions alike?
3. Do more regional transfers generate additional growth? What is the evidence regarding big-push hypothesis versus diminishing returns of transfers?
4. What are the distributional effects of transfers?
5. Are EU regional transfers contributing to resilience during economic crises?
6. What are the long-run effects? Do transfers mostly generate consumptive effects or is there evidence for a persistent shift in the spatial equilibrium?
7. What is the role of local political incentives and rent-seeking for the effectiveness of funds?

2.1.4.1 Average effect

The first question investigates whether the transfers caused, on average, growth of income and employment in recipient regions. Becker et al. (2010) introduce a regression discontinuity design exploiting the EU rule that the majority of funds goes to those regions that have a per capita income of less than 75% of EU income for an average over some predefined years. This generates a strong discontinuity which cannot be manipulated and has later been used by other papers for different outcomes as well. The results for the period 1989-2006 suggest that transfers led to higher growth on average. For Objective 1 regions, the study finds that transfers led to real economic growth in both GDP and GDP per capita of around 1.6% per year of a program period. Aggregating these figures across all years of the three program periods considered and across all regions and comparing them with the total costs, the study finds a multiplier of regional transfers of between 0.8-1.2, depending on the econometric specification. This means that one Euro adds on average around 0.80-1.20 Euros to GDP (at purchasing power parity) in the recipient regions. Pellegrini et al. (2013) confirmed this result using data on certified expenditures. A more recent paper by Lang et al. (2023) uses transfer data from the EU regional development and CP up to the year 2017 and confirms the validity of the regression discontinuity design. The authors find average effects that are very similar to the effects identified for the earlier periods with average multiplier estimates ranging between 0.9 and 1.4. Overall, econometric analysis shows that, on average, recipient regions grow faster than non-recipient regions because of transfers. The estimated multipliers are close to one such that one may conclude that “you get out what or slightly more than what you put in”.

2.1.4.2 Heterogeneous treatment effects

The second question pertains to whether the funds are as effective anywhere and which factors matter for the effective use of transfers. This is often related to the concept of absorptive capacity. Overall, it should be borne in mind that the multipliers discussed in response to question 1 are average values. With regard to the question of whether the funding process could be made more

efficient or effective, it is crucial to identify sources of heterogeneity in the effectiveness of the allocations. Becker et al. (2013) have determined such heterogeneity on the basis of two sources of absorptive capacity: the availability of human capital and high-quality institutions. Regions with high absorptive capacity are more able to benefit from technology spillovers from richer regions than others.

The results from this study are unambiguous regarding the question of whether transfers can trigger an economic upswing in the EU's poorer regions. Regional transfers are shown to be most effective where per capita income is already relatively high, i.e., somewhat less developed regions within a highly developed country benefit most from regional transfers. In contrast, low-income regions benefit very little or not at all from regional transfers. In other words, the redistribution objective of EU funds is not achieved, and the funds fail to create cohesion and do not trigger a catch-up effect of poorer EU regions unless these regions are located in a highly developed country. This has to do with the absorptive capacity: Only 30% of the recipient regions in Becker et al. (2013) have the power to turn transfers (more specifically, transfers under Objective 1 funding which are the focus of the study) into economic growth. Of those regions that were able to generate growth, only two thirds have additional effects on investments, implying that a significant part of the funding goes into consumption.

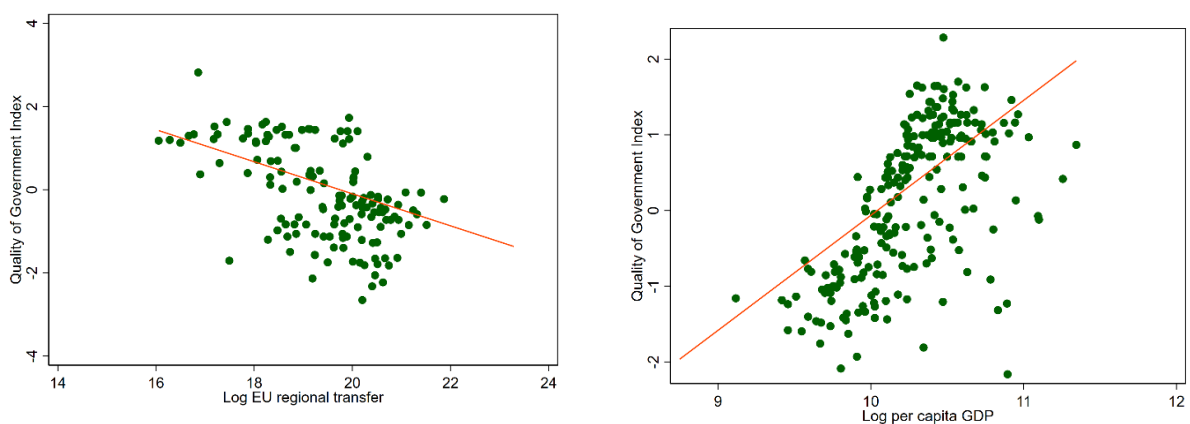
These results are supported by the analysis of Rodríguez-Pose and Garcilazo (2015) who conclude that the quality of local government is both a direct determinant of economic growth as well as a significant moderator of the efficiency of EU cohesion expenditure. Consistent with the heterogeneous treatment effect, the literature finds that the responsiveness to EU transfers varies substantially across countries. For instance, there seems to be relatively little effectiveness in Italian regions (e.g. Ciani & de Blasio, 2015) whereas Brachert et al. (2019) document positive effects of regional transfers on productivity growth in Germany, and Biedka et al. (2022) estimate positive effects on the growth of municipal revenues in Poland. Exploiting detailed information about funded projects and beneficiaries, Bachtrögl et al. (2019) conclude that the effectiveness of EU cohesion policies varies significantly across and within countries for similar interventions. Focusing on Italy, a recent paper by Albanese et al. (2021) concludes that the level of local institutional quality as well as population density matters for local transfer responses. Canova and Pappa (2022) estimate the dynamic multiplier effects of ERDF and ESF spending accounting for regional heterogeneity including the level of regional development, Eurozone membership, and geographical location. According to their results, the transfers did not contribute to reducing disparities across European regions as the multipliers are significantly lower in the low-income regions and in peripheral regions. This difference compensates the skewed distribution of funds towards low-income regions. They relate these discrepancies in the local responses to the CP to local government expenditure.

Given the results on local quality of government and human capital as crucial complementary factors for transfer effectiveness, one may jump to the conclusion of making transfer eligibility conditional on sufficient levels of local quality of government or investment in local human capital. The latter is crucially affected by the sorting mechanisms described above which indicates potentially reinforcing effects. We observe a sorting of high-skilled labor force to productive centers, and at the same time transfers in lagging regions lose effectiveness with a declining human capital

endowment. Accordingly, transfers should be used such as to raise the attractiveness of a region for high-skilled labor and slow down the sorting dynamics.

Figure 2.1.2 illustrates the correlation between regional transfer intensities and the quality of government index by Charron et al. (2022). Restricting the volume of EU cohesion transfers paid to regions with low quality of local government would imply a significant redistribution of transfers and would counteract the aim of supporting the regions with the lowest levels of per-capita GDP. A conclusion from these results is that transfers could possibly be used more fruitfully in the long term by investing in local human capital and good institutions as well as in investments mitigating the sorting of skilled groups. In other words, the overall amount of funds spent could be reduced without lowering the effect when spending it more wisely.

Figure 2.1.2: EU transfers and quality of regional government 2014-2020



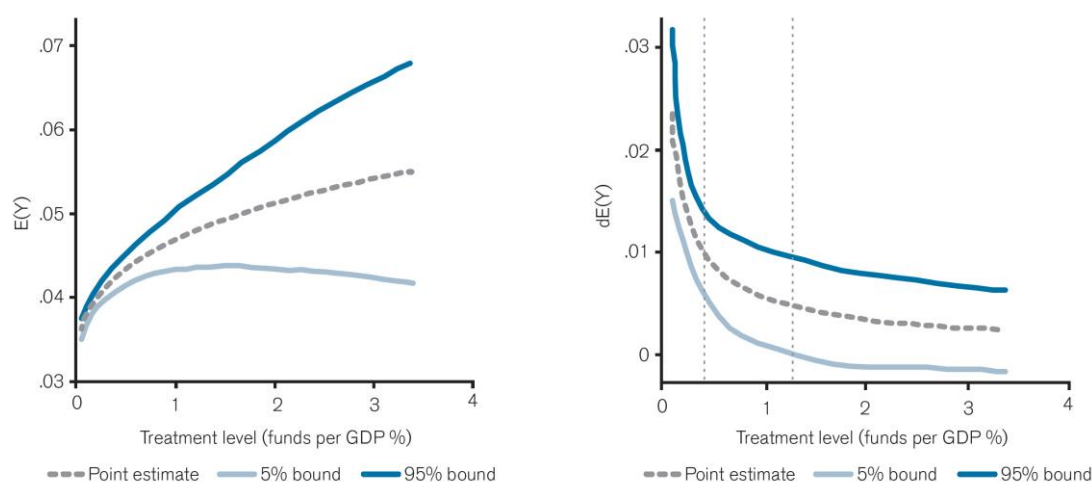
Data: EU data on transfers to NUTS2 regions available at <https://cohesiondata.ec.europa.eu/EU-Level/Historic-EU-payments-by-MS-NUTS-2-region-filter-by/2qa4-zm5t>; Eurostat regional data; Charron et al. (2022) for the regional Quality of Government Index.

2.1.4.3 Transfer intensity

Over the last decades a large set of regions has received support from EU cohesion transfers. Distributing transfers for a given budget more broadly comes at a lower transfer intensity per recipient region compared to a more concentrated spending. The EU Cohesion Report discusses the hypothesis of development traps (European Commission, 2021) which may require a sufficient transfer intensity, i.e. a big-push investment, for regions to grow out of such development traps. This idea is closely related to non-linearities in economic development as they could occur if the transfers are capable of setting off agglomeration economies that become self-sustaining. In contrast, diminishing returns to transfers, for instance, due to a more or less fixed set of potential high-return investment opportunities, would imply that higher transfer intensities lead to declining marginal effects. This empirical question has been addressed in Becker et al. (2012) using EU cohesion expenditure distributed among NUTS3 regions. Figure 2.1.3 illustrates the central results of the study where the left-hand side corresponds to the dose-response function which depicts the predicted outcome in terms of per-capita GDP growth as a function of local transfers as a share of local GDP. The right-hand side depicts the estimated treatment effect function which is estimated separately and corresponds to the first derivative of the dose-response function, i.e. the marginal effect of an additional unit of transfers for income growth. The dose-response shows that, on average, higher transfers per local GDP led to higher growth. Yet, the confidence bounds

get larger at high intensity and the curve displays a concave slope, which implies that there are decreasing returns to transfers. The treatment effect function shows the highest marginal effects of transfers at low levels of transfer intensity with a confidence interval including zero at a treatment intensity of about 1.3%. Beyond this level of transfer intensity, the null hypothesis of zero income growth effect cannot be rejected. Becker et al. (2012) refer to this threshold as the maximum desirable transfer intensity. This is in line with the hypothesis of diminishing returns and in contradiction to the development trap hypothesis. The latter would rather suggest a convex shape of the dose-response function and a minimum necessary level of transfer intensity for significant positive effects. Hence, the evidence speaks against the development trap hypothesis. Comparing the estimated threshold for significant positive treatment effect with the distribution of transfers, Becker et al. (2012) conclude that about 18% of the recipient regions are at a level beyond the maximum desirable transfer intensity. According to the estimates, cutting transfers in these regions would not even reduce their growth and the budget could be used in a more efficient way. Assuming this threshold remained constant, the share of recipient regions that exceeded this level rose to 35% in the most recent budgeting period. A later study by Cerqua and Pellegrini (2018) confirms the concave shape of the dose-response function of EU cohesion transfers and regional growth and suggests that the marginal treatment effect becomes negligible when the transfers per capita reach about 275 Euros. To summarize, more transfers do not necessarily yield more local growth and convergence.

Figure 2.1.3: Dose-response function of EU transfers



Data: Becker, Egger & von Ehrlich (2012). The dashed lines represent the point estimates, the solid blue lines the confidence bounds of the estimated functions.

2.1.4.4 Long-run effects of transfers

While a significant effect of EU regional transfers may arise due to direct consumptive effects, an important question relates to the long-run equilibrium. Are transfers capable of shifting regions to a different long-run trajectory or are effects rather short-lived and vanish once transfers are discontinued? Interesting case studies by Barone et al. (2016) for Italian regions and Di Cataldo (2017) for British regions have analyzed economic development once cohesion transfers are phased out. The two studies base their econometric analysis on regions that lost cohesion support due to changes in the EU average per-capita GDP which was caused by EU enlargement. This led

to a reallocation of transfers that were exogenous from the perspective of these regions. The results indicate a significant loss in per capita GDP following the reduction of cohesion funds. For these cases, there seems to be a move back to their old equilibrium and no persistent shift. Becker et al. (2019) studied all regions switching in and out of Objective 1 support between 1989 and 2013. Consistent with the Italian and UK evidence the analysis finds positive per-capita-income growth effects that develop relatively quickly but are not very long-lived: Taking the funding away leads to a reversion to per-capita-income levels (corrected for purchasing power differences) prior to when the funding had first been received. Yet, this does not seem to be a pattern that holds true for all place-based policies alike. Studies on US place-based policies by Kline and Moretti (2013) and on German place-based policies by Ehrlich and Seidel (2018) document persistent effects on the spatial equilibrium decades after the end of the place-based transfers. Canova and Pappa (2022) study a shorter time window of 1-3 years after transfer receipt and estimate the dynamic multipliers of ERDF versus ESF transfers. They conclude that the effects of ERDF transfers dissipate within three years whereas ESF transfers have more medium-term effects after 2-3 years. This could be related to the different types of investments supported by the two instruments. A conclusion from this mixed evidence is that the long-run effects depend largely on the context, the type of policy and investment, and the level of spatial aggregation analyzed. First, different policies may have led to different expectations about the duration of the place-based transfers. When transfers are expected to be paid for a long-time horizon – such as the “Zonenrandgebiet” support in the study for Germany – the location choices of firms and households may be influenced. Second, investments in immobile and durable capital structures or investments in human capital display different dynamic effects than transfers used for more consumptive purposes. Third, the spatial equilibrium may be affected at a granular spatial scale when one municipality receives support and a neighboring municipality does not, whereas mobility costs to relocate between labor markets or states may not be compensated by the transfers.

2.1.4.5 Distributional effects of transfers

Inequality considerations are a crucial rationale for EU cohesion transfers. The effects on regional aggregates may conceal effects on individual income inequality within recipient regions. The incidence of regional transfers within recipient regions is important at least for two reasons: First, while regional transfers may reduce inequality between regions it is not obvious whether this effect is accompanied by an increase of inequality within regions such that the general aim of individual inequality is unclear.⁹⁶ Second, depending on the distribution of the transfer incidence within regions, recipient regions may become relatively more or less attractive for different type of households. Given the role of skill sorting for regional inequality discussed above, place-based transfers that redistribute towards low-skilled within recipient regions may have contributed to the sorting equilibrium. Most evidence on the within-region incidence of place-based transfers looked only at broad groups and, in particular, at the effects on wages versus land or property

⁹⁶ Note that the dynamics of disparities reported in the EU Cohesion Report (see Figure 1) focus the population weighted coefficient of variation instead of a conventional coefficient of variation between regions.

prices. Some evidence on capitalization effects of place-based transfers in Ehrlich and Seidel (2018) (not for EU cohesion transfers) and Albanese et al. (2023) suggests that property owners could reap many of the benefits of the transfers which is not in line with the purpose of redistributing towards poorer households. New evidence by Lang et al. (2023) studies the effects of EU transfers on micro-level income data. The authors find that income groups at the top brackets gain whereas lower brackets benefit less or even display no effect. It suggests that within region inequality goes up as a consequence of the transfers. Similarly Albanese et al. (2023) document for Italy that the Gini index within municipalities that received EU cohesion transfers is positively affected by the transfers.

2.1.4.6 Effects during economic crises

With the global financial crisis, the European debt crisis, and the COVID-19 pandemic, the EU cohesion funds have been mobilized to address regional differences in the distress caused by these crises. In the wake of the crisis, the EU adjusted the design of the policy among others by extending the deadlines for spending cohesion funds during the 2000-06 budgeting period, by adjusting the co-financing requirements or by redirecting unallocated funding between funds and different priorities of regions.⁹⁷

The effects of cohesion transfers during the financial and economic crisis has been studied by Becker et al. (2019) using changes in government bond yield spreads as a measure for how severe a country has been hit by the crisis. The analysis looks at GDP per capita, employment as well as public and total investment. The results show that cohesion funds were less effective in the sense that effects on per-capita income growth were smaller. At the same time, the funds could stabilize employment as the effects on employment during the crisis were larger than before. However, regions that were more strongly hit in an adverse way by the crisis as measured by a larger government bond yield spreads of the country were not shielded successfully by the funds received. One explanation could be the lack of the capacity to co-finance the received funds. The EU Commission recognized this issue and adjusted the co-financing rates but this may have come too late or may have been not sufficient. Di Caro and Fratesi (2022) explore a number of very different shocks to the EU economy and their consequences for effectiveness of EU CP. They find a positive short-term impact of CP on sustaining regional labour market resilience mainly during the financial and economic crisis in the EU15 which neither holds true for other crises considered in the paper nor for MSs that joined the EU later.

2.1.4.7 Role of local political incentives

Finally, a very important question concerns the political economy of transfers. This relates to the evidence on highly varying effectiveness across recipient regions which has been discussed above.

When local majorities decide upon how to use funds from the central EU budget, they may use them to raise attractiveness for the incumbent majority and thereby perpetuate a local economic structure that is not dynamic (D'Amico, 2022). For instance, subsidies may be used to support

⁹⁷ EU Council Regulation 18512/11 reduced co-financing requirements. The EU Commission's packages on the CRII and the CRII+ allowed for more flexibility in the use of cohesion transfers.

declining incumbent industries or make regions with a high share of low-skilled labor force even more attractive to low-skilled workers. This would perpetuate the sorting dynamics that lead to disparities in the absence of transfers. Moreover, the political equilibrium may be biased towards using EU cohesion transfers for tangible investments that become visible in the short term and to less investment in factors that turn out relevant for absorptive capacity such as human capital or quality of institutions. Puga (2002) points out that a further rationale for regional transfers may be building support for EU integration. The funds may contribute to enhance the support for efficiency enhancing coordination across regions and countries. Yet, the same logic also implies that politicians may be willing to accept local efficiency losses if compensated by transfers. Accordingly, regions receiving centrally administered transfers may become less susceptible to structural reforms of e.g. labor markets or goods markets. A recent paper by Albanese et al. (2021a) documents that residents of areas that benefited several decades from place-based transfers developed preferences towards more state intervention and distrust of the market economy. Thus, implementing reforms may become more and more difficult, and the status quo of inefficient structures may become more persistent.

A potential further issue of centrally administered place-based policy is rent-seeking. The competition of potential beneficiaries for discretionary funds for local investments may generate a rent-seeking contest with the associated inefficient resource allocation (Blankart & Ehmke, 2015). Candidates need to invest resources in designing and presenting their projects. According to rent-seeking theory, the net benefits of transfers may be significantly reduced by the transaction costs invested to 'win the price' in the rent-seeking contest. This seems to be particularly relevant in an environment with a low quality of local government and the degree of inefficiency caused by rent-seeking may grow with the number of government layers influencing the allocation mechanism. While this theory may explain parts of the large heterogeneity in local transfer effects, there is no empirical evidence on this mechanism for EU cohesion funds.

Realizing aggregate efficiency gains in terms of productivity would require the central transfers to exploit non-linearities such as agglomeration economies as discussed in Section 2.1.3. A criticism applicable to centrally administered place-based is that the central governments are unlikely to have sufficient information to select those regions that comply best with the criteria of high marginal benefits of investment (e.g. Glaeser & Gottlieb, 2008). More importantly, such a distribution of transfers towards the places that display the highest returns may not be in line with the aim of reducing regional disparities.

Accetturo et al. (2014) study the effects of central government transfers in a model where they can be used cooperatively for the provision of a public good or diverted to private rents. The theory suggests that if local governments are characterized by low efficiency, transfers from the central government can reduce local cooperation. Evidence from the European Social Survey supports this theory. The authors document a negative effect of place-based policies on social capital -- measured by local trust and cooperation -- in settings with low quality of local governments.

Stipulating certain preconditions for the receipt of cohesion transfers could be one way to address the issues discussed in this section. Another way would be to set incentives for local governments. These incentives should be such that policies beneficial to the long-term development of

local economic activity are rewarded. Fiscal decentralization in the form of revenues from taxes on local economic activities could provide a basis for such incentives as well-used transfers would benefit the future tax base.

2.1.5 General equilibrium effects of place-based policies

The papers discussed so far focused on the effects of transfers in the recipient regions. To evaluate the aggregate effects on economic output and welfare in Europe, a general equilibrium analysis is required which should account for at least three important effects.⁹⁸ First, potential displacement affects the effectiveness of regional transfers. The increase of economic activity in one place may come with a decrease in other places when compared to the counterfactual without transfers.⁹⁹ Second, regional trade in goods and services influences the economic incidence of transfers. Benefits may not only occur in the recipient regions, but they may be channeled through trade linkages to other regions.¹⁰⁰ Third, direct spillovers could impact productivity or transport access of neighboring regions which results for instance in changes in the local price indices of non-recipient regions. The latter matters particularly for investments in production amenities or transport infrastructure which have immediate consequences for the entire transportation network. Blouri and Ehrlich (2020) aim to capture these general equilibrium effects for EU cohesion transfers by using a quantitative spatial equilibrium model. The analysis distinguishes three different types of place-based policies: investments in transport infrastructure which reduce transportation costs, investments in local production amenities improving local productivity (e.g. subsidies for R&D activities, universities, broadband internet access, energy supply, etc.), and wage subsidies directly affecting the regional income. For each of the three types of transfers, the local impact in the recipient region is estimated and fed into the model. A motive for regional redistribution is incorporated in the analysis via location preferences of individuals which means that the spatial distribution of economic activity that maximizes output and productivity is not equal to the welfare-maximizing distribution. Accordingly, supporting employment in the poorer regions increases welfare according to the model's welfare function even if it may decrease productivity. However, the analysis shows that depending on the type of instrument (transport infrastructure vs. production amenities vs. wage subsidies) the regional distribution of transfers that maximizes welfare for a fixed budget is characterized by very different spatial distributions than the one observed for EU cohesion transfers. Wage subsidies are used in the most efficient way if they are focused on few but the most lagging regions. In contrast, efficient investments in transportation infrastructure are

⁹⁸ A further aspect concerns the efficiency costs of raising the budget for place-based funds. These costs depend on the type of taxes and the corresponding tax elasticities. Since the budget cannot easily be linked to specific sources, the analyses discussed largely disregard this further efficiency cost. Blouri and Ehrlich (2020) consider spatial distortion of labor supply but disregard any effects of taxes and transfers on the extensive margin of labor supply.

⁹⁹ Einiö and Overman (2020) document displacement caused by place-based policies on the regional level. Such shifts may also be observed when comparing beneficiary and non-beneficiary firms as in Bronzini and Guido de Blasio (2006).

¹⁰⁰ Siegloch et al. (2023) provide evidence for significant spillovers of German place-based transfers to recipient regions via regional trade.

realized by a distribution that focuses on relatively central regions including many regions that are currently not among the net recipients of EU cohesion funds. The reason is that an improvement of the infrastructure in central regions will be passed on to the effective trade costs for a large share of other regions. Furthermore, investments in transport infrastructure and production amenities are complementary which does not hold true for wage subsidies. Overall, significant improvements in terms of both welfare as well as reductions in regional inequality can be realized when considering the effects of transfers beyond the immediate effect in recipient regions and distributing transfers accordingly.

2.1.6 Conclusions for a more effective and efficient EU Cohesion Policy

A central part of the EU integration process is the reduction of regional disparities. In the recent decade, market dynamics have led to a slowdown in the convergence process. The evidence for the effectiveness of EU cohesion transfers in compensating these trends towards rising disparities in Europe is mixed. The economic literature has shown that transfers may be ineffective or only have short-lived effects if they are not complemented by a conducive economic environment in recipient regions. Increasing the volume of transfers cannot compensate for this. It has been shown that higher transfer intensities are unlikely to yield higher benefits as the evidence clearly points to decreasing returns of transfers in recipient regions. What is key is the design of transfers (i.e., which type of instruments and in which regions) and the local economic environment in recipient regions. Evaluations and insights obtained from EU Cohesion Funds seem particularly relevant given the significant expansion of EU fiscal policy via the NGEU funds.

A pivotal factor exacerbating growing disparities is the concentration of high-skilled individuals in a limited number of highly productive places. For EU cohesion transfers to be effective it is imperative to increase the attractiveness of lagging regions to a high-skilled labor force and to invest strategically in the long-term development of human capital in these regions. The nature of investments supported by transfers significantly influences the local demand for skilled labor, consequently impacting the relative wages across various skill levels. For instance, transfers predominantly allocated to infrastructure construction projects may inadvertently reinforce disparities arising from the concentration of high-skilled individuals. Conversely, directing transfers towards sectors with heightened skill requirements, such as education and healthcare, holds the potential to mitigate these disparities by fostering increased demand for skilled labor and reducing spatial disparities.

The other crucial factor that has been identified in the economic literature is the quality of local governments. Restricting transfers to certain minimum conditions will not be a solution as this implies that many of the lagging regions are not eligible for transfers. Hence, the key question is about how to improve the quality of local governments in lagging regions. This is not an easy undertaking. One approach to addressing this challenge involves establishing effective incentives for local governments to allocate transfers towards policies conducive to the development of local businesses. In many lagging regions and in particular, regions facing economic decline, the political economy equilibrium may imply that governments have an incentive to keep the status quo of the current economic structure. Prioritizing the support of current stakeholders and slowing the pace of decline may yield short-term gains, making it an appealing strategy for short-sighted administrations. Decentralization of tax revenues to the municipal level could be a potential strategy to

realign incentives toward longer-term investments. Providing local governments with revenues generated from taxes on local economic activities serves as a crucial incentive mechanism. The correlation between the growth of the local economy and increased tax revenues for municipal budgets creates a dynamic where local governments are incentivized to utilize EU Cohesion Funds in a manner that fosters sustained local economic growth. This, in turn, not only contributes to future revenue streams but also aligns with the broader objectives of reducing disparities. In contrast, in a setting where local government revenues mainly rely on grants from higher-level governments, there is less incentive to channel EU CFs into optimizing local public services and infrastructure for business activity. This fiscal structure may imply to local governments that their investments in enhancing local business conditions primarily benefit the central government, and the resulting revenues are distributed irrespective of the contributions to the tax hike.¹⁰¹

There are substantial differences across EU countries in the share of tax revenues on local economic activities that are allocated to the local budgets. Herrmann (2022) documents that such revenues from taxes on local economic activity which can act as an award to local governments for their efforts to increase the local business environment are particularly low in some of the countries where lagging regions see high transfer intensities since several budgeting periods (in particular Greece, Southern regions of Italy). In contrast, some of the countries where EU cohesion funds turned out successful display relatively high shares of decentralized tax revenues (like Ireland, Poland, and the Baltic Countries).¹⁰² Given the evidence for the heterogeneity in the local effectiveness of EU cohesion transfers it seems important to study the political incentive schemes in recipient regions in more detail.

Finally, it has been shown that for a comprehensive evaluation of the efficiency and equity effects of EU CP a general equilibrium perspective is required. The degree of displacement effects or positive spillovers varies depending on the nature of transfer investments and the specific regions of intervention. A more targeted utilization of transfers and an enhancement of overall policy design could be achieved by taking into consideration the implications of general equilibrium responses. In doing so, a more nuanced and effective approach to EU CP can be realized, ensuring a more efficient allocation of resources.

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¹⁰¹ Fiscal structures are the prerogative of Member States. Accordingly, conditioning EU Cohesion Funds on a certain degree of revenue decentralization is not feasible. However, policy designs that highlight the incentive effects for local governments may be an alternative approach to studying the importance of this channel and raising awareness for reforms in this direction.

¹⁰² Herrmann (2022) computes the share of «award-compatible taxes» and reports values between zero percent in Greece and 55 percent in the Baltic states.

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2.2 Valentin Lang: The Distributional Effects of Place-based Policies in the EU

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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.

2.2.1 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 CP 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 EU CP is allocated on the basis of 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 CP 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 CP should reach people at risk of poverty, particularly the vulnerable and the unemployed. From this perspective, the ESIF 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 CP in particular can 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 inter-regional and intra-regional 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. Based on this, the chapter will examine the current state of research on the effectiveness of place-based policies building on the existing economic literature. 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 the mechanisms of how interpersonal redistribution effects materialize.

The focus will be on the evidence on EU CP; however, findings based on the analysis of other place-based policies will also be included in the review, if these are comparable to EU CP. 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 causal analytical conclusions to be drawn. This evidence base will then be used to draw conclusions on how EU CP can be further developed from 2028 onwards in order to achieve the desired interregional and interpersonal distributional effects as effectively and efficiently as possible.

2.2.2 Regional inequality in Europe

This section describes economic inequality in Europe from a regional perspective. On the one hand, it discusses how economic disparities between regions have developed in recent decades and, on the other hand, it looks at inequalities within these regions. Building on this, European inequality can be broken down into its interregional and intraregional components. In so doing, the challenges facing European regional policy in promoting social cohesion across Europe can be better understood.

2.2.2.1 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 some industries and the regions in which they are located to achieve major growth opportunities (Topalova & Khandelwal, 2011; Felbermayr & Gröschl, 2013; Lang & Mendes Tavares, 2023). At the same time, the associated import competition poses major challenges for other regions (Autor et al., 2013; Pierce & 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 & 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 & Restrepo, 2018; Ehrlich & Overman, 2020; Moll et al.,

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

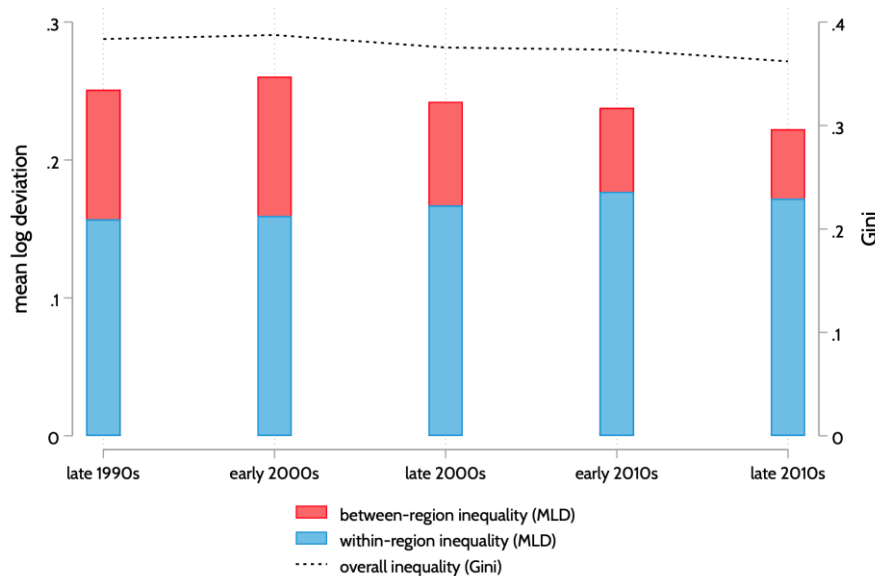
2.2.2.2 Intraregional inequality

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 look inside the regions. How much of the overall inequality results from inequality *between* regions? How unequal are incomes *within* regions? Is poverty a problem that is concentrated in poorer 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- or individual-level data which provide a sufficient number of data points for each region to calculate intraregional inequality measures. Until recently, this evidence was only available for individual 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. Such studies on individual countries are difficult to compare across countries because they use different methods, data sources and territorial units.

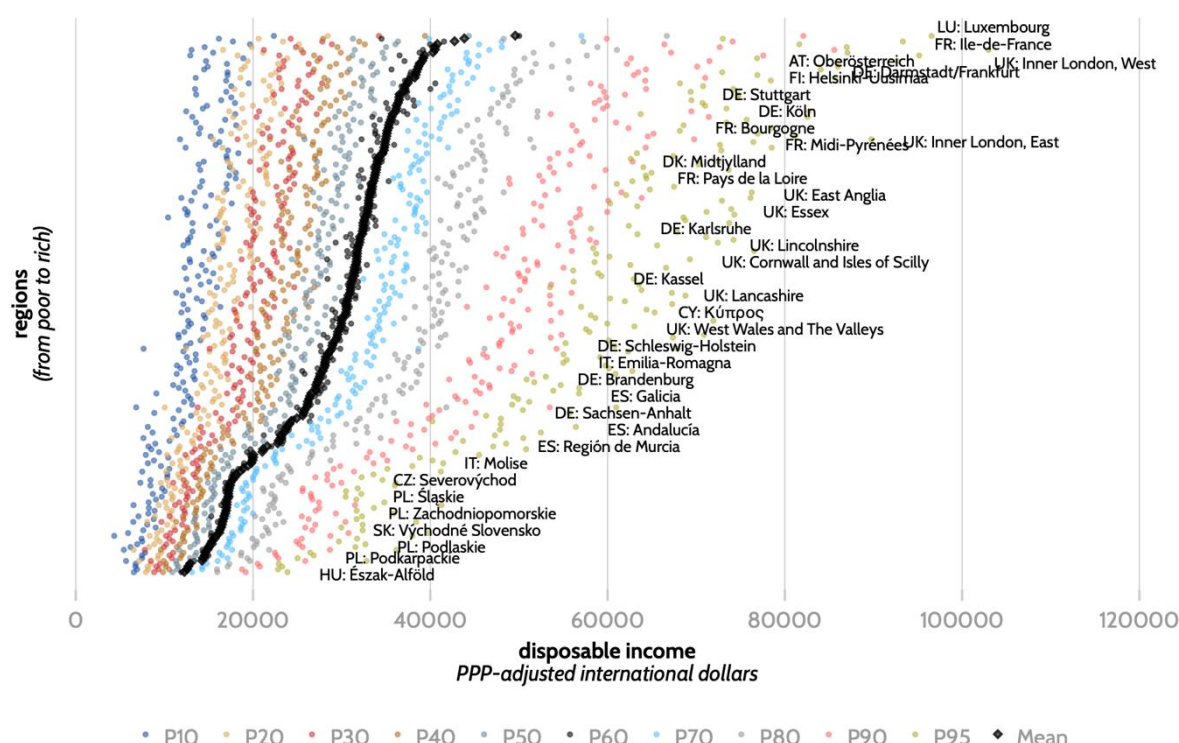
More recently, a number of studies have examined intraregional inequality across several countries and put it in relation to interregional inequality. All of these studies find that inequality between regions only explains a very small proportion of overall inequality. For example, Bauluz et al. (2023) 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. In between are France with 4 percent and the USA with 5 percent. Inequality within the 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 of these countries, the authors find that inequality between small regions contributes less than 5 percent to overall inequality. While these two studies calculate shares of national inequalities, Lang et al. (2023) examine intra- and inter-regional 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. 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 2.2.1).

Figure 2.2.1: Inequality within and between EU regions



To visualize this inequality within the regions, Figure 2.2.2 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. As can be seen, the poorest groups in richer EU regions are poorer than middle segments in poorer EU regions. At the same time, many relatively poor regions are home to many households with relatively high incomes. These data thus visualize the consistent finding of this literature that inequality between regions accounts for only a small proportion of overall inequality.

Figure 2.2.2: Inequality in the EU



Notes: The figure shows the annual disposable household equivalent income for different percentiles of the intraregional income distribution within the EU. Data: 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 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.

2.2.3 Objectives of structural support

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 justifications for such policy measures can be distinguished:

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 & Schott 2017), an underfunded public sector that has deficiencies in providing public goods (Charles et al., 2018), political extremism (Colantone & 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 & 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 et al., 2023)
3. Local public goods. Many sectors require input factors that require public funding (Juhasz et al., 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 in particular 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. The focus is on literature with an empirical focus and concentrates particularly on contributions to EU regional policy.

2.2.4 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, the more modern economic literature contains a large number of studies that identify positive growth effects (see for reviews: Neumark & Simpson, 2014; Duranton & Venables, 2018). Kline and Moretti (2014), for example, find positive growth effects of the Tennessee Valley Authority 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. Sieglöcher 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 et al., 2010, 2013, 2018; Mohl & Hagen, 2010; Pellegrini et al., 2013; Giua, 2017; Bachtröglér-Unger et al., 2022; Lang et al., 2023). Other studies show insignificant or very small effects, but they are in the minority (Fagerberg & Verspagen, 1996; Dall’Erba & Le Gallo, 2008; Dall’Erba & 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 Sieglöcher et al. (2023) all find positive effects on local employment rates. With regard to EU CP, 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, Bachtröglér-Unger et al. (2020) and Cerqua and Pellgrini (2022) also find such effects of EU CP.

Conversely, the 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 Bachtrögl et al. (2020) analyze EU CP 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 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 the 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 et al., 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 such 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 had 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.

2.2.5 Heterogeneous effects of structural policy

While such average effects indicate that regional support programs can reduce interregional inequality, this says nothing about 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 give an initial indication of this.

The level of education 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 & 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) already 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 CP, 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 et al., 2014; de Angelis et al., 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 CP 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 & 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 CP 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 the 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.

2.2.6 Intraregional effects

Up to this point, regions supported by place-based policies have been considered as aggregates. This allows statements to be made about the regions in which structural policy is most likely to be effective. However, what findings emerge when we look into the regions and disaggregate economic units within the regions? Which distributional effects become apparent?

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 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, this the factor capital could record even greater gains. According to one 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 via higher rents and house 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 the EU's ERDF funding: EU regional policy tends to increase productivity in companies that are less capital-intensive at the start of funding.

Secondly, the question arises as to which sectors place-based policy is most likely to have a positive impact on. 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 such 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.¹⁰³ 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 this spillover effect; however for multipliers smaller than 2, the relatively larger increase is nevertheless to be expected at the upper end of the local income distribution. At the same time, it is also unclear who will take on the newly created jobs. If employees move from non-subsidized regions or commute from these regions to the subsidized region for the newly created local jobs, local job gains are not necessarily synonymous with a decline in the absolute number of unemployed in subsidized regions.

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 CP show that larger companies receive more EU structural aid on average than smaller ones (Bachtrögl-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 differently than smaller and medium-sized companies. Evidence for this is provided by Criscuolo et al. (2019). The authors find, for example, that the RSA regional

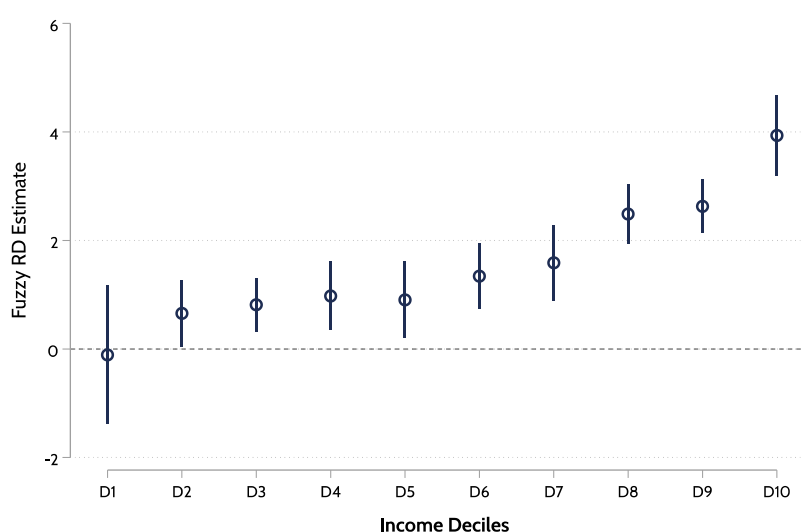
¹⁰³ However, Falck et al. (2019) do not find any such spillover effects for another German regional policy, “Innovative regional growth cores”.

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 other 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 necessarily have the strongest effects on the lowest-income segments of the promoted regions. The discussed distributional effects between production factors (labor vs. capital), between sectors (export-oriented industry vs. local economic sectors) and between companies (large vs. small) may well imply that place-based policies bring greater income gains for the wealthier groups of the supported regions.

To date, little research has explicitly investigated the question of intraregional distribution 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 2.2.3 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 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 2.2.3: Effects of EU Cohesion Policy for different income groups

Notes: The figure shows the estimated effects of EU CP for different income groups of the intraregional income distribution in assisted regions.

Data: Lang et al. (2023: 23).

2.2.7 Conclusions and policy recommendations

The current state of research on the distributional effects of place-based policies suggests a number of conclusions. 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 regions increases. At the same time, however, there is little evidence to suggest that supported regions record long-term productivity gains. Nevertheless, these local effects can reduce inequality between regions. However, this is not synonymous with a reduction in interpersonal inequality, because the majority of inequality results from income disparities within the regions. Regional structural funding has 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, more targeted support can be provided. If the political goal is to support particularly vulnerable households, the current allocation based on the European NUTS2 level is clearly too coarse. The size of the regions means that even relatively affluent areas in the 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. In this way, European structural funding could concentrate on a smaller number of low-income regions with larger per capita amounts and in a more targeted manner.

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. The 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 and 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 on the basis of individual characteristics.

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2.3 Zareh Asatryan and Carlo Birkholz: Beyond Additionality: The Impact of EU Cohesion Policy on Investments by the Member States

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Abstract

This paper studies the crowding-in and crowding-out effects of EU CP, one of the largest public investment programs in the world, on investments in EU MSs. Leveraging a threshold that makes the poorer regions eligible for EU funding, we show that cohesion funds crowd-out public investments. The retrieved fiscal resources are shifted primarily towards current expenditures, rather than to other regions or periods. However, we show that this effect is more than outweighed by substantial crowding-in of investments by the private sector, most notably in non-tradable industries. Our complementary Difference-in-Difference (DiD) exercise utilizing a smaller sample of regions that have graduated from EU funding eligibility in the mid-2000s suggests that, unlike the effects on public investments, the effects on private investment are persistent over a longer horizon. Although our results on public investment crowd-out present clear evidence for the violation of EU's additionality principle, the positive effect on total investments suggests that the design of EU CP should rather focus on further facilitating its complementarities with the private sector.

2.3.1 Introduction

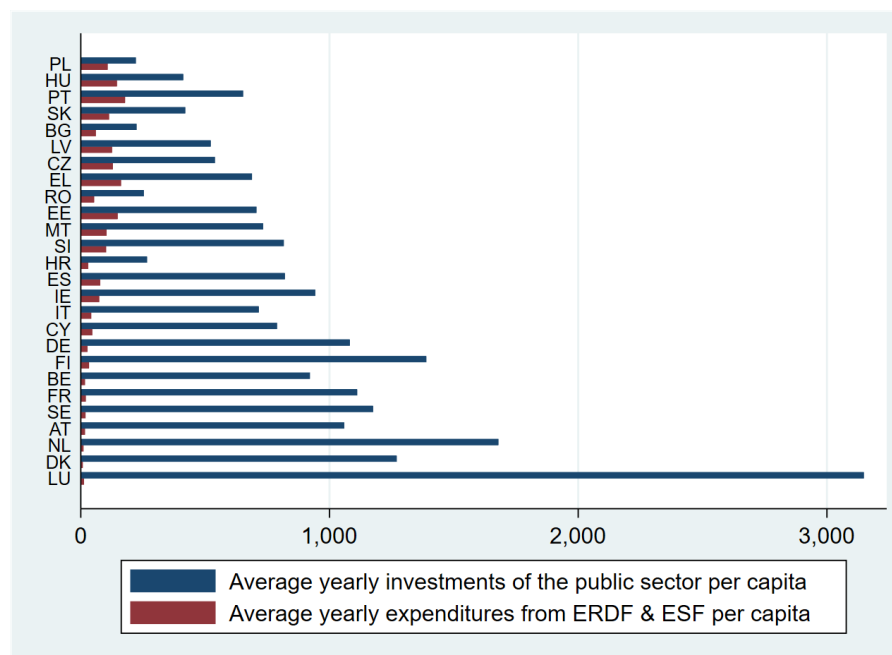
CP is an important source of public investments in Europe. In an average EU MS, the ERDF and the ESF make up about 8% of all public investments. This strong EU involvement reflects the fact that reaching economic, social and territorial cohesion through investments is one of the key objectives of the EU. With this aim to reduce regional disparities, CP is also quite unevenly distributed, with ERDF and ESF financing on average 16% of public investments in Southern European and 26% in Eastern European MSs. Figure 2.3.1 of below shows the average yearly per capita public investments financed from cohesion and from national sources. MSs are ordered according to the dependence of their public investments on cohesion funding, with cohesion countries like Poland and Hungary topping the list by up to half of public investments being funded from cohesion resources.

This substantial investment transfers raise an incentive challenge in MSs' budgetary decisions: MSs may potentially use cohesion funds to partially or fully replace national spending on public investments. For some time, the policy answer to this important incentive problem was a formal rule called the additionality principle. The rule, described in more detail in Box 2.3.1 of below, aimed to prevent the crowding-out effect of EU funds on national funds by obligating MSs to prove that the EU funds do not simply replace national funds. However, scholars and policy makers are generally sceptical about the plausibility of reliably assessing the degree of this phenomenon, which leads to doubts on whether MSs comply to the principle and how to effectively enforce it (Ederveen et al., 2003; European Commission, 2008; Šlander & Wostner, 2018). As a result, and also with the aim to simplify the already high bureaucratic burden of CP, the current MFF had discontinued this formal rule (Bachtler & McMaster, 2008; European Court of Auditors, 2022).

Fundamentally, we think about the question of whether EU funds crowd-out national funds as an economic rather than as a purely legal question. The interplay between EU funds and MS investment spending can have either crowding-in or crowding-out effects whereby the EU funds, respectively, complement or substitute MS investment spending. Moreover, EU funds may have

compositional, and not only level effects, by, for example, inducing intertemporal, sectoral, or regional relocations in MS spending. This means that governments might shift the fiscal resources they receive through the EU funds towards uses at later periods (intertemporal relocation), other purposes in the same region (sectoral relocation), or in other regions altogether (regional relocation). Our paper studies these effects empirically. Such effects of vertical government transfers have been studied extensively in the fiscal federalism literature as reviewed below, but not yet systematically in the context of CP.

Figure 2.3.1: Share of funding from ERDF and ESF in gross fixed capital formation by Member State



Notes: The figure plots the per capita average yearly investments in the public sector captured by Gross Fixed Capital Formation (GFCF) of the public sector and the per capita average yearly expenditures in the ERDF and ESF broken down by MS (for details on data sources and construction see section ‘Methodology and Data’ below).

An additional and related question we study is whether EU funds crowd-out or crowd-in private investments, which can happen directly as well through the above-described possible effects of EU funds on national public investments. Public investments may build into productive capital stock, thus increasing the marginal productivity of private capital and crowding-in private investments. On the other hand, public investments may increase capital accumulation above the level chosen by presumably rational private agents, thus leading to crowd-out effects. This question has been studied in the literature on the output impacts of public investments extensively (for early contributions see, Aschauer (1989a, 1989b) and Gramlich (1997)) and is also very important in our context since in the EU the private sector invests 5 to 6 euros for every euro of public investments. Thus, even small interactions between public and private investments will tend to lead to large economic implications.

Understanding these dynamics does not only allow us to speak to MSs’ adherence to the additionality principle, but also serves as an important prerequisite in correctly assessing the efficacy of

CP. As discussed in more detail below, a large literature studies the output and productivity enhancing impacts of public investments (see Bom and Ligthart (2014) for a meta-analysis and Ramey (2020) for a recent review) such as of infrastructure investments (Fernald, 1999) and that of Cohesion Policies (Becker et al., 2010, 2012, 2013, 2018; Canova & Pappa, 2021). However, if EU funds interact substantially with investment spending by national governments or by private agents, then ignoring the role of such interactions will result in a misinterpretation of the effects of CP on local economies and, consequently, to potentially wrong policy conclusions. Relatedly, possible heterogeneities in the crowd-in or crowd-out parameters may overlap with certain characteristics which the past literature has frequently used to explain the heterogeneity in the impact of CP, such as the rather vague but influential idea of absorption capacity, thus providing a potentially more direct explanation for the mechanisms leading to heterogeneous effects of cohesion.

We are able to revisit these important questions in the literature by overcoming two constraints that the past empirical literature has faced. These relate to difficulties in implementing credible identification strategies to study large and significant public investment programs, as well as to constraints of data availability. We follow regression discontinuity type designs developed in the past literature on the causal effects of CP which provide quasi-random variation in the allocation of cohesion funds (Becker et al., 2010, 2012, 2018; Lang et al., 2022). We then use new data on national investments aggregated at the level of NUTS2 regions and covering several programming periods to study our question. Such region level investment data has been used before (for example, by Canova & Pappa, 2021), and we make progress by separating national public and private investments as well as their more disaggregated sectors.

Our first headline finding is that cohesion funds crowd-out public investments by MSs. This effect is substantial and, depending on the specification, implies a crowd-out of up to 45 cents in national public investments for every euro of cohesion investments. We study the mechanisms that drive this effect, such as whether MSs substitute investments spatially or across types of government spending items. We document a large increase in current government spending, which suggests that fiscal resources get reallocated from investment to current spending. Our second main finding is that cohesion funds have positive effects on private sector investments especially in the non-tradable sectors. This can be either due to their direct complementary nature, or also due to the potential inverse relation of public and private investments of national governments. Either way, the crowd-in effect on private investments is large, and, on average dominates the first effect on national public investments we have documented. Third, we study the temporal dynamics of the effects. Using another empirical approach, one that is complementary to the regression discontinuity design, we study in an event study framework the dynamics of public and private investments in regions that graduate from cohesion eligibility in a period of up to 7 years after losing access to cohesion funds. We show that public investments increase in response to the loss of cohesion funds, thus confirming the crowding-out effect also in this empirical design, but they then rather quickly fall back to the past levels. Private investments also respond in ways consistent to our other evidence, which is by decreasing substantially once cohesion funds are cut, however they remain so even after 7 years implying a permanent drop in investments. Given its magnitude and persistence, this result suggests that part of the large contemporaneous crowding-in effect

may be driven by intertemporal shifts of investments within the private sector, and, more generally, it sheds some doubt on the conjecture that these investments lead to large long-run productivity increases as long as such a boost in productivity should continue attracting investments.

Our analysis contributes to two main strands of literature. First, it relates to the literature on fiscal federalism where it has been long-recognized that, as long as lower-level governments maintain autonomy over their fiscal policies, vertical transfers can be redirected to be used in ways other than what they are designated for. Consequently, one strand of literature, going back to at least Bradford and Oates (1971), studies the conditions and institution under which vertical transfers are effective in increasing the level and quality of local public spending. Related to the case of the EU, several empirical papers study vertical fiscal relations in the context of interactions between CP and national government spending, and do so either with country level data¹⁰⁴ or with regional data but from individual MSs.¹⁰⁵ Another strand researches the conditions that make transfers received increase the level of local public spending more than an increase in local income of equivalent size does, that is the so-called flypaper effect (Courant et al., 1978; Hines & Thaler, 1995). Given that it is the MSs that are responsible for allocating cohesion funds across regions within their countries, a further relevant strand of the fiscal federalism literature is the one that studies the political economy forces leading to the allocation of government resources. Cadot et al. (1999) and Knight (2002) show in theoretical models and empirical applications that political motives and bargaining power greatly determine the joint allocation of resources from different levels of government, which suggests that crowd-in or crowd-out estimates can be correctly ascertained only once this endogenous allocation process has been taken into account. Chalmers (2013) and Bachtler and McMaster (2008) highlight that such political processes of regional lobbying are likewise present in the allocation of CP funds. The implication of this strand of research for our paper is that a naïve regression analysis will generally lead to biased estimates, and thus highlights the importance of our strategy of utilizing a research design that leverages plausible exogenous variation in the allocation of EU funds.

Second, we contribute to again a fairly large literature on output effects of public investments. In the short run public investments can increase private demand for both consumption and investment goods, and, in the longer run, these investments can build into a stock of public capital increasing the productivity of the private sector and promoting economic growth. The question of whether government investments crowd-in or crowd-out private investment is always a central parameter of interest in this literature. In the EU context, several papers have studied the general

¹⁰⁴ Hagen and Mohl (2009) and Šlander and Wostner (2018) investigate this question with national level data. The former paper finds evidence for crowding-out, while the latter one present evidence of a non-linear relationship of crowding-in effects when cohesion funds are small but crowd-out effects once funds increase and pass beyond a certain level.

¹⁰⁵ Janský et al. (2016) study Czech municipalities where they do not find systematic evidence of crowding-out, however note large heterogeneities in their estimates. The paper of Del Bo and Sirtori (2016) on Italian regions also finds heterogeneous effects, but with crowding-out effects dominating on the aggregate driven by cross-sectoral and interregional substitution. In a companion paper, Del Bo (2018) shows that tax rates set by regions in Italy decline as a response to the inflow of EU funds.

economic effect using both microeconomic and macroeconomic approaches (Becker et al., 2010, 2012, 2013, 2018; Coelho, 2019; Canova & Pappa, 2021). Overall, this literature generally agrees on the aggregate positive effects of CP, but a sub-field of ongoing active research identifies important heterogeneities in its impact across regions. Findings on the more specific question on the productivity impacts of public capital, a field that was particularly active in the 1990s, are reviewed by the meta-analysis of Bom and Ligthart (2014). Some studies find large positive effects (Aschauer, 1989a, 1989b), but others disagree (Garcia-Mila et al., 1996; Evans & Karras, 1994b), and a third group of papers studies further nuances such as different types of investments (Evans & Karras, 1994a), the channels of their impact (Delorme et al., 1999) and the role of spill-overs (Holtz-Eakin, 1994; Owyong & Thangavelu, 2001). A more recent review, in particular focusing on the role of public infrastructure, is provided by Ramey (2020). Most generally, this analysis is related to the literature on fiscal multipliers. The macroeconomic literature is reviewed by (Ramey, 2011, 2019; Blanchard & Perotti, 2002), and the microeconomic literature on open economy cross sectional multipliers is reviewed by Chodorow-Reich (2019). Similar to our context, most of these papers use shocks from federal expenditure, typically in the US, to identify multipliers in local output and other outcomes (Chodorow-Reich et al., 2012; Nakamura & Steinsson, 2014; Corbi et al., 2019; Suarez-Serrato & Wingender, 2016).

2.3.2 Institutional background

This section provides additional details around the key concept of additionality, and the related economic ideas of crowding-in and crowding-out.

The design of the EU structural funds has changed over the funding periods, also in regard to the implementation and evaluation of the additionality principle. The key critique throughout the iterations stems from the fact that adherence and verification of the principle was subject to interpretation or relied on bilateral agreements without official independent external evaluation, which rendered comparisons across MSs difficult. This was exacerbated by differences in the information provided across MSs, a lack of monitoring that ensures high quality data, as well as the challenging nature of capturing precisely the relevant and eligible expenditure. The box below details the historic and current developments of the principle:

Box 2.3.1: Additionality principle in EU Cohesion Policy

The *additionality principle* states that any EU-level intervention has to complement existing (national) ones, rather than substituting or replacing them. In the context of EU funding, this principle requires the financial support to be used for projects and programs that would otherwise not have been realised at all, or not to the extent without EU funding (European Parliament, 2023). Adherence to the additionality principle counteracts crowding-out of existing financial resources and ensures resource allocation towards CP goals.

In the Council Regulation for Structural Funds for the 1989 to 1993 MFF, additionality was mentioned as a general guideline for fund disbursement. The regulation stated that funds should have genuine additional economic impact and should lead to an increase of at least equivalent volume in regional or national structural aid from the Member State (EEC No 4253/88).

Building on this general guideline, the following guiding regulations included additionality as a fundamental criterion for access to the funds. The Council Regulations for the three budgetary periods between 2000 and 2020 explicitly required an agreement between the Commission and

the MS about the amount of public structural expenditures, which the MS was obliged to uphold during the programming period. The level of expenditure provided by the MS was supposed to be at least as high as in the previous programming period (Council Regulation (EC) No 1260/1999, Article 11, §2). Considerations about the additionality principle were also included in the plans, which MSs had to submit prior to the financing period. In these documents, MSs had to inform about the planned expenditure profile and indicate how the additionality principle was upheld for the expected financial support. This was achieved by submitting overall financing perspectives which detail the national and regional resources allocated to the objectives in the proposed plan. In the 2014-2020 period, the benchmark of structural expenditure could be the regional, instead of at the national level for MSs in which less developed regions cover more than 15% and less than 65% of the population.

Up until the latest MFF budgeting period, the Council Regulation prescribed three points of verification, to ensure adherence to the additionality principle: First, the amount of annual structural expenditure of a MS eligible for EU cohesion funding had to be examined ex-ante, which then provided the reference for required national spending in the upcoming funding period. MSs were asked to provide a description of the regional problems towards which the funds would prospectively be allocated to alleviate, and would have to lay out the main national or regional financial resources that would be employed to deal with these issues prior to the upcoming programming period.

Second, adherence to the agreed spending had to be verified within the first three years of the ongoing funding period. In case of developments unanticipated in the ex-ante examination, the Commission and MS could decide to revise the previous agreement on structural expenditure.

Lastly, an ex-post verification was required. In the 2000-2006 period, this had to be provided before the last year of the programming period (Regulation (EC) No 1260/1999, Article 11, §3c). For the subsequent period from 2007-2013 this evaluation had to be three (for the 2007-2013 period (Regulation (EC) No 1083/2006, Article 15, §4)) or two (for the 2014-2020 period (Regulation (EU) No 1303/2013, Article 95, §5)) years after the end of the programming period.

In addition to these three points, MSs were required to notify the Commission if circumstances arose which might render them unable to adhere to the agreed level of expenditure.

In contrast to the preceding MFF periods, in the current 2021-2027 period, the additionality principle is no longer mentioned (see Regulation (EC) No 2021/1060). The three verification steps previously required are therefore no longer explicitly present in the legal framework governing the CP funding.

The more general economic concept related to additionality is the so-called “crowding-in” effect, which refers to the process wherein EU funds supplement and catalyse national government spending, effectively enhancing the overall financial resources available for development in a given region. In such cases, EU funds incentivize national governments to increase their investments in regions and areas aligned with the EU's CP objectives. Consequently, part of the positive growth effects can be attributed to the additional spending the EU funds attracted.

Conversely, the phenomenon of “crowding-out” occurs when the inflow of EU funds leads to a reduction in national government spending in the same regions. MSs might assess that EU funds can adequately address regional development needs without domestic financial commitments, which in turn are freed up for alternative projects which might not serve the declared goal of CP. Thus, understanding the potential crowding-out effects is crucial for assessing the true extent of EU CP's impact on regional development.

While crowding-in and crowding-out refer to the total level effects of CP on MSs' own spending, intertemporal, intersectoral and interregional effects describe potential mechanisms that drive potential substitution effects away from domestic governments' spending in certain periods, areas and regions. In essence, if crowding-out takes place, governments might shift the fiscal resources that they perceive to be freed up towards uses at later periods, other purposes in the same region, or in other regions altogether. Likewise, should there be crowding-in, additional spending in the recipient regions can come at the expense of spending in the future, other regions or other sectors in the same region.

2.3.3 Methodology and data

The empirical analysis in this chapter is based on a well-established regression discontinuity design. It leverages the rule according to which funds in the ERDF and the ESF are allocated: Regions with GDP per capita below the threshold of 75% of the European average are eligible for the vast majority of the payments from the aforementioned funds. This setting allows us to analyse whether there is a causal relationship between the inflows of the EU money from ERDF and ESF funds and per capita public investment spending from the MSs in the same regions. There are two main assumptions that need to hold: The continuity assumption mandates that in absence of the allocation of EU funds according to the rule, regions above and below the 75% threshold would have developed similarly in their public investments, that is there is no secondary confounding treatment taking place that makes regions above and below the threshold have different public spending paths. The main effort to make this a plausible assumption, is to study only those regions that fall within a certain bandwidth around the threshold, as to not compare regions of vastly differential sizes in terms of GDP per capita. The trade-off in this choice is the following: By choosing smaller bandwidths, the plausibility of the assumption holding improves, however at the cost of statistical power and external validity as the number of regions falling within the bandwidth decreases. We choose a moderate threshold of 40 percentage point following Lang et al. (2022), meaning our baseline estimation includes regions between 35% and 115% of EU average regional GDP per capita share.¹⁰⁶

The second assumption pertains to regions ability to manipulate their eligibility status, which, if possible, would threaten the quasi-random nature of the allocation rule. The prior literature has shown extensively that the assumption of no manipulation holds, which is also conceptually very plausible. Regions would not only have to be able to manipulate a complex economic aggregate as GDP per capita precisely, they would also have to accurately predict average GDP per capita across the MSs.

We utilize three main data types – all at the level of the NUTS-2 regions across MSs - to employ this Regression Discontinuity Design (RDD). First, we obtained the original regional GDP per capita data from Lang et al. (2022) which informed the decision on a region's eligibility status at the time of the decisions. Second, we collected data published by the EC on the disbursement of EU money in the ERDF and ESF funds. Third, we use GFCF broken down by sector according to the Statistical

¹⁰⁶ In the Annex we provide robustness checks for all specifications with more narrow bandwidths as well as for the global sample.

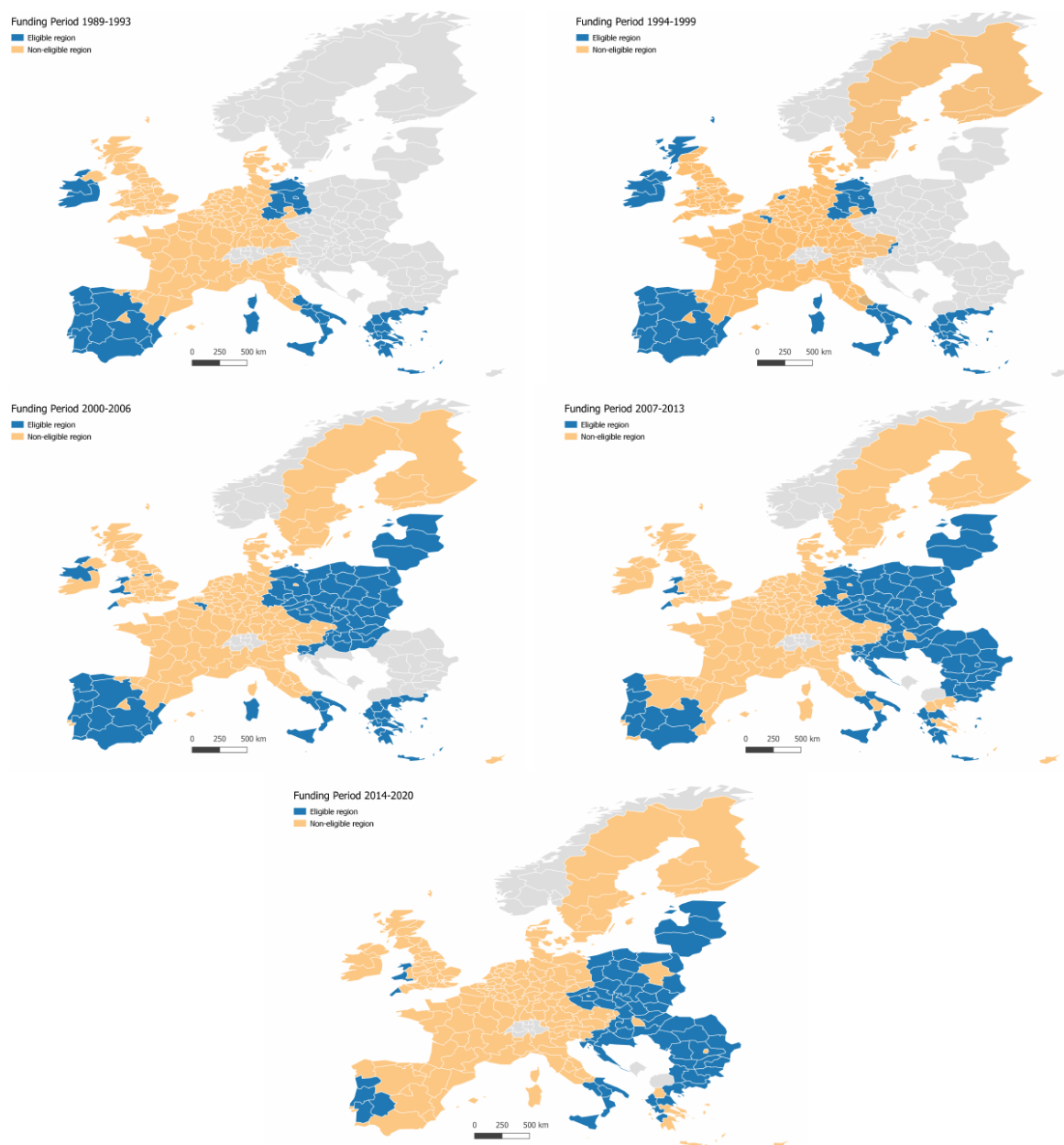
Classification of Economic Activities in the European Community (NACE) to measure investment spending. Below we describe each data type and its application in more detail:

2.3.3.1 Historic regional GDP and Cohesion Policy objective 1 eligibility

The empirical design, as described above, relies on comparing eligible and non-eligible regions. As such it is vital to use the information on regional GDP per capita that was at hand at the time the decision on regions eligibility was actually made. Utilizing more recent and revised data series on regional GDP per capita would lead to a faulty mapping of the eligibility status and bias the results.¹⁰⁷

In Figure 2.3.2 below we map eligible and non-eligible regions over the 5 different funding periods, which make up the time period of our sample. There is some variation in the eligibility status over time. In particular with the gradual Eastern expansion of the EU, formerly eligible regions drop their eligibility status.

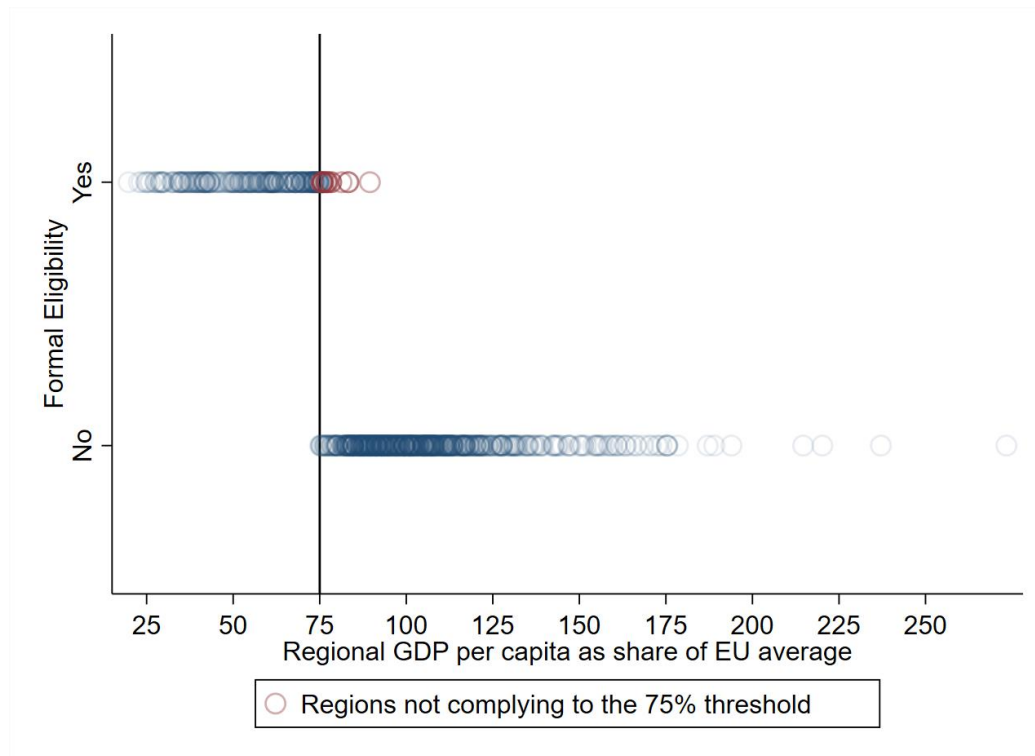
¹⁰⁷ Note that this would even be the case if no observations crossed the threshold comparing the recent to the historic data, as we employ a triangular kernel weighting that assigns larger weights to observations closer to the threshold.

Figure 2.3.2: Eligibility status by funding period

Notes: The maps show the eligible (blue) and non-eligible (yellow) regions over the five funding periods from 1989 to 2020. Grey regions belong to countries that are not EU-Members at the time.

Next up, in Figure 2.3.3 we plot for every region and funding period how the formal eligibility matches with the historic GDP per capita data. It is apparent that a regions eligibility status corresponds almost perfectly with its GDP per capita as a share of the EU average, as the allocation rule prescribes. There are 10 regions very close to the threshold that do not comply with the rule, where extraordinary reasons superseded the rule. The specific reason for each of the exceptions is detailed in Table A.2 of Lang et al. (2022), commonly the reason is either remoteness of the region or high unemployment levels while being close to the 75% threshold.

Figure 2.3.3: Compliance with the 75% threshold

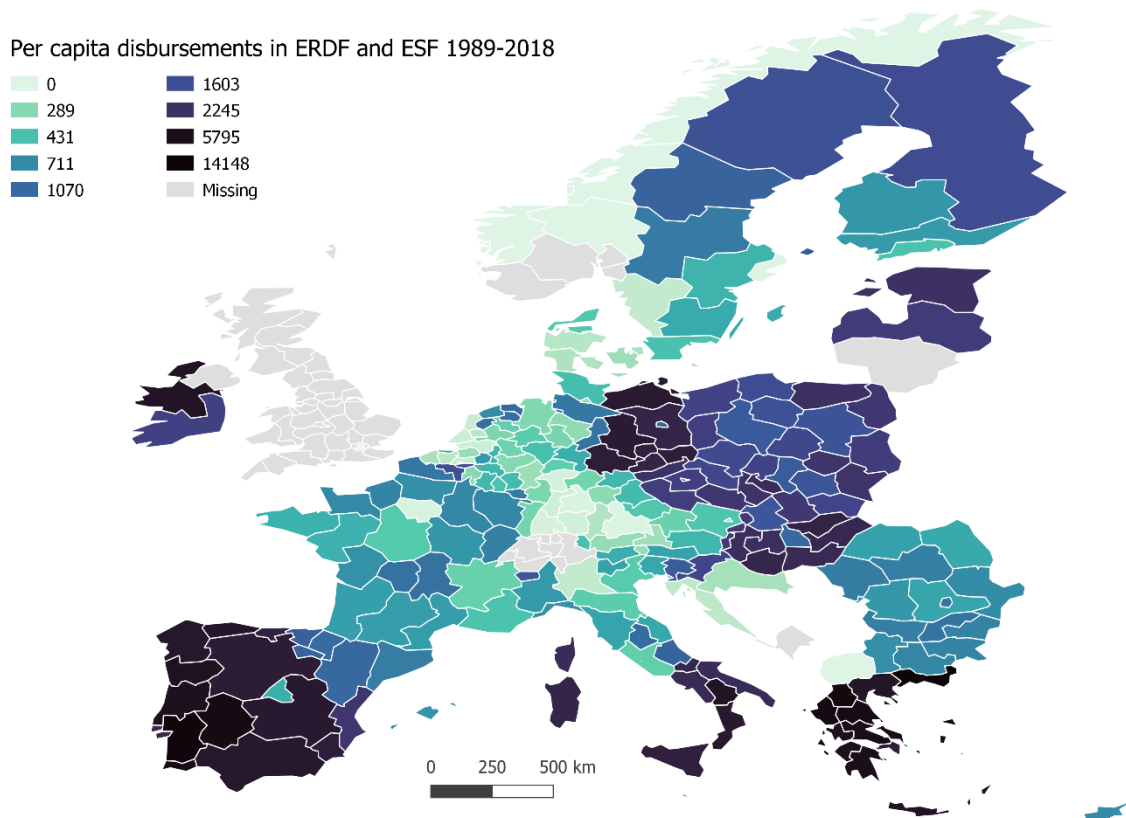


Notes: The figure plots for every region and funding period pair the formal eligibility status against the regional GDP per capita as a share of the EU average at the time of the eligibility decision. We observe almost perfect compliance with the few outliers being marked in red.

2.3.3.2 Cohesion Policy fund disbursement

The second set of data we employ is published by the EC and details the yearly funding disbursements in the ERDF, CF, EAFRD/EAGGF and ESF broken down by NUTS-2 regions up until the year 2018. The dataset contains two main variables, namely the annual sum of EU payments and modelled annual expenditure which looks to capture the timing of real expenditures through a model. As the main outcome we use the modelled real expenditures, but utilize the annual sum of EU payments in robustness checks. As our analysis focusses on the ERDF and the ESF due to our empirical strategy, we sum up the modelled expenditures in these funds. Figure 2.3.3 below maps the resulting yearly per capita spending over the period from 1989 to 2018. While there are stark differences in the dispersed amounts, with spending being particularly large in Southern and Eastern Europe, these funds make up a substantial amount of public investment. An average region receives 70€ per capita which on average amounts to roughly 7.5% of public investments.

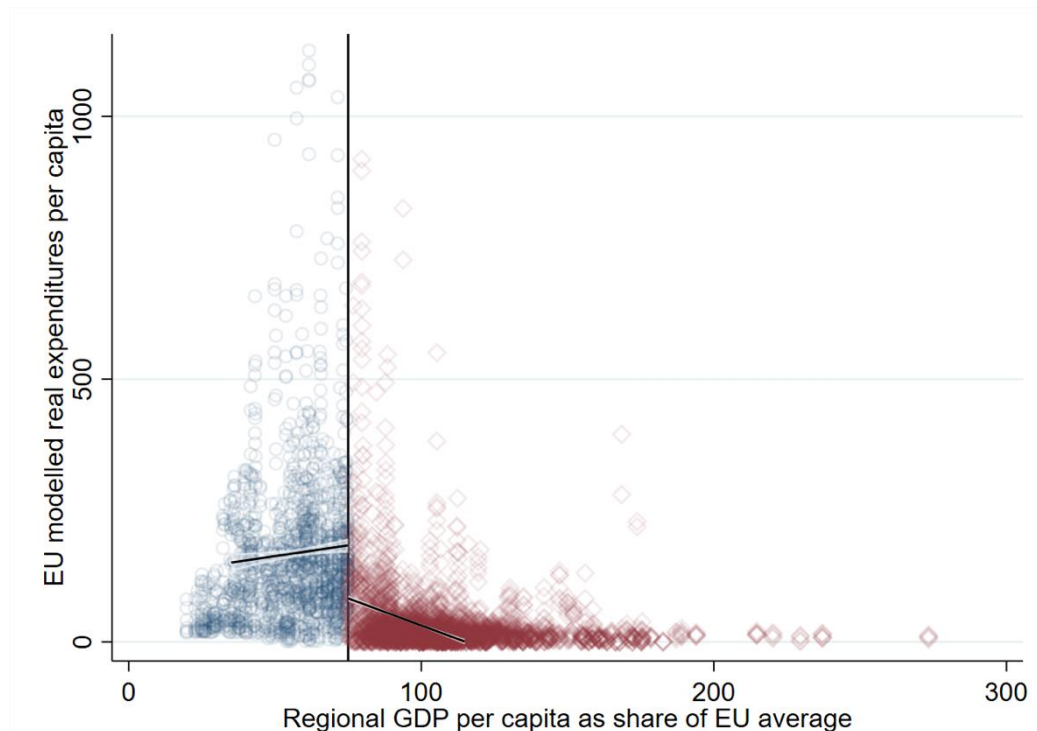
Using this data on actual fund disbursements instead of the formal eligibility status in our empirical strategy has two main advantages. First, as visible in Figure 2.3.4, disbursements vary even across eligible regions drastically, and as such utilizing the actually disbursed amounts in the regions will improve the precision of the estimated effects greatly. Second, it allows us to express effects in a euro for euro scale: How much does public investment per capita change with every per capita euro inflow of EU money.

Figure 2.3.4: Per capita regional dispersion of EU cohesion funds

Notes: The map plots the per capita amount of funds dispersed from the ERDF and ESF fund received by NUTS-2 regions between 1989 and 2018, expressed in yearly current EUR prices. Darker colours indicate larger funding amounts received.

Figure 2.3.4 above also reveals that not only eligible regions, but also non-eligible regions receive funding from the ERDF and ESF, albeit significantly less. This is consistent with the allocation, which requires the majority, but not all of the funds going to the regions eligible for objective 1 funding. Given that our empirical strategy relies on comparing regions above and below the objective 1 eligibility threshold, we need to verify that these regions indeed receive significantly differential amounts of funds. In Figure 2.3.5 we therefore plot the yearly per capita real expenditures of ERDF and ESF in relation to the 75% allocation threshold. The figure also contains local linear fits of the data to the left and to the right of the threshold within our baseline bandwidth, which reveal the expected discrete jump in per capita EU expenditures at the threshold.

Figure 2.3.5: EU per capita real expenditures in relation to the allocation threshold



Notes: The figure plots the modelled yearly EU per capita real expenditures in the ERDF and ESF for all NUTS-2 regions in the sample in relation to their region GDP per capita as a share of the EU average. The black vertical line marks the 75% threshold. The regression lines to the left and right of the threshold show the local linear fits with 95% confidence intervals within the baseline bandwidth.

Combining the data on the historic regional GDP per capita as a share of the EU average, the formal eligibility status of regions, and the per capita amounts of yearly EU expenditures from ERDF and ESF allows us to run three distinct versions of the RDD. Due to the advantages mentioned above, we utilize EU expenditure amounts in our baseline specification. To this end, we run a so called ‘fuzzy’ RDD, where we use the modelled EU expenditure amounts in per capita terms as the treatment variable. To verify that our results are robust to alternative specifications and data, we adopt the fuzzy RDD to use the formal eligibility status as an alternative treatment.¹⁰⁸ Furthermore, we estimate a sharp RDD where we exclude the non-complying regions above the 75% threshold and estimate the local average treatment effect of crossing that threshold directly.

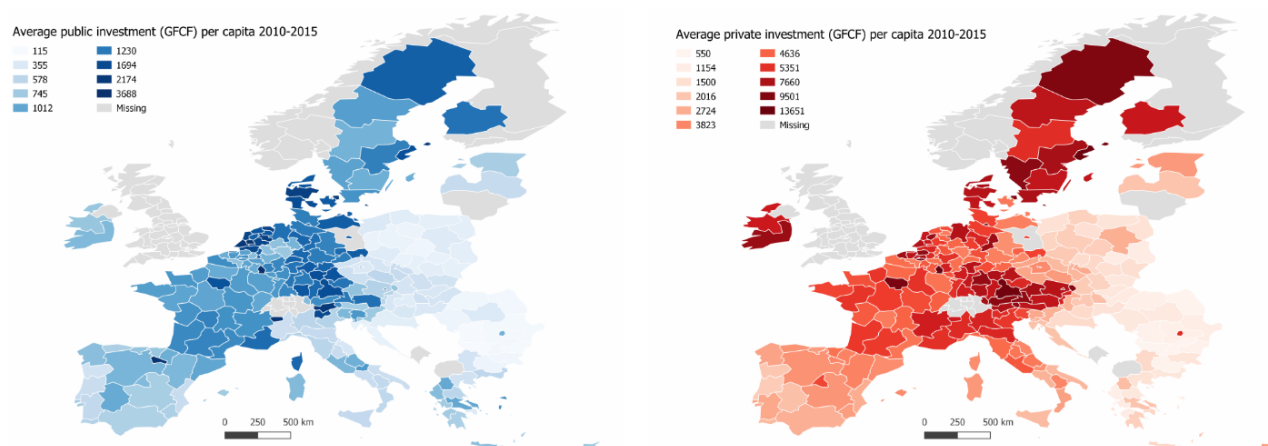
¹⁰⁸ The ‘fuzzyness’ of this RDD refers to the fact that regions above the threshold also receive partial funding (or in the case where we use formal eligibility as the instrument, that some regions above the threshold are eligible due to exceptions as shown in Figure 2.3.2), such that there is no sharp cut in the treatment across the allocation threshold. The design accounts for this by running a first-stage where the treatment is instrumented by a dummy variable that identifies observations above the eligibility threshold. In Figure 2.3.10 of the Annex we show for bandwidths larger than 20 that this first-stage regression yields large, precise estimates, speaking for the validity of the instrument.

2.3.3.3 Member States' public investment and current spending

Finally, we use data on yearly public investment spending at the level of NUTS-2 regions. To this end, we make use of the Annual Regional Database of the European Commission (ARDECO), which is a database maintained by the Joint Research Centre in collaboration with the Directorate General for Regional and Urban Policy. It contains information at the required level on population, employment, labour cost, domestic product and capital formation. We extract GFCF which is broken down by NACE sectors and expressed at constant 2015 Euro values. The NACE codes allow us to identify the agricultural sector (NACE code A), the industrial sector (NACE code B-E), the construction sector (NACE code F), the service sector (NACE code G-J), the financial sector (NACE code K-N), and most importantly the public sector (NACE code O-U).¹⁰⁹ GFCF is defined by the OECD as “the acquisition of produced assets (including purchases of second-hand assets), including the production of such assets by producers for their own use, minus disposals”.¹¹⁰ GFCF does not include purchases of land or natural resources, as these do not qualify as produced assets under this definition. Additionally, we obtain population numbers on the level of regions from the same database, in order to transform our variables into per capita terms.

The average public investment per capita across all years and regions in our sample is 959 euros, which makes up on average around 17% of all investments in a region. Figure 2.3.6 below maps public and private sector per capita investments as captured by GFCF averaged over the years 2010 to 2015.

Figure 2.3.6: Average regional per capita investments in private and public sector 2010-2015



Notes: The figure plots the average values of regional GFCF over the years 2010 to 2015, in the left panel for the public sector (NACE codes O-U) and in the right panel for the private sector (NACE codes A-N). Darker values represent larger amounts, grey coloration indicates missing values.

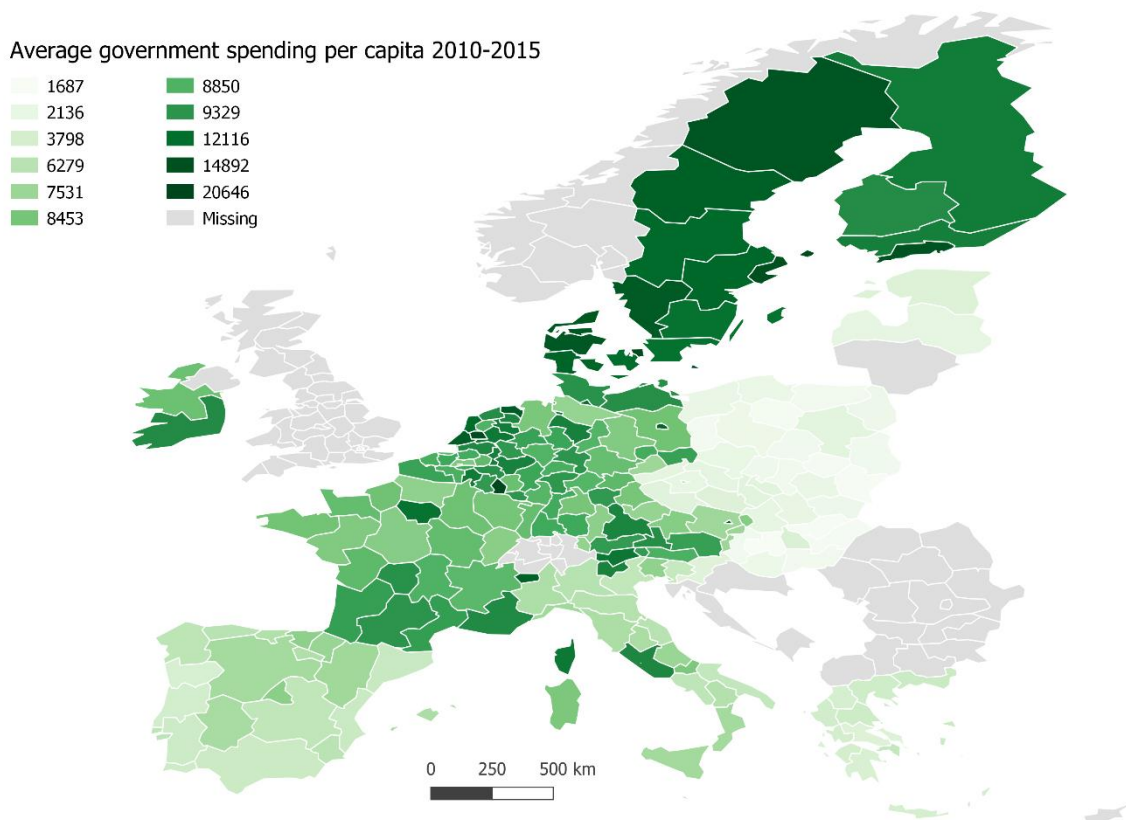
¹⁰⁹ When we use the private sector as an aggregate we group together NACE codes A-N.

¹¹⁰ From <https://data.oecd.org/gdp/investment-gfcf.htm>, accessed: 20.11.2023.

The maps reveal stark differences in average per capita investment levels across and within MSs. The general patterns are lower investments in Eastern and Southern Europe, and higher investments per capita in regions hosting the capital cities. In our empirical analyses we utilize the year-on-year change rate in per capita investments.

To be able to capture the full picture of government spending activities, we complement the data described above with a measure that approximates current government spending at the NUTS-2 region level following Gabriel et al. (2022). The measure is comprised of the sum of Gross Value Added (GVA), which itself is made up from compensation to employees including social contributions, consumption of fixed capital, and taxes minus subsidies on production, and intermediate consumption of the public sector¹¹¹. Gabriel et al. (2022) argue that the measure is a valid proxy for current government spending, because changes in the public sector GVA can mainly be attributed to government activities. Accordingly, they show that this proxy and government spending are found to be almost perfectly correlated. Following the authors, we construct the measure using data on GVA from ARDECO and data on intermediate consumption constructed from input-output data acquired from the PBL EUREGIO database. Figure 2.3.7 below visualizes the average regional per capita current spending by EU MS governments from 2010-2015.

Figure 2.3.7: Average regional per capita current government spending 2010-2015



¹¹¹ The six sub-sectors that make up the public sector are: “Public administration and defense”, “Education”, “Human health and social work”, “Arts, entertainment and recreation”, “Other service activities,” and “Activities of household and extra-territorial organizations and bodies”.

Notes: The figure plots the average values of regional per capita current government spending over the years 2010 to 2015. Darker values represent larger amounts, grey coloration indicates missing values.

2.3.4 Results

2.3.4.1 Baseline Results

We start by presenting our baseline findings. Columns 2 and 3 of Table 2.3.1 collect the results from the second-stage of the fuzzy RDD, where the dependent variable is the year-on-year change in per capita public investments.

We find a negative and statistically precisely estimated effect of EU cohesion funds on public investments by the MSs. The magnitude of the effect depends on assumptions of how much of the cohesion funds are translated into public investments, since the data on national public investments already includes investments financed from cohesion resources. For this reason, we identify two bounds. At the lower bound, we assume that all of cohesion funds are passed on to become public investments and, thus, we subtract ERDF and ESF expenditures from public investments. The estimate of column (3) suggests a crowd-out parameter of 45 cents per euro of CP funding. The upper bound estimate, which assumes that the pass-through is null, is shown in column (2) and it suggests an estimated crowd-out of 17 cents per euro of cohesion funds. We find the full pass-through assumption to be more realistic, and study the mechanisms behind this effect in more detail the next sub-sections. However, it is useful to show that, even under the very conservative assumption that cohesion funds somehow do not translate to public investments at all, our estimate is still significantly smaller than zero and is suggestive of a crowd-out effect.

Table 2.3.1: Per capita EU funds and year-on-year changes in investments

VARIABLES	(1) All sectors	(2) Public sector	(3) Public sector with pass-through	(4) Current government spending	(5) Private sector
Cohesion funds per capita	1.5848*** (0.0607)	-0.1656*** (0.0146)	-0.4482*** (0.0178)	1.5636*** (0.1207)	1.7503*** (0.0688)
Robust 95% CI	[1.466 ; 1.704]	[-0.194 ; -0.137]	[-0.483 ; -0.413]	[1.327 ; 1.8]	[1.616 ; 1.885]
Kernel Type	Triangular	Triangular	Triangular	Triangular	Triangular
BW above/below	40/40	40/40	40/40	40/40	40/40
N above/below	2667/1363	2667/1363	2667/1363	2641/1234	2667/1363

Notes: The table presents the second-stage results from the baseline fuzzy RDD specification, where the outcomes are year-on-year changes in per capita investments in (1) all sectors, (2) the public sector, (3) the public sector subtracting ERDF and ESF funding, and (5) the private sectors. The outcome in (4) are year-on-year changes in per capita current government spending. Observations are at the level of NUTS-2 regions and years, and treatment is given by yearly regional per capita expenditures from the ERDF and ESF. Estimations include country and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

2.3.4.2 Substitution and relocation effects

We discuss two potential mechanisms behind the large crowding-out effect that we have measured for public sector investments: Substitution across types of government spending and spatial relocation of government investments.

The first plausible explanation is that the investment spending financed by EU funds frees up national money to be spent for more consumptive purposes. We investigate this explanation empirically in column (4) of Table 2.3.1. The column displays the second-stage results from the baseline regression utilizing the year-on-year change in current government spending as captured by the proxy we introduced in the data section. The positive coefficient of 1.56 suggests, that each additional euro of EU funds comes with a more than 1 euro increase in consumptive government spending. The size of this effect is larger than the crowding-out effect in public sector investments discussed above. It is plausible that this very large increase in current government expenses is at least partially financed by freed-up monetary resources from investment projects, which are covered by the EU funds.

A second potential mechanism driving our finding is a regional substitution effect. That is investments from the regions receiving EU funds get shifted to regions which do not. If this type of substitution takes place and those receiving regions are within the bandwidth of our analysis, the crowding-out effect gets exaggerated, because mechanically the control regions increase their spending by the amount the treatment regions loose out. Unfortunately, it is difficult to directly test how large this effect is. Doing so would require us to accurately predict how large spending was in the control regions in the absence of the policy, or be able to account for every euro earned (taxes and debt) and spent by the government on the region level. However, it is possible to calculate the upper bound of the relocation effect. Assuming the most extreme case, in which every euro that is crowded-out in the treatment regions gets instead spent in the control regions, the average treatment effect would have to be adjusted by one quarter, taking into account the relative sizes of the treatment group and the twice as large control group.¹¹² Thus, even the most conservative crowd-out effect of 17 cents per additional euro of cohesion would become 12 cents per euro, and so well different from a no crowd-out scenario of null effects.

2.3.4.3 Effects on the private sector

Next, we study the effects on private sector investments. As before, we use the fuzzy RDD approach and study year-on-year change in per capita investments. Column (5) of Table 2.3.1 suggests that EU funds substantially crowd-in private investments. Every euro spent by CP leads to additional 1.75 euros of investments by private sector agents. Table 2.3.3 below breaks down this effect into more granular sectors. Overall, we see positive effects across all sectors, other than the industrial sector where there is a crowding-out effect. The aggregate effect is driven by modest

¹¹² One caveat is, that the relative distance of the regions loosing and receiving the spending from crowd-in and -out to the 75% threshold needs to be considered, because of the weights imposed by the triangular kernel. As such the example presents a minor simplification, however there is no reason to believe that a relocation effect would systematically target regions in the control group that are farther away from the eligibility threshold.

crowd-in in the construction sector, and large crowding-in in services and the financial sector. We do not exactly know the reasons behind these differential effects but, in the short-term, they are a combination of direct demand effects for both inputs and outputs of these industries as well as potential crowd-out effects due to the reallocation of labour and capital from certain sectors to catering the investments funded by cohesion.

Overall, however, given the much larger underlying size of private than public investments, these positive private sector effects dominate the crowd-out effect on public investments. As shown in column (1) of Table 2.3.1, every euro of CP spending raises total public and private investments by about one and half euros.

Table 2.3.2: Per capita EU funds and year-on-year changes in private investments by sector

VARIABLES	(1) Construction sector	(2) Industrial sector	(3) Service sector	(4) Financial sector	(5) Agricultural sector
Cohesion funds per capita	0.1914*** (0.0103)	-0.5412*** (0.0222)	1.0000*** (0.0309)	1.0125*** (0.0385)	0.0877*** (0.0097)
Share in private investments	1.75	19.90	15.74	55.45	7.16
Robust 95% CI	[0.171 ; 0.212]	[-0.585 ; -0.498]	[0.939 ; 1.061]	[0.937 ; 1.088]	[0.069 ; 0.107]
Kernel Type	Triangular	Triangular	Triangular	Triangular	Triangular
BW above/below	40/40	40/40	40/40	40/40	40/40
N above/below	2667/1363	2667/1363	2667/1363	2667/1363	2667/1363

Notes: The table presents the second-stage results from the baseline fuzzy RDD specification, where the outcomes are year-on-year changes in per capita investments in (1) the construction sector (NACE F), (2) the industrial sector (NACE B-E), (3) the services sector (NACE G-J), (4) the financial sector (NACE K-N), and (5) the agricultural sector (NACE A). Observations are at the level of NUTS-2 regions and years, and treatment is given by yearly regional per capita expenditures from the ERDF and ESF. Estimations include country and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

2.3.4.4 Robustness Tests

Our main findings of crowding-out in the public sector and crowding-in in the private sector are robust across a number of specifications. We show the robustness of our results to: i) utilizing the alternative outcome of the annual sum of EU payments (see Annex, Table 2.3.4), ii) the alternative treatment of formal eligibility for funding (see Annex, Table 2.3.5), iii) the sharp RDD specification (see Annex, Table 2.3.6), iv) other choices of the bandwidth (see Annex, Figure 2.3.10), and v) employing region instead of country fixed effects (see Annex, Table 2.3.7).

2.3.4.5 Longer-Run Effects

An important question regarding the crowding-out and crowding-in effects that we have documented for the public and private sectors, respectively, pertains to the persistence of these effects. To study this question, we utilize a secondary research design based on the major eastward expansion of the EU in May 2004, which saw Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia joining the Union. In particular, we leverage the fact that the EU average regional GDP was lowered by the inclusion of these countries, which led

to a number of regions losing their eligibility status as cohesion regions. While these *phasing-out* regions received some transitory support, they missed out on receiving the majority of funding by losing their eligibility for objective 1 funding starting in the programming period of 2007-2013.

We first run DiD regressions and then show the dynamics of the effects in an event study framework. The control group comprises of regions, which remained eligible for cohesion funds between the 2000-2006 and the 2007-2013 programming periods, and the treatment group comprises either of all regions losing eligibility during the 2007-2013 period or only the sub-sample of the phasing-out regions. The upside of using the former treatment group is that we have a larger sample size which gives the estimates higher precision. The latter treatment group, on the other hand, relies on variation coming from the expansion of the EU and is, thereby, less likely to suffer from endogeneity concerns, such as a potential bias stemming from the fact that regions anticipate the timing of losing the eligibility status.

Table 2.3.3 below collects the results. In column (1) we study public investments assuming full pass-through, as discussed in Section 2.3.4.1 above. In both treatment groups, shown in the upper and lower panels of Table 2.3.3, we find a positive effect implying that regions respond to losing their eligibility status by increase their public investments. This result is in line with the crowding-out effects we documented before: National public investments increase when cohesion funds decrease, and national public investments decrease when cohesion funds increase. In column (2) we move to current government spending, where effects are negative, but are very imprecisely estimated. This loss of statistical power may be driven by the reduced sample size due to restricting the period to only two programming periods and only the few regions losing their cohesion status. As such, we cannot draw a clear conclusion for current government spending. We note, however, that the negative effect size is consistent with the effect of substitution from investments to current spending that we identified before. Finally, in column (3) we investigate the effects for private investments. For the larger sample of all dropout regions we find sizeable reductions in per capita investments when regions lose their eligibility, which complements the large crowding-in effect we documented for the inflow of EU funds. The reduction is suggestive of an intertemporal substitution, meaning that the private sector invests when complementarities from CP investments can be utilized, but thereby foregoing investments they would have made at later points.

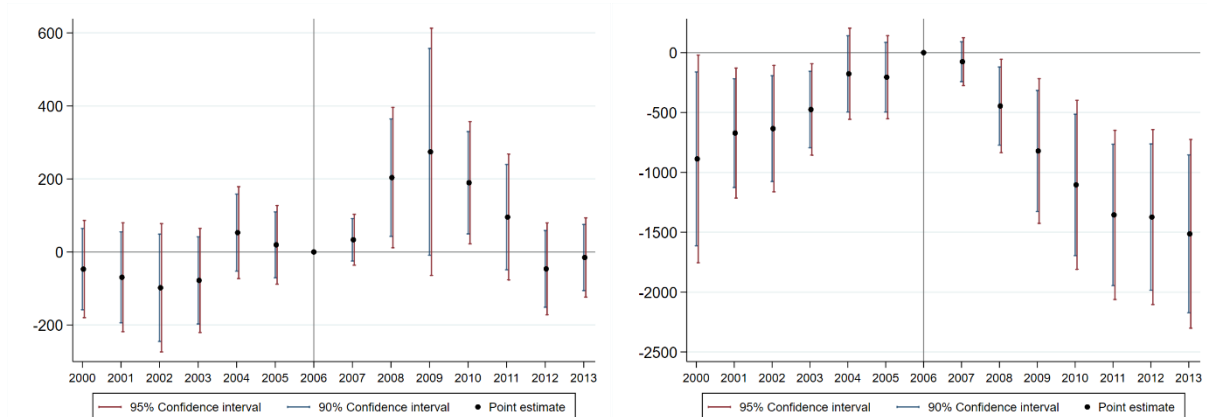
Table 2.3.3: Effects from funding loss after the EU East expansion

Panel A: All dropout regions			
VARIABLES	(1) Public sector with pass-through	(2) Current government spending	(3) Private sector
Dropout region # post	125.7989** (58.6527)	-97.9113 (119.3703)	-578.6429*** (218.1364)
Observations	1,024	1,024	1,024
R-squared	0.7417	0.9847	0.8140
Panel B: Only phasing-out			
Phase-out region # post	183.1661** (79.1677)	-132.9691 (175.2649)	-120.4366 (178.9983)
Observations	902	902	902
R-squared	0.7478	0.9854	0.8229

Notes: The table presents estimates from a DiD specification. We compare in the upper Panel A all regions dropping out of the formal eligibility status, and in the lower Panel B only the phasing-out regions who lost their funding status due to the EU East expansion, to the control group consisting of all those regions remaining eligible between the 2000-2006 and 2007-2013 MFF. The sample is restricted to only include regions eligible in the 2000-2006 period and to the years 2000 to 2013. The regression includes NUTS-2 region and year fixed effects. Standard errors are clustered at the NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

To study the dynamics of these average effect, we estimate event studies for changes in public and private investments around years of losing eligibility. In Figures 2.3.8 and 2.3.9 we calculate the yearly changes for the treatment group of all drop-out regions compared to our control group and the base year of 2006. For both public and private investments we see no significant change in the first year following the loss in the eligibility status, which is plausible given that substantial amounts of funding are typically still being spent in the year or two after the end of a programming period. After this initial period, we observe increases in public investments in the left panel of Figure 2.3.8, and decreases in private investments in the right panel of Figure 2.3.8 reverting the trend of increasing investments. These effects are consistent with the respective crowd-out and crowd-in effects on public and private investments we have identified in the baseline approach. In the longer run, we see that growth in public investments is temporary going back to the levels observed during eligibility after about 6 years. The decline in private sector investments, on the other hand, is permanent and stabilizing at a much lower level after about 5 years compared to the levels of investments observed during periods of eligibility.

Figure 2.3.8: Public (left) and private (right) investments around the time regions lose eligibility



Notes: The figure presents Event Studies on the annual change of per capita investments in the public (left sub-figure) and private (right sub-figure) sectors. The treatment group consists of all regions dropping their eligibility status going from the 2000-2006 MFF to the 2007-2013 MFF. The control group consists of regions that remain eligible during both budgeting periods. The regression includes NUTS-2 region and year fixed effects. 90% and 95% confidence intervals are displayed and standard errors are clustered at the NUTS-2 level.

This last piece of evidence is also inconsistent with the hypothesis that the crowding-in of private investments is largely driven by intertemporal substitution effects. That is because this hypothesis would imply the existence of short-run effects rather than effects that are persistent over time. A similar hypothesis but related to cross-regional substitution effects is discussed in the next sub-section.

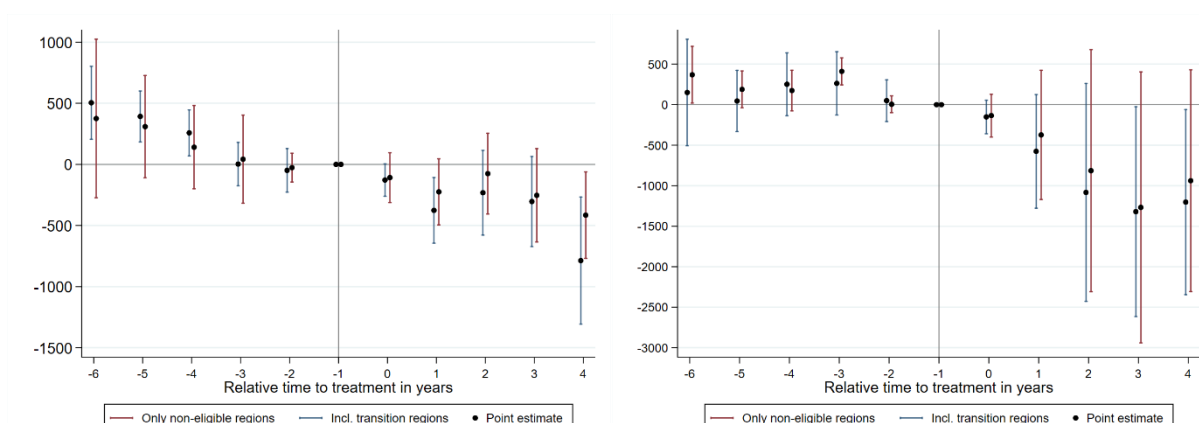
2.3.4.6 Regional spill-overs

An important remaining question is whether the large private sector crowd-in result is driven by cross-regional substitution effects that is cohesion-stimulated investments coming at the expense of fewer investments in other regions rather than being genuinely new investments.

To test this hypothesis, we use the DiD methodology of Section 2.3.4.5 and study the dynamics of investments in non-eligible regions in places where some regions lose their eligibility status going from one MFF to the next. If the hypothesis of cross-regional substitution effects was true, we would expect that the non-eligible regions see a recovery in the level of their private investments after the cohesion regions lose their funding.

We implement this test by looking at non-eligible NUTS2 regions in countries where at least one NUTS2 region graduates from cohesion, and, more granularly, non-eligible NUTS2 regions in NUTS1 regions where another NUTS2 graduates from cohesion. Left and right sub-figures of Figure 2.3.9 shows the results for these two tests. They suggest that, if anything, there is a negative not a positive effect in non-eligible regions suggesting that the spill-overs might even be positive.

Figure 2.3.9: Private investments in non-eligible regions around the time regions lose eligibility



Notes: The figure presents Event Studies on the annual change of per capita investments in the private sectors. In the left subfigure, the treatment group consists of all non-eligible regions in countries where at least one region loses its eligibility status going from one MFF to the next. In the right subfigure, the treatment group are non-eligible regions that are within the same Nuts-1 region of at least one Nuts-2 region dropping its eligibility status going from one MFF to the next. The control group consists of non-eligible regions in countries and Nuts-1 regions respectively where no region drops its eligibility status. The estimation accounts for staggered treatment timing (de Chaisemartin & D’Haultfoeuille, 2024). 90% and 95% confidence intervals are displayed and standard errors are clustered at the NUTS-2 level.

2.3.5 Conclusions

Our analysis provides strong evidence for the view that, in the context of CP, the additionality principle has been being violated systematically. That is, we provide quasi-experimental evidence from across the EU regions and covering several programming periods showing that cohesion funds partly replace public investments by the MSs. The magnitude of this effect is large, in the order of up to about 45 cents per one euro of cohesion funding, and it is consistent with anecdotal evidence and existing evidence from individual MSs. Our analysis of the mechanisms behind this result suggests that MSs likely use the freed-up money from decreased investment spending towards current government spending.

Although this large crowd-out effect that we document speaks for the potential existence of a policy space where CP can be improved so as to avoid crowding-out national investments, it is not sufficient to suggest that the additionality principle should be restored. First, as reflected in the decision to drop the additionality principle, such a rule is likely not plausible to implement so as to enforce the case of no crowd-out; a phenomenon which we claim to be a general economic one rather than a narrower legal one. Second, the relation between national public investments and private investments is not clear; if there is a large degree of substitution as claimed by parts of the economic literature, then the additionality principle may even become counter-productive, such that additionality cannot be a goal in itself.

Furthermore, and more importantly, our analysis suggests that the crowding-out of national public investments is not the elephant in the room. We show that CP crowds-in investments from the private sector and that this is the more important margin to consider. Given the large underlying share of private capital compared to public capital, the positive effect on private investments more

than cancels the negative effect on public investments, overall leading to a large crowding-in of total investments. This result is not surprising in the sense that the EC often incentivizes cooperative projects with the private sector, such as with cohesion instruments that co-finance public-private partnerships. Such participation of the private sector is further explicitly facilitated by the financing instruments of the European Investment Bank which are substantial in magnitude.

Our analysis on the longer run effects of cohesion shows that after regions graduate from being cohesion eligibility, private investments in these regions decline and do so in a sizeable and permanent fashion. This permanent decrease is inconsistent with the hypothesis that the contemporaneous crowd-in effect is driven by intertemporal shifts of investments, since that hypothesis implies that investments would restore to their original level after some time. Our evidence is also inconsistent with the hypothesis that private investments relocate from non-cohesion to cohesion regions in response to CP, if anything the evidence speaks in favour of positive regional spill-overs. The study of other mechanisms that lead to these effects are left to future work, such as related to regional absorptive capacities, as well as the implications of this evidence on what we know about the heterogenous growth effects of CP.

Overall, our results suggest that the debate over designing a growth-oriented CP should go beyond the question of additionality and take into account the private sector. In particular, such policy should make sure that investments under cohesion continue to create public capital that is complementary to private capital, and do so in a long-term vision. This may depend on the area of investments and their timing, among other factors. On the area, evidence suggests that current CP may be crowding-out tradable sectors like manufacturing, but crowding-in investments in industries like services, construction and even finance. More detailed analysis, possibly distinguishing between the types of cohesion investments, could try to identify the projects that lead to productivity-enhancing effects in the longer term. On timing, these crowding-in parameters may strongly depend on the business cycle given financial frictions in the private sector, however cohesion is not particularly designed to follow business cycles. Such a re-design would target resources to times when the economy needs to be stimulated, and it would have to take into account delays and absorption problems to make sure CP is not unsynchronized from the cycle.

2.3.6 References

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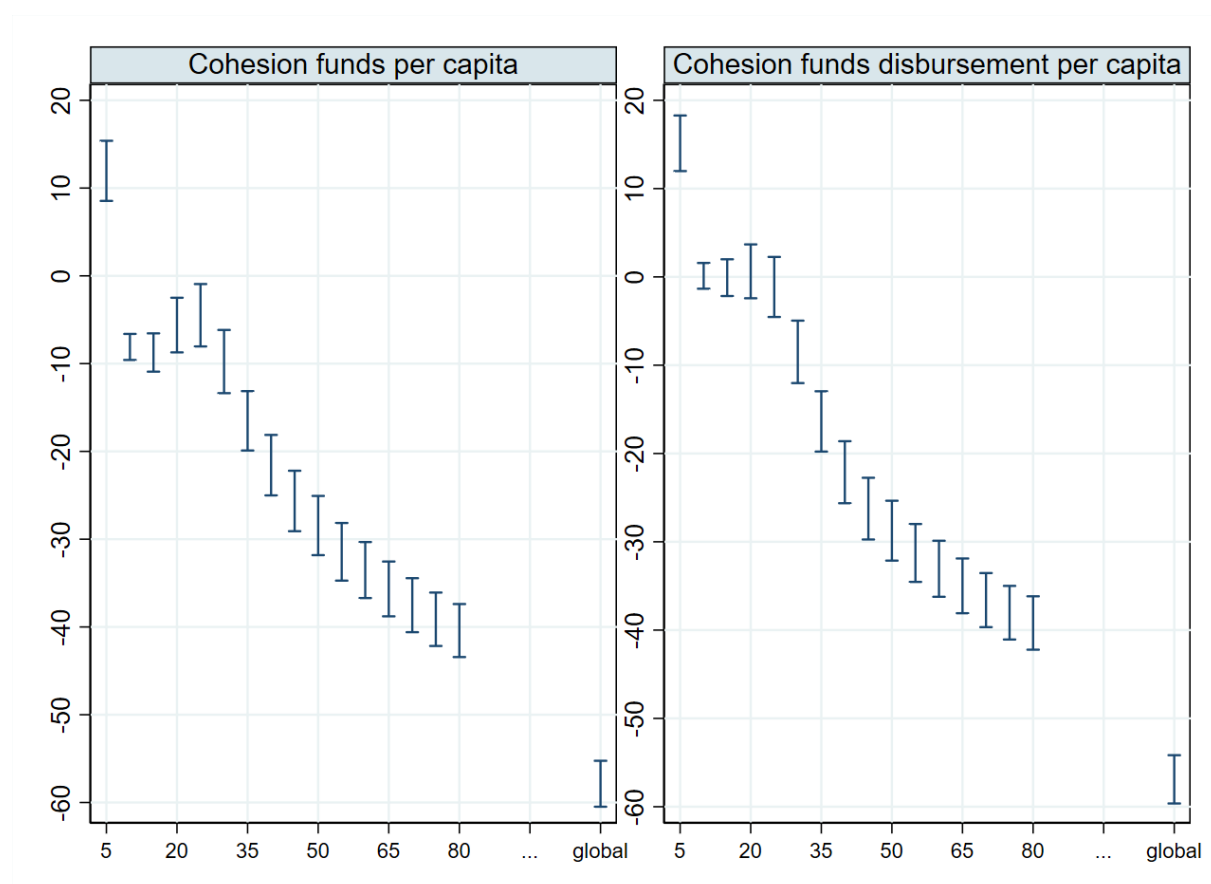
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2.3.7 Annex

Figure 2.3.10: First-stage estimates of the instrument on two outcomes over varying bandwidths



Notes: The figure displays the first-stage regression results of the baseline specification where regional GDP per capita as a share of the EU average is the running variable and the outcomes are, in the left panel the modelled real per capita expenditures of EU funds, and in the right panel the sum of per capita disbursements from the EU funds.

Table 2.3.4: Baseline with alternative outcome EU disbursements per capita

VARIABLES	(1) All sectors	(2) Public sector	(3) Public sector with pass-through	(4) Current government spending	(5) Private sector
Cohesion funds disbursement per capita	1.6107*** (0.0630)	-0.1689*** (0.0150)	-0.4555*** (0.0181)	1.5967*** (0.1269)	1.7796*** (0.0710)
Robust 95% CI	[1.487 ; 1.734]	[-0.198 ; -0.139]	[-0.491 ; -0.42]	[1.348 ; 1.845]	[1.64 ; 1.919]
Kernel Type	Triangular	Triangular	Triangular	Triangular	Triangular
BW above/below	40/40	40/40	40/40	40/40	40/40
N above/below	2667/1363	2667/1363	2667/1363	2641/1234	2667/1363

Notes: The table presents the second-stage results from the baseline fuzzy RDD specification, where the outcomes are year-on-year changes in per capita investments in (1) all sectors, (2) the public sector, (3) the public sector subtracting ERDF and ESF funding, and (5) the private sectors. The outcome in (4) are year-on-year changes in per capita current government spending. Observations are at the level of NUTS-2 regions and years, and treatment is given by yearly regional per capita disbursements from the ERDF and ESF. Estimations include country and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

Table 2.3.5: Baseline with alternative treatment formal eligibility status

VARIABLES	(1) All sectors	(2) Public sector	(3) Public sector with pass-through	(4) Current government spending	(5) Private sector
Formal eligibility	63.7193*** (2.8767)	-7.0829*** (0.6879)	-17.9719*** (0.6566)	60.5213*** (7.3837)	70.8022*** (3.0440)
Robust 95% CI	[58.081 ; 69.358]	[-8.431 ; -5.735]	[-19.259 ; -16.685]	[46.05 ; 74.993]	[64.836 ; 76.768]
Kernel Type	Triangular	Triangular	Triangular	Triangular	Triangular
BW above/below	40/40	40/40	40/40	40/40	40/40
N above/below	2667/1363	2667/1363	2667/1363	2641/1234	2667/1363

Notes: The table presents the second-stage results from the fuzzy RDD specification with the alternative treatment being the formal eligibility status. Outcomes are year-on-year changes in per capita investments in (1) all sectors, (2) the public sector, (3) the public sector subtracting ERDF and ESF funding, and (5) the private sectors. The outcome in (4) are year-on-year changes in per capita current government spending. Observations are at the level of NUTS-2 regions and years. Estimations include country and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

Table 2.3.6: Baseline with sharp RDD

VARIABLES	(1) All sectors	(2) Public sector	(3) Public sector with pass-through	(4) Current government spending	(5) Private sector
Above cutoff	-62.7597*** (2.7468)	1.8706*** (0.5511)	15.1767*** (0.6708)	-76.5124*** (3.1878)	-64.6303*** (2.3334)
Robust 95% CI	[-68.143 ; -57.376]	[0.79 ; 2.951]	[13.862 ; 16.491]	[-82.76 ; -70.264]	[-69.204 ; -60.057]
Kernel Type	Triangular	Triangular	Triangular	Triangular	Triangular
BW above/below	40/40	40/40	40/40	40/40	40/40
N above/below	2597/1363	2597/1363	2597/1363	2577/1234	2597/1363

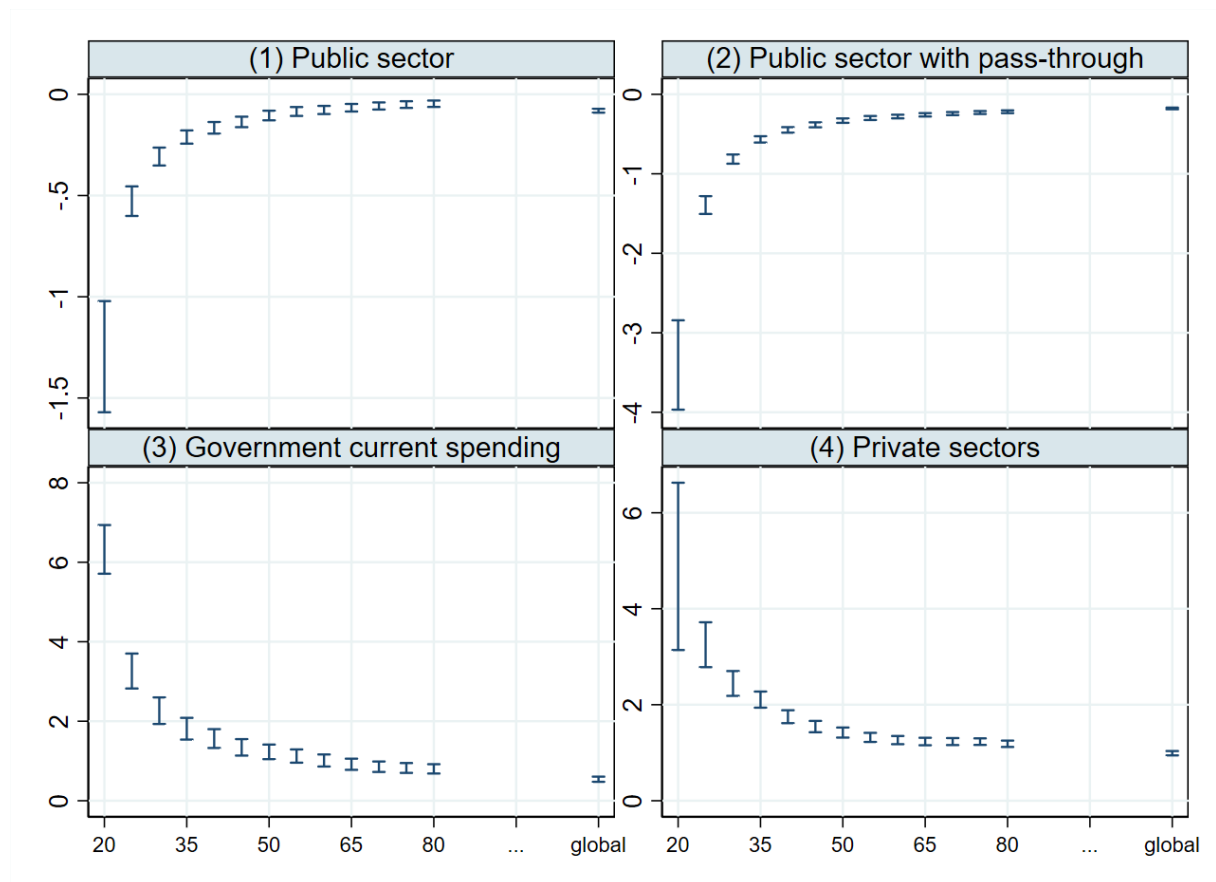
Notes: The table presents the results from the sharp RDD specification. The interpretation of the estimated coefficient is now the crossing of the eligibility threshold from below, which explains the reversal in sign of the coefficient. The running variable is regional GDP per capita as a share of the EU average and outcomes are year-on-year changes in per capita investments in (1) all sectors, (2) the public sector, (3) the public sector subtracting ERDF and ESF funding, and (5) the private sectors. The outcome in (4) are year-on-year changes in per capita current government spending. Observations are at the level of NUTS-2 regions and years. Estimations include country and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

Table 2.3.7: Baseline with region fixed effect

VARIABLES	(1) All sectors	(2) Public sector	(3) Public sector with pass-through	(4) Current government spending	(5) Private sector
Cohesion funds per capita	2.2339*** (0.0504)	-0.0651*** (0.0100)	-0.4583*** (0.0128)	1.8926*** (0.0909)	2.2990*** (0.0540)
Robust 95% CI	[2.135 ; 2.333]	[-0.085 ; -0.045]	[-0.483 ; -0.433]	[1.715 ; 2.071]	[2.193 ; 2.405]
Kernel Type	Triangular	Triangular	Triangular	Triangular	Triangular
BW above/below	40/40	40/40	40/40	40/40	40/40
N above/below	2667/1363	2667/1363	2667/1363	2641/1234	2667/1363

Notes: The table presents the second-stage results from the baseline fuzzy RDD specification, where the outcomes are year-on-year changes in per capita investments in (1) all sectors, (2) the public sector, (3) the public sector subtracting ERDF and ESF funding, and (5) the private sectors. The outcome in (4) are year-on-year changes in per capita current government spending. Observations are at the level of NUTS-2 regions and years, and treatment is given by yearly regional per capita expenditures from the ERDF and ESF. Estimations include region and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

Figure 2.3.11: Baseline over different bandwidths



Notes: The figure presents for bandwidth increments of 5 from 20 to 80 and for the global sample the second-stage coefficient and confidence interval from the baseline fuzzy RDD specification. Outcomes are year-on-year changes in per capita investments in (1) the public sector, (2) the public sector subtracting ERDF and ESF funding, and (4) the private sectors. The outcome in (3) are year-on-year changes in per capita current government spending. Observations are at the level of NUTS-2 regions and years, and treatment is given by yearly regional per capita expenditures from the ERDF and ESF. Estimations include country and year fixed effects. The presented estimates are linear bias-corrected with robust nonparametric standard errors clustered at NUTS-2 level. * (**) (***) indicates significance at the 10 (5) (1) percent level.

3 The Conditions for Success

3.1 Ugo Fratesi: Constraining and Enabling Factors of a Successful EU Regional Policy in Europe

Ugo Fratesi (Politecnico di Milano)

Abstract

Recent papers show that the impact of CP is not uniform in space but larger, smaller or insignificant depending on the regions. These outcomes mostly depend on the characteristics of each territory (conditioning factors). This paper reviews them and investigates, through descriptive statistical techniques, their presence in European regions.

European regions are then classified in terms of need on two dimensions: GDP per capita and GDP growth. Results show that most policy favourable conditioning factors are also factors of growth. As a consequence of that, the potential policy impact is often larger in those regions which are less in need of support.

In terms of policy consequence, CP should remain place-based and fully consider the regional specificities, as well the specificities of the various territories inside a region. However, since the conditioning factors for policy effectiveness are less present in regions more in need, accepting trade-offs will be required, and in particular one between growth and policy effectiveness on one hand and territorial cohesion on the other. Lagging regions will also require interventions creating framework conditions, and those territorial assets which they are missing.

3.1.1 Introduction and aims

European CP as we know it goes back to the reform prior to 1989-94 programming period, following the Single European Act in 1986. Its aim is to fulfil the objective of achieving a greater social, economic and territorial cohesion (EU Treaty, article 3). EU regional policy interventions are financed by the ESIFs and most funds are allocated to Regional Operational Programmes (Ops) within National Frameworks agreed with the EU Commission, while significant funds are also allocated to the CF (for countries <90% GDP pp PPS) and also to interregional cooperation or Community Initiatives.

In the more than three decades in which CP existed, it has undergone several reforms but none of them the size of that of 1989. However, each programming period has seen an update of the objectives and the modalities in which CP is expected to act on regional development and territorial cohesion. The main change has taken place with the 2014-2020 programming period, in which the place-based theories have been strongly implemented with the introduction of Smart Specialization Strategies (S3) as an ex-ante condition for the thematic objective one.

In 2021-2027, further evolutions took place, mostly outside CP itself but heavily affecting it. In particular, following the Covid-19 crisis, the EU established a Resilience and Recovery Facility (RRF) which aims at supporting reforms and investments in the EU MSs. This is a new and large investment policy which did not exist before, which is only marginally territorial, and which is expected to significantly impact growth in European countries and regions. Moreover, RRF is built on a simpler governance with respect to CP, which makes somebody question whether the CP governance should be simplified and made more similar to that of RRF.

Even in terms of assessment there has been an evolution from the first analyses, which looked at the aggregate impact of CP on regional growth and convergence. The results of these analyses were not homogenous and the debate between those supporting a large impact (Leonardi, 2006) and those supporting no impact (Boldrin & Canova, 2001) did not lead to a clear consensus. The reason is that CP is multi-faceted policy which includes a large number of objectives deployed differently in time and space, so that it would not only be difficult but also empirically wrong to assess its impact on just one aggregate indicator (Fratesi, 2016).

In the last years, the literature on the assessment of the CP effects has radically changed from one which tries to get aggregate results to one which investigates the so-called *conditioning factors*, which are those local or policy characteristics which can make impact larger or smaller (Crescenzi et al., 2017). The study of those aspects is very helpful for the policymaker because in this way quantitative assessment can be used to understand which policy interventions work better in which context, and so they can help designing better policy initiatives (Fratesi, 2020, 2024).

Several papers have been published in the last few years investigating the role of many possible context variables on the impact of CP. A brief summary of them is provided in the rest of the paper. However, the purpose of this paper goes beyond providing an updated review of this literature because it tries and investigate where those factors are present in the European regions and in this way to understand the potential of policy effectiveness in these regions.

The objective is therefore normative: to analyse where the prerequisites for effective policy interventions are present, with the aim of providing policy suggestions for future implementation of CP.

The rest of the paper is organized as follows: Section 3.1.2 reviews the existing evidence on the different impacts of EU regional policy in different regions. Section 3.1.3 provides a review of the conditioning factors which have been identified in the literature as determining the differentiated impacts of CP. Section 3.1.4 presents the conceptual framework of the empirical analysis, which is presented in Section 3.1.5 and which, through descriptive statistical techniques, assesses the presence of conditioning factors in European regions, in terms of average endowments and also in terms of characteristics of the individual regions. Section 3.1.6 concludes with ideas to be considered for the next programming period post-2027.

3.1.2 Some recent evidence on differential impacts of Cohesion Policy

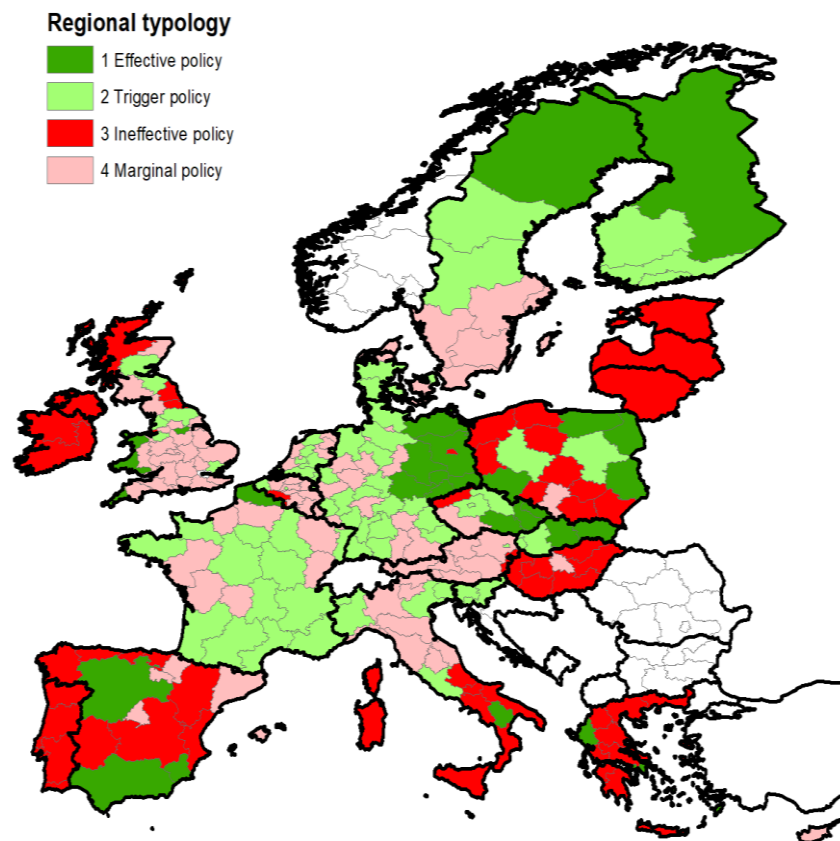
For many years, the literature on the impact of CP tried to detect its impact, without considering that this could have been different in different places (see, e.g. Boldrin and Canova, 2001). More recently, however, the idea of providing a single value for the impacts of CP was shown incorrect by several papers which, with different techniques, have analysed the differential impacts of CP on regions, leading to a consensus on the existence of this heterogeneity.

For example, Bourdin (2019) analysed the impact of CP on the regions of Eastern Europe to see if there are geographical effects using geographically weighted regressions at the NUTS 3 level. The findings show the existence of multipolar convergence processes by which for instance Eastern regions closer to the Western border seem to have benefited on average more than those further away.

Another similar result has been obtained in a radically different context by Bachtrögler et al. (2020). They analysed a subset of CP, the part based on the interventions of support to firms in the manufacturing sectors, so that the objective and the implementation is as similar as possible across regions and countries. The results show that the impact of CP support to firms is not homogeneous and regions exist in which it is high and significant while in other regions the impact is lower and even insignificant.

This idea has been further exploited by Di Caro & Fratesi (2022). In this paper, the data and the methodology are again different because exploited are the new and long-run time series of CP expenditure provided by the EC, and the Dynamic Mean Group modelling framework to calculate the region-specific effects of the policy in terms of long-run GDP growth. In this way, it was possible to identify four categories of regions based on impact and level of expenditure, because not all regions which received high levels of funding significantly benefited from CP, while other regions which only received little funding got significant results thanks to a trigger effect. The result is a map of European regions where four colours are present, one for regions where policy has been effective, one for regions where policy has been effective despite the low levels of funding (trigger effects), one in which the policy has been ineffective despite high levels of funding and finally one in which the effect is not significant but this comes along little policy support, so that the policy can be considered as marginal (Figure 3.1.1).

Figure 3.1.1: Mapping the policy impact and the level of assistance in the EU regions



Data: Di Caro & Fratesi (2022).

3.1.3 Conditioning factors in the literature

The literature on the conditioning factors of CP impact is very wide and includes papers analysing several different aspects. This section does not want to present a comprehensive review of the wide literature and all its results, but to provide a synthesis of the main aspects considered, in order to provide a reference to the next sections in which a new analysis is provided of the relationship between the presence of conditioning factors and the performance of regions.¹¹³

One of these aspects is the settlement structure of regions because it is relevant to understand whether regions are urban or rural. The first ones can be better able to exploit agglomeration economies while the others need to rely on different development mechanisms or can use some of the urban assets present in other regions through a process of borrowing size (Camagni, 2016; Meijers et al., 2016). Within such a context Gagliardi & Percoco (2017) found that in rural regions CP in Italy had different impacts depending on the location of these regions close or far from urban areas.

The single aspect which has more often been mentioned in conditioning factors studies is human capital. Indeed, human capital can be a catalyst of the most relevant development processes at the regional level because it is complementary to entrepreneurial initiatives and innovation activities. Within the context of CP, this was first demonstrated by Becker et al. (2013) who used a regression discontinuity design with systematically varying heterogeneous treatment effects to show that only those regions with good enough human capital and institutions (i.e., jointly, absorptive capacity) are able to transform CP investments into actual regional growth.

The role of institutions is one which has been further investigated in a large number of papers, starting from the contribution by Rodríguez-Pose & Garcilazo (2015) who showed that the impact of CP on regional growth is larger in those regions whose levels of quality of institutions measured through the EQI Gothenburg survey (Charron et al., 2014) is larger. More recently Bachtrögler et al. (2024) showed that the quality of local institutions is again a factor which can also impact the effectiveness of CP support to firms, based on the fact that a better level of institutions allows the region to select better projects, to better implement them, and to learn more from past experiences (Fratesi, 2024). The relevant institutional characteristics go beyond pure administrative capacity but also involve other regional and national characteristics, as evidenced in Ederveen et al. (2006) who first showed that, at the country level, EU funding enhanced growth in those countries which had better institutional quality and were more open.

Institutions and human capital are just some of the aspects which collectively make those capitals representing the territorial development of places. These are now commonly identified as territorial capital which Camagni (2009) systematised and classified along the two dimensions of rivalry¹¹⁴ and materiality¹¹⁵. For example, infrastructure is material and mostly public/unrival, human capital is immaterial and private/rival, but 9 situations are possible since assets exist with

¹¹³ For a more extensive review, the reader can refer to Fratesi (2020).

¹¹⁴ Rival goods are those for which the consumption of somebody is detrimental to the consumption of somebody else.

¹¹⁵ Material goods are those directly related to concrete things.

intermediate levels of rivalry and materiality (think about agglomeration economies). The theory of territorial capital is important here because it shows that regional assets, which need time to be accumulated exactly as a capital, also need to work jointly and in synergy, so that balanced territorial capital is better than at configuration in which the region is especially strong but only in certain aspects.

The conceptualization of territorial capital has been exploited by looking at the complementarity between policy interventions and the territorial capital of regions, showing that those disbursements by CP which are complementary to the existing territorial capital assets are more effective than those investing in aspect which are already strong, most likely due to the existence of decreasing returns (Fratesi & Perucca, 2014, 2019). These results provide an extended understanding of those by Sotiriou & Tsiapa (2015) who showed that CP in Greece was more effective in places which had endowments related to the implemented expenditure, and so more advanced regions had a larger impact.

The level of impact may also depend on the intensity of policy support. First Becker et al. (2013) showed that in some regions the left levels of expenditure might be larger than those required to be effective. Then, Cerqua & Pellegrini (2018) showed that regional economic growth depends on the intensity of CP support but this effect is concave and presents a maximum value, so that again decreasing returns exist and by re-allocating some funding from the highest funded to other lagging regions, the overall efficiency would increase.

The alignment of the policy with the local structure and the selection of the right axis has also been investigated in another series of papers. First, Crescenzi (2009) showed that there was a low alignment of structural fund expenditure with socioeconomic structure and that the concentration of disadvantage was larger than that of funding. More recently, Di Cataldo & Monastiriotis (2019) analysed the impact of CP expenditure on British regions and found that, while in general there was a positive impact, this depended on the local conditions and in particular whether the investments targeted the specific areas of regional need.

The industrial structure also matters. Already Cappelen et al. (2003) showed that, although CP in general seemed to be effective, it was more effective in strong regions, and this also because growth in lagging regions was hampered by a specialization in traditional sectors (agriculture) and low innovative activities. More recently, Percoco (2017) concentrated his analysis on the service sector and found that in Italian NUTS3 regions a larger service sector tended to attract more funding and, in this way, be detrimental to growth, while regions with lower levels of service activities could present better growth opportunities and targets for CP investments.

3.1.4 Conceptual scheme

This paper wants to reflect on the relationship between the need for CP assistance and the capability of regions to take advantage of its investments. The first step is hence to measure the regional needs which can be done according to two indicators. The first one is the level of GDP per capita in purchasing power parity, the traditional indicator which the EU used to classify regions

within the various objectives in all programming periods although with thresholds which have recently evolved.¹¹⁶

The second indicator of need is one which has recently come to pre-eminence also thanks to the recent focus on regions which cannot grow and are hence stuck in a middle income trap (Diemer et al., 2022). The growth rate of regions is hence relevant because regions whose levels are relatively high can be in a negative trend with all the negative consequences in terms of declining economy and rising unemployment.¹¹⁷

Four situations are as possible as depicted in Table 3.1.1. For two situations the order is simple: the regions of quadrant 1 are those less in need because they are rich and growing; the regions of quadrant 4 are those more in need being characterised by low levels of GDP per capita and low levels of growth.

The ranking of the other two quadrants needs to be discussed. Does more need stem from low levels of income per capita coupled with positive growth or from higher levels of income per capita coupled with negative growth? In this work we assume that a situation which is not yet economically advanced but has a positive trend is more favourable because this is accompanied with the creation of jobs and optimistic perspectives for the future, while a declining situation will need heavy restructuring which may be painful from an economic and social point of view. We therefore consider that the situation of quadrant 2 is better than that of quadrant 3.

Table 3.1.1: Classification of regions in terms of need

	High growth	Low growth
High GDP per capita	1. Regions not in need	3. Regions in decline
Low GDP per capita	2. Regions catching up	4. Regions in the highest need

The classification in terms of needs, has to be coupled with a classification in terms of the ability of those regions to respond to policy initiatives. The latter will depend on the presence in the region of conditioning factors which are the characteristics identified in the previous sections. Regions with higher endowments of human capital and administrative capability will be able to better take advantage of CP support as well as those whose settlement structure is more favourable. For this reason, the regions of the EU can be further classified in a table which takes into account both dimensions at the same time (Table 3.1.2).

This table includes eight possible situations, labelled as high performers with potentially high policy impact, high performers with potentially low policy impact, catching up with potentially high

¹¹⁶ The cutting thresholds has always remained 75% for lagging regions, while for intermediate ones the threshold has been raised from 90% to 100% in the current programming period.

¹¹⁷ While the conceptualization is hopefully clear, the actual measurement can be difficult as growth can be very variable, especially at the region level. The actual measurement is left to the next section.

policy impact, catching up potentially low policy impact, declining with potentially high policy impact, declining with potentially low policy impact, regions in hard need with potentially high policy impact, regions in hard need with potentially low policy impact.

Table 3.1.2: Classification of regions in terms of needs and endowment of conditioning factors

		ENDOWMENT OF CONDITIONING FACTORS	
		High endowment of conditioning factors	Low endowment of conditioning factors
LEVEL OF REGIONAL PERFORMANCE	1 High GDP / High growth	High performers with potentially high policy impact	High performers with potentially low policy impact
	2 Low GDP / High growth	Catching up with potentially high policy impact	Catching up with potentially low policy impact
	3 High GDP / Low growth	Declining with potentially high policy impact	Declining with potentially low policy impact
	4 Low GDP / Low growth	Regions in hard need with potentially high policy impact	Regions in hard need with potentially low policy impact

What would be interesting to observe is whether the two dimensions of Table 3.1.2 are in a relationship with each other or not. Indeed, if there is a positive relationship, then those regions more in need are also those expected to be more responsive to policy initiatives, which would be optimal because, in this way, CP efforts would provide the highest benefit where they are most needed.

However, the opposite situation is also possible, one in which the regions less in need are also those most likely to have potentially impactful regional policies and, as such, the most responsive to CP investments. If this is the case, therefore, the effectiveness of CP will be lowest where it would be most needed and, consequently, this will present a trade-off between efficiency and equity.

Given the review of conditioning factors presented in the previous section, it seems that most conditioning factors are also those which the literature says are related to regional growth, which makes the second situation more likely.

If this is the case in practice, it is investigated in the next sections.

3.1.5 Empirical analysis

The data that are used for this analysis come from official statistical sources in particular from Eurostat, ESPON and Ardeco databases (Table 3.1.3). All indicators are used at the NUTS2 level, although in some cases this required the aggregation of indicators available at a lower spatial scale.

Table 3.1.3: Indicators and Sources

Aspect	Indicator	Year	Source
Performance	GDP per capita in PPS	2019	Ardeco
Performance	GDP growth	2010-2019	Ardeco
<i>Conditioning factors:</i>			
Human capital	ISCED	2019	Eurostat
Innovativeness	High tech employment	2019	Eurostat
Innovativeness	Share of researchers	2018	Eurostat
Institutions	European Quality of Government Index	2021	Göteborg Univ.
Settlement structure	Type of regions	2017	Espon
Settlement structure/ Agglomeration economies	Population density	2019	Ardeco/Eurostat
Accessibility/infrastructure	Infrastructure endowment of railways and of motorways	2019	Eurostat
Innovation infrastructure	Share of families with broadband connection	2019	Eurostat
Social capital	Crime rates	2019	Eurostat

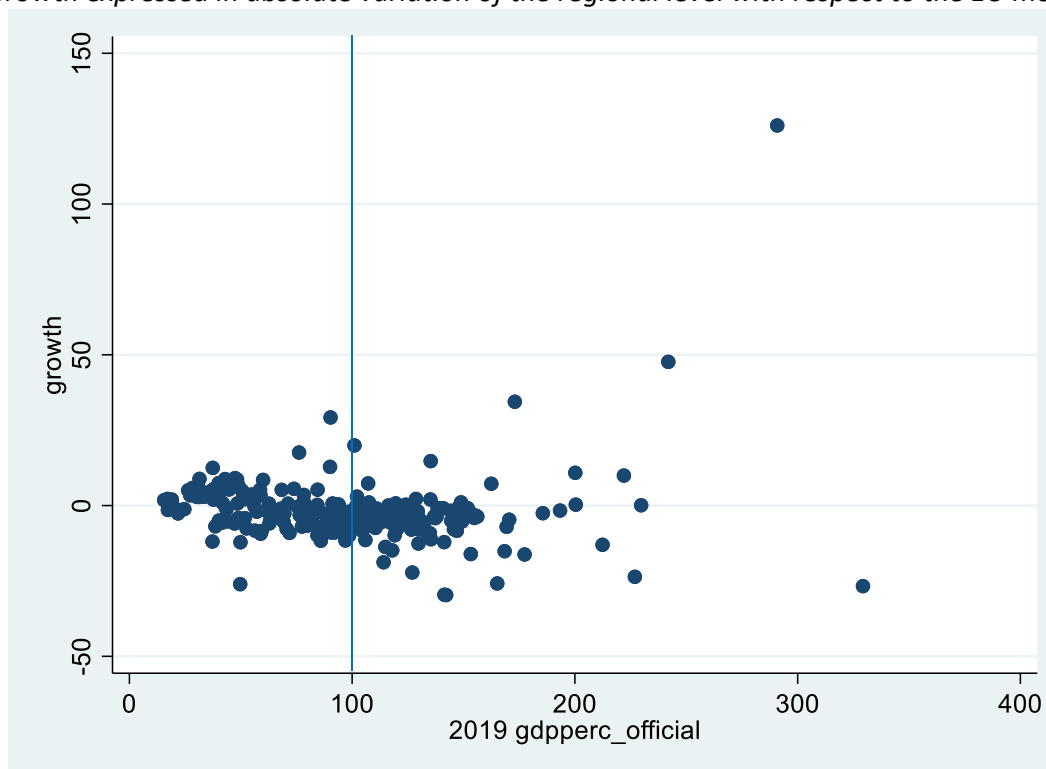
For what concerns GDP per capita, used is the value of 2019, which is the last year before Covid, because that sanitary crisis also had an impact on economic activities which are mostly not structural. In terms of growth, chosen is the period between 2010 and 2019, which excludes the global financial crisis at the beginning and the Covid crisis at the end. The other indicators are those most closely related to the aspects which were identified in the literature review.

Figure 3.1.2 represents with a point each NUTS2 region of the EU based on the classification of Table 3.1.1. This is not a graph of convergence but a graph of needs and the choice of using the final year for GDP per capita is consistent with that choice, so the appearance of a slight negative slope should not be confused for a convergence pattern. It is interesting to observe the presence

of a few “outliers”, regions whose levels of GDP per capita are way above the mean or regions where the growth of GDP per capita is very high.¹¹⁸ A hand check, however, seems to confirm that these are real cases and not statistical errors.

Figure 3.1.2: GDP per capita and GDP growth of EU NUTS2 regions

Levels expressed in % of EU mean
Growth expressed in absolute variation of the regional level with respect to the EU mean



The next step of the analysis is to investigate whether there is a positive or negative relationship between needs and policy effectiveness. There is not just one indicator of policy effectiveness, so the analysis is done one indicator at a time. For each indicator the mean of the value in the four categories of need is presented in Table 3.1.4 and then an Anova F-test is presented to show whether these differences are statistically significant or not. The Anova analysis proposes a simple F-test to check whether the means of a variable over several categories are different in a statistically significant way, i.e. they consider both the difference of means and the variance of these means. To make the table easier to read, instead of presenting the means in absolute numbers, the means of the groups are reported as a percentage of the general mean (which is 100 by definition, with the exception of the EQI index for which, being standardised, this rescaling would make no sense).

The general message arising from Table 3.1.4 is that, on average, regions more in need are also less endowed with conditioning factors. In fact, the latter tend to be higher in high GDP per capita

¹¹⁸ This is the case of an Irish region.

regions with respect to low GDP per capita ones and, at the same time, higher in high-growth regions with respect to low-growth regions.

Starting with the settlement structure of regions, we see that in terms of urbanisation the regions more in need are also on average those less endowed, because they are predominantly rural and much less urban than the average. Another indicator of settlement structure, population density, gives quite similar results as the regions less in need are those denser which means that they are more able to benefit of agglomeration economies.

Looking at the crime rate, which is a proxy for social capital, we can see that the results are more blurred. The homicide rate is higher in regions in need, but the assault and robbery rates are lower in declining regions. Burglary and theft are higher in regions less in need of regional policy except the theft of vehicles which is also very high in the regions of highest need.

In terms of human capital, the differences are striking. When we look at the share of people with ISCED (International Standard Classification of Education) higher than 3, the differences are in favour of regions less in need but not that strong. When concentrating on the people with highest educational attainments, those with ISCED equal or larger than 5, then the difference between the regions less in need and those more in need become significantly larger, so this complementary aspect to regional policy is really deficient, on average, in in lagging regions.

Looking at innovativeness, two indicators are presented. The first is the share of employees in high tech sectors, which is on average significantly higher in regions less in need and then decreases with the increase of needs. Looking at the second indicators, the share of employees in research, the results are similar and there is a very steep gradient of the variable with the increase of need. Regional policies based on innovation will hence find more fertile soil in those places where they are less needed.

Finally, a look is needed at infrastructure, starting with communication infrastructure. The endowment of ICT connections is on average significantly larger in regions with lower needs and this crisis has this despite the differences are not as large in terms of magnitude as in other indicators.

In terms of railways, the differences between the average endowments of regions less in need and the endowments of regions more in need are also striking. Weak regions definitely need investments in this field to catch up with the advanced ones, and if economic activity is complementary to this territorial asset, it's important to provide good infrastructure to those regions. The data for motorways are in the same direction but in this case there is an exception because the lowest value is in poor growing regions.

Finally, we look at the quality of government index which has an interesting result: again, it is on average larger where needs are lower and lower where needs are larger so that we can expect policy interventions to be less effective when where they are more needed. However, the highest levels are in high GDP low growth regions and not in the regions of less need.

Table 3.1.4: Anova analysis on conditioning factors by typology of regions

Indicator	1 High GDP / High growth regions	2 Low GDP / High growth regions	3 High GDP / Low growth regions	4 Low GDP / Low growth regions	Mean	F	Sig (of F- test)	Sig (stars)
Share of urban population	118	94	106	93	100	7.88	0	***
Share of rural population	67	110	88	113	100	7.88	0	***
Population density	207	53	123	87	100	2.36	0.0719	*
Intentional homicide per thousand inhab.	95	121	84	100	100	2.15	0.0955	*
Assault per thousand in- hab.	121	51	126	122	100	12.96	0	***
Robbery per thousand in- hab.	139	49	114	131	100	4.5	0.0044	***
Burglary per thousand in- hab.	163	63	127	75	100	16.97	0	***
Burglary of private resi- dential premises per thousand inhab.	162	54	116	93	100	8.29	0	***
Theft per thousand inhab.	171	48	148	65	100	37.18	0	***
Theft of a motorized land vehicle per thousand in- hab.	147	39	103	146	100	9.84	0	***
Share of employees in high tech	170	92	110	67	100	24.37	0	***

Share of employees in re- search	279	86	156	71	100	11.95	0	***
Share of population with ISCED >3	108	107	103	87	100	31.1	0	***
Share of population with ISCED >5	138	88	109	90	100	23.46	0	***
Percentage of households with broadband internet access	107	96	105	96	100	28.81	0	***
Railways per square km	258	108	114	52	100	11.28	0	***
Motorways per square km	211	56	141	72	100	18.33	0	***
Quality of government in- dex	0.59	-0.71	0.74	-0.38	0.01	54.11	0	***

To what extent are these effects due to a divide between Eastern and Western Europe? It is a well-known fact that the convergence which took place in Europe, especially before the global financial crisis, has been driven by New member countries (all in the East) growing more than Old members (Monfort, 2020). This means that, referring to the level of performance of Table 3.1.2, many Eastern regions are expected to be in quadrant 2 (Low GDP / High growth). However, also within the East several differences exist with some regions, especially those with the capital, achieving far better economic outcomes than the others.

The data confirm the existence of a different status and performance of Eastern regions: in the Ardeco database used, 55 out of 62 Eastern regions fall in quadrant 2. On the contrary, the situation is more balanced for the West (whose weight is also larger on the EU mean due to larger number of regions and larger population, so Old country mean is closer to the EU mean).

Because of the overrepresentation of Eastern Europe in a quadrant, a robustness test is needed to check whether the Anova results of Table 3.1.4 are driven by the East-West divide. For this reason, the analysis is performed again separately for Old and New MSs, and is presented in Tables 3.1.5 and 3.1.6.

Being the averages of the whole EU quite similar to those of the Western countries, results in Table 3.1.5 are very similar to those of Table 3.1.4. Only a few differences of significance can be detected for what concerns population density, assault per thousand inhabitant and the percentage of households with broadband access. In particular for the latter, the levels in the EU are probably homogeneous enough so that a statistically significant difference between types of regions does not emerge.

For Eastern countries, the expectation was to see larger differences arising. However, this only happens to a lower than assumed extent. Some differences, in fact, exist for the homicide and burglary rates, which are not significantly different, and for population density which is significantly different but higher in quadrant 3 than in quadrant 2. Interestingly, the differences in broadband access between the four groups of Eastern European regions is more marked than in the West, not just significant but with values which are more different.

Table 3.1.5: Anova analysis on conditioning factors by typology of regions in Old member countries (all calculations with respect to the mean of old member countries)

Indicator	1 High GDP / High growth regions	2 Low GDP / High growth regions	3 High GDP / Low growth regions	4 Low GDP / Low growth regions	Mean	F	Sig (of F- test)	Sig (stars)
Share of urban population	110	98	105	94	100	2.95	0.0342	**
Share of rural population	82	104	91	112	100	2.95	0.0342	**
Population density	92	106	100	99	100	0.2	0.8983	
Intentional homicide per thousand inhab.	108	82	126	83	100	3.56	0.0161	**
Assault per thousand in- hab.	96	129	97	80	100	1.08	0.3583	
Robbery per thousand in- hab.	122	89	115	73	100	3.93	0.0101	**
Burglary per thousand in- hab.	135	80	90	102	100	3.07	0.0297	**
Burglary of private resi- dential premises per thousand inhab.	135	56	138	82	100	15.37	0	***
Theft per thousand inhab.	91	64	88	147	100	5.47	0.0014	***
Theft of a motorized land vehicle per thousand in- hab.	123	98	169	47	100	2.13	0.0981	*

Share of employees in high tech	110	92	109	95	100	16	0	***
Share of employees in re- search	122	97	106	87	100	14.54	0	***
Share of population with ISCED >3	106	97	105	96	100	17.95	0	***
Share of population with ISCED >5	141	79	115	79	100	18.69	0	***
Percentage of households with broadband internet access	116	88	138	94	100	2.02	0.1234	
Railways per square km	217	64	157	74	100	6.43	0.0005	***
Motorways per square km	158	65	117	85	100	6.8	0.0003	***
Quality of government in- dex	0.86	0.25	0.84	-0.20	0.86	20.19	0	***

Table 3.1.6: Anova analysis on conditioning factors by typology of regions in New member states (all calculations with respect to the mean of New member countries).

Indicator	1 High GDP / High growth regions	2 Low GDP / High growth regions	3 High GDP / Low growth regions	4 Low GDP / Low growth regions	Mean	F	Sig (of F- test)	Sig (stars)
Share of urban population	130	97	101	91	100	9.41	0	***
Share of rural population	54	104	99	114	100	9.41	0	***
Population density	176	104	87	83	100	3.38	0.028	**
Intentional homicide per thousand inhab.	132	148	42	98	100	1.51	0.2227	
Assault per thousand in- hab.	154	88	83	92	100	3.87	0.0139	**
Robbery per thousand in- hab.	139	94	113	82	100	2.3	0.0895	*
Burglary per thousand in- hab.	117	106	83	107	100	0.81	0.4993	
Burglary of private resi- dential premises per thousand inhab.	158	79	110	82	100	3.38	0.0246	**
Theft per thousand inhab.	190	90	134	53	100	7.44	0.0004	***
Theft of a motorized land vehicle per thousand in- hab.	376	45	60	37	100	6.7	0.0006	***

Share of employees in high tech	106	100	105	96	100	10.67	0	***
Share of employees in re- search	150	96	105	83	100	13.21	0	***
Share of population with ISCED >3	107	101	103	95	100	10.36	0	***
Share of population with ISCED >5	165	92	132	66	100	10.11	0	***
Percentage of households with broadband internet access	196	93	129	52	100	6.72	0.0007	***
Railways per square km	207	80	120	68	100	6.61	0.0007	***
Motorways per square km	223	57	151	57	100	5.69	0.0018	***
Quality of government in- dex	-0.78	-1.00	-0.46	-1.22	-0.96	8.18	0.0001	***

3.1.6 Conclusions and discussion

This work investigated the relationship between the presence of conditioning factors for the impact of regional policy and the economic performance of European regions.

The starting conceptual point comes from the evidence, which spread in the regional economics and economic geography literatures in the last ten years that the impact of CP on regional growth is heterogeneous. In particular, these literatures concentrate on a series of characteristics which can be jointly identified as conditioning factors. For this reason, the first part of the paper illustrated with a literature review the main aspects which have been identified as relevant and significant.

The second part of the paper put these conditioning factors in relationship with regional performance in terms of growth and GDP per capita. In fact, if regional policy is more effective where it is more needed, this is a good thing because this means that there is no trade-off between growth and cohesion. If, on the contrary, the impact of CP is larger in more developed regions, then the concentration of expenditure in less developed regions can have detrimental effects on aggregate growth and also on aggregate policy efficiency.

The results of the empirical analysis, based on a set of indicators at NUTS2 level, showed that, on average, the endowment of various conditioning factors is larger in richest regions and in regions which are experiencing a more positive trend. This means that there will be several cases in which CP will be more effective where it is less needed.

It's important to observe that this analysis is still speculative and descriptive, as no causal relationship is identified. The expectation is that, since conditioning factors identified in the literature are on average more present in regions less in need, these latter will also be on average more able to exploit regional policy efforts, but this result would need to be demonstrated with causal analysis and, furthermore, is only an average result, so that individual regions will deviate from the average trend.

All this brings to a series of policy consequences which can be relevant for the next programming period post-2027.

The first aspect is that policy interventions need to continue to be place-based, because their impact clearly depends on the place in which they land. The effectiveness depends on the type of territory in which interventions are implemented, on the type of interventions which are implemented and finally on the relationship between the type of territory and the type of intervention. Acting on finding the right combination of expenditure axes based on the territorial capital of regions will be a first way to improve effectiveness (Fratesi & Perucca, 2019).

The second aspect is that, most likely, policymaking needs to face trade-offs in the implementation of CP. Interventions in the weakest regions are expected to be on average less effective than those in rich ones because it is in the latter that there are the preconditions and the synergies which make policy more impactful. This means that, if the political decision is to continue supporting lagging regions in order to achieve the territorial cohesion objective, there is likely the need of relinquishing some policy efficiency and aggregate regional growth.

On the other hand, it is also possible that the scarce results obtained by CP in some lagging regions are related to problems of absorption and decreasing returns and that, increasing expenditure in some currently virtuous cases, might engender the same problems.

The third aspect concerns the type of interventions which need to be implemented in different places. This analysis hinted on the fact that the presence of basic assets is a pre-requisite to effectiveness. For this reason, there is likely the need to focus investment in territorial basic assets in those regions which lack them and only on top of them to invest in more advanced policy interventions which require closer interaction with the local productive fabric and innovation system. This might also be implemented in new ways, such as with additional funding and/or initiatives which are more top-down than in the recent past, especially for those places where administrative capacity is considerably lacking.

If territorial cohesion has to remain a politically important objective (which is expected because it is included in the EU treaties) and if the economic development of lagging or non-growing regions remains an important part of it, in many cases there will be the need of complementing new and advanced regional policy initiatives (e.g. S3) with other interventions apt to ameliorate the pre-requisites for development, including administrative capacity, basic and advanced infrastructure, etc. This means that lagging regions will also require interventions creating framework conditions, and in particular investing first in territorial assets where they are missing. Furthermore, acknowledging the differential impacts of the global challenges and of the transition objectives will be necessary to avoid unrest and, in the worst cases, turmoil.

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3.2 Julia Bachtrögler-Unger: The Role of Administrative Capacity for an Effective Implementation of EU Cohesion Policy¹¹⁹

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Abstract

This reflection paper examines the influence of administrative capacity on the absorption and effective use of CP funds. First, it examines the current level of absorption of CP funds in the 2014-2020 programming period. Second, a literature review on the relationship between administrative capacity and the absorption of CP funds highlights the factors affecting the availability of administrative resources. Third, the role of administrative capacity for the effectiveness of funds usage in EU regions is discussed. The literature concludes that the effects of CP are heterogeneous across regions. Administrative capacity is an important element of a region's absorptive capacity, also due to the project selection process through managing authorities. Therefore, measures should be taken to attract motivated and well-qualified staff and to ensure communication and coordination with stakeholders and other relevant bodies. Finally, a recent study on regional development opportunities of green and digital technologies is presented, pointing to the knowledge of administrative staff about regional characteristics and capabilities as essential contribution to "good" policy implementation.

3.2.1 Introduction

CP is and since the EU's foundation has been the EU's largest investment policy. In the 2014-2020 programming period, around 405 billion euro has been allocated to foster investment for growth and jobs (a synthesis of the former objectives convergence, and regional competitiveness and employment) in all EU regions and European territorial cooperation. For the 2021-2027 programming period, the CP budget amounts to around 367 billion Euro. In line with the key goal of reducing economic and social disparities across regions, the largest part is allocated to less developed regions.

The European institutions' CPR and further regulations govern the types of investment for which the European Regional Development Fund (ERDF), the ESF (ESF, or ESF+ in the 2021-2027 period) and the CF are to be used quite comprehensively. This includes the determination of thematic objectives and, more specifically, intervention fields according to which the granted co-funding amounts must be classified. The funds are distributed in the framework of OPs that are set up by respective managing authorities prior to or at the beginning of each programming period and need to be confirmed by the EC.

The implementation of CP follows a shared management approach. Therefore, an important part of responsibility for the implementation of the OPs remains with the respective managing authorities in EU regions and MSs, respectively.¹²⁰ This includes many activities across the investment

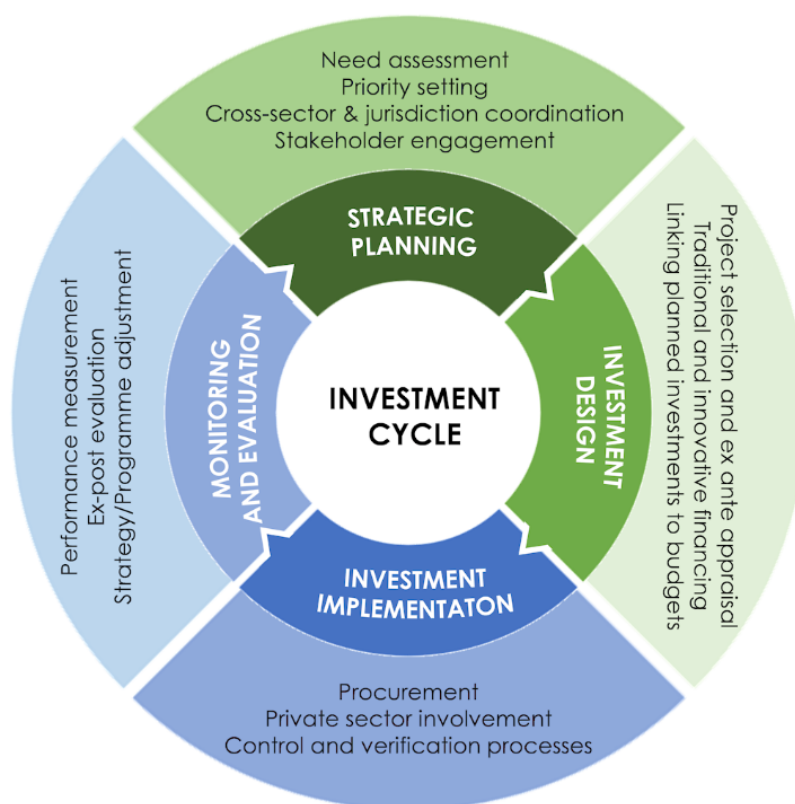
¹¹⁹ *Acknowledgement:* Valuable research assistance by Benedikt Sandrock (ZEW) and Elisabeth Arnold (WIFO) is acknowledged.

¹²⁰ In most Member States, those OPs are designed for the regional level; mostly, NUTS-2 regions, NUTS-1 regions in Germany (following the Nomenclature of territorial units for statistics, NUTS). In others such as Bulgaria, Croatia, Denmark, Hungary, Lithuania, Romania, Slovakia, Slovenia – as

cycle (Mizell & Allain-Dupré, 2013) ranging from strategic planning of investments to investment design including the selection of projects and investment implementation, to monitoring and evaluation (OECD 2020; see Figure 3.2.1).

Next to shared management, the place-based implementation approach is a key principle of CP implementation. Project selection should be in line with local needs and strategies. To ensure that, managing authorities are required to run a comprehensive stakeholder process and consultation during the design of OPs and calls for projects as well as during planning and implementing measures to address and support (potential) beneficiaries. Also, tracking the progress of project implementation and paying out the final instalment at project finalization, as well as monitoring and reporting to the EC is under the responsibility of the managing authority.

Figure 3.2.1: The investment cycle (OECD 2020)



Source: Adapted from (Mizell and Allain-Dupré, 2013[40]).

Source: OECD 2020, Figure 1.7.

All activities along the investment cycle as well as regular stakeholder consultations, communication and coordination with EU and other relevant authorities require substantial (human) resources and administrative capacity. In many cases, promoting calls for projects or addressing the “right” (e.g., innovative) potential beneficiaries will need additional capacity, knowledge of the

well as Estonia, Latvia, or Malta, that consist of only one NUTS-2 region - they are set up for the national level, often with a thematic focus such as energy, innovation, or competitiveness. Finally, e.g., in the Czech Republic or Finland, national programmes and OPs specifically designed for key (mostly capital) regions coexist.

business environment and experience. In order to monitor the success of managing authorities in spending the EU funds available to them, the **absorption of funds** available to the region is one important indicator reflecting the administrative capacity of a managing authority.

Section 3.2.2 of this reflection paper shows that the absorption rate of CP funds in the 2014-2020 programming period, in terms of the share of the budgeted amounts already spent, is still far from being 100% in all EU regions.

Section 3.2.3 reviews the academic and policy evaluation literature on the absorption of CP funds and discusses potential factors for delayed absorption, including changes in the EU policy framework since the COVID-19 crisis.

However, the ability to access available funds reflects only one dimension of the role of administrative capacity for the effective implementation of CP. On the one hand, various studies show that more funding (absorbed) does not always mean more successful policy implementation (Becker et al., 2012; Di Caro & Fratesi, 2022). On the other hand, administrative capacity also plays a crucial role in project selection. Recent studies apply a more differentiated approach to measuring administrative capacity and consider compliance with EU and national regulations such as state aid rules as well as the achievement of outcome targets in addition to the absorption rate (e.g. Mendez & Bachtler, 2022).

Indeed, even more so in the context of place-based policies, the adequate selection of investment projects to be co-financed in the specific region is central to the policy's success. A large body of literature finds that the impact of the same euro dedicated to different thematic areas, and in different types of regions, is not uniform. Therefore, the administrative capacity is also crucial for setting the "right" priorities in OPs and selecting the "right" projects and beneficiaries, in line with national or sub-national strategies, considering regional capabilities and (economic) profitability for the region. The motivation, qualification, and experience of administrative staff as well as sufficient human resources for an effective stakeholder involvement, interaction with potential beneficiaries and coordination and communication with relevant bodies are also expected to be crucial in this context.

Section 3.2.4 reviews the literature on factors determining CP effects, with a focus on the role of administrative capacity. In order to access the ERDF budget under the Research, Innovation and Technological development thematic objective, managing authorities have to submit a "smart specialisation" strategy since the 2014-2020 programming period. The concept of "smart specialisation" (Foray et al., 2011) requires regions to identify a set of technological fields, policy areas, and industries, based on regional needs, characteristics and capabilities, to which research and innovation (R&I) funding should be targeted. This should lead to a critical mass of funding in areas where additional economic returns are expected. Good knowledge about the regional business environment, the capabilities of economic actors, etc. is therefore essential and requires the commitment of administrative staff. Moreover, information on regions with complementary capabilities could improve the support services of managing authorities to beneficiaries and increase the success of CP in fostering R&I and economic development. Thus, Section 3.2.5 elaborates on a recent study mapping the capability of EU regions to develop digital and green technologies, an important priority in the current and upcoming programming periods. It highlights why it could be interesting for managing authorities to provide information on potential partner regions in order

to enhance technological development and CP outcomes through the design and selection of viable projects.

Section 3.2.6 summarises the findings, which indicate that administrative capacity is an important bottleneck for effective policy implementation and provides policy recommendations based on the analysis.

3.2.2 The absorption of Cohesion Policy funding in the 2014-2020 programming period

The progress of the implementation of the OPs, in terms of the share of planned funding amounts decided to be allocated to specific projects and the share actually spent (paid out), is required to be reported by the managing authorities and published on DG REGIO's website on a regular basis.¹²¹ Although the absorption rate (i.e., the share of planned funding already spent) mirrors only one dimension of the ability of regions to use CP funds effectively, exploring the absorption progress in the most recent programming period over time and across groups of regions, countries or thematic objectives reveals interesting patterns. EU-wide evaluation results for the 2014-2020 programming period are not yet available and policy implementation is still ongoing, so it is not yet possible to fully examine the link between absorption and policy outcomes. The literature however points to long delays in policy (or project) implementation, arising from a lack of administrative capacity or complex public procurement and state aid procedures, hampering the success of CP (Darvas et al., 2019).

3.2.2.1 Absorption of Cohesion Policy funds 2014-2020 not yet complete

Figure 3.2.2 shows that the total budget (total cost) for the ERDF, the ESF, the CF and the Youth Employment Initiative (YEI) in the 2014-2020 programming period has not been fully spent until the end of June 2023.¹²² While the amount allocated to selected projects at this point in time covers 122% of the total budget (overprogramming typically occurs to avoid leaving funds unused but may also be due to reprogramming after the COVID-19 crisis¹²³), only 84% of the budget has already been spent. According to the EC¹²⁴, the implementation of the OPs will continue until the

¹²¹ See https://cohesiondata.ec.europa.eu/cohesion_overview/14-20 for the programming period 2014-2020, as well as https://ec.europa.eu/regional_policy/policy/evaluations/data-for-research_en for previous periods [accessed 17 October 2023].

¹²² The allocations to the United Kingdom are included in the following analyses.

¹²³ Next to overprogramming to ensure the absorption of funds, reasons for significant deviations of the funding amounts decided to be used in projects from the budgeted amounts include an increase of the EU co-financing rate to 100% in the year 2020/2021 as a response to the COVID-19 crisis as well as the addition of REACT-EU resources. The latter also contributes to differences between decided and spent amounts: only 42% of REACT-EU has been absorbed by mid of 2023 (see <https://cohesiondata.ec.europa.eu/stories/s/Cohesion-policy-2014-2020-investment-progress/4e3b-ddcr> for more details).

¹²⁴ See https://commission.europa.eu/strategy-and-policy/eu-budget/performance-and-reporting/programme-performance-statements/regional-policy-performance_en [accessed 20 October 2023].

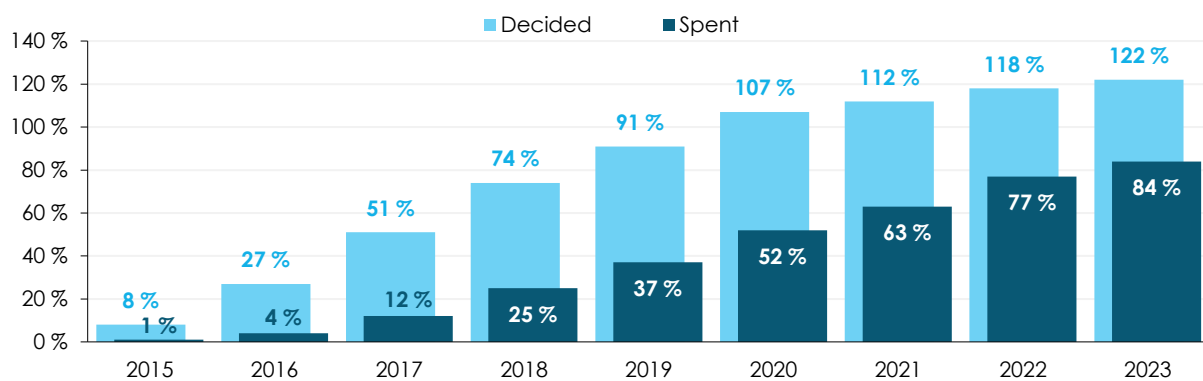
end of 2023, following the n+3 rule which should dampen the time pressure to invest. This does not leave much time to fully absorb the budgeted costs for CP projects.

The cumulative progress of financial implementation in Figure 3.2.2 shows that programming and the selection process of specific projects take time. It was only in 2020 that the use of (more than) the total budget was decided. The implementation of projects until their closure, which is associated with the payment of the full amount granted to beneficiaries, naturally comes with a further considerable time lag.

In 2020, when Europe was hit by the COVID-19 pandemic, progress in terms of the share of budgeted amounts paid out was not particularly low. However, from 2020 to 2021, the share increased by only 11 percentage points (after + 13 percentage points from 2017 to 2018, + 12 percentage points from 2018 to 2019, and +15 percentage points from 2019 to 2020). Between 2021 and 2022, progress was more dynamic again, but it remains questionable whether the total budget for the programming period 2014-2020 will be used.

Figure 3.2.2: Cohesion Policy financial implementation time series (total cost, cumulative)

Programming period 2014-2020



Notes: Period covered: up to 30 June 2023. The bar “Decided” denotes the share of total cost planned at the beginning of the programming period that is already decided to be allocated to specific projects (project pipeline). The bar “Spent” shows the absorption rate, i.e., the share of total cost planned that has already been paid out (spent) to beneficiaries. Full project amounts are paid out only after closure of each project.

Data: Cohesion Open Data platform, own visualisation.

As a response to the COVID-19 crisis, the flexibility of the use of CP funds was increased to meet new challenges, including the possibility to shift resources between OPs. Moreover, REACT-EU, i.e., a boost of the ERDF and ESF budget for 2014-2020, was part of the NGEU package, which was introduced as a substantial complement to the EU multi-annual financial framework 2021-2027. One reason for the possible underutilisation of CP funds in the 2014-2020 programming period may therefore be the availability of new funding from NGEU, but also the administrative effort necessary to access the new instruments, which may have withdrawn administrative resources from implementing CP.

Most of NGEU, in total a maximum of 723 billion Euro, is allocated to the RRF. The RRF works through reforms and investments to achieve more sustainable and resilient economies that contribute to and profit from the green and digital transition and implement country-specific recommendations made in the course of the European Semester. The main objective of fostering the digital and green transition is also a key target of 2021-2027 CP, however, the design of the RRF

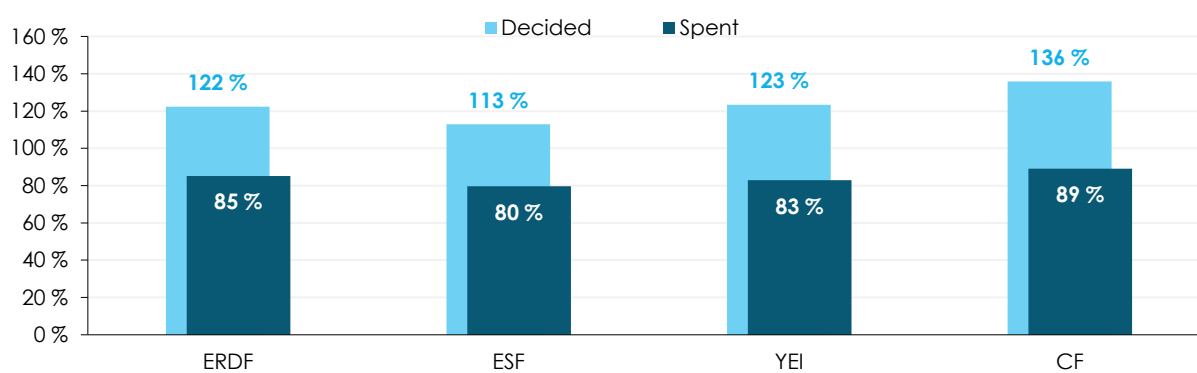
does neither foresee a sub-national nor place-based perspective.¹²⁵ Given the need to call upon funding from the RRF until the end of 2026, this could be another reason for an under-absorption of CP budgets in the 2014-2020 programming period. Furthermore, the expected delays in the implementation of CP in 2021-2027 will need to be closely monitored by the EC and managing authorities.

3.2.2.2 Absorption rates vary by type of fund and thematic objective

The data provided by DG REGIO on the financial implementation of CP in the 2014-2020 programming period allow a differentiated analysis of absorption rates by type of fund, country, and group of regions, as well as by thematic objective.

Figure 3.2.3: Financial implementation by type of fund: share of total cost (planned)

Programming period 2014-2020



Source: Cohesion open data platform (see <https://cohesiondata.ec.europa.eu/2014-2020-Finances/ESIF-2014-2020-Finance-Implementation-Details/99js-gm52>), own elaboration. Period covered: up to 30 June 2023.

The share of the planned total cost already spent is highest for the CF (89%), a bit lower for the ERDF (85%) and lowest for the ESF (80%) and the YEI (83%) (Figure 3.2.3).

However, absorption rates, in terms of the share of planned total cost already spent, vary considerably between the thematic objectives addressed (Figure 3.2.4). On the one hand, by mid-2023 (slightly more than) 100% of the total cost allocated to projects aimed to foster the competitiveness of small and medium-sized enterprises (SMEs) has already been spent until the mid of 2023. Also, absorption rates are relatively high for the more traditional CP priorities 'Network infrastructures in transport and energy' (91% spent) and 'Education and vocational training' (90%), but also for 'Research and innovation' (89%), 'Information and communication technologies (ICT)' (88%), 'Social inclusion' (87%) and 'Sustainable and quality employment' (86%).

On the other hand, only 82% of the total costs planned for the low-carbon economy, and less than 80% of the total costs planned for 'Climate change adaptation and risk prevention' (79%) as well as 'Environment protection and resource efficiency' (77%) each has been spent by the mid of 2023. Interestingly, in the latter two thematic objectives, the highest project amount was selected (*de-*

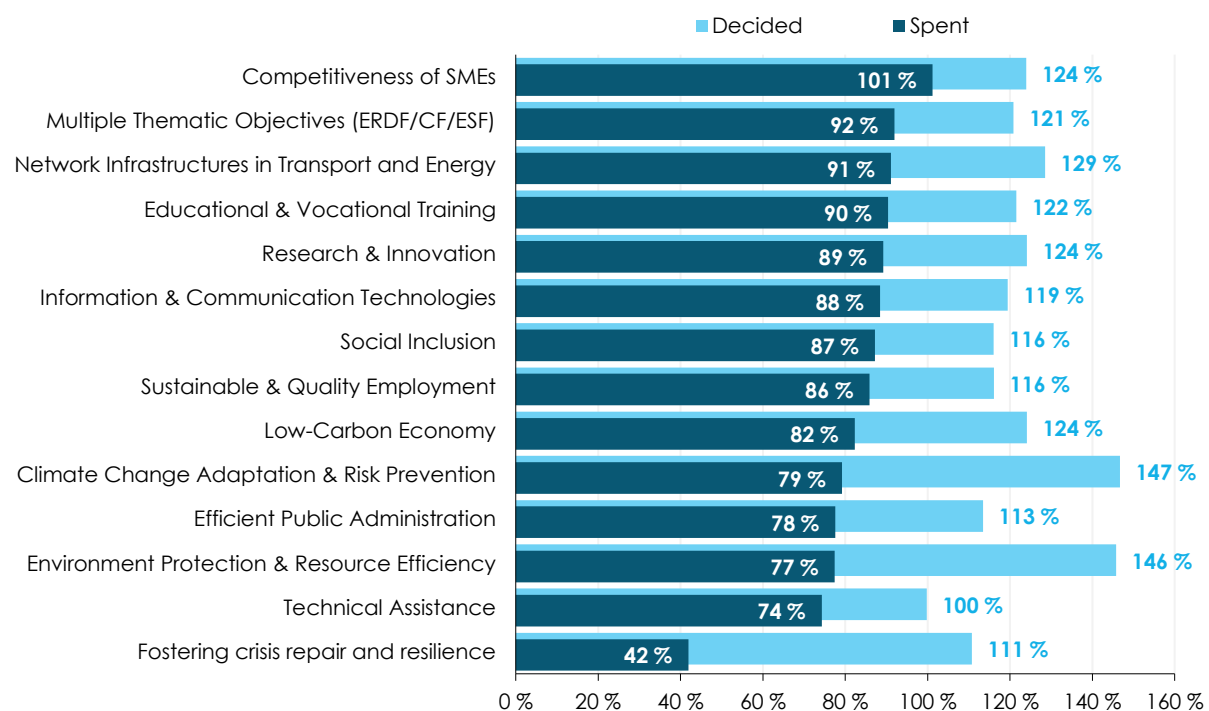
¹²⁵ See, e.g., Bachtler and Dozhdeva (2021) as one of the first studies exploring possible contradictions between the RRF and cohesion policy, or Nuñez Ferrer et al. (2022).

cided) as part of the project pipeline relative to the planned cost. This means that actual implementation and closure of corresponding projects may be delayed, or there may have been less investment co-funded by CP than planned.¹²⁶

Furthermore, the share of planned total cost spent is relatively low for the thematic objective ‘Efficient public administration’ and lowest for technical assistance projects (with the exception of the TO ‘Fostering crisis repair and resilience’ introduced with REACT-EU). These two thematic areas directly address the quality and efficiency of (regional) public administration and the implementation of CP. Low absorption rates may therefore potentially reflect low interest or few possibilities/offers to enhance administrative capacity but are much more likely to mirror limited resources to absorb the funds - given that projects corresponding to 100% and more of planned total cost were decided. This could be due to insufficient staff and/or working hours, leaving no time to improve on internal procedures, inefficiencies in the administration of OPs, or substantial additional effort to administer the response to the COVID-19 crisis and the absorption of the RRF, in case the same authority is in charge or at least involved in the decision-making process.

Figure 3.2.4: Financial implementation by thematic objective or area: share of total cost (planned)

Programming period 2014-2020



Source: Cohesion open data platform (see <https://cohesiondata.ec.europa.eu/2014-2020-Finances/ESIF-2014-2020-Finance-Implementation-Details/99js-gm52>) own elaboration. Period covered: up to 30 June 2023.

Finally, the actual implementation of projects in the thematic category ‘Fostering crisis repair and resilience’ will be of particular interest in combination with the absorption of funding available

¹²⁶ In the 2007-2013 programming period, the absorption of funding allocated to the thematic priority ‘Environment and natural resources’ was also low compared to other priorities (see Figure 3.2.11 in the Annex).

from NGEU and in particular the RRF. If not all the costs already decided to be used for projects can be absorbed, this may indicate an oversupply of EU and national public funds made available in response to the COVID-19 crisis.

3.2.2.3 Strong differences in absorption rates across countries

Investigating the absorption of CP funding in different EU MSs as well as groups of regions based on their level of economic development, further substantial heterogeneities emerge. Figure 3.2.5 shows that in the Netherlands, in Slovenia and Lithuania, all the planned cost has been already spent by 30 June 2023. Portugal, Malta, France, and Hungary are also approaching the 100% benchmark. Germany appears to be on a good track as well, with 90% of the planned total cost already spent.

It appears intriguing that Spain and Italy, the two largest recipients of the RRF (in absolute terms), report the lowest absorption of CP funding until mid-2023.¹²⁷ Spain has spent only 57% and Italy 67% of the planned total cost. Whether this is due to limited administrative resources to administer the different funding opportunities (including promotion and selection of appropriate projects) in an efficient way of course needs to be evaluated in detail.

Comparing the absorption rates (shares of planned cost *spent*) in Figure 3.2.5 with the absorption of CP funds in the 2007-2013 programming period, measured by the amount of actual expenditure (spent) as a share of allocations of the ERDF and the CF (European Commission, 2015¹²⁸, see Annex), Italy was also among the countries with the lowest absorption rate in the previous programming period (Figure 3.2.15).¹²⁹ Spain, however, ranked 16th out of 28 EU MSs (including the United Kingdom) in terms of its absorption rate.

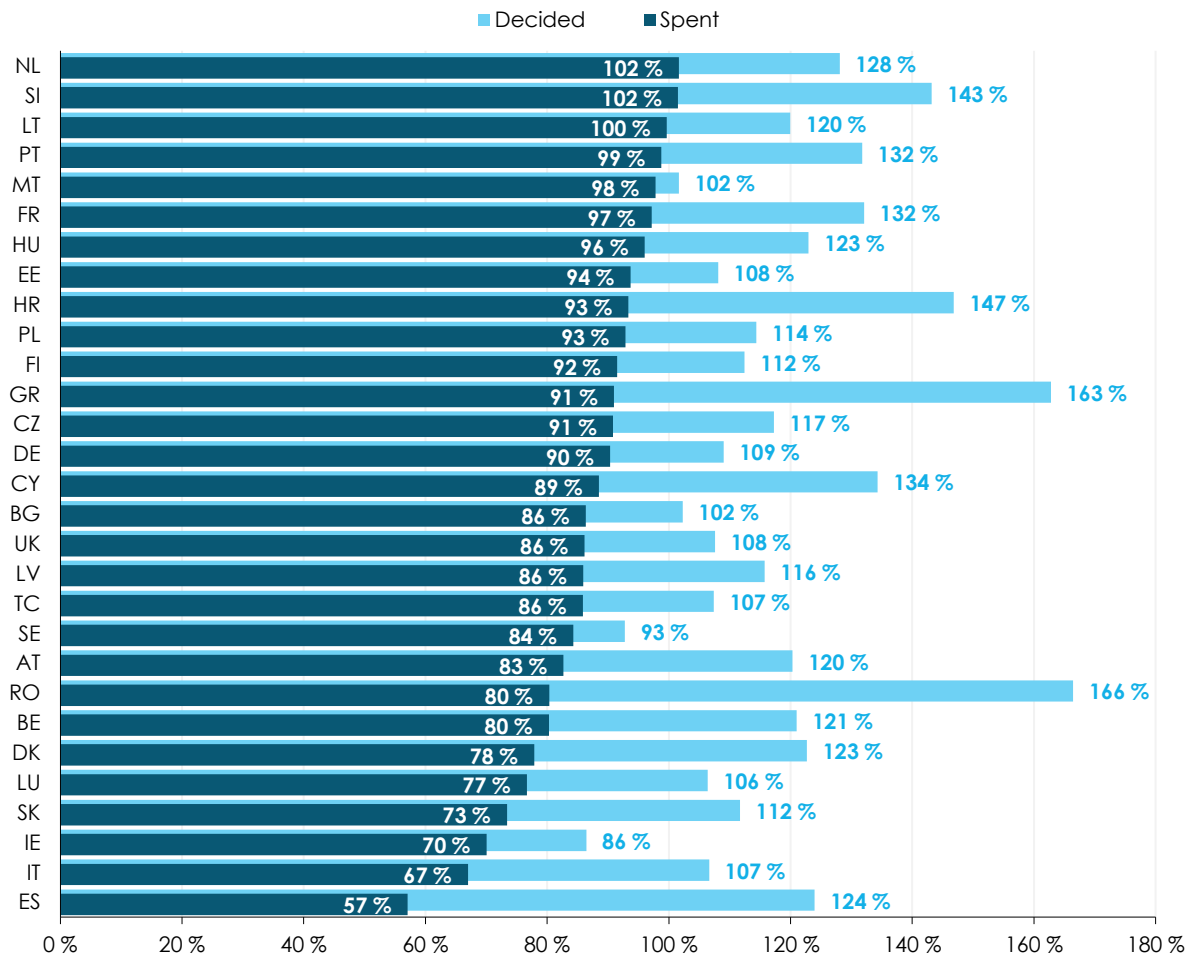
¹²⁷ The value of the Spanish recovery and resilience plan is 163 billion Euro (80 billion Euro RRF grants, 83 billion Euro RRF loans, both including parts of the plan financed by national resources), while the Cohesion Policy budget of Spain for the 2014-2020 programming period amounts to around 57.3 billion Euro including national co-funding. Italy is the second largest recipient of Cohesion Policy in the 2014-2020 period (64.7 billion Euro including national resources). The value of its recovery and resilience plan consists of 68.9 billion Euro RRF grants and 122.6 billion Euro RRF loans (including national resources). See https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/country-pages_en and DG REGIO's Open Data Platform [accessed 3 November 2023].

¹²⁸ Data available at https://ec.europa.eu/regional_policy/policy/evaluations/data-for-research_en - Historic data on structural funds by Member State [accessed on 17 October 2023].

¹²⁹ Given the different indicators available for the two programming periods, absorption rates (in %) should not be directly compared, which is why only, e.g., the ranking of countries in relative terms is considered. See Annex for more information on the measurement of absorption in the 2007-2013 programming period.

Figure 3.2.5: Financial implementation by MS: share of total cost (planned)

Programming period 2014-2020



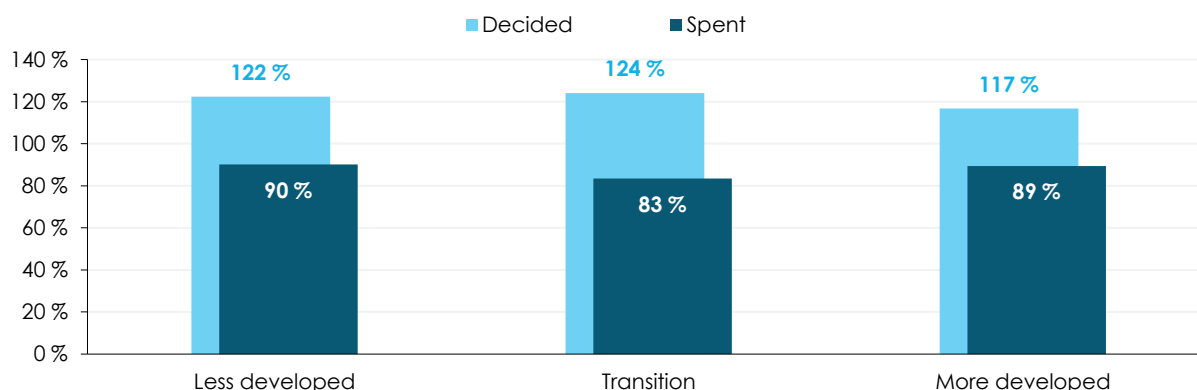
Notes: TC means “Territorial cooperation” and denotes the absorption of cross-border, transnational and inter-regional programmes. Shares over 100% might arise from shifts of funding between funding priorities that is not adequately corrected for in financial implementation data, or other adaptations of commitments as a response to the COVID-19 crisis (see <https://cohesiondata.ec.europa.eu/stories/s/Cohesion-policy-2014-2020-investment-progress/4e3b-ddcr>).

Source: Cohesion open data platform (see <https://cohesiondata.ec.europa.eu/2014-2020-Finances/ESIF-2014-2020-Finance-Implementation-Details/99js-gm52>, own elaboration). Period covered: up to 30 June 2023.

Looking at different groups of regions in terms of their GDP per capita levels relative to the EU average (Figure 3.2.6), less developed regions (with an average GDP per capita below 75% of the EU average in selected years) and more developed regions (with an average GDP per capita above the EU average) have absorbed almost the same share of the total planned costs up to June 2023 (90% and 89%, respectively). The group of transition (middle-income) regions records a lower absorption rate of only 83%.

Figure 3.2.6: Financial implementation by category of region: share of total cost (planned)

Programming period 2014-2020



Source: Cohesion open data platform (see <https://cohesiondata.ec.europa.eu/2014-2020-Finances/ESIF-2014-2020-Finance-Implementation-Details/99js-gm52>), own elaboration. Period covered: up to 30 June 2023.

3.2.3 Administrative capacity and the absorption of EU Cohesion Policy funds – A literature review

There is a growing body of literature on the relationship between administrative capacity and the absorption of CP funds, i.e., the ability of regions to access (or use) the funds available to them for implementing projects in the thematic areas prioritised by the EC. Many studies find a positive correlation between administrative capacity and the absorption of CP funds (e.g., Terracciano & Graziano, 2016; Mendez & Bachtler, 2022). Nevertheless, administrative capacity, which is often proxied by indicators on government effectiveness (Vyrostova & Nyikos, 2023), regulatory quality (Incaltarau et al, 2020) or political management performance (Tiganasu et al., 2018), is only one element of the absorptive capacity of regions.

Cohen and Levinthal (1989, 1990) introduced the concept of absorptive capacity in the context of research, development and innovation, and learning. In the CP evaluation literature (e.g., Tosun, 2014; Fattorini et al., 2020), absorptive capacity often denotes the ability of regions to not only call upon the funds available to them, but to use them in an effective way in order to achieve the policy objective of fostering growth and jobs in the region (previously convergence and regional competitiveness and employment). Becker et al. (2013) consider regional institutional quality (often used as a proxy for administrative capacity) and the share of the regions' labour force with tertiary education as two elements of the absorptive capacity of (less developed) regions.

The literature studies administrative capacity as a crucial factor for both the absorption of funds and the effective use of the funds. The stream of literature on the latter aspect, i.e., the influence of administrative capacity on CP effects, and in particular, as a prerequisite, the ability and success of (regional) managing authorities to select projects that take into account regional capabilities and objectives, is reviewed in the next section.

3.2.3.1 Operationalising the link between administrative capacity and absorption

In the literature on the link between administrative capacity and absorption, the multidimensional measurement of absorption is becoming increasingly important. Thereby, the absorption rate should not be considered as the only measure for absorption capacity (Mendez & Bachtler, 2022;

Cunico et al., 2022), as, on the one hand, it could be superficially increased by financing previously designed projects or reducing national co-financing (Aivazidou et al., 2020). On the other hand, the absorption of funds alone does not prove the effective use of funds in terms of contributing to the outcome targets of the policy. Furthermore, financial corrections may become relevant due to non-compliant operations.

An incomplete absorption of the funding available to a region may be related to a lack of national public financial resources available to co-finance the projects envisaged (Zaman & Georgescu, 2009), which has been widely discussed as an issue in the context of the Great Financial Recession (see, e.g., Camagni & Capello, 2015; Bachtrögl, 2016). In order to support the timely absorption of the funds, the EC introduced the rule that the amount of EU co-financing in the available CP budget is reduced through decommitments if the absorption of funds is delayed according to the EU expenditure schedule (Cunico et al., 2022; Bachtler & Ferry, 2015). More prominently discussed in the literature, a low absorption rate is attributed to a lack of administrative capacity and (often used as a proxy for the latter) institutional quality.

Mendez and Bachtler (2022) explore the relationship between regional quality of government and the administrative performance of regional managing authorities in charge of CP implementation in 173 European regions in the 2007-2013 programming period. Next to the absorption of funds available to the region, they consider compliance with the EU and national regulations (e.g., state aid rules) as well as the achievement of outcome targets as dimensions of administrative performance. Compliance of funds use with EU and national legislation and, partly linked to this, corruption in the use of funds are also considered to explore absorptive capacity in other studies: Incaltarau et al. (2020) apply the public diversion of funds as a measure for corruption and political governance, Vyrostopova and Nyikos (2023) explore the link between government effectiveness as a proxy for administrative capacity and financial corrections that are likely to result in the withdrawal of EU funds from projects or programmes.

Mendez and Bachtler (2022) find a positive relationship between regional quality of government (institutional quality) and different dimensions of absorption (absorption rates, compliance, achievement of outcome targets). However, they also identify a trade-off between a focus on absorption and outcome-orientation in regions with relatively low administrative capacity. Confirming a positive relationship between administrative capacity and absorption, Incaltarau et al. (2020) find from an analysis of the EU-27 regions (2007-2015) that administrative capacity (modeled by government effectiveness) and the public diversion of funds as a proxy for corruption and (poor) political governance have a significant positive and, respectively, negative impact on the absorption rate of MSs. This impact is found to be more important for the new EU MSs than for the old ones. For the Central and Eastern European MSs in the period 2007-2015, Tiganasu et al. (2018) find a positive influence of administrative capacity (modeled by institutional quality and political management performance) on absorption rates, as well as a positive impact of enhanced access to national loans for co-financing. Analysing Hungary and Slovakia in the programming periods 2000-2006 and 2007-2013, Vyrostopova and Nyikos (2023) find a negative correlation between government effectiveness, as a proxy for administrative capacity, and financial corrections. Finally, various publications based on case study designs (e.g., Terracciano & Graziano, 2016 for two Italian regions) also support the general finding.

Furthermore, political instability (Vyrostova & Nyikos, 2023) and a fragmented political system (Aiello et al., 2019) have been found to deteriorate administrative capacity and the absorption of CP funds.

3.2.3.2 Factors influencing administrative capacity and the absorption of funds

According to Mendez and Bachtler (2022), slow progress in the absorption of funds and other difficulties in the implementation of CP are often, at least in part, due to a lack of human resources or expertise, weaknesses in management systems and coordination between different authorities, mistakes in the implementation of public procurement or environmental and state aid rules, or an insufficient implementation of performance management and anti-corruption measures. Furthermore, “politicisation, rent-seeking, clientelism, corruption and other irregular use of EU funding” (Mendez & Bachtler, 2022, p. 3) play a role for a limited (and misdirected) absorption (Vyrostova & Nyikos, 2023).

Surubaru et al. (2017) study the role of administrative capacity for CP implementation in the 2007-2013 programming period in Bulgaria and Romania. Administrative capacity is defined as a combination of institutional, bureaucratic, and human resources. The authors conclude that in these countries a centralised institutional coordination of CP implementation is more successful than a semi-centralised approach, and that standardised procedures and documents enhance policy implementation. They claim that strict requirements for extensive monitoring, reporting and auditing lead to a focus on administrative tasks rather than on projects and outcomes. The pay of administrative staff is also seen as crucial, as lower salaries make employees less willing to take responsibility and more prone to corruption. Finally, the authors highlight the crucial role of technical assistance provided by CP (a separate thematic objective) in developing expertise.

Bachtler et al. (2013) analyse the development of administrative capacity for programming and implementing CP in the Central and Eastern European MSs in the years 2004 to 2008 after their EU accession. Most of them adopted a centralised approach, with OPs and managing authorities at the national level. A common challenge was to find sufficient and well-qualified human resources and to reduce the fluctuation of staff, which hampered the implementation of projects. Higher salaries, better career options, training and international exchange were identified as ways to attract more and better staff. Furthermore, support services for beneficiaries to prepare project proposals and to meet monitoring requirements were identified as crucial. Large volume projects were prioritized to increase absorption. Regarding administrative structures, it turned out favourable to combine various authorities in one central institution and thereby reduce the number of entities involved in CP implementation. Better coordination was achieved by aligning national and EU administrative procedures. Furthermore, more guidance for the entities and staff involved, better (and faster) IT systems that also enhanced monitoring and reporting of data, better communication between beneficiaries and managing authorities, and fewer administrative requirements led to improvements in the absorption of CP funds.

Smeriglio et al. (2016) perform a case study analysis of two Polish and two Italian regions each in the 2007-2013 programming period. They compare Sicily, with an absorption rate of around 66%, with Puglia and the two Polish regions, with absorption rates of around 95%. In the case of Sicily, they conclude that the investments did not meet the main local needs and that the interventions

were fragmented and not integrated. Stakeholders were not considered in the decision-making processes, which led to unrealistic selection requirements for beneficiaries and a strong delay between the call for projects and actual project implementation. In addition, the monitoring system was found to be poorly functioning, resulting in an inability to certify and control expenditure. By contrast, in the other regions a continuous dialogue between managing authorities and local stakeholders. Four main factors have been identified to increase administrative capacity: i) quality of administrative management (expertise and experience in CP programming and implementation, transformational leadership), ii) qualified, experienced and motivated staff (low turnover allows for gaining knowledge and experience as well as best practices, good salaries and career options are important for motivation, technical assistance funding should be used for training internal staff), iii) effective intra-organisational communication within the managing authority (including flexibility in job rotation between units based on resource needs), iv) audit and monitoring systems and tools (useful to improve processes).

Vyrostova and Nyikos (2023) analyse the management of EU funds in Hungary and Slovakia in the programming periods 2000-2006 and 2007-2013 and conclude on similar supportive and hampering factors for CP funds absorption: i) complex, decentralised systems with overlapping competencies make a consistent implementation approach difficult, ii) lack of qualified and experienced staff, no continuous training possibilities, high fluctuation due to high workload and unattractive salaries, but also due to organizational transformations resulting from political changes, negatively affect the absorption of CP funds.

The improvement of administrative capacity should be seen as a continuous process where the existing system, e.g., staff skills, inter-organisational communication, monitoring systems, should be monitored and upgraded step by step (El-Taliawi & Van der Wal, 2019). Aiello et al. (2019) find in a case study analysis that a fragmented political system with changing governments deteriorates administrative capacity and thus the efficient use of structural funds, partly due to a lack of trust between the actors involved. By contrast, less complex and bureaucratic processes and more flexibility in policy implementation could increase the administrative capacity to absorb CP funds (Aivazidou et al., 2020). Greater flexibility for (regional) managing authorities could thereby strengthen the accountability and thus staff motivation and commitment (Aiello et al., 2019).

Cunico et al. (2022) use Calabria and Emilia-Romagna until 2019 as cases to analyse why some regions improve in terms of administrative capacity and the absorption of CP funds while others do not. They state that short-term solutions, such as increasing the absorption rate by reducing national co-financing or financing already decided projects, seem to be preferred as compared to longer-term solutions. The reason for this is the fear of a reduction in the EU contribution (decommitments), which could be interpreted as a political failure and be perceived negatively by the public. In this context, they criticise an overemphasis on absorption rates to the detriment of policy outcomes.

Pointing in the same direction, Figure 3.2.4 above showed that progress in the use of the budget available for technical assistance as well as under the thematic objective 11, 'Enhancing the capability of public authorities and efficient public administration', which directly targets investments into the administrative capacity of public authorities, is delayed. This seems unfortunate according to a synthesis report of the EC, which summarises the annual implementation reports of the 2014-

2020 OPs and draws a positive conclusion on the impact of investments in thematic objective 11 and technical assistance on administrative capacity (European Commission, 2023)¹³⁰. Overall, it was found that investments under thematic objective 11 led to better governance, which was reflected in an improvement of skills of the staff in managing authorities. In the Czech Republic, for example, this increased the efficiency of the organisation; in Romania, better hard and soft skills enabled a better coordination of (national) programmes, better decision-making and institutional procedures, including a reduction of the administrative burden and coordination with other organisations. Furthermore, the investment improved collaboration and networks between the entities involved in CP implementation. In Poland, for example, it was found that a better understanding of 'good governance practices' led to a greater involvement of the local population in urban planning processes. Moreover, the transparency of decision procedures of the local administration was improved in many cases. However, a lack of resources in public administrations created bottlenecks for conducting evaluations or recommended communication strategies.

Further important general lessons for the implementation of CP across all thematic objectives were, first, that it is important to stay flexible in the development of interventions during the planning phase, as well as to involve stakeholders and thereby ensure consistency and complementarity of the intervention with other regional and national development schemes. Second, standardized models and electronic platforms for issuing calls for proposals and managing the submission and selection of projects have been found to decrease the administrative burden and increase the quality of applications (European Commission, 2023).

Finally, there is no consensus in the literature on whether regional (subnational) programmes enhance the absorption of CP funds. While Aiello et al. (2019) report supportive evidence in their case study on two Italian regions, Surubaru et al. (2017) conclude from their analysis of Bulgaria and Romania that a centralised institutional set-up of policy implementation is favourable. Mendez and Bachtler (2022), who perform an EU-wide analysis, do not find any impact of regional autonomy on the absorption of CP funds, compliance, and outcome-orientation of policy implementation. They suggest that a possible reason for this finding is the limited room for manoeuvre for regional programmes due to the stricter rules imposed by EU regulations.

3.2.3.3 Potential influence of new challenges and EU priorities for absorption

Under current circumstances, the adjustments of the EU's multi-annual financial framework in response to the COVID-19 crisis as well as the strengthened focus on the green and digital transition could potentially hamper the absorption of CP funding in the 2014-2020 and 2021-2027 programming periods. With the RRF, but also with other new instruments such as the JTF which was implemented to address the asymmetric consequences of bringing forward the green transition (e.g., with traditional coal regions being particularly strongly affected), the number of instruments

¹³⁰ According to European Commission (2023), by the end of 2022 there had been 139 evaluations of investments under thematic objective 11. A major finding is that the effectiveness of measures to increase administrative capacity depends both on the design of the measures and the motivation of the administrative staff addressed. Partly conflicting results were found in different regions and territorial contexts.

to be managed and used effectively has increased in recent years. Accordingly, the number and breadth of CP objectives have increased, with the digital and green transitions, as well as the need to meet the objectives of the EU Green Deal and the 'Fit for 55' package as horizontal overarching targets, alongside the objective of balanced economic growth across EU regions. In a recent report, Bachtler and Mendez (2023) reflect in detail on the progress of implementing CP 2021-2027 before this background.

While there are more and more studies on the interplay between RRF and CP, to the best of the author's knowledge there is not yet much (academic) literature on experiences of adapting the implementation of CP to the new objectives, or on measures to enhance administrative capacity to face the new challenges. Rodríguez-Pose and Bartalucci (2023) analyse the heterogeneous impacts of climate change and the green transition on EU regions with different levels of economic development. Barbero et al. (2022) explore ERDF activities in the 2014-2020 programming period dedicated to supporting the twin transition, which could reflect the capacity of regions to (re-)direct funding towards new priorities in the following period(s). Bachtrögler-Unger et al. (2023) map the EU regions' capabilities to develop green and digital technologies, as well as potential interregional linkages to be exploited to enhance the twin transition through technological development, which could serve as an important input for managing authorities to programme and plan research and innovation investments in the new programming period. The latter study will be referred to in more detail below.

3.2.4 The influence of administrative capacity on Cohesion Policy effects

The previous sections have highlighted that the ability to absorb the full amount of CP funding available to a region (or MS) is only one dimension of the influence of administrative capacity on the success of CP implementation. Becker et al. (2012) analyse European NUTS-3 regions in 2000-2006 and 2007-2013 and find that there is an efficiency-maximising amount of funding for a region above which no further growth is generated by CP funding. The authors find that 36% of the recipient regions exhibited a transfer intensity above this threshold, and that in 18% of recipient regions a cut in CP funding would not have reduced their economic growth. Using a regression discontinuity design considering funding intensity, the ex-post evaluation of the EC also finds that CP's positive impact on regional GDP vanishes if funding exceeds a certain threshold (European Commission, 2016). Recently, Di Caro and Fratesi (2022) conclude that particularly high funding amounts allocated to a region are not necessarily associated with positive and significant growth effects of the policy.

On the one hand, this points to the question whether there is too much money allocated to EU regions and might motivate a discussion on the design of CP or the EU budget. On the other hand, this means that another very important aspect is ensuring the administrative capacity to direct the funds to projects (and beneficiaries) that do not only meet the requirements of the EU regulation, but also fit regional needs, regional technological capabilities, the industrial structure and local business environment. In this context, administrative capacity - and institutional quality in a broader sense - is an important element of a region's absorptive capacity, which is also determined by the share of inhabitants with tertiary education, the presence of competitive and innovative firms, an ecosystem conducive to entrepreneurship and innovation, as well as the (current) macroeconomic environment and business cycle (Canova & Pappa, 2021). A high regional absorptive

capacity is expected to increase the probability of designing and implementing projects that foster growth and employment or promote smart, sustainable and inclusive growth in the region, thus contributing to a successful CP implementation (e.g., Becker et al., 2013).

The administrative capacity of managing authorities and other bodies involved in CP implementation is crucial for the effective use of funds, as it is important for selecting “good” projects. Managing authorities are responsible for involving stakeholders, interacting with potential beneficiaries, coordinating, and communicating with relevant bodies to learn from best practices and possibly also from other (national) funding instruments. Managing authorities are also responsible for promoting funding possibilities, publishing calls for projects, and selecting appropriate projects. It seems intuitive that the success of these tasks is directly related to the qualification, experience, and motivation of the management authorities’ staff, as well as to other factors discussed in Section 3.2.3.

Indeed, the literature finds a positive correlation between administrative capacity and CP (firm-level) effects (Bachtrögler-Unger et al., 2022) as well as the achievement of programme outcome targets (Mendez & Bachtler, 2022). Moreover, there are various papers that report a positive relationship between institutional quality (broadly defined) and CP outcomes (see, for example, Rodríguez-Pose & Garcilazo, 2015).

Different ways of using CP money have different effects. A large body of literature explores this heterogeneity of CP outcomes. A general finding – and governance principle – is that the same policy does not work everywhere (CP is not a “one size fits all” policy), but regional (or local) characteristics such as institutional quality, population density and demographics (Gagliardi & Percoco, 2017), the sectoral structure of the regional economy (Percoco, 2017), and human capital (Becker et al. 2013) should be taken into account (Bachtler et al., 2019), as they have been shown to shape policy outcomes. Bachtrögler et al. (2020) analyse a specific part of CP, namely grants to manufacturing firms, in different regions and find that its effects on employment in subsidised firms significantly differs across territorial contexts. According to their results, the firm-level effects are larger in less developed regions, suggesting a greater need for firm support in these regions (with presumably lower levels of private investment capital available).

Irrespective of the regional dimension, CP funding in different thematic areas also has different effects on economic development (Di Cataldo & Monastiriotis, 2020; Rodríguez-Pose & Fratesi, 2014). In a general equilibrium analysis, Blouri and Von Ehrlich (2020) have recently shown that the welfare effects in EU regions overall could be increased by reallocating CP funds between thematic categories and types of regions. More specifically, e.g., investments in transportation infrastructure are found to be most efficient in central and/or highly productive regions. Finally, regional CP effects are found to vary across programming periods (Becker et al., 2018; Crescenzi & Giua, 2020; Bachtrögler, 2016).

Given the different circumstances that need to be taken into account when implementing CP, the importance of the stakeholder process becomes very clear. Also, the staff of the managing authorities should be aware of regional comparative advantages and capabilities in order to identify projects that are most likely to be successful and to generate indirect economic effects given the business environment.

In the context of research and innovation activities (thematic objective 1 in the 2014-2020 programming period), the ‘smart specialisation’ (or rather ‘smart diversification’) concept (Foray et al., 2011) puts into practice the principle of taking into account local capabilities and needs in order to increase the impact of CP. Balland et al. (2018) provide a methodological framework to operationalise the ‘smart specialisation’ priorities that a region should set. They apply the concepts of relatedness and complexity to examine which technologies (activities or industries) a region is already specialised in, and in which new technologies or activities the region should diversify into in order to make the best use of existing (technological) capabilities and to generate additional economic benefits. The alignment of CP funds available to a region to its actual regional strengths is not yet researched extensively, but initial explorations (European Commission, 2021) however suggest a differential picture across regions.

As another example in the field of research and innovation, the EC encourages synergies between R&I funding under CP, in particular the ERDF, and the Horizon programme to create a critical mass of funding allocated to priority areas (Official Journal of the EU, 2022). To achieve this, it is essential that the managing authorities of OPs communicate and coordinate with the national Horizon contact points, as well as with firms or research institutions in the region that are active in Horizon 2020 (or Horizon Europe). Administrative capacity is therefore again a crucial factor for the effective creation of synergies.

3.2.5 Enhancing administrative capacity and successful Cohesion Policy implementation through information about regions’ technological development opportunities

In order to obtain information on regional capabilities in terms of scientific or technological knowledge in firms and research institutes, analysing previous patenting activities of local actors is a promising vehicle (although the innovation output of the services sector is poorly covered by patent application data). As a relevant example concerning the major horizontal objective of EU policies to contribute to the green and digital transition, findings from a recent study by Bachtrögler-Unger et al. (2023) could help managing authorities to learn about previous patenting activity and opportunities for (new) technological development in the future. It is these opportunities where – following the smart specialisation concept – ERDF investment grants in the development of green and digital technologies should be directed to. Based on this information, managing authorities could adapt communication processes with potential beneficiaries and stakeholder involvement as well as calls for projects. In the following, the findings of Bachtrögler-Unger et al. (2023) are summarised.¹³¹

¹³¹ An interactive version (scrollary) of the study is available here: <https://globaleurope.eu/technological-capabilities-and-the-twin-transition-in-europe>.

Figure 3.2.7: Patenting activity and specialization of European regions in digital technologies

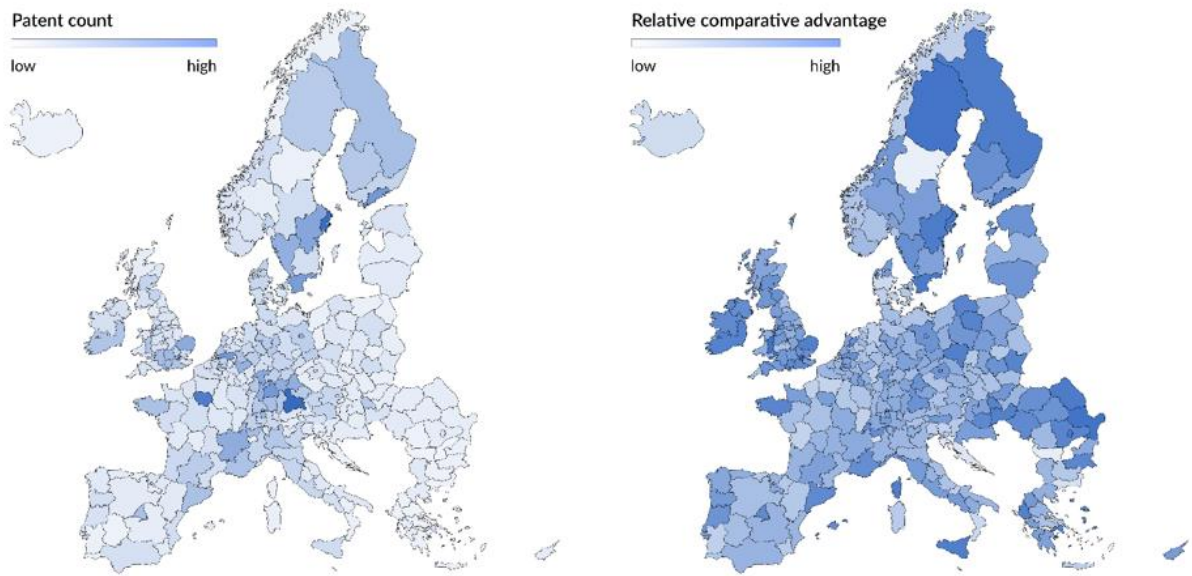
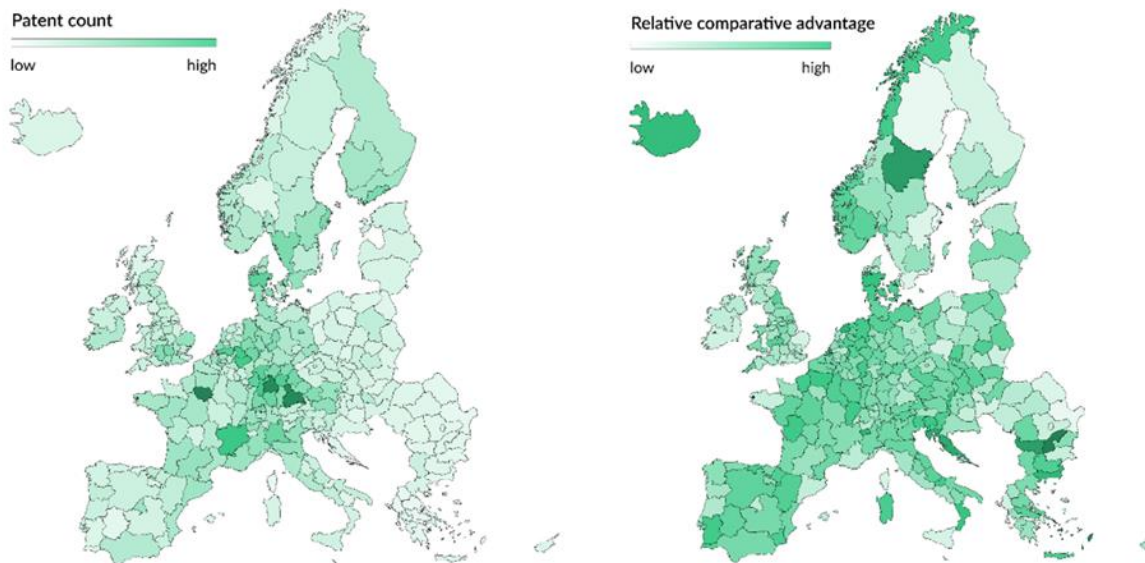


Figure 3.2.8: Patenting activity and specialization of European regions in green technologies



Source: Bachtrögler-Unger et al. (2023), pp. 7-8.

Notes: The left map depicts the absolute number of patents in digital (Figure 3.2.7) and green technologies (Figure 3.2.8) in European NUTS-2 regions. The right map depicts the RCA (share of digital/green patents in a region relative to the average share of these patents among all regions). The higher the RCA value, the higher the specialisation of a region in digital or green technologies.

Data Source: OECD REGPAT.

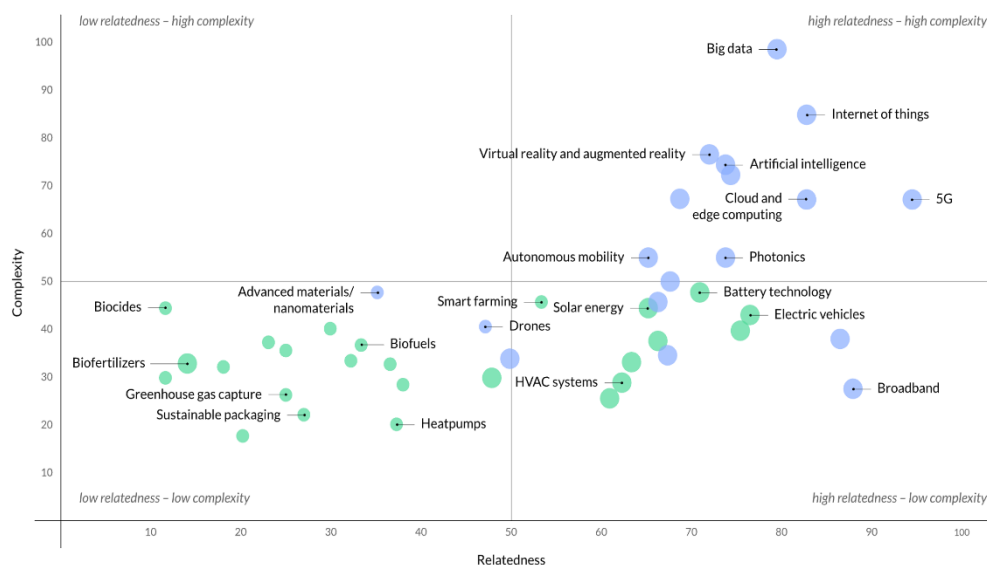
First, patents in green and digital technologies are asymmetrically distributed across European regions. This holds true for both digital (Figure 3.2.7) and green technologies (Figure 3.2.8), both

in terms of absolute numbers of patents (left map each) and the revealed comparative advantage (RCA), measuring the regional concentration of patenting activities in digital, or green, technologies relative to the EU average. The absolute number of patent applications in the years 2017 to 2021 is highest in the high-income (or more developed) regions of Europe.

Less developed regions exhibit only limited past patenting activity in green and digital technologies. However, there are “hidden champions” among middle- (transition) and low-income regions with considerable capabilities in specific technologies that could potentially serve as interesting cooperation partners for more developed regions. Bringing them on board would contribute to economic cohesion and convergence, as envisaged by Cohesion Policy ever since.

Second, current capabilities, based on past patenting activity, determine opportunities for further development in digital and green technologies. To assess opportunities, patent applications in all technology fields are considered to measure a region’s relatedness to specific digital and green technologies, i.e., how close existing technological capabilities are to those needed for new technological development. More developed EU regions have the highest potential to develop further in complex digital technologies such as 5G, artificial intelligence, the Internet of Things and big data (Figure 3.2.9), which are expected to generate substantial additional economic returns.

Figure 3.2.9: Potential of more developed EU regions to develop digital and green technologies



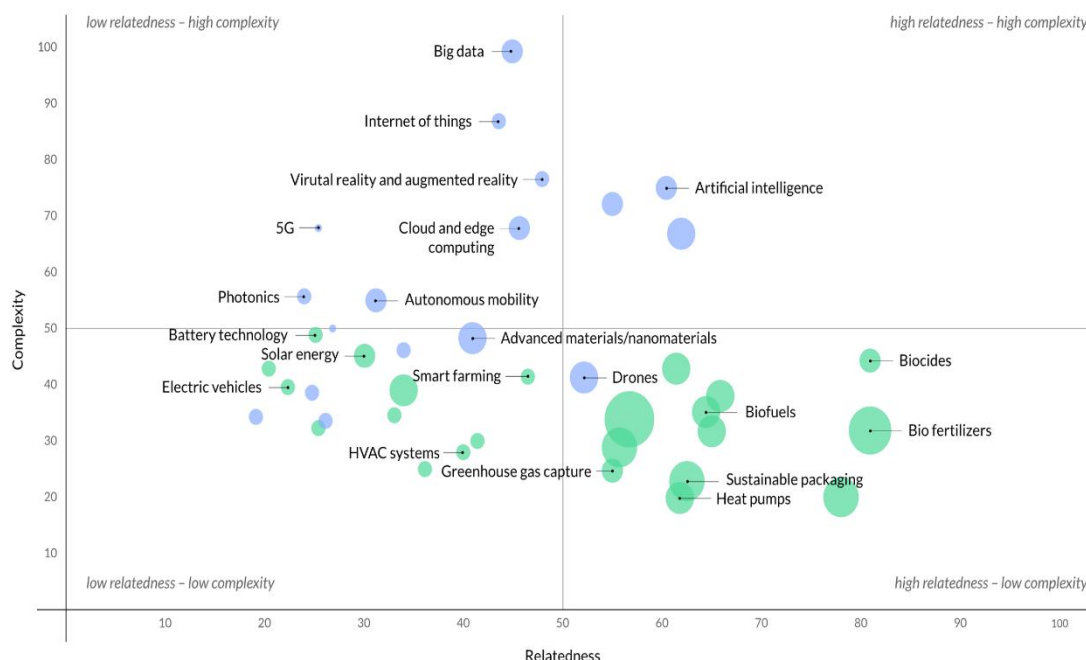
Source: Bachtrögler-Unger et al. (2023), p. 25.

Notes: This figure shows the potential to develop twin transition technologies for the group of more developed regions in the EU. The horizontal axis plots the relatedness density score. The vertical axis plots the complexity scores of each technology. All values are averaged across the group of more developed regions. *Data source:* OECD REGPAT. Refer to Bachtrögler-Unger et al. (2023) for more information.

Less developed regions, on average, also have favourable capabilities to develop on artificial intelligence and a few other relatively complex digital technologies. Overall, however, their capabilities

are more related to green technologies, which are in general less complex than (most) digital technologies. Although they are therefore expected to generate lower economic returns, they will be crucial for the green transition and could therefore trigger a substantial number of jobs.

Figure 3.2.10: Potential of less developed EU regions to develop twin transition technologies



Source: Bachtrögler-Unger et al. (2023), p. 25.

Notes: This figure shows the potential to develop twin transition technologies for the group of less developed regions in the EU. The horizontal axis plots the relatedness density score. The vertical axis plots the complexity scores of each technology. All values are averaged across the group of more developed regions. Data source: OECD REGPAT. Refer to Bachtrögler-Unger et al. (2023) for more information.

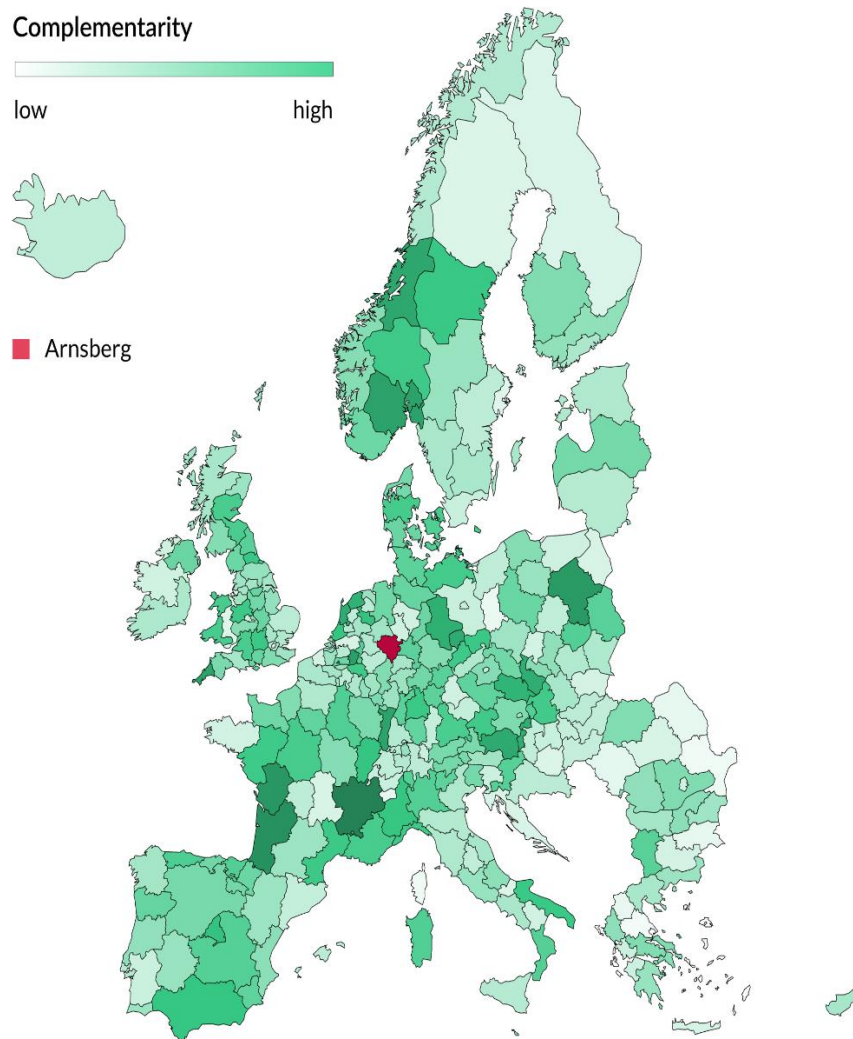
Similarly, middle-income (transition) regions have opportunities to develop further on green technologies, while the relatedness of their past technological developments to complex digital technologies, and therefore their opportunities to develop these, are lower than those of low-income regions.

In the 2021-2027 programming period, 'Partnerships for Innovation' (European Commission, 2022) are introduced as a new feature of CP support for research and innovation. Based on the 'smart specialisation' principle, it aims to foster interregional and cross-border collaboration in research, innovation, and technological development across EU regions. It should encourage the identification of partners with complementary capabilities that are related to but not present in the home region, in order to develop new (prioritised) technologies through the combination of complementary capabilities.

Looking again at digital and green technologies, Bachtrögler-Unger et al. (2023) show that complementary capabilities that could be combined are widely spread across European regions. Figure 3.2.11 shows the example of Arnsberg, Germany, and hydrogen technology. In order to develop hydrogen patents, it could partner up with several German regions, but also with regions in France,

Poland or the Netherlands. Comparing this ‘complementarity map’ with actual interregional linkages, i.e., realised collaborations on hydrogen patents, there remains significant untapped potential for collaboration with, for example, Rhône-Alpes in France, Polish regions, but also the German region of Sachsen-Anhalt.

Figure 3.2.11: Regions with complementary capabilities for Arnsberg (Germany) and the developed of patents in the field of hydrogen



Source: Bachtrögler-Unger et al. (2023), p. 32.

Notes: This map shows European NUTS-2 regions with complimentary technological capabilities to Arnsberg (DEA5, in red) to develop hydrogen technology. High values denote a high complementarity (measured in “added” relatedness density) and, thus, a high potential for Arnsberg to develop the technology when collaborating with the respective region. *Data source:* OECD REGPAT.

A general finding of this study is that most interregional collaborations take place within countries, most likely due to institutional factors, distance, but also to networks of local researchers and innovative firms built up in the past. Taking into account distance, patenting activity of both potential partner regions and other factors in a gravity model, there is still remarkable untapped potential for collaboration in the development of green and digital technologies, even for high-income regions (Bachtrögler-Unger et al., 2023).

What managing authorities, the EC or other bodies involved in CP implementation could do is to provide information on all regions (and actors) with complementary capabilities to develop specific technologies. While entering a cooperation depends on many factors, mapping potential partners could be a valuable information for beneficiaries, especially innovative firms, universities or research institutes. In particular, it would strengthen ‘Partnerships for Innovation’ and could also be a tool for the EC to encourage and incentivise, for example, high-income regions to collaborate with less developed regions in order to enhance regional cohesion and prevent regions from falling further behind.

3.2.6 Summary and policy recommendations

Summarising the literature review and data analysis on absorption rates in this reflection paper, the important role of administrative capacity for the implementation of CP is confirmed. The administrative capacity (of managing authorities) determines not only the absorption of CP funds, i.e., the ability to call upon the funds available, but also the success of the policy in terms of increasing economic growth and employment.

The analysis of the current state of CP funds absorption in the 2014-2020 programming period revealed a delay in policy implementation and a not unlikely failure to use all funds in several MSs.¹³² Next to the influence of extra commitments as a response to the COVID-19 crisis on financial implementation data, this may be partly related to the administrative capacity of managing authorities and/or the limited availability of national public co-financing. It may furthermore indicate a lack of absorptive capacity in the region in general, which is not only shaped by administrative capacity, but also - among others such as the business cycle developments - by the capacity of potential beneficiary firms or institutions and/or the regional business environment to prepare appropriate project proposals and implement the projects. Another common issue discussed is the incentive to access funds made available through the RRF. This could withdraw administrative resources and promising projects that would otherwise have been co-financed by CP.

Recommendation #1: It should be evaluated in detail whether the RRF has diverted resources from the implementation of Cohesion Policy by financing similar priorities or additional efforts for managing authorities. The advantages and disadvantages of RRF implementation should be considered when designing future Cohesion Policy. Furthermore, the consequences of RRF implementation in terms of delays in the implementation of the 2021-2027 Cohesion Policy need to be taken into account for monitoring and evaluation and should be addressed soon.

The literature finds that up from a certain threshold additional funding in a region does not contribute to further economic growth anymore; there are decreasing marginal returns from CP funding. Given the apparent challenge for many regions to absorb all money available in the 2014-2020 programming period, this might motivate a discussion about the design of CP and whether full absorption (in a programming period) is a goal in itself. For example, there is evidence that budgets

¹³² See Bachtler and Mendez (2023) for a recent analysis on the state of play of 2021-2027 Cohesion Policy implementation.

with roll-over options at the end of the year (budget period) lead to more efficient spending (Liebman & Mahoney, 2017).

Recommendation #2: The European Commission should reflect on measures to increase flexibility in using cohesion policy funds in order to avoid an incentive to spend the money (at the end of a programming period) in a rush and therefore perhaps ineffectively. Granting the possibility of rolling over cohesion policy funding to the next programming period could be one option.

Concerning administrative capacity, an issue often mentioned in the literature and evaluation reports is the lack of (well-qualified) staff in managing authorities. The motivation, qualification and experience of employees are expected to increase administrative capacity through, e.g., involving local stakeholders in programming and throughout the implementation phase, in order to avoid mistakes such as calls for projects that do not match the capabilities and needs of the region. Furthermore, well-qualified and motivated personnel is a prerequisite for establishing regular communication and coordination processes with EU and national bodies involved in the implementation of CP or other funding instruments with similar objectives (such as Horizon Europe).

Recommendation #2: Given the importance of well-qualified and motivated staff in managing authorities for the absorption and effective implementation of Cohesion Policy, it should be ensured that sufficient financial resources are available to attract and retain staff. Better salaries and career options and an attractive working environment (e.g., cooperation with other regions in the country or across the border, room for manoeuvre concerning the design of calls for projects) are essential.

Other factors appear to be particularly important for fostering administrative capacity and hence the absorption of CP funds. They include the standardisation of administrative procedures and good IT systems that enhance, for example, the communication with beneficiaries, monitoring and auditing. For the Central and Eastern European MSs, the literature further emphasises that the centralisation of institutional coordination has increased administrative capacity and improved the implementation of CP. While the advantages of regional managing authorities for regional OPs seem intuitive for a place-based policy, in a recent study, Mendez and Bachtler (2022) find that it does not play a (statistically significant) role for absorption and outcomes whether the authorities manage national or regional OPs. Most likely, the optimal level of centralisation of CP implementation depends on the respective context and regional as well as national specificities. The availability of administrative resources, in particular human resources, is likely to be very relevant in this context.

Recommendation #3: If managing authorities in certain regions are understaffed despite the availability of financial resources, the European Commission and national policymakers should consider the possibility of merging managing authorities for operational programmes in two (or more) regions that are close to each other and/or have similar characteristics and challenges. Synergies in tasks such as monitoring or stakeholder processes could possibly be identified and exploited without losing the place-based focus of the policy.

Administrative capacity is an important element of a region's absorptive capacity, i.e., the ability to use the funds available to the region in a way that increases economic growth or employment. This ability depends, among other things, on the presence of (innovative) economic actors, the

education of the local labour force and the quality of institutions in a broader sense. For managing authorities, knowledge about capabilities (such as skills or previous patenting activity) in specific technological fields, or industries in which the region is specialised is crucial for designing appropriate calls for projects and selecting “good” projects. Experienced staff, the involvement of local stakeholders and coordination with relevant national and EU authorities are found to be particularly important.

Recommendation #4: The use of Cohesion Policy funds for technical assistance and strengthening public administration should be prioritised in order to generate positive impacts on the policy’s implementation overall. EU and national authorities in charge should analyse the relatively slow progress in the absorption of cohesion policy funding allocated to technical assistance and more efficient public administration. This is likely to be particularly relevant in the current context with an increased number of EU funding instruments and a variety of policy objectives.

The further development of green and digital technologies is prioritised in order to promote and benefit from the twin transition. An analysis of previous patenting activities reveals that capabilities to expand technological development and diversify into new green and digital technologies are quite heterogeneous, but widely spread across European regions. The fact that there are less developed and transition (middle-income) regions with considerable capabilities in green technologies and also specific digital technologies that are expected to generate high economic returns offers an opportunity to promote regional cohesion while advancing the twin transition. Knowing about regional capabilities and potential promising partner regions offering complementary capabilities not available in the own region thus seems important for managing authorities in order to adapt programming and policy implementation to improve the effectiveness of CP in terms of R&I and economic outcomes.

Recommendation #5: “Good” programming and project selection depends on administrative capacity. In addition to the four previous recommendations, information systems on regional capabilities, sectoral strengths, regional needs, and opportunities for inter-regional cooperation should therefore be improved and made accessible to administrative staff as well as potential beneficiaries.

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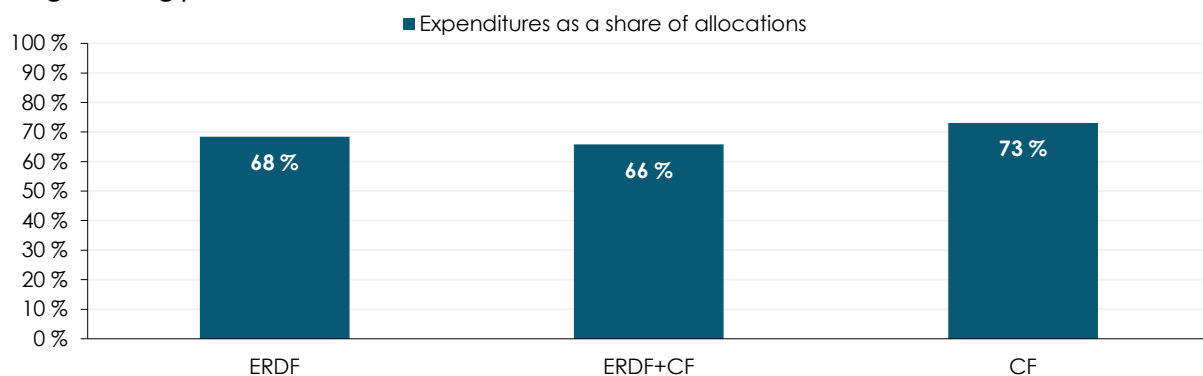
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3.2.8 Annex: Absorption rates in the 2007-2013 programming period

The following figures are based on the 'Geography of expenditure' report published by the EC in August 2015 (European Commission, 2015). The data can be downloaded from the 'Database of the cumulative allocations to selected projects and expenditure at NUTS2' and the 'Integrated database of allocations and expenditure for 2000-2006/2007–2013' on DG REGIO website (https://ec.europa.eu/regional_policy/policy/evaluations/data-for-research_en). As the report was part of the ex-post evaluation and had to be published in 2015, it is likely that not all expenditure recorded in the 2007-2013 programming period has been integrated into the database. As a result, absorption rates may be underestimated.

Figure 3.2.12: Absorption rate per type of fund

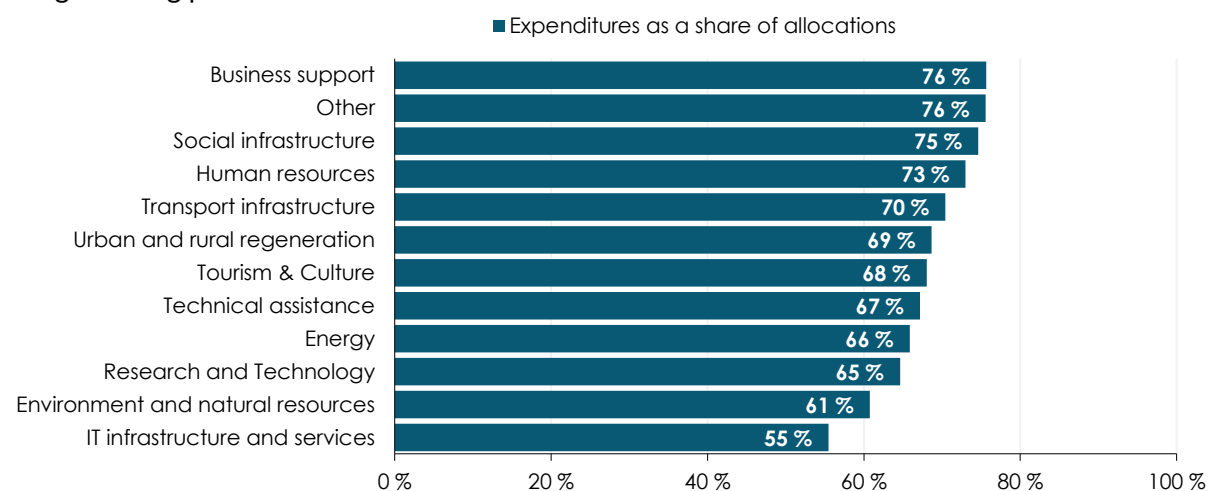
Programming period 2007-2013



Data: European Commission (2015), own elaboration.

Figure 3.2.13: Absorption rate per broad thematic category

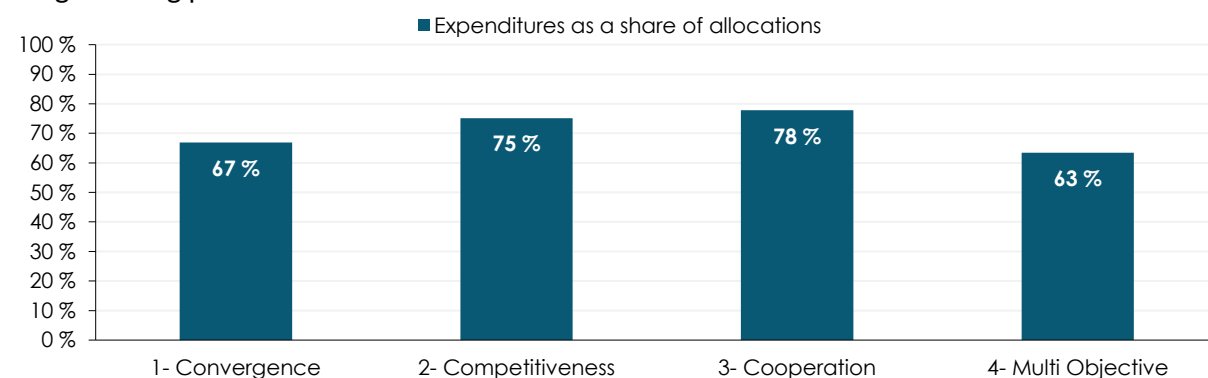
Programming period 2007-2013



Source: European Commission (2015), own elaboration.

Figure 3.2.14: Absorption rate per objective

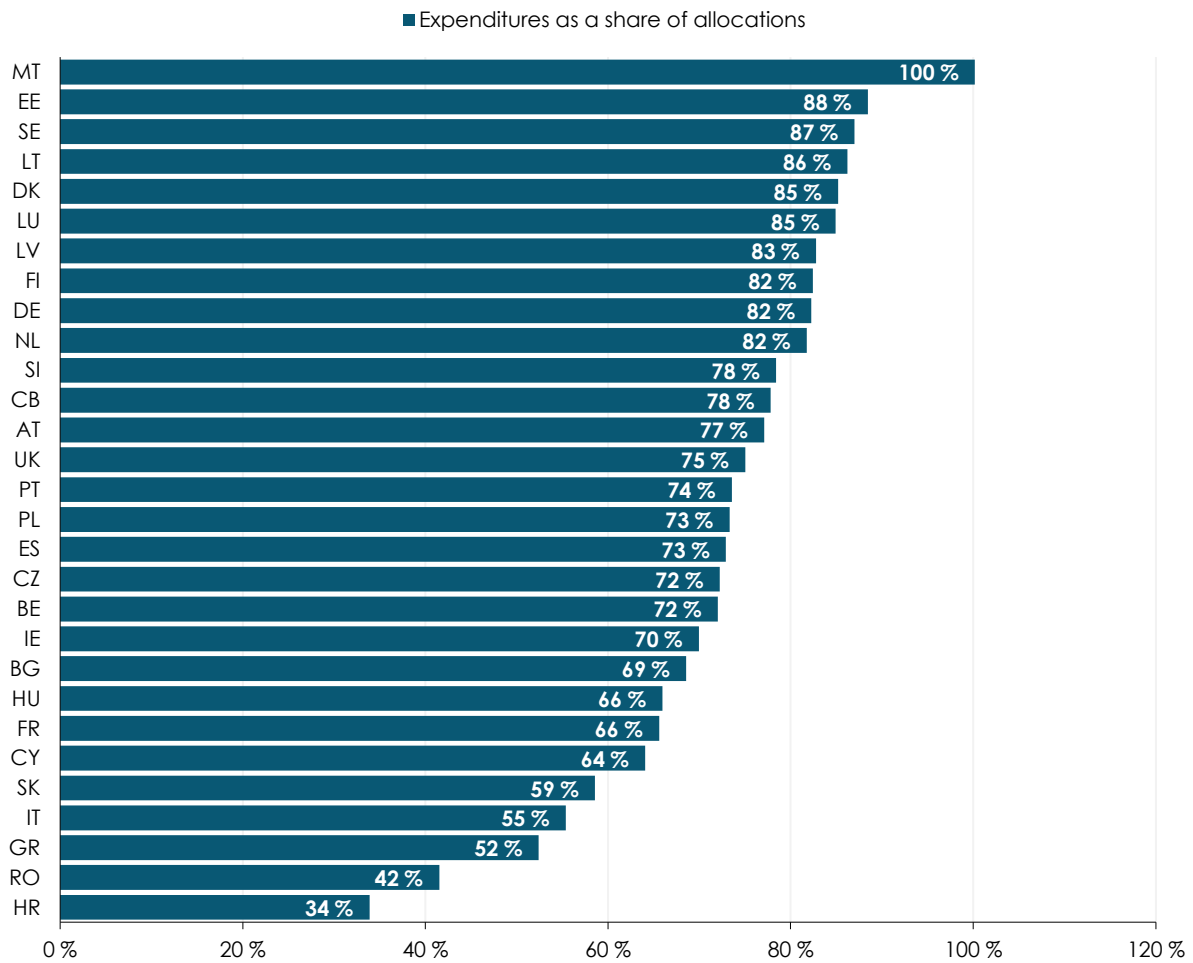
Programming period 2007-2013



Source: European Commission (2015), own elaboration.

Figure 3.2.15: Absorption rate per Member State

Programming period 2007-2013



Source: European Commission (2015), own elaboration. CB means “Cross-border cooperation” and denotes the absorption of cross-border, transnational and inter-regional programmes.

3.3 Zareh Asatryan, Carlo Birkholz and Friedrich Heinemann: The Heterogeneous Output-Impacts of EU Cohesion Policy - A Review of Recent Literature¹³³

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Abstract

This chapter reviews the recent literature that assesses the output effects of CP. It pays attention to methodological advances in this literature and articulates how different methods are suited to address particular policy questions, and what their drawbacks are. It further highlights the role of conditioning factors in explaining heterogeneous output-impacts across regions and time. It turns out that there is no clear consensus on many important dimensions driving effect heterogeneity. The divergence in findings appears to run specifically along the line from academic papers to EC authored papers. The chapter concludes with an urgent reminder to bear in mind the methodological limitations underlying individual results when drawing generalized conclusions about the success of the policy. Pressing research questions to advance the understanding of the policy's impact are formulated.

3.3.1 Introduction

CP has been and continues to be a major part of the EU budget constituting about a third of it (European Commission, 2023). While recent budgetary periods have tended to enlarge the set of objectives of CP, see, for example, Leino-Sandberg (2024) on the proliferation of policy goals or Feld (2024) on the role of EU CP for Climate Policy, territorial cohesion remains its central motif. Given the large size and the long running nature of the policy, a vast body of literature from various authors seeks to assess the policy's contribution towards reaching its main goal of territorial cohesion.

In this chapter we provide a partial review of the recent literature on the heterogeneous impacts of CP on output. We aim to understand whether there is consensus in the literature around the question of the output impacts of CP, and, in particular, around the critical conditioning factors of the effectiveness behind the policy.

We start this review with a section on the methodological advancements of the literature, to enable an understanding of the assumptions and limitations of the main methodological approaches. We then discuss the recent literature in terms of the aggregate effects of CP, as well as its heterogeneous effects where we try to identify the critical dimensions. When applicable, we contrast the findings of the academic literature to the substantial amount of research done at the EC. Finally, following this qualitative assessment of the literature, we perform a simple empirical exercise to tease out the main dimensions of heterogeneity that turn out to be important in the academic literature and that of the Commission.

¹³³ *Acknowledgement:* The authors are grateful to the German Federal Ministry of Finance for sponsoring this project, and to Karina Kindler for excellent research assistance.

Several chapters of this report study important aspects related to the heterogeneous growth effects of CP. Most closely related is Fratesi (2024a) on constraining and enabling factors of a successful EU regional policy in Europe. The chapter investigates conditioning factors for the growth effects, and conducts its own empirical analysis of them. The analysis suggests that factors of growth such as human capital, capital stock and quality of governance correlate negatively with policy potential. Regions in higher need of receiving the policy are on average less endowed with these factors. Ehrlich (2024) on the importance of EU CP for economic growth and convergence is also related. It highlights that CP has indeed been effective in reducing regional disparities. The paper argues however, that in order to further converge and use funds efficiently, improvements of local institutions in the recipient countries are required. This is reiterated for a particular aspect of local institutions, namely administrative resources, in Bachtrögler-Unger (2024). The ability of local institutions to absorb funds efficiently – their absorptive capacity – is dependent on the human capital available. The need to facilitate high degrees of administrative capacity to ensure a successful policy is stressed. A different but important type of heterogeneity of the growth effect is discussed in Lang (2024) on interregional and interpersonal redistributive effects of place-based policies. The chapter focuses on the heterogeneous impacts of CP along the income distribution, and discusses how the policy might increase interpersonal inequality within the recipient regions.

Our review builds on the literature sections of these chapters, and extends them by select recent papers that we judge to be most relevant for our questions. We do not aim to cover the very large literature on CP effects in its entirety, but rather complement the two previous meta-analytical papers, Fang and Dall'Erba (2017) and Marzinotto (2012), which present a systematic overview of the past literature. We build upon and extend their work by covering the more recent literature, focussing on drivers of heterogeneity and presenting a specific viewpoint of academic literature versus findings by the EC.

After discussing the methodological approaches of the literature, we proceed to discussing the findings of the literature on two levels. First, we summarize findings that are concerned with output-impacts in an aggregate sense. The predominant question here is naturally about the absolute size of the growth effect, but subsequent questions such as about the additional effectiveness of the policy per Euro spent, the temporal dimension of the policy, its interaction with business cycles, and effectiveness of spending by type of fund also receive attention. Second, we turn to the role of local economic characteristics in determining the effectiveness of the policy. Such local conditioning factors give rise to heterogeneous output-impacts, and are critical to consider to improve the efficiency of the policy going forward. In particular we discuss seven dimensions of heterogeneity analysed in the literature: the level of income, institutional quality, absorptive capacities of the public and of the private sector, and the availability of human and physical capital.

Following this qualitative assessment of the literature, we perform a simple empirical analysis to back out the positive and negative correlates of CP output-impacts as predicted by the ECs' RHOMOLO model (for details on the model see Section 3.3.2), which is the workhorse model of the EC to simulate the impact of CP. To this end, we hand-collect the estimated magnitudes from Crucitti et al. (2022) by NUTS-2 region (the technical details of this approach are described in Box 3.3.1 in Section 3.3.5 below). We regress these estimates at the NUTS-2 level on a number of

variables and indices which serve to represent the different dimensions of heterogeneity identified previously in the review part. In this way, we ascertain which of the factors are correlated with larger or smaller output-impact estimates. This evidence and the insights from the literature review allow us to contrast synthesised views on the critical factors of heterogeneity of the EC with those of the academic literature. We take note of certain inconsistencies in findings. For instance, as opposed to the academic literature, EC analysis does not find that the policy effects are temporary. In terms of dimensions of heterogeneity, the simulation results of the RHOMOLO model do not coincide with the common findings of the literature that cohesion effectiveness depends on factors like institutional quality, capital stock and human capital capacities.

We conclude this chapter by discussing the methodological maturity of this literature on whether cohesion leads to convergence, and by summarizing the areas of the literature where we think there are agreements and disagreements. We highlight differences in the opinions of the literature versus those of the Commission. Finally, we take note of several questions which we think are under-researched.

3.3.2 Methodological trends

The impact of a policy is of key interest to any evaluation that wants to assess efficiency and effectiveness. Empirically estimating impact precisely comes however with a number of challenges. The gold standard in assessing the causal effect of any intervention would be through a randomized control trial (RCT). The application of RCTs specifically in the context of CP is discussed in Heinemann et al. (2024). Generally they are difficult to implement at scale due to the size of the programmes and potential ethical concerns in randomizing treatment (receiving of funds). Often-times lacking this first-best option, the struggle in estimating the impact of a policy is to find credible counterfactuals. In the case of CP these would be regions that did not receive (as much) funding under the policy, but are comparable to those that receive (more) funding. These challenges are exacerbated by difficulties to obtain high quality micro level data with coverage across countries and of subjects affected and not affected by the interventions.

Given the mentioned difficulty to implement RCTs at scale, there are two second-best empirical methods that have become frequently applied in the last decade: the RDD and DID. RDD involves studying the effects within groups located in close proximity to the threshold that determines eligibility for treatment. Groups just above the eligibility threshold serve as arguably reasonable control groups for those just below the threshold, if members of each group cannot manipulate their position relative to the threshold. In the context of CP an often exploited threshold is given by the allocation rule of the ERDF and ESF, which sees regions below the 75% average of the EU GDP eligible for the majority of the funds.

The DID methodology compares treated and control regions before and after receiving the treatment. Assuming that both groups were on similar growth paths before the policy intervention, comparing the difference of the change in growth rates between the regions reveals the treatment effect of the policy. The underlying assumption is referred to as the parallel trends assumption. For an application of both methods see Asatryan and Birkholz (2024) on the impact of EU CP on investments by the MSs.

Another method to construct credible counterfactuals using ex post data is propensity score matching. Observations in the control group are weighted according to their similarity to observations in the treatment group based on observable characteristics. The characteristics chosen for the calculation of the weights might be chosen according to theoretical deliberations, or in a data-driven way.

To simulate equilibrium effects of the policy (effects that consider indirect effects, e.g. price adjustments) models are typically used. They provide a mathematical structure that relates outcomes to a foundation of relevant characteristics of the treated regions. Models are particularly useful to estimate ex-ante effects, where the necessary data to conduct analysis of the nature presented above is not yet available. Their drawback is an inherent reliance on assumptions that are not easily directly testable. As such the validity of interpreting estimated impacts coming out of models from an ex-post perspective, relies crucially on an assessment of the validity of their assumption in the reality that played out. However as put in Fratesi (2024b), “[...] models are never fully ex post even when they are used for that purpose, since relations are assumed to work in a certain way and it is not possible to check even ex post whether these relations worked as assumed”. There are two main models used, especially by the EC, for the purpose of evaluating CP impact: the RHOMOLO and the Quest III model.

The RHOMOLO model is a spatial computable general equilibrium model and was developed for EU policy makers. The model is based on NUTS-2 regions, includes 10 NACE rev.2 economic sectors and differentiates between households, governments and investors as final goods consumers. Firms consume intermediary inputs. Trade within and between regions is subject to transport costs, and labour is divided into three different categories, corresponding to skill levels. The model simulates policy effects and is particularly suited to assess effects on human capital, transport infrastructure and R&D&I (Lecca et al., 2018).

The Quest model is a New-Keynesian macro model, designed to analyse European economies’ interactions. It is primarily focused on studying policy effects through simulations, more so than being a forecasting tool (Roeger & Veld, 1997).

Aside from quantitatively studying effects, there is also a substantial literature descriptively studying specific cases through quantitative and qualitative examination of outcomes. Such case studies might not be able to report prevalent changes relative to a counterfactual scenario and therefore not identify causal effects, but they can nevertheless be a source of valuable information, especially about the context and potential mechanisms of effects.

3.3.3 Aggregate effects

Magnitudes of aggregate effects

Studies looking at the effectiveness of EU CP generally find that the beneficiaries of the policy indeed display higher positive economic growth on average. The measurement concepts differ and the magnitudes of the identified effects vary substantially. Becker et al. (2010) were the first to design a causal methodology for studying the impacts of CP, a methodology that has been adopted by many others since then. Their RDD analysis suggests that the main beneficiary regions’ GDP increases by about 1.6% per year within the programming period. From this estimate they back out a multiplier of 1.2, which lacks however the statistical precision to be distinguishable

from a multiplier of 1 with high confidence. The EC, in its own RDD study, finds that the annual rate of growth of regional GDP per capita increases by 0.5 to 0.7 percentage points due to CP (Applica and ISMERI Europa 2016). Descriptive and model-based findings of the EC further support these findings (Applica et al., 2010; DG REGIO and Joint Research Centre Seville, 2016). Crucitti et al. (2022) estimates EU-wide GDP to be 0.4% higher in 2021 compared to 2013 under the counterfactual scenario of not having CP. Coelho (2019) estimates an average output multiplier of 4.1 after three years.

Diminishing returns

One prevalent hypothesis for the impact of CP, and for government spending more generally, is that their rate of impact tends to decrease with the size of funds. The literature seems to generally agree on this hypothesis. The RDD study of Cerqua and Pellegrini (2018) estimates that funds going above the threshold of 305€-340€ in per capita transfers tend to have diminishing effects. This finding is supported by Fiaschi et al. (2018), whose spatial Solovian growth model also finds an upper threshold in the magnitude of around 4% of regional GDP, after which transfers cease having additional significant effects. Becker et al. (2012) uses propensity score matching techniques and identifies a threshold of about 1.3% of regional GDP, after which additional funding does not further increase per capita income growth. Similarly, a study by the EC uses propensity score matching techniques and finds evidence that increasing the intensity of funds yields increasingly smaller marginal regional growth effects (Università del Piemonte Orientale and Bondonio, 2016). In line with these findings, Jestl and Römisch (2020) employ HERMIN and QUEST model estimations and find that shifting transfers from the current main beneficiaries to main providers without changing the overall amount of funds would create an overall positive effect on growth in the short run. Becker et al. (2012) also suggest room for improvement through reallocation, as their propensity score analysis finds that growth in 18% of recipient regions would not have been diminished by a cut in funding.

Short vs long run effects

There is a disagreement in the literature on the question of whether the positive impacts of CP persist in the long-run. Becker et al. (2018), in a fuzzy RDD analysis, find effects on regional GDP growth during the respective funding period, but little persistence beyond that period. Mohl and Hagen (2008) find the growth effects to appear about two to three years after their disbursement. On the other hand, Crucitti et al. (2023), using a General Equilibrium approach, find a stronger positive effect on transfer recipients in the short run, but also an additional positive effect on the main contributors in the long run. The EC (DG REGIO and Joint Research Centre Seville, 2016) find GDP growth in the net contributors in the long-run. Using the RHOMOLO Model, the EC estimates that output multipliers are even larger in the long-run, going from less than 1 to 2.7 after 8 years of the end of a funding period (European Commission, 2016). According to these estimates, fifteen years after a programme's end the GDP in cohesion regions has increased by around 2.18%, while in transition and developed regions there are increases of 0.6% and 0.4% (Di Comite et al., 2018). In the QUEST Model, the EC finds different mechanisms at play. The short-run effects are reported to come from increased demand, though partly crowded-out through increased wages and prices, while effects in the long run are suggested to appear due to enhanced productivity (European Commission, 2016).

Business cycles

Generally, there is a consensus that fiscal interventions are more effective in stimulating the economy in recessions (Auerbach & Gorodnichenko, 2012). However, CP is not designed to be a counter-cyclical tool. It may even be the opposite, since financially constrained governments may have a hard time implementing cohesion projects during recessions due to co-financing requirements. Consistent with this view, Fidrmuc et al. (2019) finds smaller multipliers in regions hit hard by the global financial crisis. Darvas et al. (2019) attribute these adverse growth effects to increased fiscal constraints due to the crisis, which decrease national co-financing abilities. This finding is supported by Vivo and Rinaldi (2022), who report CP funds to lose their additionality, as they tend to crowd-out national investments in disadvantageous economic situations. Although, there has been some effort in temporarily reducing co-financing requirements during times where absorption rates were low, which may or may not be driven by financial constraints, this effort has not been systematic.

Investments vs wage subsidies

A fairly dense literature has studied the differential effects of types of funds. In general, a distinction is made between ERDF, which focusses largely on structural development through public investments, and ESF which focusses on employment subsidies. Canova and Pappa (2021) find ERDF to produce better outcomes in the short run, while the ESF seems to be more effective in the medium-term. Relatedly, Blouri and Ehrlich (2020) find investments in infrastructure to be beneficial in central regions, while wage subsidies seem to be more effective in regions with limited productivity and accessibility. At a more disaggregate level, Pontarollo (2017) finds investments in human capital to yield positive effects on GDP growth, with especially high returns in less developed regions. Fattorini et al. (2018) find investments in R&D to improve firms' productivity. A theory-based evaluation similarly assesses that the long-term effects for the growth of large enterprises come from investments in human capital or R&D (KPMG and Prognos, 2016b). As to investments in infrastructure, which is the bulk of cohesion funds, Pontarollo (2017) finds negligible or even negative effects, while the EC (European Commission, 2016) finds strong short-run benefits. This view is supported by the empirical analysis of Lang et al. (2022) who find the largest effects of cohesion to be concentrated in the construction sector.

3.3.4 Heterogeneity of effects depending on local characteristics

Level of income

Most of the empirical literature finds that economically developed regions generally have a higher multiplying factor of the funds than less developed regions (Rodríguez-Pose & Novak, 2013). However other studies (Calegari, 2021) and especially findings from the EC oppose this view. Canova and Pappa (2021) find multipliers to be consistently higher in Southern regions than in Northern regions. With some nuances but generally consistent with the consensus above, the Solow-Swan growth model of Fidrmuc et al. (2019) suggests GDP multipliers to be positive and greater than

one in Austria, Luxembourg, and the UK, positive but smaller than one in Eastern Europe and negative in Ireland and Southern Europe. These greater positive effects in more developed regions are reported to come from a more capable environment, which has the means to fully exploit additional funds (Cappelen et al., 2002). For example, regions with a high territorial capital stock reap greater benefits from the policies (Fratesi & Perucca, 2014). In a more nuanced analysis, the dynamic regression model of Canova and Pappa (2021) suggests that the longevity of benefits from ERDF are conditional on a region's position in the income distribution: regions in the lowest quartile benefit in the short term, central regions in the medium term, and regions in the top quartile in the long term. On the other hand, the EC, based on its RHOMOLO Model, finds GDP multipliers to be generally much higher in less developed regions, such as in the Eastern and Southern regions of the EU (Di Comite et al., 2018). Yet another EC report, using the QUEST model contrasts this, finds multipliers to be highest in regions of the EU12 countries, lower in the EU27 countries and still lower in EU15 countries, both at the end of the funding period, as well as eight years later (European Commission, 2016). The EC estimates especially the short term multipliers to be larger in the EU12 than EU15 countries, due to a concentration of funds on infrastructure, rather than R&D (Applica and ISMERI Europa, 2016).

Institutional quality

There seems to be a strong consensus in the literature that the effectiveness of structural funds is linked to regions' institutional quality (Butkus et al., 2021; Ederveen et al., 2003; Becker et al., 2013). Institutional quality has many dimensions, and studies try to unpack them. For example, Fazekas and Tóth (2017) finds that institutions associated with lower corruption are more capable of dealing with the additional corruption risks attached to EU funds, thereby increasing effectiveness. The EC (Ramboll and IEEP, 2015), combining case studies and detailed examinations by country experts, finds well developed communication between involved public governance levels, as well as highly trained employees of managing institutions, to lead to positive results. The case studies of EC (CSIL et al., 2018) report that current governance arrangements, institutions and stakeholders involved in a project are crucial factors influencing its success, with conflicting interests and unclear divisions of responsibilities being a hampering factor. These findings imply that reallocating funds from regions with low quality institutions to regions with high quality institutions will likely increase the overall effectiveness of CP, and to an extent this is already happening because of the higher absorption capacities of regions with better institutions (Charron, 2016).

Public absorptive capacity

Butkus et al. (2021) find that institutions have to be equipped with sufficient administrative capacity, to make Cohesion Policies effective. Additionally, positive results on growth are found in regions with decentralized structures (Baehr, 2006). To fully exploit the fund's benefits, several empirical studies suggest that improving MSs' administrative capacity should be of higher priority (Butkus et al., 2021; Arbolino & Boffardi, 2023). Likewise, survey and case study based EC reports describe that administrative and managerial capacity issues are related to implementation problems (KPMG and Prognos, 2016a) and restrict the funds' effectiveness (Finnegan et al., 2016). Moreover, an analysis through HERMIN and QUEST Models by the EC suggest that regions with a greater preparedness and capacity to absorb funds display highest benefits (Applica et al., 2010).

Private absorptive capacity

The importance of absorptive capacity is not limited to the administrative capacities of the public sector. The literature finds that effectiveness of funds also depends on a region's or sector's ability to exploit the funds and turn the transfers into economic growth (Becker et al., 2013). Sotiriou and Tsiapa (2015) use a growth model and find positive impacts of funds in regions where relevant input factors are available in abundance. For example, subsidies appear to have a greater effect in regions with low unemployment in the subsidised field (Neumark and Simpson). Likewise, the EC (Finnegan et al., 2016) finds a lack of absorption capacity in the subsidised sector to diminish the ability to fully exploit the funds' potential. A survey and case study evaluation (KPMG and Prognos, 2016a) finds that CP is less effective for small firms, which are more often limited in their management capacities and their technical knowledge.

Human capital

The ability to effectively absorb the provided funds is determined by regions' potential to satisfy the additional demand. This, in turn, depends on the availability of both human and physical capital. Becker et al. (2013) employing an RDD, and Rodríguez-Pose and Novak (2013), through a neo-classical empirical model, find human capital endowment to be an important determinant for the success of Cohesion Policies. For the funding periods from 1989 to 2006, Becker et al. (2013) report only 30 percent of recipient regions to display sufficiently high levels of human capital endowments and institutional quality to be able to efficiently take advantage of the investments. Case studies from the EC (Applica et al., 2010) find regions with a workforce with low education levels to experience slow growth. Evidence from the EC (KPMG and Prognos, 2016b) suggests that this finding also holds true on the firm level, where investments into firms with high quality R&D infrastructure and qualified human capital resources seem to produce larger overall benefits. Capelen et al. (2002) also report a lack of R&D capabilities in less developed countries to hamper their ability to turn funds into growth. However, Crescenzi et al. (2020), using RDD estimations, find investments into R&D to yield more benefits in low-tech sectors and firms.

Physical capital

The RDD analysis by Gagliardi and Percoco (2017) finds that areas which benefit the most from cohesion transfers are rural ones close to a city, as they benefit from a decent degree of development, while having the capacity to expand their economies. Similarly, the EC (DG REGIO and Joint Research Centre Seville, 2016), using the RHOMOLO Model, finds higher impacts of investments in regions which are close to other concentrated and trading regions, as well as generally closer to the core of the EU. Several case studies of the EC (Applica et al., 2010) also find growth in urban centres and capital regions to exceed growth in rural and particularly peripheral regions. The empirical studies of Bachtler et al. (2017) and Percoco et al. (2008) suggest that rural areas in the periphery seem to be more affected by the transfers than central urbanised regions.

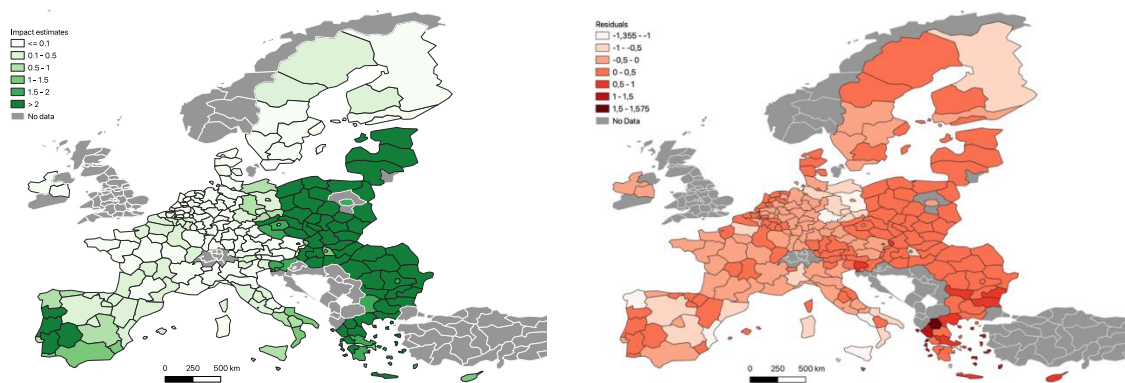
3.3.5 Commission vs economic literature: A brief synthesis

This section synthesizes the main dimensions of CP impact heterogeneity that were discussed in the two preceding sections. The aim is to evaluate where the literature's assessment of the role these factors play generally agrees or disagrees. In particular, we distinguish between the economic literature and the literature by the EC. Comparing these two providers of impact estimates

is instructive, as incentives and motives potentially differ strongly between the two. It is important to mention, that the assessments made are not always clear-cut, and this synthesis is by its nature a generalisation that serves as the basis to structure a discussion about discrepancies between these two major contributors to CP impact estimations.

As a starting point for this synthesis we plot the impact estimates of CP for the 2014 to 2020 programming period from the RHOMOLO model of the EC, which is presented in the left panel of Figure 3.3.1 below. Effects are largest in Eastern and Southern European regions, suggesting that the policy is contributing to territorial cohesion. The estimates from the model come with the general caveats laid out in Section 3.3.2. Additionally, they are expressed as estimated changes to GDP compared to a counterfactual scenario without the policy. That means, opposed to impact multipliers, they are not expressed in relation to the respective amount of funds received, and as such differences in impact might be driven by differences in funding amounts.

Figure 3.3.1: Estimates of the growth impact of Cohesion according to the RHOMOLO model



Notes: The map on the left presents the impact of CP on GDP growth of regions over the 2014-2020 funding period compared to a counterfactual of not having CP. Estimates come from the RHOMOLO model and are provided by Crucitti et al. (2022). The map on the right presents the same impact estimates but refined by us to control for the amount of cohesion funds dispersed to the region. The detailed methodology behind this exercise is presented in Box 3.3.1 below.

We use these impact measures to back out the positive and negative correlates of CP as predicted by the EC's RHOMOLO model. To this end, we run a simple ordinary least squares regression of variables that capture the dimensions of heterogeneity we identified in the qualitative literature review on the impact measures from the model, adjusted for the amount of funds spend in a region. The details of the model estimates, how we correct them for the amount of funds spent, and the empirical procedure behind the regression are detailed in Box 3.3.1 below.

The results from this regression are summarized in Table 3.3.1. We see a number of the variables we employ turn out to be significantly correlated with the impact residual. From the last column, where we regress all variables jointly, we observe a statistically significant, negative relationship between the quality of government index, the unemployment rate, the population size, and GFCF, which captures investments. A positive significant correlation appears for the share of population with tertiary education.

Box 3.3.1: Impact estimates from EC's RHOMOLO and it's determinants

To quantify the findings of the EC, we take region-specific estimates of the output impacts of CP from EC's workhorse RHOMOLO model. These estimates are provided by Crucitti et al. (2022) and they are plotted in the Figure 3.3.1 above.

The magnitudes show the impact of cohesion on GDP growth in 2014-2020 compared to a counterfactual scenario of not having cohesion at all. Unfortunately, multipliers, that is estimates showing the impact per euro of cohesion funds spent rather than their total effects, are not made available by EC at the level of regions. We try to account for the differing amounts of funds disbursed to the regions in the following way. First, we regress the amount of cohesion funds as a share of GDP at the level of regions in 2014-2020, and several higher polynomials of this regressor, on the total impact estimates provided by EC. The EC reports these regional impact estimates in intervals, for which we take the median values to utilize them in our regression framework. We take the residual of this regression, which computes as the impact measure minus the predicted impact given the disbursed funds and the estimated coefficients from the regression. Conceptually this captures the part of the impact estimate that is not explained by the amount of funds.

We plotted the residuals resulting from this regression in Figure 3.3.1, next to the raw data on impact estimates. The geographic heterogeneity in the two outcomes turns out to be quite similar.

The residuals then serve as the outcome of a second-stage regression, where we study the determinants of the output-impact of cohesion as estimated by EC. By utilizing the residuals we look to abstract from capturing differences in impact solely due to different amounts of funds spend in the regions. We take data from Eurostat to approximate the dimensions we have discussed in Sections 3.3.2 and 3.3.3, as closely as possible. Table 3.3.1 below shows the regression results and the rightmost column of Table 3.3.2 summarizes them.

Table 3.3.1: Correlation of the impact residual and various conditioning factors

	Impact residual	Impact residual	Impact residual	Impact residual	Impact residual	Impact residual	Impact residual	Impact residual	Impact residual
Log GDP in purchasing power standard per inhabitant	-0.245** (-3.28)								-0.00675 (-0.06)
European quality of government Index		-0.117*** (-4.28)							-0.151*** (-4.57)
Log tertiary education			-0.0711 (-0.77)						0.347*** (3.69)
Log unemployment rate in %				0.0187 (0.38)					-0.122** (-2.82)
Log population density					-0.0682** (-2.67)				0.0189 (0.57)
Log population						-0.265*** (-8.94)			-0.221*** (-4.08)
Log GVA agriculture							0.0717** (2.95)		0.0103 (0.27)
Log GFCF 2014-2020								-0.219*** (-9.80)	-0.103* (-2.03)
Constant	1.100** (3.27)	0.00262 (0.10)	0.237 (0.77)	-0.0366 (-0.37)	0.335** (2.60)	3.745*** (8.93)	0.282** (2.83)	2.362*** (9.75)	3.300*** (4.70)
Observations	225	225	225	224	225	225	225	225	224

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In Table 3.3.2 below we summarize our synthesis based on these findings and the qualitative review of the literature. Overall, the literature is in agreement that there are positive aggregate

growth effects from CP. These hold not only for transfers channelled into capital investment, but also for wage subsidies. There is further agreement that effects diminish after a given threshold of spending, with varying values for that threshold being found. Less consensus comes from the EC suggesting generally stronger effects than the economic literature, and also finding the effects to be very strong in the long-run. In contrast, the economic literature is not in agreement whether the short-run effects really persist in the long-run.

Table 3.3.2: Synthesis of the findings of the literature and the correlates

	Economic literature	EC (Rhomolo model)
Aggregate effects	slightly positive	strongly positive
Magnitude of spending	diminishing	diminishing
Long-run effects	diminishing	strongly persistent
Business cycle	pro-cyclical	unknown
Investments or wage subsidies	both positive	both positive
Level of income	positive	weakly negative
Institutions, capacities, capital	positive	weakly negative

The strongest disagreements between impact estimates by the EC and the economic literature regard the effectiveness of CP in relation to local characteristics. The economic literature on the one hand is in consensus that cohesion has stronger effects in regions with good institutions, higher ex ante levels of income, good public and private absorption capacities and high endowments of human and physical capital. While the EC and EC commissioned evidence from case studies mentioned in the preceding sections mirrors these findings, the correlational patterns presented in Table 3.3.1 suggest the opposite. The impact estimate residual (see Box 3.3.1 above for details) correlates negatively with local GDP, an indicator for the quality of governance, and GFCF. This suggests that CP impact as captured by the model is higher in regions where these factors are smaller. Given that these dimensions are strongly related to one another, it is plausible for the disagreements to be consistent across these factors.

It is plausible that the differences in the findings relate to their methodological underpinnings. As we discussed in Section 3.3.2, simulation models rely more strongly on assumptions, which might or might not hold in reality, to produce their output estimates. A key assumption underlying the model is the fully efficient use of funds. This assumption requires that there is no scope for diverging funds to unproductive measures, for example, through corruption. If corruption hinders the efficient use of the funds more likely in regions with lower institutional capacity, this will not be adequately captured by the models estimates. Instead such places might receive larger impact estimates, if it is assumed that there are decreasing marginal returns to the stock of public investments, due to the negative correlation between institutional quality and the public capital stock. Thus the model estimates would suggest a negative relationship between institutional quality and impact, while the economic studies with causal identification approaches show a positive relationship in Table 3.3.2. The example illustrates why relying on simulation models to assess the policy's output effects and the conditioning factors shaping them, can be flawed.

On the other hand, the models can incorporate spill-over effects of the policy, whereas in the quasi-experimental studies such spill-over effects would potentially attenuate the estimates, as

effects of the policy could indirectly affect the regions of the control group. This difference offers a partial explanation from a methodological standpoint for the disagreements in the size of the aggregate effect and the persistence of the effects.

3.3.6 Conclusions

The literature on the economic impacts of EU CP is large, naturally reflecting the economic size and the long history of the policy. This literature also exhibits a methodological diversity that reflects the complexity and multifaceted nature of the policy itself. Assessing the methodological maturity of this literature reveals a broad spectrum of approaches, ranging from causal designs to macro-economic models to qualitative case studies. However, limitations persist in precisely assessing location-specific effects, leading to substantial disagreements regarding impact heterogeneities. This lack of consensus hampers efforts to determine which policies work better in which locations, highlighting the need for further research to address these methodological challenges.

While there is general consensus on CP having a positive impact in the recipient regions in particular from investments funded under the policy, disagreements arise regarding the size and the long-term persistence of the aggregate effects. The EC asserts stronger aggregate effects and a long-term persistence, contrasting with the scholarly perspectives that suggest, if any, rather mild positive effects in the aggregate and effects of a shorter time horizon. An important additional element for the assessment of the aggregate effects of the policy is the question how it is financed. Taxes in the EU member countries can have deterring effects that lead to costs greater than one for raising one Euro of CP spending.

As to the heterogeneities of impact, there is general agreement in the economic literature that factors such as the quality of institutions, absorptive capacity of regions, human and physical capital are important in making the policy more effective. However, one issue with this literature is that, such a wide consensus can also be attributed to the inability of the literature to really unpack the role of these different characteristics from each other, rather than serving as evidence for a strong consensus per se that all these and related dimensions matter.

Nevertheless, the analysis by the EC is not fully consistent with the above because it suggests strong effects in poorer places. Since these places happen to have worse institutional quality, human capital, etc., empirically it comes out from our analysis that high impact is correlated with bad institutions. We discussed how these findings are related to the underlying modelling assumptions. Following from that discussion, the simulation model outputs should rather be understood as pointing to the policy's potential output effects, and should always be accompanied by a comprehensive discussion of the modelling assumptions. Crucially these assumptions should not just be laid out plain, but rather it should be discussed how their violation would affect the results.

These debates lead to disagreements on the central question facing CP: Is there economic (and social) convergence across the regions or not? While some meta-analyses suggest convergence, distinctions between peripheral and core regions complicate the picture. Moreover, convergence is not universally observable across well-being measures beyond GDP, indicating a lack of broad consensus on the efficacy of CP in fostering regional convergence. We thus conclude that there is no broad consensus in the literature that cohesion is leading to the economic convergence of European regions.

Finally, we note that several important questions remain under-researched in the literature. Despite consensus on the facilitative role of institutional quality and absorptive capacity, the policy implications of these factors remain ambiguous. Further research on isolating the more concrete mechanisms would be useful in designing well targeted policies. For example, lack of research on the crowd in or crowd out effects of cohesion on public and private investments, a question that Chapter 2.3 of this report focuses on, could help unpack the role of absorption capacities better. As another example, the productivity effects on the private sector are also not well studied, which would be an important step in understanding the persistence of the effects in the longer run. In this field, there seem to be major disagreements in the findings of model based and empirical approaches, which will be difficult to overcome with both approaches having methodological limitations. The interaction of the various dimension of effect heterogeneity is also potentially important for understanding the effectiveness of cohesion but not trivial to study empirically.

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4 Governance and Evaluation

4.1 Francesco Corti, Matteo Pedralli and Chiara Pancotti: The Recovery and Resilience Facility: Key Innovations and the Interplay with Cohesion Policy

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Abstract

With the aim of contributing to the ongoing discussions on the future of post-2027 CP, this chapter delves into the functioning of the RRF. It examines the interplay between the RRF and CP, illustrating their respective governance structures, the key strengths of the RRF, the main obstacles to its implementation, and the interaction between the two instruments. The chapter concludes that the RRF can provide at least two sources of inspiration for the future of CP and EU public investment policies: the performance-based payment mechanism and the link between reforms and investments.

4.1.1 Introduction

Established in February 2021, the RRF is the centrepiece of the NGEU recovery fund, temporarily set up in response to the Covid-19 pandemic. The general objective of the RRF is to promote the EU's economic, social and territorial cohesion by providing financial support to Member States in exchange of reforms and investments that address a significant subset of CSRs. The key novelty of the RRF is the funding mechanism not based on reimbursement of costs, but on the satisfactory fulfilment of the M&Ts agreed in their RRs. As such, the RRF has been presented as a 'performance-based' instrument. Put it differently, with the RRF, the focus of budgeting shifts from managing (i.e. 'how much have we spent?') to the achievement of policy objectives (i.e. 'what have we accomplished with our money?') (OECD, 2008).

Predictably, the launch of the RRF has led to a lively debate on the compatibility of this new instrument with traditional EU CP. A number of the ECA Journal published in May 2022 remarkably titled *Cohesion and NextGenerationEU: Concord or clash?*. The two instruments are in fact comparable in terms of size of the financial envelope (EUR 530 billion for Cohesion and EUR 723.8 billion for the RRF) and breadth of the investment types supported. At the same time, as we will detail in this chapter, the economic rationale underpinning the two instruments differs significantly and so does the governance structure. Such debate gained further prominence in light of the ongoing debate on the future of CP. As explicitly acknowledged by the *High Level Group on the Future of Cohesion Policy*, the RRF poses a set of questions that are linked to the governance and disbursement of EU funding as well as the role of structural reforms. Considering the temporary nature of the RRF and the ongoing reflections on the post-2027 CP, the question about which innovations can be taken and can inspire the next EU budget programming period is particularly compelling.

Against the above, the purpose of this chapter is to deep dive into the functioning of the RRF – more than three years after its adoption – and investigate the interplay with CP. In particular, we aim to answer to the following questions:

1. What are the key features of the RRF governance, and how does it compare with CP?

2. What have been - so far - the key strengths of the RRF? What have been the key obstacles for the implementation of the RRF?
3. What is the interplay between the two instruments?

To answer the above-listed research questions, the chapter will rely on multiple tools to ensure that the findings are based on factual evidence and on the opinions and perceptions of a wide range of stakeholders. Evidence has been collected through:

1. Desk research and literature review of official documents and existing studies and reports analysing the interplay, differences, and similarities of the RRF and CP.
2. Semi-structured interviews with stakeholders from the EC and national authorities from four selected MSs (Germany, Italy, Lithuania, and Spain).¹³⁴

The chapter is organized as follows. The next section will zoom in on the governance of the RRF and compare it with the governance of CP. The third section will instead illustrate the key success factors and the least effective in the implementation of the RRF. The fourth section will instead zoom in on the interplay between the RRF and CP. The last section concludes.

4.1.2 The governance of the RRF and CP: a comparison

To compare the RRF with CP we distinguish between the following dimensions:

- Policy objectives and role of reforms
- Governance processes and stakeholders' involvement
- Payments and monitoring and evaluation framework

4.1.2.1 Policy objectives and the role of reforms

The key documents of the RRF are the RRP.¹³⁵ The plans should consist of a comprehensive and coherent package of reforms and investments that fall under the scope of application of the Facility defined in Art. 3 of the Regulation, (i.e. the six pillars¹³⁶) and contribute to achieve its general and specific objectives (defined in Art. 4). To be eligible for the RRP, investments and reforms should be in line with a significant sub-set of CSRs addressed to the MSs in the context of the

¹³⁴ The interviews have been conducted in the framework of the study supporting the Mid-term evaluation of the RRF, Ref No. 2023 ECFIN 002/B4. The study has been published on the 21 February 2024. The independent study has been published together with the European Commission Staff Working Document as foreseen by the Regulation on the RRF, article 32.

¹³⁵ As stated in Art. 18 of the RRF regulation, a Member State wishing to receive a financial contribution shall submit to the Commission a recovery and resilience plan.

¹³⁶ (a) green transition; (b) digital transformation; (c) smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs; (d) social and territorial cohesion; (e) health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity; and (f) policies for the next generation, children and the youth, such as education and skills.

European Semester, they should comply with the Do No Significant Harm (DNSH) and the additionality principles (Art. 5 of the Regulation), and they should contribute to the climate and digital targets by allocating at least 37% and 20% of the financial envelope to achieve respectively the green (including biodiversity) and digital transition objectives.

Overall, the RRF objectives largely overlap with those of CP. If we look into the 5 thematic objectives identified in the 2021-2027 CPR – which represents CP’s key regulatory framework – these include also green and digital transition, smart and inclusive growth, and the implementation of the European Pillar of Social Rights. The main difference consists in the explicit reference to the sustainable and integrated development of all types of territories and local initiatives, which figures prominently in the CPR and is less explicit in the RRF. Such difference is all but minor and *de facto* reflects the different rationales underpinning the two instruments. The logic underpinning CP is primarily aimed at redistributing resources to less developed regions with the aim to contribute to upward economic and social convergence (Begg, 2010). By contrast, the RRF allocates resources to national governments with the objective of improving the resilience, crisis preparedness, adjustment capacity and growth potential of the MSs.

In terms of horizontal principles, Art. 9 of the CPR for 2021-2027 explicitly mentions the respect for fundamental rights and compliance with the Charter of Fundamental Rights of the European Union¹³⁷; equality between men and women and the integration of a gender perspective; prevention of any discrimination; alignment with the objective of promoting sustainable development, taking into account the UN Sustainable Development Goals, the Paris Agreement and the DNSH principle.

Moving to the role of reforms, CP also has an explicit link to the EU economic governance (since the 2014-2020 MFF) and in particular to the CSRs. The 2013 CPR introduced the so called ‘ex-ante conditionalities’ whereby – *inter alia* – MSs had to take into account the relevant CSRs in the preparation of Partnership Agreements and OPs (Article 17(3) of the RRF Regulation, Article 12(1) of the CPR). Yet, a number of studies (Ciffolilli et al., 2018; Vita, 2018) have highlighted that even though the CSRs have been taken up in the strategic choices set out in OPs of the then named ESIF, in practice, the absence of clear incentives or sanctions has limited the influence of the CSRs. This notwithstanding, the link with the CSRs has been included also in the CPR for the new 2021-2027 MFF, where investment priorities are defined during the programming process and re-assessed (as per Article 18 of the current CPR) taking account of the CSRs.

Despite the link to the CSRs, there is a significant difference between CP’s enabling conditions¹³⁸ and the reforms supported by the RRF. Indeed, the potential scope of RRF-supported reforms is wider. By contrast, the enabling conditions under CP are common to all MSs and their scope is limited to a number of specific areas. They are typically complied with through the adoption of strategies or administrative documents. In addition, the focus of the enabling conditions is to

¹³⁷ The only reference to the Charter of Fundamental Rights of the EU within the RRF Regulation, in recital 33, is related solely to the right to conclude or enforce collective agreements or to take collective action.

¹³⁸ In 2021-2027, ex-ante conditionalities have been renamed as enabling conditions.

reach out to the territorial level with the aim to strengthen the effective implementation of public investments. By contrast, the RRF supports reforms that are not necessarily linked to the implementation of investments.

On a different level, since the 2014-2020 programming period CP also includes a macroeconomic conditionality, allowing the Commission to suspend funds when MSs fail to reduce their excessive deficits. However, in practice, this provision – which could represent a linkage with the European Semester – has never been applied.¹³⁹

4.1.2.2 Governance: processes and stakeholders' involvement

The RRP are prepared by the MSs¹⁴⁰ and are then assessed by the Commission. Beyond the compliance with the above-mentioned criteria (CSRs, green and digital targets, DNSH and additionality), the Commission assesses whether *the arrangements proposed by the Member States concerned are expected to ensure an effective monitoring and implementation of the recovery and resilience plan, including the envisaged timetable, M&Ts, and the related indicators*. M&Ts are the measures of progress towards the achievement of a reform or an investment and are at the centre of the RRF performance-based approach.¹⁴¹ The fulfilment of M&Ts is in fact the basis for the Commission assessment of the payment requests by MS.¹⁴²

Based on this assessment, the Commission provides a proposal for a Council Implementing Decision (CID) setting out a binding set of measures, the associated M&Ts to be achieved, and the number and amount of instalments. Once the CID is adopted, it is complemented by operational arrangements¹⁴³, the financing agreements on which the budgetary commitments are based, and

¹³⁹ See Coman (2023) for a discussion of macroeconomic conditionality in CP, including a reconstruction of the difficult debate that led to its inclusion in the 2014-2020 regulatory framework. 2021-2027 CP keeps the key principles of macroeconomic conditionality, while adjusting some aspects of it: ESF+ and Interreg are excluded; no suspensions linked to excessive deficit are possible as long as the general escape clause of the Stability and Growth Pact is activated; the Commission cannot request a programme amendment during the first two years, the last year or two consecutive years.

¹⁴⁰ When drawing up RRP, national authorities were required to consult local and regional authorities, social partners, civil society, and youth organisations to the extent required by domestic legislation, and to provide in the RRP a concise overview detailing the consultation process conducted with social partners and stakeholders, showing how their inputs were integrated.

¹⁴¹ The EC's guidelines for preparing the recovery plans specify that M&Ts should remain within the control of the Member States and should not be conditional on external factors such as the macroeconomic outlook or the evolution of the labour market. As such, the Guidance suggests the use of input indicators or preferably output indicators, while it discourages impact indicators since they are not under the control of the Member States. It follows that, since fulfilling previously agreed M&Ts is the only criterion to justify disbursing an RRF payment request, M&Ts are likely to remain limited to tracking outputs rather than results or impacts.

¹⁴² See the CID approving the assessment of the RRP and the Staff Working Document accompanying the EC proposal for CIDs.

¹⁴³ The EC prepared a template for operational arrangements but issued it in October 2021 after most CIDs had already been adopted. Operational arrangements contain details of how the CID

the loan agreements, if applicable. Changes to RRP require the Commission's assessment and the Council's approval as well. In the case M&Ts are no longer achievable, either partially or totally, MSs can propose amendments to their RRP. Article 21 of the RRF Regulation defines the condition for plans' modifications.¹⁴⁴ The Commission's assessment of the modification request is based on the evidence of objective circumstances that prevent MSs from fulfilling the initially planned milestone or target.

Overall, the governance of the RRF is significantly different from that of CP funds. First, at the programming phase, under CP, each MS signs a partnership agreement with the Commission, which sets out the strategic orientation of the funding and the arrangements for using it. It contains details of national or regional programmes intended to address the main challenges facing the country or the region. The Commission adopts implementing acts to approve both the partnership agreement and the programmes¹⁴⁵. While the partnership agreement can change only at the request of the MS following the mid-term review¹⁴⁶, amendments to CP programmes, including budget reallocations within the limits authorised by the CPR, occur frequently.¹⁴⁷ Modifications of programmes only require the assessment and approval of the Commission.

Finally, with respect to stakeholder involvement, in CP, MSs must apply the partnership principle, which consists in ensuring the involvement in CP implementation of regional, local, urban and other public authorities, civil society, economic and social partners and, where appropriate, research organisations and universities.¹⁴⁸ In the 2014-20 cycle, a code of conduct on partnership¹⁴⁹ was also issued, which continues to apply in 2021-27. Concretely, the principle translates into the different partners having the opportunity to contribute to drawing up partnership agreements, through ad-hoc consultations, the participation in regular meetings and the submission of written contributions, and to similarly participate in preparing, implementing and evaluating each programme. In relation to 2021-27, these contributions were found to have helped, to some degree, in making programmes specific to the local and regional context (even if less so in the preparation of national partnership agreements) and were recognised as enablers of place-based sustainable

will be monitored, and what evidence the Commission expects to see to demonstrate that each milestone and target has been achieved.

¹⁴⁴ Plans' modifications are possible also based on two other articles of the RRF Regulation. Based on Art 14.4 Member States could request a loan until 31 August 2023 and therefore submit a modified RRP. Based on Art. 11.2, MSs could revisit their plans if the financial contribution amounts relative to the 30% of the envelope was revisited in July 2022.

¹⁴⁵ A significant difference lies in the fact that while the Commission's assessments of adopted RRP are publicly available, those of CP partnership agreements and programmes are only shared with the national and regional authorities concerned.

¹⁴⁶ According to Article 13 of the CPR a Member State may submit to the Commission by 31 March 2025 an amended Partnership Agreement, taking into account the outcome of the mid-term review.

¹⁴⁷ Amendments of programmes are regulated in article 24 of the CPR.

¹⁴⁸ Recital 14 of the CPR.

¹⁴⁹ Commission Delegated Regulation (EU) No 240/2014.

and digital transitions, being especially important in the phase of needs analysis and priority development.¹⁵⁰

4.1.2.3 Payment system and monitoring and evaluation framework

As a performance-based instrument, the RRF implementation is based on the fulfilment of M&Ts. Payment requests may be submitted by the MSs to the Commission twice a year. For each payment request, the MSs commit to implement a certain number of M&Ts. The Commission's assessment of the M&Ts fulfilment relies on their description (set out in the CIDs) as well as the *context and purpose*. In the case of non-fulfilment of M&Ts related to a payment request, the Commission proposes to suspend all or part of the financial contribution. In addition, under the RRF MSs can access a single pre-financing of up to 13% of the grant, and if relevant, the loan.¹⁵¹ In February 2023, the Commission presented a Communication in which it explains in detail the functioning of both the framework for assessing M&Ts and the payment suspension methodology, and in particular the application of upward coefficients to decide on the amount to be suspended. The coefficients are based on the importance of the milestone or target and differ depending on investments and reforms.¹⁵²

Contrary to the RRF, CP finances operations primarily based on the reimbursement of incurred costs instead, albeit not exclusively. In the 2014-20 period, CP has foreseen Simplified Cost Options (SCOs) as well, consisting in predetermined unit costs, flat rates and lump sums being used for the reimbursement of expenditures. MSs could also choose to claim reimbursements based on Financing Not Linked To Cost (FNLTC) in selected sectors, but this option was not widely adopted. In 2021-27, further steps towards a performance-based approach have been taken: SCOs become mandatory for operations under EUR 200,000, and technical assistance for programme management is reimbursable through flat rates. FNLTC is confirmed as a possible form of disbursement, and technical assistance to strengthen the capacity of beneficiaries and partners (other than programme management-related technical assistance) is reimbursed only by means of FNLTC.

As to the monitoring aspect, in the RRF, the Delegated Regulation (EU) 2021/2106 imposes an obligation on MSs to report twice a year on the progress of M&Ts (no later than by 30 April and 15 October), even in absence of a payment request. MSs report their progress in achieving their M&Ts due in the past and twelve months into the future. In addition to M&Ts, the RRF includes also other types of performance information, i.e. 14 common indicators, set out by the Delegated Regulation (EU) 2021/2106. These indicators are used for the purpose of monitoring and evaluation of the Facility towards the achievement of the RRF general and specific objectives. MSs shall report to the Commission on the common indicators twice a year (by February and August) and the information is included in the RRF Scoreboard, which displays information on the progress of

¹⁵⁰ European Committee of the Regions (2021b).

¹⁵¹ Article 13 of the RRF Regulation.

¹⁵² As explained in Annex II of the EC Communication: 'Once corrected unit values are established, upward and downward adjustments will be made in the specific cases outlined below. The final amount to be suspended per unfulfilled milestone or target will be equal to the corrected unit value subject to any upward and downward adjustment ('suspension value').

the implementation of the RRP in each of the six pillars, as well as the progress on the fulfilled M&Ts. Contrary to the M&Ts, however, common indicators are not used for payments' disbursements or suspension.

The CP approach concerning monitoring is different. Over time, the Commission has promoted and supported the development of a detailed system for data reporting concerning not only data on expenditure progress and thematic and geographic distribution of CP funds, but also different features of the operations implemented. Granular information on the operations is made available by the managing authorities of each programme, which have to maintain a list of operations by programme and by fund and publish it online. In some cases, national authorities also make available lists of operations featuring additional details compared to what is foreseen in the CPR. Such comprehensive lists represent formidable sources of information, enabling a thorough mapping of financed operations. Being able to elaborate on the types of projects that have concretely benefitted from EU funding allows to understand how the strategic priorities identified in the programming phase have been translated into reality, and in principle these datasets can offer essential insights on the relevance and the coherence of the expenditure. The Commission has also recently taken steps to integrate such national datasets in a unified database at EU level, enriching them with further detail, even though this exercise faces multiple hurdles.¹⁵³ Furthermore, under CP, data on financial implementation and details of the operations constitute a first pillar of monitoring and data reporting; a crucial second pillar is represented by performance indicators, i.e. output and result indicators, which are at the core of monitoring activities. In 2014-20, mandatory common indicators, instrumental for aggregating data at EU level, were introduced¹⁵⁴, and the capacity of MSs and regions to collect data also improved (Pelegrin & Colnot, 2020). The 2021-27 regulatory framework (with some minor modifications) has kept the common indicators, seen as key for aggregating data and ensuring accountability and policy learning. The common output indicators for ERDF, CF and JTF, for instance, are 97, common result indicators are 66. Under CP, the monitoring systems are managed by the managing authority of each programme, and their per-

¹⁵³ More information is available here: <https://cohesiondata.ec.europa.eu/stories/s/2014-2020-Data-on-operations-WP2-public-/h9bm-ur7f/>.

¹⁵⁴ Four categories of indicators were established in the CPR, based on two fundamental variables: whether indicators concern implemented operations or observed change, and whether indicators are at the programme level or belonging to the list of EU common indicators: 1) Programme-specific output indicators are collected based on the type of interventions financed under each programme. For example, they can refer to the number of supported firms, jobs created, new kilometres of rail lines built, etc. They offer information on the implementation of projects and are linked to targets; 2) Programme-specific result indicators are collected based on each programme's specific objectives, and they measure change brought about in different policy areas (i.e. in the priority concerned). Their progress is compared to a baseline and a target. They may capture not only the impact of programme interventions but also other factors external to the policy; 3) Common output indicators are set out at EU level and apply across all MS and regions, providing information that can be aggregated. They are set out in the Annexes of fund-specific Regulations and are mandatory; 4) Common result indicators: only relevant for ESF/YEI, not for ERDF and CF.

formance indicators are not linked to disbursement. Five times a year, managing authorities submit financial data to the Commission, and twice a year performance data. The Commission, in addition to managing the Cohesion Open Data Platform, issues an annual management and performance report to the Parliament, in the context of the discharge procedure (European Court of Auditors, 2023a, p. 53). In the face of such an ambitious approach to monitoring, managing authorities have over time set up wide-ranging monitoring systems and consolidated the data flows.¹⁵⁵ In some countries, the RRF monitoring systems are largely based on the CP ones, for instance in Lithuania and Romania, in light of the infrastructure and expertise built over time. At the same time, however, CP's evolution towards an ever more ambitious monitoring has also been attached to recurring concerns about administrative burden on public authorities and beneficiaries (see, for example, Pellegrin & Colnot, 2020).

Finally, in terms of evaluation system, the RRF only foresees a mid-term and an ex-post evaluation carried by the EU Commission. By contrast, under CP, in addition to the mid-term and ex-post evaluation by the Commission, the MSs perform evaluations of programmes following an evaluation plan.

The table below provides a summary comparison of the RRF and CP.

Table 4.1.1: Comparison of the RRF and Cohesion Policy governance

	CP 2021-2027	RRF
Overarching legal basis	Common Provision Regulation (2021) and programme-specific regulations	Regulation (EU) 2021/24
Objectives	5 policy objectives, specific objectives	6 pillars
Key documents	Partnership agreements Programmes	NRRPs Operational arrangements
Conditionalities	Enabling conditions Improved and more operational links with European Semester – focus on investment-related CSRs esp. at the beginning of the programming (2019 CSRs) and during the mid-term review (2024 CSRs)	Eligibility criteria CSRs pre-condition to accept reforms and investments
Amendments	Possible based on Art. 13 (for partnership agreements, taking into account the mid-term review) and Art. 24 (for programmes)	Possible based on Art. 21 (objective circumstances), Art. 14.4 (loan request). Art. 11.2 (grant revision)
Monitoring	Transmission of financial data 5 times per year, annual review meeting, final implementation report	Common indicators Social Expenditure methodology

¹⁵⁵ See Vignetti et al. (2022) for an overview of the different types of monitoring systems for 2014-20 ERDF and Cohesion Fund, their quality and challenges.

	Obligatory publication of all information and data	Transmission of data two times a year within the Semester on M&Ts
Evaluations	<p>No obligation to conduct an ex-ante evaluation by MS</p> <p>MS obliged to finalise by end-June 2029 an evaluation for each programme to assess its impact</p> <p>Commission to conduct mid-term evaluation by end-2024 and a retrospective evaluation by end-2031</p>	RRF Mid-term and ex-post evaluation (Art. 32)
Financial Support	<p>Union contribution reimbursement also through FNLTC & based on SCOs (clear conditions covered by programme decision) and reduced scope of controls and audits</p> <p>Empowerment for Commission to set up off-the-shelf methods for Union contribution through SCOs and FNLTC</p>	FNLTC (payment based on achievement of milestone and targets)
Role of the EC (planning phase)	<p>Draft budget and accompanying documents in particular the Programme Statements (Financial Regulation)</p> <p>Management Plans which show the actions and outputs for the year ahead, reflecting the priorities set in the State of the Union address and in the Work Programme</p>	Commission shall assess the relevance, effectiveness, efficiency and coherence of the RRP, taking into account the following criteria which it shall apply in accordance with Annex V of the RRF Regulation
	<p>Integrated Financial Reporting Package, in particular the Annual Management and Performance Report, which includes separate sections on performance and results and on management achievements.</p> <p>May review Common Strategic Framework if changes are made in the EU strategy</p>	Approval of the disbursement requests based on M&Ts' fulfilment

Source: Own elaboration.

4.1.3 The key strengths of the RRF compared to the CP

The independent study supporting the RRF Mid-term evaluation (Corti et al., 2024) identifies three factors as the most effective of the RRF: the speed of disbursement, the link between investments and reforms and the performance-based approach. In what follows we focus on the link between investments and reforms under the RRF and the performance-based approach.

Support to reforms: As stressed above, the key novelty of the RRF is the link between reforms and investments and the requirement to comply with a significant sub-set of CSRs as an eligibility condition for the measures included in the plans. To date, more than one third of all measures in the 27 RRFs are reforms (around 2,187 reforms compared to 3,780 investments).

The CSRs conditionality attached to the RRP pushed MSs to put in place controversial reforms for which there would otherwise be insufficient political capital (see examples below). Second, the RRF defines a clear timeline for the reforms' implementation and M&Ts to monitor the effective intermediate steps for the reforms' adoption. The ex-ante definition of a rigid timeline, accompanied by well-defined M&Ts, the fulfilment of which is a condition of the payment disbursement, is indicated as a key factor to accelerate the political discussion on reforms which would otherwise have taken a much longer time to be adopted.

Predictably, the effectiveness of the RRF in supporting reforms increases in those countries that are the largest beneficiaries of the RRF envelope. According to Italian interviewees, without the RRF it would not have been possible to adopt in such a short timing and at the same time the public administration, justice (civil justice, criminal justice, insolvency framework and tax courts) and competition reforms (to update the regulatory framework to attract both public and private investment). Similarly, the Spanish authorities acknowledge the key role of the RRF in accelerating key reforms such as the labour market and the pension reforms that were adopted in consultation with social partners in a very short time frame. By contrast, in other MSs, the reforms introduced with the RRF are not of the same magnitude. In some countries, like Germany, the reforms included in the plans were either already foreseen in the government coalition programme or introduced only relatively minor changes. This notwithstanding, also in a country like Germany, with relatively lower financial incentives, based on an interview with national authorities, the RRF in part contributed to accelerating the introduction of important reforms, like the joint programme at national and regional levels to tackle investment bottlenecks.

Overall, RRP have used the term “reform” to refer to different actions, ranging from ambitious and structural changes in key policy sectors (not necessarily linked to investments) to the adoption of rather simple administrative documents, or measures that were already foreseen and almost completed before the pandemic and the launch of the RRF.¹⁵⁶ Yet, in their most ambitious form, reforms under the RRF have the potential to overhaul the governance of entire policy sectors and to introduce disruptive innovations at the legislative level.

Performance-based approach: As highlighted in the study supporting the mid-term evaluation of the RRF, the shift towards performance-based budgeting in the RRF has been welcomed as a positive innovation by several MSs. The shift towards the performance-based approach is considered effective because it ensures predictability and accountability through the clear ex-ante definition of M&Ts and the establishment of a clear timeline for implementation. Article 20 of the Regulation in fact specifies that the time limit by which the final M&Ts must be completed is 31st August 2026, while payments shall be made by 31st December 2026.

¹⁵⁶ For example, in the Operational Arrangements between the Commission and Spain, a milestone (related to measure C10.R1) concerns the creation of the Institute for the JTF. The Institute, established in April 2020, was already foreseen in the Just Transition Strategy approved in February 2019, although not yet put into law. Even if in line with the possibility for the RRF to finance reforms and investments made from February 2020, this example offers an illustration of a case where a reform did not really disrupt the policy framework.

Predictability and accountability are welcomed as effective aspects of the RRF for two main reasons. First, the RRF performance-based approach was positively welcomed as a positive cultural shift in public policymaking. The ex-ante formulation of expected M&T is perceived as enhancing deliberation about the usefulness of policy instruments and gives clear metrics to evaluate success. Moreover, the selection of reforms and investments based on expected results pushed MSs to think about reforms and investments in parallel and this is a positive element because it forces having a coherent approach.

Second, the approach of M&Ts attaches additional leverage for administrations at the domestic level (Bokhorst & Corti, 2023). The requirement to prepare reforms and investments plans and the link between M&Ts fulfilment and payments' disbursement was an incentive for some national governments to include long-time contested measures in the plans. This is particularly true in those countries like Spain, Croatia, Italy, Portugal, where the financial envelope is high and where the risk of losing EU funds due to noncompliance with M&Ts is higher. In these cases, the performance-based approach reduces leeway for deviation and increases common responsibility to meet the agreed objectives within the agreed timeline. By contrast, in countries with lower financial envelope from the RRF, the financial incentive of the RRF is lower and therefore also the incentive to comply with the M&Ts included in the plan. This said, even in countries with a higher RRF financial envelope the choice of reforms did not incentivise governments to adopt long-awaited reforms but to rather include measures that are easier to implement in order to avoid possible delays with the payments' requests.

At the same time, RRF's approach has been subject to various criticisms, including for not really being performance-based. The ECA, for instance, assessed the RRF's performance monitoring framework as capable of measuring implementation progress, but not sufficient to capture performance (ECA, 2023d) and the literature has come to similar conclusions (see, for example, Zeitlin et al., 2023; Böhme et al., 2023). More specifically, ECA noted that a key weakness of RRF M&Ts lies in their focus on inputs and especially on outputs, rather than results. In addition, their level of ambition varies, with some of them being more demanding than others¹⁵⁷. Even in cases where the same cross-border project is supported under multiple RRFs, M&Ts are not harmonised. Moreover, some M&Ts are not described in a clear way: this poses risks in terms of difficult assessment.

Literature also sheds light on the need for caution in what can reasonably be expected from a result-based system in light of previous experiences. According to a study by the World Bank, there has been "a general pattern of disappointment with the results of performance budgeting, balanced by a strong belief in the underlying logic", leading to a "gap between promise and practice"

¹⁵⁷ ECA provides examples illustrating a large diversity in final targets of measures related to the following domains: training initiatives; industry decarbonisation; energy efficiency; sustainable transport. For instance, in the domain of industry decarbonisation, targets range from "number of completed projects" to "completion of projects achieving at least 30 % reduction in indirect and direct greenhouse gas emissions compared to the ex-ante emissions". In the area of sustainable transport, targets range from the number of "vehicles purchased" (or "vehicles purchased and in operation" or "vehicles replaced with electric ones") to "reduced air pollutant emissions" by using more sustainable means of transport. Source: ECA (2023). Special report 26/2023.

(Moynihan & Beazley, 2016). Payment systems not linked to costs may in fact create distortive incentives¹⁵⁸: public administrations may set unambitious targets; they may focus on short-term goals rather than adopting a long-term vision; they may deliver outputs and results by focusing on the needs that are easiest to tackle (frequently referred to as “low-hanging fruits”), rather than on the greatest needs.¹⁵⁹

4.1.4 Persisting concerns and similarities with CP funds

While the RRF has been welcomed for some positive innovations, regarding the speed of disbursement, the support to reforms and the shift to FNLC, still several challenges emerge in the implementation of the new facility that largely resemble concerns already affecting CP.

Low absorption capacity: As emerges in the study supporting the mid-term evaluation of the RRF, the lack of administrative capacity is one of the main obstacles to effective implementation of the RRF investments in a number of MSs, in particular those who were already facing low absorption rates of EU funding. This is indicated as one of the main causes for delays in the investments, and especially so those that involve local and regional authorities. Such delays are also in part due to the parallel implementation of the RRFs and CP, which translates into parallel processes for data collection, monitoring and reporting, which adds to the difficulties emerging from the novelty of the RRF *per se* as a new instrument.

Among the problems related to the low administrative capacity affecting the absorption of the RRF funding, the following can be identified:

- The inefficient management of resources and processes by the administrations in charge of the interventions;
- The complexity of the paperwork for accessing RRF funds;
- The cumulative delays in the expression of opinions and the granting of authorisations by national and local public authorities;
- The lack of coordination between several implementing bodies.

Despite the support to strengthen the administrative capacity put in place by some MSs, this remains a significant factor affecting the effectiveness of the RRFs as well as CP. As several researches pointed out already in 2020, the main risks of delays due to administrative capacity in the RRF regard the same MSs that had a low absorption rate under CP. As an example, in Italy, the lack of administrative capacity risks reinforcing the pre-existing territorial asymmetries whereby local authorities in disadvantaged territories do not access to RRF funding. In this respect, the Italian Government’s Department of Cohesion Policies stressed that – mainly due to a lack of administrative capacity - 30% of the resources so far awarded through competitive procedures in the

¹⁵⁸ See Moynihan (2009), Moynihan (2011), Beazley (2018), Zeitlin et al. (2023), Darvas & Weslau (2023).

¹⁵⁹ More broadly, an idea frequently mentioned in relation to the use of targets in public policy is the so-called “Goodhart’s law”, according to which “When a measure becomes a target, it ceases to be a good measure”.

South of Italy are subject to a medium to high risk of reallocation outside the South (Presidenza del Consiglio dei Ministri, [2022](#)). In Spain, the lack of support and technical assistance to providers or local authorities to accurately develop project proposals and the lack of time to present projects which is linked to the lack of sufficient personnel are indicated as well as two key concerns hampering the effectiveness of the RRF investments in childcare.

Low flexibility: with the implementation of the RRFs, the demand for flexibility has increased as a result of the changing circumstances affecting the roll-out of the national plans, such as pressure on energy, food and other commodity prices, and the disruptions in global supply chains and logistics, linked to the war in Ukraine, but also the delays cumulated because of administrative delays and the innovative nature of certain types of investments. Such demand for flexibility is linked mainly to: 1) the M&Ts assessment by the Commission and 2) the possibility of changing the plans.

With respect to the assessment of M&Ts, MSs are concerned about the lack of clarity on the interpretation of deviation from the agreed M&Ts, and criticize the discretion of the Commission in the assessment, especially when it comes to reforms. Even though the 2023 Communication by the Commission on the suspension methodology has been welcomed, still some MSs criticize the application of upward adjustment coefficients, considered as unclear, unpredictable and of non-transparent nature. At the same time, MSs criticize the increasingly rigid and excessively literal interpretation of the Commission of M&Ts. According to some MSs – given the changing circumstances in which plans are implemented – more flexibility should be granted in the assessment of M&Ts. Such flexibility is interpreted in terms of deviation especially from the targets and in the timeline of the M&Ts. With respect to these concerns, however, we should recall that when assessing M&Ts fulfilment, the Commission relies on their description (set out in the CIDs) and consider the context and purpose to determine the requirements that MSs must fulfil. This means that the Commission considers the broader objective of the measures assessed. This said, deviating from what agreed in the M&Ts would be infringing the performance nature of the RRF itself. For this reason, the EC communication of February 2023 explains that in a limited number of circumstances and in line with the application of the *de minimis* principle, minimal deviations linked to the amounts, formal requirements, timing or substance can be accepted. Annex II of the EC Communication further details the framework for assessing M&Ts and the application of the minimal deviations. Yet, to preserve predictability and accountability, one should refrain from any discretionary approach in the assessment of the M&Ts.

With respect to the possibility of changing the plans, MSs think that the revision process is burdensome, slow and implies unnecessary complexity. They point to the lack of difference between the procedures to introduce small or major changes, and between types of investments (based on risk profiles). They criticize the lengthy procedures, even in the case of minor adjustments, and the time lag between plans' modifications and Council approval of the procedures. MSs point to the risk that the lack of flexibility, in this case, might hinder the plans' implementation and timely presentation of payment requests. They further highlight the excessive number of procedures and justification that increases the time for modification so much that it almost makes the modification itself ineffective, especially considering the final deadline for the RRF of 2026.

Administrative burden: as emerges in the study supporting the RRF mid-term evaluation, there is widespread concern that the RRF, as currently managed, imposes unnecessary administrative burdens on public administrations. Unnecessary administrative burden is linked to several aspects:

- The procedures to review the plans;
- The reporting on common indicators;
- The multiple audits and controls by EU and national institutions.

With respect to the procedures to modify the plans, they are considered not only limitedly flexible (as illustrated above) but also excessively burdensome. Several MSs lament that the Commission asks for excessive justification for the objective circumstances. In this respect, the informal dialogue between MSs and the Commission is considered in part helpful but in part also a burden, which significantly slows down the plans' modification. In this respect, some countries criticise the long time it takes for the Commission to answer MSs requests, which clashes with the amount of documentation that is then required of MSs in a very short time.

Regarding excessive reporting, MSs specifically highlight common indicators, deemed as not useful for tracking actual RRFs' results. In this respect, some countries note that continuous reporting risks diverting attention from effective implementation. Common indicators were not included in the initial proposal for the RRF regulation published by the Commission on 28th May 2020 but were introduced during the negotiations between the Council and the Parliament under the request of the latter with the aim to regularly report on the RRF objectives' implementation progress. In practice, however, the reporting on common indicators is not linked to the specific implementation of RRF reforms and investments and, therefore, as stressed by a majority of MSs, it is impossible to draw a causality line between the reported information and the progress in the RRF implementation which thus puts into question the added value of this exercise. As observed by the ECA, contrary to the common indicators in CP, the RRF ones do not have associated targets to be achieved and are not systematically linked to each RRF, which thus diminishes their contribution to actually report on the progress of the measures in the plans.

With respect to audit and controls, a large majority of MSs considers the lack of clarity with respect to the role of audits and controls at the EU and national level as the least effective aspect of the RRF. National coordination bodies complain in particular about the lack of clarity in the RRF regulation about the authority in charge of the audit and control, the excessive documentation requested by multiple actors at the same time, which is considered inefficient and detrimental to the roll-out of the plans. Further, the lack of clarity is also linked to the time spent by national authorities in providing justifications for the controls and audits and the time spent with control and audit bodies in mission to MSs. Some countries stress that the audit and control system imposes unrealistic and pointless verification requirements.

Overall, the impression in a majority of MSs is that the administrative costs of RRF compliance are higher or much higher than other national investment programmes and similar or even higher than the CP funds. The perception of MSs is that the RRF is becoming progressively more focused on 'receipts' than 'results', with the risk that it does not contribute productively to improving the implementation of the reform and investment projects themselves.

4.1.5 The interplay between RRF and CP

The interplay between RRF and CP has been analysed by looking at two aspects:

- The demarcation and complementarity between the two instruments
- The challenges due to the parallel implementation of these instruments.

4.1.6 The demarcation and complementarity between the two instruments

During the programming phase of RRF and 2021-27 CP programmes, MSs had the responsibility of ensuring that coordination and consistency between the two were in place. In fact, the parallel execution of RRF and CP enables MSs to strategically choose between financing investments using either of the two instruments. It is explicitly prohibited for an operation to receive funding from both RRF and CP, and RRF resources cannot be used to cover the national co-financing of CP projects.

Within the RRF regulatory framework, the responsibility for ensuring the harmonious interaction of both instruments was delegated to national authorities. Overall, since CP partnership agreements were still in the early stages of development when national RRFs were submitted, RRFs only provided concise descriptions of how the RRF and CP complemented each other. For instance, the RRFs from Germany, Italy, and Spain included general references to the need for alignment but lacked specific details on how the RRFs related to the national partnership agreement or CP programmes. As noted by the ECA (ECA, 2023a), while RRFs laid out some fundamental principles regarding complementarity, further coordination during the implementation phase at regional and project levels remained necessary. A study commissioned by the Committee of the Regions also noted that the lack of elaboration in RRFs regarding their connection to CP reflected the limited involvement of local and regional authorities in the planning process (European Committee of the Regions, 2021).

However, some MSs have devised specific demarcation strategies, and the literature has identified various types of approaches in this regard (Lopriore, 2022):

- A thematic demarcation involves setting aside certain areas of funding exclusively for the RRF. This type of demarcation is heavily influenced by the regulatory framework, as the RRF can support sectors that fall outside the typical scope of CP, such as the justice sector.
- A territorial demarcation, where the RRF and CP focus on different types of geographic regions, such as rural and urban areas.
- A demarcation based on the type of beneficiary, e.g. distinguishing between public and private entities.
- A temporal demarcation, where funds are absorbed first from RRF resources and then from CP funds.

Partnership agreements and CP programmes also offer general guidance on demarcation in relation to the RRF, but even they do not extensively detail it. For instance, the Italian partnership agreement makes frequent but somewhat vague references to synergies with the RRF across various investment sectors and it acknowledges that demarcation will be a crucial issue at a later

stage, setting up a specific technical panel to address it during the implementation phase (as of October 2023, the panel is not yet in place).

Illustrative examples show that MSs have adopted a combination of demarcation criteria.

- In Germany, the demarcation strategy was driven by the separate governance of the two instruments, with RRF being centrally managed and CP programmes implemented by Länder. This separation discouraged demarcation based on types of territories and instead favoured a thematic and beneficiary-based approach. For instance, the German RRP supports energy efficiency measures in residential buildings, while ERDF provides support for non-residential ones.
- In Italy, the demarcation primarily follows a thematic approach. The RRF allocates significant funding to sectors that are not covered by CP, such as justice, or to sectors to which CP provides much fewer resources, like healthcare. Elements of demarcation based on beneficiary types or types of investment are also present. Similar to Germany, the funding for energy efficiency interventions in public buildings is expected to come mainly from CP, while the RRF's contribution in this area is relatively smaller. For energy communities with fewer than 5,000 residents, support is provided through the RRP, whereas those with more than 5,000 residents are funded by CP. Furthermore, large infrastructure projects are generally included within the RRP, while regional-level projects tend to fall under CP.
- In Lithuania, different types of demarcation are in place, depending on the sector. In some cases, the demarcation of investments is based on a territorial approach. In the field of the development of the ecosystem for innovative start-ups, the support from CP funds is directed to the start-ups in the region of Central-Western Lithuania, while RRF invests into the start-ups in the Capital Region. Beneficiary preparedness is also taken into consideration. In the transport sector, CP funds sustainable mobility measures for 18 major cities and resorts that have already adopted Sustainable Urban Mobility Plans (SUMP) in the framework of the Operational Programme for the EU funds' investments 2014-2020. For the other 2 cities, whose SUMP were not financed by the funds of 2014-2020, sustainable mobility measures are funded through the RRF.
- In Spain, the demarcation approach partly follows a thematic pattern. The RRP outlines major interventions in areas such as labour and pensions, along with significant support for improving the country's transport infrastructure. In contrast, the 2021-27 CP allocates only 3% of its total budget to Policy Objective 3 (A more connected Europe by enhancing mobility), focusing more heavily on competitiveness and innovation (26% to Policy Objective 1 – Smarter Europe), the green transition (28% in total to Policy Objective 2 – Greener Europe, and the Just Transition), and social and inclusive growth (36% to Policy Objective 4 – Social Europe). A temporal demarcation toward the RRF is observed under the social component: actions related to vocational training are supported by the RRP until 2024, followed up by CP in subsequent years through ESF+.

Against this background, while demarcation strategies are crucial to prevent overlaps between the two instruments, they do not necessarily guarantee complementarities (i.e. the financing of

different operations that complement each other, or the use of the two instruments to fund different aspects of the same operation). In theory, as also recognised by EPRC (2021) as well as Bachtler and Mendez (2021), the potential for complementarities between the two instruments was substantial due to thematic overlaps that could be exploited to generate additional impacts, the RRF's ability to enhance investment framework conditions and implement broad Country-Specific Recommendations, and the possibility to build on CP's experience for RRF implementation. However, there are practical difficulties that hinder complementarities including the limited or absent explicit territorial dimension of the RRFs (resulting in divergent focuses compared to CP), complex strategic and operational cooperation, thematic overlaps that increase the risk of competition, prioritization of RRFs over CP due to the pressure for rapid absorption, differing governance systems, and challenges in aligning schedules and procedures of different funds.

In the implementation phase, CP procedures provide mechanisms for establishing clear demarcation boundaries and promoting complementarities between RRFs and CP investments. Programme monitoring committee meetings within each CP programme, in particular, enable in-depth and frequent discussions on these issues. Additionally, the selection criteria are a vital component in this demarcation and coordination endeavour. As the RRF implementation progresses, it is expected that complementarities are more likely to emerge in successive funding with CP funds, ensuring the sustainability of EU public investment even after the RRF concludes. However, this mechanism could potentially slow down the CP implementation.

As the implementation of RRF reform components advances, the synergies between RRF-supported reforms and CP investments gain prominence. RRF support for reforms directly benefits CP in the sectors it invests in, and indirectly through broader reforms that establish a strong framework for public investments. Sectoral reforms supported by the RRF introduce innovation into the context in which CP investments operate. This includes new legislation, strategies, governance structures, and simplified procedures. In turn, CP programmes provide financial resources to utilize the revised framework, promoting on-the-ground investments. Therefore, support for reforms is a necessary complement to CP's investment focus, as confirmed by interviewees from various backgrounds. For instance, in Italy, RRF support for reforms and investments in energy and transportation is combined with ERDF measures. In Spain, updates to the Water Law and related regulations supported by the RRF are expected to create a legal framework conducive to increased investments, including those co-funded by CP funds. In Lithuania, RRF-supported reforms related to lifelong learning are coupled with ESF+ following up with post-reform training activities. Additionally, public administration reforms, while not providing immediate benefits, have a positive impact on the implementation of public investments, including under the CP framework. This reasoning also applies to justice reforms at an indirect level.

4.1.7 The challenges due to the parallel implementation of the two instruments

The limited absorption capacity of MSs is considered the most significant challenge for the simultaneous implementation of the RRF and CP programmes. The running of both instruments in parallel can in fact exacerbate administrative capacity gaps, in view of the considerable burden and pressure placed on central and local administrations, as well as external experts and private enti-

ties. According to the ECA (ECA, 2023a), for instance, the parallel programming of the two instruments was problematic, further prolonging the traditional delays associated with MFF programming.

As stressed above, these shortcomings linked to the absorption capacity have multifaceted causes, including issues related to human resources in the public sector (e.g., insufficient staffing, lack of specialized staff, regulatory constraints on hiring, high staff turnover, unattractiveness of the public sector for skilled professionals, lack of strong management input, frequent changes in leadership) and frequent changes in legislation (e.g., in procurement rules). In Italy, for instance, there is a well-acknowledged presence of weaknesses in conceiving, designing, and implementing projects, especially at the local administration level.

The differing eligibility periods between the RRF and CP, coupled with the absence of a national co-financing requirement for the former, have significant implications in terms of coordination and prioritization challenges. MSs must align their project planning and implementation schedules with the specific eligibility periods of each instrument to efficiently maximize the use of available funds. This can result in variations in the prioritization of existing project pipelines. Additionally, final beneficiaries, such as municipalities and enterprises, need to determine which instrument aligns better with projects in their investment plans based on eligibility criteria and fund timing, influencing the selection and sequencing of projects.

Linked to the above, a further challenge relates to substitution (or displacement) effects. According to interviews conducted in the context of the mid-term evaluation of the RRF, the latter generated substitution effects to the detriment of CP for 2021-27 programmes, while not significantly for 2014-20 programmes, as these were already well advanced. For 2021-27, in some MSs, mature projects expected to be implemented under 2021-27 CP were shifted to the RRP. This choice is clearly linked to the shorter timeframe of the RRF (due to end in 2026). A shift of mature projects occurred for instance in Spain, Italy and Greece, where the RRP received higher priority and media attention, and expectations of a lower burden compared to CP, due to the absence of a national co-financing obligation. However, the significance of the substitution issue varies depending on the specific national circumstances. In countries with substantial investment gaps in traditional sectors and extensive project pipelines such as Romania, RRF resources are perceived to complement CP to address existing needs.

There are also signs of investments returning from the RRF to the CP framework, but the extent of this phenomenon remains to be seen. In Italy, for instance, some railway projects have been withdrawn from the RRP and will likely be funded under the national Development and CF, which Italy uses to complement CP. However, it is too early to draw definitive conclusions regarding the significance of these shifts.

Moreover, during the implementation phase, two potential additional risks can emerge: first, the RRF might hinder balanced socio-economic development between core areas and peripheries, as well as more and less developed regions; second, the RRF might jeopardise the integrated and holistic investment approach promoted by CP in the last decades. As concerns the first aspect, due to its objectives and focus on green and digital investment with a place-blind approach, RRF resources naturally concentrate on more developed regions and country capitals compared to CP. This tendency can be exacerbated by the prevalence of responses to national-level calls originating

from areas with higher administrative capacity or a larger productive base. Even in a country like Italy, where the RRF aims to allocate at least 40% of the resources to less developed regions in the South, compliance with this provision is at risk due to the insufficient absorption capacity of potential beneficiaries in these regions. This situation creates a trade-off between efficiency and equity in determining territorial allocations.

As for the second potential risk, consider the following illustrative example: CP has implemented S3 to promote comprehensive innovation and industrial policies. These strategies identify priority areas for investment in a specific territory based on local strengths, potential, and an entrepreneurial discovery process involving broad stakeholder engagement. While S3 strategies have been a key component of CP since 2014-20, the RRF, which does not mention S3 in its regulation, does not enable the same level of policy design based on place-based analyses, local engagement processes, and an integrated approach to the industrial and innovation domains. This lack of alignment between the RRF investments and S3 has been observed in Spain (Gañán de Molina et al., 2022), and efforts by the Commission's Joint Research Centre are underway to identify potential synergies between the two.

Against the above, one might conclude that the lack of a regional anchor is necessarily a limitation of the RRF. This might be the case of investments in policy areas that by definition serve the needs of a limited territory, providing the necessary infrastructure for the provision of essential services (for instance in the areas of transport, management of environmental resources, education, health infrastructure). Other policy domains, however, have a less pronounced local dimension, but address essential collective needs: this is the case of European public goods¹⁶⁰, such as security and defence, health research, R&D in large and complex projects, the fight against climate change. For investments in these areas, the centralisation of planning of the RRF and the lack of a place-based approach could be also seen as a positive element, as it could allow for a more rational and efficient resource allocation. In this regard, more than half of the RRFs include measures contributing to multi-country projects or cross-border initiatives related to the green transition, with the IPCEI on hydrogen exhibiting the highest uptake. The second biggest contribution is seen in the area of the digital transition, where once more, most RRFs include measures contributing to multi-country projects or cross-border initiatives. Here, the IPCEIs on microelectronics (12 RRFs) and cloud technologies (6 RRFs) are amongst the multi-country projects with the highest take-up in RRFs.

4.1.8 Conclusions

With a view to contribute to the ongoing reflections on the future of post-2027 CP, this chapter offered a comparative analysis of the key features of the governance of the RRF and CP, shedding light on the strengths and the least effective aspects of the former. We further delved into the interplay between RRF and CP in four countries, with a focus on the demarcation and complementarity between the two instruments as well as on the challenges due to their parallel implementation. Based on what illustrated above, we conclude that the RRF can provide at least two sources

¹⁶⁰ For a discussion on European public goods see Buti & Papaconstantinou (2022); Buti et al. (2023).

of inspiration for the future of CP and EU public investment policies: the performance-based payment mechanism and the link between reforms and investments.

First, the conditionality of payments upon fulfilment of M&Ts is one of the most appreciated key innovations introduced with the RRF. Even though the implementation of this new approach – as discussed above – came with some concerns on persisting administrative burden linked mainly to the excessive reporting requirements and overlapping of audits and controls, MSs still consider the shift towards performance-based budgeting as an important innovation, for some countries – like Italy and Spain – an important cultural shift in public policy making. The positive appreciation of the M&Ts approach is linked to the predictability of policy planning due to the ex-ante definition of investments and reforms, and their expected outputs, in a clear timeline, as well as to accountability. Overall, predictability and accountability are appreciated as they enhance transparency in public finance and increase the efficiency of decision making. In this respect, several MSs highlighted that the RRF – similarly to CP – represented an incentive to the development of a more effective structure for monitoring the implementation of domestic policies. Put differently, the continuous monitoring is perceived as a positive effect and a shift towards an evaluation culture of public policies. At the same time, a positive perception of the RRF's performance-based approach might be linked to the fact that M&Ts are focused more on inputs and outputs than to results: if MSs had to demonstrate the achievement of actual results generated by outputs, it is possible that their opinion on the performance-based approach would be less positive.

While CP has traditionally been on a continuous trajectory of policy adjustments and evolution toward a more performance-oriented implementation system, with the 2021-27 regulatory package representing the latest step, the RRF's implementation can serve as an occasion for policy learning. The RRF's performance-based payment system, in this regard, can be a stimulus for reflection, even though some simplification might be introduced to avoid the above-mentioned administrative burden. Moreover, a detailed examination would be needed to ensure that the weaknesses identified by ECA and the literature are properly addressed. Margins for simplification of the RRF approach can be identified to reduce the burden linked to plan amendments, control and audits, and reporting procedures:

- Plan amendments: currently, the RRF Regulation does not foresee differentiated procedures to introduce small or major changes in the plans, which translates in unnecessary long procedures that unavoidably slow down the implementation of the plans. A possible way to shorten the RRFs' modification process would be – in the case of minor adjustment – to rely only on the Commission assessment without the necessary approval by the Council as it already happens with CP.
- Reporting requirements: administrative burdens are linked also to the biannual reporting on M&Ts' requirements which is not always needed especially in the case of countries that already have two payment requests per year and therefore do submit biannually the information on the status of M&Ts. In this case, the reporting system could be steered to avoid duplication of the reporting process by making the biannual reporting voluntary in these cases. The second administrative burden related to reporting concerns the common indicators, which are considered largely not able to really link the RRF intervention to the

outcome tracked, as stressed in the recent report by the ECA (2023d). In this case, making the reporting on common indicators voluntary could be envisaged.

- **Audit and controls:** significant administrative burden comes from the unclarity on the audit and control responsibility distribution and the overlap between national control systems, the Commission and the ECA resulting in time-consuming and inefficient processes that risk shifting the focus away from performance to cost justification. In this respect, simplification can be gained by ensuring better coordination among actors and avoiding multiple checks, reducing requests from Commission for supplementary information to be on the side of caution for future ECA audits, and performing ex-ante checks on the reliability and accuracy of data on M&Ts, as recently suggested also by the ECA (2023d).

Second, while the real impact of the reforms supported by the RRF is still to be realised, the activation of reforms, encompassing not only 'enabling' reforms for investments like permitting under REPowerEU but also more traditional structural reforms and those designed to safeguard the proper use of EU funds, is widely acknowledged as a positive aspect of the RRF and impactful policy mechanism when combined with investments. The RRF contributed to putting on the agenda long-awaited reforms linked to the CSRs. Especially in countries receiving a comparatively higher financial envelope from the RRF, "putting a price tag" on reforms acts as an incentive. The link between the financial support is unanimously recognized as the most relevant factor explaining the RRF's success in introducing reforms addressing the Semester's CSRs. The implementation of the RRF reforms has led to tangible results across a wide range of policy areas: labour market (Spain), social protection and pensions (Croatia, Latvia, Lithuania, Spain), civil and criminal justice (Italy, Spain, Croatia) public administration, including digitalisation (Italy, Slovakia), spending review and public finance governance (Belgium), licensing simplification reforms to boost the investments in renewables (Greece, Portugal, Spain), roll-out of renewable energy and sustainable transport (Croatia, Romania), structural reform of the education system (Spain, Croatia) as well as research and innovation (Spain). Clearly, translating the investment-reform approach of the RRF into CP might not be as easy and in this respect the main limit comes with the government level involved in the decision. As stressed above, the successful implementation of the reforms is linked to the commitment of national or federal governments while CP is managed in many MSs at the regional level.

To conclude, this chapter provided a broad illustration of the functioning of the RRF and compared it with CP. In so doing we highlighted some of the strengths and weaknesses of the former with the aim to identify – in a preliminary fashion – possible elements that could be considered in the current debate on the future of CP. This said, no straightforward transfer of these two elements into CP is possible. Careful research is needed to assess if and how to embed them within CP, due to the complexity of the policy. The current parallel implementation of RRF and CP, anyway, represents an extraordinary laboratory for experimenting new ideas and approaches. The RRF could be a source of inspiration on how to tackle present and upcoming challenges, and any reflections on the future of the EU budget will need to build on the lessons learned from its experience.

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4.2 Zareh Asatryan, Carlo Birkholz and Friedrich Heinemann: Evidence-Based Policy or Beauty Contest? - An LLM-Based Meta-Analysis of EU Cohesion Policy Evaluations¹⁶¹

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Abstract

Independent and high-quality evaluations of government policies are an important input for designing evidence-based policy. Lack of incentives and institutions to write such evaluations, on the other hand, carry the risk of turning the system into a costly beauty contest. We study one of the most advanced markets of policy evaluations in the world, the evaluations of EU Cohesion Policies by its MS. We use LLMs quantify the findings of about 2,300 evaluations, and complement this data with our own survey of the authors. We show that the findings of evaluations are inconsistent with those of the academic literature on the output impacts of CP. Using further variation across MS, our analysis suggests that the market of evaluations is rather oligopolistic within MS, that it is very fragmented across the EU, and that there is often a strong involvement of managing authorities in the work of formally independent evaluators. These factors contribute to making the findings of the evaluations overly optimistic (beautiful) risking their overall usefulness (evidence-based policy). We conclude by discussing reform options to make the evaluations of EU Cohesion Policies more unbiased and effective.

4.2.1 Introduction

CP, which accounts for around a third of the EU's budget and funds over 10% of all public investments in the EU, is the most evaluated of all EU policies (Darvas et al., 2019; Heinemann et al., 2024). In fact, with the mandatory nature of these evaluations since the 2014-2020 programming period (Pellegrin et al., 2020), this evaluation system is advanced, with the EU scoring far ahead of any OECD country according to OECD's index of the strength of performance budgeting frameworks (Downes et al., 2017).

The aims of this evaluation system are clear, and they generally follow those of other systems of performance budgeting. High-quality evaluations can potentially improve policy design by basing them on evidence, and they may also induce learning externalities and increase the transparency of the budget.

These goals are important for any society, but there is a trade-off. Evaluations are not costless, they include direct monetary costs and, perhaps more importantly, they induce indirect costs by setting compliance rules and increasing bureaucracy. Thus, the question is whether the CP evaluation system provides the correct incentives to systematically produce high-quality evaluations, so as to provide a solid basis for better policy design.

¹⁶¹ *Acknowledgement:* We thank the German Federal Ministry of Finance for sponsoring this project. We are grateful to Julia Bachtrögl-Unger, Maximilian von Ehrlich and Maxime Fajeanu for comments, as well as to Yanxi Hou, Hana Jomni and Patrick Büscher for valuable research assistance.

Such incentives should promote the establishment of competitive markets of independent and capable evaluators who are able to write impartial and generally high-quality evaluations. Lack of such incentives, on the other hand, carries the risk of turning the system into a costly beauty contest, where the good performance of policies is simply stamped by the evaluations without any serious implications for improving future policy.

To answer this question, we, for the first time in the literature, quantitatively analyse the CP evaluations performed by MS in the last two programming periods. Apart from providing the first methodological basis for systematically analysing the evaluation system, our work is relevant for thinking about reform priorities that improve the evaluation system of EU CP. More generally, our work, which is based on the experience accumulated so far from the EU's well-developed evaluation system and which exploits the unique variation in evaluation markets across the EU MS and regions for its quantitative analysis, can inform the design of evidence-based policies elsewhere. Examples may include the impact of development aid, which is very often evaluated but where the so-called micro-macro paradox is pervasive (Mosley, 1986; Doucouliagos & Paldam, 2009), the national systems of evaluations in both developing and developed countries many of which are trying to improve their frameworks of performance budgeting (Downes et al., 2017), or efforts to learn from and scale up successful policy experimentations, where having credible ex-ante evaluations of policy effectiveness are crucial but which are often shaped by political and institutional incentives (Hirsch, 2016; Wang & Yang, 2021).

The first step of our analysis is to measure the findings of evaluations. We quantify the findings of about 2,300 evaluations that have been written since 2007 by applying a LLM to run automated textual analysis of the evaluations' abstracts. This approach lets us estimate a sentiment score for each evaluation, which is a numerical index summarizing how positive or negative the finding of an evaluation about the performance of a specific CP intervention is presented. We validate these estimates by comparing them to findings independently assessed by humans, and work with the assumption that the measurement error in the AI-based estimates is not systematically correlated with our explanatory variables of interest. With this work we contribute to a fast-growing field in economics using LLMs to turn text into data in various application (for a review, see Korinek, 2023). We complement this data with observational data on cohesion programmes and details about evaluations, and we also conduct our own survey on a sample of individual authors of evaluations. The survey collects further characteristics about the authors and the institutions they work at, and also asks questions about authors' views on the evaluation system and its bottlenecks.

Using these measurements, we show what the past evaluations have found about the performance of CP on aggregate. Overall, our results suggest that evaluations are, in general, very optimistic about the cohesion programmes they evaluate. We then decompose the variations in these findings and show the dimensions that contribute to the heterogeneity in the findings of evaluations. This decomposition suggests that the most important source of heterogeneity comes from cohesion programmes. However, after controlling for programme specific effects, there is still a substantial degree of heterogeneity across the MS as well as across the individual authors of evaluations.

Second, we compare these evaluation findings to those of the large and growing academic literature in economics on the growth and employment impacts of CP. We perform this exercise at both

the MS and more disaggregated NUTS2 levels, as well as for a sub-set of evaluations that target growth and employment as their objective. This exercise suggests that the findings of policy evaluations do not square well with those of the academic literature.

Third, given the diverging results of evaluations and the economic literature, we study the incentives implicit in the evaluation markets and study if certain market-level frictions drive the findings of evaluations. Firstly, we study the competitiveness of markets for evaluations both across and within the MS. Secondly, we study the independence of evaluators from the managing authorities. Our data suggests that, overall, the evaluation markets are highly segmented across the EU, and are fairly oligopolistic within most of the MS, while the managing authorities often exert substantial control over the evaluators, thus, risking their independence. Our empirical analysis suggests that the larger these frictions the more skewed are the findings of evaluations towards showing more optimistic results.

Fourth, and finally, we present evidence from our own survey of evaluators on the more general bottlenecks of the evaluation system from the perspective of evaluators. The survey helps us rank the bottlenecks in terms of their relative importance and discuss some viable policy reform options that could potentially improve the functioning of the evaluation system. A fundamental challenge that stands out is the apparent disconnect between evaluations and decision-making. This, in the opinion of evaluators, may adversely affect the quality of evaluations by reducing the incentives to write high-quality evaluations since they do not matter for policy anyway. Our empirical analysis confirms the absence of policy impacts of evaluations by showing that cohesion funds are not less likely to flow to MS which have received the worst evaluations in the past programming period.

The rest of this paper is structured as follows. Section 4.2.2 describes the institutions governing the market of evaluations. Section 4.2.3 presents our observational and survey-based data, and describes the meta-analytical methods. Section 4.2.4 presents the main empirical results. Section 4.2.5 presents a descriptive analysis of the author survey regarding the main bottlenecks in the evaluation system with some ideas on possible reform options. Section 4.2.6 concludes with a summary of our main findings.

4.2.2 Institutions governing the system of evaluations

The CP evaluation framework is aimed at assessing the effectiveness, efficiency, and impact of CP interventions funded under the ERDF, the CF, and the ESF. The main legal basis defining the formal rules and procedures of the evaluation process is the CPR (European Union 2006, 2013, 2021), which are further accompanied by fund-specific regulations. For a detailed descriptions of the institutions governing the evaluation system, see Heinemann et al. (2024).

The focus of our analysis is the evaluations by the MS, and it does not include the ex-post evaluations performed by the EC. The national evaluations target individual investments and other projects that are part of OPs. These are commissioned by managing authorities which are typically the regional authorities, national ministries or local units of the central government (Pellegrin et al., 2020).

In the 2014-2020 programming period, all three main types of evaluations, that is ex-ante, ongoing and impact evaluations, have become mandatory for the MS. In the current programming period

of 2021-2027, ex-ante evaluations ceased to be mandatory in an effort to simplify the system (European Commission, 2021), while the Commission is now required to also carry out mid-term evaluations (European Union, 2006, 2013, 2021).

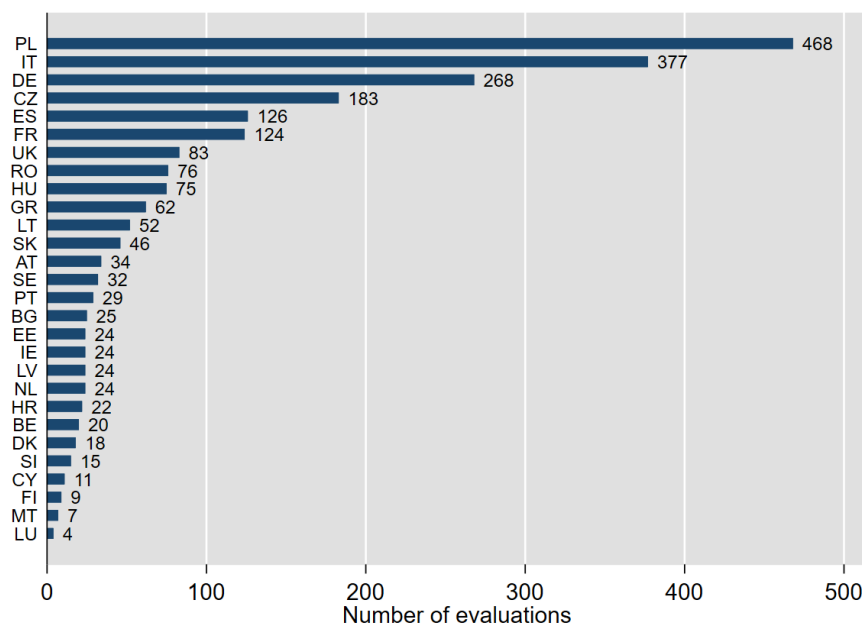
As to the supply side, the important stakeholders that conduct the evaluations are research institutions, private consultancies, individual experts, but also internal evaluators such as civil servants. They must be functionally independent from the managing authorities which prepare and implement the cohesion programme (European Union, 2013). The Commission provides guidance for the MS on how they should outsource evaluations, mentioning an assignment of the evaluation to external experts or a different organization than the one responsible for implementing the programme as best practices (European Commission, 2013). To strengthen independence and impartiality, evaluators are also required to disclose potential conflicts of interest. The de-facto independence and impartiality of the evaluation system, however, faces significant challenges while the effectiveness of such ethical and best-practice-type measures arguably remains questionable given the potential high-stakes conflicts involved in the system (Naldini, 2018).

4.2.3 Data and methodology

4.2.3.1 Data on evaluations

Our main source of data is CP evaluations conducted by the 27 MS plus the UK as former MS. The data covers all evaluations conducted in the 2014-2020 programming period, the period when the three types of evaluations first became mandatory, and it extends to impact evaluations done in the 2007-2013 programming period. The data is available publicly at the Cohesion Open Data Platform. The data includes a total of 2538 evaluations, of which textual abstracts are available for 2259 evaluations. The abstracts are in English and they typically follow a standard structure. Other variables in this data include, the title of the evaluation, cohesion programme identifier (called CCI), country code, fund type, evaluation type, evaluation method, and thematic objective. The number of evaluations per MS is presented in Figure 4.2.1. Evaluations cover projects of different monetary size, which explains the differences in the number of evaluations even for MS receiving similar amounts of cohesion funds.

Figure 4.2.1: Number of evaluations by MS



4.2.3.2 Data on cohesion programmes and authors of evaluations

We merge this data on evaluations to two further datasets. First, we merge the main dataset to data on the budgets of cohesion programmes using the CCI identifiers and the fund type. This helps us capture the total cost of programmes and other details such as the national co-financing shares. The data on budgets is available for only 1765 evaluation abstracts.

Second, we manually collect data on the authors of evaluations. We use the full names of authors to identify authors who have written multiple evaluations.¹⁶² We then use data on evaluations with multiple authors to create international and national co-authorship networks. This data helps us measure the degree of cross-border cooperation in the evaluation market, and also the concentration of the markets within MS.

The idea behind the concentration variable is to measure whether evaluations are written by few or many author clusters. We define author clusters to consist of all the authors that share at least one direct link to a joint co-author.¹⁶³ There are several reasons behind our choice to focus on individual authors rather than firms and institutions to construct concentration measures. First, we can precisely identify the individuals, whereas firms and institutions might consist of different branches and teams acting independently, forming different relationships with managing authorities and potentially changing over time too. Second, especially smaller firms might be run by the same ultimate owner, which we cannot systematically identify. One potential drawback of our choice is that authors, especially across institutions and firms, who collaborate on evaluations in

¹⁶² In the unlikely case that two authors share the exact first and last name, we would mistakenly treat them as a single author.

¹⁶³ In this exercise, we drop cross-border programmes from this analysis to avoid constructing co-authorship networks across MS since the aim here is to construct measurements of concentration at the level of MS.

some cases, might still compete for evaluation opportunities in the future. Given our choice, we then calculate the number of evaluations written by each cluster and construct the Herfindahl-Index by MS, which is a measure of market concentration frequently used in the literature on industrial economics, and is constructed as follows:

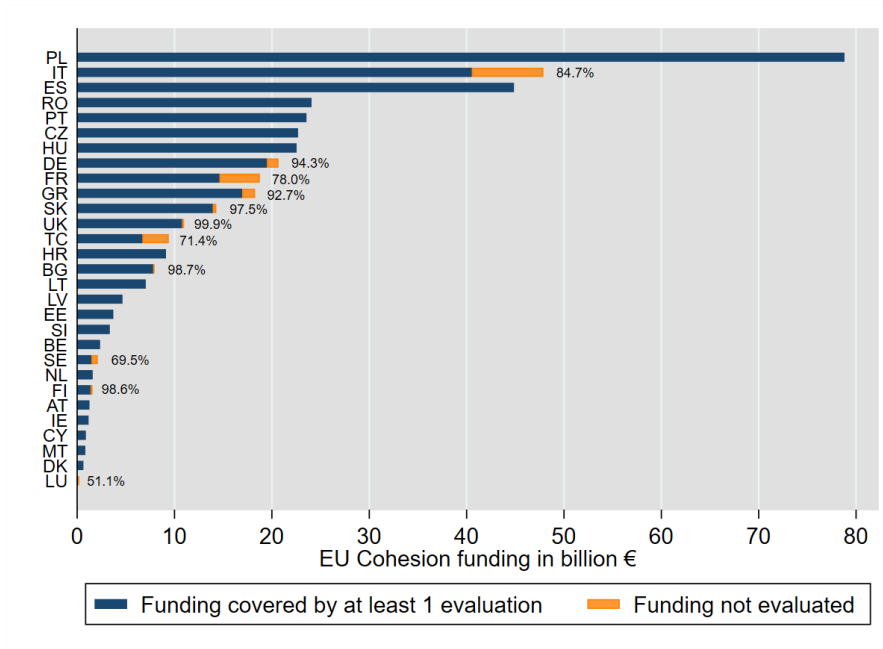
$$HHI_{MS} = \sum_{i=1}^N \left(\frac{x_i}{\sum_{j=1}^N x_j} \right)^2,$$

where x_i is the number of evaluations written by co-author cluster i . Intuitively, the Herfindahl-Index is given by the sum of the squared market shares of each cluster of co-authors in the evaluation market of the respective MS.

4.2.3.3 Coverage of data on evaluations

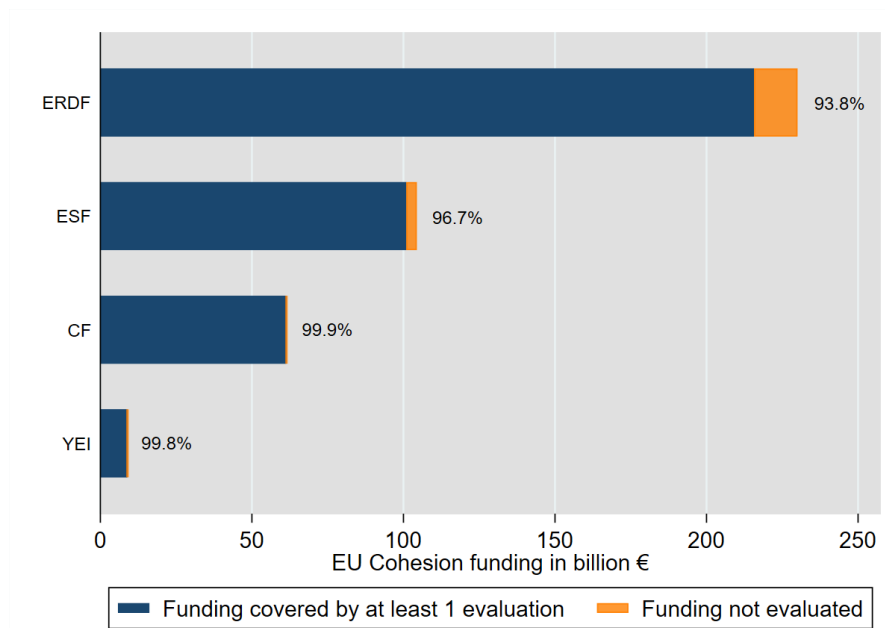
Given the mandatory nature of evaluations, the expectation is that all cohesion programmes are evaluated. We provide evidence in line with this expectation. Figure 4.2.2 presents data on the volume of total and evaluated cohesion funds per country for the 2014-2020 programming period. This data suggests that with few exceptions nearly all of cohesion programmes have been evaluated. This helps reject the concern that there may be selection of the programmes that are being evaluated or not. In Figure 4.2.3, we then show the coverage of evaluations by fund. As above, we observe that evaluations nearly fully cover each main type of fund. The funds covered by the order of their total size are ERDF, ESF, CF, and YEI.¹⁶⁴

Figure 4.2.2: Coverage of evaluations by MS



¹⁶⁴ In this classification we also list the YEI as a separate category, although we note that this is not a stand-alone fund and in 2021-2027 it has been fully integrated into the ESF.

Figure 4.2.3: Coverage of evaluations by fund



4.2.3.4 Meta-analytical methods: Quantifying the findings of evaluations

The key next step for our meta-analysis is to create a numerical variable that measures the findings of a given evaluation as described in the textual abstract of the evaluation.

While some evaluations present precise numbers on the evaluated performance of the programme, many of these evaluations are qualitative exercises that interpret the performance of programmes verbally. Thus, our approach is to create a score that is informative on whether a given evaluation finds a programme to be more or less successful. We call this score the “sentiment” as expressed in the abstract, and interpret it as capturing the direction and tonality of a given evaluation’s finding for the performance of the evaluated cohesion programme.

Given that the definition of what makes a programme more or less successful is not well defined as well as heterogeneous in many directions, we suspect that our measurement of sentiment includes substantial noise. We first define transparently how we measure it using automated text-analysis techniques, then provide a validation exercise that compares the AI-coded sentiment to a manually assessed sentiment.

Our measurement utilizes the LLM, GPT 3.5, and conducts a sentiment analysis on the 2259 abstracts available in the evaluation database. The sentiment analysis is implemented in Python through OpenAI’s Application Programming Interface (API) that allows us to interact with the GPT 3.5 model in a consistent and efficient way.

The core part of the code in Python is the prompt, i.e., the instructions provided to the model to obtain the desired response. The prompt should be precise and concise, because the results can be sensitive to how it is written. In our case, we asked the model to rate the sentiment of the abstracts from -1 to 1, with 1 being highly positive, 0 being neutral and -1 being highly negative. In Box 4.2.1 below we display the prompt used in our analysis.

Box 4.2.1: The prompt instructing GPT 3.5

```

{"role": "system", "content": "You are a helpful assistant that conducts a sentiment analysis on abstracts of Cohesion Policy evaluations. "},
{"role": "user", "content": "Rate the sentiment of the abstract from -1.000 to 1.000, -1.000 being highly negative, 0.000 being neutral and 1.000 being highly positive. Provide a three decimals rating and do not round up. Instead of replying with a text, please only state a number with no text. The abbreviations and the objective of the abstract will help you analyse the sentiment of the abstract better. Focus on the sentiment of the final result of the projects/support in your total rating, if available. Here is the abstract: '{}'.format(abstract)},
{"role": "assistant", "content": "Here are some abbreviations that can be found in the abstract:
`OP` is `Operational Programme`,
`ERDF` is `European Regional Development Fund`,
`ESF` is `European Social Fund`,
`YEI` is `Youth Employment Initiative`,
`CF` is `Cohesion Fund`,
`TO` is `Thematic Objective`,
`PaCE` is `Parents Childcare and Employment`,
`PA` is `Priority Axis`,
`IP` is `Investment Priority`,
`SME` is `Small and Medium Enterprises`.
This is the objective of the abstract: '{}'.format(objective)},

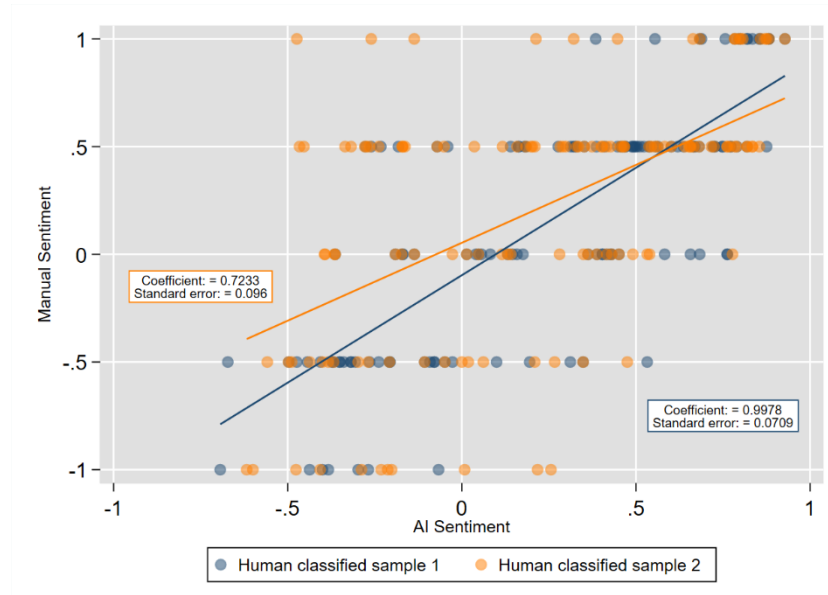
```

One important choice parameter is the temperature of the model. The temperature parameter sets the volatility of the randomness of the text generated by the model. It ranges from 0 to 2, whereby a higher temperature value results in more diverse and creative output, while a lower temperature value makes the output more deterministic and focused (OpenAI, 2023). We make use of the non-deterministic nature of the models output by implementing a bootstrap approach. That means we run the model 50 times for each evaluation with a temperature value of 1. This allows us to generate a measure of certainty about the model's prediction. The intuition is the following: More ambiguous evaluation abstracts will receive a wider range of sentiment scores over the 50 model runs, leading to a higher standard deviation of the predicted evaluation sentiment. For each evaluation we calculate the mean over the 50 runs which serves as our main variable of interest.

To test the accuracy of this method, we manually assess the sentiment of two samples of 132 abstracts. For the first sample we draw 132 abstracts at random. For the second sample we fix half of the initially drawn abstracts and independently reassess them, whereas the other half of the second sample is again randomly drawn. We code the sentiment in five categories: "highly negative", "negative", "neutral", "positive" or "highly positive". We convert this categorical sentiment to a numerical one (-1, -0.5, 0, 0.5 or 1, respectively) and test its correlation with the AI sentiment. For both samples we obtain strong correlation coefficients of 0.998 and 0.723, as depicted in Figure 4.2.4.

This exercise gives us confidence that the AI-based score delivers a reliable measure for the abstracts' sentiments, as it would be assessed by a human. Nevertheless, we do not claim that the sentiment is not a noisy measure. Instead, our assumption in the rest of the analysis is that this measurement error is not systematically correlated with the dimensions of our interest, such as across MS.

Figure 4.2.4: Manually coded sentiment versus AI-coded sentiment



Notes: The correlation is conducted for two samples of 132 observations. The AI sentiment variable is calculated as the average of 50 runs with temperature 1 and is plotted on x-axis. The manual sentiment is plotted on y-axis. It is a categorical variable, where highly positive is equal to 1, positive is 0.5, neutral is 0, negative is -0.5, and highly negative is -1.

Box 4.2.2: The methodology behind AI-coded sentiment scores using GPT 3.5

GPT (Generative Pre-trained Transformer) models are state-of-the-art LLM with promising applications in the field of meta-analysis. They typically acquire their ability to understand and generate general (as opposed to field-specific) language by training on very large quantities of textual data through machine learning algorithms. Being a recently emerging technology, there is only limited published literature on its role in advancing scientific research. Amin et al. (2023) compare the performance of ChatGPT, OpenAI's chatbot based on GPT, to three baseline methods: RoBERTa language model, Word2Vec word embedding and Bag-of-Words (BoW). The baseline models are specifically fine-tuned for the downstream classification tasks at hand, namely sentiment analysis, personality traits and suicide tendency assessment. The results show that the RoBERTa model is the best performer for the personality and suicide tendency tasks, while ChatGPT achieves the best performance for sentiment analysis. The worse performance of the baseline models is attributed to the noisy nature of twitter data. The authors infer that ChatGPT is a generalist model that can conduct different tasks without specific training, but training is necessary for achieving the best results on specific downstream tasks.

Bang et al. (2023) quantitatively evaluate ChatGPT using 23 publicly available datasets with 8 different Natural Language Processing (NLP) application tasks and find that ChatGPT outperforms other LLMs on several tasks and even achieves better results than fine-tuned models on some tasks. They also find that ChatGPT is better at deductive than inductive reasoning and that its interactive ability allows humans to improve its performance with prompt engineering. However,

ChatGPT still produced failed results on each task, and like other LLMs, it suffers from hallucination problems.

Gilardi et al. (2023) use the same model as we do (the ChatGPT API with the gpt-3.5-turbo model) and compare the performance of Mturk crowd-workers to ChatGPT on several annotation tasks and use the human annotations of research assistants as their benchmark. The authors implement several text classification tasks of a large twitter dataset and find that ChatGPT outperforms Mturk crowd-workers on four out of five tasks while being twenty times cheaper than hiring Mturk workers.

Wang et al. (2023) examine whether ChatGPT can serve as a universal sentiment analyser by comparing its performance with the trained BERT and the State-Of-The-Art (SOTA) models. The authors find that ChatGPT has an impressive zero-shot sentiment analysis capabilities, even corresponding with the BERT and SOTA models that are specifically trained for the tasks at hand. They add that few shot prompting can significantly improve its performance on downstream tasks, datasets and domains, surpassing the fine-tuned BERT but it still performs below SOTA. Wang et al. (2023) deduce that that ChatGPT has powerful open domain sentiment analysis capabilities, yet its performance can be limited for certain specific domains. On the other hand, Kocoń et al. (2023) compare ChatGPT and GPT-4 to SOTA by analysing more than 49 thousand responses and find that ChatGPT exhibits a 25% quality loss on average compared to SOTA, but the loss is significantly lower for GPT-4. The authors also indicate that the ChatGPT quality loss increases the more difficult the task is.

Another study by Zhong et al. (2023) compares the understanding abilities of ChatGPT with four fine-tuned BERT models and show that ChatGPT exhibits comparable performance with BERT on sentiment analysis tasks, surpasses all BERT models on inference tasks, and that its understanding ability can be further improvement by adding advanced prompting strategies.

4.2.3.5 Survey of authors

To enrich our results from the quantitative meta-analysis of CP evaluations, we conducted a survey of the authors of the evaluations. The general aim is to collect further relevant variables which we cannot collect using observational data, but also to measure the views of the authors, who are experts of the evaluation landscape, on various details of the evaluation system.

The two aims of the survey more specifically are as follows. First, we want to learn more about the people and institutions that conduct CP evaluations: What educational background do the evaluators typically have, what type of institutions are most commonly performing them and how reliant on these evaluations are they from a business perspective. Second, we are interested in understanding the experts' views on the EU and its policies in general, as well as on the CP and its evaluation landscape in particular. We asked up to a total of 16 questions. The invitation to participate in the survey and its introduction, as well as the exact questionnaire of the survey, can be found in Figures 4.2.14, 4.2.15 and 4.2.16 of Annex I.

The design of the survey is as follows. As a first step we manually collected publicly available email addresses of the authors through desk research. We managed to find a total of 1175 contacts, which is about half of the authors in our sample. The survey was sent out on September 27, 2023, and was in the field for four weeks until October 25, 2023.¹⁶⁵ Out of the 1175 emails we sent out,

¹⁶⁵ The invitation email is displayed in Figure 4.2.14 in Annex I.

around 230 did not reach their intended recipient, either due to faulty email addresses or restrictive email filters of the recipients' email provider. Out of the 945 remaining potential participants, 213 completed the entire survey while 17 gave partial responses to the questionnaire. The fairly high response rate of almost 25% may be, for example, due to the close engagement of the participants with the topics of the survey.¹⁶⁶

Table 4.2.1 below details the total number of unique authors, as well as the number of authors for whom we have successfully collected a contact email address and the number of respondents per MS. We received responses from almost all MS except those with very low evaluation activity due to the few unique authors these countries have.

Table 4.2.1: Number of authors and survey participation by MS

Country Code	Evaluations	Unique authors	Invited to survey	Participated in survey	Response rate
AT	28	74	50	10	0.20
BE	9	25	13	3	0.23
BG	20	69	8	1	0.13
CZ	77	174	48	11	0.23
DE	249	326	180	50	0.28
DK	13	9	3	0	0.00
EE	16	99	35	3	0.09
ES	28	44	10	1	0.10
FI	10	29	11	2	0.18
FR	64	83	22	5	0.23
GR	15	23	4	2	0.50
HR	16	49	16	7	0.44
HU	34	97	22	4	0.18
IE	10	24	10	1	0.10
IT	205	280	120	29	0.24
LT	5	23	5	0	0.00
LU	4	8	6	2	0.33
LV	16	46	20	6	0.30
MT	1	1	0	0	-
NL	26	73	30	5	0.17
PL	288	611	172	39	0.23
PT	19	106	44	13	0.30
RO	61	179	52	13	0.25
SE	28	57	22	13	0.59
SI	11	35	14	5	0.36
SK	26	53	22	6	0.27
UK	44	78	31	6	0.19

Notes: The table depicts the number of evaluations and unique authors, as well as the response rate to the survey as the share of authors who participated in the survey out of the authors invited to the survey broken down by country.

Our design leads to two different types of selection issues. The first is stemming from the not full coverage of author contacts, and the second is coming from the below full response rates among the authors who have received the survey. To understand the representativeness of our sample of respondents we conduct two balance tests. First, we analyse balance across evaluation characteristics such as the type of fund and evaluation, the evaluation method, or the thematic objective. In Table 4.2.5 of the Annex, we compare respondents to the underlying population of all evaluators, whereas in Table 4.2.6 respondents are compared to all contacted authors. Systematic differences in the former would speak to authors' email addresses being differentially likely found,

¹⁶⁶ To further increase the response rate a donation incentive was added whereby a donation of 5€ up to a cap of 1000€ was made for each full response towards disaster relief by the charity Aktionsbuendnis Katastrophenhilfe.

while differences in the latter would indicate differential response rates across observable characteristics. Importantly, we find no differences for the average sentiment or the programme size in either table. We find some minor differences, none of which suggest a systematic pattern which would bias our findings. Noteworthy are the differential contact finding and response rates by budgeting period. This makes intuitively sense, as authors writing evaluations for earlier periods are more likely to have moved on to new institutions or jobs, or might have retired.

Second, we analyse author characteristics in Tables 4.2.7 and 4.2.8 of Annex. We again compare survey respondents to all authors and to only those authors who were invited to participate in the survey. One clear difference in the respective samples is that for authors writing more evaluations contact email addresses were easier to find, and they were more likely to participate in the survey. The positive and significant difference in found email addresses by university affiliation is unsurprising, as universities commonly have public website profiles of their staff. However, the difference does not manifest in response rates.

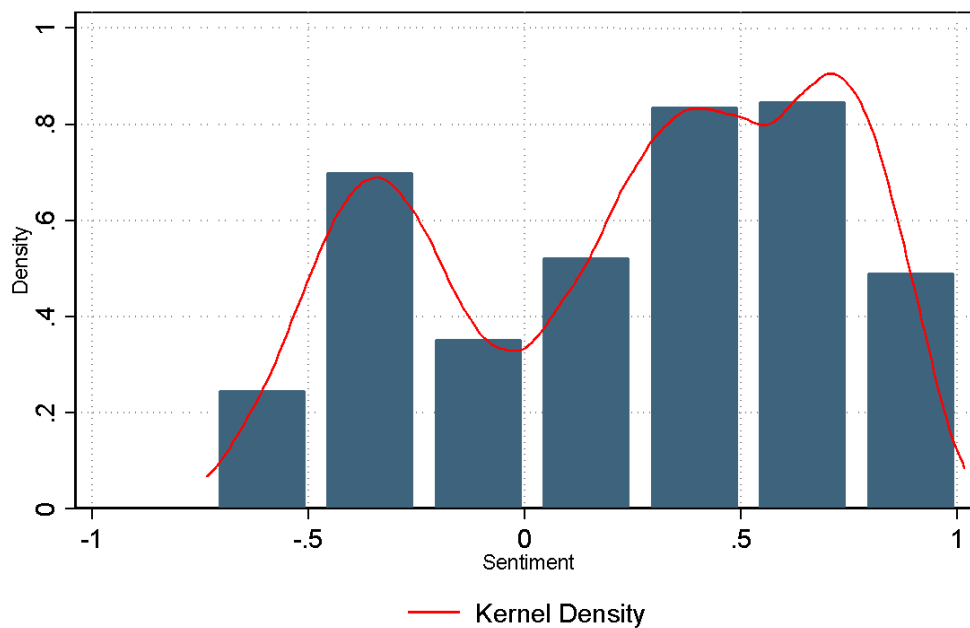
4.2.4 Results

4.2.4.1 Findings of evaluations

In this section we present our measurements of the sentiment of the evaluations. We first present the evidence on aggregate and on the MS level, and then study the factors that explain the variation in these findings.

Figure 4.2.5 plots the distribution of sentiment for all evaluations. As discussed in Section 4.2.3.4, these scores are estimates using an AI analysis of abstracts of the evaluations, and they range from a very negative, -1, to a very positive, +1, score. Figure 4.2.5 documents three interesting facts. First, the sentiment is much more likely to be positive than negative, that is there are about twice as many evaluations with scores larger than 0, than evaluations with scores 0 or below. Second, within positive evaluations the scores are roughly normally distributed in their magnitude (i.e., there are many positive evaluations with an average magnitude and about equal number of very good and somewhat good evaluations), while within negative evaluations there are virtually no evaluations with very bad scores. Third, there is a relative lack of evaluations with sentiment close to 0, which are evaluations that either find null effects, or find both positive and negative effects which largely balance each other out.

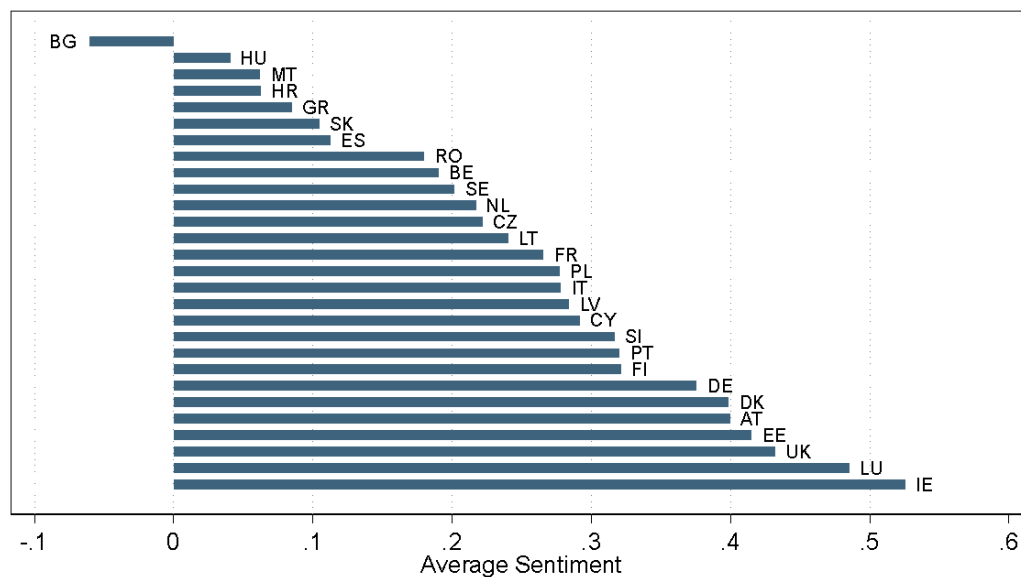
Figure 4.2.5: Distribution of evaluation findings on aggregate



Notes: Number of underlying observations is 2,259. These are grouped into 8 equal bins. Densities are shown with the respective 8 bars. The sentiment variable is calculated as the average of 50 runs with temperature 1. The red line shows the estimates Kernel density using the underlying raw data.

Figure 4.2.6 presents the average sentiment score by MS. Overall, there are large differences in mean evaluation scores across MS. Bulgaria is a clear outlier with its negative mean score based on 25 programme evaluations, followed by Hungary, Malta, Croatia, Greece, Slovakia and Spain. In the upper tail, the leader is Ireland based on 24 evaluations, followed by Luxemburg, UK, Estonia, Austria and Germany. These differences may reflect real differences in the quality of projects across the MS, but they could also be driven by underlying differences in how strict or independent the evaluations are performed. In Figure 4.2.17 in Annex, we also show the distributions behind these average scores for every MS, in terms of the median value of the score within that MS, its minimum and maximum values, and the values at the bottom and top quartiles.¹⁶⁷

¹⁶⁷ In Figure 4.2.18 of Annex, we also check for heterogeneous evaluation scores by programme size. However, we do not detect statistically significant differences in this dimension.

Figure 4.2.6: Average unconditional evaluation result by MS

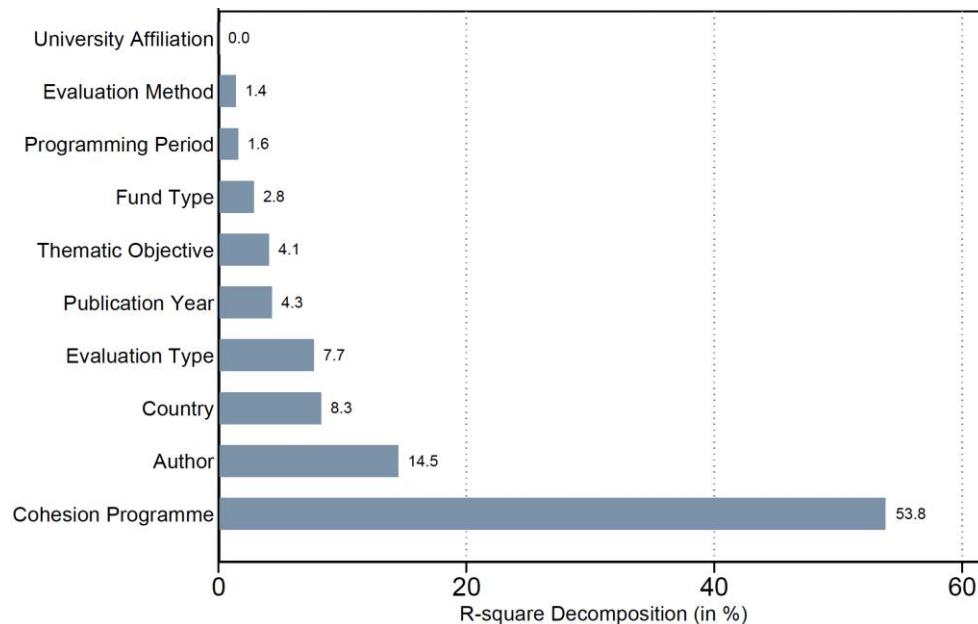
Notes: Number of observations (i.e. evaluations) per country is: Bulgaria (BG): 25, Hungary (HU): 75, Malta (MT): 7, Croatia (HR): 22, Greece (GR): 62, Slovakia (SK): 46, Spain (ES): 126, Romania (RO): 76, Belgium (BE): 20, Sweden (SE): 32, Netherlands (NL): 24, Czech Republic (CZ): 183, Lithuania (LT): 52, France (FR): 124, Poland (PL): 468, Italy (IT): 376, Latvia (LV): 24, Cyprus (CY): 11, Slovenia (SI): 15, Portugal (PT): 29, Finland (FI): 9, Germany (DE): 267, Denmark (DK): 17, Austria (AT): 34, Estonia (EE): 24, United Kingdom (UK): 83, Luxembourg (LU): 4, Ireland (IE): 24. Number of countries: 28. Total number of observations: 2,259.

Next, we investigate which factors predict the evaluation findings as captured by the sentiment score. To this end, we run a large linear regression of ten potential explanatory variables on the sentiment score. These variables are plotted on the y-axis of Figure 4.2.7. Overall, these variables jointly explain 41% of the variation in the sentiment score (i.e., the R-squared of the regression), which is a fairly large number given our suspicion that the sentiment score includes substantial measurement error. We then perform a Shorrocks-Shapley decomposition to estimate the degree to which each of these ten variables contribute to explaining the variation in sentiment in relative terms.

From the ten initial regressors, cohesion programme fixed effects stand out as the most powerful predictor of the findings of evaluations. Dummies for the type of cohesion programme explain over half of the variation, which is more than all the other nine variables combined. In other words, evaluations performed on the same programmes are fairly similar to each other in their findings. The next two variables ordered by their explanatory power are authors and countries. To understand the role of authors, we utilize the fact that single authors write many evaluations which allows us to estimate individual author fixed effects. In our data, from the 2,564 unique authors, 1,857 wrote two evaluations, with the average author writing 2.73 evaluations. The findings suggest that even after controlling for programme fixed effects and for the other explanatory variables, individual authors still have a considerable margin of impact on the findings of evaluations. Consistent with the evidence on the wide heterogeneity in the average unconditional sentiments across MS presented above, Figure 4.2.7 suggests that after controlling for the other explanatory variables there is still a substantial variation left across the MS. As an alternative specification, we

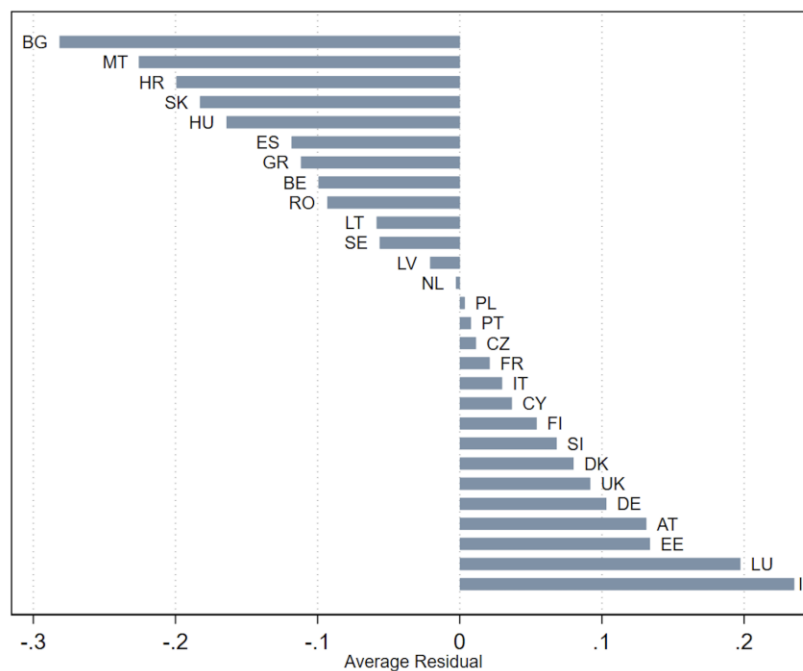
include NUTS2 fixed effects instead of country fixed effects. This estimation presented in Figure 4.2.19 of Annex suggests that the role of programmes decreases, which is intuitive since programmes often coincide with NUTS2 regions, while the role of individual authors increases further explaining about 18% of the relative contribution of these variables. Several other of the remaining variables explain a non-negligible variation of the sentiment.

Figure 4.2.7: Explaining the variation in evaluation findings



Notes: Bars present Shorrocks-Shapley decomposition of R-squared in a regression where the shown 10 variables (in their fixed effects specification) are jointly linearly regressed on the sentiment score. $n=1,363$. $R^2=0.4114$.

As a final exercise, in Figure 4.2.8 we show the MS level heterogeneity in sentiment but now taking the sentiment conditional on a number of evaluation level characteristics, rather than just averaging the raw data on sentiment as in Figure 4.2.6. This is an important exercise since the composition of evaluation characteristics will be different across the MS, and we want to make sure that the differences of MS level averages do not just reflect these compositional differences. Overall, the relative ranking of MS according to their average sentiment in Figure 4.2.8 is similar to the one in Figure 4.2.6, suggesting that composition differences in evaluations do not explain the substantial heterogeneities across the MS that we observe.

Figure 4.2.8: Average conditional evaluation result by MS

Notes: Figure presents the MS level sentiment similar to Figure 4.2.6, but now the sentiment is conditional on a number of evaluation characteristics: Fund, evaluation type, thematic objective, evaluation method, programming period, publication year. Thereby, we run a regression of sentiment on these control variables, and calculate the average of residuals at the MS level. As a result, the plotted sentiment score is in relative rather than absolute terms.

4.2.4.2 Comparison of the findings of evaluations to those from the literature

Next, we investigate whether the evaluation findings square well with the findings from the economic literature on the impact of cohesion policies. We are aware of four different estimates of the impact of CP on either growth or employment that present its impact differentiated by the MS. Three of the papers are empirical and all of them use fairly sophisticated techniques of causal identification, and one estimate comes from the DSGE model of the EC used for simulating the impact of CP on growth and employment called the RHOMOLO model. We discuss these four estimates in some detail.

First, Di Caro und Fratesi (2022) use regional data from 1989 to 2015 covering four programming periods and apply a panel fixed effects model to examine the impact of ERDF funds on GDP growth. The authors use a heterogeneous coefficient approach and provide estimates of average impact at the level of MS as well as NUTS2 regions (see Figure 3 of the paper¹⁶⁸). Second, Fidrmuc et al. (2019) employ regional data from 1997 to 2014 and apply a 2SLS strategy. Their spatial models lead to country-specific multipliers (as reported in Table 8 of the paper¹⁶⁹). Third, Canova und

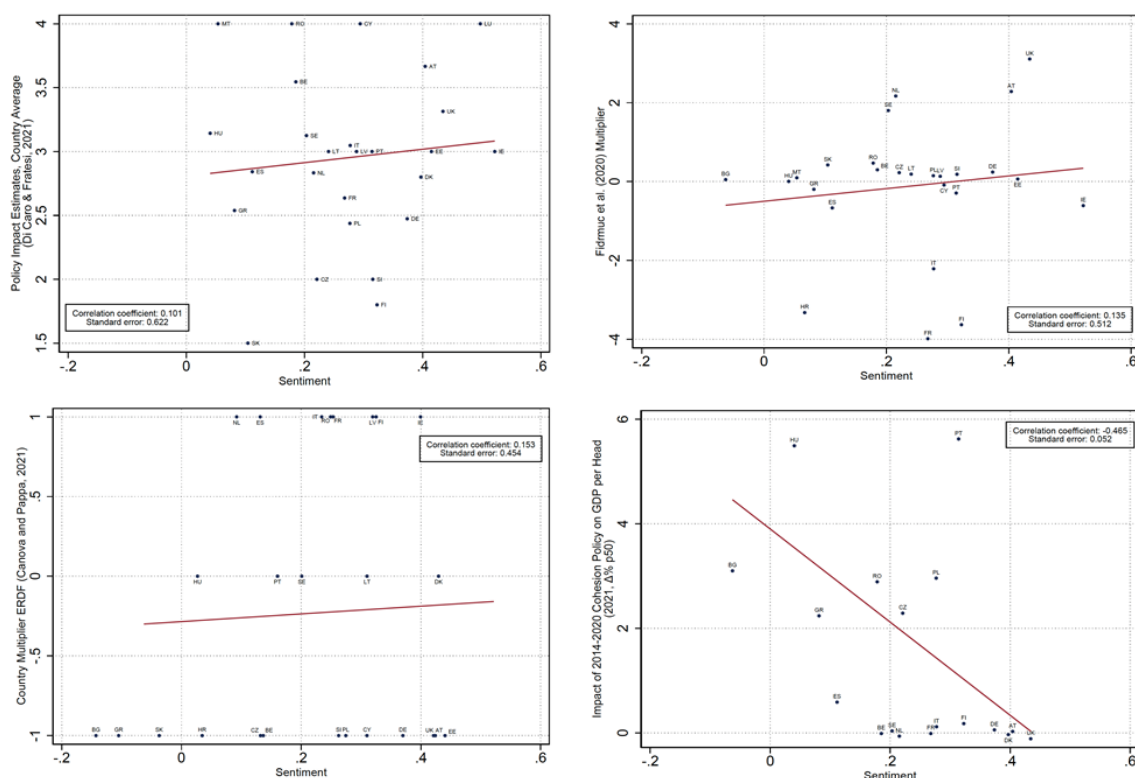
¹⁶⁸ We are grateful to the authors for sharing with us the underlying data on NUTS2 level impact estimates.

¹⁶⁹ Note that these estimates are only present in the working paper version, but not in the published version of the paper.

Pappa (2021) construct regional data running over 30 years and implement an instrumental variable Bayesian approach. They estimate regional level dynamic multipliers separately for ERDF and ESF (see, respectively, Figures 4 and 5 of the paper). Fourth, and finally, we take the estimates of the RHOMOLO model from Crucitti et al. (2022) on the impact of the 2014-2020 CP on GDP per capita in 2021 by MS (see Table 4.2.4 of the paper).¹⁷⁰

Figure 4.2.9 presents correlations of the findings from these four estimations with our sentiment score at the level of MS. Surprisingly, the results do not suggest any correlation with the three empirical papers, while the correlation with the findings of the RHOMOLO model is even negative. Assuming that the outcomes measured in the evaluations and in the literature are related, the absence of correlations suggests that the measurements of either the evaluations or the literature or both must be wrong.

Figure 4.2.9: Comparison of MS specific evaluation sentiment with the output-impacts of Cohesion Policy as estimated by the economic literature



Notes: Sources for the CP impact measures are: Top-left: Di Caro und Fratesi (2022); top-right: Fidrmuc et al. (2019); bottom-left: Canova und Pappa (2021); bottom-right: Crucitti et al. (2022).

We perform three robustness tests to confirm this finding. First, at the MS level we have few observations, and thus the absence of observable correlation may potentially be driven by the lack of statistical power due to a limited sample size rather than a true absence of correlations. We

¹⁷⁰ For each Member State the paper presents the distribution of regional estimates in terms of the median, bottom and top deciles of the magnitude of the impact. For our baseline analysis we take the median estimate per Member State, and in the appendix present robustness tests for the bottom and top deciles.

reject this hypothesis by performing the analysis at the regional level using NUTS2-specific estimates of the effect of CP. Such estimates are available only in Di Caro und Fratesi (2022), and Figure 4.2.20 of Annex II shows no correlation between their estimates and our sentiment data on the NUTS2 level. Second, it could be that the outcomes studied by the evaluations and the literature are very different. To reject this hypothesis, we look at a sub-sample of evaluations whose thematic objectives have economic growth or employment increases as the primary target, and repeat the analysis for this sub-sample.¹⁷¹ However, Figure 4.2.21 of Annex suggests that also in this sample the findings of the evaluations do not correlate with those in the literature, neither at the MS and nor at the NUTS2 levels. A third possibility is that the economic literature has done a poor job in estimating the impacts of CP at the MS level. In this case findings of the different papers in the literature should also be inconsistent with each other. We reject this third hypothesis by showing in Annex, Figure 4.2.22 that the findings of the literature indeed correlate positively with each other.

Thus, we conclude that the national and regional variance of evaluation sentiments is unrelated to corresponding findings in the academic literature on the differentiated growth and employment impacts of CP. Of course, the evaluation sentiment – even for evaluations that focus on growth and employment effects – is an indirect measure of how an evaluation assesses a programme’s growth effect. Nevertheless, this complete lack of correlation, and the even negative correlation in case of the estimates of the RHOMOLO model, shows that evaluations paint a rather different picture of CP performance compared to the academic papers.

4.2.4.3 Market structure of evaluations

In this section, we study the market structure of evaluations across and within MS. The aim is to understand how the markets for evaluations function and what their implications for the findings of evaluations are. Given the divergence between the findings of evaluations and the academic literature, it is helpful to study possible market imperfections (such as the potential oligopolistic power of evaluators or frictions arising from segmentation of markets across the MS) and ask whether these can help explain this divergence.

First, we ask if there is a single cross-border market for evaluations. Do authors frequently work on evaluating cohesion programmes in different MS, or are the markets segmented along national borders? Second, we ask if the markets in individual MS are competitive, that is whether there are many institutions and author clusters competing with each other to win contracts and write evaluations or whether few firms and author clusters dominate the markets.

To get at these questions we make use of the evaluation author data in our database. As a first step, we identify how many authors have been involved in writing evaluation reports for multiple

¹⁷¹ We select those thematic objective that target important input factors directly such as production technology with TO1 (research, technological development and innovation), infrastructure with TO2 (ICT access, use and quality) and TO7 (sustainable transport and network infrastructure improvement), human capital with TO8 (employment and labour mobility) and TO10 (human capital investments), firm subsidies with TO3 (SME competitiveness), or regulation with TO11 (efficient public administration).

programmes implemented in different countries. As a second step, we measure the concentration of evaluation markets within MS. These measurements are discussed in detail in Section 4.2.3.2.

Table 4.2.2: The EU's "single market" for evaluations

Country	Authors	% Two or More MS	Country	Authors	% Two or More MS
AT	73	2.74%	IT	266	3.38%
BE	24	8.33%	LT	23	4.35%
BG	69	0.00%	LU	7	0.00%
CY	-	-	LV	47	4.26%
CZ	171	4.09%	MT	1	0.00%
DE	316	4.11%	NL	73	0.00%
DK	5	0.00%	PL	590	1.86%
EE	95	1.05%	PT	106	0.94%
ES	40	0.00%	RO	180	6.11%
FI	27	3.70%	SE	60	8.33%
FR	72	2.78%	SI	37	10.81%
GR	18	5.56%	SK	52	1.92%
HR	49	6.12%	UK	80	5.00%
HU	95	0.00%	CB	197	20.30%
IE	23	4.35%	Total	2517	3.26%

Notes: The table breaks down by country the share of authors who contributed to at least one evaluation from that country as well as at least one other country. When authors have worked on multiple countries, they are counted in all of these countries. The last row "CB" refers to cross-border and Interreg Europe programmes.

Table 4.2.2 presents the share of authors per MS that have contributed as a (co-)author to at least one evaluation report in at least one other MS. It shows that such authors are virtually absent. On aggregate, from 2,517 authors in our sample only 82 or 3.26% have contributed to evaluations in two or more MS. This low number suggests the absence of a single market in the EU for evaluations.

Of course, some programmes require knowledge of local context and language for proper evaluations, but on the other hand, most of the programmes should serve common European goals and there must be a large element of learning externalities from programme to programme. The almost complete absence of cooperation across MS in writing evaluations is suggestive of the fact that the market of evaluations is very fragmented, and that probably substantial gains in terms of the quality of evaluations can be made in overcoming these barriers across country borders.

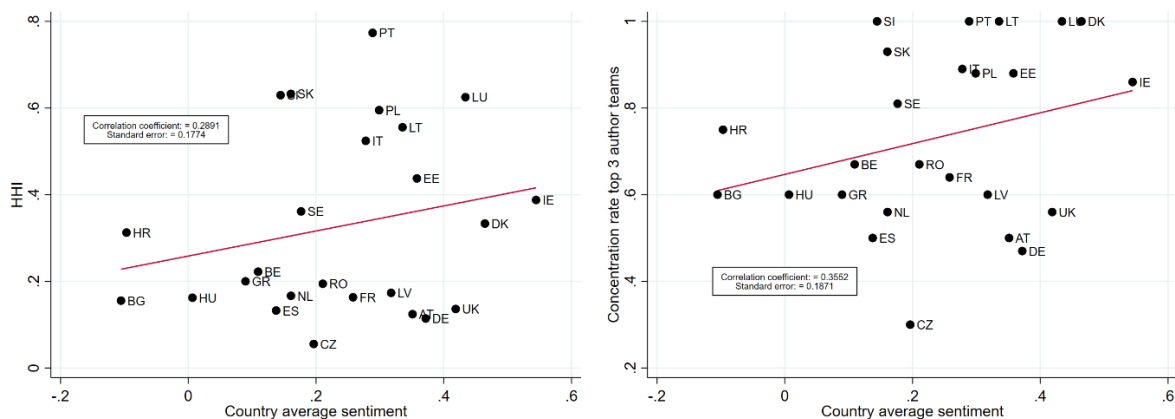
Table 4.2.3: Concentration of evaluation markets in MS

Country	HHI	CR3	Country	HHI	CR3
FI	1.000	1.000	BE	0.222	0.667
MT	1.000	1.000	GR	0.200	0.600
PT	0.773	1.000	RO	0.194	0.667
SK	0.633	0.929	LV	0.173	0.600
SI	0.630	1.000	NL	0.167	0.556
LU	0.625	1.000	FR	0.163	0.640
PL	0.595	0.879	HU	0.162	0.60
LT	0.556	1.000	BG	0.156	0.600
IT	0.524	0.888	UK	0.136	0.561
EE	0.438	0.875	ES	0.133	0.500
IE	0.388	0.857	AT	0.124	0.500
SE	0.361	0.813	DE	0.114	0.472
DK	0.333	1.000	CZ	0.056	0.300
HR	0.313	0.750			

Notes: The table shows the Herfindahl-Hirschmann-index (HHI) and the concentration ratio of the largest 3 evaluation team clusters by country. HHI is calculated according to the formula in Section 4.2.3.2.

As to the competitiveness of markets within MS, Table 4.2.3 suggests an overall large degree of oligopolistic market structures. On average, the market share of top three author clusters across MS is at a stunning 75%. The leading countries with the least competitive markets are Finland and Malta, which is driven by the very small evaluation markets in these countries restricting participation by a wide group of potential evaluators. However, even looking at the most competitive markets at the bottom of Table 4.2.3, we see that the market share of top three clusters is still very large with 30% for the most competitive case, Czechia, and otherwise at about 50% and higher.

In Figure 4.2.10 we correlate the average sentiment of evaluations in countries with our measures of market competitiveness. In the left panel for the HHI, and in the right panel for the concentration rate of the top three author clusters (CR3) we find positive coefficients for these correlations. In the case of CR3 this relationship is statistically significant. This suggests that, on average, evaluations in more oligopolistic markets tend to find more optimistic findings.

Figure 4.2.10: Correlation between market concentration and findings of evaluations

Notes: The left panel plots the correlation between Herfindahl-Hirschman-index of market concentration and average sentiment on the country level. In the right panel the correlation between the aggregate market share of the top 3 author teams and average sentiment on country level is depicted. Both concentration measures consider all evaluations for which we identify authors as individuals. Malta, Cyprus and Finland are excluded as we identify only a single author cluster for these countries.

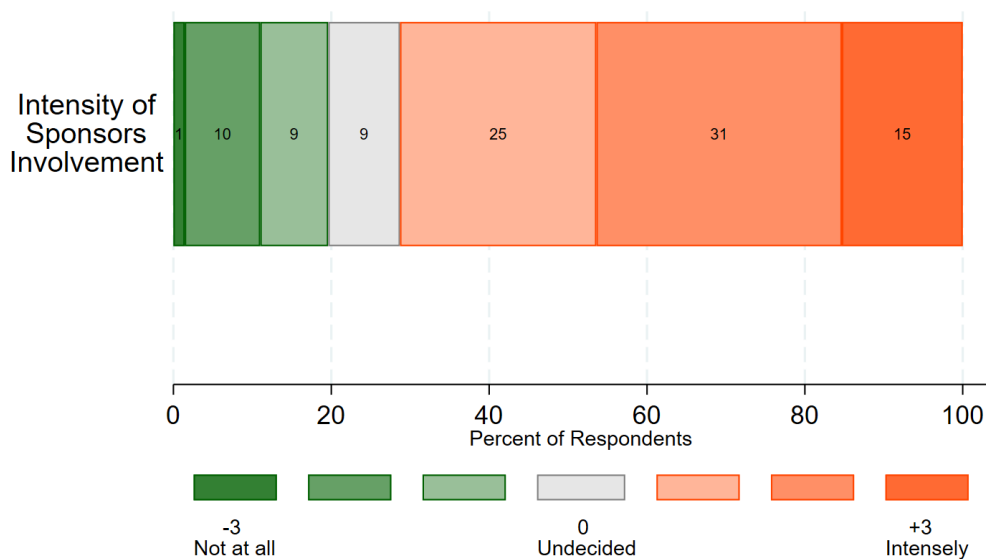
A plausible interpretation of this result is that the few dominant evaluators of oligopolistic markets have strong ties with the managing authorities, which leads the evaluations to follow the interests of managing authorities more closely, and showing a more positive performance of cohesion programmes. This result is also consistent with the argument that lack of competition generally leads to lower quality evaluations (as well as higher prices, as predicted by economic theory) which then affects the direction of the findings of evaluations. Although we do not have direct measurements of the quality of evaluations, it is plausible to assume that the findings of low-quality evaluations are more prone to influences than the ones of high-quality evaluations. Consistent with the interests of the managing authorities, such influences might then lead to the sentiment scores to be skewed towards showing more optimistic findings.

However, formulating a policy conclusion from this exercise is less straightforward. More competition will not necessarily make evaluators more independent from the managing authorities, since severe competition might lead evaluators to compete for winning contracts by being even less impartial.

4.2.4.4 Impartiality

In this section, we study the question of how the involvement of the managing authority of a CP programme correlates with the sentiment of the resulting evaluations. A common feature is that the national or regional authorities that run cohesion programmes are also the ones that commission, monitor and approve the evaluations (Heinemann et al., 2024). Such an intense involvement of managing authority with the work of (formally independent) evaluators may have both favourable and unfavourable consequences. On the upside, a strong involvement through an intense communication may support the flow of information and the evaluator's understanding for the programme design and impact. On the downside, the involvement may limit the material independence of evaluators and imply pressure on the evaluator to deliver a preferred positive assessment at the expense of a truly impartial evaluation.

To study which of the possible directions dominates, we employ the data we collected from our survey of authors. In the survey we ask the following question: "How intensely are the sponsors of your EU programme evaluations typically involved in discussing your evaluation methods, results and policy conclusions". In their answers, the respondents had the option to choose the degree of involvement according to a seven-point Likert-scale or refrain from answering. We plot the responses to this question in Figure 4.2.11. Around 70% of responses indicate at least some involvement by the sponsors of the evaluation, which confirms that the managing authorities are heavily involved in discussing the methods, results and policy conclusions of evaluations.

Figure 4.2.11: Intensity of the involvement of authorities in the process of evaluations

Notes: The question asked in the survey is as follows: “How intensely are the sponsors of your EU programme evaluations typically involved in discussing your evaluation methods, results and policy conclusions?”.

In Table 4.2.4, we test whether the involvement of authorities in the evaluations process correlates with the evaluation sentiment on the performance of programmes. If a strong involvement of the managing authority serves as a positive input for the evaluation process such as by improving the information flow between the authority and the evaluator, we should not observe a systematic correlation of involvement and sentiment. On the other hand, a positive correlation would point in the direction of a bias-promoting effect where the managing authority uses its bargaining powers to steer the evaluation towards a more positive assessment.

Our empirical exercise runs a regression of the sentiment found in the evaluation by the responding authors (or the average of the sentiments across evaluations, if there were more than one) and their response to the question on the degree of involvement of the managing authority in their work. We start with a simple correlation in column 1 and consequently add a number of control variables at the level of authors as well as fixed effects for MS in the consequent columns. The results suggest a robust positive correlation between authorities’ involvement in the process and the findings of evaluations. That is, this evidence suggests that more involvement leads to evaluations finding more positive impacts, which is in line with the incentives of the managing authority and consistent with the hypothesis that their involvement leads to biased evaluations. The magnitudes are sizable. On average about 70% of evaluations find positive sentiment, while the cases where the authority is involved are 12-13% more likely to find a positive sentiment compared to cases where the authority is not involved. In Annex III, Table 4.2.9 instead of using the average sentiment score across evaluations of the author, we run this regression at the level of evaluations. The results remain the same, with a noticeable improvement in statistical significance of the estimates likely due to the larger sample size.

Table 4.2.4: Involvement by managing authorities in the evaluation process and the findings of evaluations

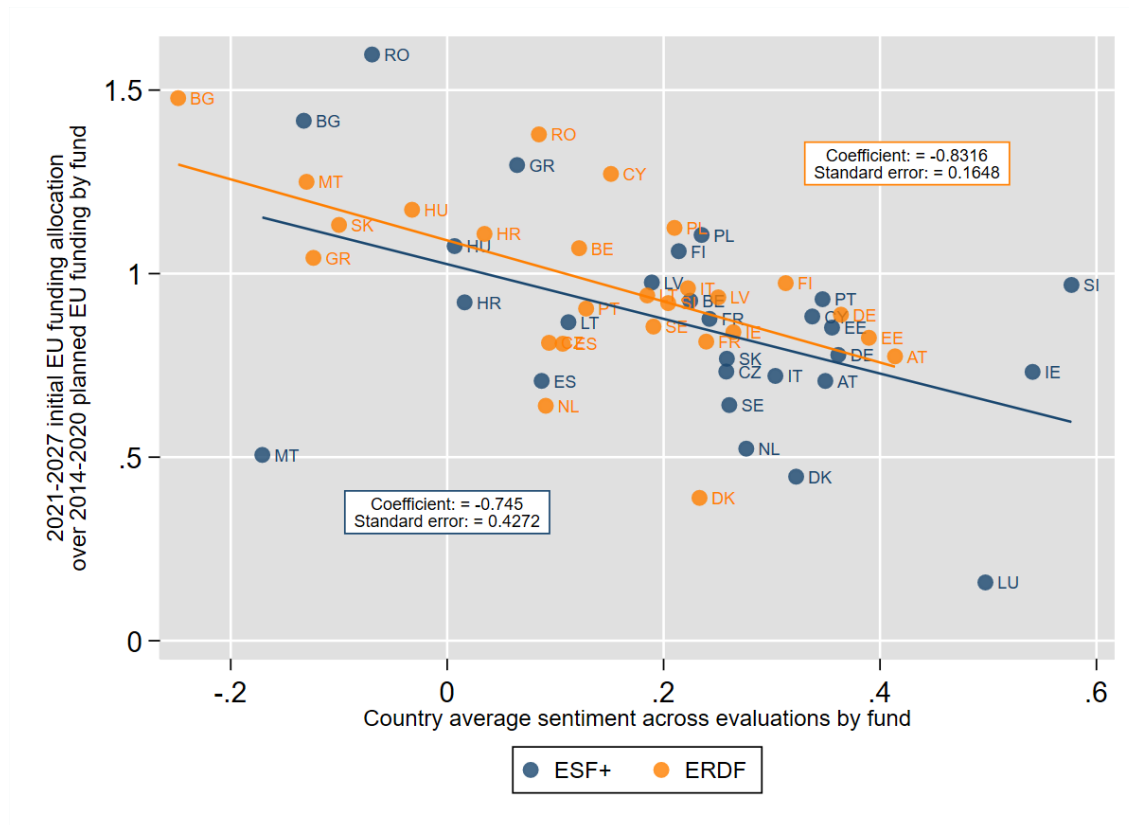
VARIABLES	(1) Positive avg. sentiment	(2) Positive avg. sentiment	(3) Positive avg. sentiment	(4) Positive avg. sentiment	(5) Positive avg. sentiment
At least somewhat intense involvement of sponsor	0.1398** (0.0665)	0.1348** (0.0669)	0.1329* (0.0677)	0.1386* (0.0720)	0.1290* (0.0740)
Evaluations are employers main activity		0.0472 (0.0608)	0.0434 (0.0635)	0.0062 (0.0704)	0.0036 (0.0713)
University / public institute			-0.0218 (0.0745)	-0.0854 (0.0850)	-0.0890 (0.0863)
Public sector			-0.0456 (0.0932)	-0.0693 (0.1047)	-0.0715 (0.1065)
Impartiality is perceived at least somewhat of a bottleneck					-0.0338 (0.0702)
Woman					0.0342 (0.0678)
EU sceptic					0.0055 (0.0991)
Constant	0.6863*** (0.0568)	0.6715*** (0.0600)	0.6850*** (0.0664)	0.7131*** (0.0733)	0.7168*** (0.0800)
Country FE	No	No	No	Yes	Yes
Observations	189	189	189	189	189
R ²	0.0231	0.0262	0.0277	0.1737	0.1760
F	4.419	2.506	1.311	1.346	0.819

Notes: The table regresses author-level characteristics using data from the survey on the average sentiment score of the evaluations written by the respective author. The sentiment variable is transformed into a dummy variable for positive and non-positive sentiment scores. The main variable of interest, plotted in the first row, is the degree of involvement of managing authorities as measured in the survey and as described in the text in detail. This variable too is transformed into a dummy. Columns 1 to 5 consequently add more control variables. Columns 4 and 5 include fixed effects for the MS.

4.2.4.5 Evaluations and decision making

We study the question of whether evaluation findings matter for policy making. To do so we correlate the evaluation findings aggregated at the level of MS with the growth of cohesion funding planned to flow to MS in the 2021-27 programming period compared to the 2014-20 period. If evaluations matter for policy making, we would expect to see some relocation in funding across the MS by cutting and expanding the funds in MS with respectively bad and good evaluation results.

Figure 4.2.12: Evaluation findings of the past and planned funding amounts in the current budgetary period



Notes: The figure displays correlations between the country level average sentiment across ESF+ and ERDF fund evaluations and the ratio of the amount of funding in the ESF+ and ERDF initially allocated to countries in the 2021-2027 MFF to the amount of funding in these funds disbursed in the 2014-2020 MFF. The sample includes all evaluations that pertain to the ERDF or ESF/ESF+ funds, regardless of whether they also evaluate other funds.

Figure 4.2.12 implements the test separately for the ERDF and ESF+¹⁷² funds. It does not find evidence for this hypothesis, if anything it suggests the opposite that is MS with worse average sentiment scores are planned to receive even more money in the future. Figure 4.2.23 of Annex replicates the exercise by limiting the sample of evaluations to those that can be precisely mapped to evaluate either of the two funds only, as some evaluations pertain to more than one fund. A similar test would be to look at the regional level within MS, however this is left for future work as data on regional level cohesion funds for the 2021-27 programming period is not yet available.

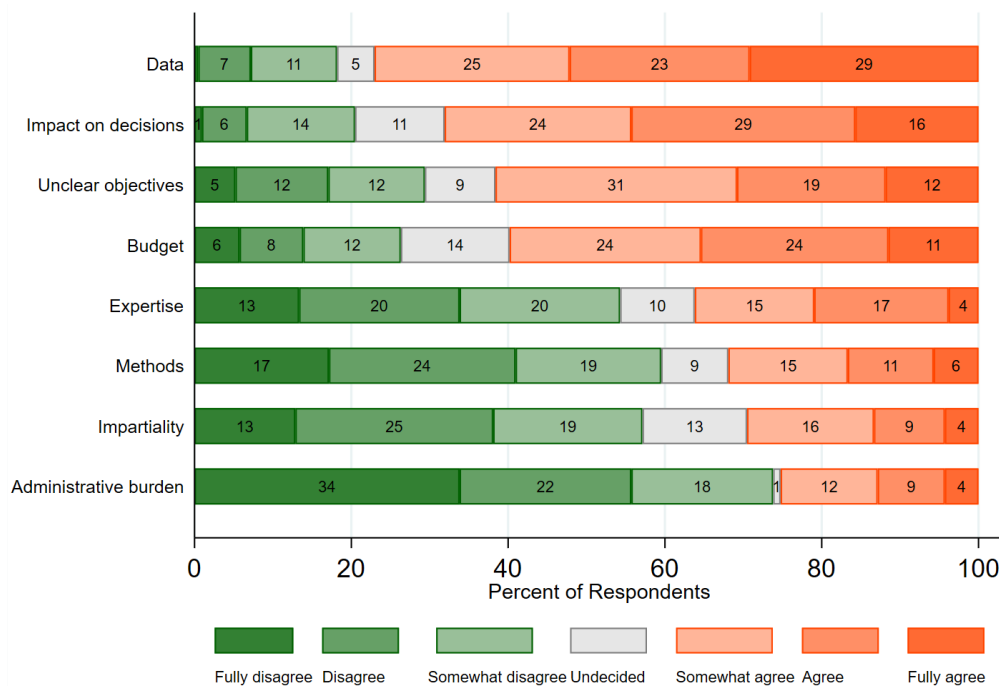
4.2.5 Main bottlenecks and reform options from the perspective of evaluators

As a final exercise, we describe the responses of authors to a question in our survey on the importance of various bottlenecks implicit in the evaluation system. We show the views of the authors on bottlenecks ranked in their relative importance, along with describing some potential reform options on overcoming these bottlenecks. A much more detailed analysis of reform options

¹⁷² With the 2021-2027 programming period, the ESF has been renamed “ESF+”.

is presented by Heinemann et al. (2024), a paper that also abstracts from the perspective of evaluators which, as we argued in this paper, cannot be considered as fully impartial in the first place. Heinemann et al. (2024) generally agrees with the main arguments of this paper that the vested interests of managing authorities and the uncompetitive markets for evaluations are significant barriers for high-quality evaluations, but it also makes the more general case for an unfavorable equilibrium characterized by limited evaluation capacities, poor methods, and a formalistic approach to evaluations.

Nevertheless, turning to the bottlenecks as expressed by the evaluators, Figure 4.2.13 highlights several important issues. There is a clear consensus among authors that access to data is a very large bottleneck. One policy response to this, a process that is ongoing from the side of EU authorities, is to provide data at high spatial granularity centrally. On methods, although modern and sophisticated methods, such as the use of randomized trials or counterfactual approaches, are important for credible evaluations, there are trade-offs in imposing a tight methodological corset on all evaluations. Many evaluations cannot be purely quantitative exercises, and even for quantitative exercise a rigid European approach may fail to work, because one-size-fits-all type policies generally do not work well given the heterogeneous circumstances. A related question pertains to the transmission of knowledge generated by evaluations, since even well-measured impacts of a certain program on a specific outcome cannot always be easily be transferred to other settings. Authors also stress issues related to their capacities for high quality evaluations, as well as often ask for bigger budgets to be made available for their work on evaluations. This latter view is somewhat inconsistent with the view that the evaluation system does not impose significant administrative burden on CP. However, this is hardly surprising, given the respondents' vested interests in keeping the status-quo also related to the fact that for many of them writing the evaluations constitute their core source of revenue. Unfortunately, we neither have data on the direct costs of evaluations, nor on their indirect compliance costs. We suspect, however, that these costs are non-negligible and it would be a task for future research to collect such data, perhaps by starting from the measurement of direct monetary costs based on the procurements of evaluation requests.

Figure 4.2.13: Main bottlenecks according to authors of evaluations

Notes: The question asked in the survey is as follows: “Finally, we are interested in potential bottlenecks of the CP evaluation system. Please select for each of the following items whether you agree or disagree that they are a major obstacle to the success of the CP evaluation system.”

Turning to the issue of impartiality, the dimension we have analyzed in Section 4.2.4.4, we see that authors still rank it an important bottleneck despite authors’ potential interest to present themselves as being independent from the authorities. One policy response could be to create an independent body, perhaps a branch of the national auditing authority, which would commission the evaluations instead of the authorities that run the cohesion programmes. Importantly, there is a consensus that cohesion programmes have too many and ever-increasing number of objectives, making the job of evaluation difficult. A reform that simplifies the cohesion objectives, clearly assigns their goals and defines the intermediate indicators that measure the progress on the way to reach them would help the evaluation system become more effective. Heinemann et al. (2024) views such a broad and imprecise definition of objectives of the policy as a key challenge and develops proposals to overcome it.

Finally, an important aspect is the question of the impact of evaluations on policy. Authors feel that there is a huge disconnect between evaluations and decision-making, a result that is consistent with our empirical evidence linking evaluation results and funding amounts across programming periods. Policy options at the one extreme are to make cohesion policies ex-ante conditional on the results of the evaluations. This is perhaps a too far-reaching reform, given the many bottlenecks in the ability to perform high quality evaluations with very certain outcomes, however the status quo is a policy at the other extreme: Evaluations have nearly zero impact on policy decisions. One plausible policy option is to force authorities to be more accountable by imposing a “comply-or-explain” principle. That is, if authorities do not follow the suggestions of evaluations, they have to explain their decisions publicly. Another even softer approach that implies less of a

bureaucratic burden than the latter proposal, is to have better communication between evaluators and policy makers. This last reform option clearly comes with its own set of problems around monitoring and enforcement. These reforms are not only important because they can improve the quality of evaluations, but they have the potential to make CP as a whole and in each MS a better policy. This is because the practical absence of any possibility to impact policy turns the evaluation system into a beauty contest, thus weakening the incentives of putting effort into writing truly independent and high-quality evaluations.

4.2.6 Conclusion

In this chapter we use meta-analytical tools to quantitatively analyse about 2,300 evaluations written on CP starting in 2007. We apply an AI-based methodology to quantify the sentiment of CP evaluations with respect to the performance of programmes and show that this new measure ranks results consistently compared to human assessment. Merging the data on evaluations to data on cohesion programmes and their budgets reveals that the evaluations formally cover the cohesion programmes as they are supposed to. This methodological work provides the basis for our work on analysing the evaluation system of CP.

In terms of the results of evaluations, on the aggregate we show that the estimated sentiment scores are heavily skewed towards showing more positive impact of cohesion programmes, as well as towards showing either positive or negative effects rather than null or balanced effects. We uncover large variation in the performance of CP programmes as suggested by the evaluations, and by decomposing the drivers of these differences we find the individual MS but also the authors of evaluations to play a key role.

We compare the MS level scores of the evaluations to country-specific estimates of the growth and employment impacts of CP coming from the academic literature. This comparison shows that the two sources do not provide consistent pictures on the impact of CP. This conclusion is robust when we replicate the analysis on the level of regions as well as for a sub-sample of programmes which have growth and employment as their objective. These findings raise questions on the credibility of evaluations.

We then study several of the potential reasons that may explain the diverging results of the academic literature and the insights from the evaluations. In particular, our analysis suggests that the market of evaluations is rather oligopolistic, that it is very fragmented across the EU MS, and that there is often a strong involvement of managing authorities in the work of (formally independent) evaluators. We show that these strong interference as well as the uncompetitive nature of national evaluation markets correlate with, on average, more optimistic findings in the evaluations.

Finally, the author survey identifies some further key bottlenecks for high-quality and impartial evaluations from the perspective of the authors of the evaluations. These suggest the importance of more technical aspects of evaluations, such as the availability of data or the reliability of methods, which often do not have one-size-fits-all solutions and need more detailed and context-dependent discussions. Responses of authors also highlight more fundamental challenges to the system, in particular related to the large disconnect between evaluations and decision-making. This disconnect is also consistent with our empirical evidence and it may adversely affect the quality of evaluations by further weakening the incentives to invest resources in writing good evaluations.

Overall, this work lays down the methodological groundwork for further formal analysis of cohesion evaluations, as well as for a more evidence-based understanding on the limits of evaluations and their reform priorities in the EU and other jurisdictions trying to establish systems of performance-based budgeting more generally.

4.2.7 References

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4.2.8 Annex I: Survey design

Figure 4.2.14: Survey invitation email

Invitation to participate in a 5 minute survey on EU Cohesion Policy

Dear [REDACTED]

The ZEW - Leibniz Centre for European Economic Research is conducting a survey about EU Cohesion Policy and the evaluation of programmes within the policy. We believe that you have contributed to writing evaluations of EU Cohesion Policy programmes in the past, and as such value your input as an expert on the topic highly. The aim of the research project is to understand potential problems of EU Cohesion Policy and the evaluation of its programmes in order to identify reform options for the next budget period. Your answers will contribute to improving the policy in the future!

You can access the survey via this link: <https://limesurvey.zew.de/limesurvey>

To signify our appreciation of your time commitment, we donate 5€ (up to 1000€) for each completed survey to the *Aktionsbündnis Katastrophenschutz* charity, a joint initiative of Caritas international, UNICEF, German Red Cross and Diakonie for disaster relief towards victims of the flooding in Libya.

Thank you very much for taking the time and participating in the survey.

Best regards

Prof. Dr. Friedrich Heinemann

Project lead 'Reorientation of the European Structural Policy in the next funding period 2028-2035'

ZEW - Leibniz Centre for European Economic Research

Department of Corporate Taxation and Public Finance

E-mail: CohesionSurvey@zew.de

Web: <https://www.zew.de/en>

Figure 4.2.15: Survey introduction

EU Cohesion Policy Survey

Dear [REDACTED]

Thank you very much for agreeing to participate in this survey, it should take about **5 minutes** of your time. Your answers serve as an important input for a scientific research project that analyses how programmes of the EU Cohesion Policy are evaluated, in order to improve the evaluation system in future funding periods. To signify our appreciation of your time commitment, we donate 5€ (up to 1000€) for each completed survey to the *Aktionsbündnis Katastrophenschutz* charity, a joint initiative of Caritas international, UNICEF, German Red Cross and Diakonie for disaster relief towards victims of the flooding in Libya.

ZEW is committed to comply with the EU General Data Protection Regulations, and as such you have the right to access (article 15 GDPR), rectification (article 16 GDPR) and erasure (article 17 GDPR) of your data. We process your data for scientific purposes only, in accordance with article 6 section 1 (f) GDPR. The survey is conducted as part of the project 'Reorientation of the European Structural Policy in the next funding period 2028-2035'.

Contact person for project-specific enquiries is Prof. Friedrich Heinemann who can be reached via email at CohesionSurvey@zew.de.

The data protection officer Dr. Thomas Wirth can be reached via email at datenschutzbeauftragter@zew.de. Your data will be archived for 10 years to comply with ZEWs guidelines for good academic practice. For more information about ZEWs data protection commitment visit: <https://www.zew.de/en/commitment-to-data-protection>.

There are 16 questions in this survey.

Next

Figure 4.2.16: Survey questionnaire

About you

In the following block we would like to ask you up to 10 questions about yourself and your working experience, specifically related to the EU Cohesion Policy.

Please select your year of birth.

Please choose... ▾

Please select your gender.

Please choose... ▾

In which country is your current place of work?

Please choose... ▾

What is the highest level of education you have completed?

- ☐ Less than primary education
- ☐ Primary education
- ☐ Secondary education
- ☐ Post-secondary non-tertiary education
- ☐ Bachelor's or equivalent level
- ☐ Master's or equivalent level
- ☐ Doctoral or equivalent level

Which of the following describes your current employer best?

- ☐ Public sector (national, sub-national, municipal administration, other public sector)
- ☐ University
- ☐ Publicly funded research institute
- ☐ Privately funded research institute
- ☐ Private consultancy
- ☐ Independent/freelance service
- ☐ Other:

In what function are you working at your current employer?

- ☐ Researcher
- ☐ Project lead
- ☐ Management level
- ☐ Other:

Did you work for a different employer than your current when you contributed to Cohesion Policy evaluation reports?

🗖️ If you wrote evaluation reports under your current and a former employer, please select "yes" only if the majority of evaluation reports you wrote were under a former employer.

✓
Yes

⊘
No

Which of the following describes your former employer best?

- ☐ Public sector (national, sub-national, municipal administration, other public sector)
- ☐ University
- ☐ Publicly funded research institute
- ☐ Privately funded research institute
- ☐ Private consultancy
- ☐ Independent/freelance service
- ☐ Other:

In which country was your place of work under your former employer?

Please choose... ▼

From your perception, were Cohesion Policy programme evaluations the main field of activity for your former employer?

✓
Yes

⊘
No

Next

Views on the EU and economic policy

In this second and final block we would like to ask you 4 questions about your general views on the EU and your views on the Cohesion Policy evaluation system.

GENERAL VIEWS ON THE EU AND ECONOMIC POLICY

Please select the option that reflects your view the best:

	Fully disagree -3	-2	-1	Undecided 0	+1	+2	Fully agree +3	No answer
The EU budget should grow substantially in order to cope with Europe's challenges.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
There should be more redistribution from richer to poorer EU Member States.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
EU competencies on fields such as taxation, social standards, and labor market regulation should be extended.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The government (EU and Member States) should take a more active role in European industrial policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

VIEWS ON COHESION POLICY EVALUATION SYSTEM

Please select the option that reflects your view the best:

	Not at all -3	-2	-1	Undecided 0	+1	+2	Intensely +3	No answer
How intensely are the sponsors of your EU programme evaluations typically involved in discussing your evaluation methods, results and policy conclusions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Do you have any suggestions how to improve the evaluation system of the EU Cohesion Policy programmes?

Finally we are interested in potential bottlenecks of the Cohesion Policy evaluation system. Please select for each of the following items whether you agree or disagree that they are a major obstacle to the success of the Cohesion Policy evaluation system.

	Fully disagree -3	-2	-1	Undecided 0	+1	+2	Fully agree +3	No answer
Unclear objectives to be evaluated against	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
No impact of evaluations on decision making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of a budget for evaluations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of appropriate methods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Evaluations create unnecessary administrative burden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of impartial evaluations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of expertise and capacities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of good data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Would you like to receive a digital copy of the final report once it is published?

☒ Yes
 ☐ No

Table 4.2.5: Balance test- Survey respondents versus all authors

	Control			Treatment			Diff
	N	mean	sd	N	mean	sd	
Average Sentiment	4068	0.27	0.46	626	0.29	0.46	0.022
Evaluation has abstract	4450	0.92	0.28	677	0.93	0.26	0.011
Fund: ERDF	4450	0.61	0.49	677	0.58	0.49	-0.033
Fund: CF	4450	0.13	0.34	677	0.08	0.27	-0.052***
Fund: ESF	4450	0.59	0.49	677	0.56	0.50	-0.024
Fund: YEI	4450	0.10	0.30	677	0.07	0.26	-0.028
Type: Impact	4450	0.49	0.50	677	0.43	0.49	-0.067***
Type: Process	4450	0.55	0.50	677	0.60	0.49	0.051**
Type: Monitoring	4450	0.58	0.49	677	0.62	0.49	0.042
Type: Summary	4450	0.03	0.16	677	0.02	0.15	-0.002
Type: Report	4450	0.05	0.22	677	0.05	0.22	0.000
MFF 2007-2013	4450	0.20	0.40	677	0.15	0.36	-0.055***
MFF 2014-2020	4450	0.82	0.38	677	0.87	0.34	0.043**
Total Programme Budget (in billion €)	4449	2.35	4.75	676	1.93	4.12	-0.415
Estimated Co-financing Rate	3087	0.26	0.15	514	0.32	0.16	0.056***
Thematic Objective: 1	4450	0.36	0.48	677	0.42	0.49	0.056
Thematic Objective: 2	4450	0.25	0.43	677	0.22	0.41	-0.034
Thematic Objective: 3	4450	0.34	0.47	677	0.36	0.48	0.021
Thematic Objective: 4	4450	0.30	0.46	677	0.27	0.45	-0.021
Thematic Objective: 5	4450	0.22	0.41	677	0.20	0.40	-0.020
Thematic Objective: 6	4450	0.27	0.45	677	0.27	0.45	-0.002
Thematic Objective: 7	4450	0.26	0.44	677	0.22	0.41	-0.040*
Thematic Objective: 8	4450	0.47	0.50	677	0.49	0.50	0.018
Thematic Objective: 9	4450	0.45	0.50	677	0.44	0.50	-0.014
Thematic Objective: 10	4450	0.42	0.49	677	0.42	0.49	-0.005
Thematic Objective: 11	4450	0.27	0.44	677	0.26	0.44	-0.005
Thematic Objective: multiple	4450	0.34	0.48	677	0.39	0.49	0.045**
Thematic Objective: all	4450	0.19	0.39	677	0.17	0.38	-0.014
Method: Theory-based Impact Evaluation	4450	0.18	0.39	677	0.20	0.40	0.012
Method: Qualitative Analysis	4450	0.92	0.27	677	0.90	0.30	-0.023
Method: Quantitative Analysis	4450	0.88	0.32	677	0.84	0.36	-0.039**
Method: Cost-benefit Analysis	4450	0.05	0.21	677	0.03	0.16	-0.021***
Method: Counterfactual Impact Evaluation	4450	0.16	0.37	677	0.15	0.36	-0.013
Method: Mod?	4450	0.05	0.23	677	0.04	0.20	-0.014

Notes: Observations are at the author-evaluation level. The Diff column is the coefficient of a simple regression of surveyed status on the variable, with clustered standard errors at the author level. Stars indicate whether this difference is significant. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4.2.6: Balance test- Survey respondents versus all contacted authors

	Control			Treatment			Diff
	N	mean	sd	N	mean	sd	
Average Sentiment	1429	0.30	0.45	626	0.29	0.46	-0.008
Evaluation has abstract	1532	0.93	0.25	677	0.93	0.26	-0.008
Fund: ERDF	1532	0.58	0.49	677	0.58	0.49	-0.004
Fund: CF	1532	0.11	0.31	677	0.08	0.27	-0.031
Fund: ESF	1532	0.60	0.49	677	0.56	0.50	-0.035
Fund: YEI	1532	0.11	0.31	677	0.07	0.26	-0.033*
Type: Impact	1532	0.49	0.50	677	0.43	0.49	-0.063**
Type: Process	1532	0.55	0.50	677	0.60	0.49	0.056**
Type: Monitoring	1532	0.58	0.49	677	0.62	0.49	0.038
Type: Summary	1532	0.04	0.19	677	0.02	0.15	-0.015**
Type: Report	1532	0.04	0.18	677	0.05	0.22	0.016
MFF 2007-2013	1532	0.20	0.40	677	0.15	0.36	-0.047**
MFF 2014-2020	1532	0.84	0.37	677	0.87	0.34	0.030
Total Programme Budget (in billion €)	1531	2.30	4.49	676	1.93	4.12	-0.372
Estimated Co-financing Rate	1107	0.29	0.16	514	0.32	0.16	0.027
Thematic Objective: 1	1532	0.34	0.47	677	0.42	0.49	0.077**
Thematic Objective: 2	1532	0.22	0.42	677	0.22	0.41	-0.004
Thematic Objective: 3	1532	0.30	0.46	677	0.36	0.48	0.056*
Thematic Objective: 4	1532	0.29	0.45	677	0.27	0.45	-0.016
Thematic Objective: 5	1532	0.19	0.39	677	0.20	0.40	0.006
Thematic Objective: 6	1532	0.25	0.43	677	0.27	0.45	0.022
Thematic Objective: 7	1532	0.24	0.43	677	0.22	0.41	-0.022
Thematic Objective: 8	1532	0.47	0.50	677	0.49	0.50	0.024
Thematic Objective: 9	1532	0.47	0.50	677	0.44	0.50	-0.031
Thematic Objective: 10	1532	0.43	0.50	677	0.42	0.49	-0.015
Thematic Objective: 11	1532	0.25	0.43	677	0.26	0.44	0.015
Thematic Objective: multiple	1532	0.36	0.48	677	0.39	0.49	0.035
Thematic Objective: all	1532	0.17	0.37	677	0.17	0.38	0.006
Method: Theory-based Impact Evaluation	1532	0.18	0.39	677	0.20	0.40	0.014
Method: Qualitative Analysis	1532	0.91	0.28	677	0.90	0.30	-0.013
Method: Quantitative Analysis	1532	0.88	0.32	677	0.84	0.36	-0.038*
Method: Cost-benefit Analysis	1532	0.04	0.19	677	0.03	0.16	-0.013
Method: Counterfactual Impact Evaluation	1532	0.18	0.39	677	0.15	0.36	-0.031
Method: Mod?	1532	0.06	0.23	677	0.04	0.20	-0.016

Notes: Observations are at the author-evaluation level. The Diff column is the coefficient of a simple regression of surveyed status on the variable, with clustered standard errors at the author level. Stars indicate whether this difference is significant. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4.2.7: Balance test – Survey respondents versus all authors

	Control			Treatment			Diff
	N	mean	sd	N	mean	sd	
Average sentiment	2257	0.26	0.43	219	0.29	0.37	0.030
Number of evaluations	2408	1.85	2.44	227	2.98	3.53	1.134***
University affiliated?	2408	0.08	0.27	227	0.13	0.33	0.048**

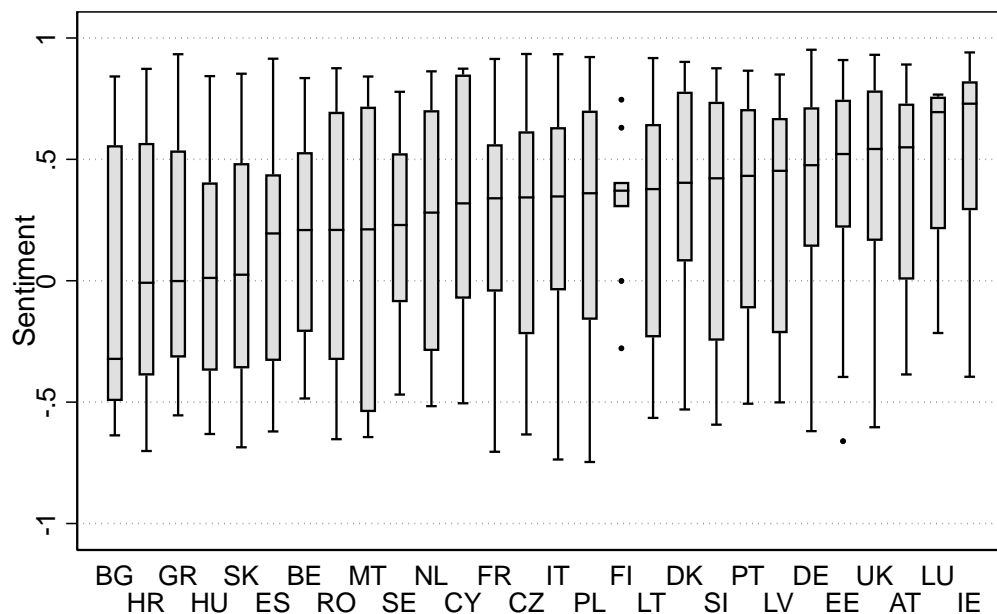
Notes: Observations are at the author level. The Diff column is the coefficient of a simple regression of surveyed status on the variable, with clustered standard errors at the author level. Stars indicate whether this difference is significant. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4.2.8: Balance test – Survey respondents versus all contacted authors

	Control			Treatment			Diff
	N	mean	sd	N	mean	sd	
Average sentiment	682	0.31	0.40	219	0.29	0.37	-0.018
Number of evaluations	717	2.14	2.87	227	2.98	3.53	0.846***
University affiliated?	717	0.12	0.33	227	0.13	0.33	0.006

Notes: Observations are at the author level. The Diff column is the coefficient of a simple regression of surveyed status on the variable, with clustered standard errors at the author level. Stars indicate whether this difference is significant. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

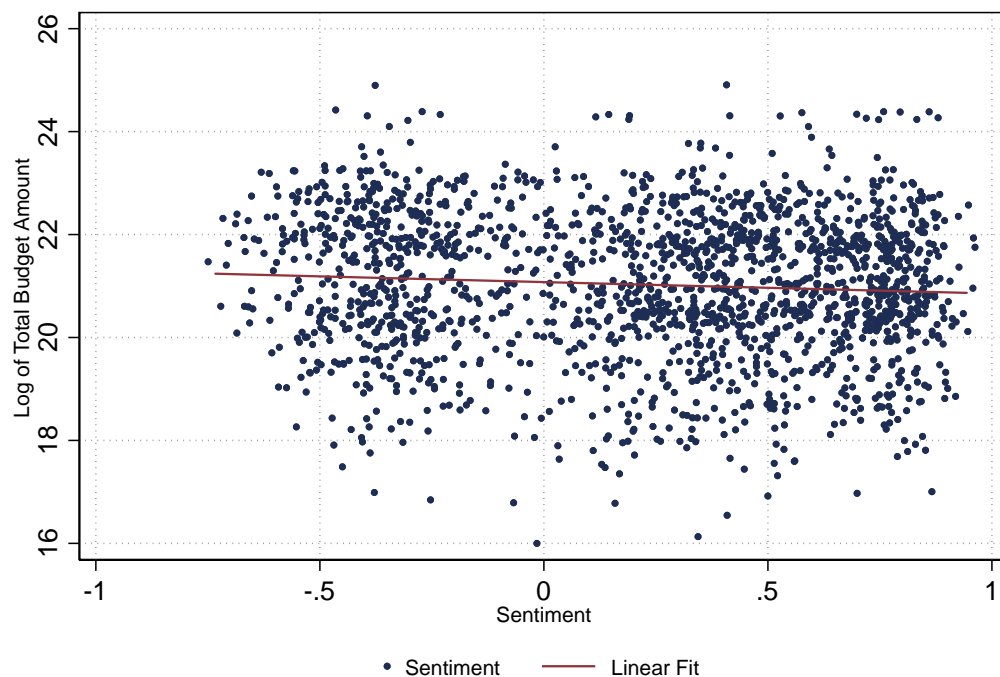
4.2.9 Annex II: Additional results on evaluation sentiment

Figure 4.2.17: Distribution of evaluation results by MS

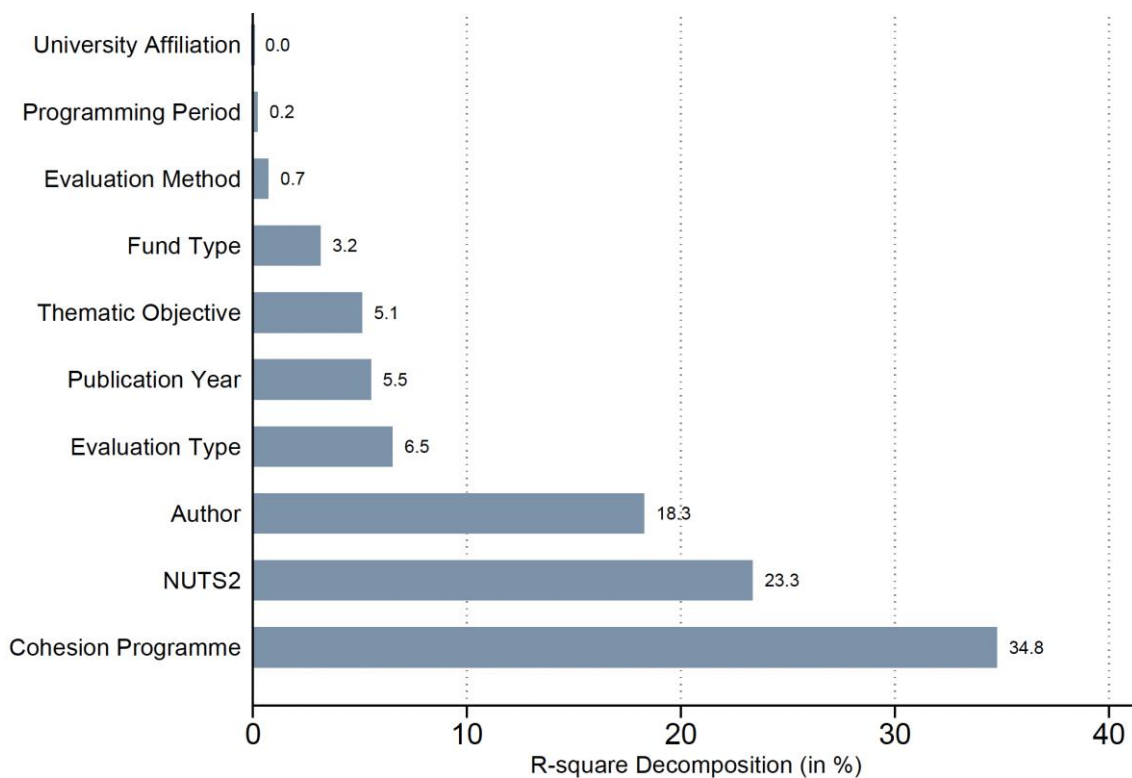
Notes: Number of observations per country is: Bulgaria (BG): 25, Hungary (HU): 75, Malta (MT): 7, Croatia (HR): 22, Greece (GR): 62, Slovakia (SK): 46, Spain (ES): 126, Romania (RO): 76, Belgium (BE): 20, Sweden (SE): 32, Netherlands (NL): 24, Czech Republic (CZ): 183, Lithuania (LT): 52, France (FR): 124, Poland (PL): 468, Italy (IT): 376, Latvia (LV): 24, Cyprus (CY): 11, Slovenia (SI): 15, Portugal (PT): 29, Finland (FI): 9, Germany (DE): 267, Denmark (DK): 17, Austria (AT): 34, Estonia (EE): 24,

United Kingdom (UK): 83, Luxembourg (LU): 4, Ireland (IE): 24. Number of countries: 28. Total number of observations: 2,259.

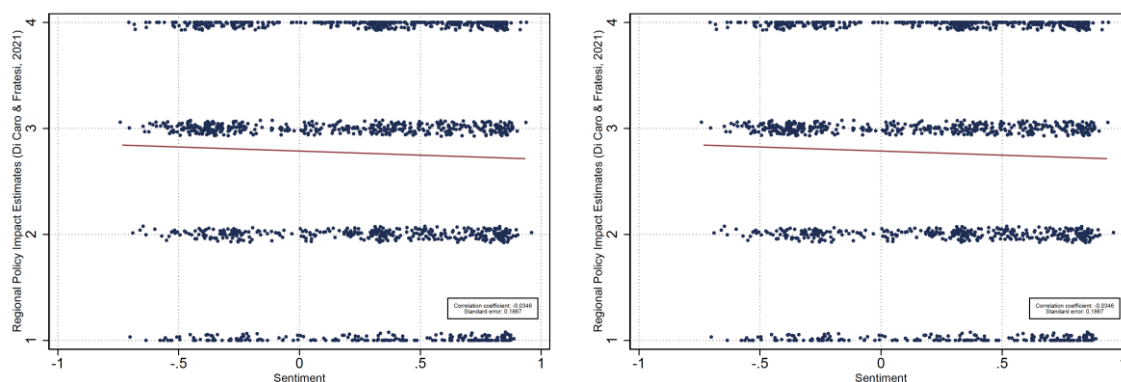
Figure 4.2.18: Average evaluation results versus size of projects



Notes: Figure correlates the monetary budget of programmes (EU funds and national co-financing) in logs with average sentiment for the programme. The number of observations is 1,881.

Figure 4.2.19: Explaining the variation in evaluation findings

Notes: Bars present Shorrocks-Shapley decomposition of R-squared in a regression where the shown 10 variables (in their fixed effects specification) are jointly linearly regressed on the sentiment score. This figure is similar to Figure 4.2.7, with the exception that we plot NUTS2 fixed effects instead of MS fixed effects.

Figure 4.2.20: Comparison of NUTS2-specific evaluation findings (evaluations with all TOs and only evaluations with growth-friendly TOs) with the effects of Cohesion Policy as estimated by the economic literature

Notes: This figure is similar to Figure 4.2.9 but performed at the NUTS2, rather than MS, level. Source of the NUTS2 level CP impact estimates is Di Caro und Fratesi (2022). The left sub-figure uses the whole sample of evaluations, while the sub-figure on the right restricts the sample of evaluations only to those which have growth friendly Thematic Objectives according to our classification.

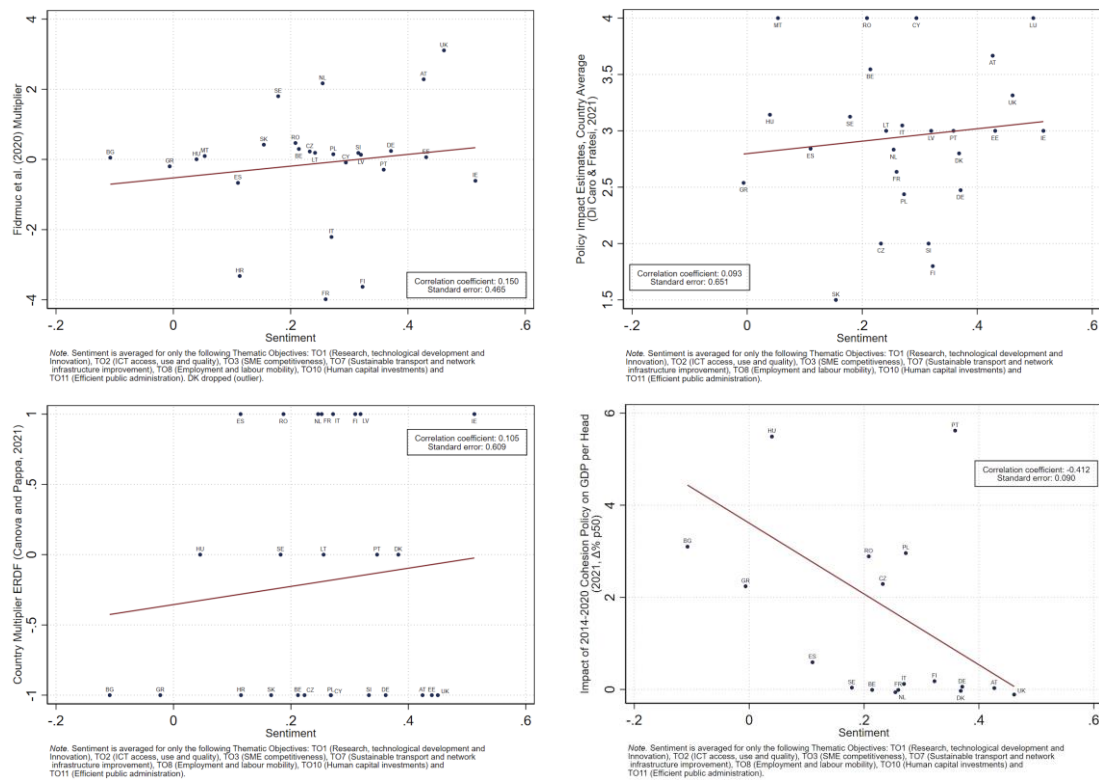
4.2.10 Annex III: Further robustness checks

Table 4.2.9: Involvement by managing authorities in the evaluation process and the findings of evaluations (alternative specification)

VARIABLES	(1) Positive avg. sentiment	(2) Positive avg. sentiment	(3) Positive avg. sentiment	(4) Positive avg. sentiment	(5) Positive avg. sentiment
At least somewhat intense involvement of sponsor	0.1044** (0.0444)	0.1027** (0.0443)	0.1033** (0.0453)	0.1284*** (0.0490)	0.1209** (0.0496)
Evaluations are employers main activity		-0.0683* (0.0371)	-0.0693* (0.0390)	-0.0305 (0.0460)	-0.0297 (0.0474)
University / public institute			-0.0043 (0.0502)	0.0246 (0.0594)	0.0300 (0.0601)
Public sector			-0.0004 (0.0800)	0.0454 (0.0894)	0.0428 (0.0898)
Impartiality is perceived at least somewhat of a bottleneck					-0.0453 (0.0465)
Woman					0.0555 (0.0438)
EU sceptic					-0.0481 (0.0621)
Constant	0.6159*** (0.0390)	0.6521*** (0.0436)	0.6530*** (0.0460)	0.6055*** (0.0538)	0.6100*** (0.0586)
Country FE	No	No	No	Yes	Yes
Observations	610	610	610	610	610
R^2	0.0090	0.0145	0.0146	0.0518	0.0565
F	5.540	4.478	2.234	2.181	1.657

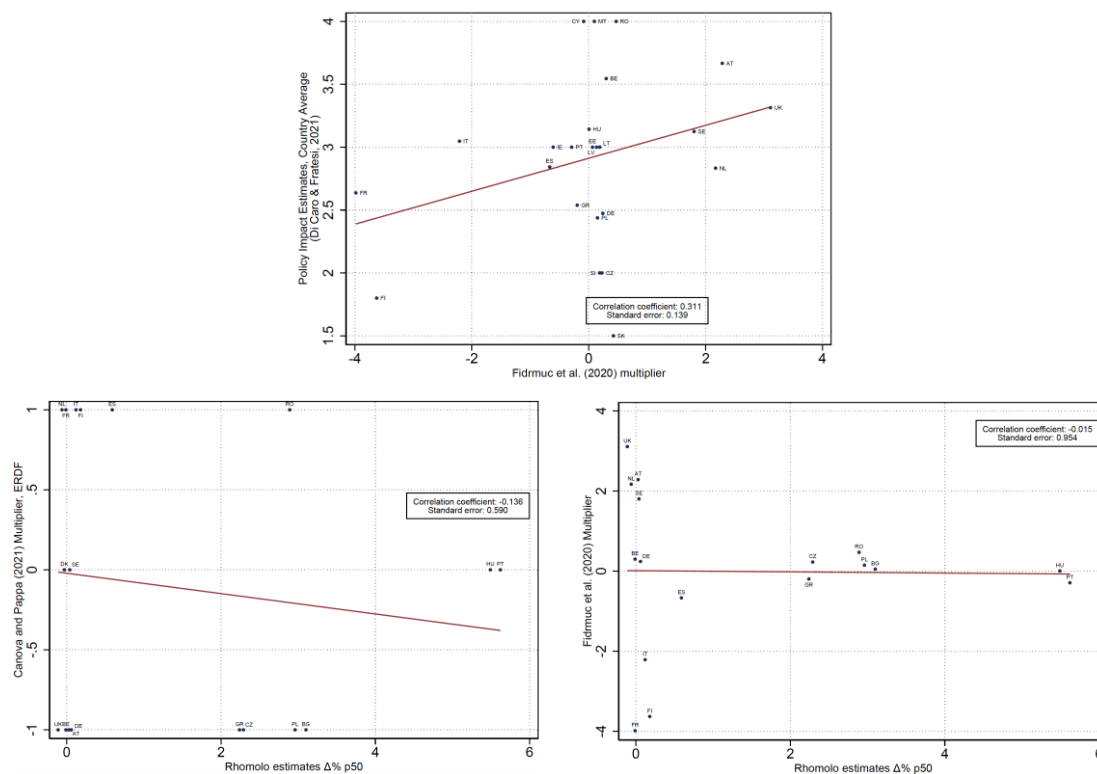
Notes: The table regresses author-level characteristics using data from the survey on the sentiment score of each evaluation written by the respective author. The sentiment variable is transformed into a dummy variable for positive and non-positive sentiment scores. The main variable of interest, plotted in the first row, is the degree of involvement of managing authorities as measured in the survey and as described in the text in detail. This variable too is transformed into a dummy. Columns 1 to 5 consequently add more control variables. Columns 4 and 5 include fixed effects for the MS.

Figure 4.2.21: Comparison of MS specific sentiments from evaluations targeting growth friendly Thematic Objectives with the output-impacts of Cohesion Policy as estimated by the economic literature



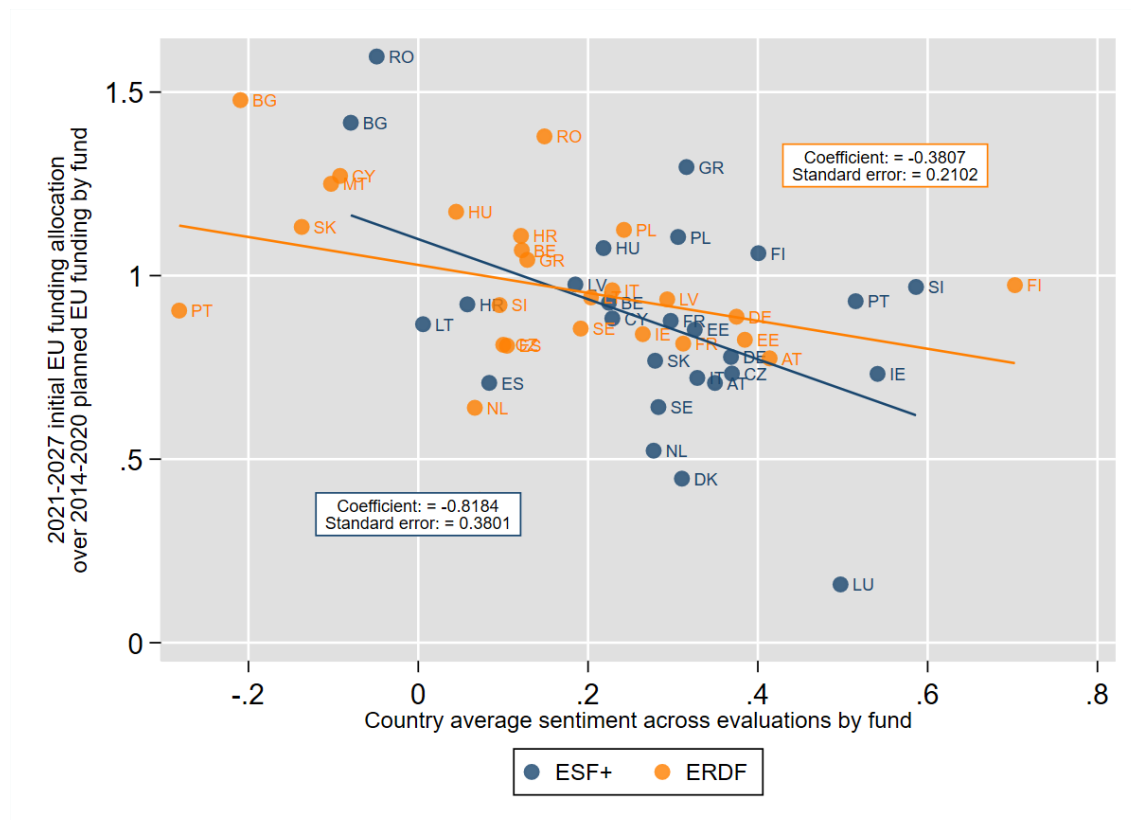
Notes: This figure is similar to Figure 4.2.9 but restricts the sample of evaluations only to those which have growth friendly Thematic Objectives according to our classification.

Figure 4.2.22: Output-impacts of Cohesion Policy as estimated by several sources in the economic literature



Notes: This figure is similar to Figure 4.2.9 but correlates the findings of the economic literature with each other, rather than against the sentiment of evaluations.

Figure 4.2.23: Evaluation findings of the past and planned funding amounts in the current budgetary period (alternative specification)



Notes: The figure displays correlations between the country level average sentiment across ESF+ and ERDF fund evaluations and the ratio of the amount of funding in the ESF+ and ERDF initially allocated to countries in the 2021-2027 MFF to the amount of funding in these funds disbursed in the 2014-2020 MFF. The sample includes evaluations that pertain to the ERDF or ESF+ funds only.

4.3 Friedrich Heinemann et al.: Enhancing Objectivity and Decision Relevance: A Better Framework for Evaluating Cohesion Policies

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Abstract

By international comparison as well as compared to other EU policies, the EU's CP evaluation system is far developed and institutionalized. This paper analyses the remaining gaps and shortcomings in the CP evaluation system against principles established by the OECD and others and provides recommendations on how to further improve it. The presence of a broad and imprecise CP objective function emerges as a key challenge for evaluations. The evaluation culture is not equally developed among all MSs and regions. In quite some cases, an unfavorable equilibrium is found which is characterized by limited evaluation capacities, poor methods, and a formalistic approach to evaluations. Programme evaluations in the MSs are usually commissioned by national or regional managing authorities who have a vested interest in promoting the success of their programmes. Evaluations are carried out by evaluators who are functionally independent, but often lack factual independence. There is also limited international competition in the market for evaluations commissioned by national or regional authorities. Evaluation methods applied in CP programme evaluations mostly lag behind academic advancements and evaluation reports often do not transparently describe their methodological limitations. As the EU body responsible for implementing CP across all 27 MSs, the Commission may also have an overly optimistic perspective on CP. Finally, there is little evidence that evaluation findings are used for decision-making processes, funding allocation and the design of programmes. The paper offers a number of recommendations how to advance the evaluation system: (1) Reorient CP reforms towards a more focused set of objectives; (2) Specify evaluation obligations more precisely in the Common Provision Regulation and set out a 'charter for evaluators'; (3) Introduce an 'evaluate first' requirement when preparing or updating programmes; (4) Promote the use of counterfactual methods; (5) Explicitly link funding decisions at programme and policy level to evaluation results; (6) Implement measures to stimulate a European market for CP evaluations; and (7) establish a standing European Advisory Panel on CP evaluation to foster independent third-party reviews.

4.3.1 Introduction

The EU's CP aims at promoting economic, social, and territorial cohesion. These overarching policy objectives are set out in the Treaty (Art. 174 TFEU). Over time, and from one programming period to the next, the EU legislators have substantially broadened and further specified the policy's objectives, using the CP in support of a significant part of the Union's comprehensive policy agenda (Leino-Sandberg, 2024) including pandemic stabilization policies (European Court of Auditors,

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¹⁷⁴ This text expresses the personal opinion of the author and not that of the European Court of Auditors.

2023a). In the 2021-2027 period, the policy's objective function encompasses the support of a more competitive and smarter Europe, a greener and resilient, carbon-free Europe moving towards a net-zero carbon economy, a more connected Europe by enhancing mobility, a more social and inclusive Europe implementing European Pillar of Social Rights and a Europe closer to citizens (Common Provision Regulation: CPR, Art. 5).

Evaluations are a tool for assessing whether CP delivers on these broad ambitions. The explicit EU approach to an "EU budget focused on results" (Begg et al., 2023) implies that a policy should not be judged solely by its budget and the amount of financial resources allocated to it (the input), but by the results, the outputs and outcomes, as well as the impact of this policy and its budget.

Generally, the EU budget, and CP in particular, are seen as frontrunners in performance-orientation compared to budgetary systems in most OECD countries (Downes et al., 2017). In addition to the traditional financial information, performance budgeting requires the collection of relevant and reliable monitoring data on outputs and outcomes. Both are an indispensable contribution to performance budgeting, because a CP budget focused on results needs a reliable understanding whether and to which extent the budgetary resources have contributed to reach the intended results and defined policy objectives. Evaluations have the role to provide this knowledge.

More precisely, the insights from evaluations serve different purposes (Fratesi, 2024b; Pellegrin et al., 2020). They support a learning function as they help programme managers to adjust and improve the programme design and operation and the legislators to reconsider the policy design and to take informed decisions on budgetary allocations. Evaluations also serve an accountability function as they inform the public on whether public money has been used in a responsible way. Additionally, they fulfil an advocacy function: The knowledge generated can be used in debates and negotiations on how to fund and develop the policy in the future.

At face value, the EU's CP evaluation system appears to be rather mature. As CP entails significant spending from the EU budget, it falls under the budgetary ex-post evaluation requirement. In accordance with the EU's Financial Regulation (Article 34) and its rules of application, such evaluations are mandatory at least once during each MFF term. Detailed provisions regarding the time and nature of the evaluation are usually set out in the basic act of the respective programme. The CPR (European Union, 2021) assigns specific roles to the EC and the MSs whereby the main responsibility for evaluation is assigned to the national and regional Managing Authorities running the CP programmes. It also defines concise rules and criteria according to which all CP programmes have to be evaluated by functionally independent evaluators within the MSs. In particular, the CPR introduces a legal requirement to evaluate programmes: as a consequence, the evaluation coverage of CP programmes is extremely high, as nearly all CP programmes financed from the ERDF, the ESF, the CF, and the YEI in the 2014-2020 period were subject to at least one evaluation (Asatryan et al., 2024). Moreover, the CP evaluation system is transparent since all EU and MS evaluations are available publicly at the Cohesion Open Data Platform.

The Commission's 2015 Better Regulation reform and the 2016 Inter-institutional Agreement on Better Law-Making have further emphasised the role of evaluation in the EU's policy cycle: as a backward-looking tool, ex-post evaluations provide an evidence-based assessment of how existing legislation, policies and programmes perform. This, in turn, is meant to help in the design of new

interventions. In particular, the Commission applies an 'evaluate first' principle whereby any revision of EU legislation should build on the lessons learned from a preceding evaluation.

Overall, the EU evaluation system is more developed than similar systems in most OECD countries (European Court of Auditors, 2019, p. 40). However, even a highly developed system with a long history is not necessarily perfect. Several observations are due at this point.

First, there is a contrast between the messages from evaluations and the assessments by academics and researchers. MS and Commission evaluations tend to paint a largely positive picture on the success of both single programmes and the policy as a whole. A textual analysis of more than 2,500 MS evaluations shows that none of them comes to very negative conclusions whereas the large majority presents good or very good assessments (Asatryan et al., 2024). Similarly, prominent Commission synthesis documents like the 8th Cohesion Report presents a list of largely positive evaluation findings across all policy priorities and complements this with messages from macro-simulations claiming a high and long-lasting overall growth effect (European Commission, 2022).

In contrast, the assessments in the advanced academic literature are more nuanced. The bottom line from this literature is one of conditional and sometimes limited effectiveness (Bachtrögler et al., 2020; Di Caro & Fratesi, 2022; Bachtrögler-Unger, 2024; Ehrlich, 2024; Fratesi, 2024a, 2024b; Ehrlich & Overman, 2020; Lang, 2024). CP causally impacts growth and employment in a positive way, but related results often show up only conditional on institutions (e.g. administrative capacity, quality of institutions) and the availability of crucial production factors (e.g. human capital). Moreover, effects are often found to be place-specific or of a limited duration. A further contrast between policy evaluations and academic literature relates to methods used and the interpretation of results and data. Economic scholars are typically much more hesitant in attributing economic developments to causes of CP whereas EU evaluations are quick in interpreting changes that occurred during a project to a cause of the project. As a consequence of the “credibility revolution” in economic research (recently illustrated in 2021 with the Nobel Memorial Prize in Economics for David Card, Joshua Angrist and Guido Imbens for their contributions to the analysis of causal relationships), the more recent scientific papers have resorted to quasi-experimental research designs which are more convincing on causal chains.

Second, the specific perspectives of crucial players continue to be important in the evaluation process. Programme managers, managing authorities, national governments, and the European institutions (European Commission, European Parliament, Council) all have different roles and interests that might impact the evaluation process and its outcome (Bachtler & Wren, 2006). The Commission, as the budgetary executive, wants to demonstrate a responsible use of budgetary resources. For the Members of the European Parliament, CP is an attractive financial policy instrument with significant visibility in home constituencies. The positions of national governments in the Council are influenced by the (differing) financial motives in CP. All these interests might potentially interfere with the impartiality of the evaluations carried out and how evaluation findings are assessed and interpreted.

Third, carrying out evaluations and publishing evaluation findings does not guarantee in itself that learning processes actually take place. Evaluations can support a budget focused on results only if evaluations have consequences for decisions on the programme design and the budget allocation.

For this purpose, all important European and national stakeholders would have to share an evaluation culture where evaluations are seen as an input to decision-taking rather than a mere formal requirement.

Against this background, this paper develops suggestions on how to further advance the CP's evaluation system in the next programming period. Here, we pay particular attention to strategies that may further foster the factual independence, impartiality and quality of MSs' programme evaluations given current limitations of the evaluation market's supply side (studied in-depth in Asatryan et al., 2024). Moreover, we explore how policy evaluations could be inspired from the above sketched insights from the academic literature on conditional effectiveness and more advanced methods.

Two caveats are important: First, even an ideal evaluation system would not improve budgetary decisions by itself. An effective evaluation system is merely a necessary, but not a sufficient condition for a budget that is effectively focused on results (Robinson & Last, 2009). The crucial conditions include, for example, a commitment of all budgetary stakeholders to consider policy outcomes and impacts instead of a mere input perspective (OECD, 2019). In this context, the setting up of the RRF in the wake of the COVID-19 crisis has a particular relevance. Like CP, the RRF aims at funding investments to promote the economic, social and territorial cohesion; at the same time its performance-based delivery mechanism ties payments directly to the satisfactory achievement of pre-defined results, i.e. M&Ts (European Court of Auditors, 2023b). Second, CP operates in a multi-annual context, whereby allocations are fixed and allocated to specific MSs. This limits policy learning from evaluation within a programming period. Third, evaluations including necessary data provision are costly and can impose a large financial and administrative burden on managing authorities. Therefore, evaluation requirements should always be proportionate. Advanced methods that are appropriate for academic papers in leading international scientific journals cannot and should not always be applied to each single CP programme evaluation. However, this does not preclude the search for a continuous and gradual improvement of evaluation methods.

The analysis presents in the next section a brief description of the current CP evaluation system. Section 4.3.3 describes principles of an ideal evaluation system that are contrasted with the status quo in Section 4.3.4. Section 4.3.5 develops a list of 5 proposals on how to improve the system in the coming programming period.

4.3.2 CP evaluation – the status quo and the 2021-2027 regulation changes

4.3.2.1 History and main trends

The origin of the current CP evaluation system can be traced back to the late 1980s. Over time, the system has evolved and the evaluation approach has become more formalized and specified in the legislation (Pellegrin et al., 2020). In particular, the assignment of evaluation tasks to the European and national authorities has been clarified. Since the 2007-2013 period, the main legal basis defining the formal rules and procedures is the CPR. For each programming period, a new CPR is adopted by both EU legislators, the EP and Council, based on a Commission proposal which is negotiated and modified during the legislative procedure (European Union, 2006, 2013, 2021). When looking at the CPRs of the last three periods, there was a move towards a more results-

oriented approach, with a particular push in the 2014-2020 period, and a tendency to unify the monitoring system with respect to the collection and use of indicators (although most of them remained programme-specific rather than horizontal and therefore not suitable for a cross-programme assessment). Since 2015, the Better Regulation Guidelines have exerted significant influence in promoting comprehensive evaluation throughout the policy cycle and on the specification of evaluation criteria (Pellegrin et al., 2020, see also below 2.5). These guidelines also recommend evaluations based on five distinct criteria, namely effectiveness, efficiency, relevance, coherence, and EU added value.

4.3.2.2 Actors carrying out evaluations

The important players in the CP evaluation system are the following:

European Commission: The EC has the responsibility for certain types of evaluations (see below). Moreover, it supports the evaluation activities of MSs and their authorities through methodological guidance (European Commission, 2013, 2014, 2021) and by providing a forum for exchange and discussion through the Evaluation Network. The Commission also provides syntheses of MS evaluations and makes these evaluations accessible through the Cohesion Open Data Platform.

Member States: In the MSs, managing authorities are tasked to carry out the evaluations of CP programmes under their responsibility. Centralized models with national responsibility as managing authority coexist with decentralized models where regional authorities manage and evaluate the programmes (for case studies see: Pellegrin et al., 2020). For each programme, MSs have to set up monitoring committees. These committees approve the managing authority's evaluation plan and monitor the evaluation process. The MS's evaluation activities can be financed from the technical assistance provided through the CP programmes.

Evaluators: Finally, the evaluators, who actually conduct the evaluations commissioned by the managing authorities or the ECon are important stakeholders as well. This group comprises public and private research institutes, universities, private consultancies, individual experts, but also internal evaluators from the civil service.

4.3.2.3 Other stakeholders

Other stakeholders in the CP evaluation system are:

European Parliament: The Commission is accountable to the Parliament and has to report to the Parliament in annual consultations (Art. 8 CPR) and on important milestones like mid-term reviews (Art. 18 CPR), or in specific circumstances, for example, if a suspension of cohesion payments is imminent (Art. 19 CPR). The Commission also has to communicate its own CP evaluations to the Parliament (Art. 45 CPR). The Parliament is free to commission own evaluations or conduct assessments of CP through its own services.

Council: similar to the EP, the Council has no direct role in the CP evaluation, but also monitors the implementation of the policy. The Council plays, however, a particular role as the competent grouping is composed of or represents the ministries in charge of carrying out the programme evaluations in the MSs.

European Court of Auditors: The ECA in its capacity as the EU's independent external auditor, carries out performance audits, not unlike evaluations, which examine the effectiveness and efficiency of programmes, operations, management systems and procedures. These audits complement its compliance audits which examine the regularity of the expenditure incurred and co-financed from the EU budget.

4.3.2.4 Evaluation requirements according to current CPR

The CPR regulation currently in place for the 2021-2027 period includes a chapter on evaluations with two articles (for the full text see Annex I).¹⁷⁵ They mandate the following:

- MSs or their managing authorities have to write an evaluation plan, which is approved by the monitoring committee.
- MSs or their managing authorities have to carry out two types of evaluations (Art. 44 CPR): First, they have to conduct evaluations of all programmes according to at least one criterion from a list (effectiveness, efficiency, relevance, coherence and Union added value), which correspond to a large extent to the internationally accepted criteria for good government evaluations (OECD, 2022). Further criteria may be examined in addition.¹⁷⁶ Second, MSs or managing authorities have to provide ex-post impact evaluations for each programme by 30 June 2029.
- All evaluations have to be published digitally.
- The Commission is responsible to carry out mid-term evaluations by the end of 2024 and an ex-post evaluation of CP ("retrospective evaluations") by end of 2031.
- Evaluations can be entrusted to internal or external experts who have to be functionally independent.

4.3.2.5 Changes compared to the last programme period

Compared to the preceding programming period, with the revised CPR for 2021-2027, the evaluation rules have changed (Naldini, 2018; Corti et al., 2024; European Commission, 2021). The adaptations include:

- MSs have to set out an evaluation plan for their programmes. This plan has to be produced within one year following the programme adoption.
- MSs must evaluate their programmes using five criteria (stemming from the Better Regulation agenda): effectiveness, efficiency, relevance, coherence with other EU priorities and policies and EU added value. During the CPR negotiations with the EP and the Council, it was agreed

¹⁷⁵ This analysis focuses on CP financed by the core budget. For an analysis how the performance orientation and evaluation differ for the Recovery and Resilience Facility see European Court of Auditors (2023b) and Corti et al. (2024).

¹⁷⁶ In practice, CP evaluations have mostly covered the effectiveness and efficiency criteria (Pellegrin et al. 2020).

that evaluations must apply at least one of these criteria, and that they can also add other criteria (such as inclusiveness, non-discrimination, etc.).

- MSs are no longer required to conduct ex-ante evaluations. This requirement has been dropped as a way to simplify the process and reduce the administrative burden (European Commission, 2021).
- MSs have to conduct impact evaluations as before, but they have to be provided only by mid-2029, i.e. two years after the end of the 2021-2027 programming period (rather than before the end of the period as was previously the case).
- The object of MSs' evaluation is defined broader than before. In the past period, evaluations had assessed how a programme has contributed to each "priority axis", which defines a specific policy aim like support of SME or employment. Under the new CPR, the evaluation requirement only refers to an operational programme as a whole. Evaluations may even cover several programmes at the same time. This change has decreased the number of obligatory evaluations substantially, but also poses methodological challenges since an operational programme includes very different instruments with various aims (Naldini, 2018).
- The Commission's obligation to conduct mid-term evaluations is new (Naldini, 2018).
- The evaluation articles in the CPR have been shortened. Some explicit obligations that had been included in the preceding CPR edition have been deleted. These cuts include the Commission's task to provide guidance on evaluations and the Managing Authority's responsibility to provide the necessary resources for evaluations.

4.3.2.6 Methods used

The CPR does not define methodological details. Various evaluation methodologies can be employed, including mainly basic quantitative and qualitative approaches conducted via desk research, interviews, surveys, and case studies. The use of methods is necessarily different for ex-ante and ex-post evaluations (for an overview: Fratesi, 2024b, Chapter 7). For ex-post impact evaluations, counterfactual methods focus on whether the intervention has had an effect that can be causally linked to the CP intervention. These methods have become the state of the art in the academic literature, but as they are more demanding, they are relatively rarely employed in CP evaluations. They make use for instance of DiD approaches or regression discontinuity designs. Theory-based impact evaluations focus on "why" and "how" questions with a particular interest into the precise causal channels that can explain causality from the intervention up to its outcome and impact ("theory of change" approach) (for a detailed discussion: Begg et al., 2023). More qualitative analysis is justified when there are only a small number of beneficiaries, or if data constraints or proportionality considerations prevent the use of more demanding counterfactual methods. Lastly, cost benefit analysis estimates both the project's financial profitability and its economic rate of return, thereby evaluating the CP intervention's benefits to society as a whole (European Commission, 2008, 2013a).

In the next section, we describe how a SOTA evaluation system should look like, to then identify the weaknesses in the current system and the gaps between the status quo and the ideal stylized evaluation system.

4.3.3 Robust evaluation systems and methods

4.3.3.1 A growing consensus on evaluation principles

A recent concise summary of principles that should guide the design of a robust evaluation system has been provided by the OECD Council on Public Policy Evaluations (OECD, 2022) (see Annex II).¹⁷⁷ Fratesi (2024b, Chapter 7) develops how such principles could be applied to CP. Other requirements result from the role of evaluations within performance budgeting (Robinson & Last, 2009), or the emerging new methodological breakthroughs in the academic literature summarized above. We regard the following requirements as key for the assessment of the CP evaluation system.

4.3.3.2 Clarity on policy objectives

A meaningful evaluation of a public intervention is impossible without a well-defined policy objective: “any assessment of EU expenditure should start from a clear definition of the logic of intervention” (Begg et al., 2023, p. 47). The requirement of clarity includes transparency about priorities or weights if a policy intervention serves different objectives at the same time. The ex-ante definition of success implies also to have a notion of when to discontinue an intervention. Ideally, the extent to which a policy objective is reached can be quantified on the basis of robust and reliable performance indicators that are available when needed to inform policy decisions. In practice, it is however often difficult to specify such indicators upfront. This makes an ex-post evaluation even more important.

4.3.3.3 Evaluation culture

A thriving evaluation culture describes a setting where the important stakeholders share a willingness to learn. This includes the readiness to challenge existing policy approaches and programmes. This principle is in tension with stakeholder interests (Bachtler & Wren, 2006; Naldini, 2018). For example, national authorities and European institutions may have a motivation to demonstrate a successful use of CP resources. A developed evaluation culture requires the readiness to learn from open-minded and impartial evaluations. This includes the readiness to admit failures. An evaluation culture can improve over time and needs to be supported by institutions and rules that foster impartiality and learning effects.

4.3.3.4 Capacity and expertise

High-quality evaluations need resources and expertise both at the level of the programme authorities and the evaluating institutions. To some extent, this is the responsibility of the EU and national institutions that have to allocate sufficient resources to the evaluation task. With respect to the evaluating contractors, capacity and expertise also depend on how the evaluation market is organized. An open and international European evaluation market with links to academic research will be able to provide higher methodological standards as compared to narrow national markets without those links.

¹⁷⁷ See also OECD (2021) and Gesellschaft für Evaluation e.V. (2023).

4.3.3.5 Impartiality and unbiasedness of evaluators

A high evaluation culture critically relies on credible and impartial evaluations. Credibility grows with impartiality of evaluators, and sound methods and data (see below). A mere functional independence of evaluators as required in the CPR is a necessary, but not a sufficient condition for impartiality. Evaluators have institutional interests as well. They want to provide a service that meets the expectations of the contracting authority in order to stay in the business and to win follow-up projects. An evaluator's financial dependence on a few contracting authorities, related career motives, or narrow links from a long-standing cooperation in a small national evaluation market could impair impartiality and credibility. Evaluators might then face incentives to white-wash unfavorable empirical evidence, or to blur the conclusions from and communication of disappointing results.

4.3.3.6 Appropriate methods

The use of a variety of methods in CP evaluations is legitimate and well justified. Evaluations have various functions that range from an assessment of a programme implementation to an ex-post impact evaluation.¹⁷⁸ These varying functions also translate into different methodological requirements. The choice of methods should follow the principle of proportionality: Methodological ambitions and the invested resources have to increase with the strategic and budgetary importance of a project. Equally, higher efforts are indispensable if there is a particular lack of knowledge on an intervention's possible impact, e.g. if the type of intervention is innovative. The 2021-2027 Commission guidance document (European Commission, 2021) clarifies, that even for the MSs' ex-post impact evaluations a variety of methods can be used including "simpler impact evaluation techniques" (p. 14). However, methodological efforts should be higher if, for example, large budgets are involved, or if an intervention is innovative and there is a lack of prior evidence.

Although a variety of measures is legitimate, this is no excuse for sticking to outdated methods in many cases. CP impact evaluations should strive for a continuously increasing level of rigor that echoes the development of the academic literature on causal inference. The build-up of capacities and expertise discussed above can support the familiarity with these methods. Proportionality and costs are relevant limiting factors, but the costs for rigorous impact analysis can be lowered if the data requirements are already considered in the initial programme design and legislation.

The methodological choices should always be well explained and ideally be documented beforehand. Pre-Analysis Plan (PAPs) and pre-registration have become more important in science and ideal CP evaluations would include these. This serves as a precaution against specification searching for the most desired outcome. While full PAPs may, in many cases, be too much to ask from CP evaluation, it would be important to agree on standards, methods, and data to be used before the actual evaluation starts.

¹⁷⁸ See Fratesi (2024b) for a survey on the arsenal of evaluation methods that can inform ex-ante and ex-post evaluations of CP.

Methodological standards should be supported through appropriate quality assurance. This includes the definition of quality standards, publication requirements, and external scrutiny through peer review and meta-analyses of each authority's evaluations.

4.3.3.7 Transparency on methodological limitations and external validity

The credibility of the evaluation system can also be supported with a high transparency on strengths and weaknesses of methods used. In particular, any communication of evaluation results that addresses non-experts should signal the limits of knowledge and the different reliability of the various methods. For example, macro-modeling simulation studies that demonstrate the CP's potential to increase growth and employment should not be presented as if they could prove these results ex-post. Equally, point estimates should be presented in a way that conveys the statistical uncertainty that relates to confidence intervals. Most importantly, mere case studies, other qualitative approaches, correlational analyses and output counts (e.g. number of jobs/firms that have received support) should not be misleadingly reported with claims of indicating causality or "success". In general, the realized values of performance indicators relative to target values set ex ante should not be the sole basis for the assessment. As a minimum requirement, the evaluation should describe a consistent logic of the mechanism of how the intervention may contribute to the policy objective. In the best case, this mechanism is verified using counterfactual methods. However, also the limits of causal inferences should be addressed openly. For example, sound evidence for a temporary effect from a programme should not be sold to the public as if this could already demonstrate a long-lasting impact. Finally, in the last programming period, MSS's managing authorities made widespread use of the possibility of modifying performance indicators prior to performance reviews leading to better assessments (European Court of Auditors, 2021). Such moving of goalposts should also be made transparent when assessing the achievement of performance targets.

4.3.3.8 Unbiased aggregation of insights

Thousands of MS evaluations create an information overflow that cannot inform the policy debate on the overall performance of CP without aggregation. Here, synthesis reports are essential by condensing the various findings, and identifying strengths and weaknesses of the policy. In this aggregation process, impartiality and unbiasedness are equally important principles as in each single programme evaluation. These principles are even more important if this synthesis and its communication are dominated by actors which are perceived to have a strong institutional interest.

4.3.3.9 Use in decision making

Evaluations are not an end in themselves but have the function to inform decision making. Evaluations that are not considered in decisions are therefore a waste of resources. For this reason, insights from evaluations should be easily available to programme managers, the budget executive, the legislator, and the general public, including the media. All these stakeholders should be able and incentivized to base their reflections and decisions on what they have learned from evaluations. A good evaluation culture should seek integration of the evaluation system into the decision-making processes. That includes formalized follow-up mechanisms that track how decision

makers react to recommendations by the evaluations. In the end, evaluation results should have a significant impact on budget allocations and programme design.

4.3.3.10 Timing aligned to policy decisions

A specific precondition for an evaluation system that looks to influence decision making is the timely provision of insights. Insights from evaluation should therefore be available when the budgetary authorities or the executive prepare or take decisions. The existence of a developed system of ex-ante, interim, and ex-post evaluations that follow the budgetary cycle from the phase of budgetary negotiations and decisions up to implementation and, finally, completion of programs, would serve this purpose. In addition, the exact deadlines for each type of CP evaluation should be aligned to the exact time of the decisions. For example, programme impact evaluations should be ideally available when the reflections on the next programming period approach the decision stage, although in practice this may be difficult.

With these principles for good evaluations, we developed a yardstick to identify weaknesses of the current CP evaluation system.

4.3.4 Imperfections in the current evaluation CP system

As emphasized, the CP evaluation system is highly developed and mature as it has gone through continuous adjustments over decades. In terms of its formalization and coverage it is advanced compared both to other EU policies and to evaluation systems in most EU MSs. Nevertheless, it still has a number of shortcomings, some of which are of a systematic nature and relate to the institutional interests of key stakeholders.

Based on various recent reports and papers (European Court of Auditors, 2019; Naldini, 2018; Pellegrin et al., 2020; Asatryan et al., 2024; Fratesi, 2024b), and our own judgment, we see the following main imperfections with respect to the preceding principles.

4.3.4.1 Goal congestion

Already for decades, CP has been confronted with the problem of the “inflation of objectives” (Heinemann et al., 2009). This trend has accelerated over more recent years with the transformation of CP towards a policy that increasingly wants to support the full EU policy agenda (Leino-Sandberg, 2024). The CP’s objective function for the 2021-2027 period, as defined in Art. 5 CPR (see introduction), is so broad that it would be hard to imagine which specific policy objective could not be subsumed under these headlines. Relatedly, the ECA stresses that the policy is confronted with the problem of overlapping EU strategies and sector-specific commitments. The resulting coexistence of multiple strategic frameworks, periods, objectives, indicators and targets creates confusion (European Court of Auditors, 2019). The problem is exacerbated by a lack of transparency in how trade-offs are to be assessed. For example, a prominent trade-off of the CP is between regional disparities and aggregate (national) efficiency, as more regional convergence may come at the cost of lower growth in agglomerations.

This goal congestion, combined with a lack of precision in the weighting of competing objectives, raises several problems. The fuzziness of the policy objective function makes a coherent policy

design difficult. Policy beneficiaries can practice “target shopping” by selecting from a large universe of possible objectives and targets those which best serve their own agenda and are most useful to legitimize a given budget. For evaluations, the lack of precision of the objective function poses a fundamental problem as any meaningful evaluation needs a well-defined yardstick to assess performance (Fratesi, 2016). Multiple objectives thus immunize a policy against a negative performance for single objectives and serve the interests of those with an interest in keeping and enlarging the CP budgets under all circumstances. Another reason for multiple objectives is a preference for flexibility in steering the policy on current (and changing) necessity.

This issue’s relevance is confirmed by evaluators. Asatryan et al. (2024) report in their evaluator survey that more than 60 percent regard unclear policy objectives as a bottleneck for the CP evaluation system and rank this problem at position three (only surmounted by data imperfections and a lack of evaluation impact). The academic literature summarized in the introduction tends to circumvent this problem by applying a relatively narrow focus on growth and employment effects. However, policy makers can easily refute those insights as lacking policy relevance since these studies do not pay sufficient attention to the broad universe of CP policy objectives.

On a more operational level, evaluations could try to avoid these challenges for the policy as a whole with a focus on the narrower objective of each single policy intervention. However, the fuzziness at the aggregate level translates into practical difficulties for evaluation designs. This is particularly relevant as the revised CPR only prescribes MS evaluations at the programme level, and no longer at the level of priorities that relate to a more narrowly defined policy target (Section 4.3.2.4). This broader scope of evaluations in the 2021-2027 programming period will exacerbate the fuzziness of objectives problem even more.

A related aspect is the increasing overlap between EU and national funding areas. Indeed, CP (and more recently the RRF) basically can fund nearly all types of measures that are traditionally funded from national budgets. In fact, over the last three programming periods, the ‘additionality principle’ for CP has been gradually abandoned (European Court of Auditors, 2023b). This means that there is no longer any requirement for CP to fund interventions that are additional to those funded by national budgets, including recurrent public expenditure. In such a system of mixed financing, attributing specific results to one funding stream is inherently difficult.

4.3.4.2 Heterogeneous evaluation culture

Evaluation culture has always been dissimilar across MSs. For the EU-15, Bachtler and Wren (2006) describe that the evaluation of regional policies had a stronger tradition in parts of Northern Europe. Cultural differences may also have an impact on whether evaluations are seen as a bureaucratic burden rather than a tool for continuous learning. In MSs with such a preconception, any willingness to conduct high-quality evaluations is naturally limited, and the main intention might be to just comply with the minimum evaluation requirements. For example, a comprehensive data collection is a pre-condition for evaluations using counterfactual designs. Regarding reporting of data on funded projects, several MSs also in Southern and Eastern Europe stand out in providing detailed data exceeding the formal requirements set out in the CPR since the 2007-2013 programming period, while others - including Northern and Middle European countries - report exactly or less than the minimum information required (see Bachtrögler-Unger et al., 2021, p. 4 and 7, for

the 2014-2020 programming period). From interviews and a survey among CP evaluation stakeholders, Pellegrin et al. (2020) confirm that a lack of evaluation culture is still a relevant issue today: Evaluations are often regarded as a formal obligation and, as a consequence, as an exercise that generates higher costs than benefits. Begg et al. (2023) report that, with respect to EU-financed social programmes, some administrations rather account for how much was spent rather than to assess targets, let alone the causal impact.

Interestingly, Pellegrin et al. (2020) find that project managers and respondents from management authorities tend to find evaluations more useful for learning purposes than high level national politicians. This may be related to the more political perspective that looks at CP funds predominantly as a European financial transfer to the own country or region. The sense of accountability towards the own electorate through credible evaluations is naturally lower for resources that come from external sources, compared to the money financed by the own country's taxpayers.¹⁷⁹

4.3.4.3 Lack of capacities and expertise

A lack of evaluation capacities and expertise remains a significant issue in regions and MSs according to current observations and judgments (Naldini, 2018; Cerqua & Pellegrini, 2023). Pellegrin et al. (2020) summarize insights from EC scrutiny that 80 percent of MS evaluations from the 2014-2020 reviewed in 2018 had major quality deficiencies; in 2019 the Commission rated the average quality of evaluations at 2.5 out of a maximum of 4 points indicating a mediocre average quality.

The use of the more advanced methods (e.g. theory-based and counterfactual methods) requires substantial expertise, constant training, and investment into methodological knowledge, as well as the data infrastructure. The required skills comprise not only methods, but also the ability to write concise and relevant policy conclusions that can guide decision makers.

The heterogeneity in evaluation culture described above correlates and is mutually reinforcing with a lack of capacities and expertise (Pellegrin et al., 2020). Countries with a weak evaluation culture have an incentive to limit resources to the minimum that is just about sufficient to fulfill the formal requirements. Conversely, a lack of evaluation expertise explains that the understanding for the merits of evaluation stays at a low level. There can thus be a stable "bad equilibrium" of low capacities, poor expertise, and a weak evaluation culture that is self-enforcing.

The lack of methodological skills tends to be more pronounced in MSs that have a lower level of human capital, and where universities and research institutes are not yet well-integrated into the international academic communities. In those countries, the availability of experts that are able to apply modern evaluation tools is relatively limited. In principle, an open European market for evaluations could compensate for this handicap of smaller and poorer countries. This is however far from being the European reality today. A common market for CP programme evaluations does

¹⁷⁹ The lack of domestic accountability is an important reason discussed in the development economics literature as an explanation for a lack of state capacity and the frequent ineffectiveness of foreign aid. With the external financing, domestic politicians need not develop an implicit contract with their citizens and prove the responsible use of money in exchange for levying taxes (Deaton 2015).

not yet exist, also due to linguistic barriers. MSs' CP evaluation markets are largely separated and closed with almost full absence of international collaboration. Asatryan et al. (2024) show in their analysis of evaluations from the last two programming periods that evaluators only rarely collaborate across borders. From more than 2,000 evaluation authors included in their study, only 2.5% have contributed to evaluations in more than one MS. This points to the obvious absence of incentives to incorporate evaluators from abroad. De iure, the market is not expected to hinder international collaboration.

Another capacity constraint relates to data. The availability of reliable and timely data to measure outputs, outcomes and impact are a precondition for any quantitative evaluation. However, the data available in the Cohesion Open Data Platform are self-reported from MSs. Self-reporting as such is an inherent necessity, but reliability may be low due to lack of external verification and auditing. Thus, there is no guarantee for their quality. Nevertheless, the obligatory provision of detailed project-level data requires MSs to engage more in documenting their activities than in the past.¹⁸⁰

As described above (2.4) the 2021-2027 CPR has not only dropped explicit obligations to strengthen evaluation capacities in the MSs, but also the EC's obligation to give MSs guidance on how to carry out evaluations. Equally, it no longer obliges MSs explicitly to provide the necessary resources for evaluations. This streamlining of the regulation may hinder further improvements and implies the risk that some MSs with lacking evaluation culture could take this as a signal to further cut back on evaluation resources, efforts, and quality assurance (Naldini, 2018; Pellegrin et al., 2020).

4.3.4.4 Lack of effective evaluator independence

The CPR requires evaluators, which may be internal or external, to be functionally independent (Art. 44). This rule is helpful but does not preclude that stakeholder interests have an impact on evaluation outcomes (Bachtler & Wren, 2006).

These interests are a logical consequence from above-described evaluation functions (learning, accountability, and advocacy) which stand in a certain mutual tension. The learning function requires unbiased and impartial guidance from the evaluation. Incentives are different for the accountability and advocacy functions. On accountability, the EC, MSs and their managing authorities all share the interest to demonstrate to the national and European public a successful use of EU funds through good evaluation results. In this respect, the central role of the managing authorities to steer evaluations is seen as particularly problematic since this authority will not be immune to national interests of CP; this constellation is likely to result in pressure on evaluators regarding the findings of evaluations (Pellegrin et al., 2020, p. 58; Naldini, 2018). On advocacy, beneficiaries and public administrators of CP funds will find positive evaluation results more useful than subdued ones. Pellegrin et al. (2020) reports the example of how the four Visegrad countries have used CP evaluations in negotiations on the 2014-2020 EU budget to call for generous funding of

¹⁸⁰ A related and fundamental issue is that of timeliness of data, which is addressed in Section 4.3.4.8.

CP. Similar incentives exist for regional authorities also in richer MSs. Even if these MSs are CP net payers, sub-national authorities will still have an interest to keep their regional programmes financed through the EU budget.

Likewise, the EC as the central budget authority with a political and institutional interest to command a substantive and growing budget may want to use evaluation results to argue for a stable or growing EU budget, of which CP accounts for a significant share (see below 4.6).

Evaluators from consultancies, research institutes and freelancers are confronted with these motives whenever they bid for, or conduct and submit evaluation reports commissioned by national or sub-national authorities. Although reputation concerns point into the direction of unbiased reports, these service providers have a business interest to satisfy their customers' expectations in order to stay in the market. With this trade-off between reputation concerns and business interests, effective independence would be supported if evaluators had a diversified business model with many different customers. As shown above, this is however not the case. Due to a strong national segmentation of CP evaluation markets, most evaluators provide their services to the authorities in one single MS only, which almost always is their home country. Hence, impartiality not only suffers from a non-diversified customer structure but potentially also from a home bias. It is known from other contexts like internationally operating rating agencies that experts tend to give better assessments to their home country (Fuchs & Gehring, 2017).

Moreover, these national evaluation markets have an oligopolistic structure where just a few (not more than three author clusters) tend to dominate the market, often even with a 100 percent market share (Asatryan et al., 2024). Asatryan et al. (2024) also show from their evaluator survey and an LLM-based analysis of evaluation reports that the intensity of sponsor involvement in the evaluation process is correlated with a more positive tonality of the reports. The same survey shows that even 29 percent of the responding evaluators admit that a lack of impartiality is an issue for the CP evaluation system, although this survey question is clearly sensitive and evaluators should be hesitant to admit the relevance of the problem.

Overall, the functional independence of evaluators as prescribed by the CPR is therefore not enough to safeguard factual independence of evaluators. This comes at the risk that the current evaluation process may not be regarded as sufficiently independent.

4.3.4.5 Slow methodological progress and lack of clarity on methodological limitations

Generally speaking, a variety of methods is justified and appropriate for evaluations in CP, also in view of capacity constraints and the large resources needed for more demanding evaluation methods. However, research shows that very few evaluations make use of causal methods, thereby lagging behind what is practiced in other fields, with development policy evaluations being the most advanced one. An analysis by Pellegrin et al. (2020, p. 49) for almost 1,400 MS CP evaluations from the last programming period classifies 48 percent as qualitative and only 2.8 percent as counterfactual impact analysis. Also, sound theory-based evaluations that explicitly consider possible causal channels, which are a promising direction especially for ex-ante analyses and are verifiable in ex-post evaluations, are still rare. As a consequence, there is generally a lack of understanding

how and through which specific mechanism a budgetary intervention contributes to a policy objective; moreover, the actual extent of the contribution in light of possible confounding variables is rarely assessed (Begg et al., 2023).

Another shortcoming is a lack of transparency on methodological limitations in the presentation of evaluation results. For example, evaluations using simple qualitative methods or indicator-based assessments should clearly point out their limitations. The careful addition of caveats that is a standard for academic papers is rarely practiced in CP evaluations. It is a common exercise both at MSs and the European level, for example, to count jobs or SMEs which have received EU funding without clarifying that this does not at all show whether the EU money causally created or preserved jobs, or fostered company performance.

The lack of methodological clarity also relates to more advanced methods. Counterfactual methods, in order to estimate a causal relationship, often have to narrow the scope of their analysis, which is not always sufficiently discussed. Another issue exists in particular for model-based simulation approaches that aim to demonstrate the growth and employment effect of CP on a macro-perspective. Often, they are presented as if they could prove the *actual impact* although they are only able to show the *policy potential* because modelling results depend crucially on model assumptions. For example, to assess the impact of infrastructure on regional growth the usual assumption is that the new infrastructure is useful and actually used by economic agents, which may not be true in case of a poor project selection. A further assumption is that all financial resources used have been allocated to the building of the new infrastructure. However, this may be not fully the case if construction delays occur or if there is corruption. If such implicit beneficial assumptions do not correspond to reality, econometric counterfactual models that are able to identify the actual impact will show different and often lower effects as compared to the model simulations (Fratesi, 2024b). Furthermore, it is important to be transparent about the benchmark scenario on which the modeled policy potential is based. For example, as compared to exploring the impact of adding “fresh” money to the model framework, modeling the policy impact vis-à-vis an alternative distribution of funding (e.g., the current distribution of national public funding) could allow more relevant insights.

There is also a lack of clarity on the time dimension. A quantitative evaluation that confirms a positive effect from CP e.g. on the number of jobs should ideally indicate whether this effect is short-lived or longer lasting. If the method and the data are unable to decide this question this needs to be clarified. Fratesi (2024b) points out that politicians seeking re-election may be keen to get immediate results. By contrast, a sustainable CP should rather focus on long-run and persistent effects. Policy design may imply trade-offs where long-run effects need more patience because of longer time lags. Evaluations should be aware of this crucial time dimension, otherwise they promote policy myopia.

Another methodological issue is the consequence of the narrow focus of MS evaluations on their own national or regional programmes. Because these evaluations do not include cross-country comparisons (and rarely cross-regional), they cannot account for the impact of uniform national

factors that do not vary within one country (or region).¹⁸¹ Hence, by construction, MS analyses are blind for the significant role of national (or regional) bottlenecks. This is a serious deficiency, since these factors have been identified to crucially explain the success or failure of CP in the academic literature (e.g. regulation, lack of human capital, low administrative capacity, deficient institutions etc., see introduction above). These methodological limits of merely national assessments interact with evaluator incentives (see 4.4) not to lose favor with national authorities through a too explicit critique of deficiencies for which the national government bears the responsibility. The lack of cross-country collaboration of evaluators also lowers the evaluators' awareness of the role of differing national factors for the success of a European policy intervention.

4.3.4.6 Lack of differentiated and unbiased aggregation of evaluation results

The CP Open Data Platform currently provides access to more than 2,500 MS evaluations from the last two programming periods. On first sight, this is an impressive number, also in view of the fact that there are around 400 CP programmes in each programming period. However, the sheer number of these programme-specific evaluations also makes it difficult to learn about the overall success of CP and about the reasons for different degrees of success in different circumstances. Hence, information aggregation is key for policy learning. Here, the EC currently holds a crucial position. This institution has the task to provide comprehensive ex-post evaluations, and it condenses their insights into reports that play a prominent role in the CP policy debate (e.g. the Cohesion Reports).¹⁸² This central role of the EC in this aggregation exercise is not without risks. As argued above, this institution is a stakeholder with a particular institutional interest. With respect to the accountability function of evaluations, the Commission as the EU budget executive has an interest to prove a responsible use of EU money and, hence, a successful CP. As a political actor, it legitimately takes a position in support of a policy that it deems important for European cohesion, political integration and the achievement of EU policy objectives. However, this institutional interest may go against providing a balanced synthesis of evaluation insights that could best support an open and unbiased learning process on the success and failures of CP.

¹⁸¹ If there is regional variation, national studies are able to control for the impact of institutional constraints, however.

¹⁸² One could argue that, for example, the Cohesion Reports sometimes give an overly optimistic account of the impact of CP. For example, Chapter 9 of the Eighth Cohesion Report (European Commission, 2022) summarizes evaluations results on the impact of CP. Essentially all evaluation results included in this chapter have a positive message. Where a limited impact is admitted or where an impact is not yet visible this is often justified e.g. by hints that the measures were not yet completed, or that the objective is long-term and can be expected to materialize later. Furthermore, evaluation results are listed without reference to the underlying methods or their methodological shortcomings. Even for an informed reader, it is difficult to judge which of the results originate from a more descriptive approach, and which are related to a more credible counterfactual analysis.

4.3.4.7 Limited use in decision making

Evaluation findings are rarely used for decision-making processes, funding allocation and the design of programmes. This is an overwhelming finding of relevant reports and studies, including by the ECA (European Court of Auditors, 2019). This not only holds for MSs but also for the EC. For none of the OPs that had failed to meet their milestones the Commission ever suspended payments; instead, milestones have been adjusted to the actual level of performance to reach formal compliance (European Court of Auditors, 2021). Evaluators themselves share the frustration that their insights do not reach the decision stage: 69 percent of the evaluators surveyed by Asatryan et al. (2024) regard a lack of decision impact as a problem (and much more important than issues like a lack of resources or impartiality). Similarly, the comprehensive stock taken by Pellegrin et al. (2020) paints a mixed picture according to which the EC tends to make use of evaluation findings for drafting proposed regulations for the next period, but that evaluation insights compete with political priorities, also those of the Commission (in line with the reasoning from the preceding section). For MSs, Pellegrin et al. (2020) only find rare examples that document the use of evaluation findings for programming decisions.

Ex-ante evaluations can help in an early stage when budget decisions are taken, but also when a programme is implemented. Evaluations that use theory-based approaches can, for example, raise manager awareness for the programme logic and important design features. However, contrary to the past period, the obligation for MSs to conduct ex-ante evaluations has been removed from the CPR for 2014-2020. The intention for this step was to cut back on the large evaluation burden that, due to an often merely formal compliance, was regarded to be a waste of resources. However, this end of any ex-ante evaluation obligation can be seen as too far reaching and detrimental for evidence-based policy making (European Court of Auditors, 2019; Naldini, 2018; Pellegrin et al., 2020).

4.3.4.8 Evaluation timing not synchronised with decision taking

Evaluation results cannot inform decisions if they are not available when decisions are taken. Evaluation requirements and deadlines should therefore be well integrated into the policy cycle from the preparation to the implementation and assessment of the policy initiative. In this respect, some of the revised evaluation obligations and deadlines for the 2021-2027 (see 2.4) may be counterproductive.

For example, MSs have to carry out their impact evaluations of 2014-2020 programmes by June 2029 and the EC is obliged to provide retrospective evaluations for each fund by the end of 2031. Both types of ex-post evaluations come far too late to inform the Commission's preparation of the post-2027 legislative proposal (due in mid-2025) and its subsequent negotiation with the EP and the Council (European Court of Auditors, 2023b). They even come too late to inform programme managers when they start to implement new programmes from 2028 onwards.

Obviously, timing decisions involve a trade-off. Data requirements and the particular interest in longer-term effects (3.7) point in the direction of longer deadlines, whereas the need to provide information at the decision stage requires shorter deadlines. In light of this trade-off the current CPR's innovation to oblige the EC to provide mid-term evaluations of each fund by the end of 2024

is to be welcomed as a positive novelty (Naldini, 2018; European Court of Auditors, 2019) as this will provide useful insights in time for the debate on the next programming period.

However, the span of data that can be used for these mid-term evaluations is limited to a maximum of three full years (2021-2023). In reality, even less data will be available since cohesion programmes had a slow start in the 2021-2027 period. Apart from the delays related to the pandemic there was a very low initial absorption of cohesion funds. The simultaneous implementation of the RRF without national co-financing needs and a shorter eligibility period, ending in 2026, as well as the two-year extension of the 2014-2020 programmes through the REACT-EU initiative has contributed to this situation (Bachtrögl-Unger, 2024). Therefore, the 2024 mid-term evaluation of the 2021-2027 CP programmes may have little to analyze.

4.3.5 Recommendations

The preceding gap analysis has revealed that a lot needs to be done to provide CP with a truly unbiased, self-critical and decision-oriented evaluation system. Reforms should be aimed at gradually breaking away from any remaining cases of bad equilibria of low expertise, mediocre methods, biases, low credibility, and formalistic application of evaluation obligations. We think that our following seven recommendations below can facilitate a transition towards a good equilibrium characterized by high expertise, more stringent standards, impartiality, credibility, and genuine policy learning.

4.3.5.1 Reorient CP reforms towards a more focused set of objectives

Addressing the deeper-rooted obstacles to a more independent, methodologically sound, and decision-relevant evaluation system poses a complex challenge with no easy fix. One fundamental and overarching problem lies in the broad and ambiguous objective function of the policy, which could only be rectified through a substantial policy reform that strives for a clearer assignment of policy objectives to different types of EU policy instruments. It may be worth recalling the Tinbergen Rule that advocates a distinct policy tool for each policy target. This approach would provide a more structured framework, emphasizing responsibilities and significantly enhancing the foundation for effective performance assessment.

Reform proposals, such as the suggestion to refocus CP on the convergence of the poorest regions (Fuest, 2024), align with the need for a clearer division of labor among EU policies. While a comprehensive reform along these lines may prove challenging to attain, it is crucial for upcoming negotiations to recognize a fundamental trade-off: the proliferation of policy objectives for CP renders its success increasingly challenging to measure.

A related aspect is the increasing overlap between EU and national funding areas. Indeed, CP basically can fund nearly all types of measures that are traditionally funded from national budgets. A clearer demarcation between EU and national policies with a focus of the EU funding on areas with a demonstrable EU added value could be envisaged. The re-introduction of an updated 'additionality principle' as a key conditionality for CP could help making clearer (and easier to evaluate) what the EU funding is meant to achieve.

4.3.5.2 Specify evaluation obligations more precisely in the CPR and set out a ‘charter for evaluators’

The next CPR revision should reintroduce an explicit statement that MSs have to provide sufficient resources to their evaluation process. Equally, the EC’s obligation to provide guidance for evaluation standards (methods, capacities, and procedures) should come back. We also agree with Naldini’s (2018) recommendation to make the Commission’s operational guidelines for the managing authorities more specific in terms of minimum methodological standards. We add to this that the guidance should emphasize the need for more transparency on methodological limits of the methods used for the evaluation.

Finally, the EC should set out a ‘charter for evaluators’ indicating the minimum quality standards an evaluation must meet. This could be used as a basis for developing relevant training programmes, both for evaluators and for staff at managing authorities dealing with evaluations. Courses on causal evaluation methods have become part of standard curricula in economics programmes at many EU universities, and tailor-made courses for CP evaluators could be easily developed.

The necessary evaluation capacity building could be supported through a strategy of sticks and carrots. Some funds could be set aside to support MS evaluation capacities, and sanctions if a MS fails to reach the minimum standards could be introduced.

4.3.5.3 Introduce an ‘evaluate first’ requirement when preparing or updating programmes

Like the Commission, MSs should apply an ‘evaluate first’ principle when preparing or updating programmes. In this regard, we consider that no longer requiring MSs to carry out ex-ante evaluations has been a too far-reaching change, even if the motive to simplify the process is understandable and justified. A better compromise on the trade-off between simplification and evaluation benefits is possible. We recommend reintroducing a focused ex-ante evaluation obligation, which concentrates on particularly important programmes. The selection could be decided on the basis of budget size or other more content-oriented criteria that identify innovative approaches with a particular need for thorough impact reflections and programme design. An alternative would be to require managing authorities to legitimate the planned allocations and activities in each operational programme based on previous evaluations and experiences. This should also involve why certain measures included in the previous period’s programme are not implemented anymore and why. This could pave the way for fewer but more thorough evaluations. Whatever criteria are used to choose which programmes to evaluate ex-ante, they should not leave room for interpretation in order to avoid any selection bias.

Finally, the issue of the timing of evaluations is crucial. While the mid-term evaluation could be helpful in this aspect, the next CPR should reconsider its deadlines for retrospective impact analyses to inform policy makers and programmers in a timely manner before programming the next period’s policy. At least some of these evaluations (both by MSs and the EC) should be conducted before the end of the programming period, and early enough before the decisions on the next period are taken.

4.3.5.4 Promote the use of counterfactual methods

Counterfactual policy evaluations do not only need methodological skills, but also experimental or quasi-experimental set-ups that allow to compare a control group to a treated group. Hence, the design of CP programmes should pay more attention to prepare (quasi-experimental) evaluation designs. We see three possibilities, which may differ in their feasibility.

- Implementation of actual experiments: From a methodological perspective, this would be the ideal approach. This “gold standard” requires to randomize funding (its levels, types, design features etc.) across eligible projects/regions. Even if this is the preferable approach from a methodological perspective, it may be difficult to implement, and it could also raise ethical and legal problems that relate to unequal treatment. But to the extent that some effects are clearly unknowable *ex ante* (and, hence, the treatment would not advantage or disadvantage anybody *ex ante*) some experimental features might be feasible. Preparations into this direction could benefit from an exchange with experimental researchers who have applied field experiments in development economics already for a long time, and where a lot of cooperation between scholars and public agencies, and policymakers is the norm.

The following two quasi-experimental evaluation designs pose less ethical and legal problems since they exploit structural differences between observations that are a consequence arising naturally from project selection and policy implementation.

- Quasi-experimental evidence with discontinuities: Exploiting discontinuities in CP spending has brought the breakthrough in the academic literature towards causal impact identification (Becker et al., 2008, 2012, 2013, 2018; Lang et al., 2023). This could inspire evaluations much more. It should be possible to make more use of discontinuities in funding allocated according to rankings of eligible projects where funding goes only up to a cut-off. This cut-off can then be used in a regression discontinuity design by comparing projects just above/below the threshold.¹⁸³
- Staggered DiD designs: Randomize the start date of projects and study them with staggered DID models that look at an event window before and after the start. Here, it would be important to collect data *before* the projects start.

As a general rule, for the experimental and quasi-experimental approaches it is important to collect data on units (projects, beneficiaries, regions) that are not funded, in order to be able to quantify policy effects against credible control groups.

4.3.5.5 Explicitly link funding decisions at programme and policy level to evaluation results

Ultimately, evaluation results should also be reflected in the funding allocation for and within programmes. This is however a complex undertaking. The experience made during the 2007-2013

¹⁸³An illustration from EU research policy is the European Research Council (ERC) that builds such a ranking when deciding on allocating ERC research grants.

period has shown that setting aside a performance-reserve whereby part of the funding is reallocated during programme allocation cannot be the way forward. For example, it is not self-evident what to do if an evaluation finds that a programme is not achieving its initial objectives: is this due to a lack of funding, or should the funding be reduced? Taking funding decisions on the basis of evaluation results requires robust evaluations that examine the underlying reasons and factors contributing to a (non-) successful programme implementation.

Against this backdrop, we propose referring back to the ‘evaluate first’ principle set out above. In particular, we suggest that MSs must back up any programme amendments which involve a significant reallocation of funding up by an evaluation. Similarly, any proposal for a programme would need to be accompanied by an ex-ante evaluation or impact evaluation of the predecessor programme. The EC (which must approve programmes and their amendments) would then act as a goalkeeper to ensure that evaluation findings are properly taken into account in the programme (re)design and the related funding (re)allocations. In that respect, the EC should also be given the right to unilaterally decide on funding (re-)allocations based on these evaluation findings.

In addition, a fundamental change of the post-27 CP may result from a potential adaptation of the RRF delivery mechanism where payments from the EU budget are directly linked to the satisfactory achievement of M&Ts in the MSs. But even the change to such a performance-based funding system would not do away with the need to evaluate the effectiveness, efficiency, relevance of CP programmes, and their coherence with other EU priorities and policies and EU added value.

4.3.5.6 Implement measures to stimulate a European market for CP evaluations

National evaluators possess a commendable understanding of their home country, including its institutions and political system, and normally have a superior command of the language compared to experts from other EU MSs. However, potential drawbacks associated with relying solely on national experts include their limited awareness of alternative institutions in other countries, financial dependence on national authorities for follow-up studies, a potential home bias in judgment, and informal ties to the government. These factors may compromise factual independence, the ability to identify deficient national institutions and policy failures, and the openness and unbiased nature of the evaluation process.

Hence, there is a trade-off. National teams have more specific country knowledge, but are less neutral and may suffer from a narrow perspective. Presently, the trade-off for MS evaluations leans heavily towards an almost entirely closed evaluation market (Asatryan et al., 2024), a situation that poses significant challenges. A more open market would not only support independence, but could also quickly import evaluator expertise into those MSs which suffer from a particular shortage of advanced evaluator expertise.

We recommend to start a broad initiative to open the borders of the CP evaluation service market with appropriate incentives. These incentives could entail:

- use international team composition as one criterion in the calls for tenders for national evaluation service contracts: the collaboration with partner institutes from a minimum number of other MSs could become a formal requirement for evaluation contracts that relate to programmes above a certain budget threshold;

- a peer review stage into the quality assurance system with the requirement that some of the reviewers must come from other MSs. A cross-country approach to quality checks and peer review could help to overcome national biases and to identify deficiencies in national evaluations.

We propose that the requirements for internationalization could be gradually increased, since over time cross-border collaboration of national evaluators would become a normality.

4.3.5.7 Establish a standing European Advisory Panel on CP evaluation

Finally, we recommend to set up a “European Advisory Panel on CP evaluation”. As argued above, the EC has specific institutional interests that may hinder fully neutral CP assessments. As a fully independent and non-political body, the main role of the European Advisory Panel on Cohesion Policy Evaluation (EAP-EVAL) would be to advise the EC and the managing authorities in the MSs in their evaluation activities and to provide an independent third-party review of their evaluation activities and reports.

The EAP-EVAL could play a supporting and advisory role in the preparation of evaluation plans, the tendering of evaluation services and the setting-up of a European evaluator data base. It could also put into practice the ‘charter for evaluators’, prepare guidance and organize trainings for evaluators and people in managing authorities dealing with evaluations. Finally, its role could be to carry out an independent third-party review of evaluation reports. This would include ‘meta-evaluations’, which assess the processes, methods and quality of evaluations from one specific institution (e.g. one managing authority). Moreover, these meta-evaluations would draw more general conclusions from the aggregation of single evaluation results. These reviews should always be made public.

Members of the EAP-EVAL should have the necessary expertise and familiarity with modern evaluation methods. They could come from academia, be evaluation practitioners, or dealing with evaluations in public administrations. Their work must be firmly governed by professional standards and practices. As a member of the EAP-EVAL, however, they should not be involved in any evaluation of EU policies or programmes, to preclude any risk of a conflict of interest.

Alternatively, the EAP-EVAL could also play a more active role, and in particular directly carry out impact evaluations of CP. For example, it could be designed with features similar to the Intergovernmental Panel on Climate Change (IPCC). The IPCC serves the purpose to accumulate knowledge on climate change and the effectiveness of climate policy instruments based on scientific knowledge and through a transparent procedure that wants to guarantee credibility of the results. The IPCC reports have become an authoritative source of information due to a careful procedure to safeguard a high degree of impartiality and variety. IPCC authors are selected on the basis of their expertise and with the intention to cover a diversity of socio-economic views and backgrounds, as well as geographical and gender balance. IPCC reports undergo an external expert review (IPCC, 2024).

Adding such a body to the CP evaluation system could lend additional credibility to the evaluation findings reported by the Commission and the managing authorities in the MSs.

4.3.6 References

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4.3.7 Annex I: Common Provision Regulations – Chapter II Evaluations

Article 44

Evaluations by the Member State

1. The Member State or the managing authority shall carry out evaluations of the programmes related to one or more of the following criteria: effectiveness, efficiency, relevance, coherence and Union added value, with the aim to improve the quality of the design and implementation of programmes. Evaluations may also cover other relevant criteria, such as inclusiveness, non-discrimination and visibility, and may cover more than one programme.
2. In addition, an evaluation for each programme to assess its impact shall be carried out by 30 June 2029.
3. Evaluations shall be entrusted to internal or external experts who are functionally independent.
4. The Member State or the managing authority shall ensure the necessary procedures are set up to produce and collect the data necessary for evaluations.
5. The Member State or the managing authority shall draw up an evaluation plan which may cover more than one programme. For the AMIF, the ISF and the BMVI, that plan shall include a mid-term evaluation to be completed by 31 March 2024.
6. The Member State or the managing authority shall submit the evaluation plan to the monitoring committee no later than one year after the decision approving the programme.

7. All evaluations shall be published on the website referred to in Article 49(1).

Article 45

Evaluation by the Commission

1. The Commission shall carry out a mid-term evaluation to examine the effectiveness, efficiency, relevance, coherence and Union added value of each Fund by the end of 2024. The Commission may make use of all relevant information already available in accordance with Article 128 of the Financial Regulation.

2. The Commission shall carry out a retrospective evaluation to examine the effectiveness, efficiency, relevance, coherence and Union added value of each Fund by 31 December 2031. In the case of the ERDF, the ESF+, the CF and the EMFAF, that evaluation shall focus in particular on the social, economic and territorial impact of those funds in relation to the policy objectives referred to in Article 5(1).

3. The Commission shall publish the results of the retrospective evaluation on its website and communicate those results to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.

Source: European Union (2021)

4.3.8 Annex II: Excerpt from Recommendation of the OECD Council on Public Policy Evaluation (OECD 2022)

1. Conduct and use evaluations across government ensuring that they are carried-out in a systematic manner and that their results are used in policy and budgetary decision-making. In particular, Adherents should:

- a) Designate evaluation champions to coordinate evaluations across institutions and advise on best practices to promote their quality and use.
- b) Define and assign institutional responsibilities for conducting policy evaluations.

2. Foster a culture of learning and accountability by promoting demand for, and ownership of, evaluations within and beyond the executive. In particular, Adherents should:

- a) Promote the role of both internal and external, national and international, knowledge brokers to strengthen the relationship between evidence from evaluations and its users, including citizens.
- b) Offer opportunities for the legislative body to review and discuss policy evaluations.

III. RECOMMENDS that Adherents promote the quality of public policy evaluations. To this end, Adherents should:

1. Actively plan, design and manage evaluations so that they are timely and proportionate to the intended objectives, taking into account the needs of the primary users and the types of intended uses, and ensuring that results can be trusted by stakeholders. In particular, Adherents should:

- a) Plan evaluations early by building provisions for evaluations into public interventions from the start, in order to improve their design, collect data on their implementation, and ensure that evaluation results are robust and available in a timely fashion.
- b) Design and implement evaluations that are proportionate and appropriate for the likely use, by adapting the aim, scope and analysis of the evaluation, its format and resources, to the needs of its primary users and the types of intended uses.
- c) Engage relevant stakeholders in the evaluation processes from the outset in order to create ownership for change and trust in evaluation results.

2. Establish quality standards and mechanisms for evaluations to generate robust and credible evaluation results that can be trusted and used with confidence. In particular, Adherents should:

- a) Develop guidelines to ensure that evaluation designs, data collection processes and analytical methods, adhere to methodological best practices.
- b) Adopt professional and ethical standards for evaluators to ensure that they meet high criteria for integrity and independence, as well as for knowledge of evaluative methods and culturally appropriate approaches, and that they safeguard the dignity, rights, safety and privacy of participants and other stakeholders when they conduct evaluations.
- c) Promote the functional autonomy of evaluations, by safeguarding the autonomy of external evaluations through oversight of the commissioning and evaluation processes, and by providing internal evaluations team with a high degree of autonomy in the use of available resources and in deciding what studies to conduct and how.
- d) Ensure that evaluations are able to withstand external scrutiny, such as through peer review, and that they can be assessed against pre-defined quality criteria.

3. Develop institutional skills and capacities to conduct, commission and use evaluations effectively and in a credible manner. In particular, Adherents should:

- a) Build public sector skills for evaluation by conducting regular training, recruiting and retaining employees with the adequate skills or collaborating with academia, the private sector and other jurisdictions to improve the availability of these skills.
- b) Ensure the availability of high quality, timely, accessible, disaggregated and re-usable results, performance and administrative data for policy evaluation.
- c) Provide institutions with appropriate resources to manage, carry-out and use policy evaluations.

IV. RECOMMENDS that Adherents conduct public policy evaluations that impact decisionmaking. To this effect, Adherents should:

1. Establish institutional mechanisms to embed evaluation in decision-making processes, both at the organisational level and across government. In particular, Adherents should:

- a) Provide high-level guidance, such as in a legal or policy framework or in a multi-annual evaluation agenda, on when to conduct policy evaluation and what type of evaluation

is needed, in order to adapt the timing of evaluations to feed into decision-making processes, focus the analysis where it is most needed, co-ordinate efforts for cross-sectorial evaluations, and avoid overlaps.

- b) Incorporate the use of evaluation results into decision-making including through the policy-making and budgetary processes.
- c) Establish follow-up mechanisms for decision-makers to respond to the results of evaluations, by defining a course of action where relevant, and assigning responsibilities for implementing and tracking recommendations.

2. Provide easy access to evaluations and present the findings deliberately in order to improve the uptake of evaluation results. In particular, Adherents should:

- a) Make the result of evaluation findings and recommendations public by default.
- b) Tailor the way evaluation evidence is presented and communicated to its potential users, in terms of timing, communication channel, format and messaging, by developing a dissemination strategy.
- c) Make use of evidence synthesis methodologies to aggregate evaluation findings and assess them in a systematic manner.

4.4 Friedrich Heinemann: Enhancing Precision in Assessing the European Added Value of Cohesion Policy¹⁸⁴

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Abstract

EU policies aim to generate "European added value". For CP, this is underscored by the inclusion of EAV as a criterion for MS evaluations in the 2021-2027 programming period. This paper lays down the conceptual foundations of EAV, covering both the widely accepted generic definitions as employed by European institutions and reflecting upon common points of critique. The analysis identifies typical conceptual and methodological flaws in EAV reflections and applications. Research on a sample of MS evaluations for major CP programmes from the previous period reveals a notable absence of EAV tests. The analysis proposes an EAV checklist of the essential requirements for a comprehensive EAV examination. This checklist serves to guide more rigorous assessments, ensuring a more robust understanding of the added value generated by EU policies, particularly within the realm of CP.

4.4.1 "Enigma" versus guiding principle

The concept of directing EU spending towards areas that offer significant "EU Added Value" has a longstanding history. Beginning with the Maastricht Treaty and the introduction of the subsidiarity principle, the notion that there must be a distinct rationale for engaging in EU-level activities has gained prominence (Tibor, 2020). The use and the definitions of the EAV terminology vary considerably (Heinemann et al., 2013; Tarschys, 2005). The operationalization of this "Enigma" (Tarschys, 2005) has consistently been subject to debate, with questions arising regarding the extent to which it can be effectively implemented, given the diverse array of underlying political interests and value judgments (Becker, 2012). However, the principle has assumed a particularly prominent role in spending decisions within CP. For the current programming period, it is explicitly mentioned as one of the criteria to be tested in evaluations (Art. 44 Common Provision Regulation, see below Section 4.4.4). Consequently, a consensus has emerged within the EU that considerations of EAV should guide evaluations assessing the success or failure of CP programmes.

Against this backdrop, this article aims to refine the terminology surrounding EAV in order to enhance the credibility of EAV assessments. It delves into the conceptual foundations and controversies surrounding the terminology of EAV, highlighting potential pitfalls in its understanding and application. Additionally, it examines the actual use of EAV-related criteria in CP evaluations. Finally, the article proposes an "EAV checklist," offering guidance for conducting sound and credible EAV-related evaluations. This checklist seeks to promote greater precision and rigor in assessing CP spending, both from an ex-ante perspective (e.g., in budgetary negotiations) and an ex-post perspective (evaluation of ongoing or completed programmes).

¹⁸⁴ *Acknowledgment:* The author is grateful to the German Federal Ministry of Finance for sponsoring this project, to Zareh Asatryan for helpful comments and to Anselm Etzelmüller for excellent research assistance.

This analysis is closely intertwined with several other contributions within this report: In her legal analysis, Leino-Sandberg (2024) shows how the interpretation of the EU's competence in CP has expanded and how pre-existing competence limitations have become less relevant. She suggests considering EAV as a "new delimiting principle for how EU funding should be used in the future" (p. 1). Asatryan and Birkholz (2024) offer empirical evidence regarding the extent to which CP spending either crowds out or crowds in national investment spending. This result underscores the importance of considering both potential positive and negative side effects when evaluating EAV, in order to obtain a comprehensive picture. The paper by Heinemann et al. (2024) emphasizes the need for impartiality and methodological rigor in CP evaluations, a broad conclusion that translates into specific requirements for EAV evaluations, which will be elaborated in detail below.

4.4.2 EAV definitions and critique

The terminology of an EAV has become fashionable since the 2000s. While it was only rarely used in the times of the Delors-I (1988-1992) and Delors-II (1993-1999) financial packages, it has become an important term, e.g. in Commission Communications on new MFRs, since then (Heinemann et al., 2013).

Since the 2000s, there has been a vigorous debate regarding a potential common understanding of key terminology. This process of creative interpretation typically ensues once a particular criterion gains political attention in discussions on budget allocation. Even if the term possesses a well-defined meaning, stakeholders tend to adapt and reinterpret it in a manner that aligns with their preferred spending or regulations. A similar phenomenon has unfolded with the EAV terminology (see Box 4.4.1). While there exists a clear understanding of the core essence of the term, various definitions with greater specificity have emerged. The subsequent section, which delves into extensions and pitfalls of the EAV concept, elucidates that these more specific definitions pertain to partial aspects of EAV.

Box 4.4.1: European Added Value definitions

Generic definitions by EU institutions:

European Commission: "European Added Value is the value resulting from an EU intervention which is additional to the value that would have been otherwise created by Member State action alone" (European Commission, 2011, p. 2).

European Commission: "Changes that can reasonably be attributed to the EU intervention, over and above what could have been expected from national actions by the Member States" (European Commission, 2021, p. 16).

European Court of Auditors: "EU added value (EAV) is the value that an EU action adds through EU policy, regulation, legal instruments and spending, over and above that created by member states alone" (Aquilina, 2020, p. 75).

More specific definitions:

EAV is sometimes understood as benefits from good management and implementation of EU projects (Rubio, 2011, p. 3). In this version, the concept is used as an ex-post criterion to evaluate EU programmes, which are already implemented, regarding efficiency and effectiveness, not necessary in comparison to a hypothetical implementation on national level.

EAV is also used as a narrower criterion to judge on the best-possible allocation of limited EU resources. Essentially, this refers to an opportunity cost consideration asking whether the value added generated for one spending item is sufficiently high compared to the potential value added from other EU spending usages (Rubio, 2011, p. 4).

Often, EAV is also applied to emphasize positive indirect side-effects of EU spending that are additional to the direct goals of a programme (Rubio, 2011, p. 5). This definition is particularly popular for CP. Example for possible positive side-effects relate, e.g., to capacity building, learning effects on best practices, regional and national spending spill-overs, and a positive impact on the political support for integration from visible EU support.

While these definitions appear to signal a good understanding and a far-reaching consensus, fundamental concerns about the EAV criterion and its applicability exist as well (see Box 4.4.2). These concerns assert that the nature of any added-value reasoning is inherently "political" that certain dimensions of EAV may not be quantifiable, and caution against an overly economic-centric utilization of the EAV criterion.

Box 4.4.2: Critical Remarks on the EAV Criterion

"In all cases, however, the final judgement on whether expected added value would justify an EU programme is ultimately the result of a political process" (European Commission, 2011, p. 3).

"European added value is a key test to justify spending at EU level even if the added value of a political project cannot be reduced to a balance sheet" (European Parliament President, cited in: European Commission, 2011, p. 3).

"The 'cultural added value' should not be forgotten", "the concept of 'European added value' ... should also contain a 'visionary' aspect" (European Parliament, 2004).

The European Parliament has warned against an "excessively economist interpretation" of the concept (Tarschys, 2005, p. 96; Tibor, 2020).

In a similar vein, Tibor (2020, p. 10) clarifies that "the inherent risk of all quantitative approximations is obvious: if what is important needs to be measurable, a consequential risk is always that only the measurable becomes important."

These concerns are indeed important and provide valuable insights to avoid the one-sided use of the EAV concept, but they do not invalidate the usefulness of the criterion in principle.

Any meaningful EAV assessment should commence with the policy objectives as its foundation. In this regard, it is accurate that any EAV judgment also reflects a political process. In a democracy, policy objectives are determined by elected politicians, not by experts. However, assessing the extent to which an instrument serves the defined objective is not inherently a political task. An evidence-based policy should evaluate the outcomes of the policy in the context of the politically determined goals as objectively as possible. Subsequent decisions, once this information is made available, will undoubtedly involve political judgment. Therefore, the assertion that the final judgment of whether the EAV justifies a programme is a political one is entirely correct. Nevertheless, this does not negate the necessity to conceptualize and measure the EAV from a programme as precisely as possible.

Moreover, the concerns that EAV assessments may be one-dimensional, neglecting important policy objectives, or excessively economist-focused can help prevent misunderstandings. The "value"

dimension in an EAV assessment can encompass any dimension within the universe of political objectives, spanning from social to environmental, cultural, and economic dimensions. Regardless of the value dimension chosen, it is crucial that the dimension is well-defined ex ante. Otherwise, a policy instrument becomes inaccessible to evaluation in general and EAV assessment in particular.

Furthermore, stakeholders' interests may sometimes seek to shield preferred programmes against unfavorable evaluations. A common strategy in this context is to blur the objective function. With a diffuse objective function – many diverse policy objectives without clear priorities or weighting – it becomes impossible to arrive at a negative evaluation. Even if a measure fails to prove its EAV on one dimension, proponents could still point to other dimensions where the measure might contribute to a policy objective. This problem of "goal congestion" has been a longstanding challenge for CP for decades (Tarschys, 2005; Heinemann et al., 2024). Similarly, emphasizing the non-quantifiable benefits of a measure can be part of an immunization strategy. However, given the existing arsenal of quantitative and qualitative methods, it is difficult to argue that the achievement of a policy objective is completely beyond measurability. Indeed, a position asserting that an EU programme creates EAV but cannot be substantiated due to a fundamental impossibility of measurement is difficult to accept, especially for the EU budget, which explicitly emphasizes results orientation.

4.4.3 EAV pitfalls

4.4.3.1 Building blocks

Returning to the core definitions of EAV as they are consensus among EU institutions (see Box 4.4.1), it is helpful to examine the central building blocks of these definitions. These building blocks include:

- "Value": This pertains to the dimension under consideration, as defined by the political process. Positive value creation fundamentally requires that the benefits exceed the costs of a measure. Additionally, value creation may stem from side effects that are not the direct intention of a programme (see Box 4.4.1 for more specific definitions).
- "Added": The value created should be additional to a reference point. This reference point perspective is crucial for any meaningful test for the existence of a value that is additional (i.e. added value). In leading definitions, this reference point for comparison is typically a comparable action by Member States. This perspective elucidates the close relationship between EAV considerations and the subsidiarity principle. An EAV test aims to ascertain the extent to which the EU policy intervention aligns with the subsidiarity requirement that an EU intervention can achieve better outcomes at the EU level compared to the Member State level (see also Art. 5 (3) TEU).
- "Attributable to an EU intervention": The consensus definitions, including the most recent Commission definition from 2021 (see Box 4.4.1), emphasize that the added value creation must be attributable to an EU intervention.

While these building blocks for a meaningful EAV test are uncontroversial given the official EAV definitions, there are typical pitfalls associated with each of these three building blocks resulting from a lack of precision.

4.4.3.2 Net value

Any assessment of value must take into account the costs associated with a measure. Simply demonstrating that a programme creates "gross value" is insufficient to establish "net value," which requires consideration of the costs involved. For instance, if a CP budget of 100 euros temporarily increases regional growth by 80 euros, there is indeed a gross value creation, but a net value reduction when accounting for the resources utilized. This net value reasoning is closely tied to an efficiency perspective. For example, if a measure reduces CO₂ emissions at a cost per ton above the CO₂ price of the EU-ETS (European Emission Trading System), the measure is likely to be inefficient and cannot readily claim net value generation, as a smaller expenditure elsewhere could achieve the same policy objective. In other words, the cost dimension should ideally also encompass opportunity costs.

4.4.3.3 Welfare costs of taxation

For a comprehensive assessment, the costs of CP, like any other public spending, should not ignore the welfare costs of taxation. It is important to recognize that the money spent on CP is no manna from heaven. Member States must finance their contributions to the EU budget through national taxation. Most taxes have distortionary effects, stemming from compliance costs and, more significantly, because they influence economic decisions made by households and firms, such as hours worked, investments, innovations, risk-taking, savings, and human capital investments. These "deadweight costs" of taxation are prominent in theoretical treatments of taxation but are often overlooked in discussions on budgetary decisions, both at national and European levels.

The essential consequence of the excess burden of taxation is that the economic cost of one euro of spending is higher than one. Various estimates exist attempting to quantify these "marginal costs of funds," which take into account the welfare cost of taxation (Barrios et al., 2013; Kleven & Kreiner, 2006). Empirical results vary a lot and depend on the tax type (tax on income, consumption, capital/wealth, green taxes), tax rate change size, salience, and methods used. Green taxes, for example, which serve not just the revenue function but also internalize an environmental externality are assessed more favorably as compared to labor taxes with their work disincentivizing effects. Barrios et al. (2013) use a computable general equilibrium model, which represents 24 EU Member States. According to their results, one additional euro of labour tax revenue comes with efficiency losses of 0.90 euro on EU-average, while one additional euro of green tax revenue causes efficiency losses of eight cent only. Kleven and Kreiner (2006) consider five European countries, namely Denmark, France, Germany, Italy and the United Kingdom for different scenarios of labor supply elasticities. They show a range for the efficiency loss of one extra euro of labour tax revenue between 0.14 to 0.36 euro for the United Kingdom and between 0.51 and 2.51 euro for Denmark.

While the range of estimates varies considerably, one clear takeaway from this extension is that only generating "small" value creation from a public programme is unlikely to result in net value.

The returns must significantly exceed the direct budgetary costs to justify the costs of taxation. It is important to clarify that this broad perspective applies to any tax-financed government budget on any federal layer, not just the EU budget.

There could be decision situations where these welfare costs of taxation do not matter. This is the case if the EU budget size (or the size of the CP budget) is given and a pending decision solely refers to the spending structure. In this decision scenario, the welfare costs of taxation are fixed and the reflection can focus on picking the type of spending with the highest value generation.

4.4.3.4 Value generation versus distribution

Distributive effects must not be conflated with value creation. In essence, value creation implies a positive-sum game. Therefore, a mere redistributive effect achieved through a CP programme – for example, money channeled from a wealthy to a less affluent MS – has to be distinguished from programme-induced value generation. While this redistribution may express European solidarity and foster support for integration and thus create a certain type of European benefit (under the uncertain assumption that the integration-supporting effect in the recipient country outweighs the integration-rejecting effect in the donor country), these effects do not qualify as a genuine value creation resulting from an EU policy. Such effects could be replicated through a cash payment or a simple adjustment in EU revenues in the absence of any EU programmes (La Fuente et al., 2010; Neheider & Santos, 2011; Thöne, 2024).

4.4.3.5 Financial advantage and interest rate savings

Financing advantages do not constitute a programme added value: For the recipient Member State and region, one advantage from a CP programme is that the money originates from the EU budget and, hence, from the common pool funded by all EU taxpayers. Hence, from the perspective of the beneficiary entity, there is a transfer gain compared to a programme, which is financed from national or regional budgets and the related tax payers. As clarified in the preceding section, this mere financial advantage should not be classified as value creation since it is part of a European zero-sum game. Hence, it can also not serve as a source for an EAV.

With the pandemic crisis facilities NGEU and SURE, the EU, for the first time in its history, substantially finances programmes in MSs from EU debt. The EC issues bonds on behalf of the EU for which interest and amortization are paid from the EU budget. This debt operation is particularly attractive for countries with rating below the EU rating. For those countries, an EU loan with the EU interest is cheaper compared to national financing conditions. As a consequence, loan-based programmes under the RRF and SURE have a financial advantage for countries with a below-average creditworthiness. For an EAV analysis, any such interest rate savings should not be considered as “added value”. The financial advantage originates from the fact that MSs with a better rating provide guarantees to the EU budget. This guarantee has an economic value. However, better-rated MSs are not compensated for this reputation lending although they accept an additional risk. Through the EU loan operations, higher-rated MSs lend their higher creditworthiness to lower-rated MSs for free. Thus, this guarantee scheme creates implicit transfers from the higher-rated to the lower-rated MSs and constitutes a zero-sum game.

4.4.3.6 Positive and negative side-effects equally possible

Unintended indirect effects of programmes deserve careful consideration in a comprehensive EAV assessment. Some refinements of genuine EAV definitions (see Box 4.4.1) have already highlighted the potential non-direct and unintended effects of programmes. A common consideration is that a CP programme in one region, such as Eastern Europe, may generate spillover effects (such as jobs and profits) in other regions, such as Western Europe, through procurement chains. Additionally, CP programmes may stimulate the establishment of better management and audit institutions, leading to positive side effects on the efficiency of national spending.

Acknowledging indirect effects, including cross-border spillovers, is methodologically sound and crucial. However, it is essential to apply extensions of an EAV test in an unbiased manner. An EAV assessment that solely focuses on positive side effects while neglecting potential negative side effects is inherently biased. Both positive and negative side effects, whether within-country or cross-border, are equally plausible *ex ante* and should be considered in a comprehensive evaluation.

For instance, the job creation resulting from a CP programme in a targeted region may simply involve a relocation of jobs from another EU region. In such cases, value is merely "shifted around," rather than genuinely created (Tarschys, 2005, p. 90). Moreover, within-country side effects can also be negative. CP-financed investment spending may potentially crowd out national investments, particularly in the absence of effective additionality rules (Asatryan & Birkholz, 2024).

More fundamentally, the concept of "moral hazard" suggests that transfers can influence economic policy decisions in the beneficiary region. The literature on aid effectiveness in development economics highlights the risk that external transfers may diminish governments' political accountability to their own taxpayers and even lead to a deterioration in institutional quality (Deaton 2015). The example of Hungary, which has persistently high and worsening levels of corruption and institutional quality decline while being a major recipient of EU structural funds (Transparency International, 2023), underscores that these risks cannot be easily dismissed for the EU.

Therefore, a comprehensive perspective on EAV including indirect effects on institutional quality is desirable, but it must equally endeavor to identify both positive and negative effects.

4.4.3.7 The need for a national counterfactual

The most recent 2021 Commission definition on EAV that wants to guide MS evaluations (see Box 4.4.1) clarifies that the "added" value perspective requires a comparison with a counterfactual of MS action. EAV is about effects attributable to EU programmes "over and above what could have been expected from national actions by the Member States".

There are several potential sources for additional value from EU spending compared to national spending, as outlined by the Bertelsmann Stiftung (2013) and Ederveen et al. (2008). These include: EU programmes may benefit from economies of scale due to their larger scope and reach compared to individual Member State programmes; joint EU spending may enhance budgetary decisions by addressing free-riding issues and mitigating cross-border spending externalities; the

EU budget may allow for spending on projects that exceed the capabilities of individual MSs, particularly in areas where minimum thresholds are necessary for effectiveness; EU spending may ensure higher quality outcomes by leveraging joint governance between the EU and MSs, potentially leading to a more efficient and effective allocation of resources.

The question of whether these drivers of added value actually exist and their strength is an empirical matter. In practice, finding a suitable MS counterfactual for comparison is challenging but not impossible. Many MSs fund regional policy programmes using their own resources and implement numerous policy interventions with similar objectives as EU structural funds, which could serve as reference points (for details see: Heinemann et al., 2013). To substantiate economies of scale it could make sense to compare the cost profiles of programmes in large MSs to those in small MSs. Alternatively, the impact of EU spending can well be compared looking at countries before and after EU accession, or comparing the performance of EU MSs with non-EU European countries.

Even if a rigorous empirical comparison is not feasible due to a lack of suitable national reference points or missing data, a minimum requirement for an EAV test is a theory-based analysis. Such an analysis should precisely delineate the mechanisms and channels through which an EU measure could provide value beyond that of a comparable national measure. According to the theory-of-change method, an evaluation should outline how the activities undertaken by an intervention contribute to a chain of results leading to the intended or observed impacts (Better Evaluation 2024). This requirement also applies to an EAV test, which should be able to describe a credible causal chain explaining the emergence of additional European value.

Therefore, the most fundamental pitfall related to the added value building block is the absence of any empirical or theoretical approach that places European value generation into comparative perspective with a national intervention. Simply testing whether an EU programme has been effective in achieving its objectives is insufficient to demonstrate EAV.

4.4.3.8 European involvement may increase or decrease value

Another potential pitfall relates to the necessity of considering both positive and negative consequences when evaluating the added value of an EU programme compared to a national intervention. While European economies of scale, threshold effects, and other mechanisms may indeed create added value when a programme shifts from the national to the European level, there are also potential downsides to European activities.

On the negative side, a European intervention may be inferior, meaning more costly or less effective, compared to a national intervention. This may result from additional European bureaucracy, higher EU salaries for EU staff involved in comparison to national pay scales, costly coordination between European and national administrations, a lack of information on local conditions, and additional constraints on national flexibility that may lead to policies frustrating national preferences.

Therefore, similar to the recommendations on indirect effects (see Section 4.4.3.6), any impartial empirical or theoretical analysis on the potential existence of direct added value from an EU activity must give equal attention to both the possibility of positive and negative consequences. This

balanced approach ensures a comprehensive assessment of the overall impact of EU interventions.

4.4.3.9 Attribution of effects to EU intervention

Effect attribution to the EU intervention must be credibly established. A possible pitfall in evaluations, including those assessing EAV, is the assumption that correlation implies causality. Positive effects observed after the start of a programme may not necessarily be a direct consequence of the programme itself. Therefore, relying solely on case studies, qualitative approaches, correlation analyses, or output counts (such as the number of jobs or firms receiving support) to claim a causal impact of the programme can be misleading. This also holds for assessing the EAV of CP on a higher level of aggregation. For example, in Central and Eastern Europe, the phasing in of CP programmes coincided with the region's increasing integration into the internal market. This synchronicity complicates efforts to isolate the specific contribution of CP to the region's successful convergence over the last two decades. This example underscores the fundamental challenge in EAV evaluations: substantiating the causal impact of the programme itself. While methods of causal identification are standard in scientific evaluation literature, they have not yet become commonplace in CP evaluations (Heinemann et al., 2024).

4.4.4 Commission guidance on EAV and its practice in Member State evaluations

The EAV criterion does not only receive attention in high-level reflections on the EU budget (see Section 4.4.2). It has also received a prominent position in the key regulation defining the rules and principles of CP spending, the CPR for the programme period 2021-2027 (European Union, 2021). Art. 44 CPR includes “Union added value” into the list of criteria that can be the subject of the obligatory MS evaluations.¹⁸⁵ Although the regulation does not oblige MSs to cover EAV in each evaluation, the prominent position in the CPR signals that it should get substantive attention. This explicit reference to EAV as an evaluation criterion is new compared to the preceding programme period when the criterion was not mentioned in the CPR’s evaluation rules.

The Commission Staff Working Document that guides MSs on monitoring and evaluating programmes financed from the structural funds (European Commission, 2021, p. 16) also provides a brief half-page guidance on the use of the EAV criterion in MS evaluations. It makes the commendable clarification that an EAV test requires a comparison with MS action but admits that such an approach is challenging.

While thus the Commission guiding document is precise on the comparative nature of the EAV criterion, the document remains brief on how to conceptualize an EAV test. Moreover, it is not free from at least one of the pitfalls as described above (see Sections 4.4.3.6 and 4.4.3.8): The

¹⁸⁵ „The Member State or the managing authority shall carry out evaluations of the programmes related to one or more of the following criteria: effectiveness, efficiency, relevance, coherence and Union added value, with the aim to improve the quality of the design and implementation of programmes. Evaluations may also cover other relevant criteria, such as inclusiveness, non-discrimination and visibility, and may cover more than one programme” (CPR, Art. 44 (1)).

document exclusively offers arguments for a potentially positive EAV (e.g., scale, speed, programme quality) but is completely silent on arguments for a potentially negative EAV. Thus, the Commission guidance nudges national evaluators to develop reflections only into the direction of positive, not negative results from EU involvement. This bears the risk to incentivize evaluation designs, which are biased towards overly favorable outcomes.

Another regular flaw in Commission EAV documents and statements is related to the interest rate advantages from SURE and RRF (see Section 4.4.3.5). For the SURE programme, the EC quantifies these interest rate savings and adds them to the programme benefits (European Commission, 2022). Similarly, the Commission explicitly adds the favorable interest rate conditions that are offered to MSs to the value added from RRF loans (European Commission, 2020). These examples indicate a lack of precision on the nature of an added value consideration in contrast to a mere distribute effect that results from an implicit transfer (as a consequence of a non-compensated guarantee from higher rated MSs).

As previously mentioned, MSs were not legally obligated to consider the EAV criterion in their evaluations during the last programming period. An examination of a sample of these evaluations confirms a notable absence of meaningful assessments of EAV. The sample selection process focused on including evaluations of the two to three largest programmes in terms of budget size for each MS. Specifically, the evaluations available in English, German, Dutch, Italian, Portuguese, or Spanish were included in the screening process. This selection method aimed to prioritize large programmes, which would typically undergo more thorough evaluation. Therefore, if EAV was largely overlooked in assessments of these sizable programmes, it is unlikely that the criterion received significant attention in evaluations of smaller programmes.

The second column (“dimension of (added) value”) informs about the dimension that was used to discuss or assess a possible added value. The term “business-management definition” summarizes cases where the value or the sales of one or more private companies are used as an indicator for value creation. The results of this brief sample search leave no doubt, that EAV has played almost no role in MS evaluations so far. From 27 programmes analyzed, in only two evaluations there is a reference to the concept of EAV. In neither of the two, the insights are used to justify the EU funding of the project. In one of the two evaluations, it is questioned, whether EU funding provides more value than national funding for this specific project. For the other evaluation, it is merely mentioned that the amount of EAV is planned to be evaluated.

Table 4.4.1: Role of EAV considerations in evaluations of large Member State programmes

Programme	Dimension of (added) value	EAV statement
Austria 315: Communication Strategies (Survey)	Survey: Do citizens think, EU programmes provide added value in general?	No
Austria 395: Governance system	No explanation, of which kind the realized added value is	No
Austria 2392: Programme aiming at strengthening	Funding enables firms to invest in innovations	It is questioned, whether EU funding

small and medium-sized enterprises		provides more value than national funding
Germany 1223: Aiding social inclusion and fighting poverty and discrimination	No mention of added value	No
Germany 1978: Integration of long-term unemployed into the labour market	No mention of added value	No
Germany 2102: Temporary employment abroad for disadvantaged persons	Facilitation of “European experiences”, reduction of prejudices, strengthening European solidarity	No
UK 586: ERDF programme for England	Benefits of engaging local people, developing local relationships	No
UK 964: ERDF programme for England	Business-management definition	No
Ireland 712: YEI	No mention of added value	No
Ireland 778: JobsPlus	No mention of added value	No
Malta 738: Funding support for private sector	Additional GDP	No
Malta 1994: Funding support for private sector	Additional GDP	No
Spain 784: Sustainable growth	No mention of added value	No
Spain 1187: Selection of sustainable urban development strategies	No mention of added value	No
Netherlands 2016: Territorial Investments	Better allocation of the labour market, better cooperation between different policy fields, between institutes, companies and government	No
Netherlands 2268: Equality of opportunities and non-discrimination	No mention of added value	No
Italy 190: Active Policy Systems for Employment	EU added value shall be analysed	Amount of EAV is planned to be analysed
Italy 1989: Rural development programme	No mention of added value	No

Portugal 867: Incentive Schemes for business investments	Additional GDP (in traditional economic sectors)	No
Portugal 1916: Research for Intelligent Specialization (RIS3)	No mention of added value	No
Belgium 1580: ESF programming 2014-2020 Wallonie-Bruxelles	Mention that it is hard to measure added value	No
Czech Republic 139: Operational Programme Enterprise and Innovation	Business-management definition	No
Greece 504: Money Assessment Methodology	Business-management definition, Additional GDP	No
Hungary 1504: Tourism development	No mention of added value	No
Romania 2396: Advise on the Use of Funds from ESIF in the Romanian Energy sector	No mention of added value	No
Slovakia 507: PA 3 impact	No mention of added value	No
Sweden 1430: YEI	No mention of added value	No

Notes: Evaluations obtained from the Cohesion Open Data Platform. Numerical evaluation identifier refer to this database.

4.4.5 An EAV checklist

4.4.5.1 Checklist purpose

As previously noted, identifying EAV within a cohesion programme presents a conceptually challenging task fraught with potential misunderstandings and pitfalls. Nonetheless, the revised CPR has intensified the pressure to incorporate meaningful EAV assessments into evaluations. However, the guidance provided by the Commission on how to conduct these tests is itself limited and not devoid of conceptual imperfections. In light of these challenges, the following checklist aims to enhance clarity regarding how EAV assessments can serve as a meaningful source of guidance for improving CP. The following distillation outlines the requirements that an exhaustive and optimal EAV test ought to satisfy. While this checklist is ambitious, realistic evaluations are often constrained by data limitations or insufficient evaluation resources, which may hinder fulfillment of all these requisites. Nonetheless, even EAV tests capable of addressing only a subset of these criteria can possess merits. In such instances, this checklist serves to promote methodological transparency regarding any inherent limitations.

4.4.5.2 The value dimension is clearly defined

The starting point of any EAV test is a solid understanding of the objectives of a policy intervention. As outlined (see Section 4.4.2), the challenge of goal congestion due to an imprecise objective function poses a significant obstacle to evaluating the creation of value. Therefore, a crucial prerequisite for a meaningful EAV test is the clear articulation of objectives that define the dimension of value.

The selection of EAV evaluation objectives should closely align with the goals outlined in the programme documents as determined through the political and administrative processes. This alignment helps minimize the risk of strategic selection, where objectives are chosen for the purpose of an evaluation to yield a favorable outcome. In cases where there are multiple objectives, it is important to have an understanding of priorities and to establish weighting, especially when conflicting evidence arises (for example, achieving success on objective A but failing on objective B).

4.4.5.3 Costs are comprehensively assessed

Value creation necessitates that programme benefits surpass programme costs (see Section 4.4.3.2). Consequently, programme benefits must be assessed in relation to budgetary costs. However, a comprehensive cost perspective extends beyond direct programme budgets and should encompass full costs, including overhead expenses, such as complete administrative costs at both national and EU levels. Furthermore, opportunity cost considerations should ideally explore the efficiency of the measure as compared to other uses of EU resources. Considering the efficiency costs of taxation, a fully meaningful cost-benefit analysis would incorporate surcharges on the full budgetary costs. This is because every euro spent publicly is sourced from taxpayers, resulting in additional economic costs due to disincentives from taxation (see Section 4.4.3.3).

4.4.5.4 There is no confusion of distributive effects with value creation

A financial advantage accruing to the recipient entity (whether a region, sector, firm, or household) solely due to the receipt of financial resources does not constitute value generation. As highlighted earlier (see Section 4.4.3.4), the pure transfer effect operates on a zero-sum logic and could theoretically be replicated through a system of cash transfers without European programming. Therefore, the assertion of value creation from a CP programme must be grounded in a genuine programme contribution, where the programme initiates specific behavioral, ecological, economic, or other causal chains that produce desired effects. Consequently, this genuine programme benefit must be rigorously distinguished from the mere financial advantage associated with the flow of CP transfers between donors and beneficiaries.

4.4.5.5 Preferential EU financing conditions are not classified as added value

This checklist item is closely intertwined with the preceding one and underscores a crucial caveat arising from recent debt-related innovations for the EU budget. Specifically, the notion that EU loans entail interest rate savings for Member States with lower credit ratings cannot be categorized as added value stemming from an EU activity (see Section 4.4.3.5). This is because the (implicit) costs for this advantage are borne by MSs with higher credit ratings, which provide uncom-

pensated guarantees. Furthermore, even from a more optimistic standpoint regarding this interest rate advantage, it does not embody an advantage inherently associated with the programme itself but is just related to the type of finance.

4.4.5.6 The assessment pays equal attention to possible positive and negative side-effects

A thorough exploration of value generation should extend beyond the direct effects of the programme. Indirect effects, whether they manifest within or outside the beneficiary region and country, could significantly contribute to obtaining a comprehensive understanding. However, any assessment of a CP programme would be fundamentally biased if the examination of indirect effects remains unbalanced. This occurs when the focus is solely on positive side-effects without equally considering the potential for negative effects (see Section 4.4.3.6). For instance, discussing potential positive cross-border effects from a CP programme (e.g., through cross-border procurement) while overlooking potential negative effects (e.g., job and investment relocation from regions without programme support) results in a one-sided evaluation inherently biased by design. This requirement applies to both empirical and conceptual assessments. In instances where a theoretical evaluation within the framework of the theory-of-change approach outlines positive scenarios for indirect programme effects, equal intellectual effort should be devoted to describing negative scenarios and rigorously assessing the plausibility of both.

4.4.5.7 European value creation is compared to the reference point of a national activity

This item on the checklist represents a necessary condition for conducting an EAV test. The inquiry into whether a CP programme generates added value cannot be adequately addressed without a reference point, which typically takes the form of a comparable national activity (see Section 4.4.3.7). Ideally, this comparison is established through empirical research. However, if empirical analysis is not feasible, the minimum requirement is a credible theory-based argumentation. Such an argumentation should elucidate precisely how the EU programme is expected to create value beyond what could be achieved by a comparable national programme.

4.4.5.8 Added value from European activity can be positive or negative

This item aligns with the same rationale as item 5.6. Here, the requirement for a balanced assessment pertains to comparing the consequences of EU action against MS action. Ex ante, this scrutiny must remain equally receptive to the possibility that EU involvement can yield either beneficial or detrimental outcomes. For instance, an examination of potential cost implications resulting from an EU provision of a programme should not solely inquire whether the EU activity offers specific cost advantages; it should also encompass potential cost disadvantages. An EAV assessment that only endeavors to identify the former without earnestly considering the latter (and vice versa) must be dismissed as biased (see Section 4.4.3.8).

4.4.5.9 Value creation can be causally attributed to the programme under consideration

This requirement underscores the standard challenge faced by evaluations, which must convincingly establish a causal impact resulting from the policy instrument under review (see Section

4.4.3.9). Causal identification designs and theory-based approaches can aid in achieving this objective. It is essential to exercise caution when EAV assessments make claims solely based on correlational data, as such claims may lack the necessary causal linkages.

4.4.6 Conclusions

There is a disparity between the significant high-level emphasis on the EAV principle in CP and the current status of EAV assessments. At least in the last programming period, if EAV assessments were included in CP evaluations at all, they often remained in an early stage concerning their conceptual foundations and empirical methodologies. Consequently, convincing evidence that CP delivers EAV has rarely been substantiated. With the inclusion of the EAV criterion into the CP regulation in the current period, the frequency and depth of covering the EAV criterion in evaluations may hopefully increase.

The proposed checklist wants to support this development. It aims to provide guidance on how more rigorous tests could be developed in the future. It is undeniably challenging for any EAV evaluation to fully adhere to all these requirements. Nonetheless, the checklist can aid in avoiding major errors, raising awareness of methodological limitations, and gradually enhancing standards in EAV assessments. Additionally, it may serve as a tool to scrutinize claims from MSs or EU institutions asserting that specific policies or CP programmes yield EAV. If a study underlying any such claim fails to meet various checklist requirements, the claim's authority should be seen with scepticism. In this regard, this contribution also advocates for greater modesty and transparency regarding the limited state of European knowledge to which extent CP programmes actually provide an EAV.

4.4.7 References

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